



# THAILAND

October 2019

## 2019 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR THAILAND

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2019 Article IV consultation with Thailand, the following documents have been released and are included in this package:

- A **Press Release** summarizing the views of the Executive Board as expressed during its September 30, 2019 consideration of the staff report that concluded the Article IV consultation with Thailand.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on September 30, 2019, following discussions that ended on July 19, 2019, with the officials of Thailand on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on September 11, 2019.
- An **Informational Annex** prepared by the IMF staff.
- A **Statement by the Executive Director** for Thailand.

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October 7, 2019

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Washington, D. C. 20431 USA

### **IMF Executive Board Concludes 2019 Article IV Consultation with Thailand**

On September 30, 2019, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation<sup>1</sup> with Thailand.

Growth lost momentum over the last 12 months, while inflation remained subdued. Real GDP growth reached 4.8 percent year-on-year in 2018:H1 but declined to 3.4 percent in 2018:H2; and 2.8 percent and 2.3 percent in 2019:Q1 and 2019:Q2 respectively. Although private consumption held up, global trade tensions impacted Thai exports, particularly electronics, through the global value chains. Headline inflation averaged 1.1 percent in 2018 and declined to 0.5 percent in August 2019 on the back of food and energy prices, and core inflation remains subdued at 0.5 percent. The output gap seems to be closing by some measures, although the combination of low inflation and a large current account surplus suggest a still negative gap.

Credit and housing markets are also cooling. Total credit growth moderated in 2019:Q1, led by declines in corporate borrowing. In contrast, loans to households picked up in 2018 and remained buoyant through 2019:Q1, driven by auto loans and new mortgages. Following the tightening of LTVs in April 2019, housing loan demand softened, and condo prices declined by 1¾ percent (y/y) also reflecting weaker foreign demand. The housing market is already going through a period of adjustment consistent with the broad-based cooling of the Thai economy.

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<sup>1</sup> Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

The current account surplus narrowed sharply in 2018. The decline of the surplus to 6.4 percent of GDP in 2018 from 9.7 percent in 2017 was driven partly by the U.S.-China trade tensions, which weighed on exports. Data as of end-June 2019 reveal the continued impact of trade tensions, as exports contracted by 2.2 percent y-o-y, driven by electronics and computer parts, with a 14.9 percent decline in China-bound goods and a 2.2 percent decline in U.S.-bound goods. Imports declined by 9.4 percent y-o-y, with lower capital goods, raw materials, and intermediate goods imports. Tourism receipts have also softened, led by a slowdown in Chinese tourists.

The continued strong external position and looser global financial conditions have contributed to the recent appreciation pressures. Since December 2018, the baht has appreciated by about 5.5 percent against the U.S. dollar, making it one of the best performers in the region. The level of reserves increased by nearly US\$11 billion by end-June 2019 to US\$250.3 billion, well above Fund adequacy metrics. Since May 2019, capital inflows have further accelerated, contributing to a sharper appreciation of the baht. On July 12, 2019, the Bank of Thailand announced measures aimed at curtailing short-term speculative capital inflows (a reduction in the limit of the outstanding balance for non-resident baht accounts) and the tightening of the reporting requirements for of non-resident holdings of debt securities issued in Thailand.

With respect to the outlook, growth is projected to slow down to about 3 percent in 2019–20 reflecting external and domestic headwinds. On the external side, the projected slowdown in global demand and uncertainty about trade tensions are expected to weigh on exports throughout this year. Domestic factors include a weakening in consumption growth—as the debt overhang weighs on credit growth and the drought depresses farm incomes. Over the medium term, private consumption and investment are expected to strengthen, supported by dissipating political uncertainty and a scale-up in public investment. This would also contribute to external rebalancing as demand feeds into higher imports. Risks to the outlook are tilted to the downside emanating most notably from the ongoing escalation of protectionism threatening the global trading system.

