THAILAND ECONOMIC MONITOR

INEQUALITY, OPPORTUNITY AND HUMAN CAPITAL

January 2019

WORLD BANK GROUP

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Acknowledgements

This report was prepared by Kiatipong Ariyapruchya (task team leader), Kevin C. Chua, Mahama Samir Bandaogo, Dilaka Lathapipat, Sutayut Osornprasop, and Judy Yang. Mara Warwick, Birgit Hansl and Ndiame Diop provided overall guidance. Valuable comments were provided by Sudhir Shetty, Salman Zaidi, Toby Linden, Gabriel Demombynes and Ergys Islamaj.

We would like to acknowledge valuable contributions from Arvind Nair, Rattanyu Dechjejaruwat, Thanapat Reungsri, Shiyao Wang (all WB) and Pensiri Kangvongkit (Office of the Prime Minister).

Kanitha Kongrukgreatiyos and Buntarika Sangarun led external communications and the production and design of the report while Angkanee Luangpenthong provided administrative support.

Valuable comments and information were provided by officials of the Bank of Thailand, the Ministry of Finance, the Budget Bureau and the National Economic and Social Development Council.

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TABLE OF CONTENTS



BOXES

FIGURES

TABLES


APRIL
MAY
JUNE
OCTOBER
NOVEMBER
DECEMBER
HEAD (เฮด)
HAIR (แฮร์)
EAR (เอียร์)
EYE (อาย)
NOSE (โนส)
MOUTH (เมาธ์)
ร่างกายของเรา
(MY BODY)
ผลไม้
(FRUITS)
PILOT
asean
1

EXECUTIVE SUMMARY

Recent Economic Developments

The outlook for the global economy has darkened amid elevated trade tensions. International trade and investment are moderating, trade tensions remain elevated, and financing conditions are tightening. Global growth is projected to moderate from a downwardly revised 3 percent in 2018 to 2.9 percent in 2019 and 2.8 percent in 2020–21, as economic slack dissipates, monetary policy tightens in advanced economies, and global trade gradually slows (World Bank Global Economic Prospects, January 2019).

Despite external shocks to trade and tourism, growth of the Thai economy is estimated to have accelerated to 4.1 percent in 2018. The economy proved to be resilient in the face of strong global headwinds due to strengthening domestic demand stemming from an upswing in private consumption and private investment. Domestic consumption expanded by 5 percent in 2018Q3, posting the highest growth rate in 22 quarters in a low-inflation environment and record-low unemployment.

In addition, private investment grew by 3.9 percent in the third quarter supported by increased spending on construction, machinery and equipment. Strong domestic demand offset partially adverse global factors—the China-US trade dispute—as well as domestic and idiosyncratic factors—such as the Phuket boat tragedy and the high-base effect of gold exports. The Thai economy also owed its resiliency to strong and stable macroeconomic fundamentals.

Outlook and Risks

In line with trends in the global economy, a slight economic slowdown is expected in 2019. The Thai economy is projected to slow to 3.8 percent in 2019, ticking up only slightly to 3.9 percent in 2020. Economic growth will continue to rely mainly on domestic demand as exports will be adversely affected by slower global demand. In this context, public infrastructure projects and continued planned economic reforms are expected to catalyze domestic demand in 2019 and support medium-term growth.

The balance of risks is tilted to the downside. The US and Chinese economies could slow further due to trade tensions. There is thus a risk that a continued slowdown in external demand may undermine Thailand's exports. In response, investors may hold back private investment in export industries as well as related industries amid heightened global uncertainty. In addition, the recent and expected interest-rate hikes in the US and in some of the developed economies could lead to some financial market turbulence and sudden retrenchment of capital inflows from emerging market economies. On the domestic front, persistently low disbursement rates of the capital expenditure budget, fiscal fragmentation and political uncertainty all remain risks for timely implementation of planned large public infrastructure projects.

Fiscal and monetary policy stances are expected to remain accommodative and macroeconomic stability maintained. Headline inflation is unlikely to deviate from the target range of 1–4 percent amid anchored inflationary expectations and a gradual recovery. Monetary and fiscal buffers are expected to remain adequate with room for further expansion to support economic activity, if needed. Moreover, public debt remains low at 42 percent of GDP. The Thai baht showed less volatility during the recent Turkish currency crisis compared to Indonesia and the Philippines, due to a strong current account surplus (8.1 percent of GDP) and the largest foreign exchange buffer in ASEAN (74 percent of GDP).

Continued progress in lowering poverty will depend on productivity gains. As an upper middle-income country in developing East Asia and Pacific, Thailand accordingly has one of the lowest levels of extreme poverty as measured by the International Poverty Line ($1.90/day 2011 PPP). At the higher and more relevant upper-middle-income class poverty line, ($5.5/day 2011 PPP), Thailand's poverty rate of 7.1 percent in 2015 is similar to its wealthier neighbor, Malaysia. Poverty is expected to decline at a slower rate in rural areas in the medium term as agricultural prices are not expected to reach highs observed in recent years due to the global commodity cycle. Growth could become less inclusive, with the rural poor negatively affected unless agricultural productivity increases. In addition, rural households are aging rapidly as younger generations have migrated to urban areas.

Sustaining the pace and quality of structural reforms will be crucial for reducing poverty and raising Thailand's long-term growth path above 4.0 percent in the face of demographic headwinds from rapid aging. The government's 20-year strategic plan for long-term growth is envisaged to help ensure administrative consistency and coordination across agencies as well as continuity across governments. Continued reforms in core areas such as public investment management, education, competition and services liberalization will be particularly important to raise productivity growth across all segments of society and raise Thailand from middle- to high-income status.

Inequality, Opportunity and Human Capital

The second part of this report sheds light on Thailand's challenges and opportunities in enhancing human capital and reducing inequality. While Thailand's level of inequality as measured by the Gini coefficient is comparable to peers, inequality remains an issue that has become a national priority. Income inequality can harm development in two major ways: unequal economic opportunities lead to wasted productive potential, and it typically also results in impaired institutional development which in turn is bad for investment, innovation, and risk-taking.[1]

[1] Riding the Wave: An East Asian Miracle for the 21st Century (World Bank, 2017).

The Government of Thailand has recently set up a special unit under the National Economics and Social Development Board to help devise and implement strategies to tackle social disparities and inequality. Part 2 aims to inform these efforts by highlighting how important it is for Thailand to develop the human capital of its next generation in an inclusive manner. Strengthening the health and skills of low-income groups in Thailand can go a long way in reducing inequality. Indeed, a recent study by the World Bank reviewed the experience of five countries with strong records in narrowing income inequality and highlighted the key role that labor markets can play in reducing inequality by providing better opportunities to disadvantaged groups (World Bank, 2016c; Narayan et al 2018).

Access to human capital is an important tool for narrowing future income gaps. At its 2018 Annual Meetings, the World Bank has released the Human Capital Index (HCI), which measures the expected productivity level for the next generation of workers relative to their full potential if all health and education outcomes were realized (World Bank, 2019). Thailand's HCI is 0.60 out of a possible score of 1, which can be interpreted as *"A child born today in Thailand can expect to be only 60 percent as productive as a future worker compared to if she enjoyed complete education and full health"*. While Thailand generally scores in the upper half of the various indicators compared to its ASEAN and other upper-middle income country peers, there is substantial room for further improvement. For example, in adult survival rates between ages 15–60, Thailand's rate is lower than over half of measured countries in the world.

For Thailand, unequal education quality is a big challenge, with poorer areas being underserved. Small under-resourced schools with inadequate infrastructure and education materials are mostly located in poorer regions of the country where they predominantly serve the socioeconomically disadvantaged student population and are more likely to be allocated teachers with lower qualifications and teaching experience (Lathapipat and Sondergaard, 2015). Thailand's HCI harmonized test score is lower than the ASEAN average. A Thai child born today can expect to obtain 12.4 years of school before the age of 18. However, the same Thai child can expect to complete only 8.6 learning-adjusted years of schooling, indicating a learning gap of 3.8 years.

The country faces new health challenges, including the rise in non-communicable diseases (NCDs). Across Thailand, only 85 percent of 15-year-olds will survive until age 60. This is lower than the global median, below the average 86.2 percent of its income group, and only around average of ASEAN countries. The high burden from NCDs and road traffic injuries, which caused premature deaths, has affected the country's adult survival rate. Thailand has encountered the fast-moving epidemiological transition to NCDs, which have become the leading cause of deaths accounting for an estimated 82 percent of all deaths among Thai people in 2013.[2] While mortality and morbidity from communicable diseases have decreased, prevalence of diabetes and hypertension has tripled and quadrupled respectively in the past 15 years.

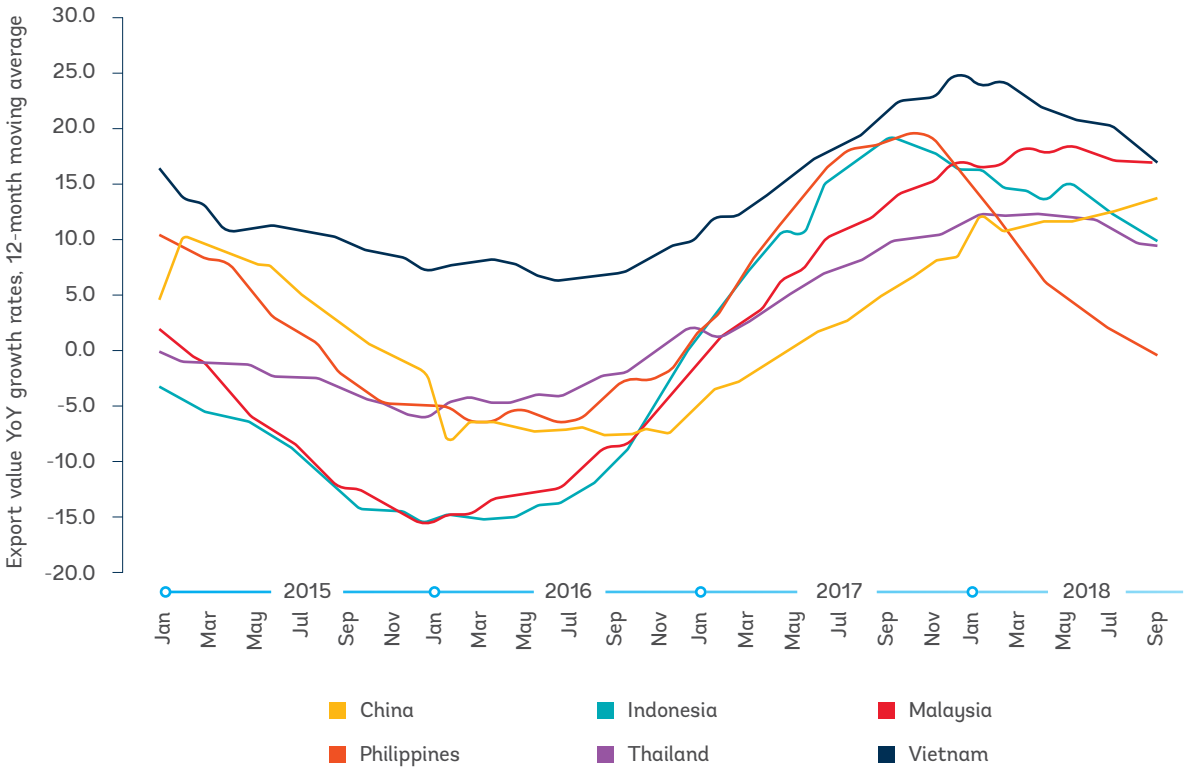
[2] Burden of Disease Thailand program, 2017.

To achieve higher economic development, inclusive and equitable investment in the next generation will be crucial and can start by addressing some priority areas in education, health, and equalizing opportunities. Thailand's aspirations to ascend to an advanced economy face the difficult challenge of a rapidly aging society, low education quality, regional differences in access and quality of education, and emerging health challenges. In education, strategies include addressing small schools where approximately 1 million (mainly poor) children, on average, are currently getting an inferior quality education, improving school-based management, and increasing the efficiency of public education expenditures. Promoting healthier outcomes is essential as Thailand's adult survival rate is lower than half of countries worldwide. Lastly, investment in human capital must be equitable to boost opportunities for all in the next generation.

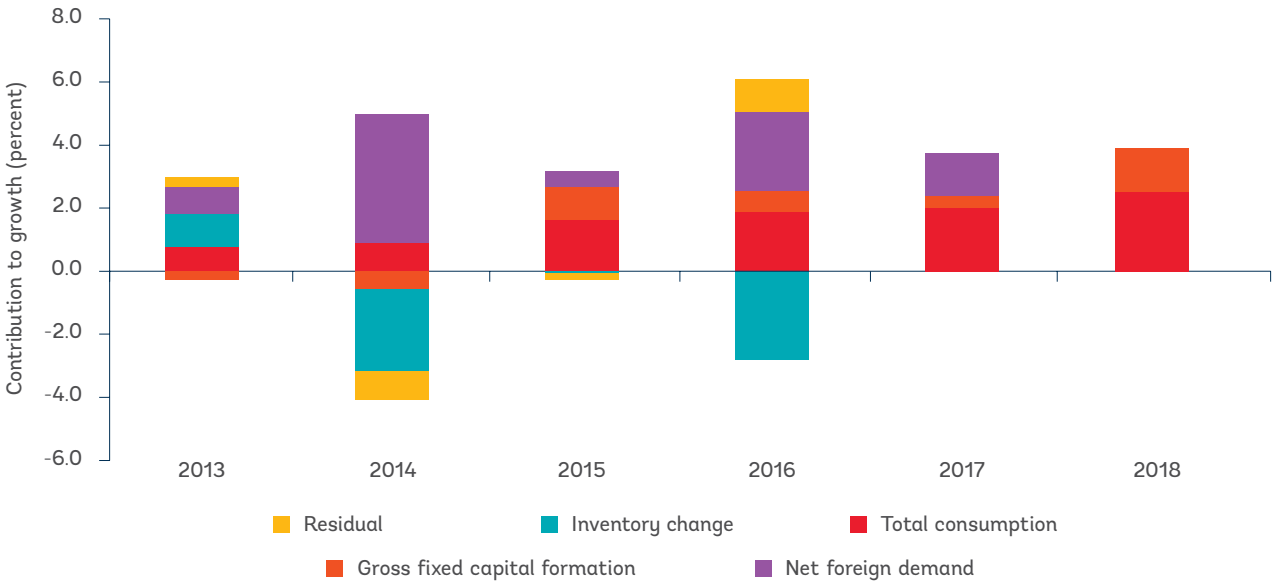
Reducing inequality of opportunities can set in motion a virtuous cycle. When the outcomes of children become less tied to the circumstances of their birth or the characteristics of their parents, relative mobility is high, inequality traps are broken, economic growth is stimulated. These positive changes foster a more inclusive process of growth, and in turn help mobility rise further. A virtuous cycle is reinforced as it promotes social cohesion as people no longer feel excluded from progress, have improved perceptions of fairness and optimism, and can more realistically meet their aspirations. For example, in countries with greater relative mobility in education, parents are found to be likely to be more optimistic, with a larger share believing that their children have the opportunities to learn and grow (Narayan et al 2018). Reducing inequality has been empirically linked to boosting economic growth in some countries, though a global relationship has not been found (Ferreira et al. 2013; World Bank 2006, 2016c). When society is more unequal, higher growth rates are required to reduce poverty (World Bank 2016c).

Summary charts

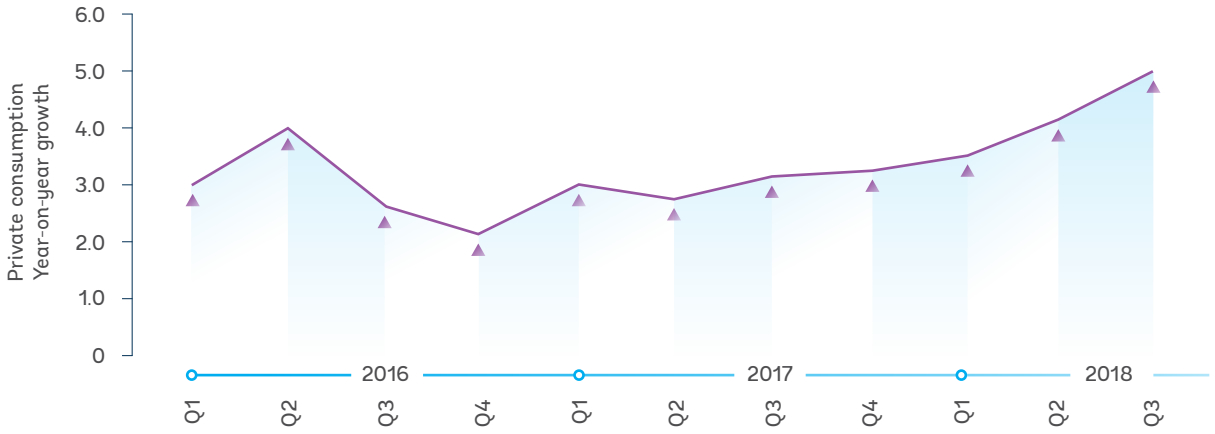
Exports slowed across the region…



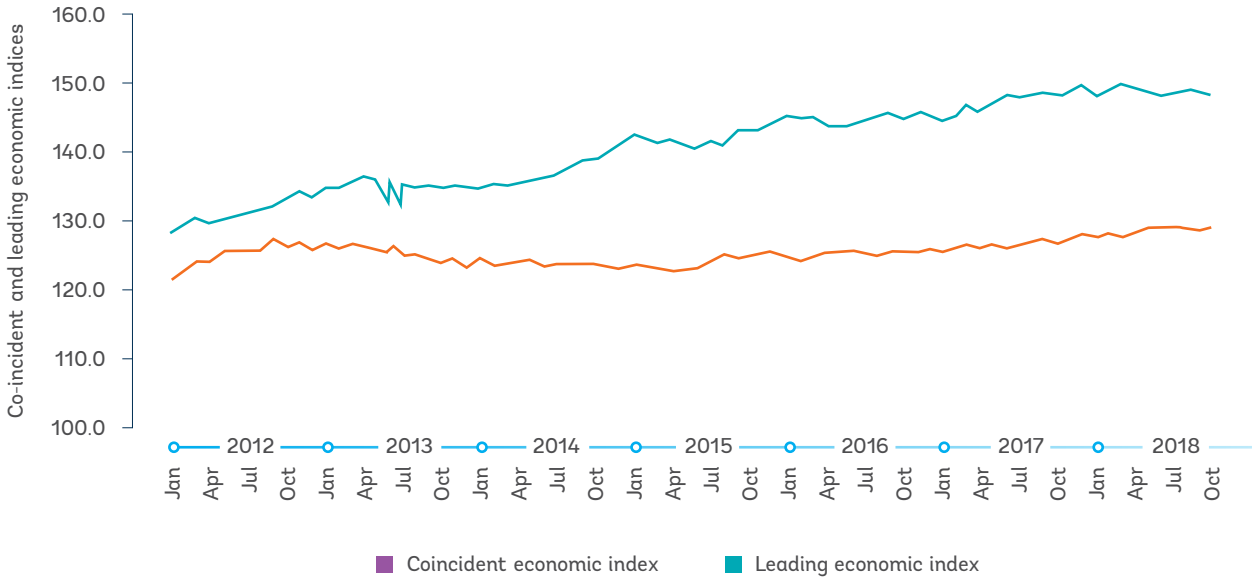
…weighing on Thailand's export-led recovery



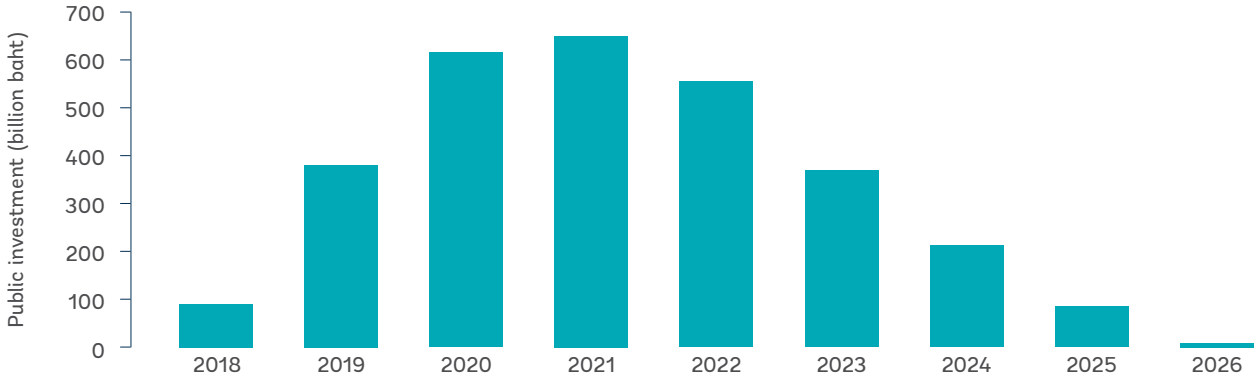
...as private consumption continued to steadily recover, offsetting sluggish external demand...



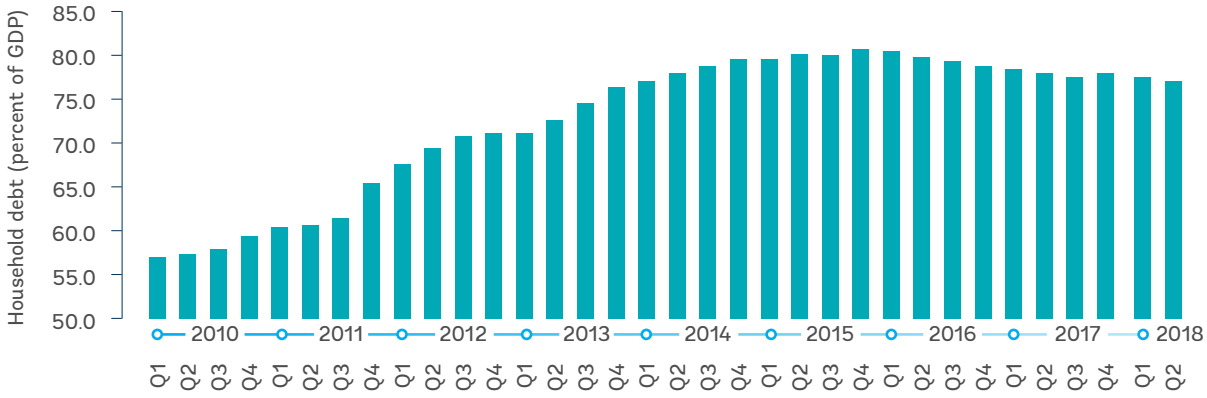
...amid improving co-incident and leading indicators...



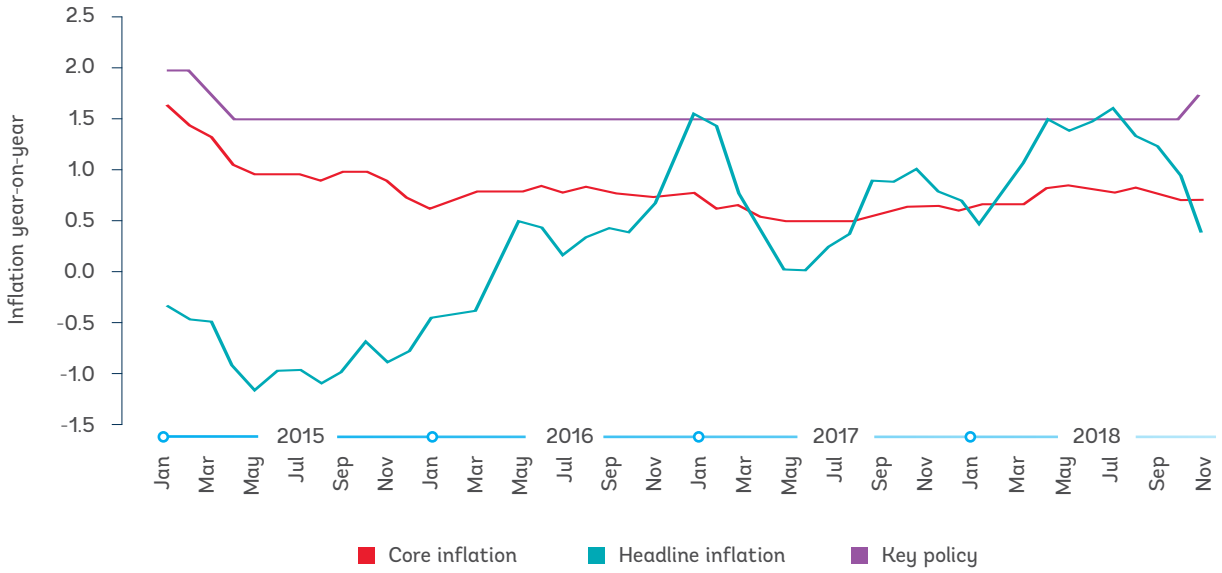
...as ambitious public investments are expected to pick-up and improve investor sentiment...



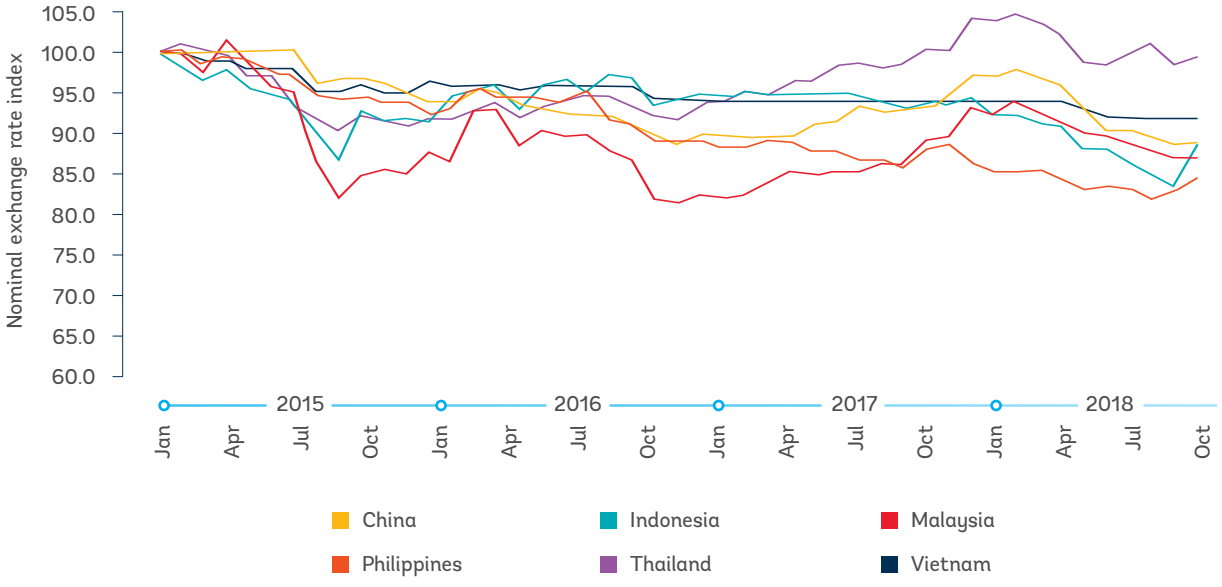
…despite lingering concerns about still-high household debt.



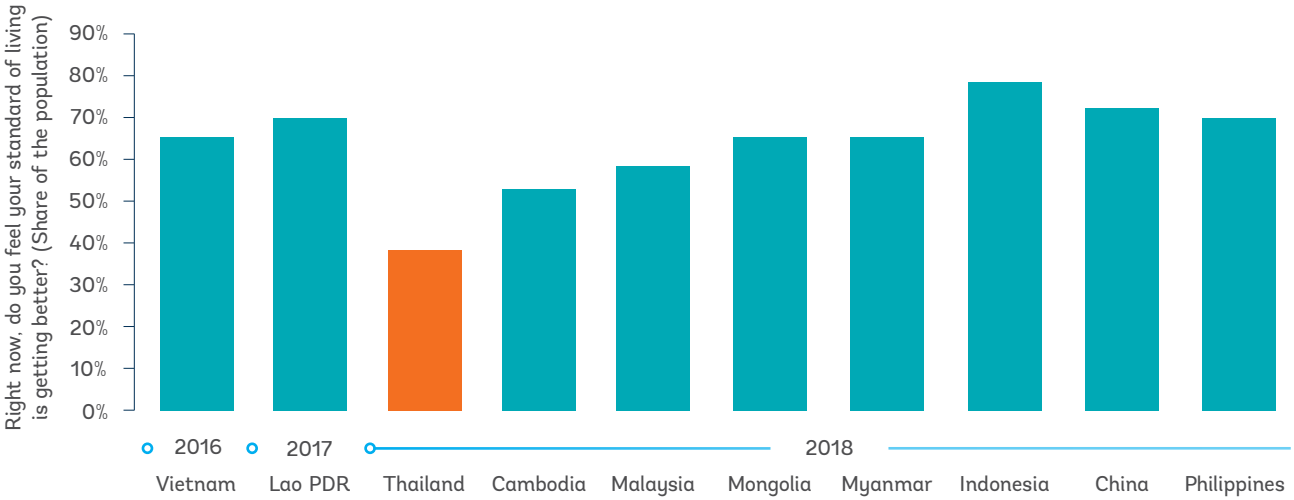
Macroeconomic fundamentals are bolstered by anchored headline and core inflation…



…exchange rate volatility tempered by strong current account surplus and high foreign reserves.

