

# PROMOTING AN INCLUSIVE AND SUSTAINABLE FUTURE

JUNE 2023

## How can spending on human capital be made more efficient and equitable?

Dr. Ronald Mutasa  
Practice Leader, Human  
Development

May 29, 2023



**THE WORLD BANK**

IBRD • IDA | WORLD BANK GROUP

East Asia & Pacific



# Overview of main findings: Spending for Improved Student Learning

# Scope of the Education assessment



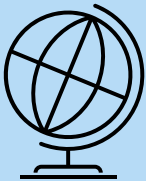
Assesses **spending adequacy, spending efficiency, and effectiveness**, using available administrative data and surveys.



Assesses the country's **performance on education access and human capital accumulation in relation to per-pupil spending** by benchmarking Thailand against international peers at similar stages of development



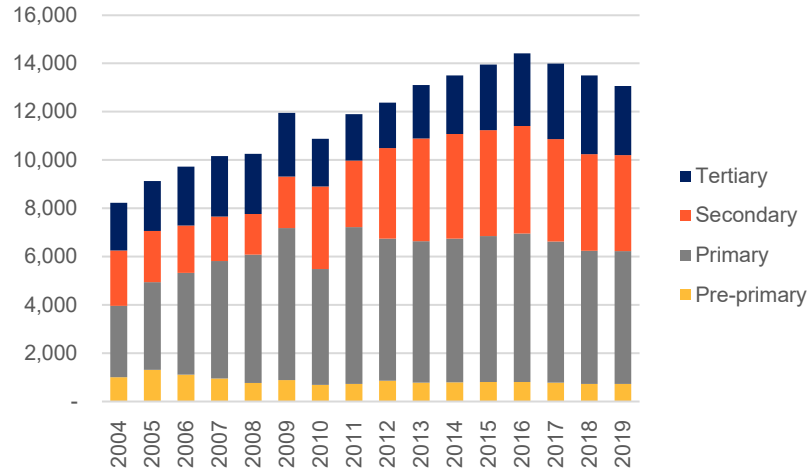
**Evaluates the extent of inequities in student achievement** and educational resource allocation among schools



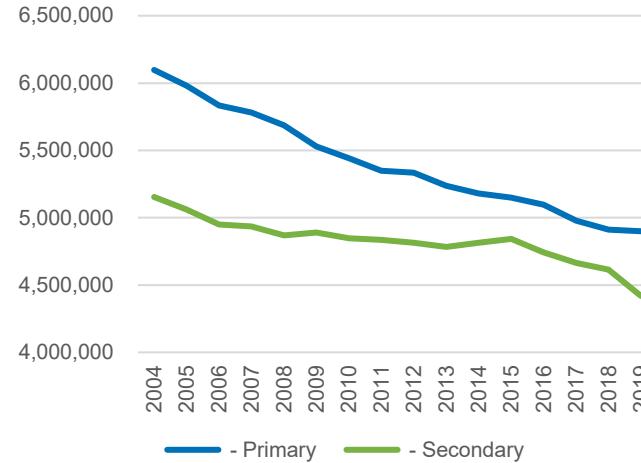
Summarizes analyses of **education financing scenarios** that would be consistent with improved learning outcomes and lower inequality

# Thailand's education spending inefficiency has worsened considerably in the last 15 years

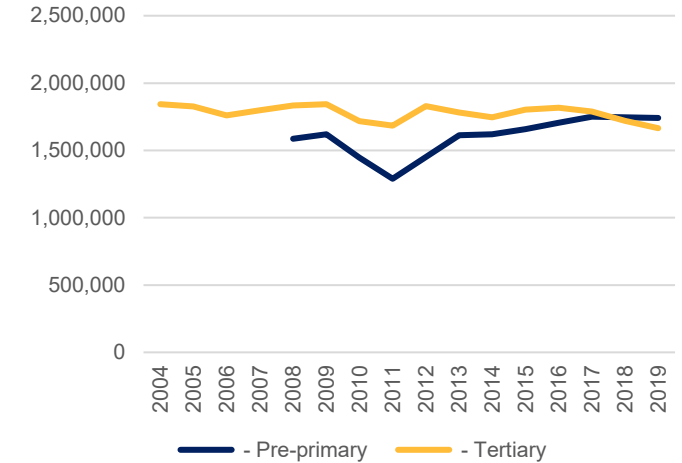
**Total expenditure by level of education (const US\$2010, mil)**



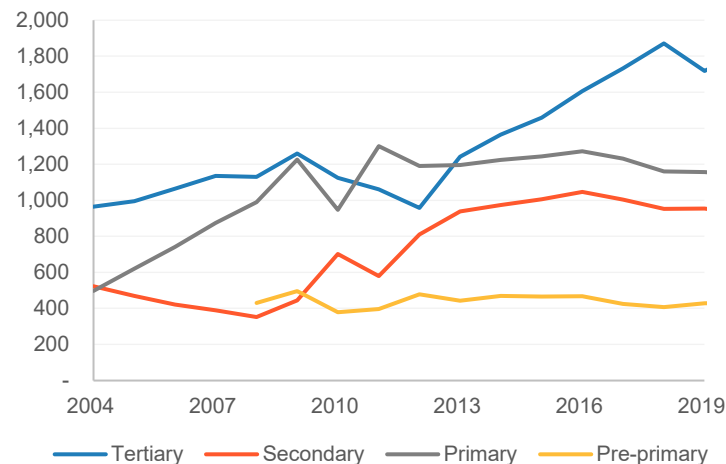
**Number of primary and secondary students (2008 – 2019)**