## **Executive Board Assessment<sup>2</sup>**

Executive Directors noted that Thailand’s robust policy framework and ample buffers, created through the authorities’ judicious management of public finances, continue to underpin its resilience to shocks. Directors also welcomed the progress in improving the coverage and

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<sup>2</sup> At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: <http://www.imf.org/external/np/sec/misc/qualifiers.htm>.

effectiveness of financial supervision and macroprudential policies which has enhanced financial stability. They noted, however, that external and domestic headwinds are challenging near term growth prospects, and that risks are tilted to the downside stemming from the impact of the global economic slowdown, ongoing trade tensions, and weak domestic demand. In this regard, Directors encouraged an expansionary policy mix to support domestic demand, and structural reforms to promote inclusive and sustainable growth.

Directors encouraged the authorities to undertake an investment-led expansion through the judicious use of existing fiscal space, while preserving sufficient buffers and ensuring fiscal sustainability. Strong implementation of macro-critical public infrastructure projects currently in the pipeline would crowd in private investment and stimulate domestic demand in the short run, while helping lift up potential growth in the long run. Directors emphasized the importance of better targeting social assistance to protect vulnerable households while minimizing distortions. They welcomed the authorities' intention to strengthen revenue mobilization over the medium to long run, as part of a broader strategy to prepare for aging-related expenditure pressures.

Directors welcomed the Bank of Thailand's August decision to cut the policy rate. Going forward, a number of Directors saw scope for further monetary easing to help steer inflation back to target. Many other Directors considered the current monetary stance to be sufficiently accommodative, and noted that monetary policy should be calibrated based on assessment of financial stability risks. Complementary use of macroprudential policy would also address financial stability concerns.

Many Directors considered that Thailand's external position remains substantially stronger than warranted by medium-term fundamentals and desirable policies. A number of other Directors called for a more cautious interpretation of the external balance assessment citing Thailand-specific issues as contributing factors.

Directors emphasized the importance of exchange rate flexibility, with foreign exchange intervention limited to avoiding disorderly market conditions. While a number of Directors recognized that recent tightening of existing capital flow management measures (CFMs) plays an important role in mitigating short-term volatility, a number of other Directors considered that these measures should be phased out and replaced with appropriate macroeconomic, financial and structural policies.

Directors agreed that financial stability risks appear contained although household indebtedness is relatively high and there are pockets of vulnerability in the corporate sector. In line with the FSAP recommendations, they encouraged the authorities to strengthen the crisis management and resolution framework, close leakages in the macroprudential toolkit, and establish an

overarching body to help enhance coordination among supervisors. Many Directors noted that the recommendations on institutional arrangements of supervisory agencies should be tailored to a country-specific context. To enhance oversight of the non-bank sector, Directors recommended strengthening the supervision and regulation of Specialized Financial Institutions and Credit Cooperatives.

Directors emphasized that the start of the new government is a timely opportunity to forge ahead with a concerted reform agenda. Targeted policies to enhance labor productivity across the regions can boost competitiveness, raise potential growth, and enhance its inclusiveness. A key priority is to address population aging through pension reform and investment in human capital that will help unlock growth potential, including through education, health, and equalizing opportunities. Directors took note of the authorities' ongoing efforts to strengthen anti-corruption institutions and called for improving the operational aspects of the procurement law and addressing AML/CFT deficiencies.

## Thailand: Selected Economic Indicators, 2015–20

Main exports (percent of total 2015): machinery (44), food (12)  
 GDP per capita (2017): US\$6,732  
 Unemployment rate (2017): 1.2 percent  
 Poverty headcount ratio at national poverty line (2014): 10.5 percent  
 Net FDI (2017): US\$-10.59 billion  
 Population (2016): 65.9 million

