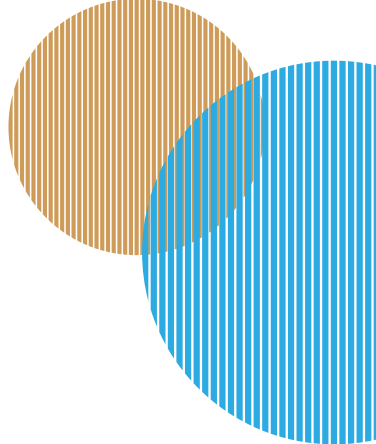




WORLD BANK GROUP



THAILAND PUBLIC REVENUE AND SPENDING ASSESSMENT

PROMOTING AN INCLUSIVE AND SUSTAINABLE FUTURE

JUNE 2023



CHAPTER 8

TAXES, TRANSFERS

AND EQUITY



Chapter 8: Taxes, Transfers, and Equity

8.1 Introduction

391. This chapter examines the impacts of fiscal policies on poverty and inequality. Fiscal policy can be a key instrument for reducing poverty and inequality while financing important investments in public services and growth. This chapter uses the Commitment to Equity (CEQ) method to estimate the distributional welfare consequences of Thailand's public revenues and expenditures, quantify the impact of these fiscal activities on both inequality and poverty, and estimate how effectively they redistribute income between the rich and the poor. The analysis aims to inform reforms to improve the poverty and distributional impacts of fiscal policies.

392. Thailand's fiscal system reduces the Gini Index of inequality by 8.9 points (around the upper middle-income country (UMIC) average), while poverty falls by 0.9 points (7th highest of UMIC countries with data). In total, fiscal policy reduces the Gini Index of inequality in Thailand by 4.2 points when considering only the impact of taxes and cash benefits of transfers, and 8.9 points when also including health and education in-kind benefits.²⁰⁴ In the international context, the cash impact on inequality is 12th-best out of 58 countries with available CEQ data, and 4th-best out of 24 UMICs. However, when non-cash benefits are included, Thailand falls in international rankings, 22nd out of 58 countries and 13th out of 24 UMICs. Poverty is estimated to fall by 0.9 points from fiscal policy. This is 15th-best out of 56 countries with comparable data and 7th best among UMICs.

393. However, Thailand's spending on health, education and social protection is low by international standards, as is tax revenue collection; the reforms recommended in this report would increase both while maintaining progressive fiscal policy outcomes on poverty and inequality. While social spending does help reduce poverty and inequality in Thailand, overall levels are low. At the same time, overall spending is constrained by low total tax revenue collection, particularly low VAT collection. As recommended in this report, the following reforms would increase spending on critical public services and raise revenue for this additional spending in a progressive manner:

- Increasing direct taxation, especially from personal income taxes
- Increasing indirect taxation on general consumption
- Increasing health taxes on tobacco, alcohol, and sugar-sweetened beverages, as well as introducing digital and carbon taxes
- Increasing spending on health and education
- Strengthening tax administrative capacity
- Avoiding spending on subsidies to mitigate higher fuel and food prices
- Improving targeting of direct transfers

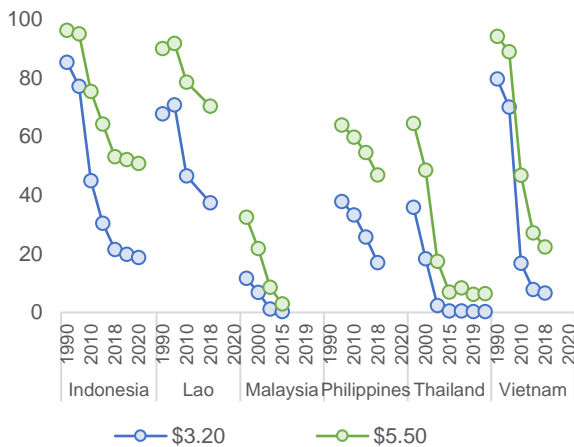
8.2 Poverty and inequality in Thailand

394. Prior to the COVID-19 pandemic, Thailand had made faster progress in reducing poverty than most regional peers, but disparities in income and consumption continued to be higher relative to other countries in the region. Over the past three decades, the poverty rate based on the \$5.5 per person per day in 2011 Purchasing Power Parity (PPP) exchange rate upper-middle income country (UMIC) international line fell by 58 percentage points in Thailand; only Vietnam (72 points) and Indonesia (67 points at the \$3.20 lower-middle income country (LMIC) line) had larger reductions (Figure 8-1). From 2015 onwards, only Malaysia had a lower UMIC poverty rate than Thailand. Thailand has also achieved important reductions in inequality, but in 2019 income inequality was still the highest in the region (Figure 8-2). In 2017/18, Thailand ranked 13th out of 63 countries globally for which income Gini coefficients are available. In terms of consumption inequality, Thailand performed better, ranking 45th out of 72 countries with available consumption Gini coefficients, but it continues to rank higher than half of countries in East Asia and the Pacific (EAP) that have available data for this period.

²⁰⁴ This is the baseline Pensions as Deferred Income (PDI) scenario. The results are very similar if pensions are treated as a government transfer (PGT), see technical appendix for full results.

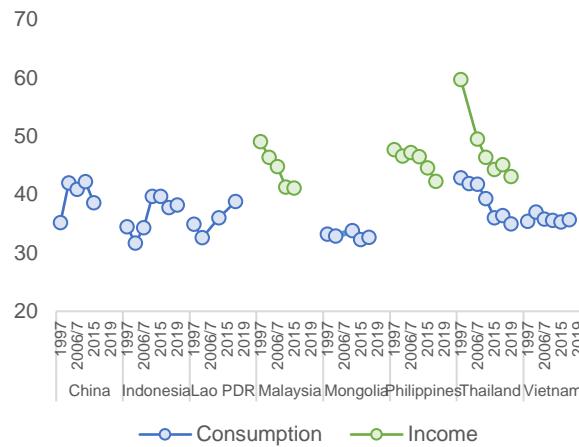
Figure 8-1: Thailand achieved the fastest poverty reduction in East Asia ...

(Poverty rate at 2011 PPP international poverty lines)



Source: World Development Indicators and SES 1990-2020.
Note: Nearest year of available data taken for 1990, 2000 and 2010.

Figure 8-2: ...but inequality remains high albeit declining
(Gini Index)



Source: PovcalNet and SES 1990-2020.

395. The severe economic contraction caused by COVID-19 led to widespread job and income losses. During the onset of the pandemic (March to May 2020) about 70 percent of the national workforce saw their income fall by nearly half, with informal sector workers and low-income households being hit the hardest.²⁰⁵ Over 500,000 jobs were lost in manufacturing, wholesale and retail trade, and accommodation and food services, and there was a progressive return of workers back to agriculture.

396. Thanks to massive social transfers, poverty only slightly increased by 0.6 percentage points in 2020. It is estimated that more than 44 million Thais have benefitted from social assistance and social insurance programs during the pandemic. Simulations indicate that social protection measures have mitigated the 1.2 percentage point increase in poverty that is estimated to have otherwise occurred during 2020 in the absence of the government’s response (TEM July 2021).

397. Despite the large social assistance response achieving high coverage, households remained under pressure. A rapid phone survey implemented from April to June 2021 showed that around 80 percent of households received government assistance during the pandemic (Belhaj Hassine Belghith and Arayavechkit 2021).²⁰⁶ The proportion is higher among low-income households (86 percent) than high-income households (71 percent), and among those experiencing negative income shocks (84 percent) than those not (66 percent). Despite the high coverage of social assistance, food insecurity increased, and substantial income declines have forced households to resort to negative coping strategies such as reducing food consumption and increasing debt.

398. A fourth wave of COVID-19 in 2021 slowed the recovery with vulnerable groups bearing a disproportionate burden. The survey also showed that while national employment remained stable at 68 percent between March 2020 and June 2021, there were significant differences across regions and certain demographics, with employment declining in urban areas and Bangkok but increasing in rural and Northern areas as many individuals who lost employment moved into the agricultural sector. Individuals in low-income households, women and those in low education groups were the most negatively impacted. Furthermore, increasing care responsibilities during the pandemic have negatively affected the employment status of married women and those in households with children, especially in urban areas. In addition to challenges in employment, the survey indicated that over 70 percent of households have experienced a decline in income, increasing to 80 percent of households in rural areas and low-income groups.

²⁰⁵ Surveys of Thai workforce and micro and small businesses conducted by the Asia Foundation in May and September 2020.

²⁰⁶ <https://blogs.worldbank.org/eastasiapacific/impact-covid-19-thailands-households-insights-rapid-phone-survey>.

8.3 Fiscal policy and equity

399. Fiscal policy is a key government instrument with several roles. It can be used to provide public goods and services, for macroeconomic stabilization, helping to dampen the impact of adverse shocks, to stimulate economic growth and to aid poverty reduction (Horton and El-Ganainy 2020). The COVID-19 pandemic brought into sharp relief the role that fiscal policy can play in mitigating shocks. It is also an important part of financing the necessary public investments in physical and digital infrastructure and human capital needed for countries to transition to higher incomes.

400. This chapter looks at the relationship between fiscal policy and poverty and inequality reduction in Thailand. Fiscal policy is also one of the few instruments which governments can use to reduce inequality in the short-term. It is not just that fiscal policy finances public investments which can promote growth as well as reduce poverty and inequality in the long-term; it can also affect the household income distribution today. Different households pay various taxes and benefit from public spending in different ways. The net effect determines the extent to which fiscal policy directly reduces poverty and inequality. The choice of public spending can also affect how much poverty and inequality are reduced in the longer-term.

401. Lower inequality tends to be associated with faster and more sustainable growth. Inequality can undermine progress in human capital accumulation, dampen demand, cause political and economic instability that discourages investment, and undercut the social consensus required to adjust in the face of shocks, and thus it tends to reduce the pace and sustainability of long-term growth. Ostry et al. (2014) finds that, for a given level of redistribution, lower post-fiscal inequality is correlated with faster and more durable growth. Similarly, Dabla-Norris et al. (2015) shows that an increase in the income share of the B40 is associated with higher GDP growth. Other studies have found that the relationship between income inequality and economic development is non-linear, switching from positive to negative at relatively low levels of income inequality (Grigoli and Robles, 2017). Fiscal policy is the main instrument used by governments to address acute needs and promote long-term growth, with wide-ranging impacts on poverty and inequality (World Bank, 2022c).