**Number of pre-primary and tertiary students (2008 – 2019)**



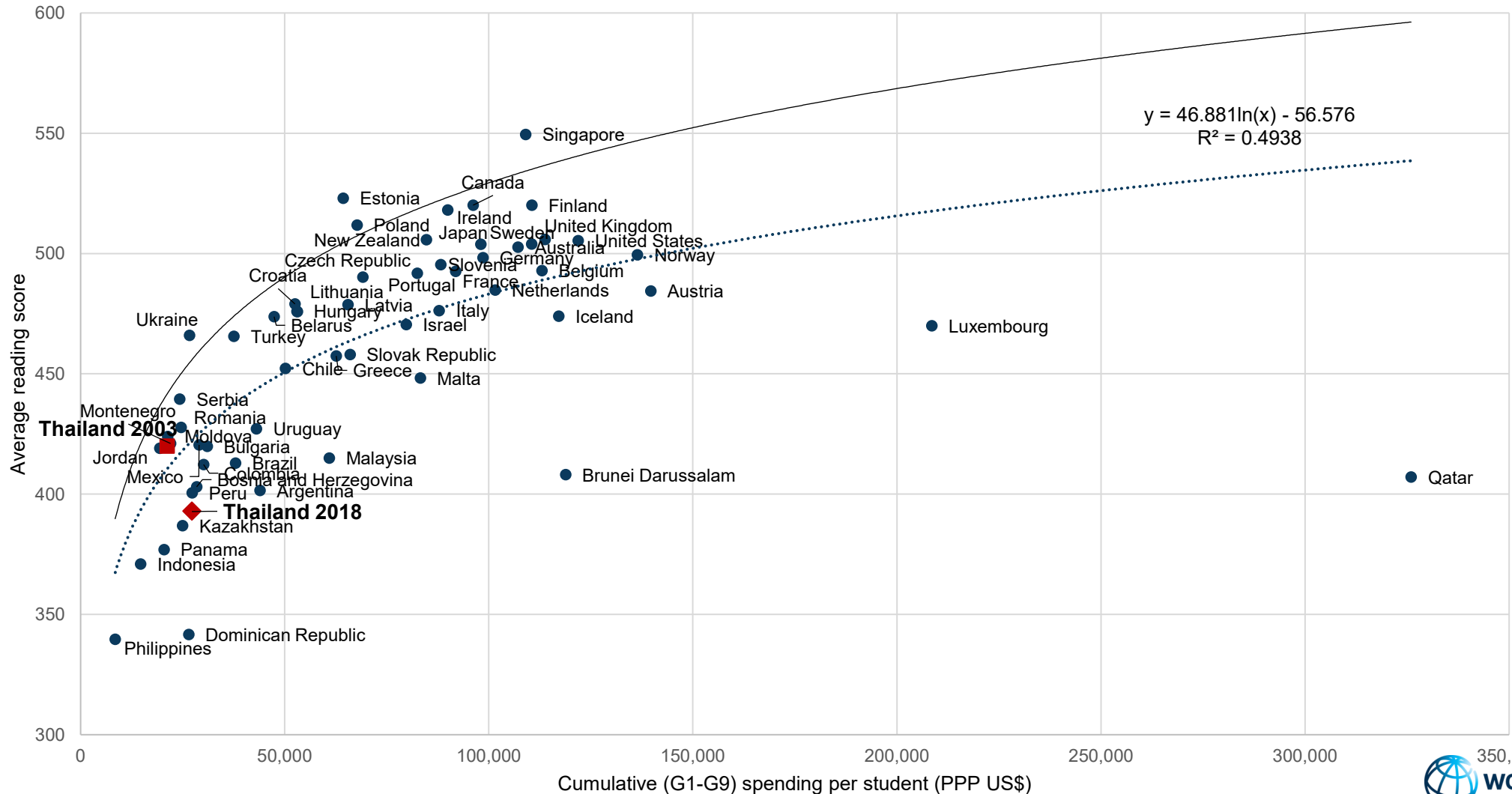
**Expenditure per student by level of education (constant US\$2010)**



- Massive increase in public education expenditure occurred despite a continuous decline in student numbers
  - Office of the Basic Education Commission's inflation-adjusted budget increased by 30% from 2010-2016 even though the total number of students declined from 7.71 to 6.86 million
- It is not surprising to see that per-student public spending has been rising substantially

# Over the last 15 years, real per-student spending increased from US\$ 21,250 to US\$ 27,271 but reading performance fell from 420 to 393, and 60 percent of students performed below basic proficiency

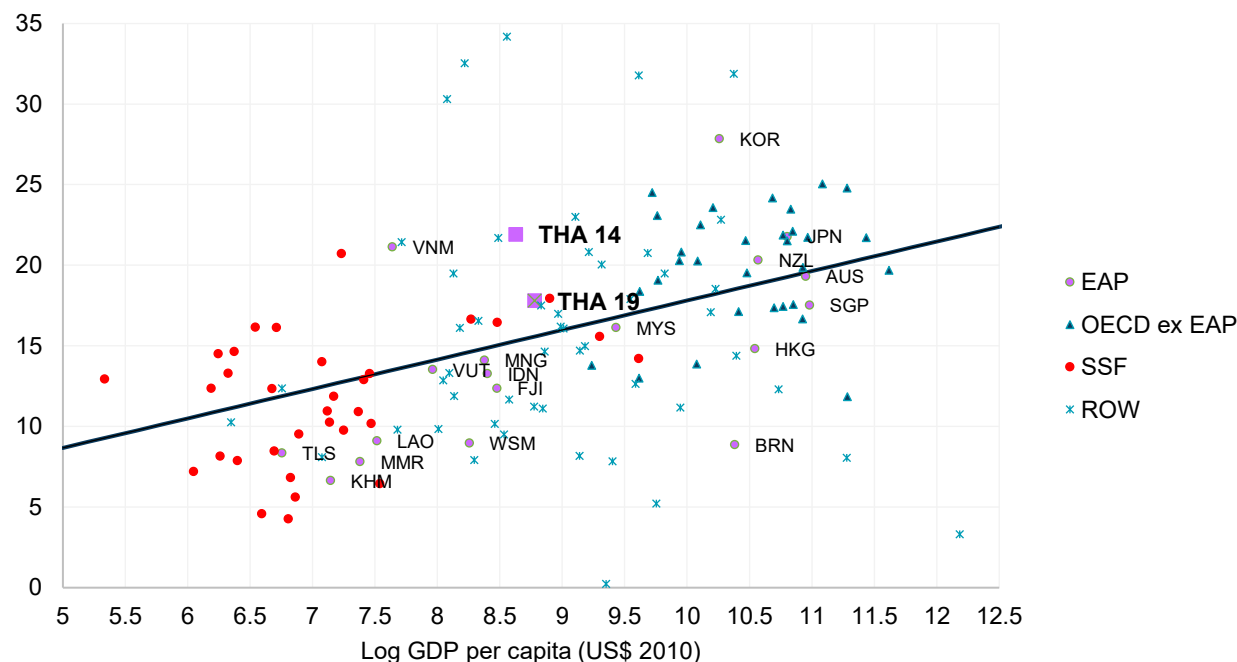
PISA 2018 Reading vs. Cumulative (G1-G9) Spending per Student



# In primary education, Thailand was spending significantly more per student than expected given its GDP per capita

- Thailand has achieved universal primary education for quite some time
- At Thailand's level of development, it is expected that the country would spend around 15.6% of GDP per capita per primary student
- However, the country was spending almost 18% of its GDP per capita per student in 2019

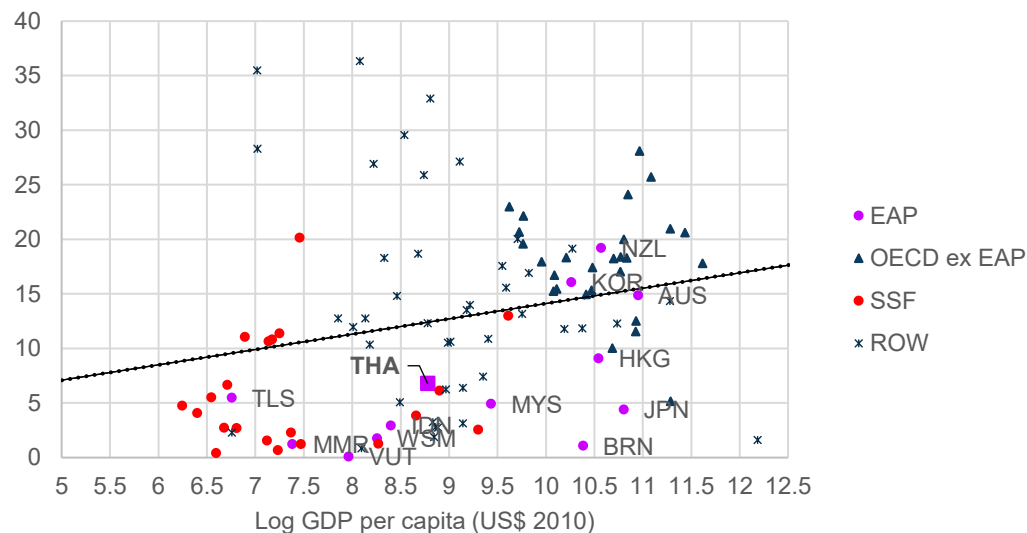
Government expenditure per primary student as percentage of GDP per capita