	2015	2016	2017	Prel. 2018	Proj.	
					2019	2020
Real GDP growth (y/y percent change) 1/	3.1	3.4	4.0	4.1	2.9	3.0
Consumption	2.4	2.7	2.3	4.0	3.6	3.8
Gross fixed investment	4.4	2.9	1.8	3.8	5.2	8.5
Inflation (y/y percent change)						
Headline CPI (end of period)	-0.9	1.1	0.8	0.4	1.3	1.2
Headline CPI (period average)	-0.9	0.2	0.7	1.1	0.9	0.9
Core CPI (end of period)	0.7	0.7	0.6	0.7	0.5	0.6
Core CPI (period average)	1.1	0.7	0.6	0.7	0.5	0.6
Saving and investment (percent of GDP)						
Gross domestic investment	22.4	20.9	22.8	25.0	24.9	25.3
Private	18.2	17.4	17.2	16.9	17.1	17.9
Public	6.3	6.4	6.0	5.9	6.2	6.5
Change in stocks	-2.2	-2.8	-0.3	2.1	1.7	0.9
Gross national saving	29.3	31.5	32.5	31.4	31.0	30.7
Private, including statistical discrepancy	22.2	24.3	27.1	25.7	25.1	24.7
Public	7.1	7.1	5.4	5.7	5.9	6.0
Foreign saving	-6.9	-10.5	-9.7	-6.4	-6.0	-5.4
Fiscal accounts (percent of GDP) 2/						
General government balance 3/	0.1	0.6	-0.9	-0.3	-0.2	-0.2
SOEs balance	0.7	0.8	0.7	0.5	0.4	0.4
Public sector balance 4/	0.9	1.3	-0.2	0.2	0.2	0.2
Public sector debt (end of period) 4/	42.6	41.8	41.9	42.1	42.4	43.0
Monetary accounts (end of period, y/y percent change)						
Broad money growth	4.4	4.2	5.0	4.7	4.0	3.6
Narrow money growth	5.7	4.8	9.4	2.8	3.7	3.6
Credit to the private sector by depository corporations	5.6	4.2	4.6	5.8	3.1	3.8
Balance of payments (billions of U.S. dollars)						
Current account balance	27.8	43.4	44.1	32.4	31.8	30.1
(Percent of GDP)	6.9	10.5	9.7	6.4	6.0	5.4
Exports, f.o.b.	213.4	213.5	233.7	251.1	245.2	263.0
Growth rate (dollar terms)	-5.9	0.1	9.5	7.5	-2.4	7.3
Growth rate (volume terms)	-1.5	0.1	6.0	5.1	-3.6	5.5
Imports, f.o.b.	187.2	177.7	201.1	228.7	223.0	243.1
Growth rate (dollar terms)	-10.6	-5.1	13.2	13.7	-2.5	9.0
Growth rate (volume terms)	0.3	-2.5	7.2	7.7	-1.2	9.1
Capital and financial account balance 5/	-21.9	-30.6	-18.1	-25.1	-20.9	-30.1
Overall balance	5.9	12.8	26.0	7.3	10.9	0.0
Gross official reserves (including net forward position, end of period) (billions of U.S. dollars)	168.2	197.6	239.3	239.4	251.1	251.1
(Months of following year's imports)	11.4	11.8	12.6	12.9	12.4	11.5
(Percent of short-term debt) 6/	280.2	273.8	326.8	301.9	307.0	298.2
(Percent of ARA metric)	203.9	211.2	221.2	222.2	...	...
Forward position of BOT (end of period)	-11.7	-25.8	-36.7	-33.7	...	...
Exchange rate (baht/U.S. dollar)	34.2	35.3	33.9	32.3	...	...
NEER appreciation (annual average)	4.4	-3.2	4.3	4.3	...	...
REER appreciation (annual average)	2.6	-4.0	3.4	3.4	...	...
External debt						
(Percent of GDP)	32.7	32.0	34.1	31.9	32.0	32.4
(Billions of U.S. dollars)	131.1	132.2	155.2	160.9	169.3	180.4
Public sector 7/	20.6	22.6	31.5	35.7	36.2	36.5
Private sector	110.5	109.5	123.7	125.2	133.1	144.0
Medium- and long-term	58.3	56.7	59.0	65.0	69.4	77.9
Short-term (including portfolio flows)	52.2	52.8	64.7	60.2	63.7	66.1
Debt service ratio 8/	7.6	6.0	5.8	6.0	6.3	6.3
Memorandum items:						
Nominal GDP (billions of baht)	13,743	14,555	15,452	16,318	16,922	17,536
(In billions of U.S. dollars)	401.3	412.4	455.4	505.0	...	...