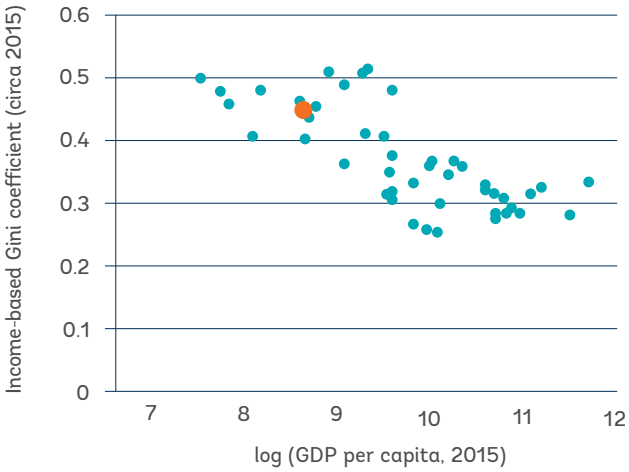


Reducing inequality is a national priority.



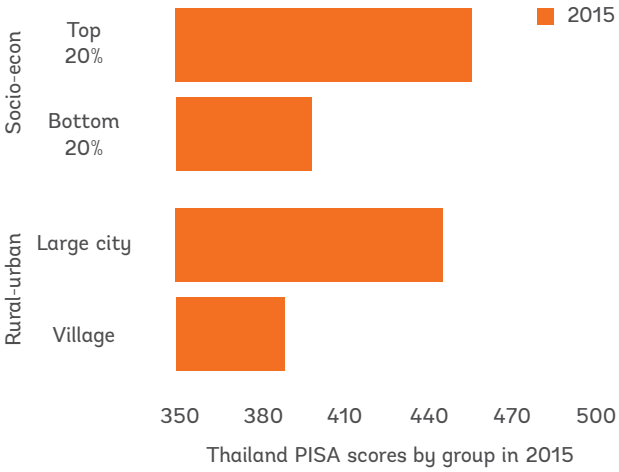
Source: Gallup.

Thailand's level of inequality is comparable to peers based on its level of development.



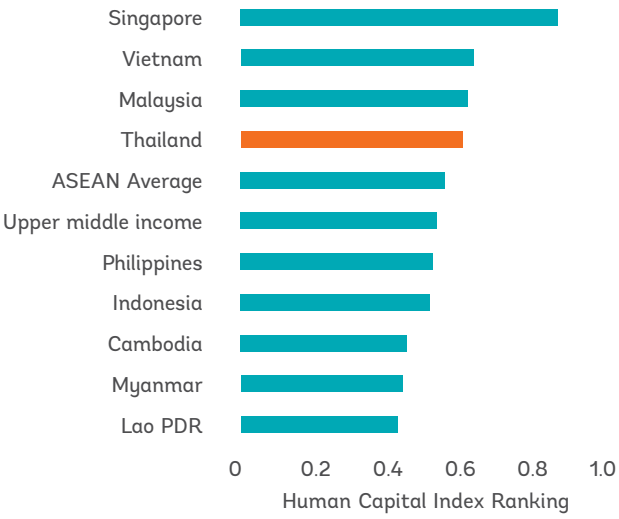
Source: PovcalNet

However, children in poor or rural households have worse access to quality education.

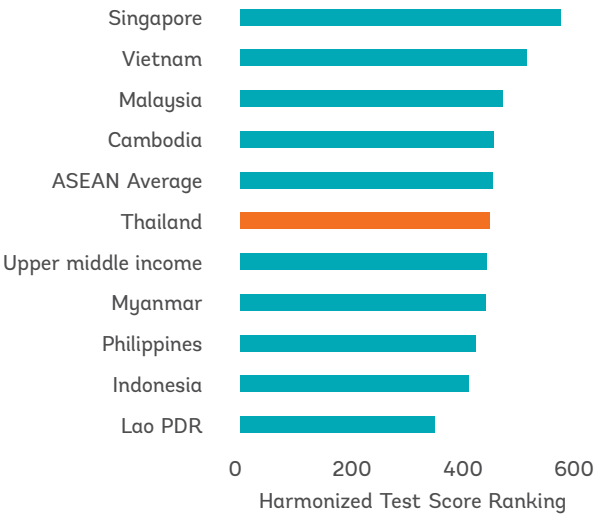


Source: OECD

Thailand's Human Capital Index value is above the ASEAN average.



But Thailand's quality of education is lower than the ASEAN average.



PART 1 | MACROECONOMIC DEVELOPMENTS AND OUTLOOK

A. THE THAI ECONOMY IN 2018

Real sector development: robust domestic demand amid weak external environment

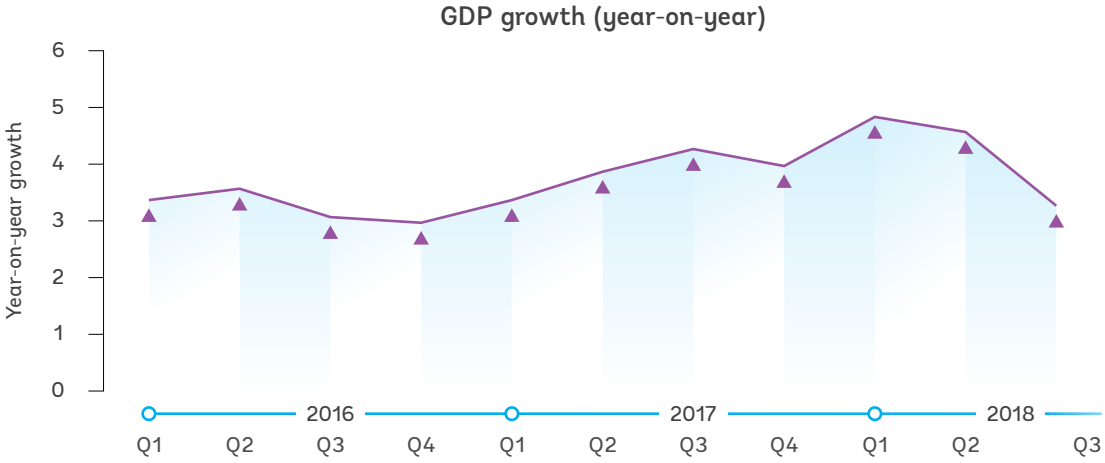
The global economy is estimated to have expanded by 3.1 percent in 2018, despite a slowdown in global trade. This growth dynamic is slower than the EAP region's (6.3 percent) and economic growth rate estimated for emerging markets and developing economies (4.5 percent). While the estimated growth of the Thai economy in 2018 (4.1 percent) was higher than global growth, it lags behind the growth performance of the EAP region.

Thailand's GDP continued to expand in 2018, supported by a strong uptake in domestic demand, in particular private consumption. After an extended period of slow growth, private consumption was on an upward trend in 2018 and has supported the expansion of the Thai economy. Private consumption grew by 5 percent in the third quarter of 2018, up from 4.5 percent in the second quarter (Figure 3). The expansion in private consumption was supported by several factors: 1) household incomes improved, which fueled spending on semi-durable and non-durable goods; 2) low inflation and high consumer confidence; 3) increase purchases of new cars due to the end of the 5 years requirement of ownership under the first car buyer scheme, which was implemented in 2012. The purchase of passenger car grew by 25.15 percent in the second quarter; and 4) welfare spending targeted at low-income people.

In addition to private consumption, domestic investment was also in an upswing in 2018. Gross fixed capital formation grew by 3.9 percent in the third quarter of 2018, from 3.6 percent in the second quarter. The expansion in gross fixed capital was supported in equal parts by growth in both public and private investment. Private investment expanded by 3.9 percent and public investment by 4.2 percent. Growth in private investment was supported by a healthy expansion in construction and the purchase of machines and equipment (Figure 4). This marks a significant acceleration in private investment growth compared to only 1 percent growth in 2016 and a contraction of one percent in 2017.

The expansion in public investment came mainly from public construction, which rose by 4.2 percent in the third quarter compared to just 1.5 percent in the previous quarter. Acceleration was due to increased procurement of small and medium-sized projects which started to take off after the initial "teething period" of the new procurement law which came into effect in August 2017. However, spending on large infrastructure projects has been slower compared to last year. The disbursement rate of capital expenditure was documented as 70.5 percent, missing the official target by 17.5 percent. Also, the purchase of public machinery and equipment decelerated from 13.6 percent in the second quarter to just 4.1 percent in the third quarter due a high-base effect from the purchase of several aircraft by Thai Airways in 2017.

Figure 1: GDP growth decelerated to 3.3 percent in the third quarter…

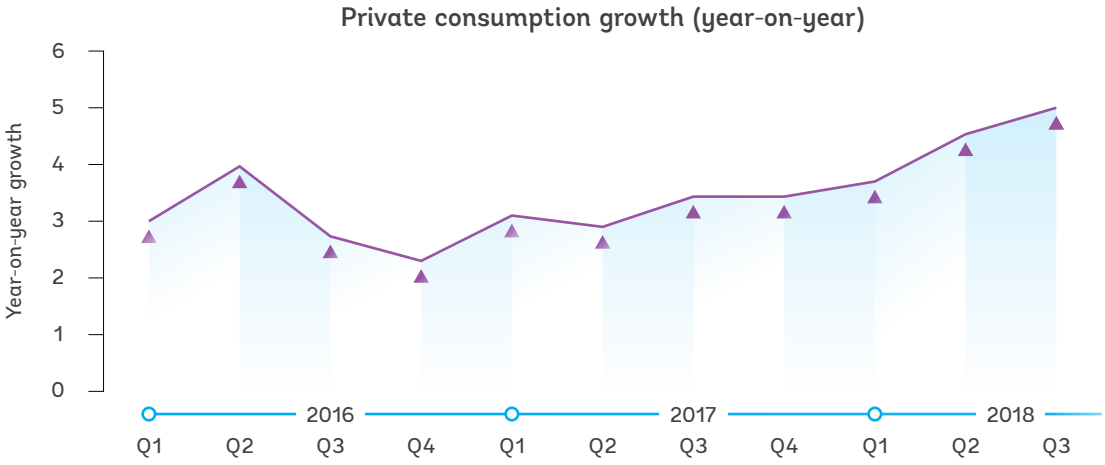


Source: NESDB.

Figure 2: … mainly due to a drastic fall in exports

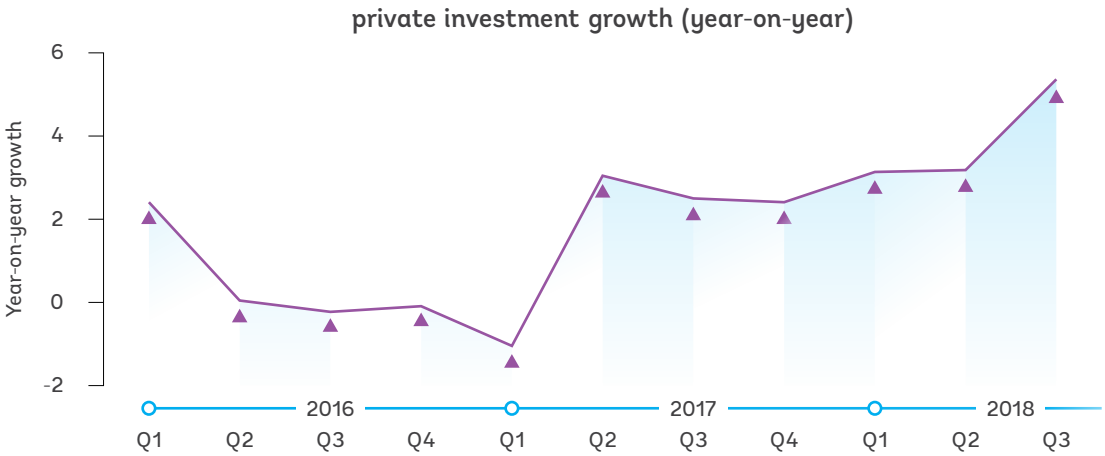
Source: NESDB.

Figure 3: Private consumption has been on an upward trend during the first 9 months of 2018 …



Source: NESDB.

Figure 4: … and so has private investment



Source: NESDB.

Figure 5: Production Side GDP Growth Composition

Source: NESDB.

Growth of external demand decelerated abruptly in the third quarter of 2018 to 2.6 percent from 12.3 percent in the previous quarter and export volume shrank by 0.4 percent (Figure 2). The value of manufacturing exports decelerated in the third quarter to 6.7 percent from a high of 10.7 percent in the previous quarter. In addition to the China-US trade tensions, other short-term factors contributed to the weak growth in exports (e.g. production disruption of major export commodities due to flooding, and high base for gold exports) and tourist receipts (e.g. the Phuket boat tragedy[3]). Exports to China fell by 2.8 percent and those to Australia by 5.7 percent. This slowdown in exports is not isolated to Thailand as exports slowed down across the region (Figure 6). However, exports to ASEAN saw the fastest growth in 28 quarters, to 22.3 percent, which more than made up for the fall in exports to China, Australia and the United States.

The growth of number of foreign tourists slowed down in the third quarter, to only 1.9 percent, compared to 8.4 percent in the previous quarter. This contributed to the lower growth rate of 0.5 percent in foreign tourism receipts. Among other things, the slowdown in the number of foreign tourists was due to the boat accident in Phuket and the summer FIFA World Cup, which attracted European tourists away from Thailand. The number of Chinese tourists went down by 8.8 percent, mostly likely due to the boat accident, but also to some extent because of the slowdown of the Chinese economy, which may pose a threat to the Thai tourism industry in the long run if it continues. However, the low number of Chinese citizens with a passport (about 10 percent) and the low number of Indian tourists currently coming to vacation in Thailand (fewer than a million) as well as the concentration of tourism in Bangkok, Phuket and Chiang Mai suggest that there remains considerable upside potential to the Thai tourism industry in the long term.

In line with the rise in domestic demand, imports expanded, supported by increased imports of consumer goods, raw materials and intermediate goods. Import value, measured in US dollar, expanded by 17 percent in the third quarter. Import price was up 6.2 percent and import quantity 10.2 percent. The import of capital goods saw a decline of 5.9 percent, mainly due to a high base effect from the previous year. The faster expansion in imports and the slowdown in exports caused the trade surplus to shrink to US$3.4 billion, from US$5.8 billion in the previous quarter.

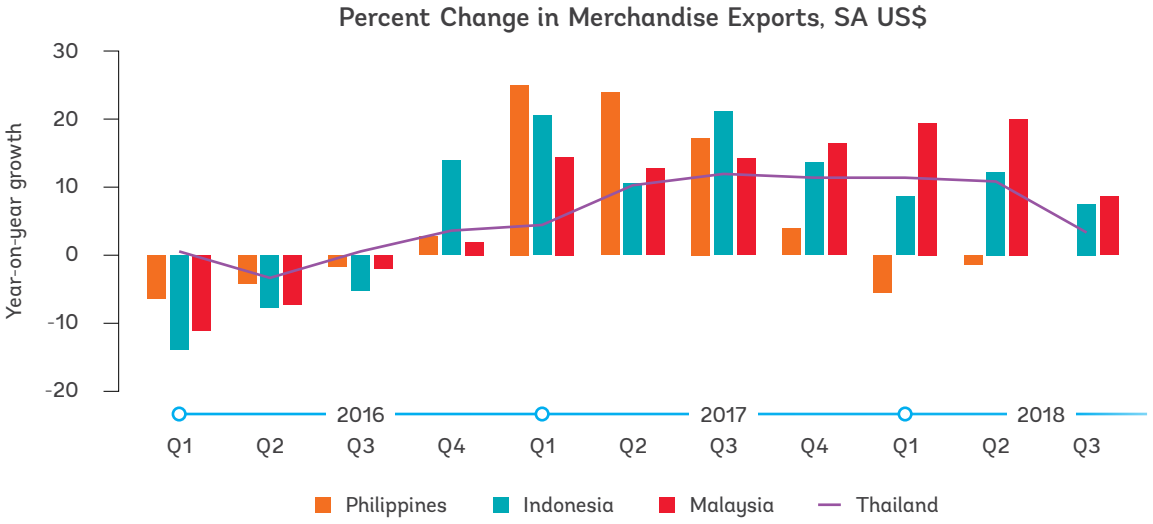
Reflecting the slowdown in exports, growth in manufacturing production declined by half in the third quarter compared to the previous quarter, from 3.2 percent to 1.6 percent. The decline in export growth cascaded into weaker manufacturing activities in export-linked industries. The growth in manufacturing production slowed down, from 7.0 percent in the second quarter to 2.3 percent in the third quarter in industries with exports share between 30 and 60 percent of their total production. At the same time export-oriented industries, those with exports share above 60 percent of their production expanded by 1.5 percent in the third quarter. Furthermore, while production in domestic oriented industries rose by 1.9 percent in the second quarter, it shrank by 0.8 percent in the third quarter. Production capacity fell from 67.1 percent in the same quarter last year to 66.5 percent in the third quarter, but four industries including plastics and synthetic rubber, automobile, petroleum and meat processing, had capacity utilization of at least 80 percent in the third quarter. The business sentiment index at the end of October stood at 49.6, having dropped from 51.5 the previous month. However, the expected business sentiment was at 54.2, meaning that expectations about future business had improved compared to the previous month.[4]

Growth in agricultural production slowed to 4.3 percent in the third quarter of 2018, from 10.2 percent in the second quarter, compared to 9.7 percent in the third quarter of 2017. The relatively lower commodity prices in 2018 softened incentives for greater agriculture production. The agricultural price index fell by 3.3 percent due to lower price of rubber, sugarcane, poultry and white shrimp. The oversupply of rubber is putting a downward pressure on the price of rubber, which is expected to remain low given the continued increase in production from mature rubber trees, planted a few years ago when rubber prices very high. Agricultural income rose for the second consecutive quarter and the farm income index was up by 1.3 percent in the third quarter. This is a particular upside for those in the bottom 40 percent of the income ladder, who had seen their income deteriorate in recent years.

[3] On 5 July 2018, two tourist boats capsized and sank near Phuket during a sudden storm. Forty-six people perished and three were declared missing, all of whom were on the double-decker ship Phoenix PC Diving, which carried 101 people, including 89 tourists (all but 2 were Chinese nationals). All 42 passengers aboard the second boat, Serenita, were rescued. Chinese arrival numbers plummeted following the tragedy.

[4] Business Sentiment Index, Bank of Thailand.

Figure 6: Exports slowed down across the region



Source: Haver Analytics.

Fiscal policy development: expansionary stance

Aligned with the continued economic expansion, government revenues exceeded the official target for the fiscal 2018. Net government revenues were estimated at 2,528 billion baht, an increase of 7.3 percent over the previous fiscal year and 1.1 percent more than the official target rate. In particular, the rise in public revenues was fueled by an uptake in revenue from the corporate income tax and revenue from petroleum income tax, which rose by 233.7 percent in the third quarter due to relatively high prices of crude oil and production quantity. Tax revenues from VAT and those from excise tax were also on an upswing.

Public expenditure increased by 8.6 percent in the third quarter of 2018, compared to the same quarter last year. During the third quarter, current expenditures were up 5.6 percent and capital expenditure disbursements was up 17.7 percent. For the 2018 fiscal year, which ended in September, the disbursement rate for current expenditures stood at 96.1 percent, missing the official target set at 98.4 percent. The disbursement rate for the capital expenditures, on the other hand, was estimated at 70.5 percent, falling by 0.1 percent compared to last fiscal year and largely missing the official target by 17.5 percent. To support the expansion of domestic demand and spur growth in a deteriorating external environment, increasing the capital expenditure disbursement rate in the future would be crucial to the Thai economy.

For the 2018 fiscal year, the budgetary balance was a deficit of 624.5 billion baht (3.7 percent of GDP), but the non-budgetary balance was a surplus of 233.8 billion baht (1.4 percent of GDP).[5] Public debt stood at 6.8 trillion baht or 41.5 percent of GDP, which is far below the fiscal prudential maximum limit of 60 percent of GDP. Total public spending was set at 3,000 billion or 17.1 percent of GDP for the fiscal year 2019, a slight decrease compared the previous fiscal year. Public investment on the other hand is expected to accelerate in fiscal year 2019 to 6.2 percent, from 5 percent in fiscal year 2018. This expansion in public investment is in line with the expansionary fiscal stance in recent years to support the large public infrastructure projects underway to connect lagging regions. Some of the public transportation projects include railway dual-tracking, Mass Rapid Transit lines (Orange, Pink and Yellow) in Bangkok, a Bang Pa-in to Nakhon Ratchasima motorway and a train route from Bangkok to Nakhon Ratchasima.

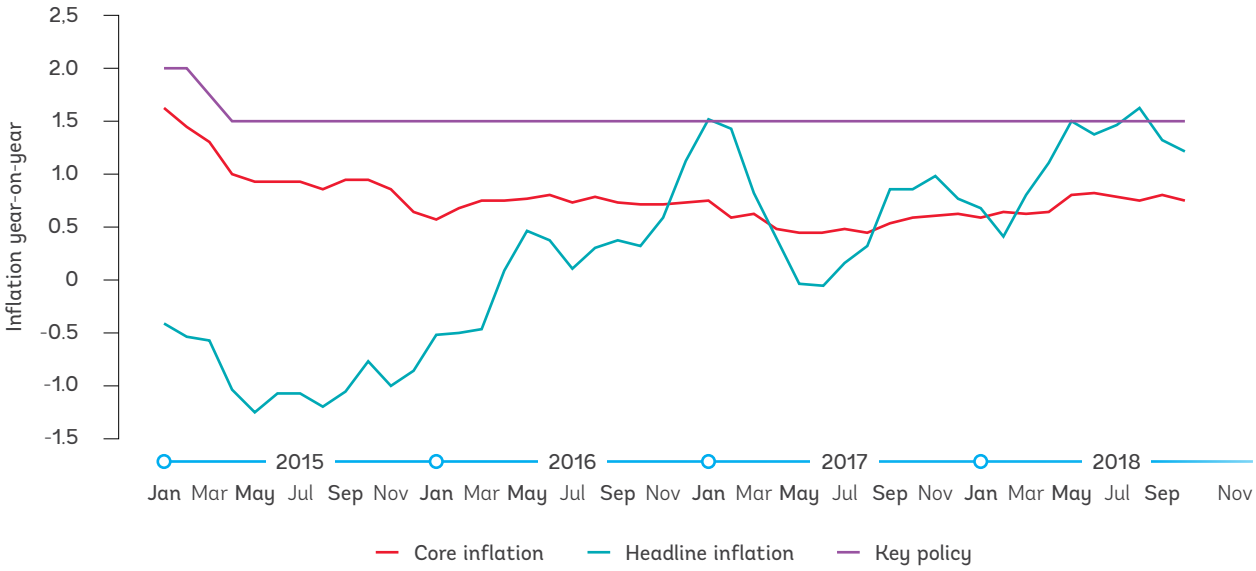
[5] Non-budgetary balance includes revolving funds from specialized financialized institutions (policy banks) and non-budgeted borrowing for emergencies such as the flood of 2011.

Table 1: Selected Fiscal Data

FY	Revenue (% GDP)	Expenditures (% GDP)	Balance (% GDP)
2015	16.1%	18.7%	-2.6%
2016	16.5%	19.1%	-2.6%
2017	16.2%	18.7%	-3.5%
2018	15.3%	18.3%	-3.0%

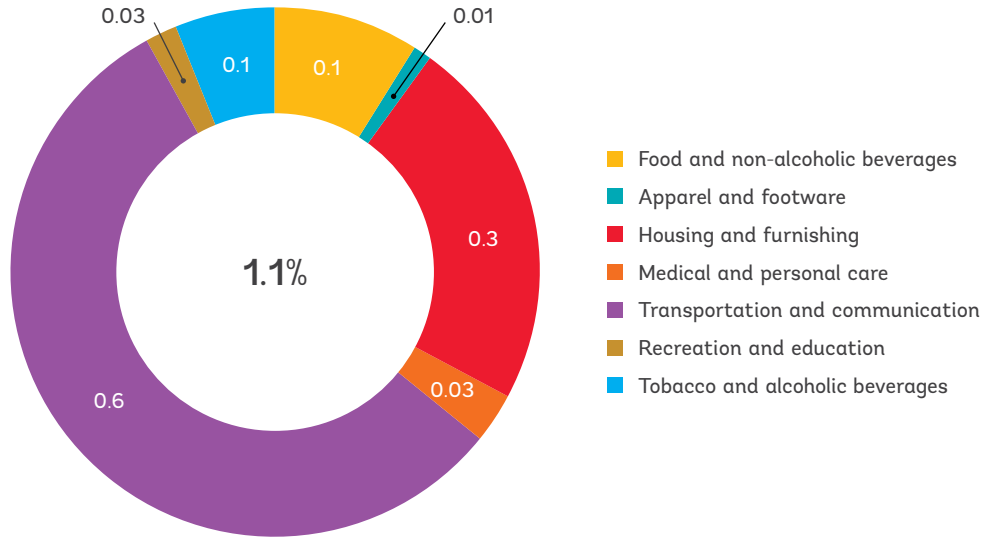
Source: Bureau of the Budget.

Figure 7: Inflation has been kept at low and manageable levels



Source: Bank of Thailand

Figure 8: Rising energy prices in the global market impacted prices in transportation and communication



Source: Bank of Thailand.

Monetary and Financial sector development: maintaining an accommodative stance

Inflation remained low and near the lower bound of the inflation target range, creeping up slightly in 2018. Headline inflation has slowly risen, averaging 1.1 percent in 2018 from 0.7 percent in 2017 (Figure 7). Rising energy prices in the global market impacted the prices of transportation and communication which remained elevated throughout the year and contributed more than half of the inflation in 2018 (Figure 8). Food inflation, meanwhile, remains subdued at 0.4 percent in 2018, due to the absence of price growth in 2017. The marginal increase in food inflation was caused by the higher prices of rice, flour and cereal products as the prices of meats, eggs and dairy products, and vegetables and fruits contracted. Excluding the volatile food and energy items, core inflation remains largely stable reaching 0.7 percent in 2018 from 0.6 percent in 2017. Both headline and core inflation numbers fell near the lower bound of the central bank's 1–4 percent headline inflation target range.