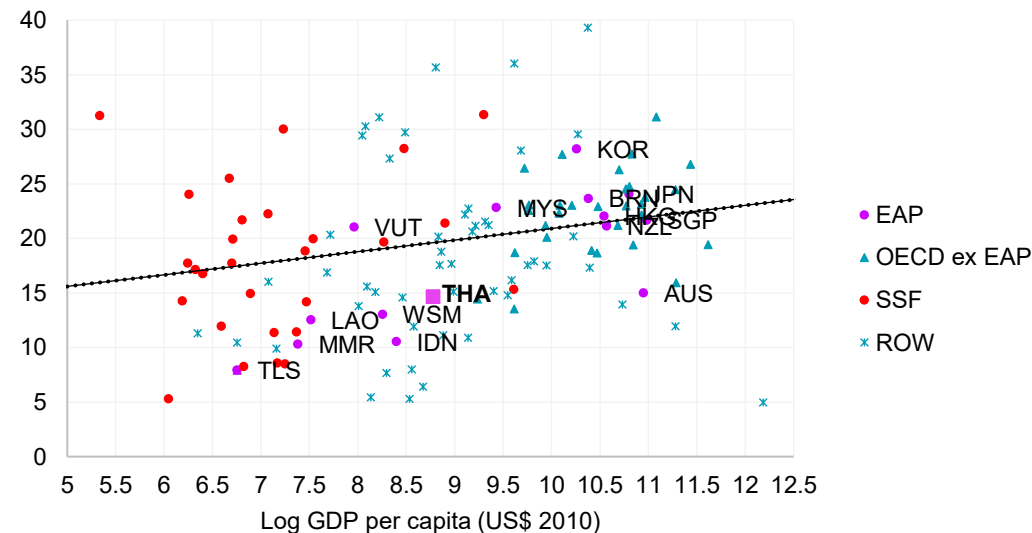
- ***The spending indicator registered in 2014 was even greater, at 21.9%, and it put Thailand among the highest spenders in the world in that year***
- ***The bulk of Thailand's spending inefficiency can be traced overwhelmingly to the primary sector***

# Per-student public spending at the pre-primary and secondary levels in 2019 were substantially lower than the international benchmarks

Government expenditure per pre-primary student as % of GDP per capita



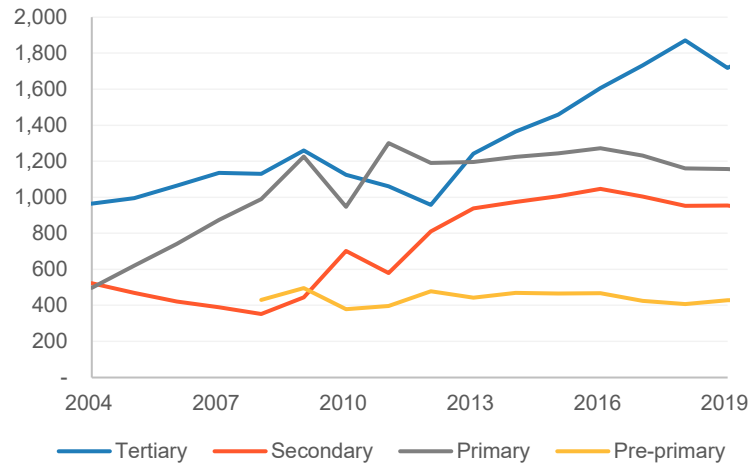
Government expenditure per secondary student as % of GDP per capita



- Pre-primary net enrolment rate (for 3–5-year-olds) stood at almost 80% in 2019, which was about 20% higher than expected given Thailand’s level of GDP per capita
- On the other hand, Thailand’s per-student spending at the pre-primary (secondary) level was around 47% (25%) below the world regression line
- The Multiple Indicator Cluster Survey 2019 data revealed that only 61% of Thai children aged 3-5 were developmentally on track in the literacy-numeracy domain (UNICEF, 2020)

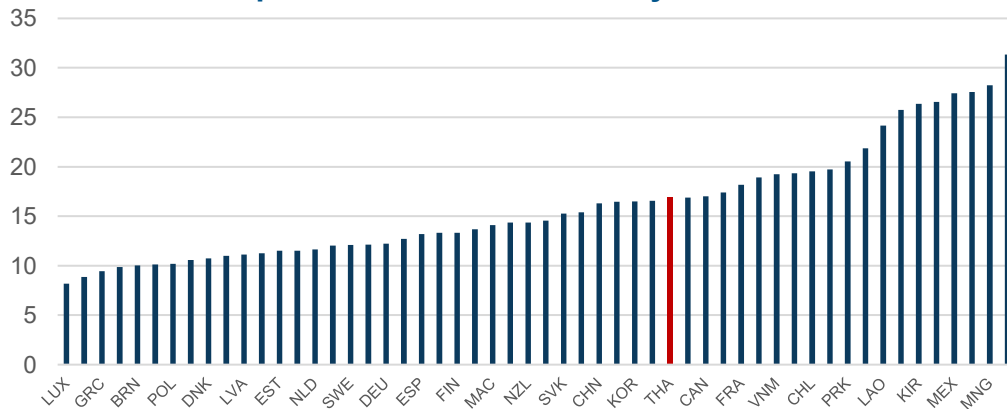
# It is unusual that per-student spending at the primary level has been consistently higher than the secondary level throughout the last 15 years

**Expenditure per student by level of education (constant US\$2010)**

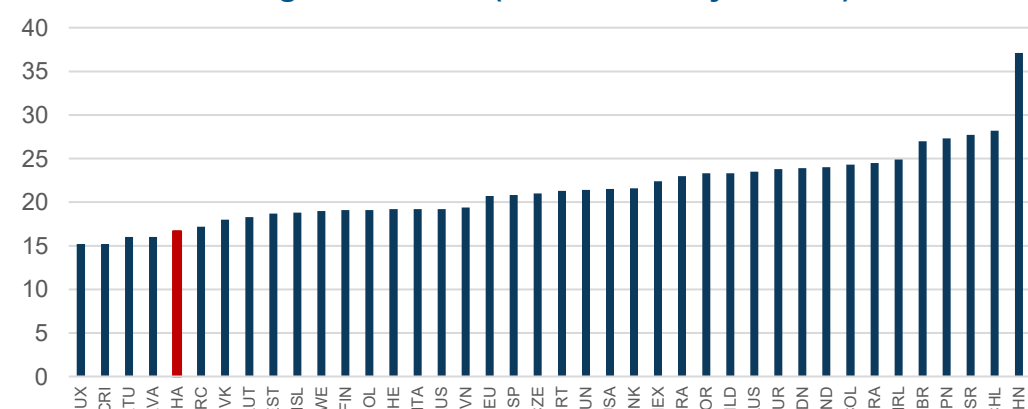


- *Ineffectiveness of teacher allocation is the most important driver of spending inefficiency and learning outcome inequality*
- Thailand's pupil-teacher ratio of 16.9:1 is not low by international standard (on par with Australia, Japan, Korea, Canada and Great Britain)
- However, when class size is considered, Thai primary schools have among the smallest average class size compared to the 40 countries which reported the statistics
- Teachers and other resources are being spread very thinly across too many small classrooms
- *At the secondary level, Thailand's average class size of 37.3 was the 9th largest among the 79 PISA 2018-participating education systems*

