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MARGINAL TAX RATES AND ECONOMIC OPPORTUNITY

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KEY FINDINGS

- The marginal tax wedge is relevant for understanding how workers might benefit (or not) from an increase in pay once taxes enter the picture.
- Marginal tax wedges might deter workers from pursuing additional income and working extra hours.
- In 2021, at certain income levels, Canadian, French, and Italian workers lost up to 60, 93, and 116 percent of additional earnings to spikes in marginal tax rates from the provincial Canadian health-care premium, the French "contribution d'équilibre générale," and Italian local income taxes.
- Single parents with two children can face marginal tax wedges as high as 98 percent in the United States, 652 percent in Australia, and 359 percent in Japan. These marginal tax wedges are due to policies like the Earned Income Tax Credit and the 2021 Recovery Rebate Credit in the United States, Family Tax Benefit and the Parenting Payment in Australia, or the child-rearing allowance and child benefits in Japan.
- On the other hand, Lithuania's and Australia's tax design for single workers avoids unnecessary tax spikes by applying a flat social security contribution and a flat or slightly progressive income tax. In Finland, the local income tax and the central income tax are coordinated so that they do not generate marginal tax rate spikes like the ones observed in Italy or Japan.

INTRODUCTION

Research has shown that spikes in tax rates can act as barriers to upward mobility, locking people in poverty or discouraging them from advancing in their careers.

High marginal tax rates, as we will see below, might directly influence the decisions workers make about accepting a raise, working additional hours, or whether they might remain on government benefits. These high rates are often hidden in complex tax and benefit structures. This report shines a light on the underlying policies that drive marginal tax rate spikes that workers at different earning levels are subject to across countries in the Organisation for Economic Co-operation and Development (OECD).

THE PROBLEMS CREATED BY HIGH MARGINAL TAX RATES

Empirical research has shown that labor taxation impacts employment, unemployment, participation rates, hours of work, and even poverty.[1] Nevertheless, the tax burden that workers face has different components: income taxes that in many cases are progressive and, in some countries, levied at different administrative levels and payroll taxes or social security contributions that are typically flat-rate. Government benefits provided to workers can also be withdrawn at certain income levels and push up marginal tax rates on additional earnings.

This is the case of a Japanese single parent who earns a rough equivalent of US$39,981 and faces a 57 percent marginal tax rate. With just a small increase in pay of $599, she would face a 359 percent marginal tax rate. A Japanese parent who benefits from a government program worth $5,123 might lose 100 percent of that benefit if he or she earns above the earnings threshold. Therefore, in addition to examining the overall tax wedge on earnings and statutory tax rates, it is important to look at marginal tax rates on labor income.

The marginal tax wedge differs from the statutory rate and is generally higher than the average tax wedge. In general, a tax wedge is the difference between what someone is paid and what they earn after accounting for taxes. The average tax wedge is the share of labor and payroll taxes applied to all earnings. The marginal tax wedge is the share of labor and payroll taxes applicable to the next dollar earned. This makes the marginal tax wedge relevant for understanding how workers might benefit (or not) from an increase in pay once taxes enter the picture.

Workers face a wide range of marginal tax rates depending on their income level. The differences in marginal tax rates are often driven by progressive individual income tax schedules, payroll tax or social security rates, and tax credits or cash benefits. As workers earn more, they face a higher tax wedge on their marginal dollar of earnings. However, the many marginal tax rates on labor income make tax codes more complex and disincentivize additional work at the margin, which translates into lower productivity and less economic growth.

Marginal tax rates influence labor supply both in terms of employment/unemployment rates as well as in the number of hours worked. For workers, marginal tax rates affect the number of hours worked, whether to transition or not from a part-time job to a full-time one or even taking an additional job. Also, high marginal tax rates may discourage people from searching for a better job as a larger part of their additional income will be taxed away. High marginal tax rates might discourage individual labor supply and savings, thus potentially reducing the total size of the economy.

For the unemployed, high marginal tax rates (especially those arising from the withdrawal of benefits) might deter them from searching for a job. Therefore, to encourage the unemployed to enter the labor market, an appropriate design of the tax and benefit system is key.

How much marginal tax rates affect labor supply depends on two factors explored by economists. On one hand, higher marginal tax rates make working less attractive relative to leisure (not working). On the other hand, higher marginal tax rates could push people to work more hours or take a second job in order to maintain their level of income, consumption, and savings. Empirical studies have shown that, in general, a reduction in marginal tax rates translates to more working hours.[2] As we will see below, which one prevails in real life depends on the level of income, marital status, benefits, or gender; it might differ from country to country and could also change over time.[3]

For example, in the United States, an increase in effective marginal tax rates encouraged workers to reduce either productivity or the number of hours worked.[4] On the other hand, a sharp benefit reduction when a person moves from unemployment to employment reduced the incentive to work.[5] Additionally, high effective marginal tax rates caused by benefit reductions, the so-called "twice-poverty trap," generate disincentives to increase household earnings above a minimum amount when moving towards two times the poverty level or beyond.[6]

Moreover, different groups of people are affected differently by the marginal tax rates. In the United Kingdom, research has shown that taxes and benefits affect both the decision to enter the job market as well as the number of hours worked.[7] Marginal tax rates influence the decision of entering the labor market for highly educated workers as well as low-educated ones. However, marginal tax rates have a smaller effect on the number of hours worked.

In Italy, the tax-benefit system affects women's participation in the labor market more than men's participation. This effect is even more pronounced for low-income households.[8]

A similar effect was observed in the United States where low-income single mothers were better off working than relying solely on welfare.[9] However, they benefited little from raising their wage from $5.15 to $9.00 per hour. In the United States, programs like the Earned Income Tax Credit (EITC) have proved to be successful at keeping low-income working households out of poverty. However, the tax-benefit system has proved to be less efficient regarding upward mobility since the loss of benefits, including childcare and transportation costs, needs to be taken into consideration.[10]

Additionally, there are striking differences across U.S. states. A 2012 study found that when moving from poverty-level income to 150 percent of the poverty level, a single parent with two children faces a marginal tax rate that goes from 26.6 percent to over 100 percent, depending upon the state in which the parent lives.[11] A more recent study also finds major differences in marginal and average net taxation across the states.[12] One in four low-wage workers faces marginal net tax rates above 70 percent, and more than half face remaining lifetime marginal net tax rates above 45 percent. The richest 1 percent also face a high median lifetime marginal tax rate of 50 percent.

SEVEN CASE STUDIES

This report uses the marginal tax wedge data that has been made available by the OECD to highlight to policymakers and the public how severe marginal spikes can be, the earnings levels that they primarily impact, and the underlying policy drivers.

In order to check for possible marginal tax wedge spikes, the marginal tax wedge has been analyzed for different family types and labor costs (see Figure 1) corresponding to gross earnings that range between 50 and 250 percent of the average wage in each OECD country.[13] Seven case studies from six countries have been selected where each case presents a different underlying policy that generated a particularly problematic marginal tax rate spike.

Figure 1 | COMPONENTS OF THE LABOR COST

Source: Author's own elaboration.

Canadian Single Worker

A Canadian worker earning CAD 48,124 costs their employer CAD 53,233. The employer cost includes the taxes the employer has to pay on the worker's wages. While the tax wedge for this worker is 28 percent, the worker faces a significant marginal tax rate spike on even a small wage increase. If the employer increases compensation by just CAD 822 more, this would increase the employee social security contribution by CAD 202, employer social security contribution by CAD 82, central government income tax by CAD 103, and local government income tax by CAD 65, and reduce cash benefits by CAD 36. The net earnings increase is CAD 334.

This Canadian worker with no children faces a marginal tax wedge of 59 percent for a 1 percent increase in gross earnings[14] on top of the gross annual wage of CAD 48,124.

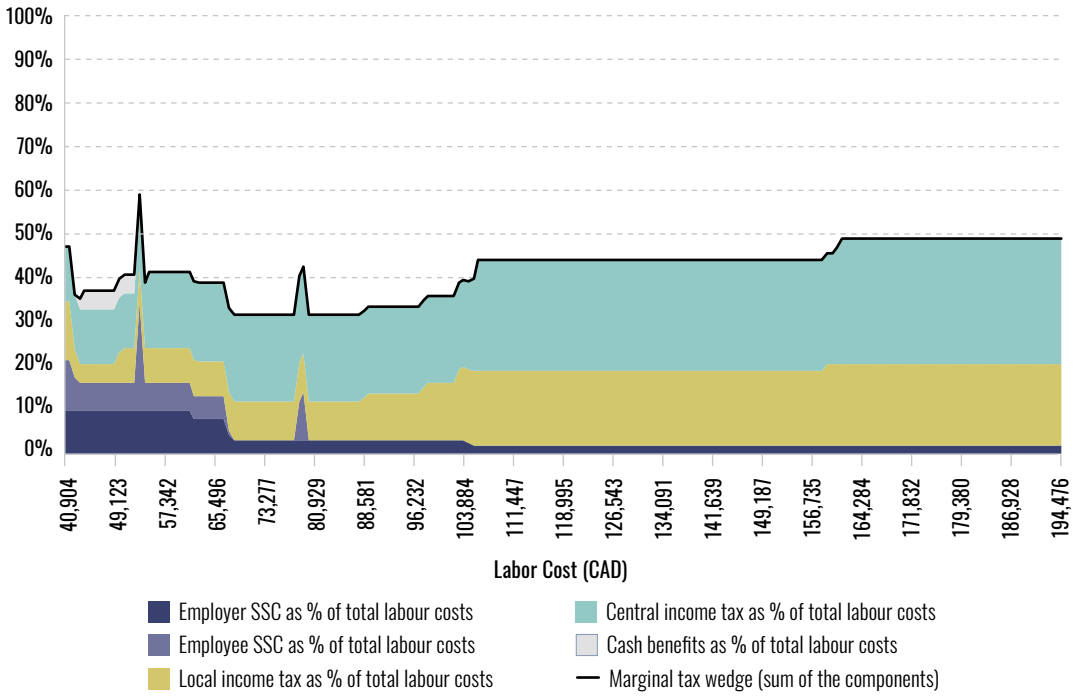
Table 1 | CANADIAN WORKERS CAN FACE MARGINAL TAX RATES (MTR) THAT CLAIM 60 PERCENT OF ADDITIONAL EARNINGS