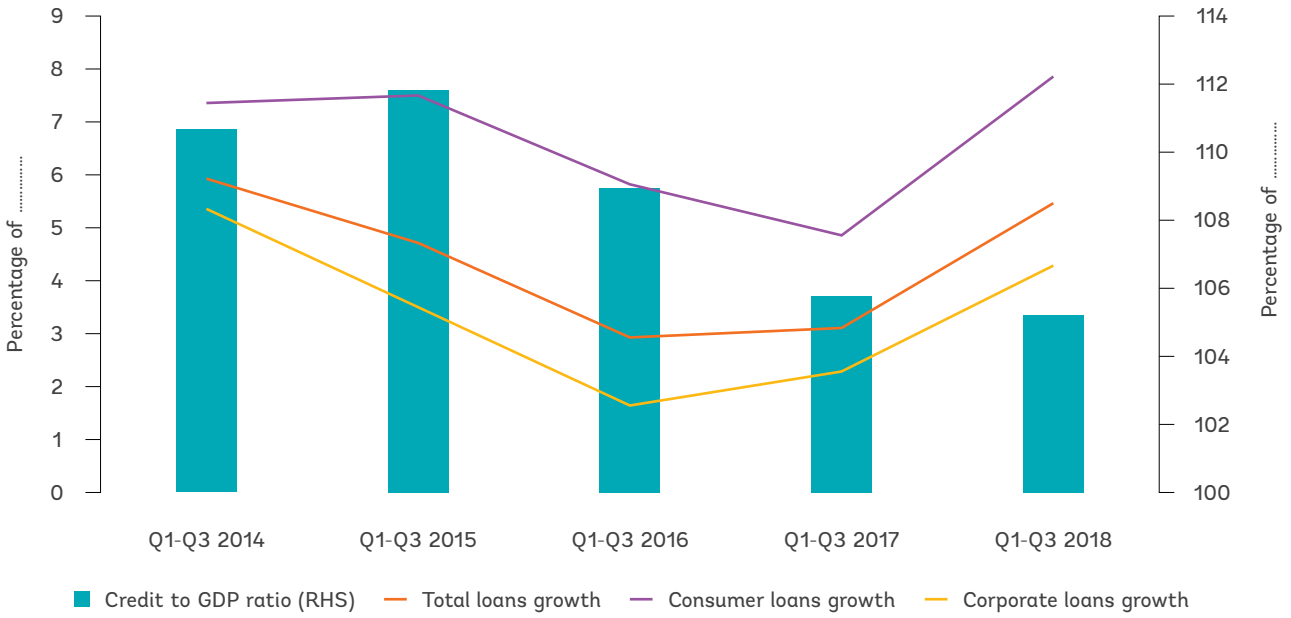
With inflation at manageable levels, the Bank of Thailand maintained its accommodative monetary policy which supported credit expansion. The Bank of Thailand kept its key policy rate at 1.5 percent from April 2015 to December 2018, which supported credit growth and in turn, domestic demand in 2018. In December 2018, the Bank of Thailand raised its policy rate to 1.75 percent to curb risks to financial stability from the extended low-interest rate environment. Bank loans grew at an average of 5.5 percent in the first three quarters of 2018 from 3.1 percent in the same period in 2017. On the one hand, consumer loans, which accounted for 33.4 percent of total loans, saw an increase of 7.9 percent in the first three quarters of 2018, driven by the robust lending for autos and housing loans. On the other hand, corporate loans, which accounted for 66.7 percent of total loans, grew at 4.3 percent in the first three quarters of 2018 with the financial services, real estate activities, and wholesale and retail trade sectors significantly contributing to the expansion in credit. Total credit represented 105.2 percent of GDP in the first three quarters of the year (Figure 9). The credit expansion went hand-in-hand with money supply (M3) growth, which expanded by 5.2 percent in the first three quarters in 2018, effectively supporting the growth in the economy.

High household debt poses a risk to highly leveraged households when interest rates begin to normalize. The low and steady interest rate environment, past fiscal and quasi-fiscal policies to stimulate consumption through housing and car tax rebates as well as the rice pledging scheme[6], competition in consumer credit and loose macro-prudential stance in specialized financial institutions all contributed to higher leverage in the household sector. From less than 60.0 percent in 2010, the household debt to GDP peaked at 81.2 percent in the fourth quarter of 2015 but has slowly fallen to 77.5 percent in the second quarter of 2018 (Figure 10). The deleveraging, however, has been uneven and concentrated in wealthier households in certain regions (Figure 11). Given the rise in the central bank policy rate for the first time in three years and possible future hikes, the high level of household debt represents a build-up of potential vulnerabilities. The Bank of Thailand has recently announced the issuance of loan-to-value caps for high-end housing to pre-empt the build-up of risks, and previously tightened credit line limits for credit card and personal loans.

Nonetheless, Thailand's financial system remains stable with capital adequacy well above Basel 3 requirements. The share of non-performing loans to total loan portfolio in commercial banks stood at 2.94 percent in September 2018, marginally lower than the 2.97 percent in September 2017. Regulatory capital risk-weighted assets ratio stood at 17.6 percent in the second quarter of 2018, the same as in the second quarter of 2017, which is double the 8 percent minimum capital adequacy ratio under Basel 3. The ratio of actual to regulatory loan loss provision remained high at 182.1 percent in the second quarter of 2018. Based on the latest available data, the banking system's return on assets stood at 1.4 percent while the return on equity was at 9.9 percent. Despite a decline in fee income due to growth in fee-free retail fund transfers via internet and mobile banking transactions, bank profitability increased by 15.9 percent in the second quarter of 2018 from a 4.1 percent contraction in the same period last year, due to higher interest income and lower provisioning expenses.

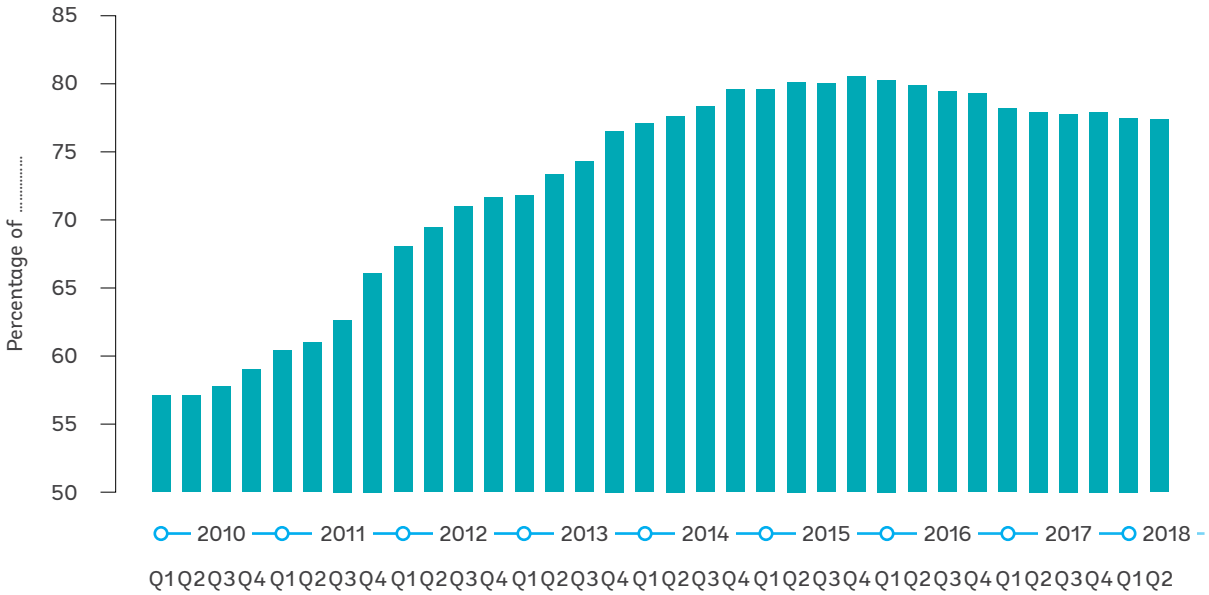
[6] For example, the Yingluck administration (2011) supported Thai rice farmers by buying rice at prices 50 percent above market prices. The policy is estimated to have cost 3.5 percent of GDP (World Bank Thailand Economic Monitor December 2012).

Figure 9: Corporate and consumer loans grew faster in the first three quarters of 2018



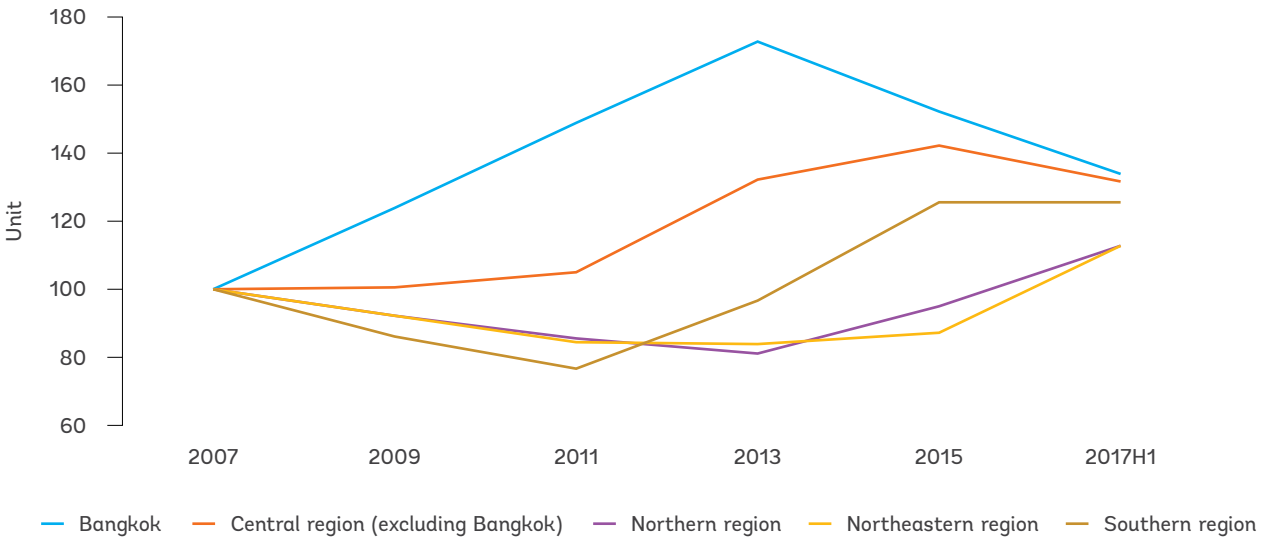
Source: Bank of Thailand.

Figure 10: Household debt as a share of GDP has slowly fallen since 2015



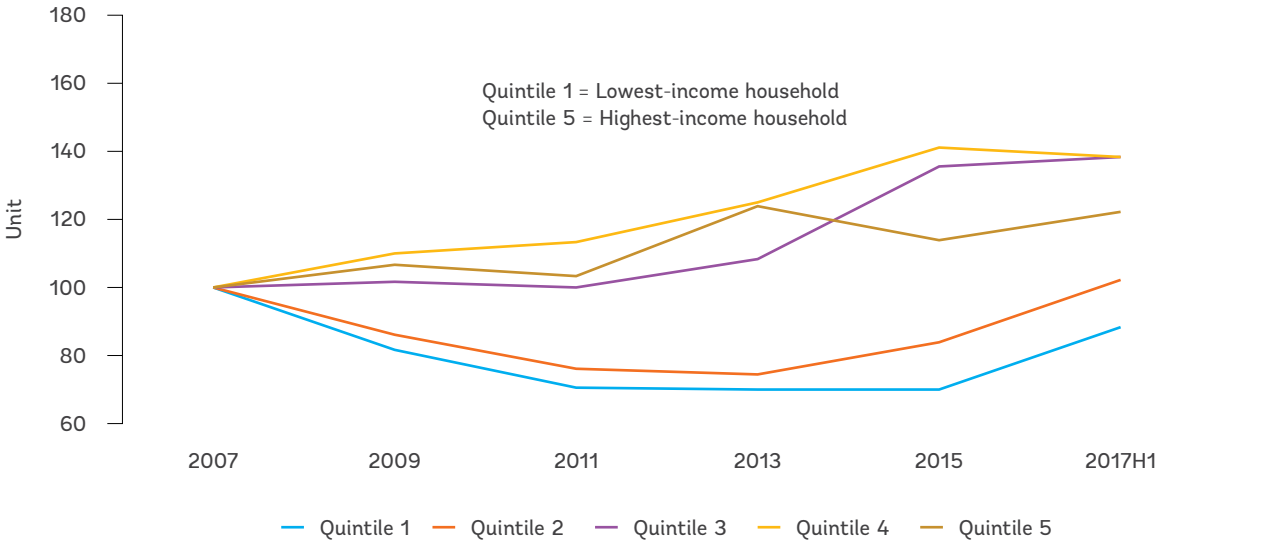
Source: Bank of Thailand.

Figure 11: Household debt classified by region/Index 2007 = 100



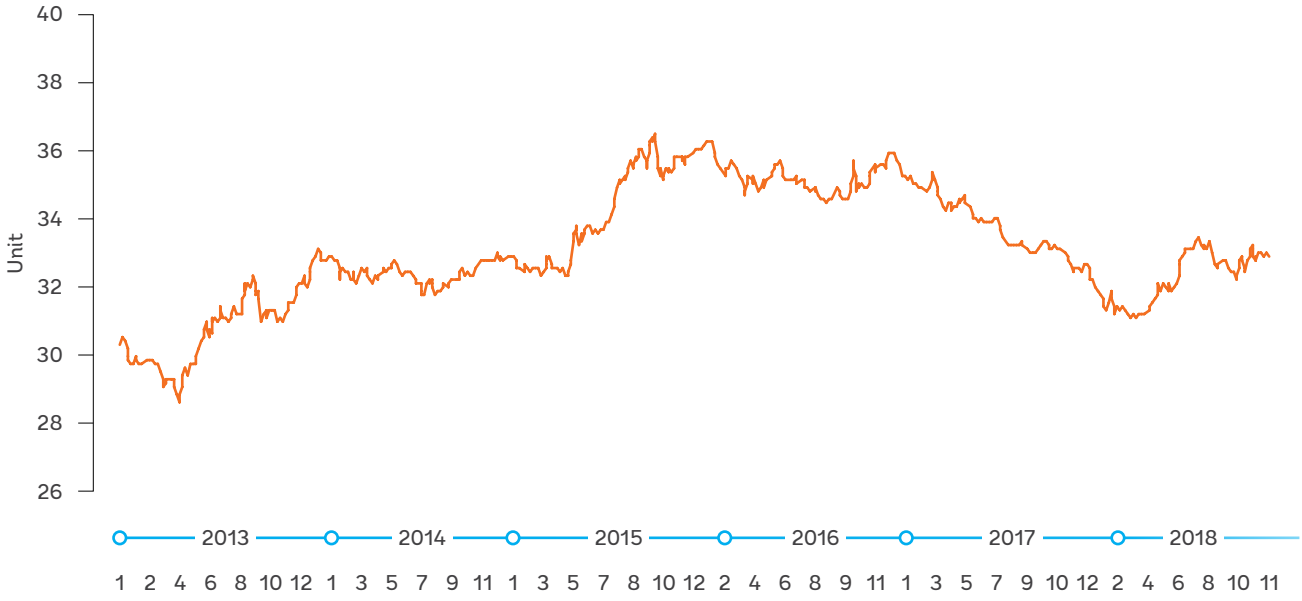
Source: National Statistical Office, Bank of Thailand.

Figure 12: Household debt classified by income/Index 2007 = 100



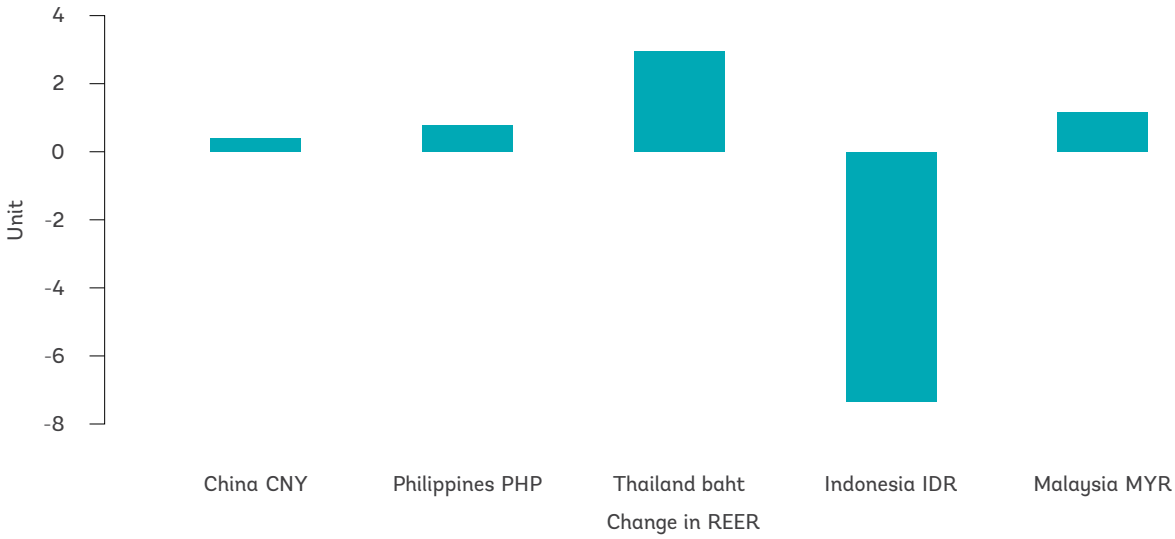
Source: National Statistical Office, Bank of Thailand.

Figure 13: The Thai baht weakened starting the second quarter of the year



Source: Bank of Thailand

Figure 14: The Thai Baht's real effective exchange rate appreciated more than the regional peers'



Source: Bank of International Settlements

Table 2: Balance of Payments (Q1-Q3 2013 – Q1-Q3 2018)

In millions US$/in percentage of GDP

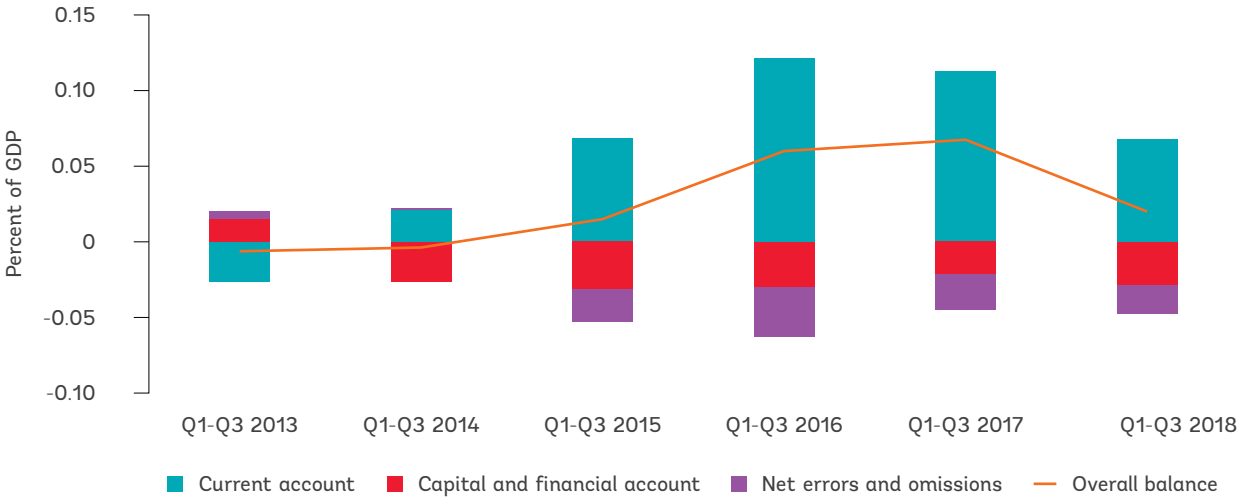
	Q1-Q3 2013		Q1-Q3 2014		Q1-Q3 2015		Q1-Q3 2016		Q1-Q3 2017		Q1-Q3 2018	
Current account	(8,428)	(0.03)	6,822	0.02	20,868	0.07	37,485	0.12	37,852	0.11	25,936	0.07
Goods	(2,069)	(0.01)	11,403	0.04	19,073	0.06	29,445	0.10	27,128	0.08	15,863	0.04
Exports	171,082	0.54	169,427	0.56	161,354	0.53	159,461	0.52	174,137	0.52	188,189	0.50
Imports	173,152	0.55	158,024	0.52	142,281	0.47	130,016	0.43	147,009	0.44	172,326	0.46
Services	7,944	0.03	4,881	0.02	13,855	0.05	18,718	0.06	21,523	0.06	22,927	0.06
Primary income	(22,349)	(0.07)	(16,205)	(0.05)	(17,159)	(0.06)	(15,529)	(0.05)	(16,379)	(0.05)	(18,834)	(0.05)
Secondary income	8,046	0.03	6,744	0.02	5,099	0.02	4,851	0.02	5,580	0.02	5,980	0.02
Capital and financial account	4,777	0.02	(8,097)	(0.03)	(9,396)	(0.03)	(8,849)	(0.03)	(7,120)	(0.02)	(10,730)	(0.03)
Capital account	270	0.00	91	0.00	0	0.00	–	–	–	–	(611)	(0.00)
Financial account	4,507	0.01	(8,188)	(0.03)	(9,396)	(0.03)	(8,849)	(0.03)	(7,120)	(0.02)	(10,120)	(0.03)
Direct investment	3,739	0.01	1,553	0.01	3,566	0.01	(10,398)	(0.03)	(4,455)	(0.01)	(2,579)	(0.01)
Portfolio investment	(674)	(0.00)	(7,445)	(0.02)	(10,986)	(0.04)	5,400	0.02	(110)	(0.00)	(3,733)	(0.01)
Financial Derivatives	(80)	(0.00)	238	0.00	743	0.00	3	0.00	132	0.00	19	0.00
Other investment	1,521	0.00	(2,534)	(0.01)	(2,718)	(0.01)	(3,855)	(0.01)	(2,687)	(0.01)	(3,826)	(0.01)
Net errors and omissions	1,862	0.01	244	0.00	(6,545)	(0.02)	(10,167)	(0.03)	(7,973)	(0.02)	(7,242)	(0.02)
Overall balance	(1,789)	(0.006)	(1,031)	(0.00)	4,928	0.02	18,468	0.06	22,759	0.07	7,964	0.02
Memo:												
Basic Balance	(4,689)	(0.01)	8,375	0.03	24,434	0.08	27,086	0.09	33,397	0.10	23,357	0.06

External sector development: heightened uncertainty and volatility

Despite heightened uncertainty in the external sector, the Thai baht appreciated in 2018. Heightened uncertainty and volatility in the external environment, brought by the normalization of the US Federal Funds rate, US-China trade tension, and contagion fear from the Turkey and Argentina economic troubles, have weakened most currencies in the region. The Thai baht, however, appreciated in nominal terms by 5.0 percent year-on-year from an average of Thai baht/US$33.92 in 2017 to an average of Thai baht/US$32.32 in 2018 (Figure 13). On a quarter-on-quarter basis, however, the weak external environment has already caught up to the baht which depreciated by 1.3 percent in the second quarter and 3.1 percent in the third quarter of 2018. The depreciation was likely brought about by a combination of heightened import demand and net capital outflows. In real terms, the Thai currency's effective exchange rate has also appreciated, more than other regional currencies in the past twelve months (Figure 14).

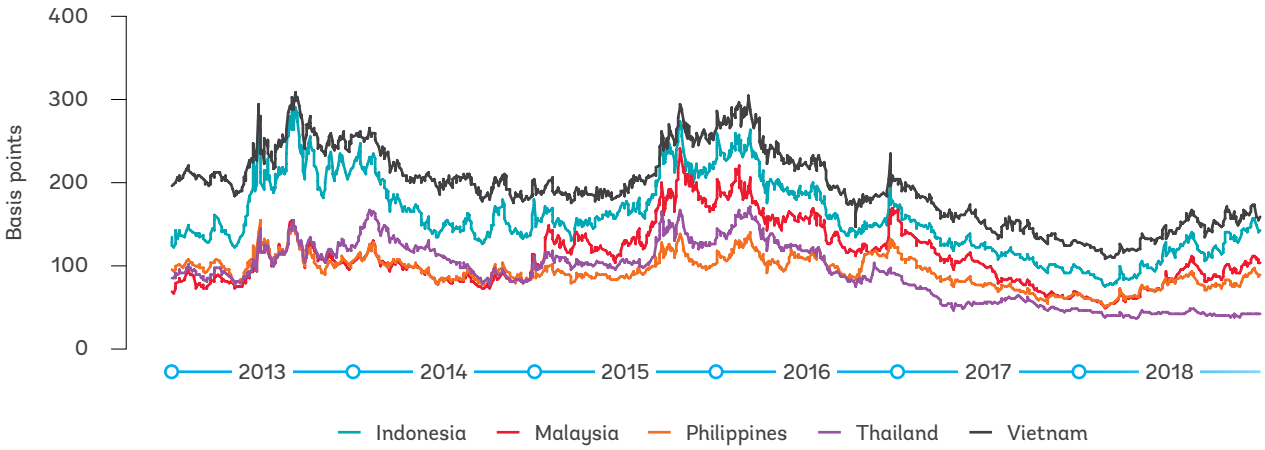
The current account remains in surplus but declined due to a narrowing trade gap. The current account surplus declined from US$37.9 billion (0.11 percent of GDP) in the first three quarters of 2017 to US$25.9 billion (0.07 percent of GDP) in the same period in 2018 (Table 1). This was mainly driven by a narrowing trade surplus where goods imports expanded by 17.2 percent year-on-year in the first three quarters of 2018, more than double the expansion of good exports at 8.1 percent. Meanwhile, services exports, which draw mainly from tourism receipts, raked in US$22.9 billion (0.06 percent of GDP) in the first three quarter of 2018, higher than US$21.5 billion (0.06 percent of GDP) in the same period in 2017 despite the decline in the number of tourists, so far, this year. Primary income accounts generated net dollar outflows of US$18.8 billion (0.05 percent of GDP) driven by the repatriation of foreign investment incomes, while secondary income accounts, represented by personal remittances and other transfers, generated net inflow of US$6.0 billion (0.02 percent of GDP).

Figure 15: A smaller current account surplus, coupled with capital outflows, have narrowed the balance of payment surplus



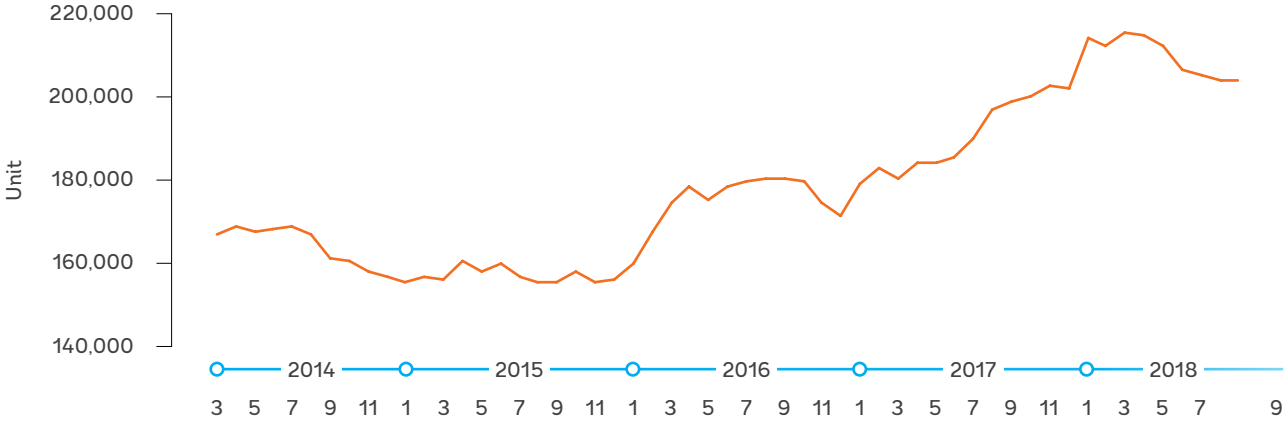
Source: Bank of Thailand.

Figure 16: Among regional peers, the CDS spread is the lowest in Thailand



Source: Haver Analytics.

Figure 17: Gross international reserves can cover three times the short-term external debt



Source: Bank of Thailand.

Net capital outflows, however, intensified in the first three quarters of 2018 driven by both net selling of foreign investors and a net outflow of Thai direct investment. The capital and financial account deficit widened to US$10.7 billion (0.03 percent of GDP) in the first three quarters of 2018 from US$7.1 billion (0.02 percent of GDP) in the first three quarters of 2017. The uncertain external environment led to weaker investor sentiments in emerging economies, intensifying portfolio outflows from Thailand in line with the experiences of regional peers. Nonetheless, after persistent outflows in the first half of the year, portfolio investment has started to return to Thailand in the third quarter, where the CDS spread remain the lowest among East Asian peers (Figure 16). Direct investment abroad by Thai entities grew 10.7 percent year-on-year to reach US$12.0 billion in the first three quarters of 2018, contributing to the capital outflows. In contrast, foreign direct investments to the country expanded 47.7 percent year-on-year, to reach US$9.4 billion in the first three quarters of 2018.

The overall balance of payments remains in surplus. Given the narrower current account surplus and the intensified capital outflows, the balance of payments declined to US$8.0 billion (0.06 percent of GDP) in the first three quarters of 2018 from US$22.8 billion (0.07 percent of GDP) in the first three quarters of 2017. Even so, international reserves remain at high level, reaching US$201.8 billion in end-October 2018 or more than three times the short-term external debt (Figure 17).

Poverty and Unemployment: long-run poverty reduction has been positive

In line with the more broad-based economic expansion observed in the first 3 quarters, a rise in agricultural and nonagricultural employment pushed the unemployment rate to its lowest rate in eight quarters. This is a sign of an increasing broad-based economic recovery amidst a transition towards a domestic demand driven expansion.