**Pupil-Teacher Ratio – Primary Level**



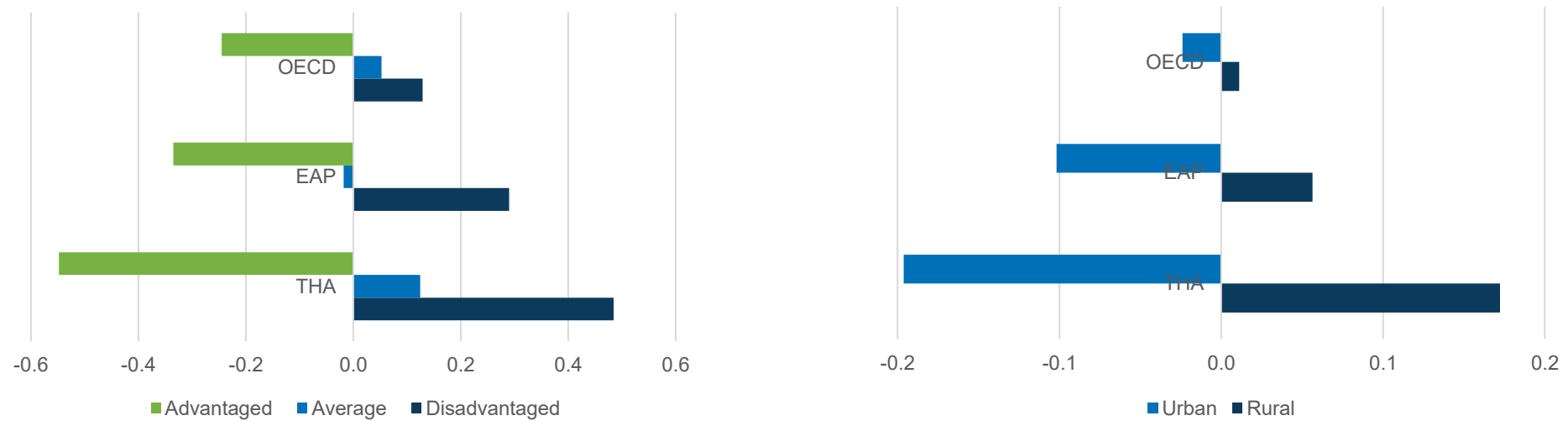
**Average Class Size (Public Primary School)**



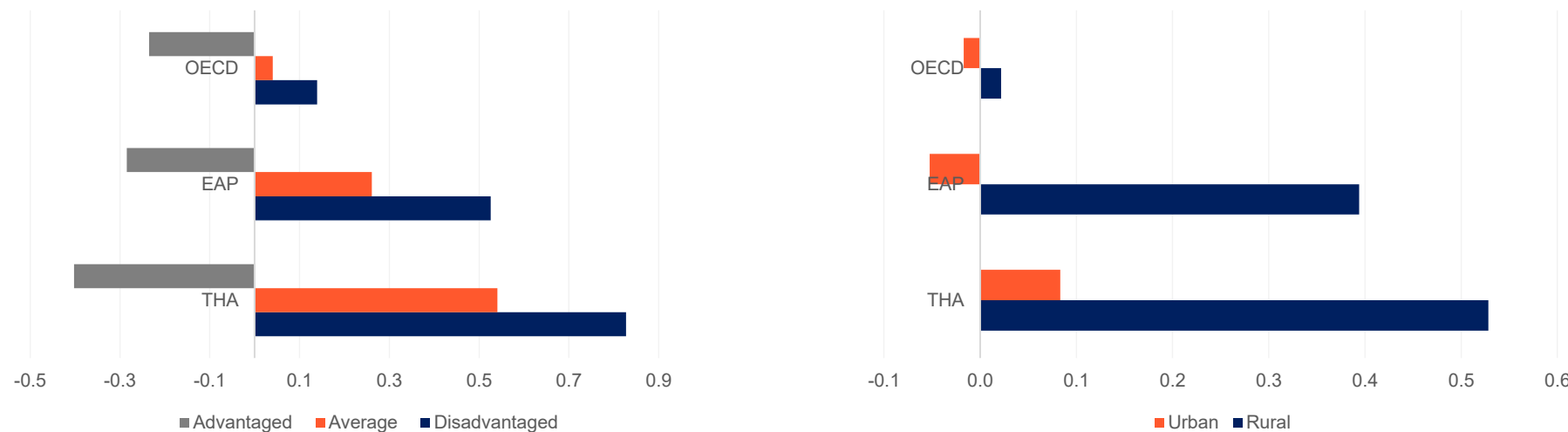


# As many as 16,596 OBEC schools (out of 29,313) are small and most are chronically under-resourced - A key driver of poor learning outcomes for Thai students

## Shortage of Educational Staff Index – PISA 2018



## Shortage of Educational Materials and Infrastructure Index – PISA 2018



# Conclusion and recommendations

To improve Thailand's education spending efficiency and student learning outcomes, policymakers and educators are encouraged to focus on the following priorities:

- Reorganize Thailand's oversized school network and ensure that limited educational resources are adequately and equitably redistributed
- Increase overall education spending envelope and utilize the savings from the school merger to increase per-student spending at the pre-primary and secondary levels
- Address children's school readiness by making high-quality preschool available to every child
- At the secondary level, Thailand could first embark on reducing class sizes and providing adequate resources to its schools
- Strengthening teaching quality and addressing the poor allocation of educational resources

# Overview of main findings: Reimagining Health Care

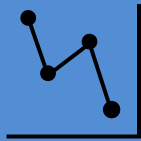
# Scope of the Health assessment



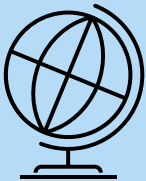
Builds on previous World Bank analytical work



Assesses **spending adequacy, spending efficiency, effectiveness, and equity** using available administrative data, World Bank, and WHO Expenditure Databases



Applies a **standard growth accounting model to project health financing needs** in Thailand up to 2050 using Thailand Health and Welfare Survey (2019 and 2021) datasets



Draws from international best practices and develops policy recommendations.