Canadian Single Worker | Average Labor Cost: CAD 80,929 (US $64,905)		
Total Labor Cost	CAD 53,233	CAD 79,399
Net Earnings Before the Raise	CAD 38,205	CAD 54,518
Amount of the Raise	CAD 822	CAD 765
Amount of Additional Tax/Benefits Reduction Due to the Raise	CAD 488	CAD 328
% of the Raise Eaten up by the MTR	59.33%	42.84%
Net Earnings After the Raise	CAD 38,539	CAD 54,956

Source: OECD, "Taxing wages – Tax wedge decomposition,"https://stats.oecd.org/Index.aspx?DataSetCode=TXWDECOMP; OECD, "Taxing wages – Comparative tables," https://stats.oecd.org/Index.aspx?DataSetCode=AWCOMP; and Tax Foundation calculations.

When the Canadian worker moves up the income ladder to earn CAD 72,556, his employer will face a total labor cost of CAD 79,399. If the employer increases compensation by just CAD 765 more, this would increase the employee social security contribution by CAD 84, employer social security contribution by CAD 25, central government income tax by CAD 152, and local government income tax by CAD 68. The net pay increase is CAD 437.

Graph 1 | CANADA. MARGINAL TAX WEDGE FOR A SINGLE EARNER AS A PERCENTAGE OF LABOR COST BY LEVEL OF LABOR COSTS IN CAD



Source: OECD, "Taxing wages – Tax wedge decomposition," https://stats.oecd.org/Index.aspx?DataSetCode=TXWDECOMP; OECD, "Taxing wages – Comparative tables," https://stats.oecd.org/Index.aspx?DataSetCode=AWCOMP; and Tax Foundation calculations.

Now, this Canadian worker faces a marginal tax wedge of 43 percent for a 1 percent increase in gross earnings on top of the gross annual wage of CAD 72,556.

This happens because the provincial health-care premium moves to a different rate at these two levels of income. Although there is no federal health benefit plan, the provinces of Quebec, Ontario, and British Columbia levy health premiums on individuals.

In Ontario, the Canadian province used by the OECD to model the tax wedge, the premium is determined based on taxable income and operates over different income bands. The premium has a fixed and a variable component that shifts up to a different amount and rate at the taxable income of CAD 48,000 and CAD 72,000, where the two spikes are observed.[15]

These marginal tax wedge rates of 59 and 43 percent that are above the average marginal tax wedge of 42 percent could be avoided by implementing a flatter health-care premium with a single tax rate.

French Single Worker

A French worker earning EUR 40,771 costs their employer EUR 55,569. The employer cost includes the taxes the employer has to pay on the worker's wages. While the tax wedge for this worker is 47 percent, the worker faces a significant marginal tax rate spike on even a small wage increase. If the employer increases compensation by just EUR 631 more, this would increase the employee social security contribution by EUR 102, employer social security contribution by EUR 232, and central government income tax by EUR 111. The net pay increase is only EUR 186.

Table 2 | AT CERTAIN INCOME LEVELS, FRENCH WORKERS LOSE 90 PERCENT OF ADDITIONAL EARNINGS TO TAXES

French Single Worker | Average Labor Cost: EUR 54,479 (US $77,248)			
Total Labor Cost	EUR 55,569	EUR 63,840	EUR 93,420
Net Earnings Before the Raise	EUR 29,325	EUR 32,744	EUR 43,601
Amount of the Raise	EUR 631	EUR 3,376	EUR 1,757
Amount of Additional Tax/Benefits Reduction Due to the Raise	EUR 445	EUR 3,145	EUR 1,526
% of the Raise Eaten up by the MTR	70.51%	93.16%	86.85%
Net Earnings After the Raise	EUR 29,511	EUR 32,975	EUR 43,832

Source: OECD, "Taxing wages – Tax wedge decomposition," https://stats.oecd.org/Index.aspx?DataSetCode=TXWDECOMP; OECD, "Taxing wages – Comparative tables," https://stats.oecd.org/Index.aspx?DataSetCode=AWCOMP; and Tax Foundation calculations.

This French worker with no children faces a marginal tax wedge of 71 percent for a 1 percent increase in gross earnings on top of the gross annual wage of EUR 40,771.

This is because employer social security contributions are increased by 0.33 percentage points at that earnings level. This increase is generated by the contribution to the general equilibrium component that rises from 1.29 percent to 1.62 percent once the ceiling of social security contributions is reached (EUR 41,136).[16]

For another example, a French worker earning EUR 46,767 costs their employer EUR 63,840. While the tax wedge for this worker is 49 percent, the worker faces a significant marginal tax rate spike on even a small wage increase. If the employer increases compensation by EUR 3,376, this would increase the employee social security contribution by EUR 41, employer social security contribution by EUR 2,976, and central government income tax by EUR 128. The net pay increase is only EUR 231.

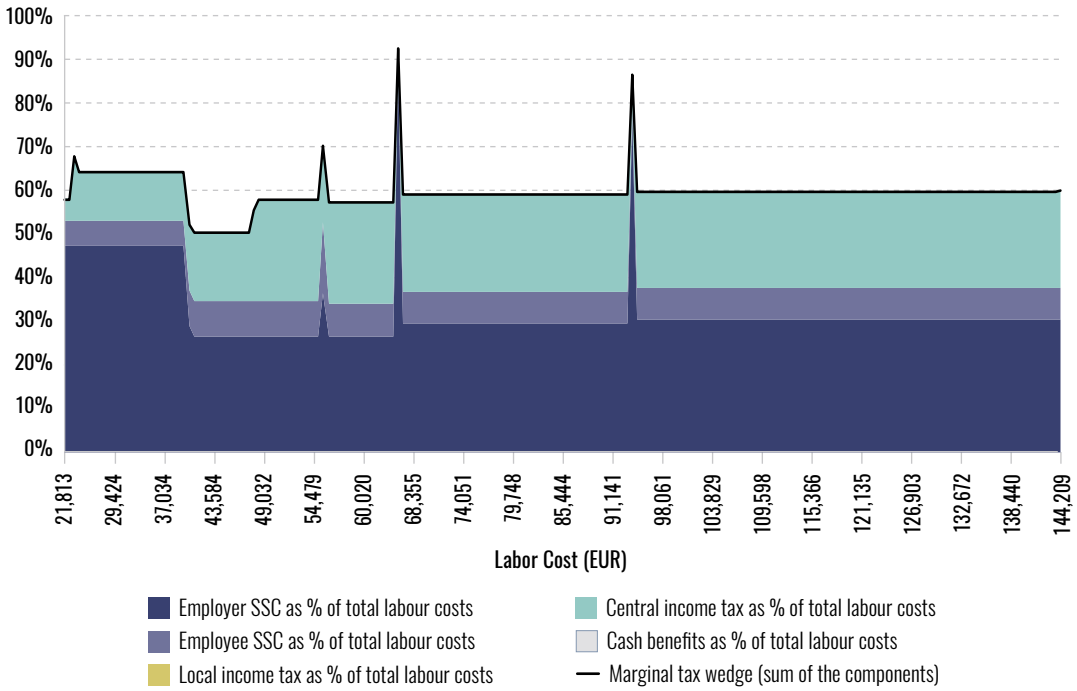
This French worker with no children faces a marginal tax wedge of 93 percent for a 1 percent increase in gross earnings on top of the gross annual wage of EUR 46,767.

This is because employer social security contributions increase by 6 percentage points at this level of income. The 2018 social security financing law introduced a 7 percent employer's health-maternity-disability-death contribution starting January 1, 2019. This reduced rate applies to yearly wages not exceeding 2.5 times the French minimum wage (EUR 19,074 annually). For incomes that exceed 2.5 times the minimum wage (EUR 47,685 annually), the social security employer contribution scales up to 13 percent.[17]

Moving higher up the income ladder, a French worker earning EUR 65,553 costs the employer EUR 93,420. If the employer increases compensation by EUR 1,757 more, this would increase the employee social security contribution by EUR 41, employer social security contribution by EUR 1,357, and central government income tax by EUR 128. The net pay increase is only EUR 231.

This French worker faces a marginal tax wedge of 87 percent for a 1 percent increase in gross earnings on top of the gross annual wage of EUR 65,553.

Graph 2 | FRANCE. MARGINAL TAX WEDGE FOR A SINGLE EARNER AS A PERCENTAGE OF LABOR COST BY LEVEL OF LABOR COSTS IN EUR



Source: OECD, "Taxing wages – Tax wedge decomposition," https://stats.oecd.org/Index.aspx?DataSetCode=TXWDECOMP; OECD, "Taxing wages – Comparative tables," https://stats.oecd.org/Index.aspx?DataSetCode=AWCOMP; and Tax Foundation calculations.