Poverty has been on the decline, with recognition that some regions are lagging and that regional differences exist. As an upper-middle income country, Thailand accordingly boasts one of the lowest levels of extreme poverty as measured by the International Poverty Line ($1.90/day 2011 PPP). However, at the more stringent upper-middle income class (UMIC) poverty line, ($5.5/day 2011 PPP), Thailand's poverty rate of 7.1 percent in 2015 is similar to its wealthier neighbor, Malaysia. Since the late 1980s, when the NESDB began the national poverty rates series, official poverty rates measured by the government of Thailand have only increased four times. Three of these instances coincided with financial crises. However, poverty increased again in 2016, based on both official estimates using the national poverty line as well as using the international UMIC poverty line. The most recent occurrence, in 2016, is difficult to explain. The most likely cause is the stagnation or fall in agricultural production in rural regions.

The UMIC poverty rate in 2017 remained higher than it was in 2015. Official estimates of poverty produced by the NESDB coincidentally trends very closely with the international $5.5/day UMIC poverty line. Over the comparable[7] survey periods of 2014-17, national poverty rates declined, with almost no changes from 2015–17. All regions but Bangkok experienced a rise in poverty from 2015-17. Poverty in the Northern region increased the most in absolute terms from 2015–17. In the North region, poverty increased for two consecutive years, related to droughts that severely affected agricultural production. A small-area view (tambon) of poverty shows clustering of poverty particularly around border areas (see Box 1).

Together, the North and Northeast regions account for almost half of the total population, and many are still very reliant on agriculture. The increase in poverty rates in these two regions aligns with a sharp fall in agricultural production. By GRP per capita, the North and Northeast have the lowest values. While many in the North farm, it is not evident from examining their household income. This region is also reliant on remittances. In terms of population, the largest number of poor reside in the Northeast.

Continued progress in lowering poverty will depend on productivity gains. Poverty is expected to decline at a slower rate in rural areas in the medium term, as agricultural prices are not expected to reach highs observed in recent years due to the global commodity cycle. Growth could become less inclusive, with the rural poor negatively affected unless agricultural productivity increases. In addition, rural households are aging rapidly as younger generations have migrated to urban areas.

Poverty estimates based on the national poverty line for 7,424 tambons are presented in a map view for easier visualization. The NSO map shows large areas of high poverty in the Northeast and Central regions that border Myanmar, other northern borders along Laos, and other smaller pockets of poverty. Bangkok, Phuket, and the proposed Eastern Economic Corridor areas with the lowest poverty rates. Pattani, another pocket of high poverty, is located in the FCV South region. The map of the number of poor is also interesting since Bangkok, has one of the highest population of poor despite its low poverty rate, due to the high population density.

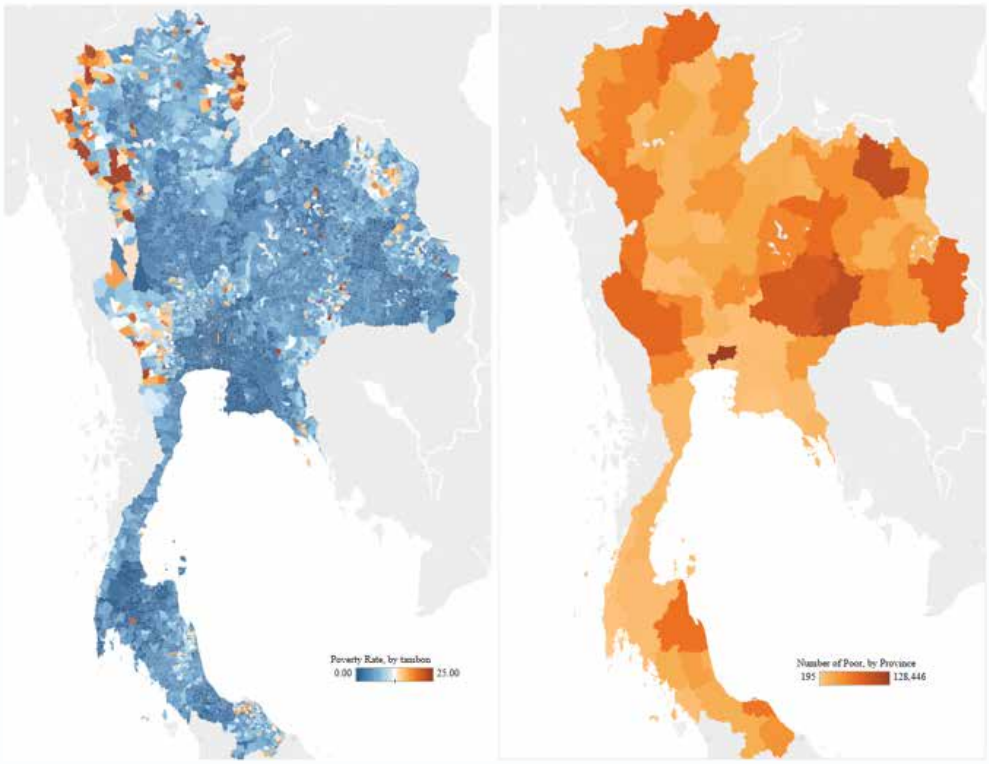
[7] Important note on comparability: A survey break between 2013 and 2014 prevents full exploration of the growth story. Starting in 2014, the survey samples were drawn from the 2010 Census. However, this caused a large shift in the urban and rural proportions. In 2013, 33 percent of the population was urban, compared to 43 percent in 2014. According to the WDI, the urban share of the population in 2013 and 2014 in Thailand was about 46 percent. Unfortunately, this means that trends cannot be made between the 2013 and later years of the SES. To illustrate this point, as a larger urban share is introduced into the survey, average incomes and consumption increased. The lack of a spatial deflator also contributes to this bias.

Box 1

A Small Area View of Poverty

Poverty estimates based on the national poverty line for 7,424 tambons are presented in a map view for easier visualization. The NSO map shows large areas of high poverty in the Northeast and Central regions that border Myanmar, other northern borders along Laos, and other smaller pockets of poverty. Bangkok, Phuket, and the proposed Eastern Economic Corridor are areas with the lowest poverty rates. Pattani, another pocket of high poverty, is located in the FCV South region. The map of the number of poor is also interesting since Bangkok, has one of the highest population of poor despite its low poverty rate. This is due to the high population density.

Figure 18: Tambon-level small-area poverty estimates, and province-level number of poor, 2015



Notes: Small-area estimates calculated by NSO using Thailand official poverty lines. Bueng Kan is not included in the NSO small area poverty estimates since it was not approved as a province until 2011, after the 2010 Census. In the left panel, poverty rates are grouped, 25 refers to 25+.
Source: Estimates by NSO, visualization by WBG staff.

B. OUTLOOK FOR 2019–2020

Growth in 2019-2020 is expected to be driven by a strengthening domestic demand reflected in more robust private consumption and capital formation (Table 2). The growth of exports and tourism receipts, however, is expected to slow down amidst weaker external demand and fewer tourist arrivals, along with market turbulence in the global environment. As heightened external uncertainty remains elevated in the short term, global economic and financial volatilities will pose a challenge to the Thai economy in the coming years.

The World Bank projects a softening of Thai real GDP growth to 3.8 percent in 2019 and 3.9 percent in 2020 (Figure 19).[8] These projections reflect a downward correction from the earlier-projected 3.9 percent growth in 2019 and 2020, reflected in the October 2018 edition of the WB East Asia and Pacific Economic Update. This growth estimate is a reflection of a weaker global economic prospect given tightening financing conditions, moderating industrial production, and lingering trade tensions. Faced with these headwinds, the recovery in emerging market and developing economies has lost momentum, with some countries experiencing significant financial market stress. Global growth is projected to weaken to 2.9 percent in 2019 and 2.8 percent in 2020, which will likely impact the export performance of Thailand and restrain manufacturing activities in export-oriented industries. Nonetheless, the country's growth momentum in capital formation and public consumption may be sustained as the government pursues its public infrastructure investment plans.

This growth projection assumes that the government will maintain its expansionary fiscal stance and deliver on public infrastructure development. Infrastructure spending in scheduled to accelerate in 2019 and pick up in 2020 as EEC related projects are implemented. As exports continue to slowdown, private investment could be derailed as a result. Faster disbursement rate of the capital expenditure budget could then give a much-needed boost to the Thai economy. The fiscal deficit is expected to be maintained at 3.0 percent in 2019.

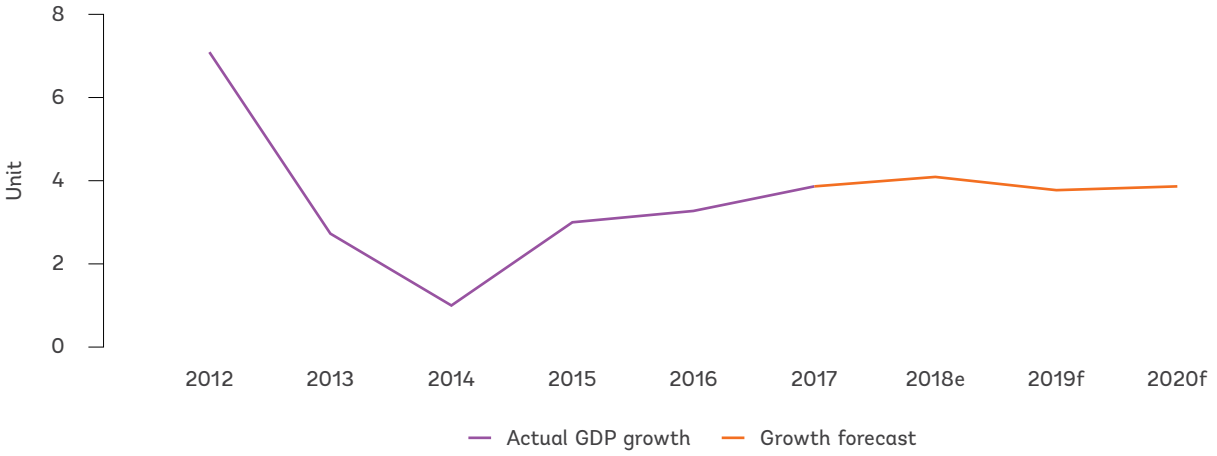
Table 3: Selected Economic Indicators

	2015	2016	2017	2018e	2019f	2020f
Growth in real GDP	3.0	3.3	3.9	4.1	3.8	3.9
Private consumption	2.3	3.0	3.2	4.6	4.4	4.4
Government consumption	2.5	2.2	0.5	4.6	4.6	4.3
Gross fixed capital investment	4.3	2.8	0.9	5.4	5.5	5.6
Exports, goods and services	1.6	2.8	6.0	5.9	5.7	5.5
Imports, goods and services	0.0	-1.0	7.2	7.2	7.1	6.8
Consumer Price Index, average	-0.9	0.2	0.7	1.2	1.4	1.6
Fiscal Balance, % of GDP	-2.6	-2.6	-3.5	-3.0	-3.0	-3.0
Current account balance, % of GDP	8.0	11.7	11.0	7.6	6.0	4.5

Source: NESDB, BOT, and World Bank Estimates.

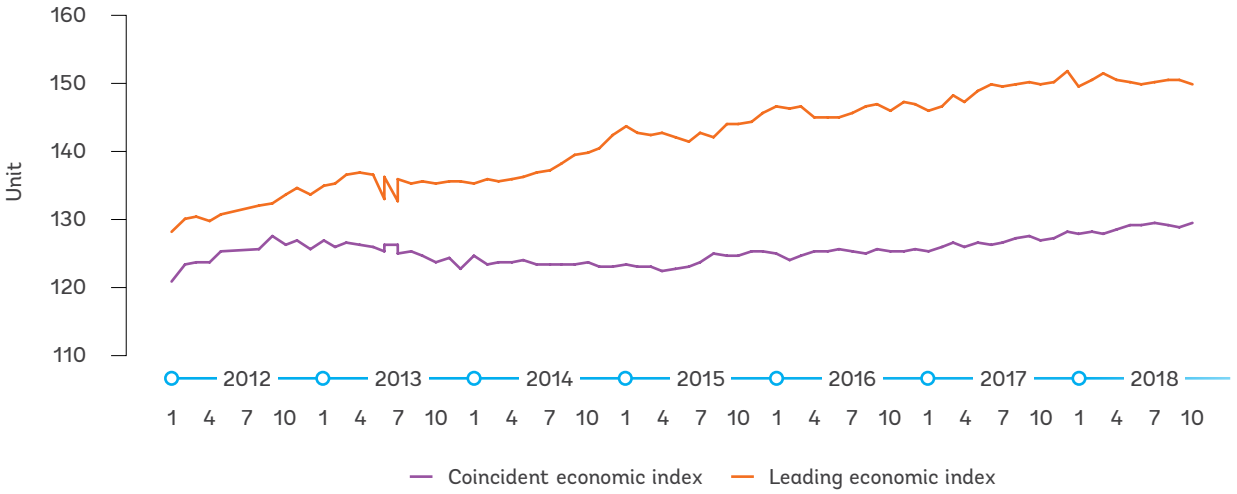
[8] The Bank of Thailand's Leading Economic Indicators shows a strong but plateauing growth in 2018 (Figure 19).

Figure 19: The Thai economy is projected to grow at 4.1 percent in 2018



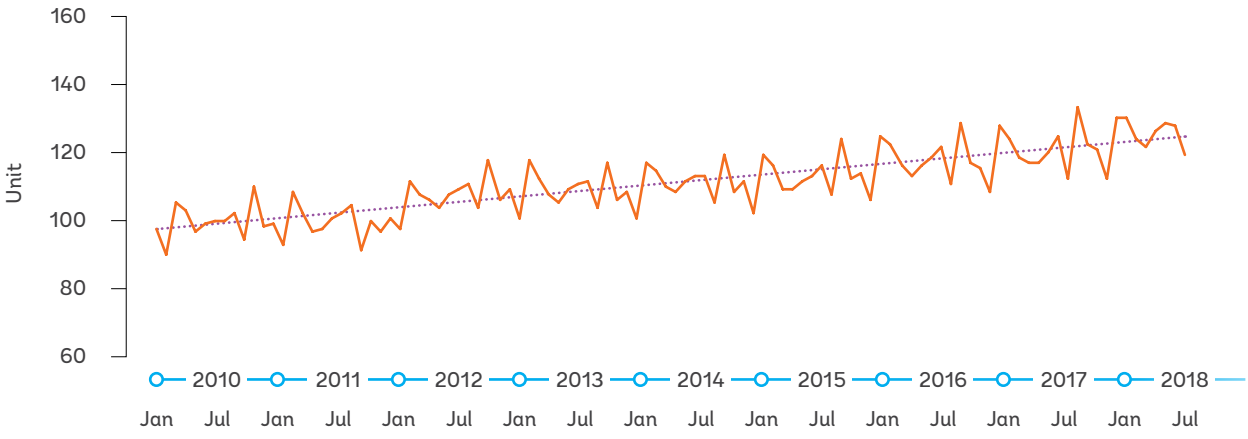
Source: NESDB, World Bank staff estimate.

Figure 20: Leading economic indicator shows a plateauing in 2018



Source: Bank of Thailand.

Figure 21: The private consumption index reflects a rising trajectory



Source: Bank of Thailand.

The monetary policy stance is expected to remain accommodative to growth, but the central bank may need to keep an eye on inflationary pressure and a further rise in the US Fed Funds rate. The Bank of Thailand has maintained its key policy rate at 1.5 percent since April 2015, generally supportive of domestic credit and economic growth. During this time, inflation has been judiciously kept at low levels though it has steadily risen since 2016. Given the strengthening domestic demand and planned public spending on infrastructure, inflation pressure may start to build up, albeit from a low base. Headline inflation is projected to gradually rise from 1.2 percent in 2018 to 1.6 percent in 2020, but still falls in the lower end of the central bank's inflation target range of 1 to 4 percent for the medium term. Yet, another factor to watch out for is the further normalization of the U.S. Fed Funds rate, which was raised eight times since 2015 to the current 2.25 percent. A widening interest rate gap could impact the capital and foreign exchange markets, and contribute to capital flows moving out of Thailand, as they have in previous months.

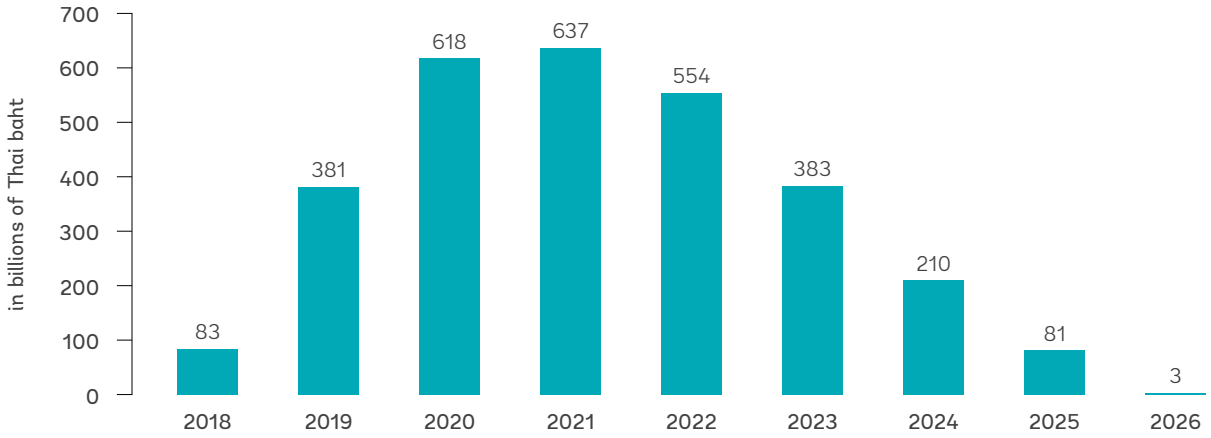
Private consumption is anticipated to sustain Thailand's growth momentum on the back of improved employment and income conditions, amid a low inflation environment. Employment and income conditions have generally improved in 2018. The unemployment rate declined from an average of 1.2 percent in the first three quarters of 2017 to 1.1 percent in the first three quarters of 2018 with employment growth seen in both agriculture and non-agriculture sectors. Employment may grow further, contingent on the timely rollout of the infrastructure investment plans that will stimulate demand for construction workers. While the unemployment rate has remained historically low due to the ability of the informal services and agricultural sectors to absorb labor during downturns, employment income levels are expected to improve especially in the tourism sector in anticipation of its rebound in 2019, and the agriculture sector where the farmer's income index has grown in 2018. The agriculture sector constitutes roughly a third of the employed in Thailand. Meanwhile, the low inflation, coupled with the low interest rate environment and the end of the five-year ownership requirement under the first-car buyer scheme, will likely fuel consumer spending. The private consumption index, prepared by the Bank of Thailand, reveals a positive trajectory, signifying a potential for sustained growth momentum (Figure 21).

Public and private investment are expected to accelerate as the government delivers on public infrastructure development. The Thai government has embarked on an ambitious infrastructure investment plan, meant to transform the country into a regional economic hub in trade, investment, tourism, communication, and transportation. The cornerstone of this plan – the Eastern Economic Corridor (EEC) – is expected to deliver investment in infrastructure projects of USD43.0 billion between 2018 and 2022 for airport expansion, port development, railway construction and modern industry growth.[9] Spending on large infrastructure projects is scheduled to accelerate in 2019 and peak in 2021 (Figure 22). The ramp up in public investment associated with the EEC is expected to attract private investment as the government leverages private-public partnership scheme for select projects. Moreover, the private sector will likely increase productive capacity through new investments on machines and equipment to address growing domestic demand and perhaps, new opportunities that may arise from the US-China trade dispute. In general, business sentiment has been upbeat in the past two years, and barring any sudden change in policy continuity, this optimism may spill into 2019 (Figure 23). In addition, several industries (e.g. automobile, petroleum, meat processing, plastics and synthetic rubber) show capacity utilizations above 80 percent and are more likely to expand their production capacities.[10]

[9] Thailand Board of Investment: https://www.boi.go.th/upload/content/BOI%20-%20Thailand%20Infrastructure%20Development_14976.pdf, December 8, 2018.

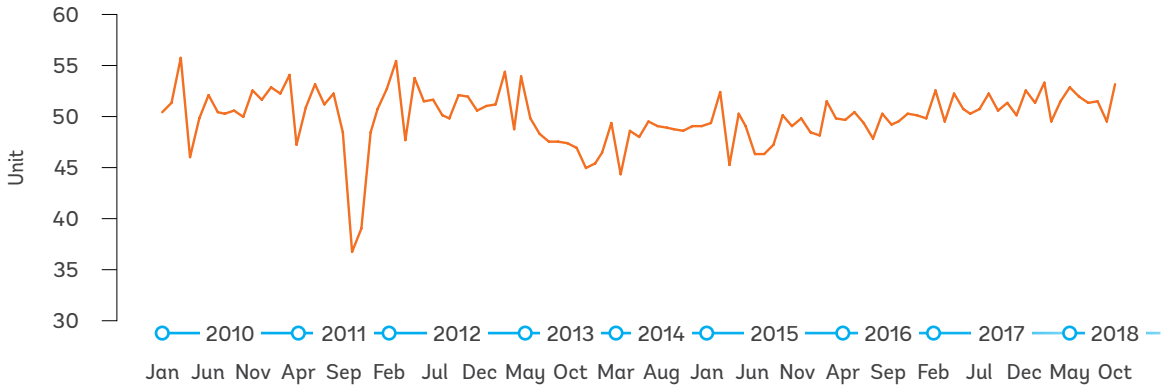
[10] Jongwanich and Kohpaiboon (2008) offer a different explanation, arguing that private investment in Thailand has been sluggish due to the shortage of capital funds as measured by the level of credit extended to the private sector. Jongwanich, Juthathip and Kohpaiboon, Archanun, "Private Investment: Trends and Determinants in Thailand", *World Development, Vol. 36, No. 10, 2008.*

Figure 22: The total value of mega- infrastructure investment projects peaks in 2021



Source: Krungsri Research, MOT, OTP.

Figure 23: The Business Sentiment Index has been upbeat since 2017



Source: Bank of Thailand.
Note: Index above 50 indicates business sentiment has improved. Index below 50 indicates business sentiment has worsened.

Exports are expected to continue to grow but at a slower pace due to the weak external environment, while imports will accelerate to satisfy the requirements of the infrastructure investment. The weak and uncertain external environment will slow down the global demand for goods and services, including that of Thailand. However, recent World Bank studies show that there is opportunity for the country to capitalize on the external weaknesses including the prevailing US-China trade dispute (Box X3). The relocations of production activities and investments, or the diversion of U.S. demand from China to Thailand may intensify in 2019–2020.[11] If realized, this is an opportunity to maintain or quicken the export growth despite the global demand slowdown. Imports, however, will likely increase in the coming years to satisfy the requirements in capital, for both equipment and raw materials necessary to carry out the infrastructure investment plan. The projected faster import growth relative to export growth will effectively narrow the trade surplus.

The tourism sector is anticipated to rebound in 2019 after a soft demand in 2018. The tourism sector in Thailand slowed in 2018 due to competition with the 2018 FIFA World Cup in Russia, which caused European tourists to change their destination, while a boat accident in July in Phuket lowered the influx of Chinese tourists. The Thai authorities have intensified efforts to ensure standards for tourist safety, and have added advocates to target and re-engage the Chinese clienteles. Based on historical data, episodes of crisis incidents such as the 2008 airport closure, the 2010 military crackdown, and the 2015 Erawan Shrine bombing were generally followed by a recovery of tourist arrivals in three or four months.[12]

[11] The NESDB Economic Report in Q3 reveals that based on information from various sources, some entrepreneurs have started to plan for their production base relocation since the second quarter of 2018.
[12] Krungsri Research, Economic Outlook 2019.

C. EMERGING RISKS

The continued slowdown in global trade remains a risk to Thailand's nascent domestic demand recovery. The initial recovery of the Thai economy in 2016–2017 was primarily driven by external demand. However, the first nine months of 2018 showed an upswing in domestic consumption and investment, suggesting that the Thai economy transitioning from being exports driven to being domestic demand driven, supported by strong private consumption and a gradual rise in private investment. Investment growth in 2018 so far has been driven by export-led industries facing high capacity utilization rates. Increased protectionism as well as slowing growth in Thailand's key trading partners, may diminish export growth and slow private investment recovery, thus curtailing domestic demand.

A second key risk is delayed private investment recovery given concerns over political uncertainty. Private investment sentiment notably improved in 2018 but in general has been weak since 2012. Private investors remain concerned about political uncertainty and the adverse impact on planned public infrastructure projects and policy continuity. Continued progress on execution of mega-projects including those under the Eastern Economic Corridor and dual-tracking of railways will be critical to shoring up private investor confidence.

Planned large public infrastructure projects may put a downward pressure on the already low disbursement rate of the capital budget and slow fiscal stimulus and private investment. Disbursement rates for FY2017 and FY2018 were both below 60 percent and given that planned infrastructure projects, such as high-speed rail, are large and complex, there is a risk of the disbursement decreasing or remaining low. The new procurement law is likely to act as a bottleneck to project implementation, particularly during the initial "teething" period as government agencies learn to abide by the new law. However, as government agencies adapt to the new law, the bottleneck may abate.

Thailand remains well placed to manage any potential volatility arising from cross-border capital flows due to the large scale of its buffers. Thanks to a large current account surplus (8.1 percent of GDP), Thailand displays a very large basic balance surplus and the largest foreign exchange buffer in the sub-region (74 percent of GDP). Moreover, at 42 percent of GDP, public debt remains low. Fiscal discipline and fiscal rules are now enshrined in law under the recently passed State Financial and Fiscal Discipline Act of 2018. External debt is also relatively low (32 percent of GDP) and mostly denominated in baht or hedged. While the size of these buffers reflects Thailand's sluggish public investment and growth in recent years, there seems to also be a clear bias toward stability in policy-making.

D. POLICY WATCH

The government has focused on economic reforms aimed at raising Thailand's potential growth to achieve high income and inclusive growth as envisioned in the new 20-year national strategy. Initial steps taken are promising. Some highlights from the ongoing reform efforts include:

Thailand enacted a new Budget Procedures Act 2018 in November 2018 to replace the former Budget Procedures Act 1959. The legislative change is motivated by a desire to modernize the budgeting framework in line with plans for performance-based budgeting, aligned with the long term National Strategy, and to improve the efficiency and cost effectiveness of spending. The new act complements the recently enacted Fiscal Responsibility Act B.E. 2018. While this new Act introduces monitoring, evaluation and reporting systems and limits off-budget borrowing to strengthen fiscal discipline, key challenges such as fiscal fragmentation and transparency remain beyond the scope of the Act. Effective coordination among such central planning agencies as NESDB, OPDC, and BOB are required for result-based management as well as the performance-based budgeting of public projects. In addition, the fundamental step of qualified project preparation and project feasibility need to be addressed comprehensively in other relevant laws and regulations to ensure the quality of public infrastructure and public services (See Box 5: The New Budget Procedures Act).

Eastern Economic Corridor (EEC). Parliament has passed the EEC Act in November 2018 which is expected to boost investor confidence. The Act would build upon the success of the Eastern Seaboard by empowering the EEC office with the ability to sidestep restrictions in investment and services. While the Eastern Seaboard focused on hard infrastructure in the 1980s, the EEC will also focus on soft infrastructure to attract skills and targeted industries. Key measures in the Act which will encourage investment include (1) EEC areas which primarily include Chachoengsao, Chonburi and Rayong provinces, and others; (2) creation of regulatory bodies — Eastern Economic Corridor

Policy Committee and the Eastern Economic Corridor Office — to drive the EEC projects and shorten the review and approval process; (3) tax incentives for business operators and foreign workers in EEC; and (4) allowing foreign investors to hold more than 50 percent stake in aviation and related businesses. According to the Board of Investment (BOI) report, applications for BOI privileges under EEC reached 388 projects in 2017 with a total investment value of 296.9 billion Thai baht (compared to 199.3 billion Thai baht in 2016). About 84 percent of 2017 application value was for 10 targeted industries. The government expects that after the Act is enforced, the investment value of applications for BOI privileges under EEC would exceed its target of 300 billion Thai baht in 2018. Many projects, such as the high-speed rail from Suvarnabhumi airport to U-Tapao airport, high-speed trains connecting Suvarnabhumi and U-Tapao are already in procurement stage and have garnered private interest.

Water management. Parliament passed a water resources law in October 2018 to integrate water management to address floods, droughts, and water shortages which negatively impact both the agricultural and manufacturing sectors. In 2016, Thailand was hit by its worst drought in more than two decades. In addition, Thailand ranks 60 out of 62 countries surveyed in the World Bank Enabling the Business of Agriculture indicators on water management. This indicates weaknesses on the legal and regulatory framework for Integrated Water Resources Management (IWRM). Unlike many countries, Thailand did not have a single law governing IWRM and the regulatory authority for water management is fragmented. In 2017, authorities have made some progress in addressing institutional fragmentation by relocating the Water Resource Department from the Natural Resources and Environment Ministry to the Office of the Prime Minister to integrate nation-wide water management policy by overseeing all water-related agencies.