Sources: Thai authorities; CEIC Data Co. Ltd.; and IMF staff estimates and projections.

1/ This series reflects the new GDP data based on the chain volume measure methodology, introduced by the Thai authorities in May 2015.

2/ On a fiscal year basis. The fiscal year ends on September 30.

3/ Includes budgetary central government, extrabudgetary funds, and local governments.

4/ Includes general government and SOEs.

5/ Includes errors and omissions.

6/ With remaining maturity of one year or less.

7/ Excludes debt of state enterprises.

8/ Percent of exports of goods and services.



# THAILAND

## STAFF REPORT FOR THE 2019 ARTICLE IV CONSULTATION

September 11, 2019

### KEY ISSUES

**Context:** Thailand's robust policy framework and ample buffers continue to underpin its resilience to external headwinds. The authorities have taken measures to strengthen medium-term fiscal management and financial stability. The recent Financial Sector Assessment Program (FSAP) concluded that financial vulnerabilities appear to be contained and that the banking sector is resilient to severe shocks. At the same time, long-standing domestic and external imbalances persist, leaving the economy vulnerable to the global slowdown and trade tensions.

**Outlook:** Growth is projected to slow in 2019–20 to about 3 percent reflecting external and domestic headwinds. On the external side, the projected slowdown in global demand and escalation of trade tensions are expected to weigh on exports. Domestic factors include a weaker consumption growth—as the debt overhang weighs on credit demand and the drought depresses farm incomes.

**Policy recommendations:** Against this backdrop, policies should aim at boosting growth, while promoting domestic and external rebalancing and making growth more inclusive. Specifically:

- *Staff recommends a front-loaded fiscal impulse in FY 2020.* Thailand should use available fiscal space judiciously to spur domestic demand and support potential output. Implementation of macro-critical public infrastructure projects would also crowd in private investment.
- *Further monetary easing is appropriate.* The recent escalation in U.S.–China trade tensions, slowdown in global demand, delays in the enactment of the FY2019/20 budget, subdued inflation below target, and the moderation of the domestic financial cycle, all lend support to further monetary policy easing. This will also help dampen the cycle of portfolio inflows into Thailand and thus attenuate appreciation pressures.
- *Staff encourages the authorities to strengthen financial oversight, crisis management and resolution, and macroprudential policy, including by closing existing leakages.* This would allow macroprudential policy to continue to contain systemic risks and provide monetary policy the necessary space to effectively target inflation.
- *Structural reforms aimed at improving the implementation of public investment, strengthen social safety nets, and raise productivity in an increasingly digital economy, would boost growth and enhance its inclusiveness.* Addressing macro-relevant governance and corruption vulnerabilities is also fundamental. The start of the new government provides a timely opportunity to forge ahead with this concerted policy agenda.

Approved By  
**Kenneth Kang and  
 Zuzana Murgasova**

Discussions took place in Bangkok during July 4–19, 2019. The staff comprised Messrs. Leigh (head), Kashiwase, and Saenz, and Ms. Nadeem (all APD). The team was joined by Mr. Lopez Mejia (FSAP mission chief). Ms. Mahasandana, Executive Director, and Mr. Srisongkram (OED) accompanied the mission. Ms. Dao (APD) provided analytical inputs. Mr. Landicho (APD) coordinated the production of the report.

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## CONTEXT

**1. Thailand's robust policy framework and ample buffers continue to underpin its resilience to external headwinds.** The fiscal responsibility law enacted last year accompanied by the recent work on the medium-term fiscal framework has cemented the long-standing tradition of judicious management of the public finances. The authorities have also made commendable progress in improving the coverage and effectiveness of financial supervision and macroprudential policies which have contributed to financial stability. Nonresident capital inflows attracted by Thailand's strong fundamentals have surged lately, despite the cyclical slowdown driven in part by trade tensions.