This is due to an increase in employer social security contributions by 2 percentage points generated by the contribution to the family allowance that moves from 3.5 percent to 5.25 percent once the income exceeds EUR 66,759, 3.5 times the minimum wage.[18]

The existence of different social security thresholds calculated either in terms of the minimum wage or in terms of the maximum social security contributions generates a series of marginal tax rates that might keep some workers in France just below the threshold earnings that trigger the tax rate spikes. Eliminating these barriers by implementing a unique and lower rate will allow workers to have access to higher wages without confronting this barrier.

The system of social security contributions in France is extremely complex with numerous reductions of the rates depending on a company's size, sector, and workers' wages. Simplifying the system would bring clarity both to employees and employers and would eventually prevent social security contribution fraud.[19]

Italian Single Worker

An Italian worker earning EUR 38,456 costs their employer EUR 50,601. The employer cost includes the taxes the employer has to pay on the worker's wages. While the tax wedge for this worker is 49 percent, the worker faces a significant marginal tax rate spike on even a small wage increase. If the employer increases compensation by just EUR 448, this would increase the employee social security contribution by EUR 32, employer social security contribution by EUR 107, central government income tax by EUR 157, and local government income tax by EUR 223. Therefore, despite the pay increase, the worker will face a net loss and see his earnings cut by EUR 72.

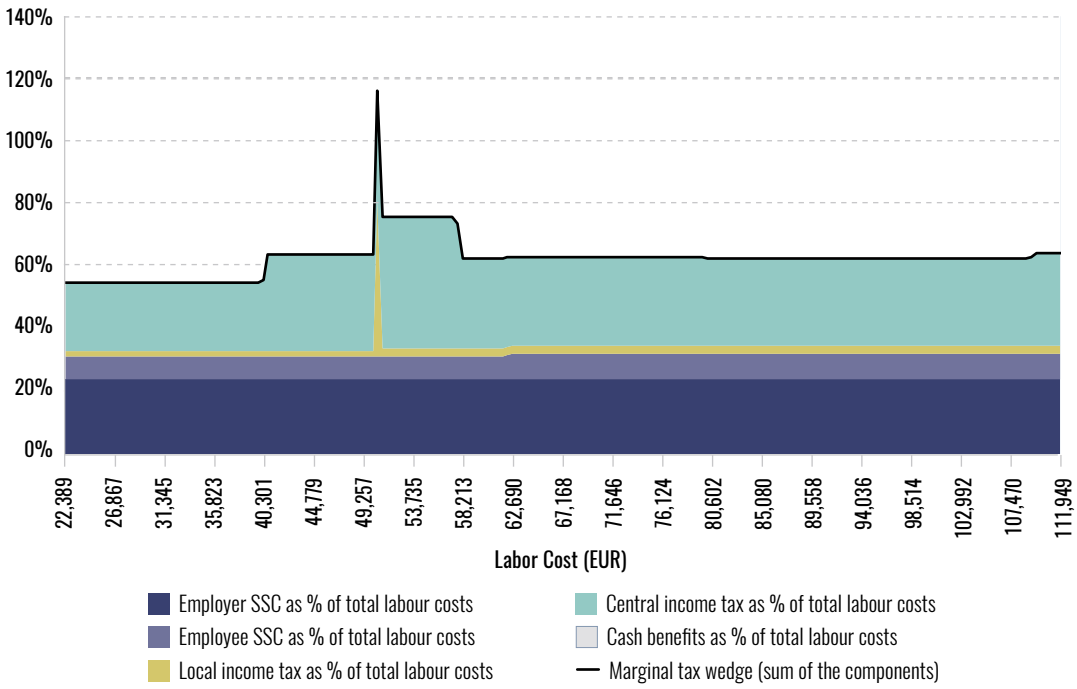
Table 3 | AN ITALIAN WORKER MAKING EUR 38,456 FACES A MARGINAL TAX RATE AS HIGH AS 116 PERCENT ON A SMALL PAY INCREASE

Italian Single Worker | Average Labor Cost: EUR 44,779 (US $68,848)	
Total Labor Cost	EUR 50,601
Net Earnings Before the Raise	EUR 26,043
Amount of the Raise	EUR 448
Amount of Additional Tax/Benefits Reduction Due to the Raise	EUR 520
% of the Raise Eaten up by the MTR	116.15%
Net Earnings After the Raise	EUR 25,970

Source: OECD, "Taxing wages – Tax wedge decomposition," https://stats.oecd.org/Index.aspx?DataSetCode=TXWDECOMP; OECD, "Taxing wages – Comparative tables," https://stats.oecd.org/Index.aspx?DataSetCode=AWCOMP; and Tax Foundation calculations.

This Italian worker with no children living in Rome faces a marginal tax wedge of 116 percent for a 1 percent increase in gross earnings on top of the gross annual wage of EUR 38,456. While this spike is similar to the large spikes for "poverty traps" discussed earlier, in Italy's case, it is closer to a "middle-income trap." This is because the local income tax rate rises drastically at this level of income.

Graph 3 | ITALY. MARGINAL TAX WEDGE FOR A SINGLE EARNER AS A PERCENTAGE OF LABOR COST BY LEVEL OF LABOR COSTS IN EUR



Source: OECD, "Taxing wages – Tax wedge decomposition," https://stats.oecd.org/Index.aspx?DataSetCode=TXWDECOMP; OECD, "Taxing wages – Comparative tables," https://stats.oecd.org/Index.aspx?DataSetCode=AWCOMP; and Tax Foundation calculations.

In order to understand this "middle-income trap" an overview of how the tax wedge in Italy works is needed. The tax wedge is formed by social security contributions and central, regional, and local income tax. Additionally, there is a basic employee tax credit and a payable tax credit for net income under EUR 28,000.[20] For incomes between EUR 28,000 and EUR 40,000, an additional nonrefundable tax credit has been introduced in July 2020 and was made permanent starting January 2021.

The regional income surtax rates range between 1.23 percent and 3.33 percent. In some regions, the surtax is progressive with different tax brackets where the increased tax rate applies to the overall income instead of the corresponding bracket excess. For this reason, within a limited range of income, an increase in the gross income translates into a lower disposable income, creating the so-called "poverty trap."[21]

On the other hand, the local income surtax has, in general, a flat tax rate that can range, depending on the city, between 0.2 percent and 0.9 percent for incomes over EUR 12,000. This is especially problematic for low-income earners as one additional unit of income on top of the exemption threshold will create a local tax liability on the overall income, not only on the additional amount. In the case of a worker that moves from earning EUR 12,000 to EUR 12,001, depending on his residence, he might face a local tax liability of EUR 108. Therefore, the marginal tax rate will be larger than 100 percent.

Lazio, the region that contains Rome, for which the marginal tax wedge was determined by the OECD, applies a progressive income tax with five tax brackets and tax rates that go from 1.73 percent to 3.33 percent. Nevertheless, for taxable income under the EUR 35,000 threshold, a 1.73 percent tax rate applies to the whole amount of taxable income. Additionally, Rome also applies a local income tax rate of 0.9 percent.

In order to eliminate this middle-income trap, regional and local income tax rates and thresholds need to be aligned with the central income tax. Additionally, regional and local income tax should not apply to the overall income once the threshold is reached but only to the excess income on top of the threshold amount like a truly progressive tax system.

Australian Single Parent with Two Children

An Australian worker earning AUD 57,854 costs their employer AUD 60,927. The employer cost includes the payroll taxes the employer has to pay on the workers' wages. While the tax wedge for this worker is negative, -16.9 percent, the worker faces a significant marginal tax rate spike on even a small wage increase. If the employer increases compensation by just AUD 983 more, this would increase employer payroll taxes by AUD 50, reduce central government income tax by AUD 21, and reduce cash benefits by AUD 6,382. The worker will face a net loss and see his earnings cut by AUD 5,428.

Table 4 | WHEN MOVING UP THE INCOME LADDER AN AUSTRALIAN WORKER WITH CHILDREN CAN FACE A TAX RATE SPIKE OF OVER 100 PERCENT AT FOUR DIFFERENT POINTS

Australian Single Worker with Two Children | Average Labor Cost: AUD 98,269 (US $65,689)				
Total Labor Cost	AUD 60,927	AUD 83,528	AUD 105,147	AUD 114,974
Net Earnings Before the Raise	AUD 71,249	AUD 74,071	AUD 83,323	AUD 82,990
Amount of the Raise	AUD 983	AUD 983	AUD 983	AUD 983
Amount of Additional Tax/Benefits Reduction Due to the Raise	AUD 6,410	AUD 2,120	AUD 4,045	AUD 1,842
% of the Raise Eaten up by the MTR	652.31%	215.77%	411.60%	187.40%
Net Earnings After the Raise	AUD 65,821	AUD 72,934	AUD 80,261	AUD 82,131

Source: OECD, "Taxing wages – Tax wedge decomposition," https://stats.oecd.org/Index.aspx?DataSetCode=TXWDECOMP; OECD, "Taxing wages – Comparative tables," https://stats.oecd.org/Index.aspx?DataSetCode=AWCOMP; and Tax Foundation calculations.

This Australian single parent with two children faces a marginal tax wedge of 652 percent for a 1 percent increase in gross earnings on top of the gross annual wage of AUD 57,854. This is due to the clawback of the Parenting Payment income support that single parents in Australia are entitled to. For a single parent with two children, the income limit to access the Parenting Payment is reached at AUD 52,760.[22]

When this Australian worker moves up the income ladder to earn AUD 79,316, his employer will face a total labor cost of AUD 83,528. If the employer increases compensation by just AUD 983 more, this would increase employer payroll taxes by AUD 50, central government income tax by AUD 322, and reduce cash benefits by AUD 1,749. The worker will face a net loss and see his earnings cut by AUD 1,138.