The lands and building tax. The revised Lands and Building tax, recently passed by parliament in November 2018, will allow the government to raise taxes progressively, expand asset-based tax revenue, alleviate wealth inequality, raise land utilization and promote fiscal decentralization through increased local administration tax revenue. Taxes on assets account for less than 5 percent of tax revenue. The tax sets ceiling rates of 0.2 percent of appraisal value for land used for agricultural purposes, 0.5 percent for residences, 2 percent for commercial use and 5 percent for vacant or undeveloped land. The tax will be levied on first homes and land used for agricultural purposes with appraisal prices starting at 50 million baht, with the rate applied to the amount exceeding 50 million baht. Owners of first homes and farms with an appraisal price below 50 million baht will be free from the tax liability. The tax will also apply to second homes on a progressive basis, with rates of 0.03 percent to 0.30 percent for homes with an appraisal value of less than 5 million baht to more than 100 million baht. The tax also financially penalizes landowners who leave land sites undeveloped. For vacant or undeveloped land, the tax rate will be imposed at 1 percent for land left vacant or unused for 1–3 years, 2 percent for 4–6 years and 3 percent for more than seven years. Earlier versions of the tax drafted under both the current and previous governments faced substantial opposition from landowners and the tax was subsequently watered down. As such, only 10 percent of homeowners who own more than one house or own houses valued above 50 million baht will be taxed. The bill came into effect in 2017. Authorities are also setting up capacity for land valuation. An estimated 200 billion baht will be collected. The law is effectively immediately upon publication in the Royal Gazette, but actual tax collection will commence in 2020.

Going forward, the sustained pace and quality of reforms as well as sound implementation will be crucial for translating the reform effort into the desired economic outcomes. The government's 20-year strategic plan is envisaged to help ensure administrative consistency and coordination across agencies as well as continuity across governments. Continued reforms in additional areas such as public investment management for complex projects, inclusive education, competition enforcement and services liberalization, will be particularly important to take Thailand from middle- to high-income status.

Box 2

Thailand's Budget for Fiscal Year 2019

The Thai National Legislative Assembly approved the budget proposal for fiscal year 2019 in June 2018. The FY 2019 budget was set at 3,000,000 million baht, representing a 1.6 percent decline from the FY 2018 budget and equal to 17.1 percent of GDP. The Budget Bureau of Thailand is responsible for the drafting and publishing of the budget.

In line with the NESDB, the Budget Bureau assumed an economic expansion between 4.2 and 4.7 percent for 2018, which has since been updated to 4.2 percent, compared to the estimated 4.1 percent in the Thailand Economic Monitor. While exports are expected to remain sluggish in 2019, private consumption and investment are expected to continue an upward trajectory and support an annual growth rate of about 3.9 percent. Inflation is expected to remain low and between 0.9 and 1.9.

Government net revenues are estimated at 2,550,000 million baht or 14.5 percent of GDP and borrowing at 450 000 million baht or 2.6 percent of GDP. Tax revenues constitute the bulk, 93 percent, of the government revenues of which indirect taxes (general and specific sales taxes) contribute the most. The largest sources of tax revenues include (i) corporate income tax (ii) VAT (iii) consumption tax. Borrowings for the FY2019 represent 15 percent of the total budget.

Current expenditures account for most of the budget at 73.3 percent, and capital expenditures account for 22.2 percent. Social Services, which include environmental protection, education and social protection, account for the 42.7 percent of the budget in FY2019, compared to 43.3 percent in YF2018. Expenditure on Social Strategy has increased significantly since FY2017. Actual capital expenditures have been lagging the appropriated capital budget. The disbursement rates of the capital budget were below 60 percent for FY2017 and FY 2018, and with many large infrastructures planned for the next couple years there is a risk of an even lower disbursement rate. Subsidies to SOE account for 3.8 percent of the budget allocation, a decline of 5.2 percent over FY2018.

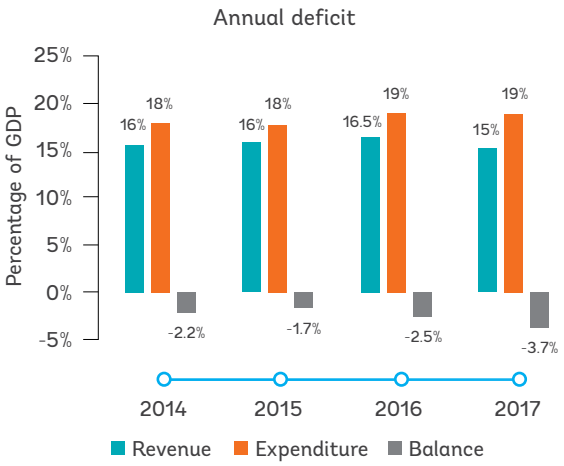
The Thai government continue to maintain an adequate fiscal space.[13] The annual deficit stood at 3.5 percent of GDP in FY2017 and as of 2018Q3, public debt was estimated to be 41.5 percent of GDP, which is well below the fiscal prudence limit of 60 percent of GDP. External debt stands at about 1.1 percent of GDP or 5.7 percent of the budget for FY2018.

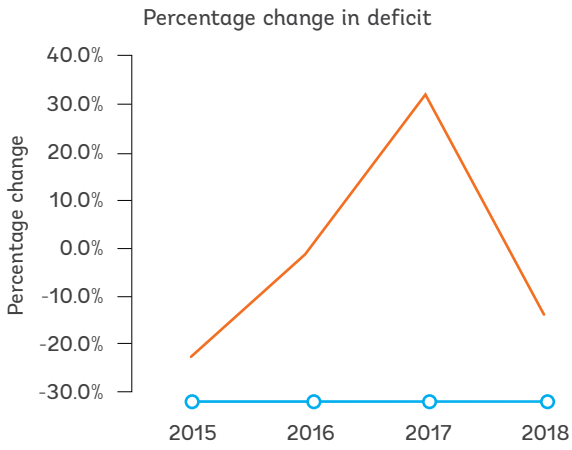
Budget allocation for environmental protection was set at 13163 million baht or 0.5 percent of total, a 53.6 percent increase over the FY2018. While budget allocation for pollution abatement saw no significant change, the category "Environment protection not elsewhere classified" increased by 88 percent.

In summary the Thai government has ample fiscal space supported by low public debt at 41.5 percent of GDP, low foreign borrowing, relatively strong economic performance and stable macroeconomy. The government can use the fiscal space to spur domestic investment, which it plans to do in the next couple years with infrastructure spending expected to pick around 2021. Nonetheless, fiscal fragmentation remains an obstacle to public investment implementation.[14]

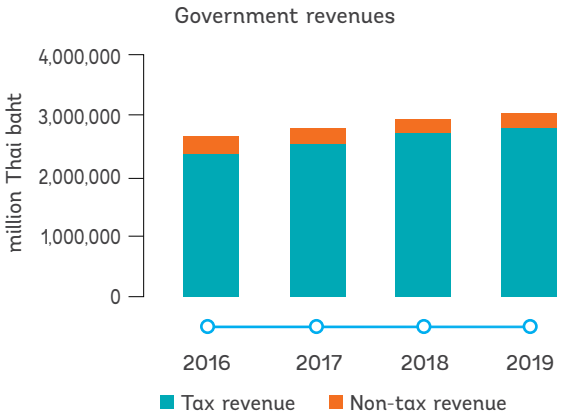
[13] "Assessing Fiscal Space: An Update and Stocktaking" *IMF Policy Paper.*
[14] See Box. "Are Thailand's Fiscal Institutions Fit for Thailand 4.0?" WB Thailand Economic Monitor: Beyond the Innovation Paradox April 2018.

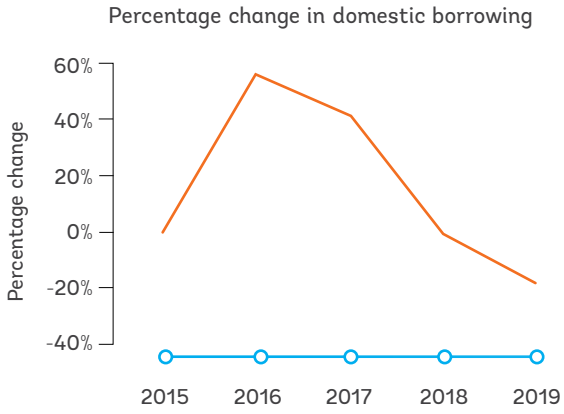
Annual deficit recently increased from 2.6 percent of GDP in 2015 to about 3.5 percent in 2017. It was estimated at 3 percent in 2018 and is expected to remain at 3 percent in 2019.



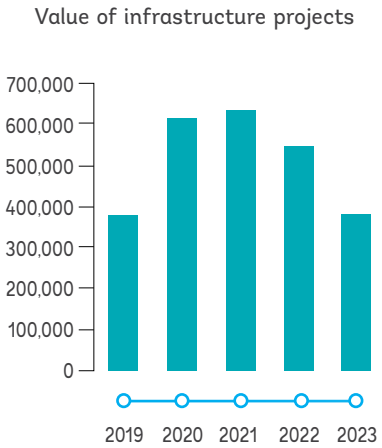


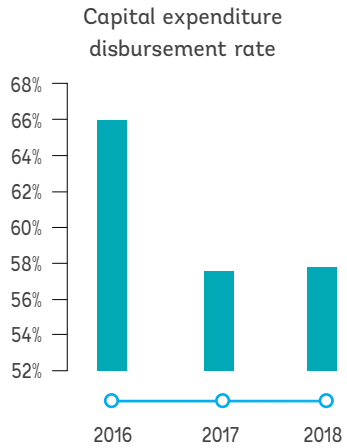
Tax revenue constitute the main source of government revenue. Recent rise in annual borrowing was fueled by the recent upswing in annual deficit, which is projected to remain stable in the medium run.

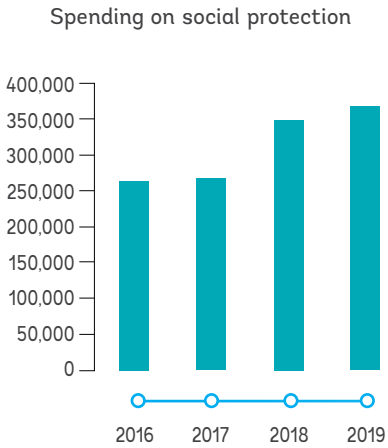




A couple of priorities in the budget include (i) infrastructure spending, which is expected to accelerate and pick in 2021 despite recent low disbursement rate and (ii) spending on social protection.







Source: Bureau of the Budget

Box 3

The United States-China Trade War: How will Thailand Fare?[15]

The evolving US-China trade war heightens fear of global trade and investment disruptions which can result to slower global growth. In 2018, the United States has increased the level of import protection against China, slapping tariffs on about US$234.8 billion worth of Chinese products in three separate tranches (Table 4). To retaliate, China imposed its own tariffs on US goods worth about US$110 billion. Hinting of no end yet in sight, the US further released a list of proposed export controls on emerging technologies and up the rhetoric in the concluded Asia Pacific Economic Cooperation meeting in November. This trade dispute threatens the world economy by increasing the costs of inputs and final products, dampening investors' sentiment, and disrupting trade. Recent World Bank simulation shows that the US-China trade war could reduce global exports by up to 3.0 percent and global income by up to 1.7 percent with losses across all regions.[16] Many countries in the East Asia and Pacific region are exposed to the trade war, with Thailand included, given their integration into the global economy via trade and investment linkages. Thailand can potentially be impacted through the three channels: financial market uncertainty, direct investment, and direct and indirect trade channels.

The trade war heightens uncertainty in the financial markets and weakened investors' sentiments towards emerging markets such as the Thai economy. Although the recent financial market volatility and capital outflows in emerging economies were initially driven by tighter monetary policy in the US, the threat of a trade war has contributed to heightened uncertainty. This uncertainty has recently contributed to foreign capital outflows from the Thai economy, where net portfolio investment outflows widened by 2.8 percent in the first half of 2018 from a smaller 1.2 percent outflow in the first half of 2017. A result of investors flying to 'safe havens', this divestment of assets also contributed to the weakening of the Thai baht, which depreciated by 1.3 percent quarter-on-quarter in the second quarter of 2018 and 3.1 percent quarter-on-quarter in the third quarter (Figure 24).

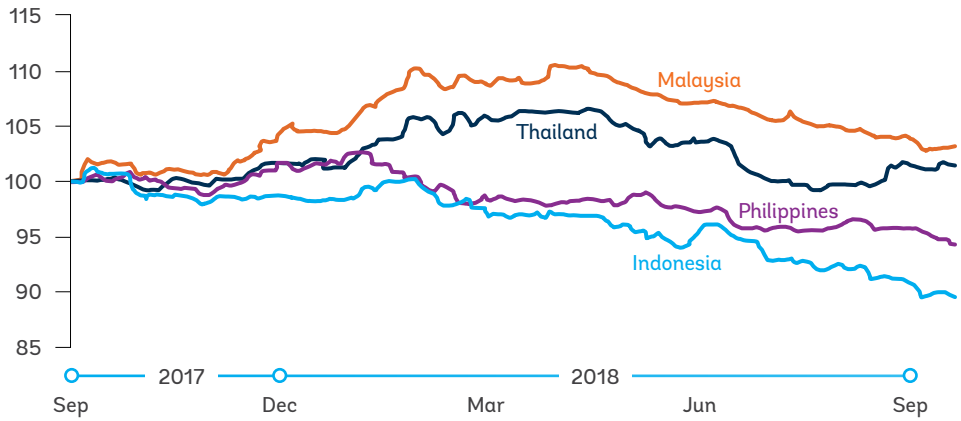
Table 4: Value of US imports from China targeted by the tariff measures

	Value of target imports in first announcement (in US$ billion)	Value of target imports at effective date (in US$ billion)
1st tranche	32.3 (April 3rd)	32.3 (July 6th)
2nd tranche	13.8 (April 3rd)	13.7 (August 23rd)
3rd tranche	197.2 (July 10th)	188.9 (September 24th)
Total		**234.8**

Source: WB staff estimates.

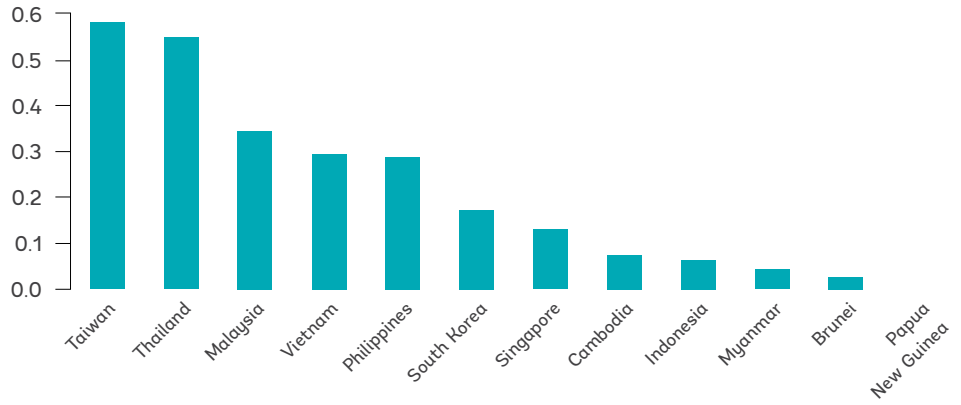
[15] The content of this box has largely been drawn from "Potential Impact of the Trade Wars on East Asia and the Pacific," a note prepared by M. Cali et al., under the guidance of N. Diop.
[16] "China-US Trade War Scenarios: Impacts on Global Trade and Income", a note prepared by C. Freund, et al.

Figure 24: On a quarter-on-quarter basis, the Thai baht depreciated in the second and third quarters



Source: CEIC, WB staff calculations.
*Downward movement in currency represents depreciation.

Figure 25: Thailand holds a high degree of similarities of exports basket to the US with China for affected products

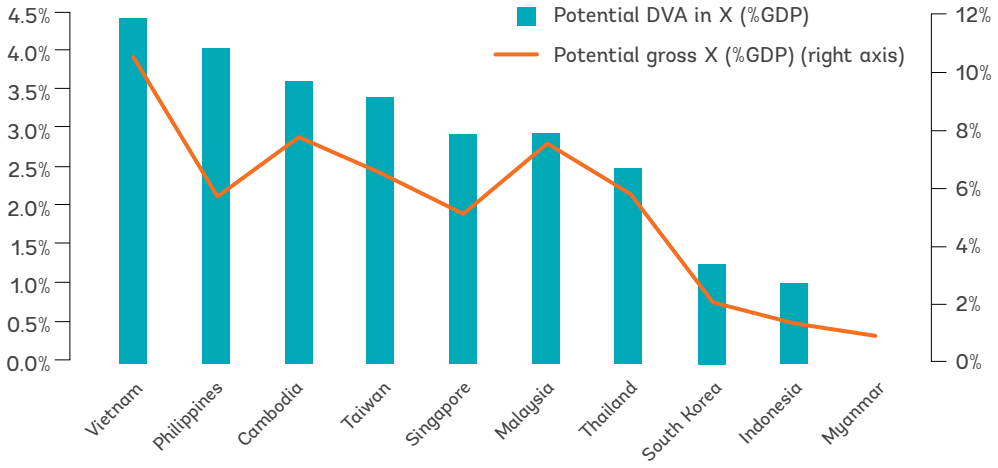


Source: WB staff estimates on the basis of US Bureau of Census Statistics.

Thailand is well-positioned to host direct investments aiming to bypass tariffs in the US market in the medium term. By raising the cost of serving the US market from China, the trade war could lead to diversion of investments towards Chinese competitors in the medium term. The extent to which investments may relocate towards other countries would partly depend on each country's ability to produce the same affected products. Thailand, Malaysia and Vietnam are best positioned to host these investments among Southeast Asian neighbors as they hold a high degree of similarities of exports basket to the US with China for affected products (Figure 25). Meanwhile, if the relocation of investments is driven by Chinese investors, countries which are already large recipients of Chinese outward FDI would be in a better position to capture such flows. Malaysia and Vietnam were the largest recipients of Chinese FDI in 2017 followed by Indonesia, Thailand and the Philippines.

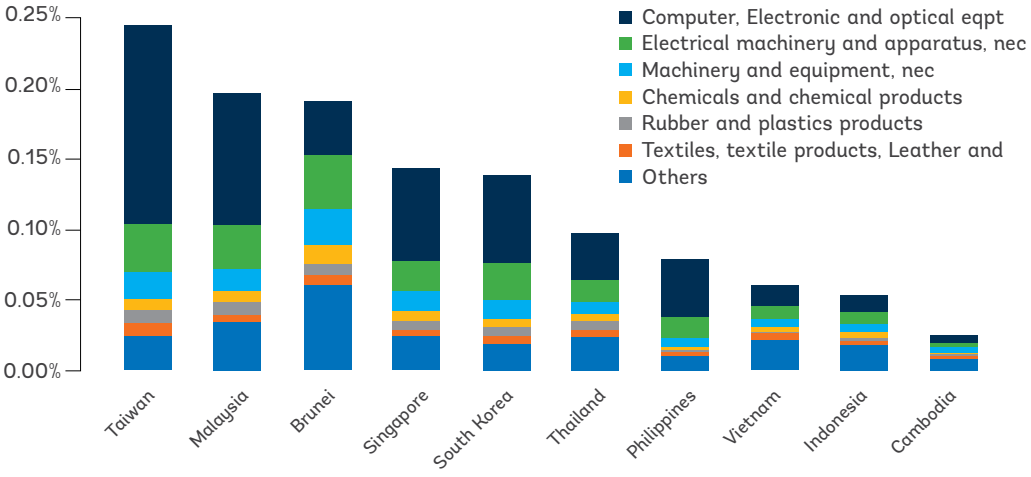
There is opportunity for Thailand to replace Chinese exports to the US, but this opportunity is lower compared with regional peers. US imports from China in the products subject to the three tranches of tariff measures are estimated to decline by US$68.6 billion; the bulk, of which, are related to electronic equipment and machinery and their components. This reduction has the effect of potentially diverting US imports to non-Chinese suppliers, for which, the similarity of exports baskets between these countries and China are high. Estimates show that the replacement potential of exports from Thailand, in terms of domestic value-added, is relatively lower compared with its regional peers (Figure 26). The potential domestic value-added of exports in Thailand is estimated at 2.5 percent of GDP and potential gross exports at 5.9 percent of GDP. This is in comparison with Vietnam, which is the country with the largest opportunity to replace Chinese exports in Southeast Asia, at 4.4 percent and 10.9 percent, respectively.

Figure 26: Potential replacement of Chinese exports to the US by Thailand is lower than other peers



Source: WB estimates.

Figure 27: EAP countries including Thailand will be affected by the reduced Chinese demand for intermediates



Source: WB estimates.

As Thailand is connected to the regional value chain, its exports to China will be negatively impacted by the reduced Chinese demand for intermediates. Concentrated in capital equipment and electronics goods, the drop in Chinese exports to the US could slightly reduce the demand for intermediates in EAP countries. Many countries in Southeast Asia are integrated in the China-led value chains. Among them, Malaysia is the most vulnerable country to the drop in Chinese demand for intermediates, which is expected to lose around 0.2 percent of GDP. While Thailand is also vulnerable, the impact is much lower at roughly 0.1 percent of GDP.[17] Finally, another key indirect effect of the trade dispute operates through the changes in economic growth in both China and the US. Lower economic growth will translate to lower domestic demand which would generally reduce the demand for imports in those countries.

[17] While these negative effects are smaller than the estimated positive export replacement potential, the two figures are not necessarily comparable. The latter are upper bound estimates of the potential for replacement. The true dimension of the replacement effect is likely to be considerably smaller than what was reported in Figure 27 for two reasons. First, each country would compete for the same potential market; and second, any such replacement would hinge on the supply response in each country-product pair; which could be relatively small in many cases.

Box 4

The New Budget Procedures Act and its Implications

Thailand enacted a new Budget Procedures Act B.E. 2561 (2018) in November 2018 to replace the former Budget Procedures Act B.E. 2502 (1959). The legislative change is motivated by a desire to modernize the budgeting framework in line with plans for performance based budgeting, aligned with the long term National Strategy, and to improve the efficiency and cost effectiveness of spending. The new act is complementary to the recently enacted Fiscal Responsibility Act B.E. 2561 (2018).

The new act proposes changes in six major areas that could significantly improve budget execution and cement fiscal discipline. This includes:

(i) **Revision of the list and scope of the government budget receiving units.** Local administration organizations are now designated as a separate budget unit, possibly allowing for increased decentralization, and the number of state owned enterprises eligible for government budget has been reduced.

(ii) **Adoption of more stringent rules to ensure fiscal responsibility.** This includes directly linking controls of budgetary aggregates with the Fiscal Responsibility Act and including additional procedures for control of off-budget spending.

(iii) **Introduction of new expenditure budget items and allowance for in-year transfer of expenditure across departments.** Three new expenditure categories have been introduced – central expenditure budget, particularly for emergency and unanticipated spending; central budget for consolidation, for spending that cuts across multiple budget units, which may facilitate inter-agency cooperation; and expenditure budget for personnel. The law also allows for transfer of personnel and consolidation funds across departments in-year without need for re-issuance in a budget bill – which could aid budget execution by reducing delays.

(iv) **Revision of budget practices and procedures.** This includes more flexibility in approvals of requests for supplementary budget, with allowance for the Cabinet to propose supplementary bills along with the reasons and the source of funds to be received for the additional spending. New procedures have tightened the process of rollover of unused funds, limiting roll-over to a single six-month extension with Ministry of Finance approval, from the current practice of allowing multiple extensions on a case-by-case basis.

(v) **Introduction of Monitoring, Evaluation and Reporting Systems.** This includes additional requirements of public disclosure on expenditure performance metrics and additional reporting on transfer of central expenditure budget between line items, expenditure budget for consolidation, and the expenditure budget for personnel.

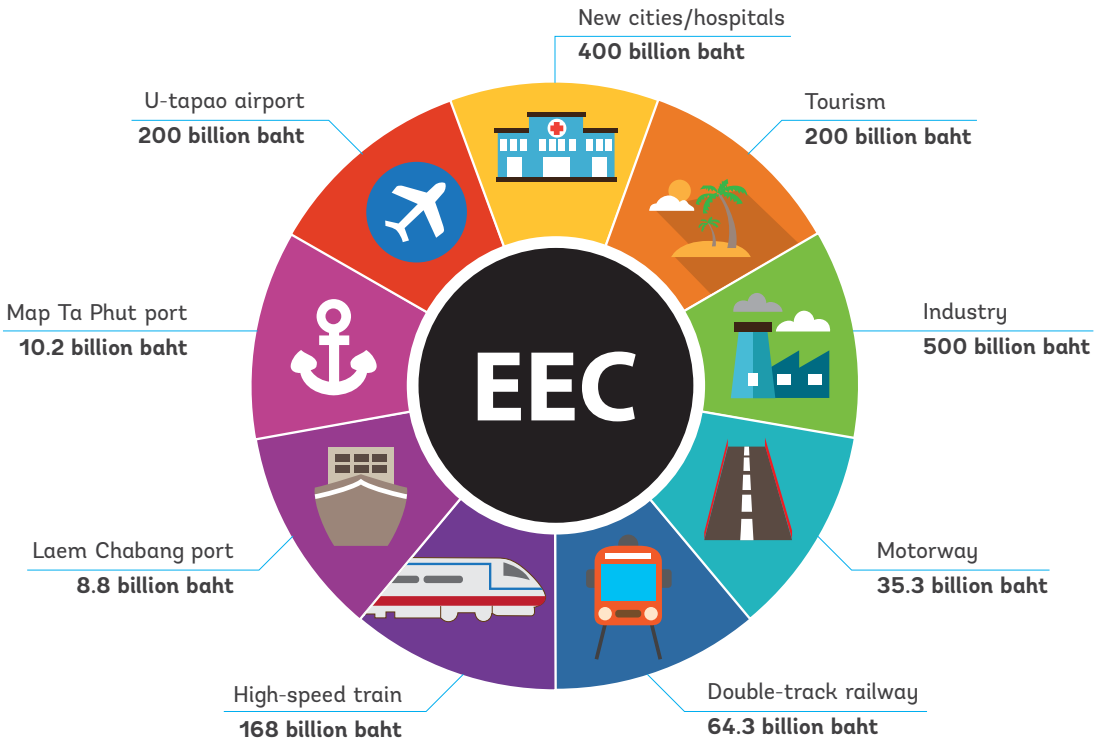
(vi) **Introduction of commitment budgets.** Previous budget procedures were binding on an annual basis, with funds committed annually and additional funds for multi-year capital projects needing to be approved each year. Section 18 of the new budget procedures act allows for multi-year commitments to be made in certain cases, with total funds for multi-year projects to be committed at project commencement. These multi-year commitments are still subject to the conditions that carry-over of spending across fiscal years is well specified and the preparation of such budget shall comply with the rules and procedures as specified by the Budget Bureau Director with the consent of the Cabinet.

These changes could positively impact the implementation of complex, high-value and multi-year capital investment projects such as under the Eastern Economic Corridor (EEC). Public investment project implementation delays have been a major challenge facing Thailand, as highlighted in the fiscal section and in previous editions of the Thailand Economic Monitor. Improving project execution is critical in the context of implementing projects under the EEC (Figure 28), which estimates suggest require implementation of public and private investment of at least 1.5 trillion baht in the first five years. Provisions under the new budget procedures, such as increased flexibility of transfer of funds across departments and more adaptive and flexible budget procedures could improve capital budget execution. In addition, allowance of commitments for capital projects will provide an assurance that a specified amount will be available over several years, increasing the confidence of the private sector to commit to large-scale investments under a partnership framework.

The positive impact of the procedural changes relies on effective and timely implementation. As highlighted in the previous Thailand Economic Monitor, fiscal fragmentation is a significant challenge for Thailand with fragmented legislative frameworks also playing a role. Implementing the new budget procedures act and the new fiscal responsibility act offers some opportunity to link the two legislations and to ensure, for example, that overlapping processes are streamlined. Doing so could significantly enhance the changes made under the new procedures.

Essentially, the new Budget Procedures Act has envisaged several implications to the public financing of Thailand. Nonetheless, such critical issues like the institutional coordination and integration of all budget units toward the same integrated outcome as well as the qualified public investment management and appraisal to address transparency of public agencies are still required for further enhancement. While this new Act has introduced the monitoring, evaluation and reporting systems, the effective coordination among such central planning agencies as NESDB, OPDC, and BOB still required ensuring the result-based management as well as the performance-based budgeting of the public projects. Beyond this, such fundamental step of qualified project preparation and project feasibility need to be addressed comprehensively in other relevant laws and regulations to ensure the quality of public infrastructure and public services.