# The Thai health system has provided relatively good value-for-money to date...

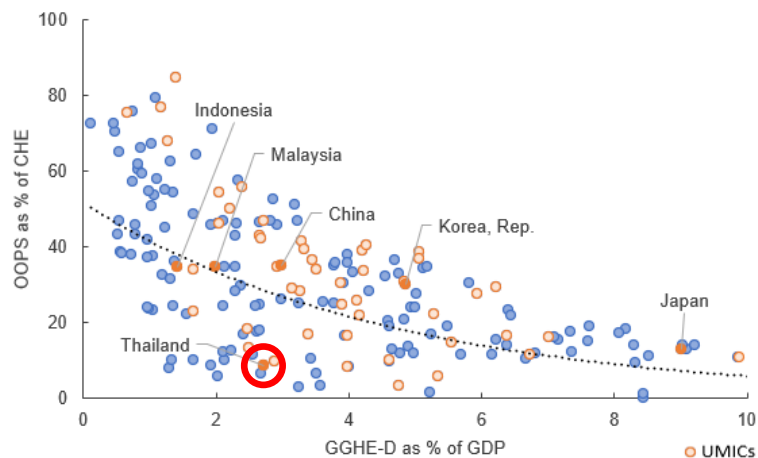
Total health spending is relatively low, and financial burden on households is low.

- Thailand's total health spending per capita doubled from 2000 to 2019 but is lower than comparator countries: Thailand \$296 vs EAP excl. HICs \$414 vs UMICs \$555
- The government plays a significant role in health financing, accounting 70-75% of total health spending
- Direct out-of-pocket spending decreased sharply from 34% in 2000 to 9% in 2019, and is significantly lower than comparator countries

Health outcomes and health system performance is relatively higher than the average of UMICs.

- Key population health outcomes (e.g., life expectancy, infant mortality, under-five mortality, maternal mortality)
- The coverage of essential health services (UHC service coverage index doubled between 2000 and 2019)

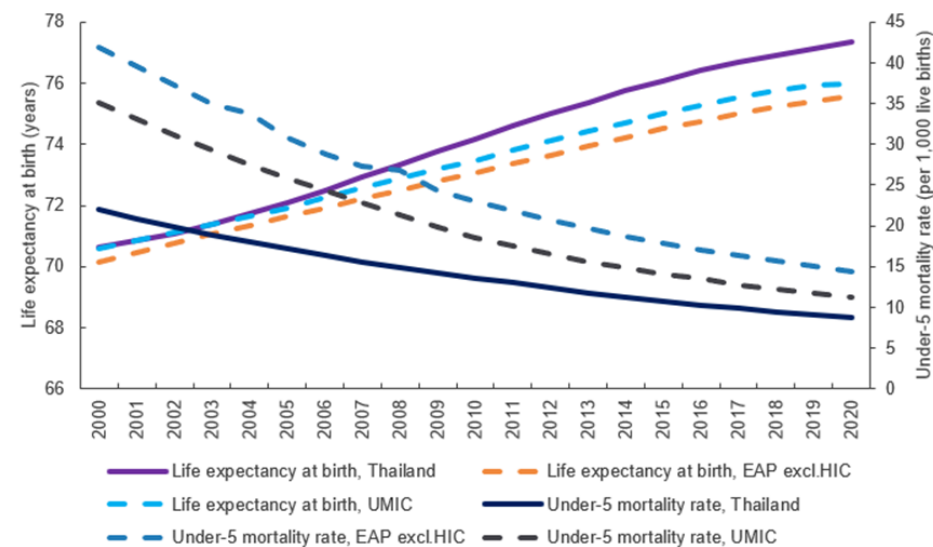
Share of Out-of-Pocket Spending versus Government Health Expenditures



Source: WHO Global Health Expenditure Database.

Note: OOPS = Out-of-pocket spending; CHE = Current health expenditure; GGHE-D = Domestic general government health expenditure; UMICs = Upper Middle-Income Countries.

Life expectancy at birth and Under-5 mortality rate



Source: World Development Indicators.

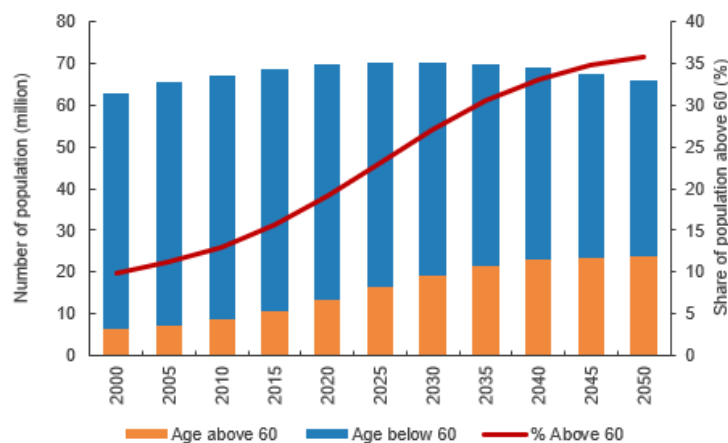
Note: UMIC = Upper Middle-Income Country; EAP = East Asia and Pacific; HIC = High-Income Country.

# ... but challenges remain, and rising health costs for the government will continue.

## Population aging

- 20% in 2020 and 35% in 2050
- Aging itself does not drive up health care costs, but the combination of poor health outcomes and the health system's inability to address NCDs does

Population Aging in Thailand

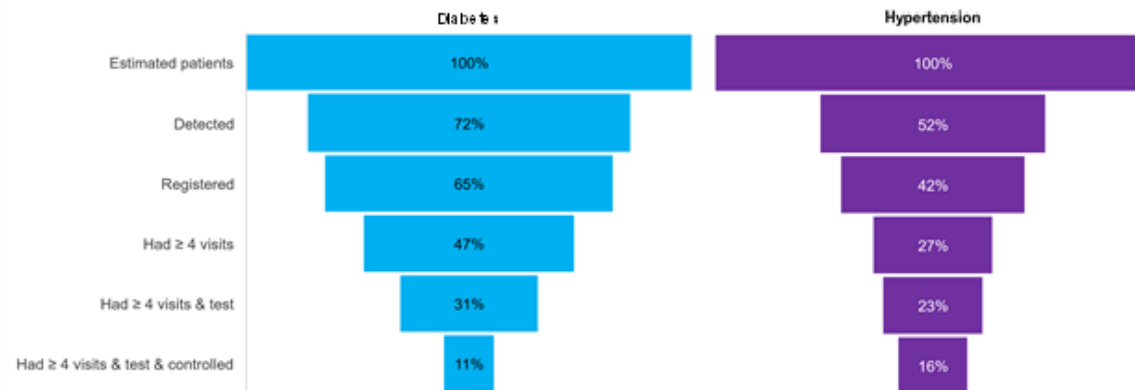


Source: World Population Prospects 2019.

## A growing burden of NCDs

- The prevalence of hypertension and diabetes is high and expected to grow
- But the rate of diagnosis, treatment and control is low
- Limited progress had been made in reducing the premature mortality from NCDs, stagnating at about 14%

Diabetes and Hypertension Cascade Analysis among Universal Coverage Scheme Members above 15 years



Source: International Health Policy Program. 2020. "Report on the Effective Coverage Programs: Diabetes and Hypertension Services." <https://ihppthaigov.net/publication/comprehensive-report-on-effective-coverage-assessment-projects-2020>.