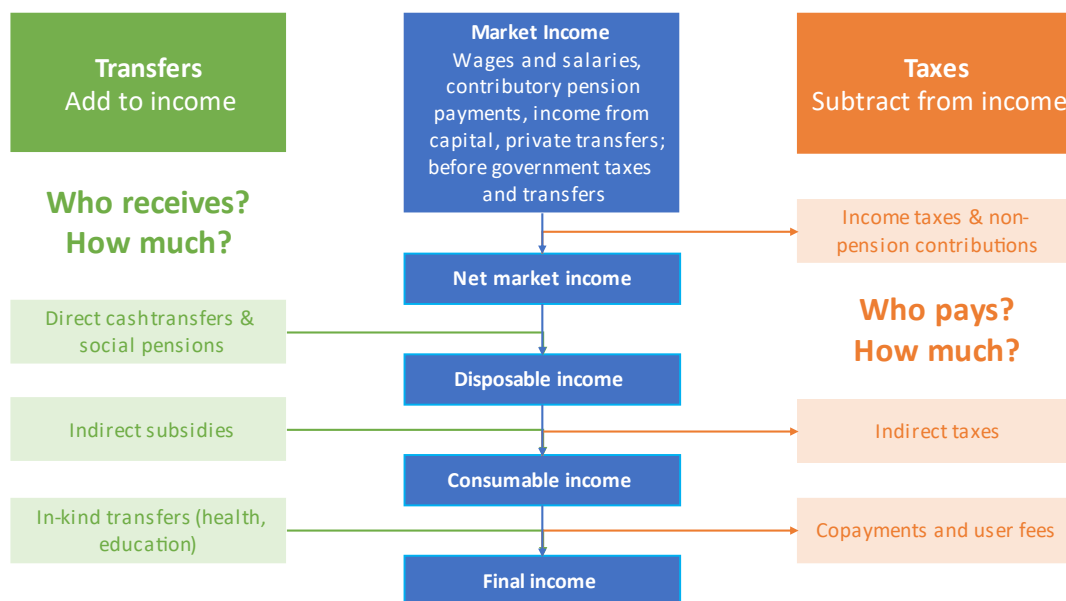
8.4 The commitment to Equity framework

402. To determine the impact of fiscal policy on household welfare, the Commitment to Equity (CEQ) framework of fiscal incidence analysis is used (Lustig 2018).²⁰⁷ Under this framework, household income is assessed at different stages, as outlined in Figure 8-3. First, a household's market income is the total income it received from wages and salaries, rents and dividends, private transfers and remittances and contributory pension income.²⁰⁸ This is the income a household generates before it encounters the fiscal system and is also called its pre-fiscal income. Some households pay personal income taxes and non-pension social security contributions which reduce their market income. Some households receive direct transfers (including social pensions) from the government as part of the social safety net, which increases their market income. The net effect after direct taxes and direct transfers is a household's disposable income: how much money does it have to spend on goods and services, or to save? Disposable income is equivalent to the measured consumption in the Thailand Socio-Economic Survey (SES). Second, when a household does buy goods and services, it pays indirect taxes (such as VAT, GST or Sales tax or special excises on particular goods) which means its disposable income buys less, but it might also benefit from indirect subsidies (such as cheaper fuel or electricity) which means its disposable income buys more. How much of different goods and services a household can afford to buy, after considering both indirect taxes and subsidies, is called consumable income. When considering only cash-based fiscal instruments, this is also a household's post-fiscal income. Finally, a household may also use public services such as send their children to a public school or visit a health center or hospital. In this case the public spending benefits are non-cash. Including this non-cash spending results in a household's final income (the post-fiscal income if non-cash spending is included).

²⁰⁷ The CEQ approach was developed by the Commitment to Equity Institute (CEQ Institute) at Tulane University. The methodology, implementation guidelines, applications, and software of the CEQ approach can be found in Nora Lustig (Ed.), *Commitment to Equity Handbook. Estimating The Impact of Fiscal Policy on Inequality and Poverty* (pp. 3-55). Brookings Institution Press. 2018.

²⁰⁸ Pensions can either be treated as deferred income – a person makes contributions when they are working and this is in effect saving, and then they draw down on this income when they retire – or they can be treated as government taxes and transfers – contributions are treated as a tax and payments are treated as a transfer. In the case of Thailand the baseline treats pensions as deferred income. See the data annex for the results when pensions are treated as taxes and transfers and the technical annex for greater discussion of this point.

Figure 8-3: Definition of income concepts and the role of fiscal instruments



Source: Lustig (2018).

403. This framework allows two key questions to be answered. First, who pays a particular tax or receives a particular benefit? For example, how much VAT is paid by poorer households and how much by richer households, both in baht and as a percentage of their market income? Second, what is the net impact of all taxes and transfers on different households? For example, which households pay more in taxes than they receive in benefits and which pay less? How does this net fiscal impact affect poverty and inequality in Thailand?

404. The objective of this chapter is to ask whether pre-COVID-19 fiscal policy in Thailand made the household income distribution more equal, and which instruments contribute to any such effect. The results are put in international perspective and insights from international experience are summarized, while specific policy recommendations are discussed in the concluding chapter of the report which follows. The data and methodology used to produce these results are discussed further in the technical appendix (Appendix A).

405. The CEQ framework has two important advantages. First, it assesses both tax and expenditure policies, including direct taxes (personal income tax, PIT) and pension and social insurance contributions; indirect taxes on consumption, such as VAT and excises on tobacco and alcohol or fuel; direct transfers; indirect subsidies (for a range of goods and services, sometimes as subsidized final items and sometimes as subsidized inputs); and in-kind spending (for example, education and health benefits, which are not received by households as cash). Moreover, the framework not only assesses as much tax and spending as possible but also examines their joint rather than individual effect, so the net impact on households is estimated. Second, it uses a standardized methodology, making it comparable across countries and time and allowing international benchmarking, as this chapter does.

406. It is also important to note what the CEQ framework does not do. Because the framework takes an accounting approach, it does not include behavioral effects (such as consumer substitution and labor market decisions, although it does model tax evasion and non-take up of social benefits), general equilibrium effects (such as the multiplier effect of cash transfers on the economy and the second-round tax effects this may create), or intertemporal effects (such as the long-run benefits of public education). Nor does it cover all taxes and spending or all people. In particular, it does not generally include corporate income tax or infrastructure spending and can suffer from low coverage of the richest people, who are often under-represented in household surveys.²⁰⁹

²⁰⁹ The likely distributional impact of missing taxes and spending as well as the longer-term benefits of spending on health and education are discussed further in World Bank (2022).

8.5 Taxes and spending

Composition of revenues and expenditures (2019)

407. Thailand’s tax revenues rely more on indirect than direct taxes; 62 percent of total tax revenue is captured in the current analysis, which excludes corporate income taxes. Thailand collected 17 percent of GDP in tax revenues in 2019,²¹⁰ below both the EAP and UMIC average (see Chapter 2). Indirect taxes such as VAT and excises are responsible for greater revenue collection than direct taxes such as CIT and PIT (Table 8-1), which is standard in developing countries; only OECD countries collect a majority of revenues through direct taxes (World Bank, 2022). Around 42 percent of tax revenue is from direct taxation, mostly CIT, which contributes about 25 percent to tax revenue while PIT contributes only 11 percent. VAT and excises each contribute about a similar amount as CIT (21 and 24 percent, respectively), with the latter mainly coming from fuel excises (prior to their reduction during the Ukraine food-fuel crisis; see later discussion). About 62 percent of total tax revenues (PIT, SSC, VAT and excises) are included in the CEQ analysis, although only around 34-47 percent of total PIT, VAT and excise revenues are modelled, reflecting in part missing top income households from the survey data; PIT cannot be calculated on the income from these households, nor VAT and excises on the resulting consumption.²¹¹

Table 8-1: 62 percent of total 2019 tax revenues in Thailand are included in the CEQ analysis

	% Rev	% GDP	Included	Macro-validation*
Tax revenues	82.2	17.1		
Income taxes	34.1	7.1		
Personal income tax	8.7	1.8	Yes	39.7%
Social security contributions	4.9	1.0	Yes	78.8%
Corporate income tax	20.6	4.3	No	
Property taxes	1.1	0.2	No	
General taxes on goods and services	36.3	7.6		
VAT*	16.9	3.5	Yes	37.7%
Excises*	19.4	4.0	Yes	55.5%
Taxes on international trade	2.8	0.6		
Customs duties	2.8	0.6	No	
Other taxes	7.9	1.6		
Non-tax revenues	17.8	3.7		
Total revenues	100.0	20.9		

Source: UNU-WIDER Government Revenue Dataset 2021: General Government.

Note: GDP in 2019 is THB 16,896 billion and total revenues are THB 3,526 billion. Macro-validation is the ratio of each simulated tax or spending item to the administrative total.

408. Just under half of all spending is included. Of the 20.5 percent of GDP which Thailand spends on public expenditure, nearly half (8.8 percent of GDP) is spent on social protection, education and health (Table 8-2), all of which is captured in the analysis in this chapter. Of the 3.1 percent of GDP spent on social protection, 0.8 percent goes on direct social assistance transfers, mostly Old Age Allowance (OAA) and the State Welfare Card (SWC).²¹² About 2.3 percent goes on social insurance, or contributory pensions. In the baseline methodological approach these are treated as deferred income

²¹⁰ 16 percent excluding social contributions.

²¹¹ For the purposes of macro-validating the modelled CEQ VAT and excise with administrative data, we use only that part of VAT collected attributed to households (so excluding that from non-residents, government purchases and intermediate consumption with limited right to deduct VAT). VAT forgone from exemptions is not broken out amongst these categories and so is pro-rated according to the VAT collected.

²¹² The 2019 Socio-economic survey (SES) data show larger spending on social assistance than administrative data (1.2 percent of the GDP in the first and 0.8 percent in the latter). CEQ results use 1.2 percent of GDP.

and included in market or pre-fiscal income. Around one-third of education spending goes on secondary school, a little under that to tertiary spending.

Table 8-2: 44 percent of total 2019 public spending in Thailand is included in the CEQ analysis

	% Exp	% GDP	Included	Macro-validation
Social protection	15.0	3.1		
Direct transfers	3.9	0.8	Yes	59%
Old age allowance	2.0	0.4		
Unconditional cash transfers ¹	0.9	0.2		
Other	1.0	0.2		
Social insurance ²	11.1	2.3	Yes	-
Education	14.8	3.0	Yes	86%
Pre-primary and primary	0.7	0.1		
Secondary	5.4	1.1		
Tertiary	3.9	0.8		
Not defined/classified	2.9	0.6		
Subsidiary serv. to education	1.9	0.4		
Health	13.9	2.7	Yes	99%
Other spending	63.0	12.9		
Total expenditures	100.0	20.5		

Source: GFS and TEM July 2021.

Notes: Total expenditures are estimated at THB 3,456 billion. Over 90 percent of unconditional cash transfers are from the State Welfare Card (SWC) program. Macro-validation is the ratio of each simulated tax or spending item to the administrative total. Contributory pensions are treated as deferred savings under the baseline CEQ approach used in this chapter. As such, they are not included in the main CEQ results and do not require macro-validation.

409. Thailand tripled social assistance spending to mitigate the impact of the COVID-19 crisis on firms and households. The Thai COVID-19 response was one of the largest in the region and beyond, with over 80 percent of the population receiving some sort of support. This support came by way of additional payments to existing beneficiaries as well as an expansion of temporary support to new beneficiaries; see Chapter 6 for greater detail.

410. Moreover, with the compounding Ukraine food-fuel price crisis, it has enacted a series of price controls. Inflation reached a 14 year-high in July 2022 and the government intervened through price controls and subsidies to contain the inflationary pressures. While price increases are projected to moderate over the short term, these measures impose a significant fiscal cost and aggravate the fiscal deficit (Thailand Monthly Economic Monitor August 2022, EAP Economic Update 2022).

Impact of taxes and spending on the household income distribution

411. The progressivity of a fiscal system can be thought of either in terms of what share of taxes are paid and benefits received by richer households and poorer households, or how much these amounts paid and received represent relative to each household's income. Each household in Thailand pays some taxes and receives some benefits from public spending. If the taxes paid are more than the benefits received, they are a net contributor; if the benefits outweigh the taxes, they are a net beneficiary. This chapter groups every household into an income decile – groups of ten percent of the population ranked from the poorest 10 percent by market income (decile 1) to the richest 10 percent (decile 10). How each decile benefits and contributes and by how much can be presented in two different ways. The first is to show the total tax paid by each decile (or the total benefits received). The second is to show the same pattern of taxes or benefits but as a percentage of average income for each decile. That is, one way of thinking the progressivity of a fiscal system is to ask what share of taxes and benefits go to each income decile? Another is to ask how much are taxes and benefits for each decile relative to their income? Both types of charts are used throughout this chapter and Box 8-1 discusses further how to read and interpret them.

Box 8-1: Incidence curves, concentration shares and fiscal progressivity

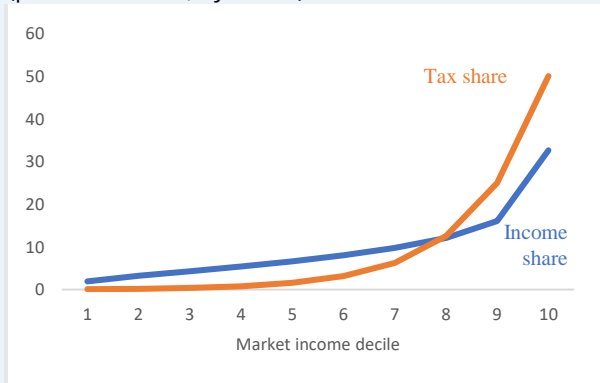
The incidence of a particular tax or transfer is how much it represents relative to a household's market income.