Figure 28: Estimated Public and Private Investment Needs for the Eastern Economic Corridor



Source: EEC Office.


LG.5
SAFETY
PORT AUTHORITY OF THAILAND
ASIATIC BAY


ICONSIAM
ICON
MAX
SIAM
Takashimaya

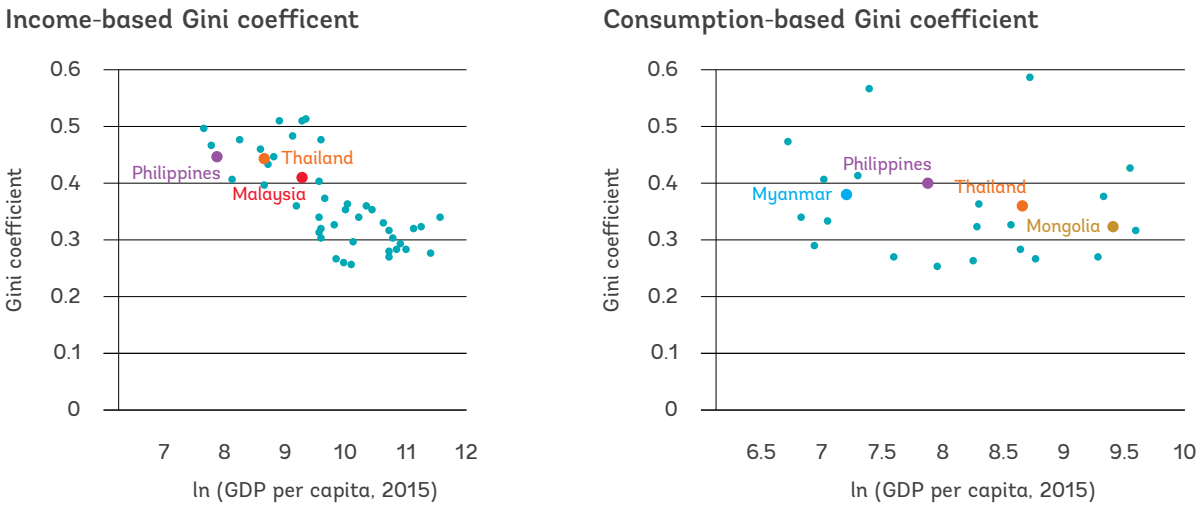
PART 2 EQUITABLE INVESTMENT IN HUMAN CAPITAL IS VITAL TO THAILAND'S CONTINUED ECONOMIC DEVELOPMENT

POVERTY AND INEQUALITY REDUCTION HAS STALLED

Following long-term improvements in both poverty and inequality indicators, Thailand's progress on poverty and inequality reduction has recently plateaued. Over the last four decades, Thailand has made substantial gains on key social and economic development objectives, reflecting its remarkable transition from a low-income to an upper-middle-income country in a single generation. However, in the last several years household income and consumption growth have stalled nationwide, with a troubling decline observed among households at the bottom of the income distribution.

Though Thailand's inequality indicators are not grossly higher compared to peers, the size of top incomes and public perceptions of both inequality and economic mobility are a cause for concern. Thailand's income- and consumption-based Gini coefficients are broadly consistent with its level of per capita GDP (Figure 29), though alternative measures of inequality taking into account top income earners suggest that the Gini coefficient may be underestimated. In the 2014 Pew Global Surveys, 90 percent of respondents reported that the income gap between the rich and the poor was either a moderate or very large problem. Moreover, a 2018 Gallup poll found that just 39 percent of Thai respondents believed that their standard of living was improving, the lowest share among all East Asian countries surveyed during the period (Figure 30).

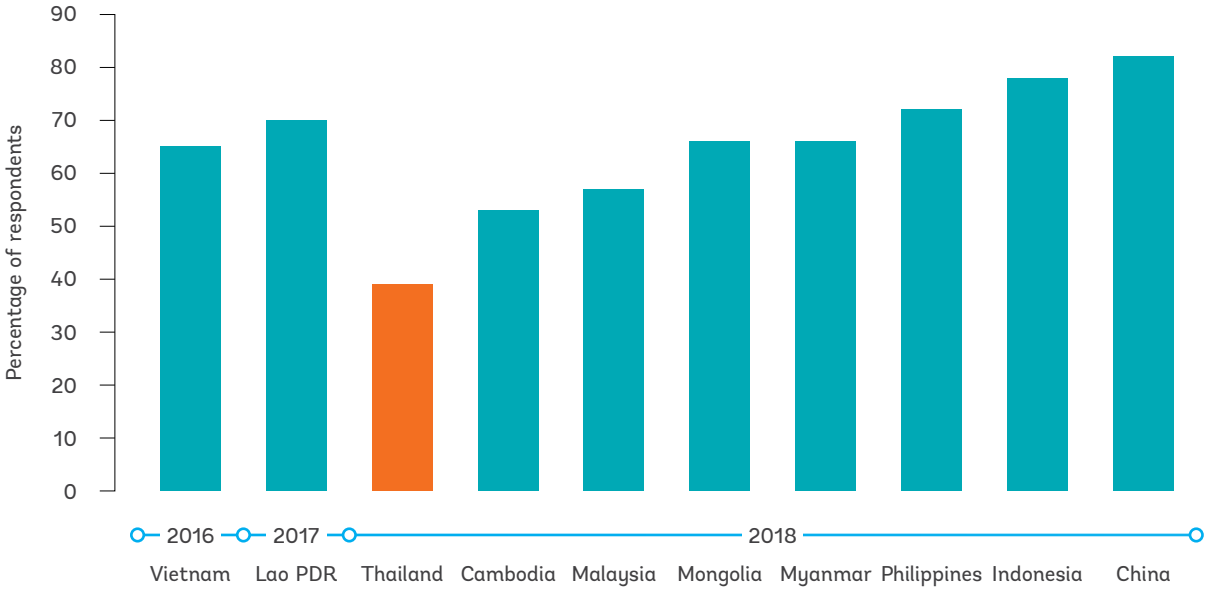
Figure 29: Measures of Inequality, Thailand and Global Comparators, 2015



Source: World Bank staff calculations, PovcalNet.

Note: Countries shown are those for which 2015 data are available. Countries with income-based household survey data tend to be richer than those with consumption-based survey data, and survey frequencies tend to be lower among the latter. Income-based Gini coefficients typically exceeds consumption-based coefficients, as income levels typically exhibit larger variations and may include negative values.

Figure 30: Share of survey respondents who report that their standard of living is improving



Source: Gallup polls.

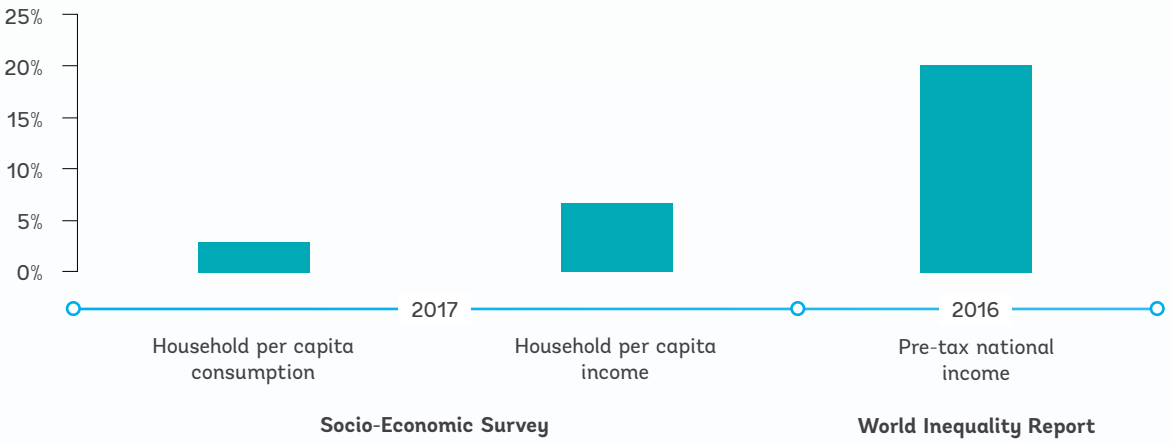
Box 5

Measures of Inequality in Thailand

The Gini Coefficient

Measures of inequality that focus on top income earners indicate that inequality may be higher than the Gini coefficient would suggest. Household survey data may be compromised by the underrepresentation of wealthy households, and analyses based on a combination of household, financial, and tax data often yield much higher income estimates among the top quintiles. Some researchers have found that including tax data more accurately captures wealthy households, and in Thailand the inclusion of tax data does yield higher Gini coefficients.[18] Similar methodological issues affect other measures of inequality. For example, as part of Thailand's national 20-year plan, the government aims to lower the ratio of income between the top and bottom 10 percent of the population to 15, while also boosting average income per capita. However, the survey data likely underestimate the average income of households in the top quintile. According to the household surveys, the top 1 percent of households accounted for 3.0 percent of consumption and 6.8 percent of income in 2017. By contrast, the World Inequality Report, which uses multiple data sources, found that households in the top percentile accounted for 20.2 percent of pre-tax national income.[19]

Figure 31: Share of consumption/ income held by the top 1 percent, by data type and source



[18] Vanitcharearnthum, 2017; Jenmana, 2018.
[19] Due to the challenges involved in obtaining accurate tax records, the World Inequality Report covers a smaller and wealthier group of countries than do analyses based on household surveys.

Perceptions of Inequality

Public perceptions of inequality can be just as important than objective measures. Public perceptions of inequality are based on subjective comparisons not only of income levels, but also of living standards, access to public services, and political influence. The widespread perception that economic returns are unfairly distributed, or that upward mobility is limited, can strain the social fabric. Moreover, public perceptions of inequality can have deeply negative consequences even when observed levels of inequality are relatively low. The regional Gini coefficient in Asia is lower than in other developing regions, such as Latin America, yet large shares of respondents in many Asian countries perceive their societies as highly unequal.[20]

Public perceptions of inequality are also influenced by social norms and cultural attitudes, which can shift rapidly and in ways that do not necessarily align with objective trends. For example, perceptions of inequality can worsen during times of robust growth, a phenomenon dubbed the "unhappy growth paradox."[21] Studies have found that perceptions of inequality contributed to the Arab Spring despite observed declines in inequality indicators.[22] In Indonesia, inequality's recent rise to prominence in the public discourse has bolstered support for policies designed to expand opportunity and reduce socioeconomic disparities.[23] Given the importance of public perceptions, subjective measures of inequality can complement objective indicators.

[20] World Bank, 2018a.
[21] Graham and Lora, 2009.
[22] World Bank, 2016c; Chattopadhyay and Graham, 2015.
[23] World Bank, 2015.

Uneven regional growth rates contribute to both the perception and the reality of inequality. From 2011 to 2013, household per capita income in the Bangkok area grew at a rate of 10 percent per year, far above the national average of 3.8 percent. Meanwhile, growth in central Thailand as a whole significantly outpaced growth in the country's north, northeast, and south regions. Between 2015 and 2017, growth slowed nationwide, yet patterns of regional inequality persisted.

Addressing inequality at both the regional and household levels is a central pillar of Thailand's national strategy for inclusive growth. Relatively unequal societies require faster economic growth rates to reduce poverty.[24] The Government of Thailand has recently established a special inequality watchdog unit under the National Economics and Social Development Board to help devise and implement strategies to reduce social and economic disparities. In addition, the legislature is expected to pass a set of bills in early 2019 aimed at accelerating rural development by expanding rural communities' access to economic opportunities and resources.

INEQUALITY AMONG CHILDREN CAN HAVE A LIFELONG IMPACT

The inequality experienced by children contributes to lifelong disparities in social and economic outcomes. Disparities in access to nutritional, medical, educational, and social resources can permanently impact children's future economic productivity. In addition to preventing children from reaching their full potential, high levels of inequality and limited access to social and economic opportunities can exacerbate social tensions, contribute to the misallocation of human capital, and inhibit economic growth.

The relatively low quality of education in rural Thailand is an especially significant contributor to regional inequality. Education quality and outcomes vary in Thailand both by region and household income level. Students from rural areas and poorer households tend to receive the lowest-quality education and experience the worst learning outcomes. For example, lower school quality likely contributes to lower levels of functional literacy in rural areas. Moreover, the results of the 2015 Program for International Student Assessment (PISA) survey of school principals suggest that small village schools serving disadvantaged children[25] lack adequate educational materials and infrastructure.

Households in the bottom 40 percent of the income distribution are predominantly rural and tend to have limited educational opportunities. More than half of the rural population is in the bottom 40 percent of the income distribution, compared to just one-quarter of the urban population.[26] Rural households in the bottom 40 percent have especially high illiteracy rates, and children from these households are likely to be enrolled in small village schools that have a limited capacity to provide essential education services. The pervasiveness of functionally illiteracy among 15-year-old students in rural villages underscores the urgent need to reduce educational disparities and enhance the quality of rural schools.

The international evidence underscores the importance of reducing neighborhood-level income segregation. In economies with lower levels of income segregation, children from disadvantaged backgrounds are better able to share the public services used by children from wealthier backgrounds, and the social integration of households at diverse income levels generates a range of positive spillovers. Worldwide, economies with lower levels of educational segregation are also more likely to achieve higher aggregate levels of educational attainment, more equitable educational outcomes, and a greater degree of economic mobility.

[24] World Bank, 2016c.
[25] The survey classifies advantaged (disadvantaged) schools as those with a student body that ranks in the top (bottom) 25 percent on the economic, social, and cultural status (ESCS) index. The PISA ESCS index has three dimensions: the occupational status of parents, the education level of parents, and a measure of household assets that encompasses family wealth, cultural possessions, and books and other educational resources.
[26] World Bank, 2018e.

EQUALIZING OPPORTUNITIES FOR HUMAN CAPITAL DEVELOPMENT CAN HELP REDUCE SOCIAL AND ECONOMIC DISPARITIES

Investing in human capital is critical to equalize opportunities across generations, which can boost growth and reduce inequality. Ensuring a level economic playing field requires that all households have access to the resources necessary to build human capital. The World Bank's Human Capital Index (HCI) measures the actual and potential productivity levels for the next generation of workers. Thailand's score on the 2018 HCI was 0.60 out of 1, indicating that a Thai child born today will grow up to become only 60 percent as productive as he or she could have been, had they received the optimal investment in health and education.[27] While Thailand generally performs well on the various HCI indicators compared to its peers in the Association of Southeast Asian Nations (ASEAN) and other upper-middle-income countries (UMICs) worldwide, it has substantial scope for further improvement. For example, Thailand's survival rate for adults between the ages of 15 and 60 is in the bottom half of all countries included in the HCI.

As Thailand's economy continues to develop, innovation and productivity will become increasingly important drivers of growth. Investing in human capital can enable Thailand to exploit emerging opportunities while maintaining its competitiveness in a dynamic global marketplace. The rise of skill-intensive industries and sectors is already disrupting the labor-intensive growth model of past decades. Moreover, meeting the demands of the country's rapidly aging population will require effective and equitable investment in the next generation. Multiple demographic trends highlight the importance of broad-based investment in human capital, including declining fertility rates, rising life expectancies, and a shrinking working-age population. By 2040, the share of the elderly in Thailand's total population is expected to be the highest in East Asia, and a highly productive workforce will be critical to manage the country's rising dependency ratio.[28] The international experience suggests that reducing inequality can help accelerate economic growth.[29]

THE HUMAN CAPITAL INDEX MEASURES THE EXPECTED PRODUCTIVITY OF THE NEXT GENERATION

Human capital—an aggregate of the knowledge, skills, and health factors that largely determine labor productivity—has been a key driver of the sustained economic growth and poverty reduction observed across East Asia over the past several decades. Rapid technological change has tightened the link between human capital and economic output at the national level. Automation continues to eliminate many labor-intensive jobs, and the new jobs it creates frequently require advanced technical knowledge or sophisticated cognitive skills. As technology advances and spreads across borders, the global economy increasingly places a premium on complex problem-solving, socio-behavioral skills, reasoning, and self-efficacy.[30] Consequently, policies that accelerate human capital formation are vital to build the knowledge, competencies, and skills necessary to sustain robust and inclusive growth in the context of a rapidly evolving global economy.

Education and health play vital and complementary roles in the development of human capital. Among high-income countries, levels of educational attainment are closely linked to economic performance. Similarly, strong health indicators are essential to support economic growth and productivity. At the individual level, education and health factors play a major role in determining social and economic outcomes. These effects are also transmitted across generations, as well-educated individuals, especially women, are often better able to ensure the health and education of their families. Positive maternal and early childhood nutrition are correlated with improved educational outcomes and higher levels of cognitive performance. Similarly, high-quality education can break intergenerational cycles of poverty, promote human capital formation, and support poverty reduction, with positive implications for labor productivity, economic growth, and average life expectancy. Educated populations also tend to have higher levels of social tolerance, intercommunity trust, and demand for public services.

[27] World Bank, 2019.
[28] World Bank, 2016a.
[29] Ferreira et al. 2013; World Bank 2006, 2016c.
[30] World Bank, 2019.

Box 6

The Contribution of Education to East Asia's Extraordinary Growth

Education has played a pivotal role in the remarkable economic growth and development achieved by countries across East Asia and the Pacific over the past several decades.[31] In the early stages of the region's economic transformation, education complemented labor needs, as widespread basic literacy and numeracy helped workers meet employer demand in the manufacturing and product-assembly sectors. As economic growth accelerated, educational mobility—i.e., the average increase in education levels between generations—rose rapidly, facilitating the development of knowledge- and skill-intensive activities.

Across the region, investments in education have also proven critical to manage inequality and promote economic inclusion. Efforts to improve the quality of regional school systems have been complemented by increasingly sophisticated forms of technical and vocational education and training designed to ensure that workers have the skills necessary to exploit emerging opportunities and meet future economic challenges. Japan, China, Korea, Singapore, and other regional economic leaders situated their educational policy goals within a larger policy framework that sought to close technology gaps with the world's most advanced countries and build the domestic capacity to produce innovative knowledge and technological advancements that would enable them to compete on the global stage. Long-term gains in productivity require continuous efficiency improvements and the application of new technologies, creating a steady demand for more highly skilled workers. However, investments in education yielded gains for workers at all education and income levels, not just those employed in high-tech sectors and industries. In rural areas, workers with even a few years of primary school consistently outproduced their less-educated counterparts. Poverty rates dropped across the region as new jobs were created and income-earning opportunities expanded.

As a result of these efforts, regional levels of educational attainment rapidly converged with global averages. In 1950, the average adult in East Asia and the Pacific had only 1.3 years of schooling—less than half the contemporaneous world average of 2.9 years—but by 2010 the regional average had increased sixfold and converged with the world average of 8 years. This increase in average schooling occurred even as the region's population more than doubled. Average levels of educational attainment have continued to climb, with more and more students completing secondary school and proceeding to tertiary studies. Compared to 1950, regional schools now provide twice as many students with more than six times as much instruction.

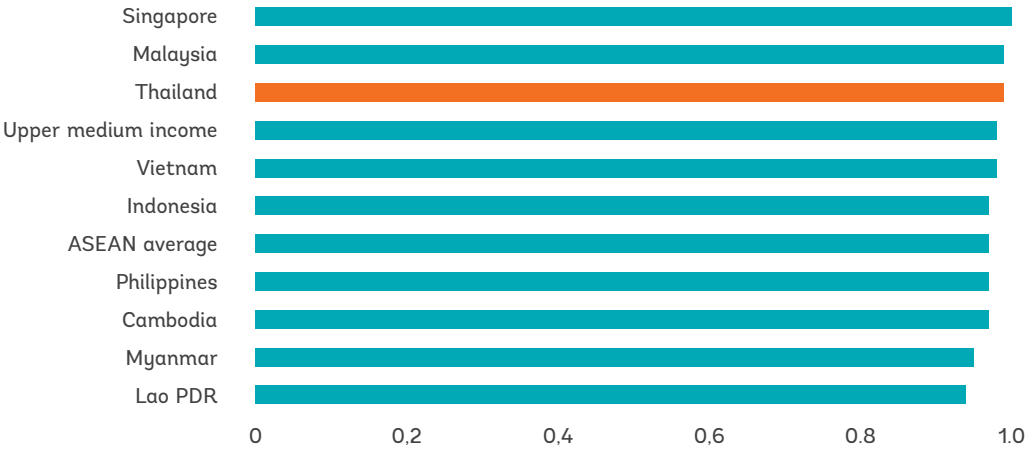
Source: World Bank 2018b, Gill et al 2016, Narayan et al 2018

[31] Permani, 2009; World Bank, 2018b; Gill, Revenga, and Zeballos, 2016.

Figure 32: Performance on the human capital index by Indicator, Thailand and comparators

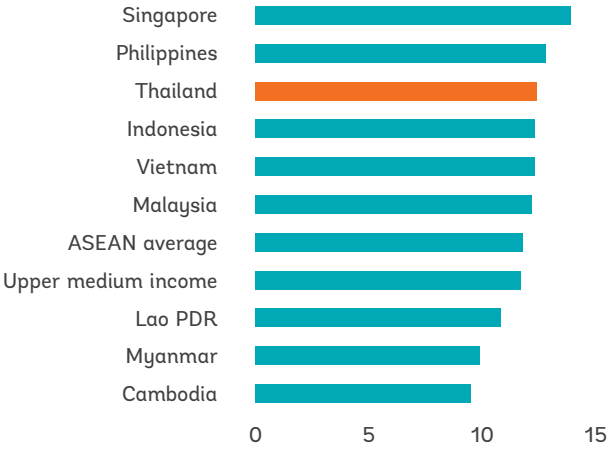
SURVIVAL

Probability of survival to age 5

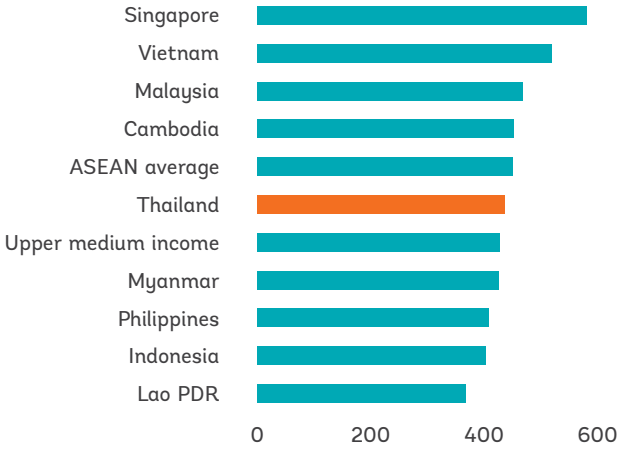


SCHOOL

Expected years of schooling

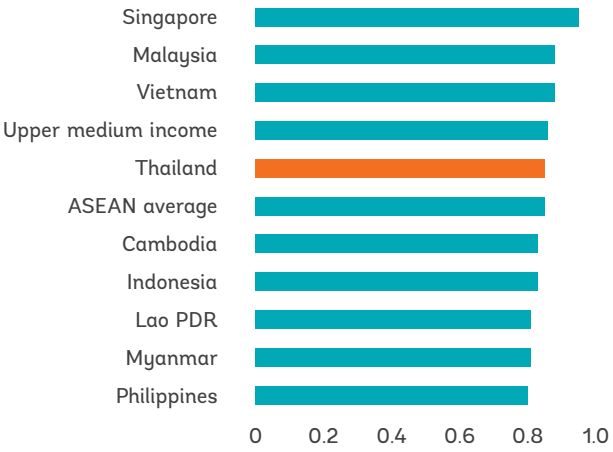


Harmonized test scores

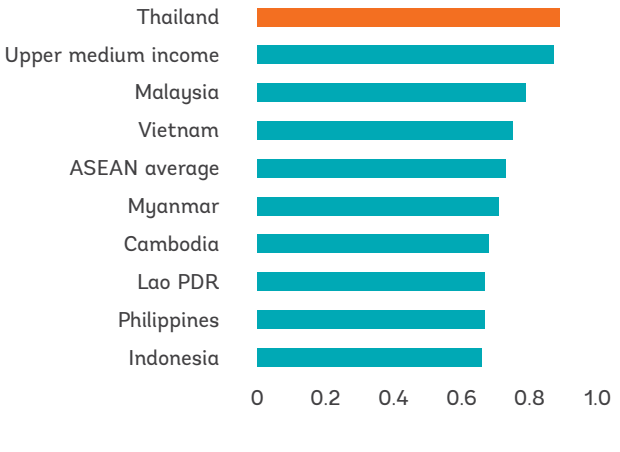


HEALTH

Adult survival rate



Fraction of children under 5 not stunted



Source: World Bank Human Capital Index.

The World Bank created the HCI to assess the conditions that will shape the productivity of the next generation.[32] The HCI is part of a broader World Bank Group initiative that emphasizes and prioritizes investment in people. By anchoring the index to economic theory, it raises awareness of the opportunity cost of inaction and bolsters demand for effective interventions.

The HCI predicts the impact of human capital formation on both economic growth and individual income generation. It encompasses key health measures, such as the under-five mortality rate, the under-five stunting rate, and the survival rate for adults aged 15–60. It also estimates both the quantity and quality of education by measuring learning-adjusted years of schooling—the expected number of years of schooling received by age 18, adjusted to reflect education quality as proxied by standardized test scores.

Thailand's performance is on par with or above the ASEAN average on all HCI indicators except standardized test scores. Thailand's international PISA score is 436 out of 625, below the ASEAN average of 451. Low education quality, reflecting in part the low scores of students in remote and underserved regions, diminishes gains in educational attainment. While recent student cohorts have attained levels of education that far surpass those of previous generations,[33] the demands of the labor force are increasingly complex, and substantial disparities persist across regions and household income levels. Thailand's health indicators are relatively strong by regional standards, but its adult survival rate is below the global median.

With an HCI score of 0.60, Thailand ranked 65th out of the 157 countries included in the index, placing it in the 3rd quartile range. Thailand's HCI score is broadly in line with what its per capita GDP would predict (Figure 33). Government efforts to expand basic education and reduce the incidence of child stunting have yielded substantial gains in those areas. Thailand's HCI score is below the average for East Asia and the Pacific (0.61), but higher than the averages for ASEAN member states (0.59) and UMICs worldwide (0.58). Of the nine ASEAN countries, Thailand has the 4th highest HCI score, behind Singapore (0.88), Vietnam (0.67), and Malaysia (0.62).

Thailand's human capital gender gap is very small by ASEAN and UMIC standards, with women slightly outperforming men. Thailand's male and female HCI scores are 0.59 and 0.61, respectively—one of the narrowest gaps among ASEAN countries. Of the five HCI components, the female group performed better on standardized test scores (+17 points), survival past age five (+3 percent), and adult survival (+11 percent), and these factors contribute to the gender gap. College graduation rates among women are also significantly higher than those among men.[34]

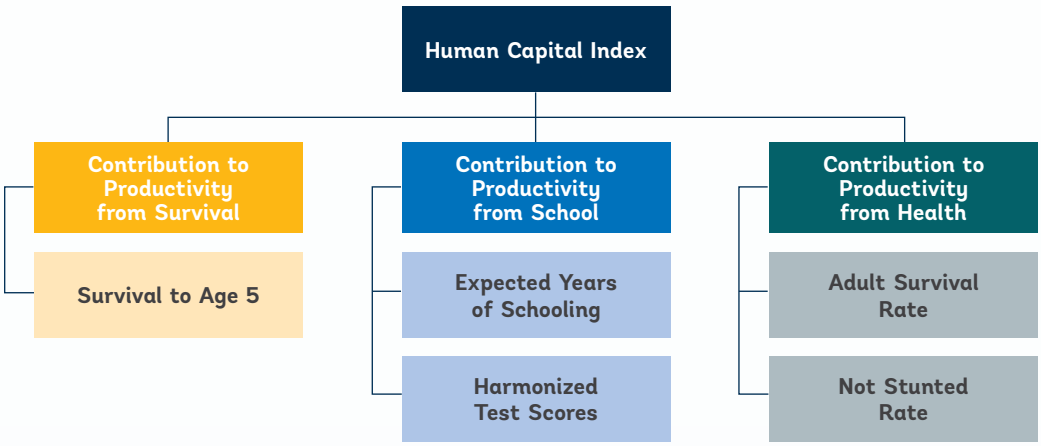
[32] See Box 7 for more details on the HCI data and measurement methodology.
[33] Narayan et al., 2018.
[34] UNFPA, 2016.