Now, this Australian single parent faces a marginal tax wedge of 216 percent for a 1 percent increase in gross earnings on top of the gross annual wage of AUD 79,316. This is due to the Family Tax Benefit, Part A, as for the year 2020–21 a year-end supplement of AUD 781.1 was made available for parents with a taxable income under AUD 80,000.[23]

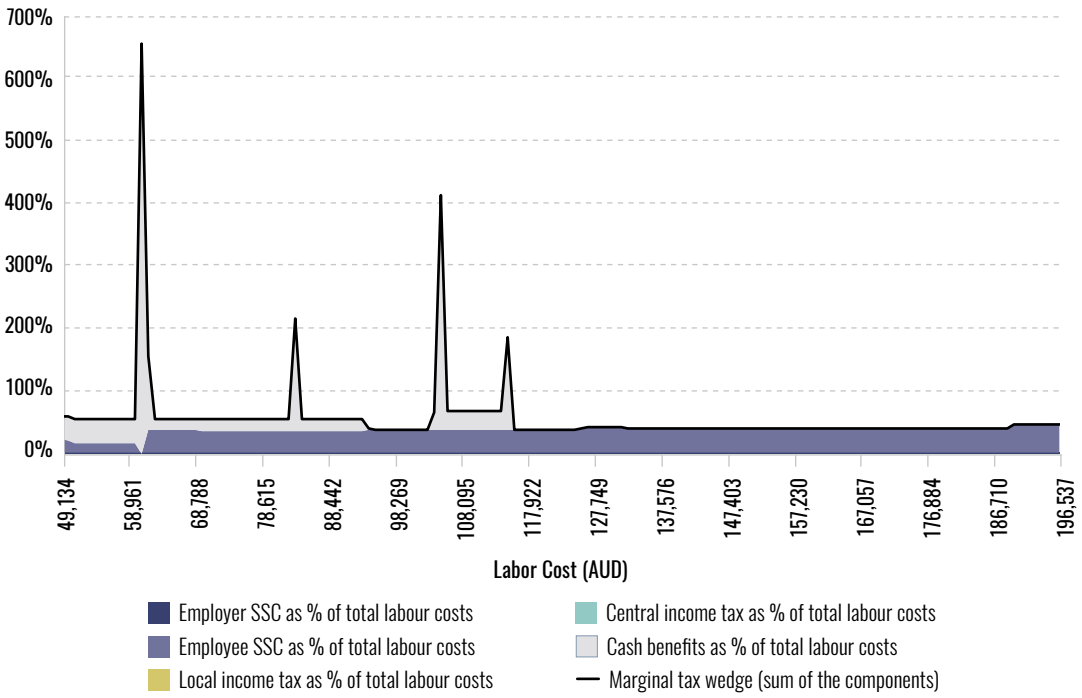
When this single parent moves higher up the income ladder to earn AUD 99,845, their employer will face a total labor cost of AUD 105,147. If the employer increases compensation by just AUD 983 more, this would increase employer payroll tax by AUD 50, central government income tax by AUD 350, and reduce cash benefits by AUD 3,645. The worker will face a net loss and see his earnings cut by AUD 3,062.

In this case, the single parent faces a marginal tax wedge of 412 percent for a 1 percent increase in gross earnings on top of the gross annual wage of AUD 99,845. This is due to the Family Tax Benefit, Part B (AUD 3,314.2 and a one-off supplement of AUD 379.6), which ends when the taxable income reaches AUD 100,000.

When this Australian single parent moves one step up on the income ladder to earn AUD 109,176, their employer will face a total labor cost of AUD 114,974. If the employer increases compensation by just AUD 983 more, this would increase the employee payroll taxes by AUD 50, central government income tax by AUD 350, and reduce cash benefits by AUD 1,442. The worker will face a net loss and see his earnings cut by AUD 859.

Now, the Australian single parent faces a marginal tax wedge of 187 percent for a 1 percent increase in gross earnings on top of the gross annual wage of AUD 109,176. This is due to the Family Tax Benefit Part A that phases out completely at this level of taxable income.

Graph 4 | AUSTRALIA. MARGINAL TAX WEDGE FOR A SINGLE PARENT WITH TWO CHILDREN AS A PERCENTAGE OF LABOR COST BY LEVEL OF LABOR COSTS IN AUD



Source: OECD, "Taxing wages – Tax wedge decomposition," https://stats.oecd.org/Index.aspx?DataSetCode=TXWDECOMP; OECD, "Taxing wages – Comparative tables," https://stats.oecd.org/Index.aspx?DataSetCode=AWCOMP; and Tax Foundation calculations.

Previous research analyzing the marginal tax rates in Australia has shown that the design of income support payments generates effective marginal tax rates of over 69 percent in the case of a jobless couple with two children if one member of the couple secures a full-time job with a low wage.[24] Even though the system has been reformed since that research was published, we can still observe confiscatory marginal tax rates of over 100 percent. The loss in cash benefits that especially low-income single parents face when taking on additional work hours can lock them into poverty.

U.S. Single Parent with Two Children

In the United States, the marginal tax wedge spikes are driven by local and central income taxes, payroll taxes, and tax credits such as Earned Income Tax Credit (EITC) and Child Tax Credit (CTC).

A U.S. worker earning $47,845 costs their employer $51,812. The employer cost includes the taxes the employer has to pay on the worker's wages. While the average tax wedge for this worker is 6 percent, the worker faces a significant marginal tax rate spike on even a small wage increase. If the employer increases compensation by just $678, this would increase the employee social security contribution by $48, employer social security contribution by $48, local government income tax by $43, and reduce central government income tax credit by only $90. The net earnings increase is $448.

Table 5 | A U.S. WORKER FACES FIVE MAJOR CHANGES IN MARGINAL TAX RATES

U.S. Single Worker with Two Children | Average Labor Cost: $68,077					
Total Labor Cost	$51,812	$78,920	$121,616	$129,748	$154,139
Net Earnings Before the Raise	$48,686	$67,226	$92,234	$92,426	$105,316
Amount of the Raise	$678	$678	$678	$678	$639
Amount of Additional Tax/Benefits Reduction Due to the Raise	$229	$277	$667	$289	$261
% of the Raise Eaten up by the MTR	33.84%	40.83%	98.39%	42.68%	40.90%
Net Earnings After the Raise	$49,134	$67,627	$92,245	$92,814	$105,693

Source: OECD, "Taxing wages – Tax wedge decomposition," https://stats.oecd.org/Index.aspx?DataSetCode=TXWDECOMP; OECD, "Taxing wages – Comparative tables," https://stats.oecd.org/Index.aspx?DataSetCode=AWCOMP; and Tax Foundation calculations.

This U.S. single parent with two children faces a marginal tax wedge of only 34 percent, down from 52 percent, for a 1 percent increase in gross earnings on top of the gross annual wage of $47,845. This is because EITC ends at this level of income.

When the U.S. worker moves up the income ladder to earn $73,027 their employer will face a total labor cost of $78,920. If the employer increases compensation by just $678 more, this would increase the employee social security contribution by $48, employer social security contribution by $48, central government income tax by $138, and local government income tax by $42. The net pay increase is $401.

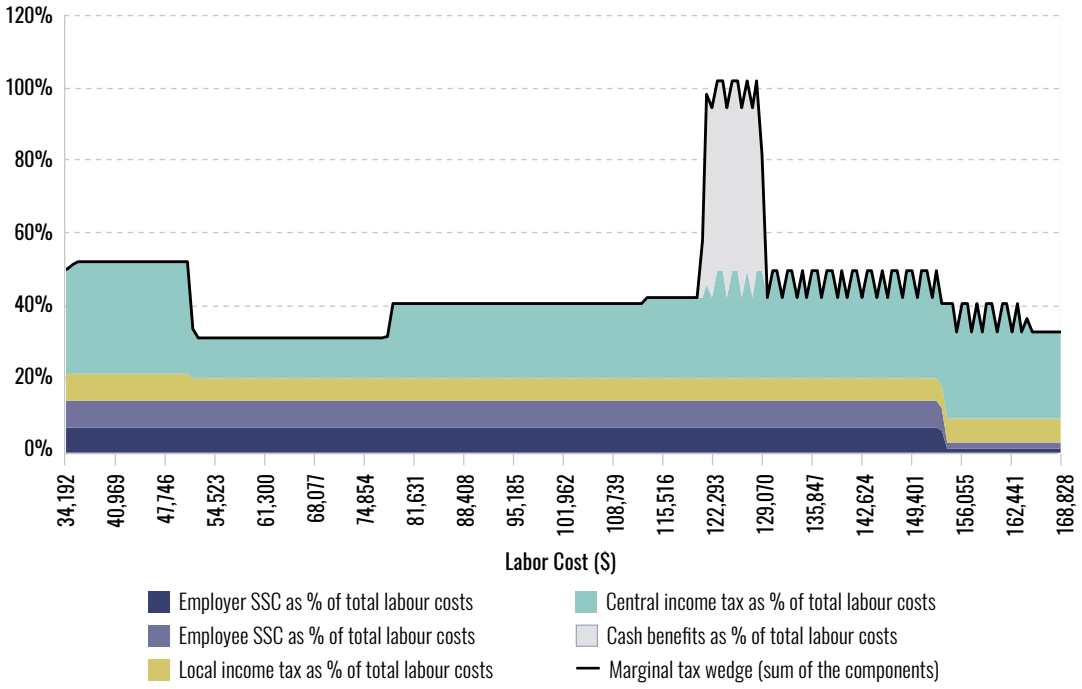
Now, this U.S. worker faces a marginal tax wedge of 41 percent for a 1 percent increase in gross earnings on top of the gross annual wage of $73,027. This increase in the marginal tax wedge from 31.94 to 40.83 is due to the total phaseout of the CTC.