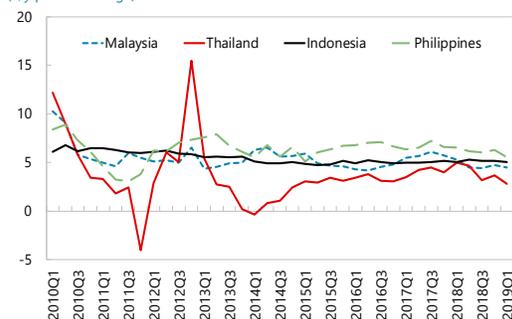
**2. At the same time, the economy continues to be challenged by domestic and external imbalances.** GDP growth has trailed behind regional peers for a better part of the last decade and inflation, investment, and employment rates have steadily declined since 2012. Weak domestic demand has contributed to below-target inflation and a large current account surplus for several years, which has reinforced exchange rate appreciation pressures, raised long-term competitiveness concerns, and led to excessive reserve accumulation.

### Thailand's Macro Fundamental in the Context of ASEAN-4

*Thailand's investment has generally lagged behind those of regional peers. Weak domestic demand has contributed to relatively low growth, low inflation, and a high current account surplus over the last few years.*

#### Real GDP Growth

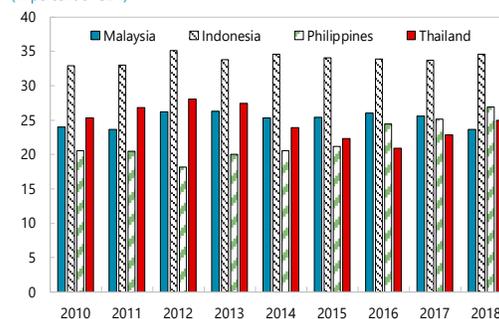
(Y/y percent change)



Sources: Haver Analytics; and IMF staff calculations.

#### Gross Investment

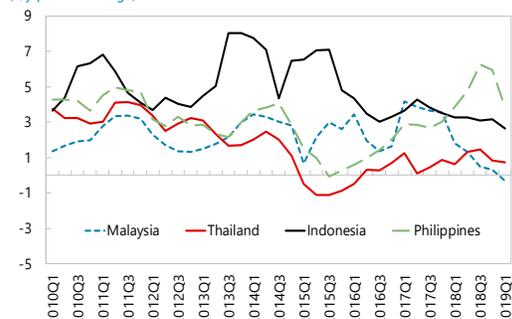
(In percent of GDP)



Sources: Haver Analytics; and IMF staff calculations.

#### Inflation

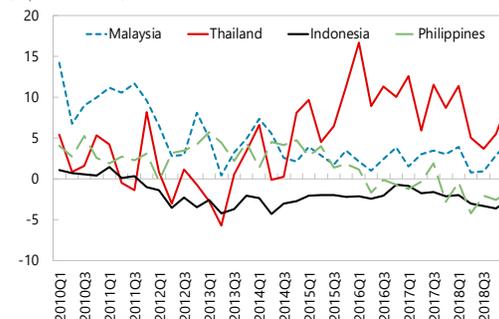
(Y/y percent change)



Sources: Haver Analytics; and IMF staff calculations.