Box 7

The Human Capital Index: Data and Measurement

The HCI is a forward-looking measure designed to capture the amount of human capital a child born today could expect to attain by age 18, given projected health and education conditions. The HCI is calculated based on five quantifiable indicators of survival, education, and health.

The Framework for Calculating the Human Capital Index



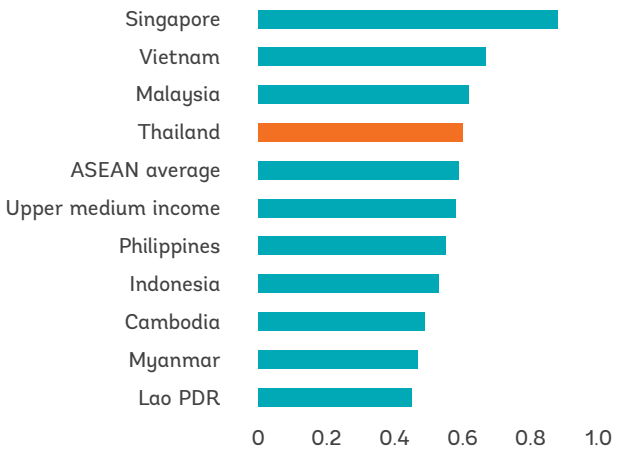
The HCI assesses the five indicators of survival, education, and health in terms of their contribution to productivity relative to a best-case benchmark.[36] For example, Thailand's under-five mortality rate is 0.01 percent, and thus the contribution of the indicator "survival to the age of five" to future productivity is 0.99. The methodology for assessing the contributions of education and health to productivity is more complex and is described in detail in Kraay (2018). The values for all contributions range from 0 to 1, as does the overall HCI score.

The HCI does not include some human capital indicators that may be highly relevant in services-oriented or high-tech sectors. These include indicators of cognitive or socio-behavioral skills, as well as educational attainment at the tertiary level. Currently, the HCI can be disaggregated by gender but not by subnational region or other criteria. However, nothing would prevent local governments, which often have access to the necessary data, from calculating the HCI for more specific groups. Moreover, both national and subnational governments could use the same methodology to calculate their own tailored indices based on different parameter values.

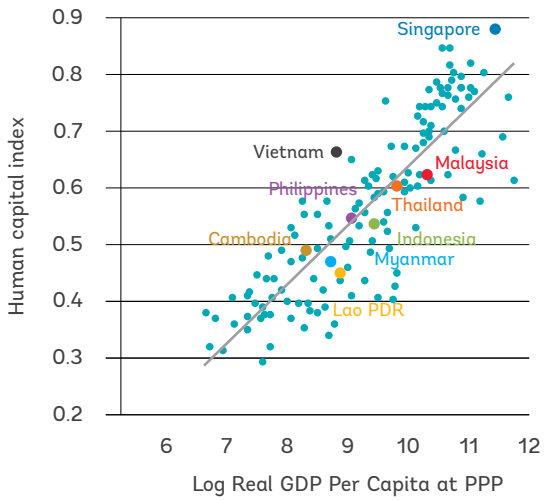
[36] Kraay, 2018.

Figure 33: Human capital index scores and rankings, Thailand and comparators

A HCI scores and rankings



B HCI scores by GDP per Capita

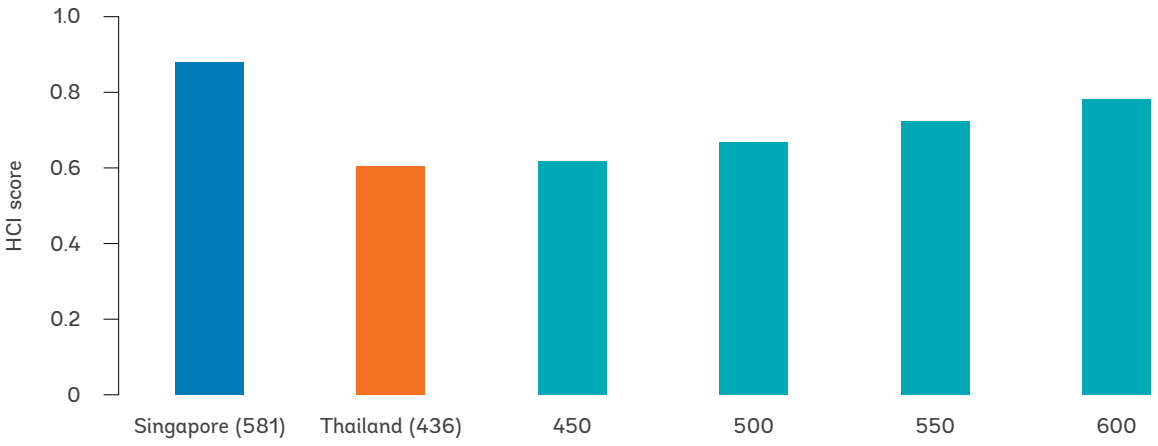


Source: World Bank, Human Capital Index.

To converge with the region's top HCI performers, Thailand must increase its investments in education quality and health outcomes. The average performance of 15-year-old students in each of the three PISA test domains (mathematics, science, and reading) are slightly below what Thailand's GDP per capita would predict. Among ASEAN countries, Singapore, Malaysia, and Vietnam all outperformed Thailand in terms of both learning-adjusted years of schooling and adult survival rates.

Raising its PISA scores could significantly improve Thailand's overall HCI score, as the country's performance on other HCI indicators is closer to the frontier. Thailand's overall PISA test score used to calculate the HCI was 436. Raising this score to 500 could push Thailand's HCI score above 7.5, and if its PISA score reached 600, Thailand's HCI score could approach 8 (Figure 34). However, of the 157 countries included in the HCI study, Singapore had the highest PISA score at 581.[35] Even with a PISA score of 600, Thailand's expected HCI would still be below Singapore's. Singapore outperforms all other ASEAN countries in four dimensions of the HCI, and the fifth—the child stunting rate—is so low that Singapore does not record data on it.

Figure 34: Thailand's actual HCI score and predicted HCI scores based on alternative PISA scores



Source: World Bank Group staff calculations based on the methodology used by Kraay (2018)

[35] WDR, 2019.

Figure 35: The Learning Gap, Thailand and Comparators

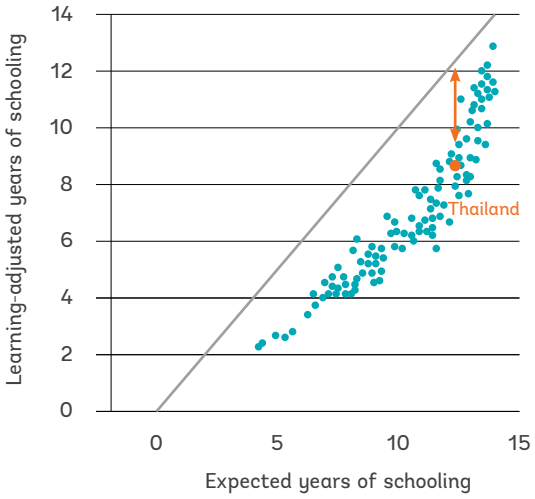
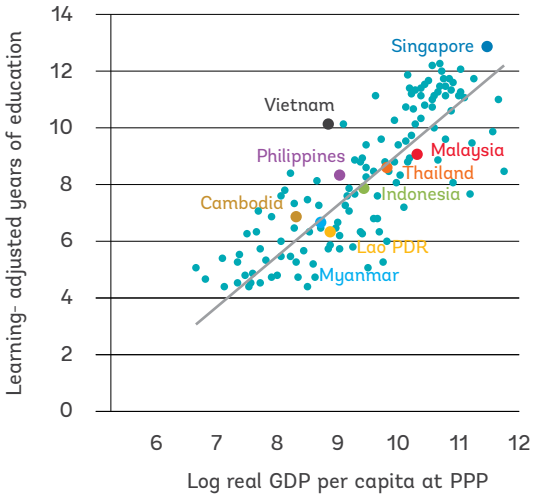


Figure 36: Learning-Adjusted Years of Schooling by per Capita GDP



Source: World Bank Human Capital Index, WDI.

UNEVEN EDUCATION QUALITY IS A SERIOUS OBSTACLE TO THE DEVELOPMENT OF HUMAN CAPITAL

Education mobility is rising rapidly in Thailand. In a recent global study, Thailand was the second-best performer among UMICs in absolute education mobility, as almost 85 percent of Thai children born in the 1980s attained higher education levels than their parents.[37] Older cohorts, especially those ages 50 and above, have markedly lower levels of educational attainment, and only a very small share have a university education.

However, uneven education quality weakens the impact of rising educational attainment, and learning gaps in Thailand are above the averages for ASEAN countries and UMICs. A Thai child born today can expect to obtain 12.4 years of school before the age of 18. However, the same child can expect to complete only 8.6 learning-adjusted years of schooling, indicating a learning gap of 3.8 years (Figure 35). Thailand's learning gap reflects a shortage of qualified teachers and inadequate educational services for children under the age of six.[38] The country's numerous small schools tend to have high operating costs and variable levels of service quality, and consolidation could yield significant efficiency gains.

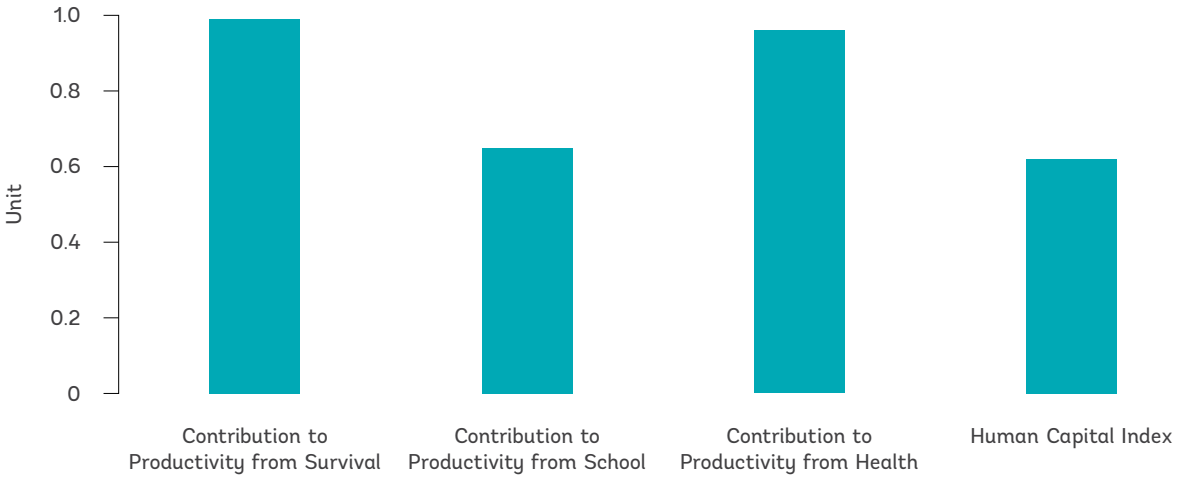
About half of Thai students are below basic proficiency levels in science, reading, and mathematics. One-third of Thai 15-year-olds are functionally illiterate, meaning that while they know the alphabet and have some ability to read, they are unable to identify the main messages of an age-appropriate text.[39] In rural villages, the share of functionally illiterate children rises to 47 percent. According to the 2012 PISA, only 1 percent of Thai children are high performers in reading.

In Thailand, the education component of the HCI contributes least to the productivity of the next generation. The survival and health dimensions of the HCI are relatively close to the frontier, but education contributes far less to productivity (Figure 37).

Education quality is highly uneven, and poorer areas tend to be underserved. Small schools are under-resourced and face high unit costs; they are also more likely to serve students from poor households and marginalized communities. Also, small schools are chronically understaffed, and their teachers generally less qualified and less experienced. Small schools frequently lack adequate infrastructure and educational materials, and many are located in poorer regions of the country, where they predominantly serve students from socioeconomically disadvantaged households.[40]

[37] Narayan et al., 2018. In Thailand, education mobility was estimated using the co-resident sample, meaning differences in education between children and their parents could only be measured for multigenerational households.
[38] Lathapipat and Sondergaard, 2015.
[39] World Bank, 2016b.
[40] Lathapipat and Sondergaard, 2015.

Figure 37: Human Capital Index Components, Thailand

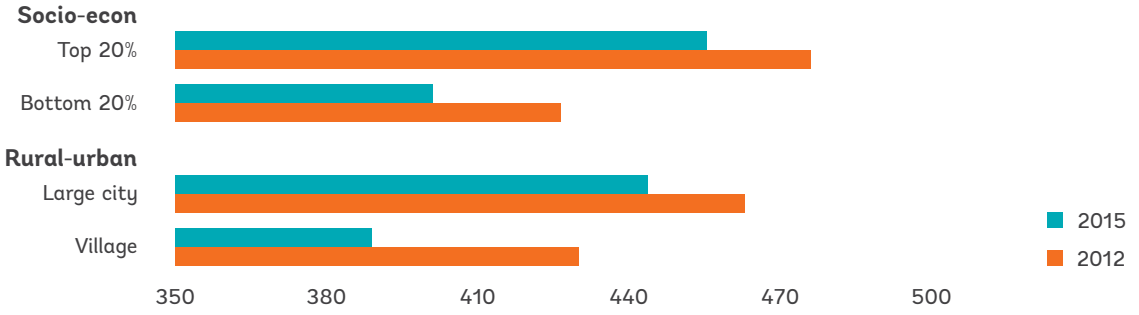


Source: World Bank Group staff calculations based on the methodology used by Kraay (2018)

Differences in urban and rural PISA scores have widened over time. Although learning outcomes in Thailand are not highly unequal by global standards,[41] the two most recent PISA tests indicate that inequality is rising, as the learning gaps observed in the 2012 and 2015 PISA tests have widened across various measures (Figure 38). In terms of science scores, the difference between students in the top and bottom socioeconomic quintiles increased from 1.6 to 1.8 learning-adjusted years of schooling,[42] while the gap between large city schools and small village schools widened significantly from 1.1 to 1.8 years.[43] PISA scores for mathematics and reading reveal similar patterns.

Around half of Thai primary schools are critically short of teachers. A critical teacher shortage is defined as having an average teacher-to-classroom ratio of less than one.[44] Thailand's low teacher-to-classroom ratio reflects both its oversized school network and the misallocation of teachers and other educational resources. The proliferation of small schools has created excess classroom capacity, and this situation is expected to worsen as birthrates decline. In other countries with low-quality public education, middle-class families have opted out of public schools,[45] which could exacerbate the challenges posed by excess capacity. A significant shift toward private schooling could also disengage the middle class from the policy dialogue around education, weakening pressure on the government to improve the quality of public schools.

Figure 38: PISA Scores for Science by Household Income Level and Location



Source: OECD PISA 2012 and 2015

[41] OECD, 2018.
[42] The socioeconomic quintiles used in this analysis are based on the PISA ESCS index. See supra note 2.
[43] The PISA defines a village as a community with less than 3,000 people; a small town has 3,001 to 15,000 people; a town has 15,001 to 100,000 people; a city has 100,001 to 1,000,000 people; and a large city has over 1,000,000 people.
[44] This ratio includes only full-time teachers employed by the civil service.
[45] World Bank, 2018a.

TARGETED REFORMS CAN ENHANCE THE IMPACT OF EDUCATION ON PRODUCTIVITY

School consolidation

Many key challenges in Thailand's education sector stem from the country's numerous small schools, which provide uneven education quality at a high unit cost. Addressing the village school challenge could involve: reorganizing small schools into fewer but larger and better-resourced schools; financing schools based on the number of students enrolled, therefore incentivizing schools to become larger and more efficient; improving teaching resources for small and remote schools; and increasing awareness and understanding of the small school challenge.

A cost-efficient approach could be to utilize existing resources more effectively by optimizing its school network or merging small schools. Thailand's vast network of small schools no longer suits the needs of its current and projected student population. A recent mapping exercise revealed that many nearby schools could be merged without significantly affecting student access.[46] While in some cases school consolidation would require direct administrative action, allocating funds on a per-student basis could also encourage schools to merge voluntarily in order to leverage economies of scale.

Due to current trends in the retirement rates of teachers and administrators, the government could rationalize the school network without laying off any civil servants. Over the 2018–2025 period, Thailand could gradually transition toward a smaller school network by shedding excess staff through natural attrition. However, this process would need to be carefully planned and managed to ensure that hiring remains consistent with projected student needs.

School management

Expanding school autonomy while strengthening accountability mechanisms could greatly enhance education quality. The international experience underscores the potential of school-based management (SBM) reforms to improve student learning and reduce outcome inequality. Encouraging parental engagement and increasing local financial accountability have been shown to positively impact student learning.[47] Greater school autonomy negatively affects student outcomes in developing countries with low-performing education systems, but positively in more developed countries with better-performing education systems, and this relationship holds even when controlling for the presence of complementary institutions.[48]

Increasing school autonomy in Thailand through school-level recruitment and staff management would require clear selection criteria and methods. Currently, teachers are recruited and assigned at the provincial level per the rules of the Teacher's Civil Service Commission. This system does not necessarily provide schools with the necessary staff, as the selection process is excessively bureaucratic and based on teacher characteristics, such as qualifications and years of service, rather than local needs. Once a teacher has been appointed, the school has little influence over his or her performance, as professional incentives are managed by the civil-service administration. School-level teacher recruitment could better align staffing with local needs, enable school administrators to create effective performance incentives, and expand opportunities for professional development. Local governments should be included in the selection procedures, and schools and local governments should jointly undertake annual formal teacher assessments. School consolidation would increase the efficiency of local recruitment and school-based management.

School councils can encourage parental participation and increase the accountability of school administrators. Programs designed to strengthen the oversight capacity of school councils could help create a social contract between teachers and parents and establish the mutual trust that characterizes high-performing school systems such as those of Finland and Korea, where teachers are well selected, have the respect of the community, and demonstrate a strong commitment to student learning. School councils would require training to take on these new roles, and provincial-level staff would need to be involved in oversight.

[46] The average distance between potential hub and affiliated schools was just 5.3 kilometers. World Bank, 2018d.
[47] Patrinos, 2011.
[48] Hanushek et al., 2013.

Effective SBM reforms leverage information on learning outcomes to strengthen the accountability of teachers and administrators for student performance. The international experience shows that publicizing school-assessment results can help strengthen accountability and improve learning outcomes.[49] Brazil's experiment with "school report cards" in the State of Paraná between 1999 and 2002 is a particularly inspiring example of a cost-effective SBM intervention—one that Thailand could follow.[50]

Increasing budgetary transparency could help optimize resource use. To improve transparency and accountability, schools could be required to publish their budgets, while local authorities could be required to publish the allocation of resources across schools. Publishing school budgets would enable parents and communities to monitor how efficiently schools were using their resources. In the longer term, school funding should be determined on a per-student basis through a transparent and well-designed funding formula.

Expenditure efficiency

Effective public education spending can equalize economic opportunities and build human capital among disadvantaged groups. However, merely increasing public spending will not necessarily improve education quality. For example, a recent study suggests that higher levels of education spending are not associated with better learning outcomes when per-student spending already exceeds a certain threshold.[51] Reducing inequalities in education quality and learning outcomes requires policies that effectively address both the proximate and systemic causes of the "learning crisis" described by the 2018 World Development Report on Learning.

In Thailand, public spending on education has increased steadily in recent years despite a continuous decline in the number of students. From 2009 to 2015, the inflation-adjusted budget for the Office of the Basic Education Commission (OBEC) increased by more than 30 percent,[52] while the total number of students attending public schools declined by about 10 percent (almost 1 million students) over the period. Inefficiencies in basic education spending are most acute at the primary level and stem from the proliferation of small schools and the misallocation of teachers. Preliminary analysis indicates that personnel expenditures have driven total costs among schools under OBEC supervision.[53]

Substantial increases in education spending over the last 15 years have yielded no significant improvement in learning outcomes. Between 2001 and 2013, total public spending per student per year increased by 143 percent in real terms, and the rate of increase has recently accelerated, with per-student spending rising by as much as 48 percent in the last three years. Aside from a brief spike in performance in 2012, student performance on all three PISA domains declined between 2000 and 2015 despite the massive increase in per-student spending over the period. In 2015, Thailand's average PISA scores for 15-year-old students were 2.5 years behind the OECD average and almost 3 years behind the East Asia and the Pacific regional average.[54]

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[49] See Hanushek and Raymond (2005) and Carnoy and Loeb (2002) for evidence from the United States, Burns et al. (2011) for evidence from Brazil, and Alvarez et al. (2007) for evidence from Mexico.

[50] These "report cards" contained school-level data on test performance for 4th and 8th graders; parents' views on each school; student promotion, retention, and dropout rates; school characteristics (e.g., average class size, share of teachers with college degrees) from the annual school census; student information (e.g., family socioeconomic status) from questionnaires attached to statewide achievement tests; and principals' statement about their management style. Whenever possible, comparative municipal and state averages for key indicators were provided so that parents and teachers could compare the performance of their school with that of neighboring schools. Schools were also reported to be performing at, below, or above their expected performance level, which controlled for the socioeconomic background of the students. The three-page summary of indicators was disseminated to parents and teachers at local-level workshops, and the results were published in the state education secretariat's monthly newsletter and widely disseminated through press releases and press conferences. See Burns et al. (2011) and Winkler (2004).

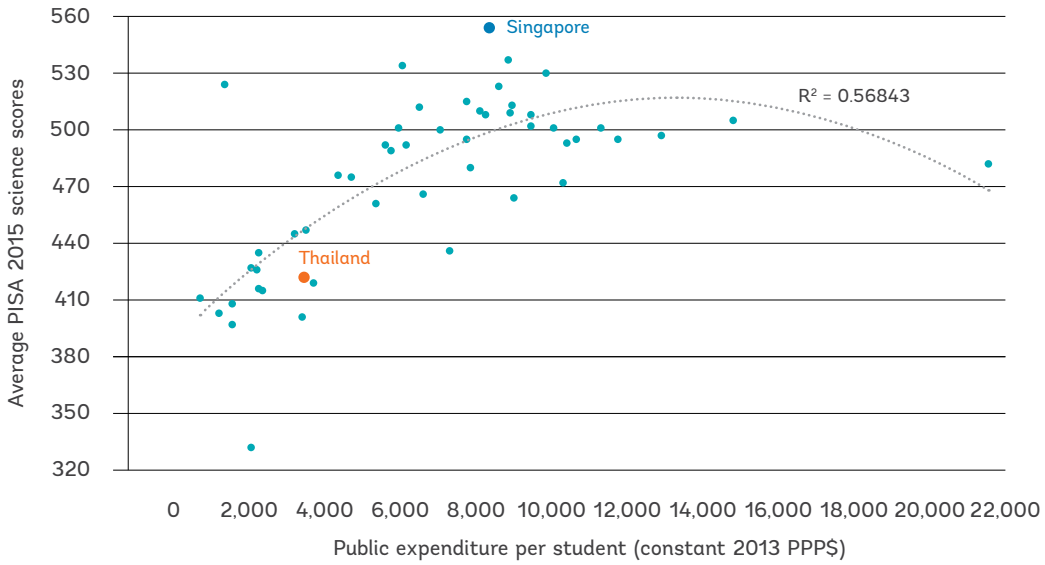
[51] Vegas and Coffin (2015) find that, after controlling for GDP per capita and income inequality, higher education spending is significantly correlated with improved student performance only among education systems that spend less than US$8,000 (in purchasing-power-parity terms) per student per year. In these education systems, mean student achievement on the PISA rises approximately 14 points for each additional US$1,000 spent.

[52] Actual spending, however, increased by 27 percent over the 2009–2015 period.

[53] According to data from 2015/16, OBEC-supervised schools serve 6.9 million of the 8.6 million students enrolled in the public K-12 school system. Another 2.4 million K-12 students are enrolled in private schools, which are supervised by the Ministry of Education's Office of the Permanent Secretary.

[54] During the initial PISA cycle, test scores were scaled so that the OECD average in each domain (mathematics, reading, and science) was 500 and the standard deviation was 100. Subsequent cycles have been linked to previous cycles through item-response theory methods. A score of 30 points is equivalent to one year's worth of learning.

Figure 39: Average PISA 2015 science scores and public spending per student, Thailand and Comparators

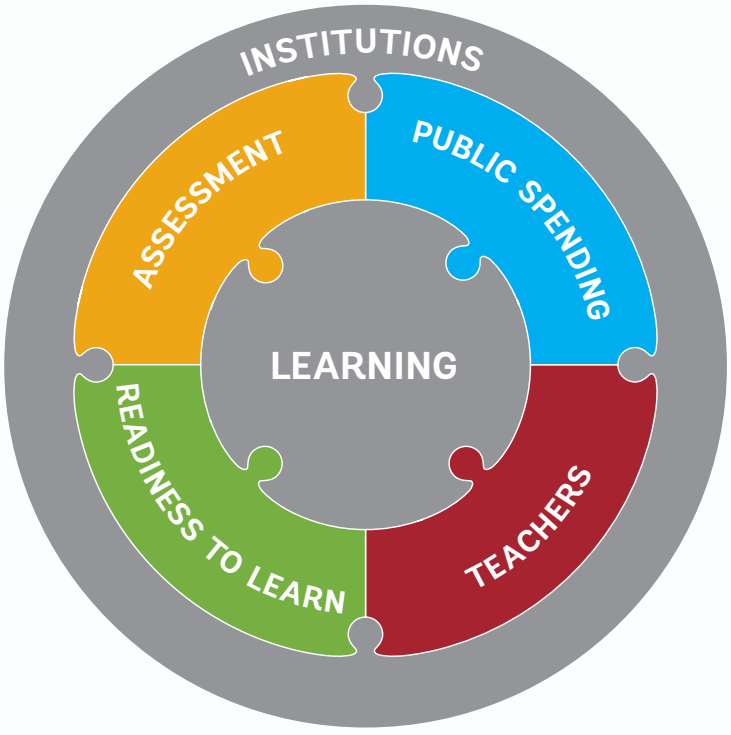


Source: World Bank staff calculations based on data from the OECD and the UNESCO institute for statistics
Note: Data are from the latest year available between 2013 and 2015.

Box 8

Lessons from the Best-Performing Schools in East Asia and the Pacific

The most successful education systems prioritize outcomes over outputs, or "learning over schooling". Aligning the main elements of the school system—including teachers, students, school administration, and educational inputs—to facilitate learning requires: (i) an educational assessment system that accurately captures student progress; (i) a meaningful commitment to adjust the education system based on these assessments; and (iii) effective multi-stakeholder collaboration that enables reform efforts to overcome technical and political challenges. The World Bank's 2018 Regional Education Study found that the best-performing school systems in East Asia and the Pacific had consistently implemented five general education policies encompassing 15 specific policy actions. These include:



I) Institutional Alignment

1. Aligning the activities of educational institutions and administrative systems to ensure the adequate provision of essential inputs and infrastructure.

II) Public Spending

1. Devoting sufficient resources to basic education before increasing spending on higher education.
2. Managing essential inputs efficiently.
3. Channeling resources to lagging schools and districts to improve the equity of educational outcomes.

III) Teachers

1. Establishing high standards for teacher selection and basing career advancement on merit.
2. Supporting new teachers by routinely observing classroom practices and providing feedback.
3. Clarifying performance expectations for teachers and allowing them adequate preparation time; setting concrete goals for students; and streamlining the curriculum to allow students to master one subject before moving on to another.
4. Encouraging experienced teachers to mentor their peers and conduct pedagogical research.
5. Focusing teacher training on classroom practices and the ability to teach the curriculum.

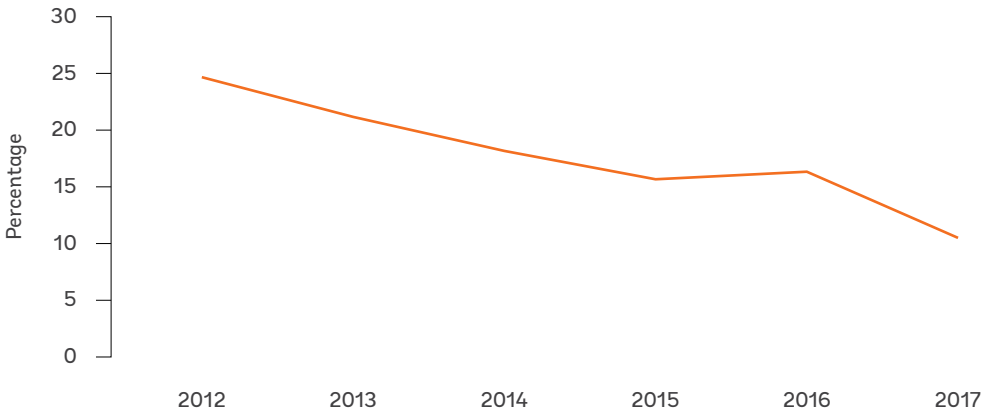
IV) Assessment

1. Using a variety of assessments to measure learning outcomes and benchmarking those outcomes against international assessments.
2. Evaluating cohort progress at every grade level.
3. Using data from classroom assessments to inform instruction.