When the U.S. worker moves up one more step on the income ladder to earn $112,688, their employer will face a total labor cost of $121,616. If the employer increases compensation by just $678 more, this would increase the employee social security contribution by $48, employer social security contribution by $48, central government income tax by $176, local government income tax by $42, and reduce cash benefits by $353. The net pay increase is $11.

This U.S. worker faces a marginal tax wedge of 98 percent for a 1 percent increase in gross earnings on top of the gross annual wage of $112,688. This increase in the marginal tax rate from around 43 percent to 98 is due to the phasing out of the cash benefits, the so-called Recovery Rebate Credit.

In 2021 in the United States, the American Rescue Plan Act (ARP) was enacted in response to the COVID-19 pandemic. The ARP Act approved the Recovery Rebate Credit (RRC), a tax credit for 2021 of US$1,400 per eligible individual. In this case, the single parent with two children receives up to $4,200 in cash benefits. However, the RRC starts to phase out when the gross annual income of this single parent increases above $112,500 and is fully phased out at $120,000.[25]

Graph 5 | THE UNITED STATES. MARGINAL TAX WEDGE FOR A SINGLE PARENT WITH TWO CHILDREN AS A PERCENTAGE OF LABOR COST BY LEVEL OF LABOR COSTS IN $



Source: OECD, "Taxing wages – Tax wedge decomposition," https://stats.oecd.org/Index.aspx?DataSetCode=TXWDECOMP; OECD, "Taxing wages – Comparative tables," https://stats.oecd.org/Index.aspx?DataSetCode=AWCOMP; and Tax Foundation calculations.

When the U.S. worker moves up one more step on the income ladder to earn $120,243 his employer will face a total labor cost of $129,748. If the employer increases compensation by just $678 more, this would increase the employee social security contribution by $48, employer social security contribution by $48, central government income tax by $151, and local government income tax by $42. The net pay increase is $388.

The U.S. worker faces a marginal tax wedge of 43 percent for a 1 percent increase in gross earnings on top of the gross annual wage of $120,243. This drop in the marginal tax rate from 82 percent to 43 percent is due to the total phaseout of the RRC.

When the U.S. worker moves up one more step on the income ladder to earn $142,906 his employer will face a total labor cost of $154,139. If the employer increases compensation by just $639 more, this would increase the employee social security contribution by only $9, employer social security contribution by $9, central government income tax by $201, and local government income tax by $42. The net pay increase is $377.

The U.S. worker faces a marginal tax wedge of 41 percent for a 1 percent increase in gross earnings on top of the gross annual wage of $142,906. This drop in the marginal tax rate from around 50 percent to 41 percent is due to the social security payroll tax reaching the cap while the 2.9 percent Medicare payroll tax remains in place.

Japanese Single Parent with Two Children

A Japanese worker earning JPY 3,963,097 costs their employer JPY 4,571,829. The employer cost includes the taxes the employer has to pay on the worker's wages. While the tax wedge for this worker is 22 percent, the worker faces a significant marginal tax rate spike on even a small wage increase. If the employer increases compensation by just JPY 59,374, this would increase the employee social security contribution by JPY 7,437, employer social security contribution by JPY 7,906, central government income tax by JPY 1,722, local government income tax by JPY 3,374, and reduce cash benefits by JPY 192,788. The worker will face a net loss and see his earnings cut by JPY 153,853.

Table 6 | A JAPANESE SINGLE PARENT WITH TWO CHILDREN FACES MARGINAL TAX RATES OF OVER 250 PERCENT

Japanese Single Parent with Two Children | Average Labor Cost: JPY 5,937,440 (US $59,899)		
Total Labor Cost	JPY 4,571,829	JPY 10,170,746
Net Earnings Before the Raise	JPY 3,562,284	JPY 6,778,705
Amount of the Raise	JPY 59,374	JPY 54,665
Amount of Additional Tax/Benefits Reduction Due to the Raise	JPY 213,227	JPY 140,751
% of the Raise Eaten up by the MTR	359.12%	257.48%
Net Earnings After the Raise	JPY 3,408,432	JPY 6,692,619

Source: OECD, "Taxing wages – Tax wedge decomposition," https://stats.oecd.org/Index.aspx?DataSetCode=TXWDECOMP; OECD, "Taxing wages – Comparative tables," https://stats.oecd.org/Index.aspx?DataSetCode=AWCOMP; and Tax Foundation calculations.

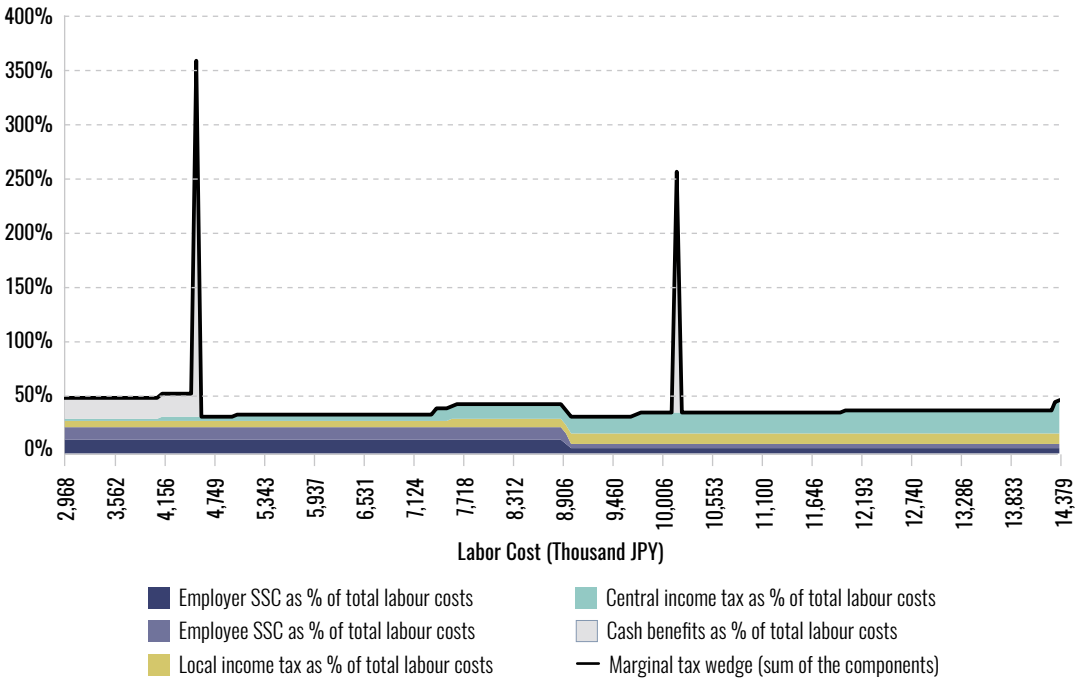
This Japanese single parent with two children faces a marginal tax wedge of 359 percent for a 1 percent increase in gross earnings on top of the gross annual wage of JPY 3,963,097. This is because the child-rearing allowance, which is a benefit available for single parents, disappears at the income cap.

When the Japanese worker moves up the income ladder to earn JPY 8,904,101 the employer will face a total labor cost of JPY 10,170,746. If the employer increases compensation by just JPY 54,665 more, this would increase the employee social security contribution by JPY 2,728, employer social security contribution by JPY 3,196, central government income tax by JPY 9,953, local government income tax by JPY 4,874, and reduce cash benefits by JPY 120,000. The worker will face a net loss and see their earnings cut by JPY 86,086.

This Japanese single parent with two children faces a marginal tax wedge of 257 percent for a 1 percent increase in gross earnings on top of the gross annual wage of JPY 8,904,101. This is due to child benefits being cut by half from JPY 240,000 to JPY 120,000 when the cap of JPY 6,980,000 is reached.[26]

Both the child-rearing allowance and the child benefit generate marginal tax rate spikes of over 250 percent as they reach the income cap. A gradual fading out of these benefits would eliminate these tax spikes.

Graph 6 | JAPAN. MARGINAL TAX WEDGE FOR A SINGLE PARENT WITH TWO CHILDREN AS A PERCENTAGE OF LABOR COST BY LEVEL OF LABOR COSTS IN THOUSAND JPY



Source: OECD, "Taxing wages – Tax wedge decomposition," https://stats.oecd.org/Index.aspx?DataSetCode=TXWDECOMP; OECD, "Taxing wages – Comparative tables," https://stats.oecd.org/Index.aspx?DataSetCode=AWCOMP; and Tax Foundation calculations.

One-Earner Japanese Couple with Two Children

A Japanese worker earning JPY 2,676,377 costs their employer JPY 3,087,469. While the tax wedge for this worker is 19 percent, the worker faces a significant marginal tax rate spike on even a small wage increase. If the employer increases compensation by just JPY 59,374 more, this would increase the employee social security contribution by JPY 7,437, employer social security contribution by JPY 7,906, central government income tax by JPY 1,460, and local government income tax by JPY 62,532. The worker will face a net loss and see their earnings cut by JPY 19,960.