**Conservative projections** suggest that health spending will increase from 3.8% of GDP in 2019 to 4.5% of GDP by 2030 and to 4.8% in 2050.

- These projections do not account for possible changes in cost structure, improvement in quality, or technological changes.
- Technology has been the main driver of long-term health spending, more than income or demographics.
- This implies that the actual growth in Thai health spending could be greater than that indicated above.

# There is potential for efficiency gains through strengthening the delivery and purchasing of NCD care...

## Bypassing primary health care in urban areas

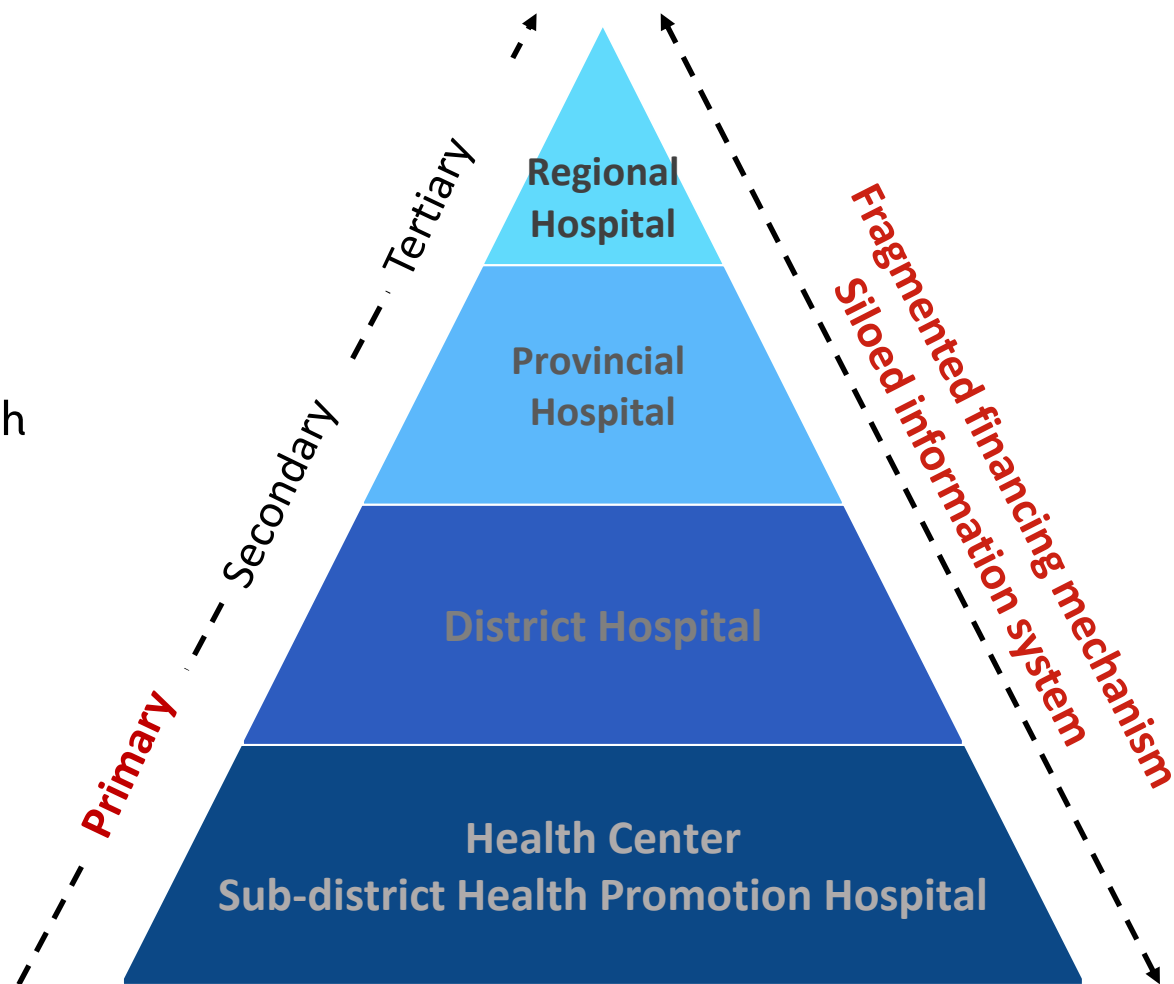
- Inefficient use of hospital services, a rise in health spending, and compromised health outcomes

## Fragmented financing mechanisms

- Limited incentives for care coordination and integration, fragmented care with suboptimal health outcomes

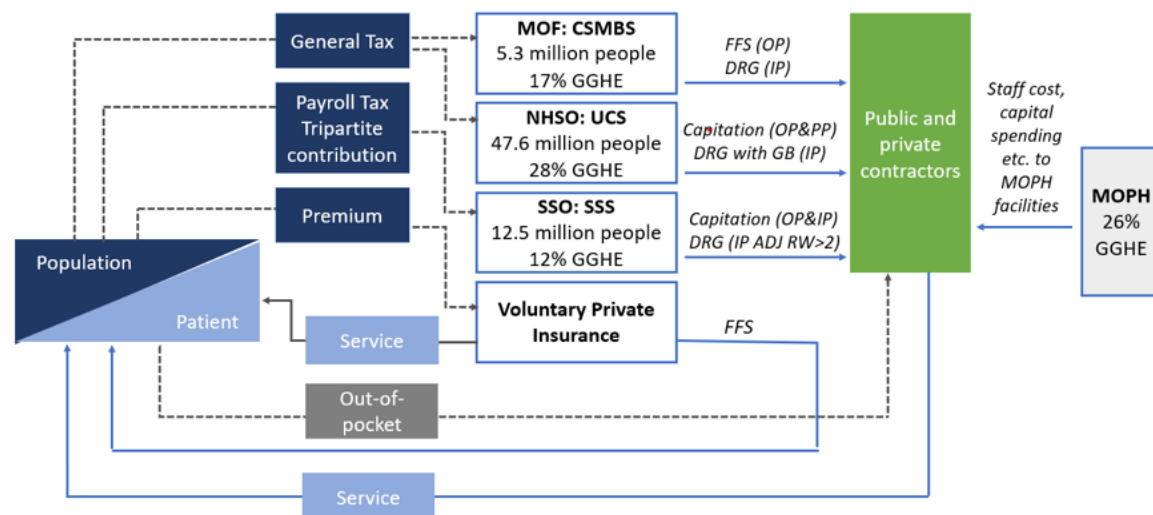
## Lack of interoperability of Health Information System

- Particularly challenging for patients with multiple morbidities who need to seek coordinated care across levels of health care as well as social care



# There is potential for enhancing financial sustainability through improving efficiency of public health insurance schemes...

Health Insurance Schemes in Thailand (2021)



Source: The figure is adapted from Thailand UHC & Overview of the Universal Coverage Scheme of the National Health Security Office (NHSO). The number of people enrolled in each insurance scheme is extracted from NHSO Annual Report 2021. The share of government spending on CSMBS, UCS, and SSS is extracted from Thailand National Health Account (2019).