V) Readiness to Learn

1. Promoting children's physical and cognitive development from birth.
2. Assessing and improving the quality of early childhood education and development services.
3. Leveraging interinstitutional coordination to deliver essential services.

Figure 40: Stunting Rate, Thailand, 1987–2017



Source: Thailand Multiple Indicator Cluster Surveys (MICS)/Demographic and Health Survey (DHS)/UNICEF-WHO-WB joint malnutrition estimates, World Bank human capital index, WDI.

THAILAND HAS ACHIEVED CONSIDERABLE SUCCESS IN REDUCING THE INCIDENCE OF STUNTING AND IMPROVING NUTRITION INDICATORS

Over the past several decades, sustained public investment in health services has contributed to significant improvements in health outcomes in Thailand. Average life expectancy at birth increased steadily from 60 years in 1970 to 75 years in 2017, and the under-five mortality rate fell from 37 deaths per 1,000 live births in 1990 to 10 in 2017. According to the HCI, 99 out of 100 children born in Thailand will survive to age five, with girls experiencing slightly better outcomes than boys. Thailand's survival rate exceeds the UMIC average and is the third highest among ASEAN member states.

Thailand has significantly expanded the coverage of health-protection schemes and health-promotion activities. In 2002, the country achieved universal health coverage through its three major public health insurance schemes. Expanding access to health services and more equitable utilization of those services helped reduce the financial burden and risk of impoverishment associated with healthcare expenses. The incidence of "catastrophic" health expenditures (defined as more than 10 percent of total household spending) declined from 7.1 percent in 2000 to just 2 percent after universal health coverage was achieved.

Successful efforts to improve nutrition have sharply reduced the rate of stunting. Stunting (defined as a low height-to-age ratio) reflects chronic undernutrition, which inhibits cognitive development and impairs children's ability to learn. Over the past 30 years, stunting rates among children under the age of five have fallen from 24.6 percent to just 10.5 percent (Figure 40). Thailand's stunting rate is well below the UMIC average and the lowest among all ASEAN countries (excluding Singapore, which does not record stunting rates). Stunting rates declined steadily during the 1990s and early 2000s, plateaued between 2006 and 2012, then declined again over the past five years (Figure 41). More modest improvements have been observed in the incidence of wasting (defined as a low weight-to-height ratio), which is associated with acute starvation and/or severe disease. Wasting rates among children under five fell from 7.3 percent in 1993 to 5.4 percent in 2016.[55]

[55] Thailand Multiple Indicator Cluster Surveys (MICS)/ UNICEF-WHO-WB Joint Malnutrition Estimates.

Box 9

Factors Contributing to Thailand's Success in Addressing Stunting in the Late 1980s and 1990s

Thailand's nutrition program in the late 1980s and 1990s exemplifies how prioritized, effective, and explicitly nutrition-specific and nutrition-sensitive interventions can transform a country's nutritional status within a single decade. Four key factors contributed to the rapid decline in undernutrition in Thailand: planning, integration, social mobilization, and local action-oriented surveillance.

Planning

Planning at both the micro and macro levels followed the basic minimum needs (BMN) approach as part of the Poverty Alleviation Plan (PAP). Under the PAP, communities identified development priorities based on a survey measuring 32 indicators across eight areas, and adequate food and nutrition was the first category on the list. Nutrition-specific and nutrition-sensitive indicators included outcomes such as child malnutrition, low birthweight, and micronutrient deficiencies, as well as outputs such as immunization coverage, antenatal care coverage, and access to potable water and sanitation.

At the micro level, teams of community leaders, nutrition and health experts, midlevel government officials, NGO representatives, and district and subdistrict sector chiefs used community-based planning to assess local needs. Based on local priorities, a set of BMN indicators was established, and progress on these indicators was monitored. Working together, service providers and community leaders established plans for a set of nutrition-specific and nutrition-sensitive actions targeted to vulnerable and disadvantaged groups.

At the macro level, a core group comprised of nutrition and health professionals, senior government officials, and representatives of international agencies supported these community processes by promoting collaboration among the health, agriculture, education, and rural development sectors. Training and workshops on community-based nutrition programming were organized for district chiefs and reinforced through field visits to communities. International agencies also provided training workshops and grants.

Integration

Under the PAP, nutrition was understood to be a multisectoral issue that required complementary actions in the health, agriculture, education, and water and sanitation sectors. The PAP facilitated cross-sector coordination and the integration of minimum basic services at the national, regional, local, and community levels. Health components focused primarily on antenatal care for pregnant women, growth monitoring and promotion for infants and young children, and support for breastfeeding and appropriate complementary feeding. Program activities also covered other basic health services such as immunization, oral rehydration therapy, deworming, the treatment of local endemic diseases, and the provision of potable water and sanitary latrines. In addition, individuals, families,

and communities engaged in agricultural and educational activities designed to build self-reliance through improved food security, income generation, and behavior changes to support long-term gains in nutrition.

Projects in the education sector, such as school meal programs and micronutrient supplementation, sought to improve child nutrition. Curricula were updated with nutrition and health education materials, and nutritious food production and consumption were promoted through investments in school gardens and kitchens. In addition to formal educational activities, efforts were made to better coordinate health and agricultural extension services, develop information systems to monitor the nutritional status of vulnerable groups, and educate consumers in healthy and safe ways to select, prepare, and store food.

Under the PAP, investments in agriculture included horticulture and animal-husbandry programs designed to strengthen subsistence food production, as well as support for home gardening to produce locally sourced supplementary foods for pregnant women and adolescent girls and complementary foods for young children. Community-based agricultural research through collaboration with universities and research institutions helped identify and address local agricultural challenges.

Social Mobilization

Service delivery was supported by a cadre of community health volunteers, or "mobilizers," who were selected by their communities. These mobilizers were trained to implement nutrition programming in collaboration with service providers, or "facilitators," most of whom were paid healthcare workers, NGO employees, or university or research staff. The program targeted a ratio of one mobilizer to 10–20 households to optimize its reach and effectiveness. The mobilizers were unpaid, but they received free medical services for themselves and their families, as well as public recognition of their work in the form of awards and certificates.

Training and support were critical components of the program. Mobilizers participated in an initial two-week training on the theory and practical application of basic nutrition and health interventions, especially antenatal and postnatal care, maternal and childcare practices, birth spacing, breastfeeding, immunization, complementary feeding, and growth monitoring and promotion. The trainings also emphasized communication skills to enable mobilizers to effectively provide information on maternal health, childcare, and nutrition and to generate interest in self-help activities, particularly among women's groups.

Supervision at all levels was vital to the success of the mobilizer program. Facilitators visited mobilizers every one to two months to provide support—rather than police compliance—through on-the-spot trainings and problem-solving, along with technical and managerial information-sharing. This form of regular supervision was highly effective, and it was supplemented with monthly or bimonthly review meetings, as well as communication through social events and printed media. Mobilizers tracked and evaluated impact indicators and used growth charts to discuss and support child development at the community level.

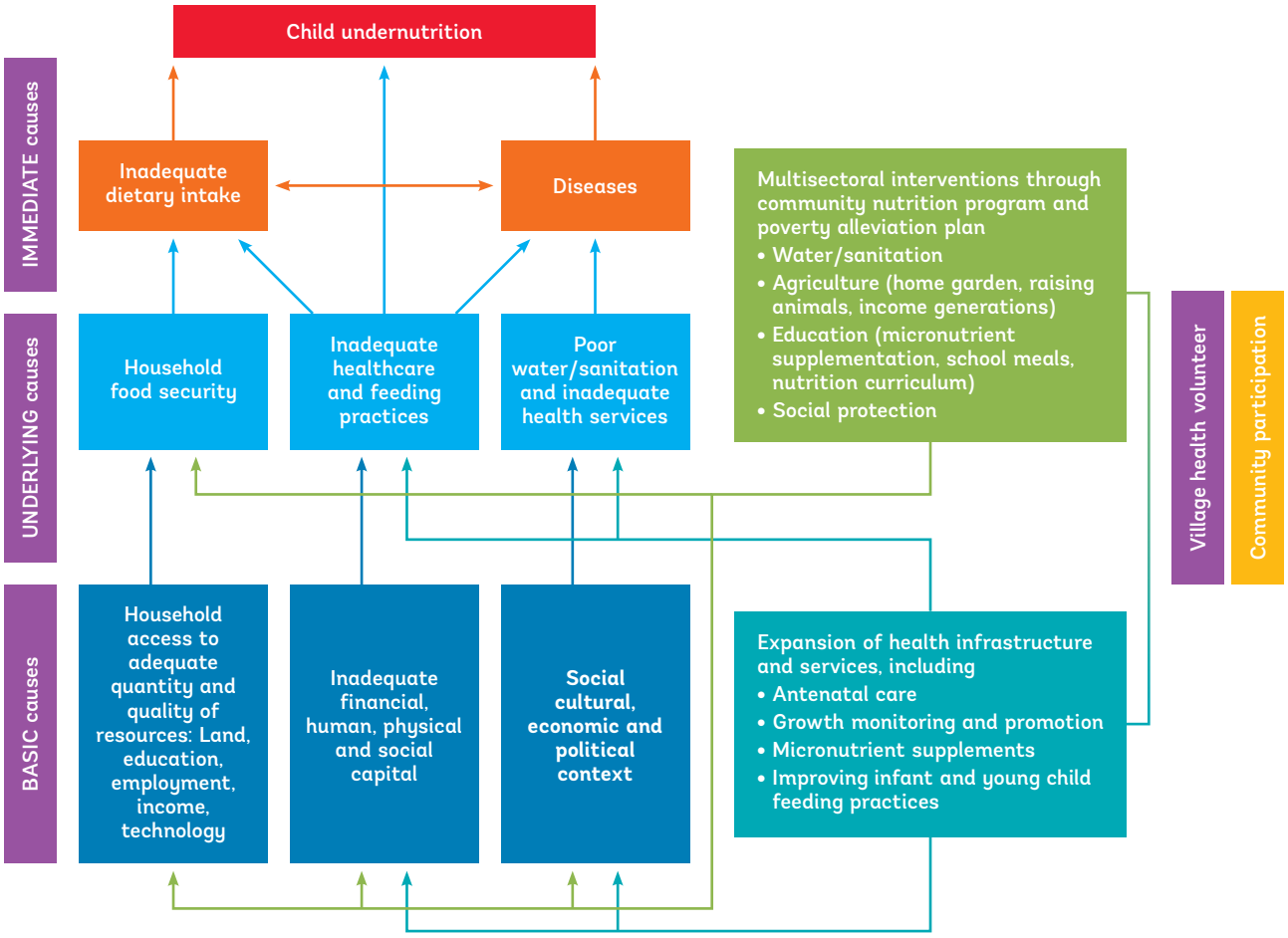
Local Monitoring

All preschool-aged children received regular weighing and health checks every three months as a screening, educational, remedial, and integrative tool for both mobilizers and parents. Growth monitoring and promotion activities were designed to shift responsibility from health workers to the community by enabling mothers to visualize their children's growth and take responsibility for improving their nutrition.

An evaluation by the Ministry of Public Health and interviews with senior government staff involved in the program suggest that its observation components (weighing and charting) were executed more effectively than both its analytical components (identifying the causes of undernutrition) and its intervention components (providing counseling and support). Since the late 1980s, the share of children refusing to be weighed has declined from 31 percent to 8 percent, while the share that is weighed accurately has risen from 79 percent to 92 percent. However, the causes of undernutrition were analyzed in only 46 percent of cases, and nutrition education was provided to just 64 percent of child caretakers. By the mid-1990s, nutrition indicators were being used in over 95 percent of villages. In areas that experienced rapid improvement, new indicators were added and benchmarks for success were raised.

Source: Adapted from Gillespie et al. (2016). « Local to National: Thailand's Integrated Nutrition Program." In Nourishing Millions: Stories of Change in Nutrition. Gillespie, Hodge, Yosef, and Pandya-Lorch (eds.), pp. 91–98. Washington, D.C: International Food Policy Research Institute. http://dx.doi.org/10.2499/9780896295889_10

Figure 41: Multisectoral Interventions to Address Child Undernutrition in Thailand



Source: Author's illustration based on the UNICEF conceptual framework for undernutrition.

Since the 1980s, community-based multisectoral nutrition programs targeting areas of concentrated poverty have greatly contributed to the decline in Thailand's stunting rate. The expansion of health infrastructure and human resources to rural areas, combined with the implementation of community-based nutrition programs, has enabled a majority of mothers and children access to primary healthcare and nutrition services, including antenatal care, micronutrient supplements, guidance on improving infant and young child feeding practices, growth monitoring and promotion, as well as health and nutrition education, all of which are vital nutrition-specific interventions and helped address underlying causes of undernutrition. The community-based nutrition programming implemented under the PAP (Box 9) helped improve basic infrastructure and services in high-poverty areas nationwide. Investments in water and sanitation services in rural communities, the inclusion of nutrition education in school curricula, increased agricultural output and food production, and rising rural incomes, all contributed to the observed improvement in health, nutrition, and mortality indicators, especially among children. Thailand's expansion of health services and multisectoral interventions through the PAP and similar programs, supported by strong community participation, have successfully addressed both the systemic and proximate causes of child undernutrition (Figure 41).

NEW HEALTH AND NUTRITION CHALLENGES ARE EMERGING

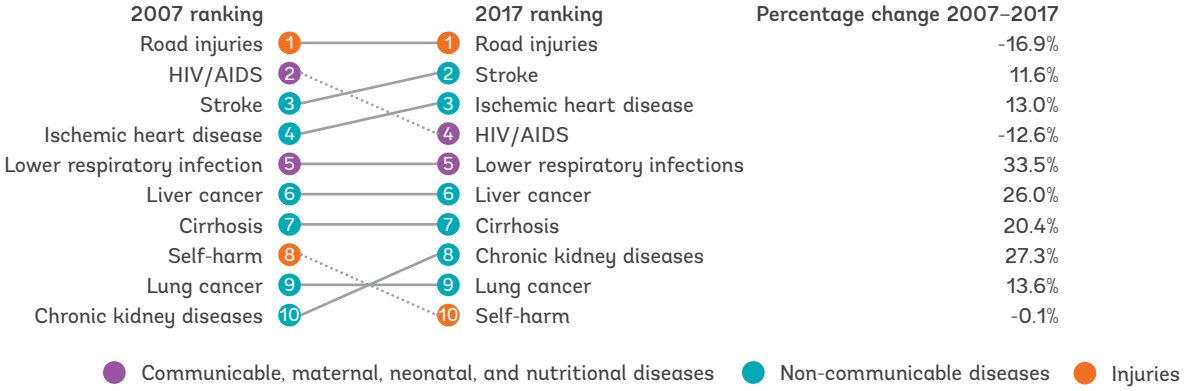
Even as child health and nutrition outcomes continue to improve, Thailand faces an array of new challenges, including the rising incidence of noncommunicable diseases (NCDs), overnutrition, and teenage pregnancy. Thailand's epidemiological transition is proceeding rapidly, and NCDs have become the leading cause of death. While mortality and morbidity from communicable diseases have decreased, the prevalence of diabetes and hypertension have tripled and quadrupled,

respectively, over the past 15 years. In 2013, NCDs were responsible for an estimated 82 percent of all deaths in Thailand,[56] and 63 percent of all deaths were caused by four major lifestyle-related NCDs: cardiovascular disease, cancer, chronic respiratory disease, and diabetes.

The top three risk factors for mortality and morbidity are dietary risks, tobacco consumption, and high body-mass index. Like many other middle-income countries, NCDs in Thailand are no longer largely restricted to the elderly population and wealthier households, but are now increasingly prevalent among working-age individuals and poor households. NCDs impose a significant burden not just on patients, but also on households, communities, employers, healthcare systems, and government budgets, due in part to the potentially catastrophic costs of NCD treatment. Figure 42 below demonstrates the top 10 causes of premature deaths (mortality before the age of 65) in Thailand over the past ten years. Over the last 10 years, cardiovascular diseases have become the second and third leading causes of premature deaths after road accidents, and the number of cardiovascular cases is increasing rapidly (Figure 42).

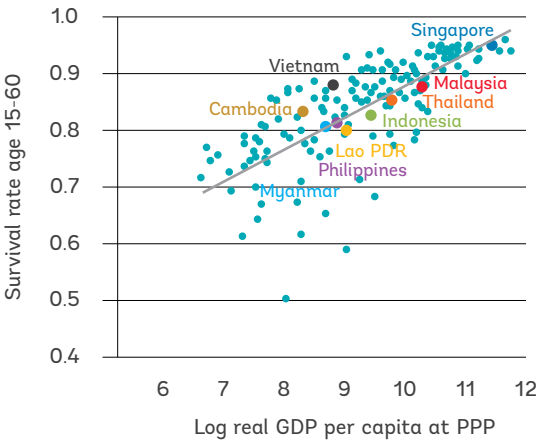
The rising incidence of NCDs, combined with high rates of road injuries, has negatively affected Thailand's adult survival rate. Only 85 percent of Thai 15-year-olds are expected to survive until age 60. Thailand's adult survival rate is below both the global median and the 86.2 percent average for its income group and close to the average for ASEAN countries (Figure 43). Efforts to address NCDs and road accidents, particularly through prevention and risk reduction, will be essential to improve Thailand's adult survival rate.

Figure 42: Leading causes of premature death in Thailand, 2007 and 2017



Source: Global burden of disease, institute for health metrics and evaluation.

Figure 43: Survival rates and GDP per capita, Thailand and Comparators



Source: Thailand Multiple Indicator Cluster Surveys (MICS)/Demographic and Health Survey (DHS)/UNICEF-WHO-WB joint malnutrition estimates, World Bank human capital index, WDI.

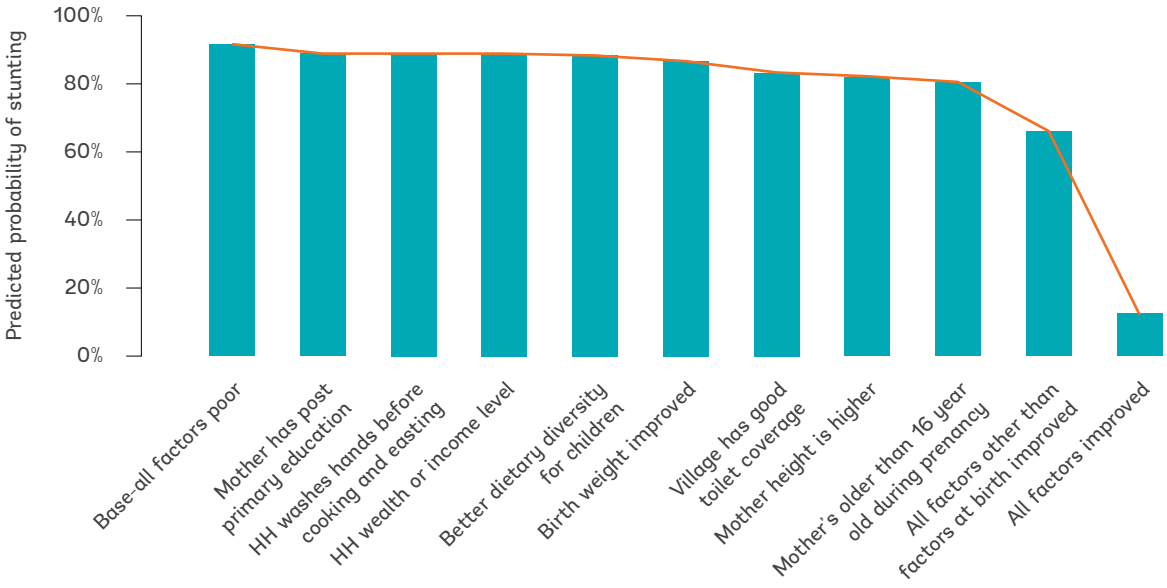
[56] Burden of Disease in Thailand Program, 2017.

TO REALIZE THE FULL POTENTIAL OF ITS HUMAN CAPITAL, THAILAND MUST ADDRESS A NEW SET OF HEALTH CHALLENGES, ESPECIALLY TEENAGE PREGNANCY

Adolescent pregnancy is a pressing challenge in Thailand, with significant health, nutrition, educational, and economic implications. While the country's total fertility rate has fallen from 2.1 births per woman in 1990 to less than 1.5 in recent years, the adolescent fertility rate is moving in the opposite direction. In 1990, there were 51 live births per 1,000 women ages 15–19. This rate dipped to 43 in 2000, as rising female education indicators and rural economic development led to a decline in teenage marriage. However, by 2012 the rate had rebounded to 53.4, above its 1990 level. Adolescent births currently account for 16 percent of total annual births in Thailand.[57] The rise in adolescent birth rates can be attributed in part to pervasive economic, social, and technological changes, including a rapid process of urbanization, compounded by limited access to appropriate sexual and reproductive health education and services, as well as the lack of an enabling environment for girls to develop the skills necessary to delay or negotiate safe sexual activity. Consequently, many Thai teenagers lack the age-appropriate knowledge necessary to responsibly navigate sexual behavior.[58]

The recent increase in adolescent pregnancy threatens to undermine Thailand's success in improving maternal and child health outcomes, as well as its broader efforts to accelerate human capital development. Adolescent pregnancy has negative consequences for the health and nutrition status of infants and teenage mothers, including an increased risk of low birthweight, preterm birth, infant mortality, and maternal mortality. Multivariate analysis reveals that teenage pregnancy is one of the most important determinants of stunting, and addressing teenage pregnancy is associated with a 11.2 percentage-points reduction in the stunting rate—the greatest impact of any variable (Figure 44). Teenage pregnancy is also associated with reduced rates of school completion, and lower levels of educational attainment can limit skills formation, employment opportunities, and earnings potential later in life, perpetuating cycles of poverty and negatively impacting human capital development at the national level.

Figure 44: Predicted Probability of Stunting among Children Ages 6–23 Months by Cause



Source: Nutrition in Lao PDR: Causes, determinants, and bottlenecks, World Bank, June 2016.

[57] Jitsuchon, S. et al.
[58] Jitsuchon, S. et al.

In summary, while Thailand has made remarkable progresses in improving the health and nutrition outcomes of its population, accelerating human capital development will require addressing a new set of challenges. Thailand's achievement of universal health coverage and its remarkable gains in health outcomes, especially in the areas of maternal and child health, offer important lessons for developing countries worldwide. However, Thailand now faces new challenges as it strives to improve adult survival rates and extend life expectancy by addressing the rising incidence of NCDs. Meanwhile, a recent increase in adolescent pregnancy rates requires urgent action to consolidate gains in maternal and child health and to enhance human capital development and promote the general welfare of women and children.

CONCLUSION

Equalizing economic opportunities can set in motion a virtuous cycle of human capital development and accelerated growth. As the outcomes of children become increasingly independent of the circumstances of their birth or the characteristics of their parents, rising economic mobility enables individuals to escape intergenerational poverty traps and promotes a more efficient allocation of human capital. Inclusive growth further increases economic mobility, which promotes national cohesion, improves public perceptions of social fairness, and encourages general optimism regarding the direction of the country and the future prospects of individuals and households.[59]

[59] Narayan et al., 2018.

Box 10

Reforming Institutions for Tackling Inequality in Thailand

The government of Thailand aims to tackle inequality as part of the national strategy by establishing an inequality watchdog unit and enacting a set of bills to strengthen rural development. The inequality watchdog is expected to help address long-neglected institutional challenges: miscoordination between government agencies as well as lack of a designated body, plan and target, subject expertise, and effective funding. In addition, the aforementioned set of draft bills seeks to reduce inequality of opportunity by enabling rural communities across the country to have access to natural resources, financial services, opportunities to start their own businesses, and fair contracts. In doing so, the government aims to strengthen capacity at the grassroots level for sustained inclusive growth.

I. The Inequality Watchdog

In December 2018, the cabinet endorsed the establishment of the national inequality watchdog as a special unit under the National Economic and Social Development Board (NESDB). Thailand will have, for the first time, a unit dedicated to inequality and poverty reduction. The unit will be supervised by a national board chaired by the Prime Minister and key ministers and tasked with performing three main functions:

1) Target

The inequality watchdog will make use of "big data" to facilitate targeted policy-making. The unit will develop comprehensive integrated databases on inequality and poverty. The big data database includes real-time data such as financial and business transaction data, satellite data, electricity usage, mobile phone and internet usage, welfare payment, and locational data on the Thai People Map and Analytics Platform (TPMAP). In addition, the unit will set the targets and create a set of indicators beyond traditional indicators (i.e. Gini). Potential indicators include the community strength index, sustainable development index , and the World Bank Human Capital Index. Also, the unit will produce research and reports on inequality and poverty on a regular basis.

2) Integrate

The inequality watchdog will be the main government agency for driving the national strategic and reform plan on inequality and poverty reduction. The unit will ensure that key projects on inequality proposed by each ministry are in line with the 20-year national strategy and the national reform plan. In addition, the unit will prioritize key projects to receive special budget allocation for addressing inequality.

3) Streamline

The unit will work closely with the Bureau of Budget (BOB) through the formation of a special NESDB-BOB committee to allocate budgets for tackling inequality, using agenda-based and area-based budgeting. Also, the unit will perform ex-ante policy assessment to assist BOB in budget allocation for the following years.

II. The Enactment of Key Draft Bills to Narrow Rural-Urban Gaps

To strengthen rural development and narrow rural-urban gaps, a set of draft bills will be passed by the National Legislative Assembly (NLA) in February 2019. The objective is to empower rural communities by facilitating access to resources necessary for growth such as financial services, natural resources (i.e. land, forestry), and know-how on business formation, thereby reducing inequality of opportunity and allowing rural communities to grow sustainably. Previous attempts at enacting such bills proved unsuccessful due to institutional resistance to decentralization of power. However, the overall reform momentum has picked up in recent years. In addition to supporting rural development and human capital investments, addressing top incomes and redistribution of wealth and income through a progressive tax system will also be important for keeping inequality in check. The recently introduced property tax (Land and Building Tax) effective on January 1, 2019, is a step in the right direction.

Table 5: Key Draft Bills to Empower Community and Narrow Rural-Urban Gaps

Draft Bills	Main Content
The Community-Based Financial Institution (CBFI) Act	• The act enables local saving groups who meet the minimum requirements to be registered as a community-based financial institution. The CBFI network will be promoted and supervised by the MOF. • The act aims to promote rural community development by enabling locals to form their own community banks, thereby increasing financial access and the quality of financial services, reducing informal debt, and unnecessarily high transaction costs. CBFIs will also support the development of community businesses and community welfare funds. The National Saving Fund (NSF) will also distribute their product through this network to enhance the retirement saving rate. • Bank of Agriculture and Agricultural Cooperatives (BAAC) and Government Savings Bank (GSB) are designated as incubator banks to support the development of the CBFIs. In doing so, they will provide accounting software, management know-how, and several wholesale finance initiatives to the CBFIs (e.g. the land bank initiative, micro-insurance, etc.) • The registered CBFIs are required to use the accounting software provided by the incubator banks, which records real-time financial transaction data. The data will constitute one of Thailand's most important big data on rural development.
The Community Enterprise Promotion Act	• The act designates one unit under the Ministry of Agriculture and Cooperatives (MOAC) to serve as a one-stop service to support and promote community enterprises (wisahakit chumchon), and encourage those that are ready to be registered as formal legal business entities. • The unit will also coordinate with other government agencies including Specialized Financial Institutions (SFIs) to offer financing, management know-how, product development, and R&D for community enterprises.
The Community Forest Act	• The act empowers communities to actively engage in forest management, protection, and usage. The act also enables local government units to facilitate local people's engagement in forest management.
The Social Enterprise Promotion Act	• The act sets an ecosystem for long-term development of social enterprises (SE). This includes the establishment of the national board for SE development, the SE promotion office, the SE fund, and key measures to promote SE development.
The Act on Unfair Land Repurchase Contract	• The act protects citizens, particularly farmers, from unfair land repurchase contracts, and from unknowingly losing their lands especially during liquidity shortages. • The act stipulates that land repurchase contracts shall be supervised by the government to prevent unfair contracts. It also sets guidelines on the contract formulation and procedures. Any contract that does not comply will be rendered void.
The Contract Farming Promotion and Development Act	• The act aims to prevent farmers from being exploited by big corporations and forced to engage in unfair farming contracts. • The act sets guidelines for contract formulation, dispute resolution, mediation mechanism, and determining factors for contract farming agreements. Also, the act enables government officers to intervene in the contract-making process when deemed necessary.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