#### Current Account Balance

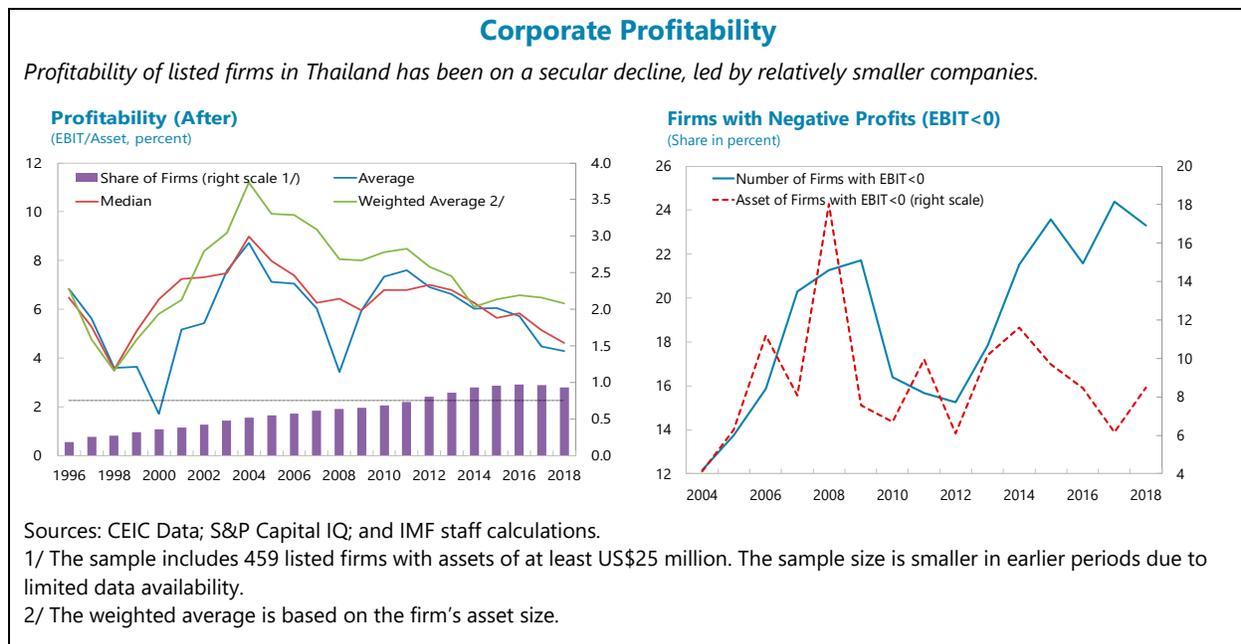
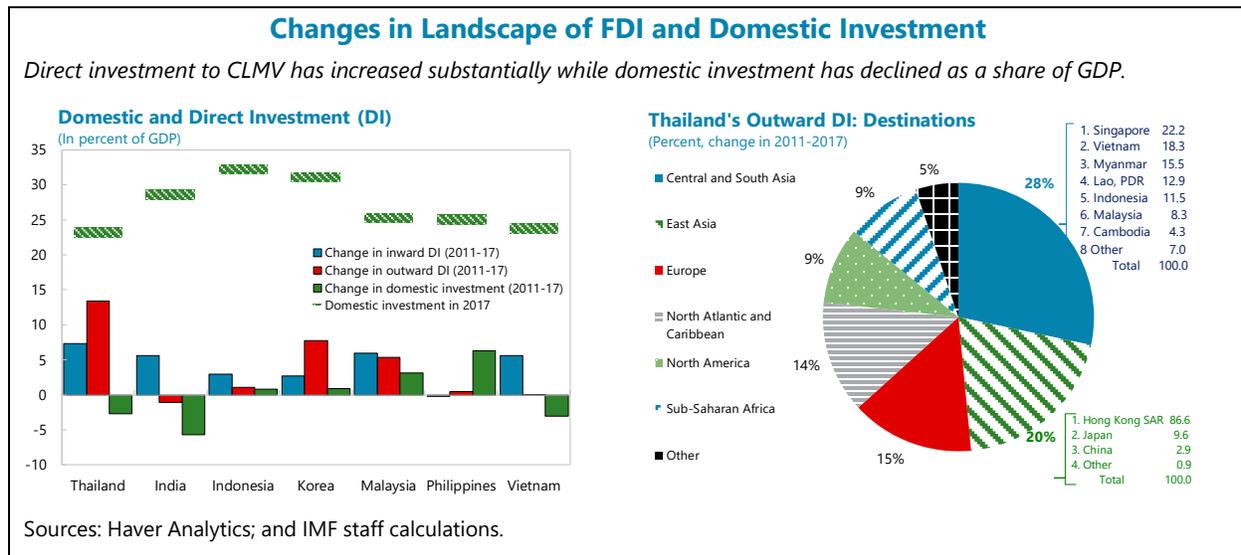
(In percent of GDP)