Note: MOF = Ministry of Finance; MOPH = Ministry of Public Health; CSMBS = Civil Servant Medical Benefit Scheme; NHSO = National Health Security Office; UCS = Universal Coverage Scheme; SSO = Social Security Office; SSS = Social Security Scheme; GGHE = General Government Health Expenditure; FFS = fee-for-service; DRG = diagnosis-related group; GB = global budget; OP = outpatient; IP = inpatient; PP = prevention and promotion; ADJ RW = adjusted relative weight.

## High administrative costs as a result of a multipayer and multischeme system

- Duplications the investment (e.g., IT system, capacity building) as well as the activities (e.g., claims processing, benefits management, purchasing and contracting)



# Recommendations

## 1. Harness digital technology to advance health system transformation

- Build strong political commitment and leadership
- Invest and empower people
  - ✓ Both health workforce and the public
- Build a nationwide interoperable HIS with EHR at its core
  - ✓ Enable better coordinated care and payment models

## 2. Reduce fragmentation in service delivery and financing

- Build an integrated service delivery system
  - ✓ With strong PHC and LTC, supported by innovative payment models
- Harmonize purchasing mechanisms for health services across public health insurances
  - ✓ Shift from passive reimbursement to strategic purchasing
- Improve operational efficiency of public health insurance schemes
  - ✓ Entrust the management of public health insurances to one agency to improve operational efficiency

# Recommendations

## 3. Realign the roles and responsibilities of stakeholders toward promoting population health

- Advance the health system decentralization
  - ✓ Further develop mechanisms for central–local government accountability
- Further, promote a multisectoral approach to prevent NCDs by reducing major risk factors
  - ✓ Guided by health behavior science
  - ✓ Build a functioning M&E and impact evaluation system
  - ✓ Build effective communication mechanisms

## 4. Monitor and address inequities to ensure no one is left behind

- Monitor and course-correct unintended consequences on equity
  - ✓ E.g., investing in digital transformation in the health sector

# Overview of Main Findings: Social Protection

## Why is social protection important?

- ✓ **Social assistance** provides support to individuals and households facing economic hardships and serves to:
  - ✓ promote social equity and inclusion,
  - ✓ contribute to economic stability and social cohesion,
  - ✓ facilitate economic mobility and participation in the labor market,
  - ✓ help households become resilient to economic shocks.
- ✓ **Social insurance** serves to protect an individual's labor earnings due to unemployment, disability, or old age.

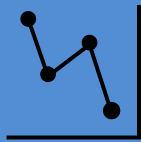
# Scope of the Social Protection assessment



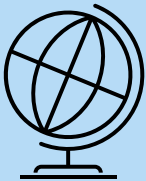
Builds on previous World Bank analytical work, such as Towards Social Protection 4.0: An Assessment of Thailand's social protection and labor market systems.



Assesses spending adequacy, spending efficiency, effectiveness, and equity using available administrative data, the Household Socioeconomic Survey 2019 data, and World Bank ASPIRE international database.



Simulates targeting and benefit level response scenarios for the State Welfare Card and Old Age Allowance, Thailand's main social assistance programs



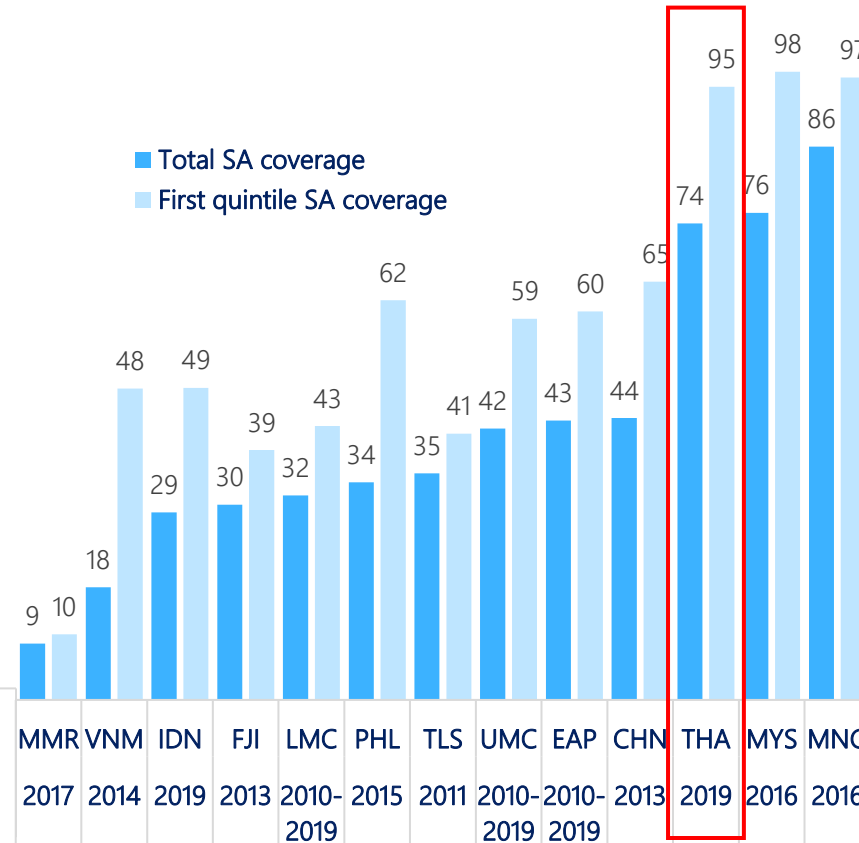
Draws from international best practices and develop policy recommendations.

# Low SA spending is spread thinly over the majority of the population even undermining the objective to protect the poor and vulnerable

Social protection spending as percent of GDP



Share of population receiving SA (percent)