A transfer that provides poorer households a greater benefit than for richer households is progressive *with respect to income*. The *concentration* of a particular tax or transfer is how much of the total tax is paid or benefit received by a household. A transfer in which more goes to poorer households in absolute terms (that is, of the total budget) than richer households is progressive *with respect to the share of benefits*. Any transfer in which poorer households receive an equal or greater share of benefits as the rich will reduce inequality: as the rich have a greater share of income to begin with, the post-transfer shares of income will be more equal. For a tax to reduce inequality, not only must the rich pay a greater share of it, but they must also pay a greater share than they already enjoy of total household income. This may seem counterintuitive, but consider an example where A earns \$10 and B earns \$90. A pays \$5 in tax while B pays \$10. B is paying a greater share of tax (67 percent) but because she has an even greater share of income (90 percent), the tax is inequality increasing: the post-tax incomes are \$5 and \$80, where B now has 94 percent of total income.

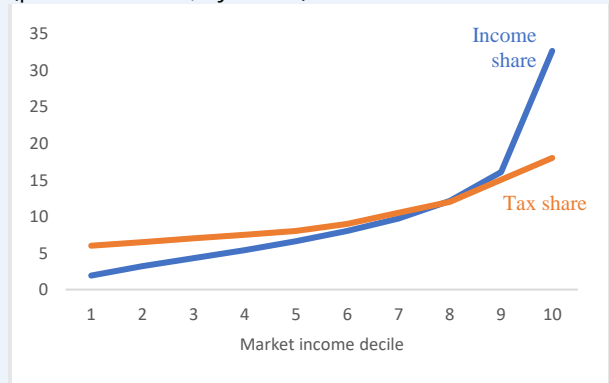
Figure Box 8-1-1 shows two examples of taxes, both where richer households pay a greater share, one where it reduces inequality because the share paid by the rich is greater than their share of total income, and another where inequality is increased because even though the rich pay a greater share of the tax, it is less than their share of income, meaning their post-tax income share *goes up*. Note that the concentration shares add up to 100 percent.

Figure Box 8-1-1: Inequality Increasing and Reducing Concentration Shares

Concentration Shares (market income and inequality decreasing tax)
(percent of total, by decile)



Concentration Shares (market income and inequality increasing tax)
(percent of total, by decile)



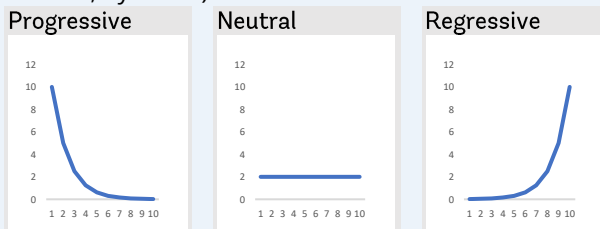
Source: Authors' elucidation

The incidence of a particular tax or transfer is how much it represents relative to a household's market income.

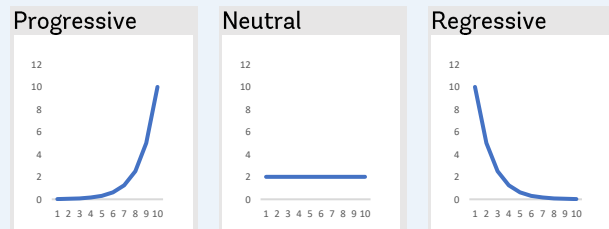
A transfer that represents a greater percent of income for poorer households than for richer households (or a tax which represents a greater percent of income for richer households) is progressive *with respect to income*. Figure Box 8-1-2 shows stylized examples of progressive, neutral, and regressive incidence curves, first for a transfer, subsidy or other benefited by households and second for a tax paid. Note that the points of the incidence curve do not add up to 100; their height will depend on both the size of the tax or transfer and a decile's average market income.

Figure Box 8-1-2: Progressive, Neutral, and Regressive Incidence Curves

Incidence Curve
(transfer, subsidy or benefit as percent of market income, by decile)



Incidence Curve
(percent of total tax, by decile)



Source: Authors' elucidation.

Box 8-1: Incidence curves, concentration shares and fiscal progressivity

It is possible for an instrument to have a regressive concentration but progressive incidence. This is often the case with fuel subsidies; richer households consume much more fuel (and therefore a greater share of the total subsidy) than poorer households, but the meagre benefits to the poor represent a greater share of their even more meagre incomes. It is also possible for an instrument to have a progressive concentration but regressive incidence. This is often the case with indirect taxes such as VAT; richer households pay a greater share of the total tax because they consume more, but poorer households pay more relative to their income (and poor incomes are closer to consumption than rich incomes). In fact, indirect taxes and subsidies can be seen as mirror images of each other. A more exact way to both represent progressivity / regressivity and quantify it is with Lorenz Curves of income and Concentration Curves (not shares) of a tax or transfer.

Source: World Bank (2022)

412. The Thai fiscal system in 2019 was quite progressive, with a greater share of net contributions coming from richer households, driven by progressive taxation, and a greater share of net benefits going to poorer households.

Figure 8-4 shows the total taxes paid by each household market income decile, the total benefits received and the net impact. A number of features are salient. First, in cash terms (that is, excluding the non-cash benefits of health and education spending), Thais in the poorest two deciles are net cash beneficiaries – they receive more in cash benefits than they pay in tax. The next two deciles roughly breakeven, neither paying nor benefiting more, while the richest six deciles are all net cash contributors. Moreover, decile one receives more net cash than decile two while each of the richest six deciles contributes an increasing amount into the fiscal system, with the richest 10 percent of households contributing three times more than the next richest 10 percent. When non-cash benefits are also included, the first seven deciles become net beneficiaries and only the richest decile remains a significant net contributor, paying THB 209 bn more in taxes each year than they receive in benefits. By contrast, the poorest 20 percent receive nearly as much in net terms, or THB 225 billion. While a greater share of education, health and cash transfers goes to poorer households than richer ones, the main driver of the strong net contributions by the richest households is the high share of total tax they pay.

413. The net benefits represent a large share of income for the poorest households, although they are more modest in cash terms and even the richest households do not contribute significantly relative to their incomes.

Figure 8-5 shows the same pattern of taxes and benefits but as a percentage of average income for each decile. The net benefits to the poorest decile represent 70 percent of their market income; that is, their incomes are 70 percent higher after paying taxes and receiving benefits than from what they earn themselves or receive from friends and family. However, education and health benefits make up most (86 percent) of the net impact;²¹³ in cash terms the poorest decile is only 10 percent better off. And both net benefits for other poor households and net contributions from richer households are smaller as a percentage of incomes. No other decile than the poorest one pays or receives in cash more than 10 percent of their income except for the richest decile, which pays 17 percent of their income in cash.

²¹³ Education and health benefits are attributed at the cost of delivery.

Figure 8-4: The majority of households are net beneficiaries, although not in cash terms

(Concentration of taxes and transfers by decile, THB billions annually)

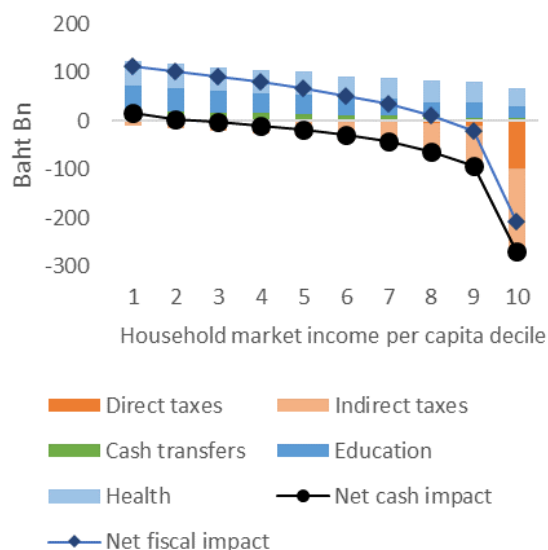
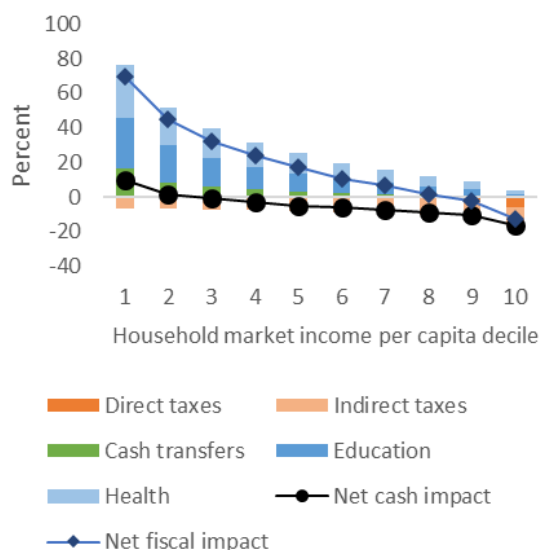


Figure 8-5: Benefits are significant for poorer households relative to their incomes

(Incidence of taxes and transfers by decile, percent of market income)



Source: World Bank calculations

414. The progressive fiscal system reduces inequality in Thailand. Pre-fiscal income inequality – the Gini Index when measured using market income – is 37.5 points. With richer households paying more of their income in direct taxes and poorer households benefitting more from direct transfers, inequality falls to 35.0 (Figure 8-6).²¹⁴ The payment of indirect taxes further reduces inequality slightly to 34.0 but it falls more sharply again to 28.6 points after including health and education benefits. In total, fiscal policy reduces the Gini Index of inequality in Thailand by a considerable 8.9 points.²¹⁵

415. Poverty is also reduced, with the greatest declines coming in areas with the highest initial poverty rates. If poverty were measured in Thailand based on each household’s market income, the poverty rate at the international UMIC poverty line of \$5.50 would be 9 percent. However, after accounting for direct taxes and transfers received, the poverty rate falls to 6.2 percent.²¹⁶ Indirect taxes create some burden for households, resulting in a poverty rate of 8.1 percent, or a decline of 0.9 percentage points after all taxes are paid and cash benefits received (Figure 8-7).²¹⁷ The largest reductions in poverty from fiscal policy come in the initially poorest regions; the poverty rate in the Northeast falls from 16 percent in pre-fiscal terms to 13.3 percent in post-fiscal terms, or a decline of 2.7 points, while in the North it falls from 12.8 percent by 1.5 points. Little reduction is seen in the already very low poverty regions of Bangkok and Central, but neither is there much impact in the South which has a pre-fiscal poverty rate only slightly higher than post-fiscal. The larger impact of fiscal

²¹⁴ The current analysis uses the consumption welfare aggregate from SES data and equates it to disposable income, constructing market income backwards by adding back direct taxes and subtracting direct transfers (see technical appendix for more detail). This ignores the role of savings across the distribution. If we use survey income (instead of consumption) as the starting point and equate it to market income, the pre-fiscal Gini is 45.5, falls to 38.5 after including tax and benefits, suggesting that fiscal policy reduces the income Gini Index by 7 points. The lower impact of fiscal interventions on income Gini than consumption Gini is due to the fact that household income is higher than consumption, particularly in top deciles, and thus the effect of fiscal interventions is lower when measured as a proportion of income than when measured as a proportion of consumption.

²¹⁵ This is the baseline Pensions as Deferred Income (PDI) scenario. The results are very similar if pensions are treated as a government transfer (PGT), see technical appendix for full results.

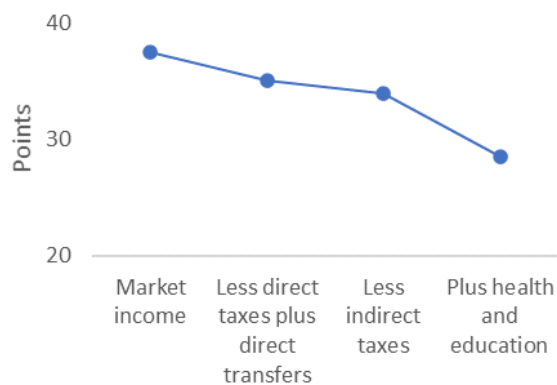
²¹⁶ If we use the survey estimates of social assistance transfers without benchmarking to administrative data (that is spending on social assistance would be 1.2 percent of GDP instead of 0.8 percent), fiscal policy is found to reduce inequality by 9.1 points and poverty by 2.6 points.