Table 7 | WHEN MOVING UP THE INCOME LADDER A ONE-EARNER JAPANESE COUPLE WITH TWO CHILDREN FACES FIVE MTR SPIKES OF MORE THAN 100 PERCENT

Japanese One-Earner Married Couple with Two Children | Average Labor Cost: JPY 5,937,440 (US $59,899)					
Total Labor Cost	JPY 3,087,469	JPY 10,170,746	JPY 12,302,681	JPY 12,849,331	JPY 13,395,981
Net Earnings Before the Raise	JPY 2,496,730	JPY 6,889,301	JPY 8,091,945	JPY 8,381,282	JPY 8,663,965
Amount of the Raise	JPY 59,374	JPY 54,665	JPY 54,665	JPY 54,665	JPY 54,665
Amount of Additional Tax/ Benefits Reduction Due to the Raise	JPY 79,334	JPY 140,751	JPY 57,116	JPY 63,772	JPY 63,772
% of the Raise Eaten Up by the MTR	133.62%	257.48%	104.48%	116.66%	116.66%
Net Earnings After the Raise	JPY 2,476,770	JPY 6,803,215	JPY 8,089,493	JPY 8,372,176	JPY 8,654,858

Source: OECD, "Taxing wages – Tax wedge decomposition," https://stats.oecd.org/Index.aspx?DataSetCode=TXWDECOMP; OECD, "Taxing wages – Comparative tables," https://stats.oecd.org/Index.aspx?DataSetCode=AWCOMP; and Tax Foundation calculations.

This one-earner Japanese couple with two children faces a marginal tax wedge of 134 percent for a 1 percent increase in gross earnings on top of the gross annual wage of JPY 2,676,377. This is because at this level of income, in addition to the local fixed standard tax of JPY 5,000, a 10 percent local income tax is due.[27]

When the Japanese worker moves up the income ladder to earn JPY 8,904,101, his employer will face a total labor cost of JPY 10,170,746. If the employer increases compensation by just JPY 54,665 more, this would increase the employee social security contribution by JPY 2,728, employer social security contribution by JPY 3,196, central government income tax by JPY 9,953, local government income tax by JPY 4,874, and reduce cash benefits by JPY 120,000. The worker will face a net loss and see his earnings cut by JPY 86,086.

This Japanese couple with two children faces a marginal tax wedge of 257 percent for a 1 percent increase in gross earnings on top of the gross annual wage of JPY 8,904,101. This is due to the child benefits being cut by half from JPY 240,000 to JPY 120,000 when the cap of JPY 6,980,000 is reached.[28]

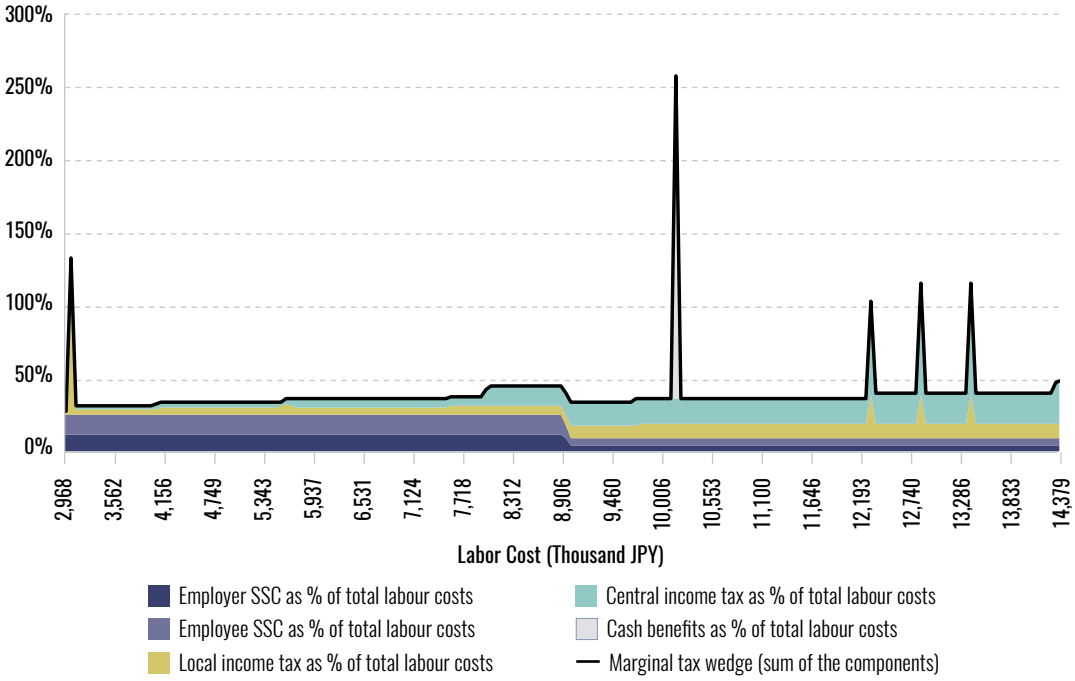
When this Japanese worker moves one step up the income ladder to earn JPY 10,911,384 their employer will face a total labor cost of JPY 12,302,681. If the employer increases compensation by just JPY 54,665 more, this would increase the employee social security contribution by JPY 2,728, employer social security contribution by JPY 3,196, central government income tax by JPY 35,318, and local government income tax by JPY 15,874. The worker will face a net loss and see their earnings cut by JPY 2,451.

This Japanese couple with two children now faces a marginal tax wedge of 104 percent for a 1 percent increase in gross earnings on top of the gross annual wage of JPY 10,911,384.

When this worker moves even higher up the income ladder to earn JPY 11,426,072, the employer will face a total labor cost of JPY 12,849,331. If the employer increases compensation by just JPY 54,665 more, this would increase the employee social security contribution by JPY 2,728, employer social security contribution by JPY 3,196, central government income tax by JPY 41,974, and local government income tax by JPY 15,874. The worker will face a net loss and see his earnings cut by JPY 9,107.

This couple faces a marginal tax wedge of 117 percent for a 1 percent increase in gross earnings on top of the gross annual wage of JPY 11,426,072.

Graph 7 | JAPAN. MARGINAL TAX WEDGE FOR A ONE EARNER MARRIED COUPLE WITH TWO CHILDREN AS A PERCENTAGE OF LABOR COST BY LEVEL OF LABOR COSTS IN THOUSAND JPY



Source: OECD, "Taxing wages – Tax wedge decomposition," https://stats.oecd.org/Index.aspx?DataSetCode=TXWDECOMP; OECD, "Taxing wages – Comparative tables," https://stats.oecd.org/Index.aspx?DataSetCode=AWCOMP; and Tax Foundation calculations.

When the worker earns JPY 11,940,760, the employer will face a total labor cost of JPY 13,395,981. If the employer increases compensation by just JPY 54,665 more this would increase the employee social security contribution by JPY 2,728, employer social security contribution by JPY 3,196, central government income tax by JPY 41,974, and local government income tax by JPY 15,874. The worker will face a net loss and see his earnings cut by JPY 9,107.

This Japanese couple with two children faces a marginal tax wedge of 117 percent for a 1 percent increase in gross earnings on top of the gross annual wage of JPY 11,940,760.

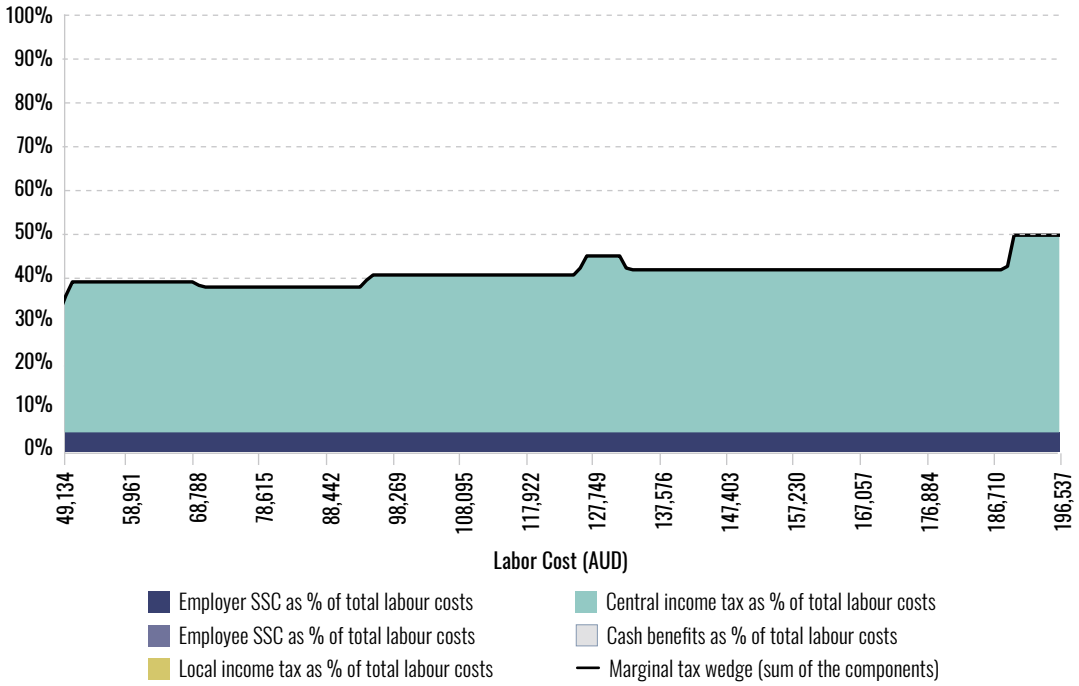
These last three increases in the marginal tax wedge generated by the increase in income taxes are due to the gradual loss of the spouse's allowance by one-third of its initial amount until it is completely withdrawn.[29] Therefore, a gradual reduction of the spouse allowance would drastically reduce these three marginal tax rate spikes.

WHY MARGINAL TAX RATE SPIKES ARE UNNECESSARY

Not all tax systems generate high marginal tax rate spikes like the ones observed in the previous section. Good policy design can avoid these spikes.