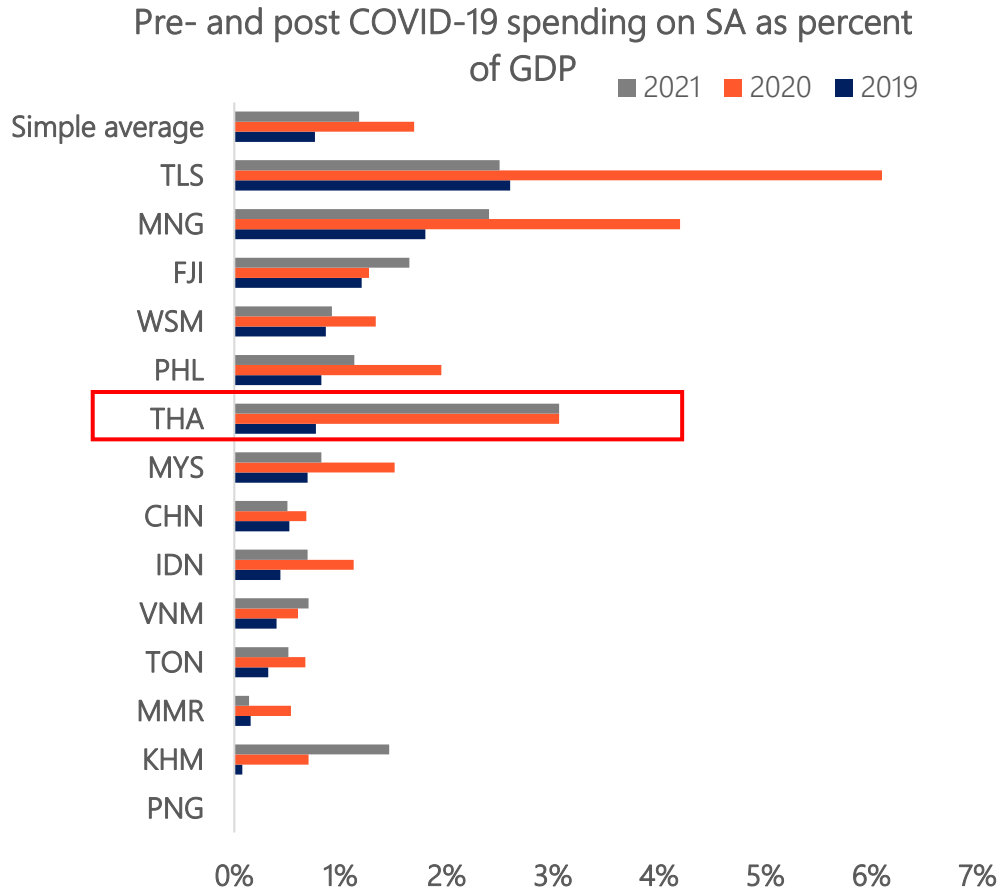
**2019 average monthly SA benefit levels per capita:**  
 THB 369, or 13% of average national monthly per capita poverty line (THB 2,763).

**State Welfare Card:**  
 THB 200-300 per month

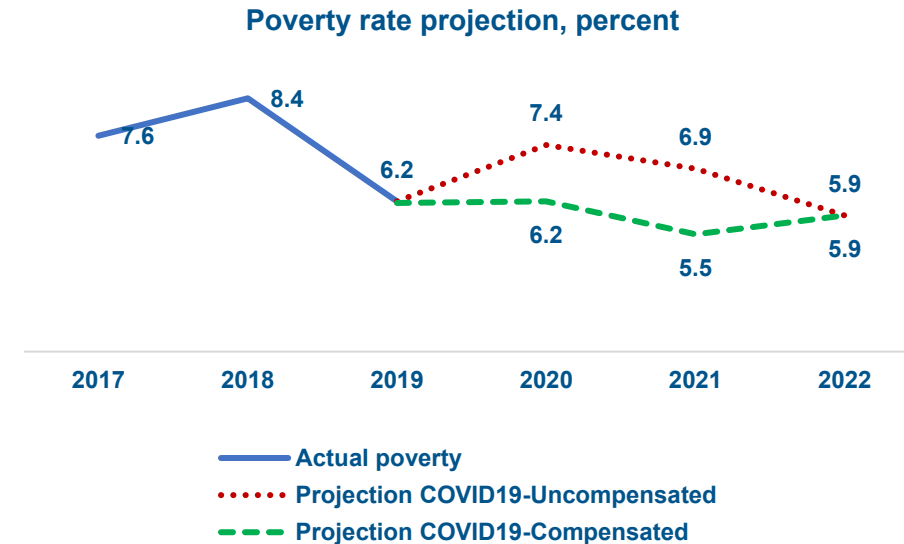
**Old Age Allowance:**  
 THB 600-1,000 per month

Source: ASPIRE database and WB estimates based on 2019 Household Socioeconomic Survey data.

# Thailand's SA response to the pandemic was one of the largest in the region and helped avoid an increase in poverty and inequality



Source: World Bank EAP Economic Update 2022.



Note: Poverty measured at US\$5.5/day (2011 PPP).

Source: World Bank. 2021. Thailand Trends and Drivers of Poverty 2017-2019.

- ✓ SA spending more than **tripled**, reaching over **3% of GDP** (from 0.8%) and **82% of the population** (from 72%).
- ✓ Included temporary emergency program for **informal workers and famers** and expansion of programs for **elderly, people with disabilities, children of poor families, SWC recipients**

## Increased spending and improved targeting could have a significant impact on poverty reduction at a low cost

	Inequality (Gini)	Poverty (percentage points)	Cost per point of poverty (THB million)	Fiscal cost (percent of 2019 GDP)
OAA: THB 2000/month for bottom 40%; baseline for top 60%	-1.23	-2.21	41.34	0.54%
OAA: Tapered (from THB 2000 to 0, by quintile)	-1.26	-2.20	33.48	0.44%
SWC: 30% of poverty line (THB 700) and improved targeting	-1.20	-3.02	23.77	0.43%
<b>Increase OAA (tapered from THB 2000 to 0, by quintile), increase SWC to THB 700 with improved targeting</b>	<b>-2.38</b>	<b>-4.51</b>	<b>32.27</b>	<b>0.86%</b>
Current emergency response (“fuel subsidies”): 10 THB price reduction of diesel	0.15	-0.48	276.24	0.79%
10% VAT, no exemptions, increase OAA (tapered) and increase SWC	-2.42	-2.65	-37.52	-0.59%
<b>10% VAT, no exemptions, increase OAA (tapered from THB 2000 to 0, by quintile) and increase SWC to THB 700 with improved targeting</b>	<b>-2.74</b>	<b>-3.66</b>	<b>-27.14</b>	<b>-0.59%</b>



**The COVID-19 response shows there is room for improvement in the amount of SA spending, as well as a need to increase efficacy and efficiency of SP**

**Our analysis recommends to:**

- 1. Increase SA spending** more permanently
- 2. Improve (introduce) poverty targeting of SA programs**, thereby increasing the efficiency of poverty reduction: in 2019, nearly half of social assistance benefits accrued to households not in the bottom 40 percent, with over 11 percent benefitting households in the richest quintile.
- 3. Reduce fragmentation, introduce comprehensive monitoring and more effective delivery systems:** SA programs currently operate in silos with their own processes for outreach, eligibility determination and enrolment and payment of benefits.
- 4. Reduce inequities and high fragmentation of current pension system** via parametric reforms as proposed by the Social Security Office.

## Concluding Summary:

# Policy Options and Investments to Improve the Quality of Thailand's Human Capital

- Over the last decade, **Thailand's Human Capital Index (HCI)** score increased from **0.585 in 2010 to 0.609 in 2020**
- **The quality of human capital in Thailand is lower than regional and income peers.**
- **In summary, improving human capital will demand:**
  - Sustaining improvements in health components of human capital (UHC). BUT respond to growing pressure on the health system due to NCDs, medical technology, and aging.
  - Pursuing education financing and delivery reforms to tackle learning quality and inequity. Consolidate small schools and increase per student spending at the pre-primary and secondary levels.
  - Reforming social assistance programs and delivery systems to increase support for the most vulnerable, better respond to shocks, and enhance human capital accumulation. Increase the size of the Old Age Allowance and State Welfare Card benefits and improve their targeting.
  - Added attention to service delivery reform, pensions, and financing to match the demands of a rapidly aging society. Reduce fragmentation of social assistance and social insurance systems.