²¹⁷ This is the baseline Pensions as Deferred Income (PDI) scenario. When pensions are not treated as market income, initial poverty is higher (12.3 percent compared to the 10.6 percent under PDI) because those receiving pensions have a lower initial income, and since the pensions are then treated as a government transfer, poverty ultimately falls further once fiscal policy is accounted for, to the same 8.1 percent, increasing the impact of fiscal policy on poverty to 4.2 points (compared to 2.6 points under PDI); see technical appendix for full results.

policy on poverty in the North and Northeast compared to the other regions is explained by two factors. The first, and most important one, is related to the fact that 40 percent of households above the median of income distribution in these regions receive enough transfers (net of direct taxes) to close the gap to the poverty line, while this is not the case in the Central and Southern regions. The second, though less important, factor is due to the fact that the net effect of direct transfers less taxes is slightly higher among poor households in northern regions than in the South.

Figure 8-6: The net impact is to reduce inequality at all stages of fiscal policy

(Impacts of fiscal policy on Gini Index)

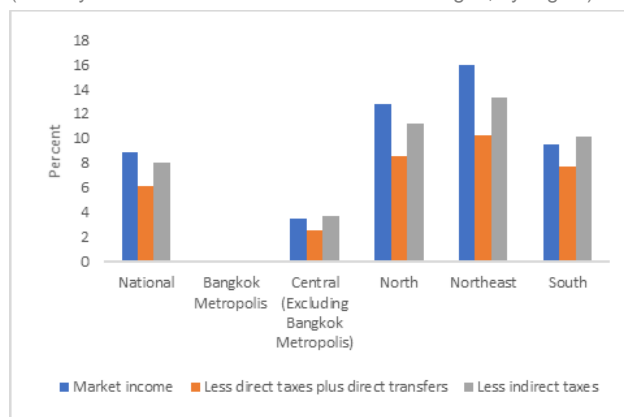


Source: World Bank calculations

Note: The results presented treat social security pension contributions as compulsory savings and pension receipts as deferred income, and so as part of market income and not as taxes and transfers.

Figure 8-7: Fiscal policy also reduces poverty, and by more in poorer regions

(Poverty headcount rate at different income stages, by region)



416. Moreover, the COVID-19 cash support to households also helped prevent an increase in poverty more recently. As Chapter 6 discusses, to mitigate the economic impacts of the COVID-10 crisis on Thai households, the government introduced a significant social assistance response. This included the mobilization of large new emergency programs for informal workers and farmers, and through vertical expansion of existing social assistance schemes for the elderly, people with disabilities, children of poor families and for recipients of the SWC program. The new emergency programs are estimated to have reached 30.7 million individuals or approximately 81.5 percent of households (Sharpe et al. 2021, TEM July 2021). With a total cost estimated at THB 388 billion (38.6 percent of the government’s one trillion THB emergency response and recovery package) COVID-19 cash transfers amounted to 2.5 percent of GDP, additional to regular expenditures of 0.8 percent of GDP for social assistance programs, bringing total social assistance to about 3.2 percent of GDP in 2020. The national poverty rate in 2020 increased by 0.6 percentage points, but World Bank estimates suggest that without the public social assistance response, poverty would have increased by around 1.2 percentage points, suggesting a response cost of around THB 323 billion per percentage point of poverty mitigated.

417. A mix of fuel subsidies and cash transfers in response to broad-based inflation in 2022 due to the Ukraine war has also mitigated poverty impacts, albeit in a less efficient manner than during COVID-19. With global food and fuel prices sharply higher in 2022 due to the war, Thailand employed a dual approach to soften the impact on households. The price of diesel was regulated below the international price while the diesel excise was reduced by more than two-thirds. At the same time, top-up payments of THB 200 per month were made to existing SWC beneficiaries. In the absence of any government response, it is estimated that inflation would have led to 2.7 percentage point increase in poverty. The government’s diesel subsidy is estimated to reduce the poverty impact of inflation by 0.5 percentage points (or 18 percent). Although the cost of the subsidy varies month-to-month based on changes in international fuel prices and occasional policy adjustments made by the government, it is estimated that the subsidy costs approximately THB 10 per litre (or roughly THB 11.1 billion per month in total).²¹⁸ A monthly cash transfer – top-ups of THB 200 – paid to 13.4 million existing State Welfare Card (SWC) beneficiaries from February to April and again from September to October is estimated to reduce the poverty impact of inflation by 0.9 points (or 35 percent) at a cost of THB 2.6 billion. Together, the two responses are estimated to

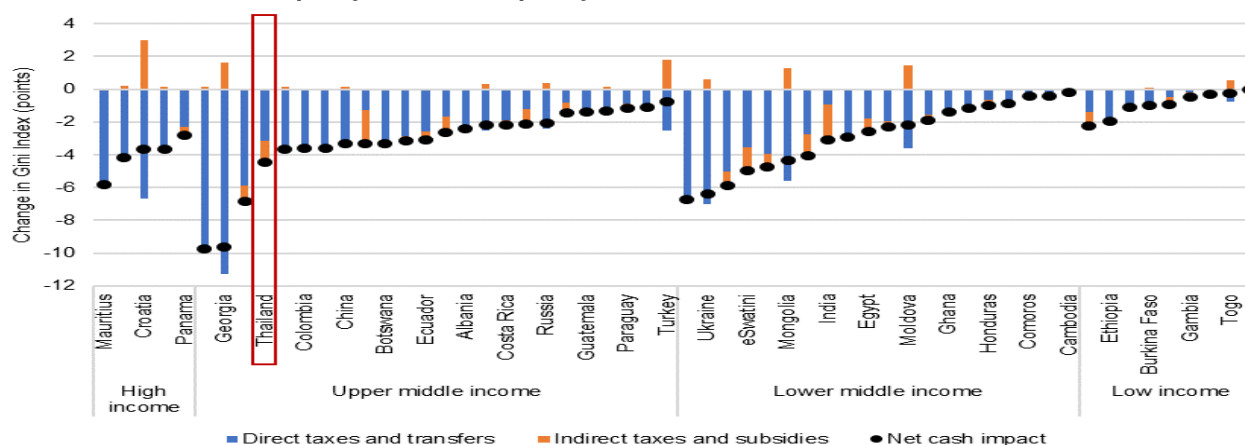
²¹⁸ The fiscal cost includes both the cost to the State Oil Fund of maintaining the diesel price cap (THB 35 per litre) and the forgone revenue from reducing the diesel excise (from THB 5.99 per litre to 1.34). A total cost of THB 10 per litre is used in the modelling, a monthly representative subsidy which is similar to that of July 2022.

mitigate about half of inflation's poverty shock impact (around 1.4 points), at a combined cost of THB 13.7 billion, about a similar magnitude to the COVID-19 response. However, because richer households also benefit from fuel subsidies (and by considerably more than poorer ones), the Ukraine crisis response has had a greater fiscal burden, costing THB 10.1 billion per point of poverty reduction, over three times more expensive than the cost of the SWC payments alone. In fact, had the same budget been spent on higher SWC top-up payments instead, overall poverty would have decreased by 0.8 points.

The progressivity of Thailand's fiscal policy in international perspective

418. Thailand's fiscal system does more to reduce inequality in cash terms than in most other countries with comparable data. The impact of taxes and cash benefits in Thailand in 2019 was to reduce the Gini Index by 4.2 points from its pre-fiscal level. This is both a significant reduction in absolute terms and a strong performance in international context, being the 12th best out of 58 countries with available CEQ data and 4th best out of the 24 UMICs (Figure 8-8). Like most countries which achieve significant reductions in inequality through the cash components of fiscal policy, direct taxes and transfers play the largest role.

Figure 8-8: Thailand's fiscal policy reduces inequality in cash terms more than most countries...

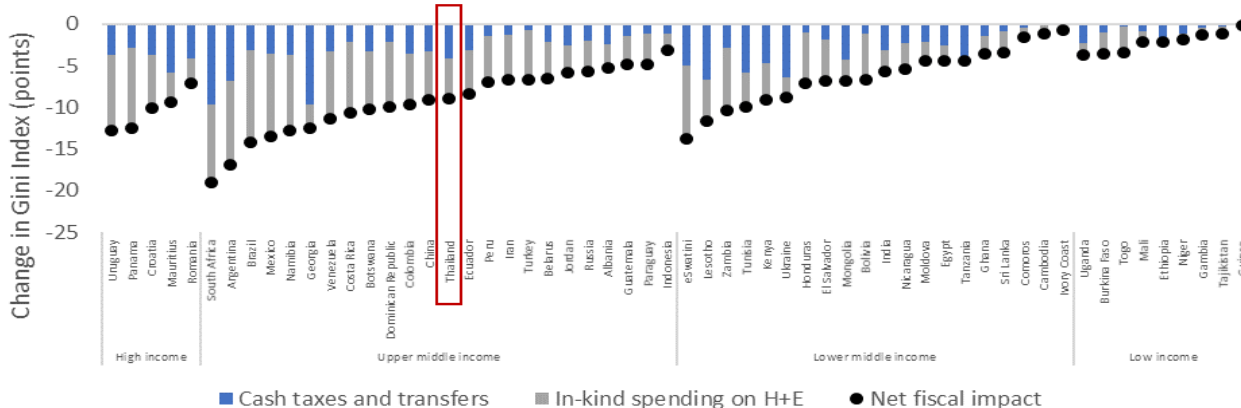


Source: World Bank estimates based on CEQ Data Center on Fiscal Redistribution, OECD and World Bank data

419. Non-cash health and education benefits further reduce inequality in Thailand, although by less than in many other countries. Health and education services are benefits to households not received in cash and so are not included in the impacts of fiscal policy on inequality in cash terms just discussed. Nonetheless, they do represent real benefits to households; when valued at their cost of delivery, they further reduce inequality in Thailand by another 4.7 points to 8.9 points in total. In spite of this, Thailand's net fiscal impact on inequality when non-cash benefits are included falls closer to average in international rankings, 22nd out of 58 countries and 13th out of 24 UMICs (Figure 8-9). While health and education benefits do reduce inequality in Thailand, they do so by less than elsewhere, where the 58-country average impact is 4.4 points and the UMIC average is 6.0 points. Similarly, as the figure shows, these non-cash benefits are responsible for around two-thirds of total inequality reduction by fiscal policy in other countries on average, compared to just over half in Thailand (in part because Thailand spends less on both than the UMIC average and in part because of differences in enrolment across the income distribution). This being said, given the non-cash nature of the health and education benefits and the difficulty in valuing them,²¹⁹ Thailand's strong inequality reduction in cash terms bears emphasising.

²¹⁹ There are good reasons not to think the value of these non-cash public services to households is the same as the cost to governments of delivering them. If there are quality issues, the value to households could be significantly lower than the cost of provision. One approach is to adjust the value of the benefits to different households based on differences in human capital outcomes across the income distribution using the global socioeconomic-adjusted Human Capital Index (S-HCI; Dsouza, Gatti and Kraay, 2019); see Rodriguez and Wai-Poi (2021) for the original application of CEQ and Wai-Poi *et al.* (2022) for an application in the region to Vietnam. S-HCI data are not available in Thailand, so the progressive nature of health and education benefits presented here likely represents an upper bound, especially given the differences in test results across the income distribution documented. However, the true benefit of public health and education to households is in the returns to human capital when children become adults; these benefits are not modelled at all and can be both inequality and particularly poverty reducing. This is discussed in World Bank (2022).