In the case of Australia, a single earner with no children has a generally flat marginal tax wedge profile, starting at 32.1 percent and reaching 49.7 percent at labor costs above AUD 189,658. The increase in the

Graph 8 | AUSTRALIA. MARGINAL TAX WEDGE FOR A SINGLE EARNER AS A PERCENTAGE OF LABOR COST BY LEVEL OF LABOR COSTS IN AUD



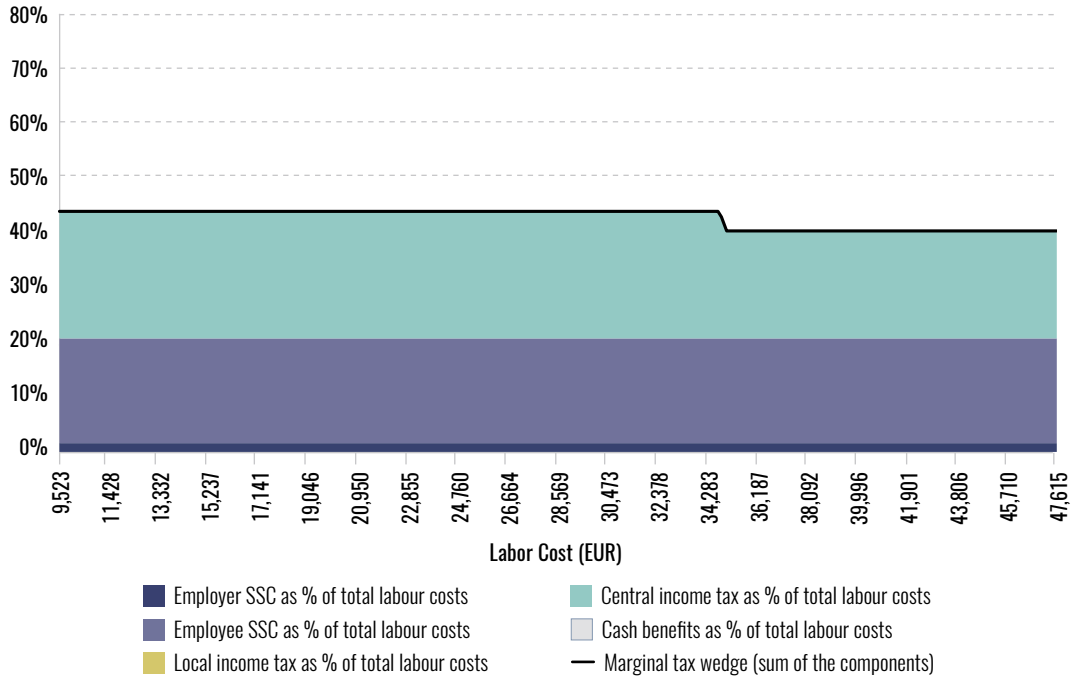
Source: OECD, "Taxing wages – Tax wedge decomposition," https://stats.oecd.org/Index.aspx?DataSetCode=TXWDECOMP; OECD, "Taxing wages – Comparative tables," https://stats.oecd.org/Index.aspx?DataSetCode=AWCOMP; and Tax Foundation calculations.

marginal tax wedge rate is due to a progressive central income tax, while social security contributions have a flat rate.

Other countries like Lithuania also have a relatively flat marginal tax rate at around 44.1 percent. Lithuania is the only country in the European Union that from 2019 shifted most of the employer social security contributions to the employee side, which translated into a gross salary increase of 28.9 percent. By closing the gap between the total labor cost and the gross salary, labor taxation became more transparent and simple.

On the other hand, Lithuania has a two-bracket progressive personal income tax. A 20 percent rate applies to income equal to or below the threshold of 60 times the average wages per year, EUR 81,162, and a 32 percent rate applies to income above the threshold. Additionally, it offers a regressive general tax allowance that fades out completely at EUR 34,368.[30]

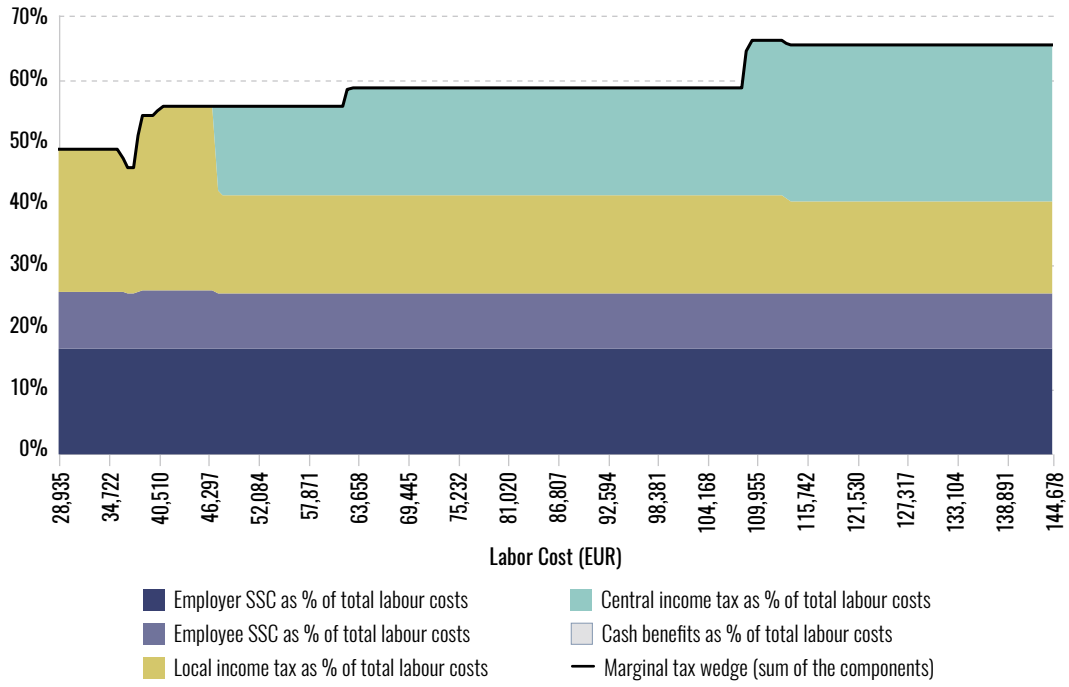
Graph 9 | LITHUANIA. MARGINAL TAX WEDGE FOR A SINGLE EARNER AS A PERCENTAGE OF LABOR COST BY LEVEL OF LABOR COST IN EUR



Source: OECD, "Taxing wages – Tax wedge decomposition," https://stats.oecd.org/Index.aspx?DataSetCode=TXWDECOMP; OECD, "Taxing wages – Comparative tables," https://stats.oecd.org/Index.aspx?DataSetCode=AWCOMP; and Tax Foundation calculations.

In the case of Finland, a single parent with two children faces a progressive marginal tax wedge profile, starting at 49 percent and reaching 65.7 percent at labor cost above EUR 114,007. The increase in the marginal tax wedge rate is due to a progressive central income tax, while social security contributions have a flat rate. Also, the local income tax and the central income tax are adjusted and well-coordinated and do not generate marginal tax rate spikes like the ones described in the previous section in Italy or Japan. Nevertheless, marginal tax rates above 50 percent, as the ones observed in Finland, might discourage employment and labor supply. Even if marginal rates do not spike in a way that traps people in poverty, high marginal rates still impact workers directly.

Graph 10 | FINLAND. MARGINAL TAX WEDGE FOR A SINGLE PARENT WITH TWO CHILDREN AS A PERCENTAGE OF LABOR COST BY LEVEL OF LABOR COST IN EUR



Source: OECD, "Taxing wages – Tax wedge decomposition," https://stats.oecd.org/Index.aspx?DataSetCode=TXWDECOMP; OECD, "Taxing wages – Comparative tables," https://stats.oecd.org/Index.aspx?DataSetCode=AWCOMP; and Tax Foundation calculations.

MARGINAL TAX RATE SPIKES IN OECD COUNTRIES BY FAMILY TYPE

Marginal tax rate spikes like the ones observed in the case studies occur in many OECD countries at different levels on the earnings scale.

From the four family types available in the OECD database, only two were selected. The marginal tax wedge of a one-earner married couple with two children is similar to the marginal tax wedge of a single parent with no children. In addition, the marginal tax wedge of a single person with no children is similar to the marginal tax wedge of a one-earner married couple with no children. For this reason, only the single worker with no children and the single parent with two children are presented below for all OECD countries.

Marginal Tax Wedge Spikes Observed in OECD Countries for Single Person with No Children

In 16 OECD countries, workers earning less than the average income in their country face marginal tax rates above 50 percent. In countries like Austria, Belgium, France, Mexico, Spain, and Turkey, low-income workers face marginal tax rates of about or above 70 percent. High marginal tax rates like these can make moving up the income ladder very difficult, especially for low-income workers and families.

In Mexico, marginal tax rates above 100 percent can be observed generating the so-called "poverty trap."