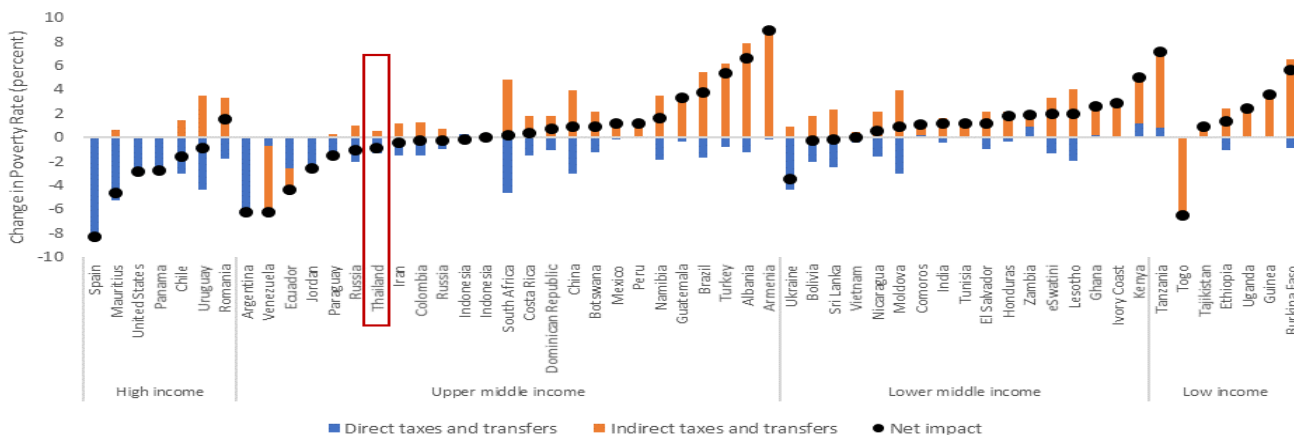
Figure 8-9: ...however the impact on inequality is only average for UMICs once non-cash education and health benefits are included



Source: World Bank estimates based on CEQ Data Center on Fiscal Redistribution, OECD and World Bank data

420. The poverty reduction achieved by Thailand’s fiscal policy is also a strong outcome relative to other countries. Poverty at the UMIC \$5.50 line is reduced by 0.9 points in Thailand. Not only is this 15th best out of 56 countries with comparable data and 7th best amongst UMICs, the majority of countries outside of HICs actually see short-term poverty increase as indirect taxes leave poorer households out-of-pocket relative to the cash transfers they receive (Figure 8-10). As noted earlier, indirect taxes – VAT and excises – do place a burden on the poor in Thailand but this is more than offset by targeted cash transfers.

Figure 8-10: Thailand’s fiscal policy reduces poverty unlike most middle income countries



Source: World Bank estimates based on CEQ Data Center on Fiscal Redistribution, OECD and World Bank data.

Note: Income category-relevant international poverty lines are used for each country: \$1.90 per person per day (in 2017 PPP terms) for LICs; \$3.20 for LMICs; \$5.50 for UMICs and HICs. Countries with older CEQ data use 2011 PPP rates.

The distributional impact of different fiscal instruments in Thailand

421. This section looks at each of the major fiscal instruments on both the revenue and expenditure side to better understand their particular distributional impact. Thailand’s fiscal system has already been shown to be quite progressive, reducing both poverty and inequality significantly. This section looks at the role each major fiscal instrument plays in this outcome: who pays particular taxes and by how much, and who benefits from particular spending and by how much. Understanding individual instruments can show how fiscal policy can be made even more progressive in Thailand, or how fiscal consolidation can be achieved without adversely affecting poorer households.

Household demographics

422. The impacts of fiscal policy depend in part upon household demographics, particularly the benefits of public education and pensions. Poorer households are more likely to have children and to have more of them than richer ones. Over half of the poorest 30 percent of households have at least one child, many two or more, compared to one-fourth or less of the richest 30 percent (Figure 8-11). Childless households with elderly members (who might benefit from social pensions) represent around 30 percent of households at all income levels, but households with no young or old dependents are a much more common phenomenon amongst richer households; 59 percent of households of the richest quintile.

423. However, education spending benefits also depend on whether children go to public schools and whether they stay there. Enrolment rates at the primary and secondary level are near 100 percent in Thailand, so the greater number of children in poorer households also mean more students come from poorer households. Students are also increasingly more likely to go to private schools as households get richer, meaning they do not benefit from public school spending (Figure 8-12). However, public tertiary education is considerably more expensive (THB 61,000 per student) than primary (THB 39,000 per student) and secondary (THB 32,000 per student) and is largely enjoyed by the richer half of the income distribution, particularly the richest 20 percent.

Figure 8-11: Poorer households are much more likely to have children...

(Household demographic composition by income decile)

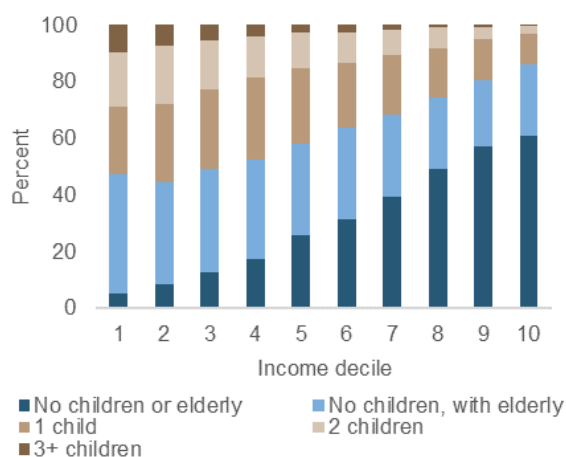
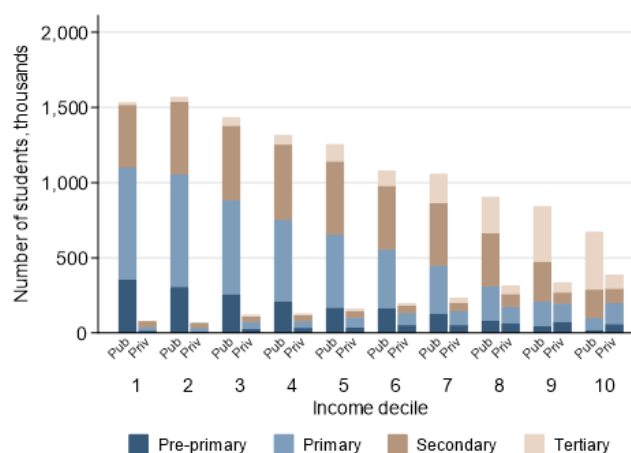


Figure 8-12: ...but richer children are more likely to be enrolled in expensive public tertiary education

(Children enrolled by schooling level and income decile)



Source: 2019 SES and World Bank calculations.

Note: Children are defined as aged below 18 years and younger (end of compulsory schooling and elderly as aged 60 years and above (eligible for social pension)).

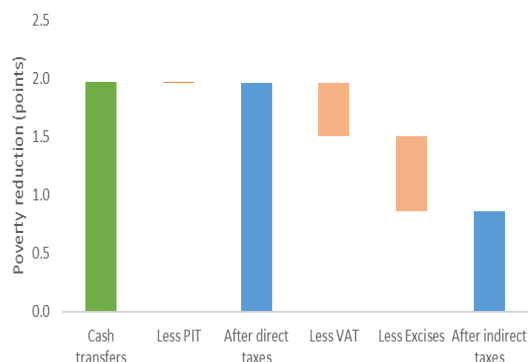
The impact of different taxes and spending on poverty and inequality

424. Poverty falls because the cash transfers received by poorer households more than offset their tax burden from VAT and excises. Very few poorer households pay direct taxes such as PIT, so they have little impact on the poverty rate. However, all households pay some VAT on their consumption and most pay some excises on tobacco, alcohol, sugar-sweetened beverages and vehicles and their parts. By themselves these indirect taxes would increase poverty by 1.1 percentage points. However, the cash transfers received by poorer households decrease poverty by 2 points, more than offsetting the indirect tax burden, accounting for the net reduction in poverty of 0.9 points (Figure 8-13).

425. At the same time, all fiscal instruments in Thailand help reduce inequality, with PIT contributing the most on the tax side and direct transfers, education and health benefits all playing a part on the spending side. As discussed earlier, the cash transfer, education and health benefits represent a greater percentage of income for poorer households than richer ones, and so reduce inequality by 1.2, 2.3 and 2.8 points on the Gini Index respectively. Moreover, while taxes are a burden to all households and increase poverty, because richer households pay more relative to their income, taxes also reduce inequality in Thailand. Direct taxes, mainly PIT, do the most to equalize (1.1 points) but VAT (0.5 points) and excises, mostly on fuel (0.9 points), also contribute. Thus, all fiscal instruments in Thailand contribute to the 8.9 points reduction in equality by fiscal policy.

Figure 8-13: Cash transfers more than offset the tax burden for poorer households, reducing poverty by 0.9 points

(Impact on poverty reduction by instrument, percentage points)

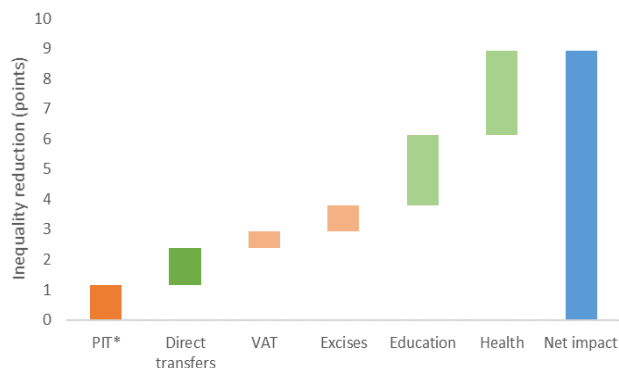


Source: World Bank calculations

Notes: Marginal effects on poverty and inequality reduction are presented. The marginal impact of each instrument is the size of each bar. The cumulative impact is the ending point of each bar. A bar starts at the ending point of the last instrument. A green positive bar represents contribution to poverty or inequality reduction. An orange negative bar represents an increase in poverty or inequality. Individual sub-components are scaled to the marginal effect of each fiscal category. For example, the marginal effects of VAT and excises are scaled to sum to the marginal effect of indirect taxes as a category.

Figure 8-14: All of Thailand's fiscal instruments reduce inequality to a degree, reducing the Gini by 8.9 points in total

(Impact on inequality reduction by instrument, percentage points)



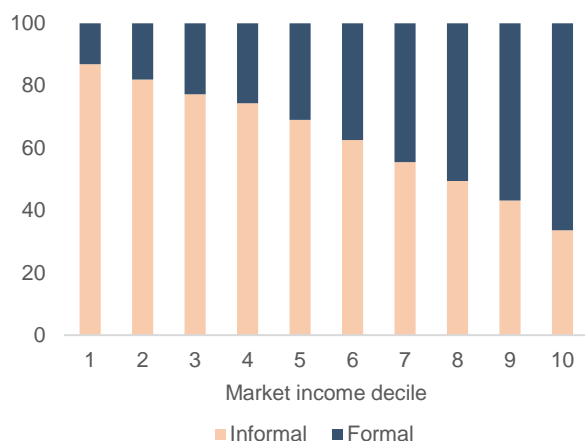
The incidence and concentration of different taxes and spending

426. Direct tax collection is constrained by degree of informality in employment. Direct taxes – personal income tax and social security contributions – are based on a worker’s earnings. Their payment generally depends upon them being withheld by a worker’s employer; informal workers generally do not submit tax returns, declare their income or pay direct taxes, including many richer self-employed professionals. Thus, the degree of direct tax collection will depend on how formal or informal employment is in a country. Around half of all workers are formal (waged or salaried) in Thailand, with formal workers much more likely to be in richer household income deciles (Figure 8-15). A combination of progressive tax rates and minimum income thresholds for direct taxes combined with high rates of informality amongst poorer households mean direct taxes are structurally progressive. However, the relatively high rates of informality even among the richer households who make up the main income tax base will limit potential revenue generation from these progressive taxes.

427. Richer households are more likely to pay any direct taxes, although considerably more poorer households make social security contributions than pay PIT. Rich households are more likely to pay direct taxes than poorer ones. Nearly half of the richest decile are estimated to pay PIT, more than double the rate of the second richest decile; only 10 percent of decile 8 pays PIT and almost no household in the poorest half of the distribution does (Figure 8-16). Social security contributions (SSC) are also more likely to be paid by richer households, but a much larger proportion of poorer households also make contributions, making SSC less progressive. Three in ten people in decile 5 pay SSC and around 10 percent of the poorest two deciles do as well. It is important to remember that SSC *for pensions* are not considered taxes in the baseline Pensions as Deferred Income approach of the current analysis, but it is nonetheless useful to understand how these forced savings reduce disposable income across the distribution. They are included in the current direct tax analysis for this reason despite being excluded from the baseline poverty and inequality impact results; other SSC (e.g., unemployment and health) are presented separately and are included in the baseline results.

Figure 8-15: Formal workers are more likely to come from richer households, but informality is common even in richer deciles

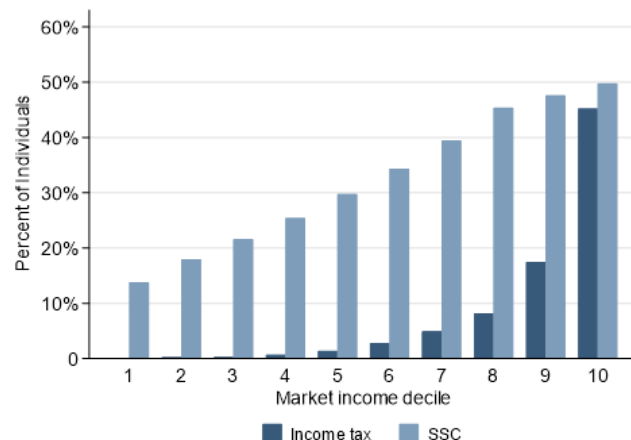
(Employment formality by decile, percent)



Source: World Bank calculations

Figure 8-16: Social Security contributions are paid much more broadly across the income distribution than income tax

(SSC and PIT coverage by decile, percent)



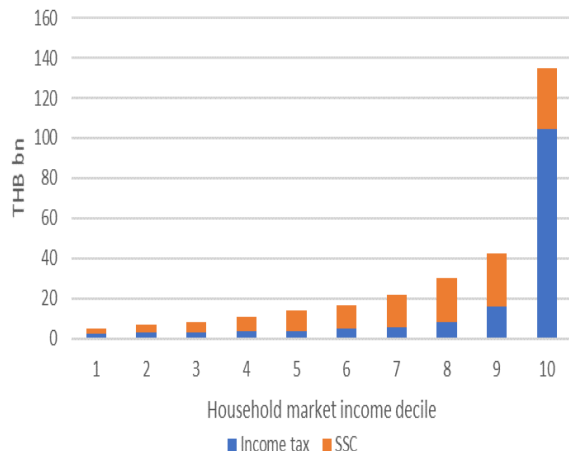
428. At least half of all direct taxes and most PIT are paid by the richest 10 percent of people, likely even more, although the burden is less than one-tenth of their average income. Richer households pay a much greater share of direct taxes than poorer households. In fact, the high percentage of decile 10 paying PIT and the increasing PIT rates with income mean that around half of all direct taxes – and two-thirds of PIT – come from decile 10 (Figure 8-17), driven primarily by PIT receipts.²²⁰ Moreover, with some of the richest households likely missing from the household survey in the current analysis, it is likely that the total amount of PIT paid by decile 10 is even higher. While the total number of PIT payers from the tax administrative data are captured in the survey, only 47 percent of total PIT paid is modelled, indicating that a small number of the richer households who are responsible for large PIT payments have not been captured, those surveyed are underreporting incomes or both.²²¹ Nonetheless, the average direct tax burden for decile 10 is less than 9 percent of market income (Figure 8-18), suggesting that greater revenues could be generated from PIT in a progressive manner while leaving the burden on taxpayers at a reasonable ratio to incomes; Chapter 2 discusses PIT reforms.

²²⁰ Direct taxes include not just PIT but also tax on interest, rental income, remittances and lottery winnings. PIT makes up the large majority of direct taxes; a full breakdown is given in the technical annex.

²²¹ World Bank (2022) discusses missing top incomes in household surveys and notes that it is a common phenomenon in most countries; see, for example, Lustig (2019) and Ravallion (2022). This is reflected in the usually large gap between both total income/consumption in household surveys and the national accounts, and between the total PIT revenue estimated in surveys and the total revenue collected in administrative data. See Lustig (2019) for a discussion of reasons for missing top incomes in survey data. Indeed, in all countries, PIT tends to be quite concentrated, with a small number of rich taxpayers paying a large share of total taxes; to the extent that these households are not included, the PIT incidence and concentration curves can be underestimated at the top. A few studies have tried to evaluate the extent of missed income by merging survey data with administrative data from tax returns; Piketty (2003) and Piketty and Saez (2003) are the key reference works, and Atkinson and Piketty (2007, 2010) represent the main cross-country studies. Blanchet, Flores, and Morgan (2022) discuss how these two types of datasets can be merged and illustrate this with data from a few countries. For example, the share of national income going to the richest 1 percent of households in Chile increases from 14 percent in the survey data to 17 percent once tax administrative data are included; this increases the Gini index from 64 to 69 points. In Brazil, the top 1 percent's share increases from 10 percent to 24 percent and the Gini index from 51 to 62 points.

Figure 8-17: Half of all direct taxes come from the richest decile, primarily from PIT

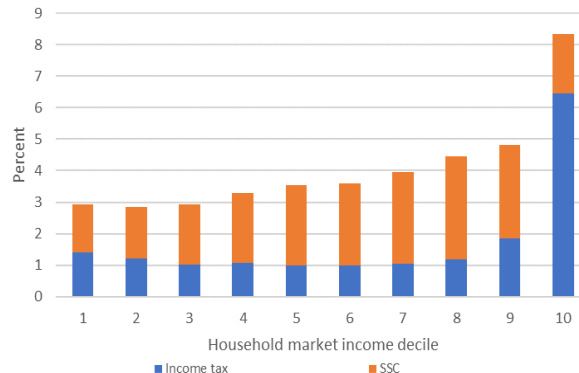
(Direct taxes by decile, BHT millions)



Source: World Bank calculations

Figure 8-18: Significant social security contributions mean direct taxes are less progressive than from PIT alone

(Direct taxes by decile, percent of market income)



429. Richer households also pay a larger share of total indirect taxes and a higher effective rate relative to their incomes, although poorer households pay significantly more indirect taxes than they do direct taxes. Half of all indirect tax revenue comes from the richest *two* deciles (unlike the richest decile for direct taxes), with richer households still paying a significantly higher share of total indirect taxes collected; the poorest half of the population contribute only 20 percent of the total (Figure 8-19). VAT is the single largest indirect tax for all households but excises all together are higher, driven by the direct and indirect effects of fuel excises for everyone, combined with vehicle excises for richer households.²²² The effective indirect tax rate is both flatter than for direct taxes – the richest households do pay a higher percentage of their income than other households but the gap is smaller – and higher – the poorest decile pays 6.8 percent of their market income in indirect taxes Figure 8-20 while the second richest decile pays 10.4 percent of income in direct taxes.

430. As in other countries, informal purchases lower total revenue collection and reduce the effective tax rate on the poor, although the impact is more muted in Thailand than elsewhere. The VAT burden modelled here not only includes preferential rates and exemptions on different goods and services, matched to individual household consumption baskets, but also informality of purchases. Purchases from informal establishments (such as a streetside vendor) often do not charge VAT. Since poorer households tend to have a larger share of informal consumption, their effective VAT rate can be lower (although the final price of informal purchases does include embedded VAT charged on formal inputs used in the production of informally purchased items). Unlike for many countries, the Thailand survey data include place of purchase and so informality can be directly modelled. As in other countries, informal purchases do make up a larger share of poor consumption with nearly 20 percent of VAT on consumption of the poorest half of households going unpaid compared to less than 10 percent for richer households, although this level of informality is significantly below developing country averages.²²³ The relatively low level of informality limits the forgone revenues although the highest amount foregone still accrues to richer households due to their higher consumption levels.

²²² The progressivity of excises on tobacco, alcohol and sugar-sweetened beverages depends not only on their share in the consumption basket of different households but also whether the dynamic effects of reduced consumption, greater health and productivity and higher wages are modelled. See Fuchs et al. (2019) for a summary of tobacco excise analysis across a range of different developing countries and Fuchs et al. (2020) for an example of dynamic incidence analysis for sugar-sweetened beverages. The dynamic impacts are not modelled here but health excises in Thailand are currently a small component of households' total tax burden.

²²³ See Bachas et al. (2020) for a survey of over 30 developing countries.

Figure 8-19: Half of all indirect taxes come from the richest two deciles, split between VAT and excises

(Indirect taxes by decile, THB billions annually)

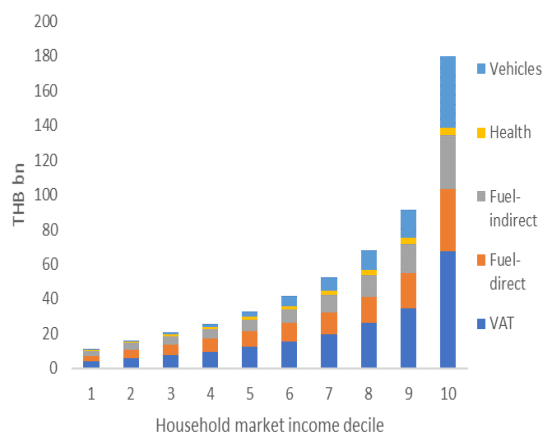
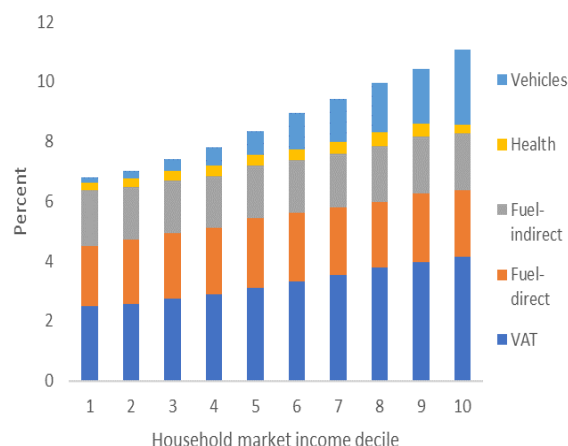


Figure 8-20: Indirect taxes represent a significant share of income for poorer households

(Indirect taxes by decile, percent of market income)



Source: World Bank calculations

Note: VAT paid is based on VAT rate schedules and household consumption baskets. Direct fuel excise is based on fuel purchased by households; indirect fuel excise is based on use of fuel as an input to the production of other goods and services (as captured in the Input / Output table) and each household's consumption of those goods and services. Other excises are based on direct consumption only. Health excises are on tobacco, alcohol and sugar-sweetened beverages' vehicle excises are on purchases of vehicles, motorcycles, parts and engine oil.

431. The poor receive a greater share of transfers than the rich and the benefits are even greater relative to their incomes, but the targeting of transfers could be improved. Old Age Allowance (OAA, a social pension) and State Welfare Card (SWC, a targeted cash transfer) make up most direct transfers in Thailand and are discussed further in Chapter 6. The majority of these transfers go to poorer households; 60 percent of all transfers go to the poorest four deciles and 22 percent go to the poorest decile (Figure 8-21). However, a third of all transfers go to the richest half of the population and nearly 10 percent to the richest two deciles. Better targeting of transfers away from richer households – 32 percent of the richest two deciles and 59 percent of the next richest four deciles receive any social assistance (Figure 8-23) – would create budget space for more generous benefit levels.

432. Transfer benefits represent around a third of market income for the poorest decile but significantly less for deciles 2 and 3. For those in the poorest decile who receive benefits, average transfers are equivalent to 32 percent of their pre-fiscal income, but this falls to 14 percent for decile 2 and again from there (Figure 8-22), so better targeting with more generous transfers could achieve a greater impact on poverty and inequality at no extra cost. The significant impact of transfers on poverty in Thailand is partly due to poverty being solely concentrated in the poorest decile. If the poverty line were higher (and many households in decile 2 churn in and out of poverty), the impact of transfers on poverty would be significantly less as the relative transfer value to deciles 2 and 3 is much lower.