Table 8 | MARGINAL TAX WEDGE (MTW) IN OECD COUNTRIES FOR SINGLE PERSONS WITH NO CHILDREN

Country	Average MTW	Highest MTW	% of the Average Wage at which the Highest MTW is Reached	Total Labor Cost at which the Highest MTW is Reached	
				National Currency	USD PPP
Australia	43.24%	49.67%	193%	189,658	126,779
Austria	52.29%	88.07%	58%	37,478	49,578
Belgium	68.20%	82.73%	50%	31,712	42,325
Canada	42.34%	59.33%	65%	53,233	42,692
Chile	14.39%	910.33%	89%	9,591,369	22,363
Costa Rica	34.97%	40.13%	185%	20,503,919	61,928
Czech Republic	44.69%	44.69%	50%	291,224	22,993
Denmark	49.77%	55.49%	130%	594,897	91,981
Estonia	43.60%	49.47%	79%	19,374	37,465
Finland	59.65%	66.50%	189%	109,377	132,580
France	59.83%	93.16%	117%	63,840	90,520
Germany	51.04%	59.36%	109%	68,728	93,053
Greece	50.52%	62.16%	248%	57,228	110,350
Hungary	43.16%	43.16%	50%	3,159,245	20,932
Iceland	44.94%	47.60%	122%	13,077,999	89,263
Ireland	53.62%	56.78%	139%	78,161	104,401
Israel	46.33%	50.74%	138%	258,305	73,254
Italy	62.57%	116.15%	113%	50,601	77,798
Japan	38.56%	49.80%	250%	14,379,952	145,070
Korea	31.78%	61.20%	149%	77,321,991	91,011
Latvia	45.21%	48.23%	132%	24,916	51,800
Lithuania	42.92%	44.10%	50%	9,523	20,781
Luxembourg	53.09%	191.87%	246%	183,753	212,802
Mexico	27.10%	197.53%	67%	103,822	10,662
Netherlands	49.71%	55.50%	203%	119,825	158,467
New Zealand	31.15%	33.00%	106%	70,042	48,989
Norway	49.21%	52.57%	155%	1,155,819	115,194
Poland	41.38%	48.30%	161%	120,071	67,406
Portugal	55.08%	60.44%	202%	51,499	92,661
Slovak Republic	47.40%	49.19%	164%	29,996	58,105
Slovenia	51.83%	55.04%	163%	42,552	77,324
Spain	46.60%	69.72%	64%	22,307	36,993
Sweden	60.07%	66.60%	179%	1,135,974	130,601

Switzerland	35.04%	46.51%	242%	242,816	216,985
Turkey	47.43%	69.54%	60%	60,567	25,815
United Kingdom	48.29%	66.61%	228%	112,886	166,120
United States	39.98%	66.84%	120%	81,631	81,631

Note: Both top and average MTW are calculated for wages that are between 50% and 250% of the average country's wage.
Source: OECD, "Taxing wages – Tax wedge decomposition," https://stats.oecd.org/Index.aspx?DataSetCode=TXWDECOMP; OECD, "Taxing wages – Comparative tables," https://stats.oecd.org/Index.aspx?DataSetCode=AWCOMP; and Tax Foundation calculations.

Marginal Tax Wedge Spikes Observed in OECD Countries for Single Parent with Two Children

When looking at a single parent with children, in 26 OECD countries, workers earning less than the average income in their country face marginal tax rates above 50 percent. And in 17 countries a low-income single parent with two children faces a marginal tax rate of more than 70 percent. Additionally, marginal tax rates of over 100 percent are observed in 20 countries at various income levels.

Table 9 | MARGINAL TAX WEDGE (MTW) IN OECD COUNTRIES FOR SINGLE PARENT WITH TWO CHILDREN

Country	Average MTW	Highest MTW	% of the Average Wage at which the Highest MTW is Reached	Total Labor Cost at which the Highest MTW is Reached	
				National Currency	USD PPP
Australia	55.83%	652.31%	62%	60,927	40,727
Austria	51.06%	82.47%	58%	37,478	49,578
Belgium	69.21%	258.42%	70%	46,461	62,010
Canada	52.03%	90.21%	65%	53,233	42,692
Chile	9.56%	134.94%	56%	6,035,019	14,071
Costa Rica	34.81%	40.13%	185%	20,503,919	61,928
Czech Republic	46.41%	568.00%	195%	1,135,773	89,671
Denmark	50.32%	57.49%	179%	819,127	126,651
Estonia	43.60%	49.47%	79%	19,374	37,465
Finland	59.65%	66.50%	189%	109,377	132,580
France	56.71%	197.30%	235%	135,556	192,209
Germany	48.75%	58.04%	109%	68,728	93,053
Greece	53.88%	347.76%	201%	46,382	89,437
Hungary	43.16%	43.16%	50%	3,159,245	20,932
Iceland	49.64%	104.56%	165%	17,687,457	120,725
Ireland	59.68%	311.35%	59%	33,176	44,314
Israel	46.19%	50.86%	65%	120,038	34,042

Italy	67.02%	121.82%	113%	50,601	77,798
Japan	43.97%	359.12%	77%	4,571,829	46,122
Korea	30.39%	52.79%	149%	77,321,991	91,011
Latvia	43.96%	48.23%	132%	24,916	51,800
Lithuania	45.50%	563.27%	74%	14,094	30,756
Luxembourg	42.06%	125.11%	246%	183,753	212,802
Mexico	27.10%	197.53%	67%	103,822	10,662
Netherlands	53.84%	57.62%	132%	80,534	106,506
New Zealand	43.65%	100.00%	50%	33,039	23,108
Norway	49.21%	52.57%	155%	1,155,819	115,194
Poland	42.02%	185.35%	207%	154,377	86,664
Portugal	56.45%	412.21%	134%	34,163	61,468
Slovak Republic	47.40%	49.19%	164%	29,996	58,105
Slovenia	53.75%	337.58%	68%	17,752	32,258
Spain	44.83%	104.89%	54%	18,822	31,213
Sweden	60.07%	66.60%	179%	1,135,974	130,601
Switzerland	30.18%	42.38%	235%	235,818	210,731
Turkey	47.43%	69.54%	60%	60,567	25,815
United Kingdom	52.91%	77.89%	50%	23,803	35,028
United States	44.65%	102.08%	181%	122,971	122,971

Note: Both top and average MTW are calculated for wages that are between 50% and 250% of the average country's wage.

Source: OECD, "Taxing wages – Tax wedge decomposition," https://stats.oecd.org/Index.aspx?DataSetCode=TXWDECOMP; OECD, "Taxing wages – Comparative tables," https://stats.oecd.org/Index.aspx?DataSetCode=AWCOMP; and Tax Foundation calculations.

CONCLUSION

The case studies analyzed show that complex tax structures and benefit programs conduce to a broad range of marginal tax rates, generating in some cases marginal tax rates of over 50 percent. At certain levels of income, selected types of families and workers face the so-called "income trap" where marginal tax rates are higher than 100 percent.

In 2021, a Canadian worker could face marginal tax rates that claim 59 percent of additional earnings due to the health-care premium that Quebec, Ontario, and British Columbia provinces levy on individuals. The first marginal tax rate spike occurs at 65 percent of the average wage and proximately 73 percent of the median wage.[31] This could keep some workers in these provinces just below the threshold of earnings that triggers the tax rate spikes. Eliminating these barriers by implementing a unique and lower rate will allow workers to have access to higher wages without confronting this barrier.

Similar to the Canadian worker, at a certain level of income, a French worker loses 93 percent of additional earnings to contributions to the general equilibrium component of social security contribution and family allowance. The first marginal tax rate spike occurs at 102 percent of the average wage and proximately 117 percent of the median wage. The existence of different social security thresholds calculated either in terms of the minimum wage or of the maximum social security contributions generates a complex system with marginal tax rates that might keep workers in France just below the threshold or even push them to commit social security fraud.

In 2021, an Italian worker could face marginal tax rates that claim 116 percent of additional earnings due to local income tax. The marginal tax rate spike occurs at 113 percent of the average wage and approximately 128 percent of the median wage. By aligning the regional and local income tax rates and thresholds with the central income tax this middle-income trap would be eliminated, encouraging workers to pursue higher incomes.

When moving up the income ladder an Australian worker with children can face a tax rate spike of over 100 percent at four different points due to the Family Tax Benefit and the Parenting Payment Single. The first marginal tax rate spike occurs at 62 percent of the average wage and approximately 73 percent of the median wage.[32] The loss in benefits that especially poor Australian single parents face when taking on additional work hours can lock them into poverty, showing that the tax-benefit system is inefficient in promoting the upward mobility of single parents.

A single parent with two children in the U.S. faces major changes in the marginal tax rates due to the Earned Income Tax Credit (EITC), Recovery Rebate Credit, and Medicare. At certain levels of income, the marginal tax rate for this single parent decreases as income increases even by a small amount. The first drop in marginal tax rates occurs at 76 percent of the average wage and approximately 95 percent of the median wage. Although the EITC can encourage work participation among certain groups, it is an imperfect policy as in its flat and phaseout region, it motivates the reduction of hours worked.[33] Therefore, when reforming the EITC, policymakers should take into consideration both its benefits and its drawbacks.[34]

A Japanese single parent with two children faces marginal tax rates of over 350 percent due to the child-rearing allowance and child benefits. The first marginal tax rate spike occurs at 77 percent of the average wage and approximately 88 percent of the median wage. Additionally, a one-earner Japanese couple with two children faces marginal tax rates of over 250 percent due to a local fixed standard tax and spouse's allowance. For this couple the first marginal tax rate spike occurs at 52 percent of the average wage and approx-

imately 60 percent of the median wage. However, a gradual fading out of these benefits and allowances would eliminate these tax spikes.

Although many of the underlying policies generating these marginal tax rate spikes were designed for and proved successful in keeping low-income working households out of poverty and encouraging workforce participation, many of them come with trade-offs that policymakers must keep in mind when planning to reform the tax system. Countries have policies that impact workers at different levels of income. In Canada, Australia, and the United States, the spikes directly impact workers earning less than the average wage. Even close to poverty-level workers are impacted by marginal tax rate spikes in Japan. In France and Italy, higher-income workers are mainly impacted. Reshaping some of these policies to generate a smoother variation of marginal tax rates over different income levels would likely raise labor supply and encourage the upward mobility of workers.[35]

ENDNOTES

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