Figure 8-21: A larger share of cash transfers goes to the poor...

(Cash transfers by decile, BHT billions annually)

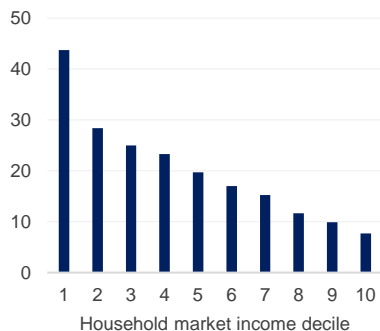


Figure 8-22: ... but benefit levels are low...

(Cash transfers by decile, benefit levels as percent of market income)

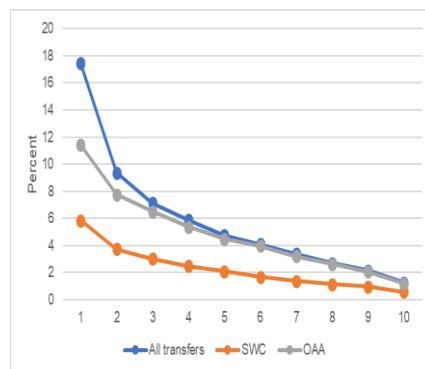
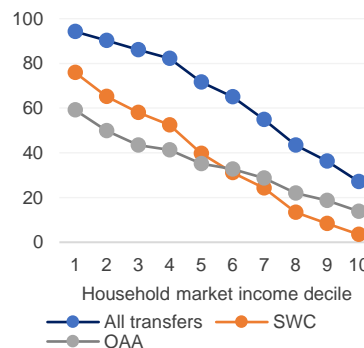


Figure 8-23: ...while many richer households also benefit

(Cash transfer coverage by decile, percent)



Source: World Bank calculations. Benefits by decile are the average for households receiving them.

433. Health spending is spread evenly across the income distribution reflecting near universal coverage, but benefit levels are low. The share of health spending is relatively neutral in Thailand across deciles (by design); the poorest decile receives 11 percent of total public health spending, the richest decile 8 percent and the rest of the population in between (Figure 8-24). This reflects near universal coverage of households (Figure 8-25); the slightly lower coverage of the richest decile (80 percent) is due to opting out of the public health system and into private care. Although households with private insurance are also eligible for public health care, they are treated as not benefiting from it as they do not utilise it. However, the benefits relative to incomes are relatively low for all households due to low overall health spending;²²⁴ benefits are equivalent to 16 percent of market income for decile 1 and 11 percent for decile 2, not worth more than 10 percent of income for any other decile and in fact are less than 5 percent of income for the top half of the distribution (Figure 8-25), although it is important to emphasise that these benefits are not cash and the value to the household may be less than the cost of delivery to the government (the basis for valuing the benefits used here).

Figure 8-24: Health spending is relatively flat across the distribution...

(Health spending by decile, BHT billions annually)

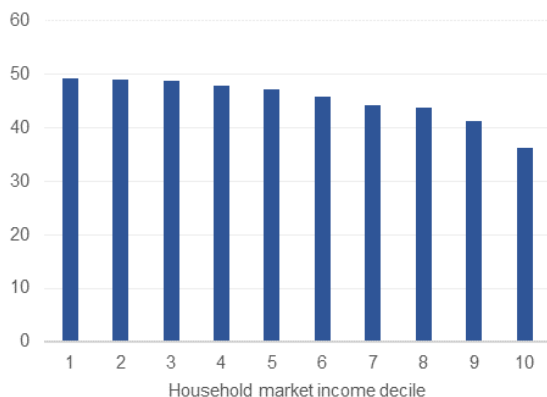
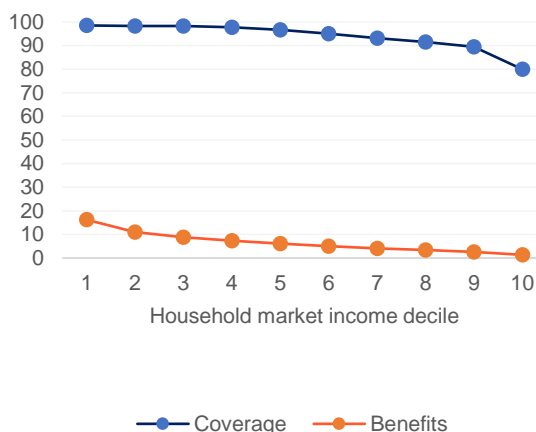


Figure 8-25: ...reflecting near universal coverage. The value of benefits is low

(Health spending by decile, coverage and benefit levels as percent of market income)



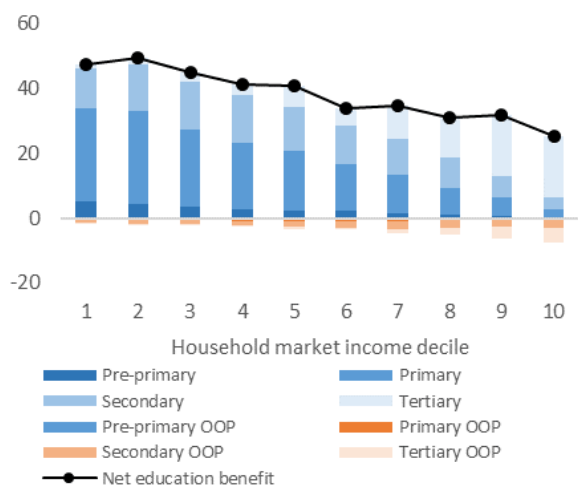
Source: World Bank calculations

²²⁴ Thailand spent 2.9 percent of GDP on public health spending in 2017, compared to the 4.9 percent average for East Asia and the Pacific and 4.0 percent for UMICs.

434. Education utilisation reflects the greater number of children in poorer households and greater use of private education by richer ones while benefit levels are greater than in health and social assistance. No more than two-thirds of households in any decile have children in public school, as is expected given the large number of Thai households without any children. Poorer households are more likely to benefit from public education with 59 percent of the poorest four deciles having children in public school, which declines as households get richer (with fewer children who are more likely to go to private school) and falls to a quarter for the richest two deciles (Figure 8-27). However, richer children are much more likely to stay in school through to the much more expensive tertiary stage. As a result, while much more primary school spending goes on poorer households, almost all tertiary spending goes on richer households and the net impact is to spread total education spending somewhat evenly across the distribution, although still favouring the poor slightly (Figure 8-26). The benefit levels (based on the cost of spending) represent a greater percentage of income for poorer households, more than both health and social assistance benefits. The value to the poorest decile is 48 percent of market income and is 36 percent for the second poorest decile (Figure 8-27).

Figure 8-26: Education spending shares are relatively even as richer households enjoy most tertiary spending

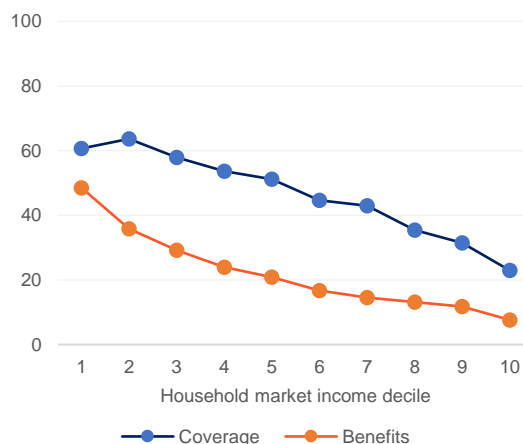
(Education spending by level by decile, BHT billions annually)



Source: World Bank calculations

Figure 8-27: Coverage reflects more children in poorer households and richer children going to private schools while benefit levels are higher than health and SP

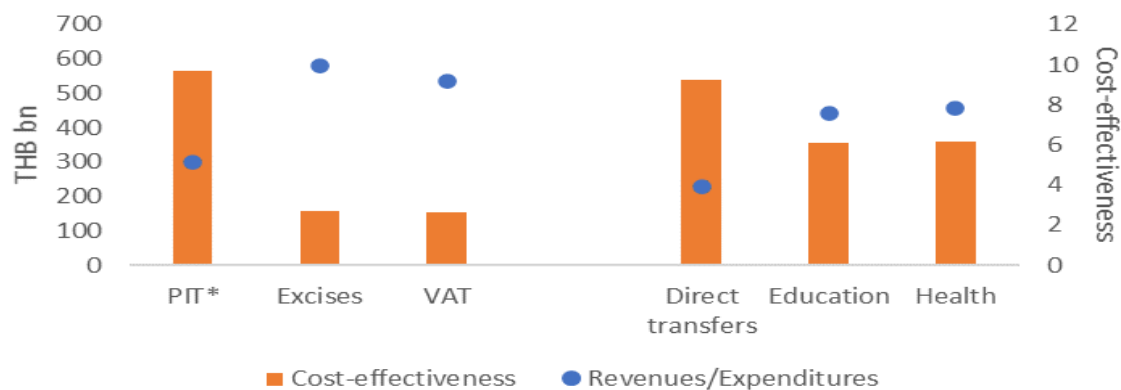
(Education spending by decile, coverage and benefits as a percent of market income)



435. Different taxes and spending have different impacts on inequality (and poverty), depending on both their size and progressivity. The impact of a fiscal instrument on inequality will depend on both: (i) how much it benefits poorer households relative to richer ones (in the case of spending, or collects in the case of a tax); and (ii) how much in total is spent on it (or revenues collected with it in the case of a tax). To measure the net impact of these two drivers, a redistribution cost-effectiveness indicator can be calculated, equal to the change in Gini Index (or the marginal contribution of a fiscal instrument) divided by the expenditure of the instrument (in the case of spending or the revenues collected in the case of a tax). That is, how much inequality reduction is achieved for each *baht* spent / raised? What is the redistributive bang-for-the-buck of different spending and tax choices?

436. Thailand's fiscal mix includes a significant weight of more cost-effective redistribution spending but less of more progressive revenue streams. PIT is a very progressive tax, collecting half of the revenue from the richest decile and reducing inequality by much more per *baht* raised than the less progressive VAT and excises (Figure 8-28). However, because it collects only a quarter of the joint revenues of VAT and excises (Figure 8-28), it has only around the same total impact on reducing inequality (Figure 8-13). On the spending side, social assistance spending is more cost-effective in reducing inequality per *baht* spent than health and education (Figure 8-28; although redistribution is not the primary purpose of human capital development) and receives 43 percent of the budget spent on the other two, meaning it has around half the impact on inequality in total (Figure 8-13). Consequently, while Thailand balances reducing inequality and developing human capital well on the spending side, it could reduce inequality more by growing its share of revenue collected from PIT.

Figure 8-28: Indirect taxes raise more revenue but reduce inequality proportionally less than direct taxes; direct transfers are the most cost-effective spending



Source: World Bank calculations

Notes: Cost-effectiveness is points of Gini Index reduction per THB millions of tax raised or benefit spent. PIT includes other small direct taxes such as on property rental, gifts and remittances, interest, and lottery winnings.

8.6 Conclusions and recommendations

437. While Thailand’s fiscal policy already has a progressive impact, the reforms recommended in this report would particularly benefit lower-income households. The World Bank 2022 Poverty and Shared Prosperity Report focuses on the role of fiscal policy in reducing inequality and poverty and contributing to an inclusive recovery in the aftermath of COVID. Its conclusions include a discussion of how best to pursue progressive fiscal policy in countries at different income and capacity levels. For those UMICs seeking to transition to HICs, it emphasises a range of reforms which are fully aligned with the recommendations in this PREA:

- Increasing direct taxation, especially from personal income taxes
- Increasing indirect taxation on general consumption
- Increasing health taxes on tobacco, alcohol, and sugar-sweetened beverages, as well as introducing digital and carbon taxes
- Increasing spending on health and education
- Strengthening tax administrative capacity
- Avoiding spending on subsidies to mitigate higher fuel and food prices
- Improving targeting of direct transfers

438. There is scope for Thailand to both collect more revenue and deploy a more progressive tax mix with heavier reliance on PIT. As per Chapter 2, Thailand collects considerably less PIT (1.7 percent of GDP) than UMIC average (2.8 percent).²²⁵ As this chapter has shown, Thailand’s PIT is very progressive with most revenue coming from richer households, but it contributes only a quarter as much revenue as VAT and excises. Consequently, Thailand both collects less total revenue than other UMICs and has a less progressive mix. An increase in PIT collection would boost overall revenues and equity.

439. VAT exemptions and preferential rates are an expensive tax expenditure which can be rationalized. The current VAT rate is 7 percent while a number of items receive preferential rates or are exempted. Potential reforms include eliminating preferential rates and exemptions and increasing the base VAT rate. Preferential rates are generally an inefficient means of supporting the poorest households, as while they are often on staple goods which represent a larger

²²⁵ Thailand data from IMF WORLD revenue database and UMIC average from World Bank (2022).

share of poor consumption, they are also consumed by richer households and usually in larger quantities, meaning that more of the tax expenditures end up benefitting richer households. Removing such exemptions is a central fiscal reform for raising additional revenue in the short-term in a progressive manner (World Bank, 2022). However, any increase in VAT rates, whether to the base rate or through removal of exemptions will have an adverse impact on poorer households, which should be mitigated (see below).

440. Health taxes on alcohol, tobacco and sugar-sweetened beverages can not only increase revenues today, they can significantly reduce health expenditures tomorrow and are also progressive. Health taxes contribute an average of 0.4 percent of GDP each for tobacco and alcohol and 0.1 percent for sugar-sweetened beverages in OECD countries (World Bank, 2022). Excises on harmful consumption raise revenue in the short-run but also reduce long-term health spending as household internalise the negative externalities of using alcohol, tobacco and sugar-sweetened beverages. Although these items often make up a larger share of the consumption basket of poorer households, these households are more responsive to the higher prices after excise increases, reducing their consumption by more and so benefitting more from better long-term health and productivity, increasing lifetime wages and reducing out-of-pocket health expenditures. In fact, the pro-poor nature of the long-term benefits outweigh the regressive nature of the short-term burden, making health taxes progressive in the longer-run.²²⁶

441. Greater indirect tax collection could come through digital and carbon taxes; both are likely to reduce inequality although may increase poverty at the same time without accompanying mitigation measures. Thailand saw very high e-commerce sales growth in 2020; fully capturing sales on e-commerce and digital services would raise short-term revenue and improve VAT efficiency while also making local service operators more competitive in the local market (see Chapter 2). The progressivity of such a tax would require further analysis but to the extent to which e-commerce and digital services are more commonly used by richer households, such taxes may be inequality reducing. Similarly, a tax on carbon has also been estimated to have a progressive impact.²²⁷

442. More progressive revenue collection can be facilitated by investments in tax administrative capacity. Administrative constraints can partly explain relatively low direct tax revenue collection. In addition to PIT withholding by firms, World Bank (2022) notes that the consolidation of increasingly digitized data sources could expand the tax base to capture capital and mixed income, including capital gains, property rental, and some self-employment, using third-party data and the combination of records from multiple agencies, while international tax agreements on information exchange could reduce the extent of international tax avoidance.

443. Greater investment in human capital and social assistance would both increase future growth and achieve greater inequality reduction. Thailand's investments in human capital are pro-poor but the total spending level lags other UMIC countries, as shown in Chapters 3 to 6. This means that their contribution to reductions in inequality is also commensurately lower.

444. The impact of social assistance spending on poverty and inequality can be improved by strengthening delivery mechanisms. A significant percentage of richer households benefit from social transfers in Thailand. Stronger targeting of these transfers could redirect these transfers towards increasing the adequacy of benefit levels for poorer households. Thus, inequality can be further reduced by the fiscal system without increasing spending. At the same time, COVID-19 has shown that Thailand needs to strengthen its social protection delivery chain to better protect vulnerable households in times of shock (see Chapter 6).

445. While some of these revenue enhancing reforms (e.g. to the VAT) would negatively impact the poorest, these effects could be mitigated by social assistance spending, while preserving net fiscal gains. VAT reforms could increase tax revenues by as much as THB 245 billion, or VAT collection by 40 percent. The CEQ model from this chapter has been used to simulate the removal of current VAT preferential rates and exemptions (see Chapter 2 for further discussion), an increase in the base VAT rate from 7 percent to 10 percent with the current exemption structure, and a combination of both (a flat 10 percent VAT rate with no exemptions). The CEQ modelling indicates that the combined reform of a higher 10

²²⁶ For example, see Fuchs *et al.* (2019) for a comparative study of tobacco taxes and Fuchs *et al.* (2020) for an example of sugar-sweetened beverage excises in Kazakhstan.

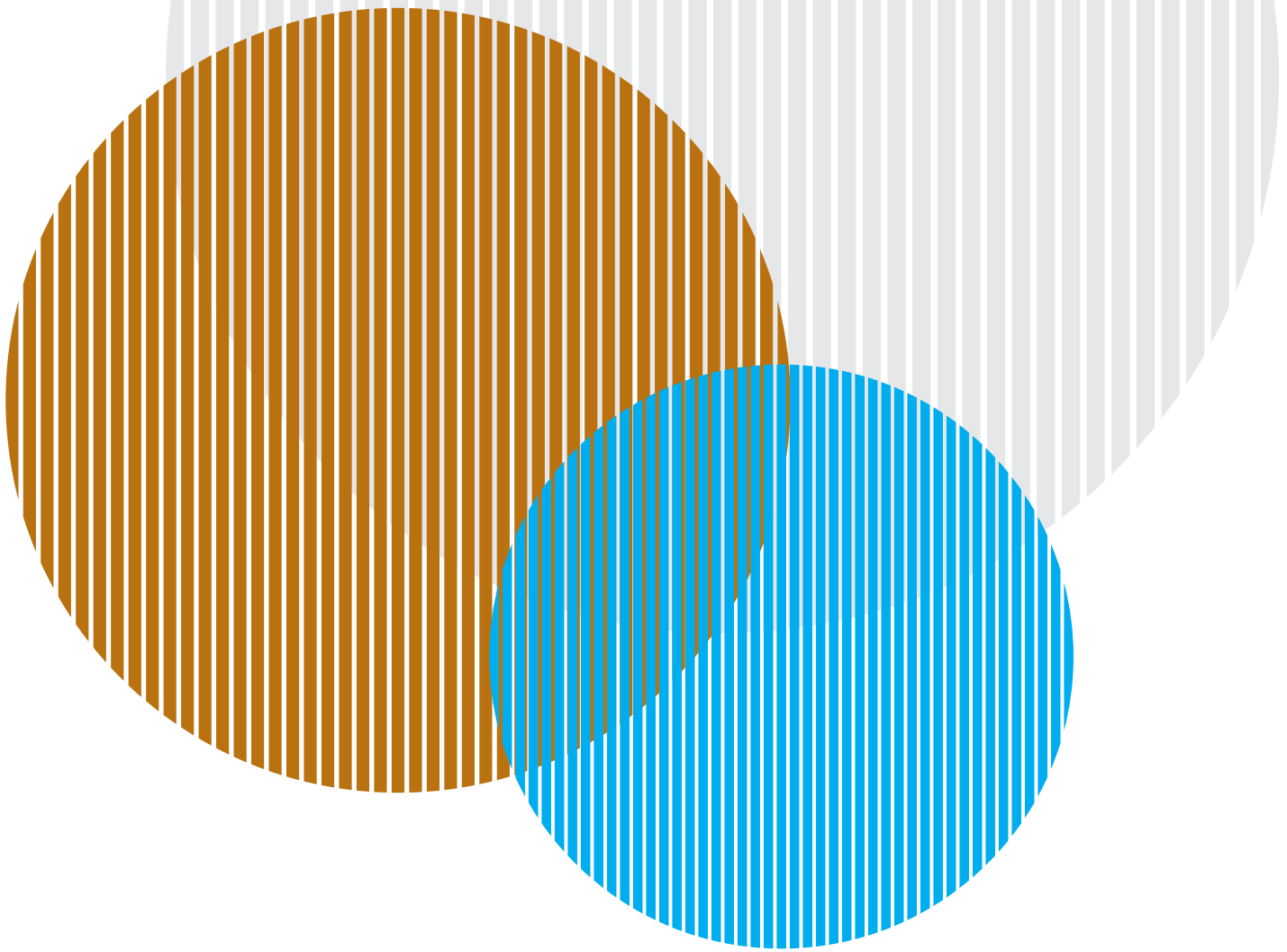
²²⁷ See Saelim, Supawan. Carbon tax incidence on household consumption: Heterogeneity across socio-economic factors in Thailand. 2019.

percent rate with the elimination of exemptions could raise as much as THB 245 billion. This reform will affect poorer households, even if the impact is borne more by richer ones. If uncompensated, the full VAT reforms would increase poverty by 1.5 percentage points, though they would reduce inequality by 0.3 points due to their progressive form.

446. The impact on the poor of the VAT reforms could be more than offset by the social assistance reforms in Chapter 6; together the VAT and social assistance reforms would raise THB 100 billion (0.6 percent of GDP) while reducing poverty by 3.6 points. The OAA reforms (2.1 point poverty reduction) or SWC reforms (2.9 point reduction) discussed in Chapter 6 would more than offset the impact of the VAT reforms on poverty, while each costing less than a third of the amount of the additional VAT revenues collected. The preferred OAA and SWC reforms taken together would still cost significantly less than the new VAT revenues at THB 145 billion (0.86 percent of GDP) and reduce poverty by 4.4 points (inequality by 2.3 points). These reforms together would cost around the same amount as the current diesel price subsidy and reduction in diesel excise, which only leads to a poverty reduction of 0.5 points, as much of the benefit accrues to non-poor households. The preferred scenario therefore is a combination of i) increasing VAT to 10 percent with no exemptions; ii) some form of tapered increase of the OAA; and iii) an increase of SWC transfers to 30 percent of the poverty line with better targeting. This package of reforms would result in a net increase of tax revenues by THB 100 billion and a reduction of poverty and inequality by 3.6 points and 2.6 points, respectively. A summary of the fiscal costs and the impact on inequality and poverty of the different VAT reforms and compensating options is presented in Table 8-3, with the social assistance reforms discussed in greater depth in Chapter 6.

Table 8-3: Fiscal and distributional impacts of VAT reforms and compensating measures for households

		Fiscal (THB bn)	Inequality (Gini)	Poverty (% points)	Cost per % point of poverty reduction (THB million)	Fiscal (% of GDP)
Revenue reforms						
	7% VAT, no exemptions	+111	-0.1	+0.8		0.7%
	10% VAT with current exemptions	+87	-0.2	+0.4		0.5%
	10% VAT, no exemptions	+245	-0.3	+1.5		1.5%
Household compensation						
Scenario 1	Raise OAA to poverty line	-196	-1.4	-2.6	76.9	-1.2%
Scenario 2	Raise OAA to THB 1250/month	-77	-0.6	-1.3	61.1	-0.5%
Scenario 3	OAA tapered (B40 receive THB 2000/month, T60 keep current OAA)	-83	-1.1	-2.1	40.3	-0.5%
Scenario 4	OAA tapered (from 2000 to 0, by quintile)	-71	-1.2	-2.1	34.9	-0.4%
Scenario 5	Increase SWC to 30% of poverty line	-73	-0.9	-1.9	38.6	-0.4%
Scenario 6	Increase OAA tapered and SWC	-145	-2.0	-3.6	40.2	-0.9%
Scenario 7	Improved targeting of SWC	-2	-0.1	-0.4	4.0	0.0%
Scenario 8	Improved targeting of SWC and increase to 30% of PL	-73	-1.2	-2.9	25.3	-0.4%
Scenario 9	Increase OAA (tapered), increase SWC (improved targeting)	-145	-2.3	-4.4	32.9	-0.9%
Scenario 10	10 THB price reduction of diesel	-133	+0.2	-0.5	276.2	-0.8%
Preferred scenario						
	10% VAT, no exemptions, increase OAA (tapered) and SWC (targeted)	+100	-2.6	-3.6	-27.8	0.6%



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