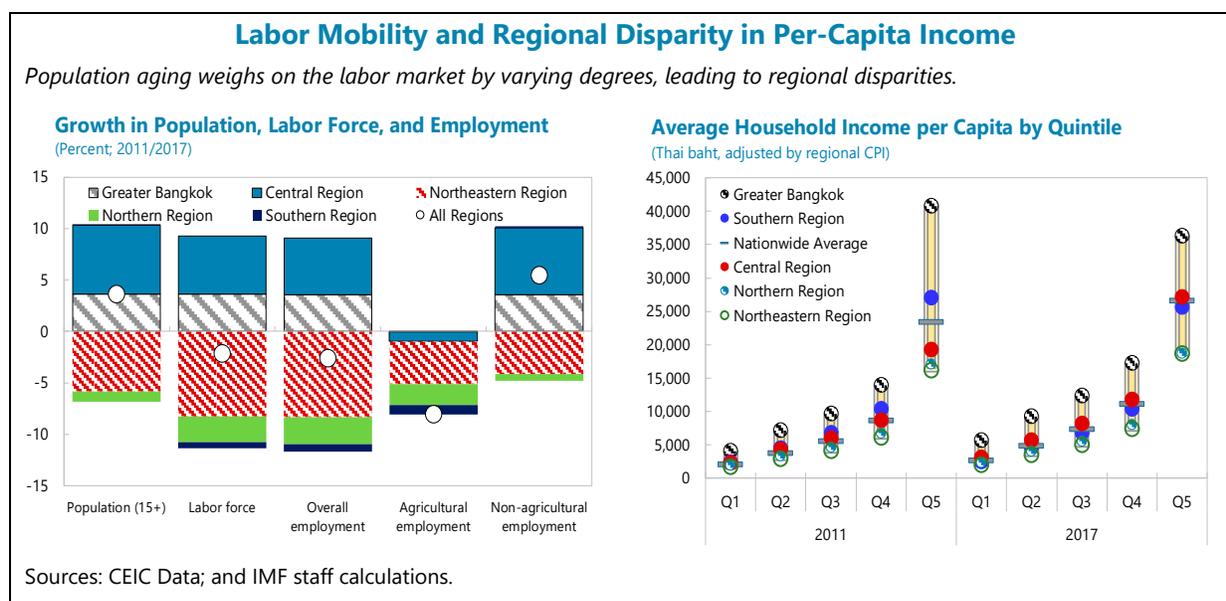


Sources: Haver Analytics; and IMF staff calculations.

**3. Structural factors have played a significant role in the macro imbalances, including weak inflation dynamics, low growth, a large current account surplus, and regional disparities.**

The high level of household debt constrains private consumption growth. Insufficient social safety net coverage, including the pension system, encourages precautionary savings especially at the lower income deciles. In addition, despite a large export sector, Thailand’s competitiveness has deteriorated due to low productivity growth and high wages relative to the region. As a result, multinational Thai firms have increased investment abroad, particularly in CLMV (Cambodia, Lao, Myanmar and Vietnam), to take advantage of lower labor costs and access to global supply chains. The profitability of small firms and their willingness to invest domestically have declined in the face of increasing global competition. These features have also manifested themselves in regional income disparities (Appendix III).

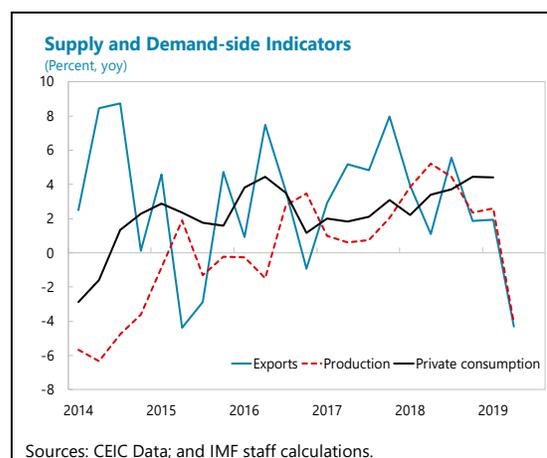




## RECENT DEVELOPMENTS, OUTLOOK, AND RISKS

*In the context of the global cyclical downturn and trade tensions, Thailand's growth is slowing. Inflationary pressures remain subdued. Risks to the near-term outlook are tilted to the downside, reflecting domestic and external headwinds.*

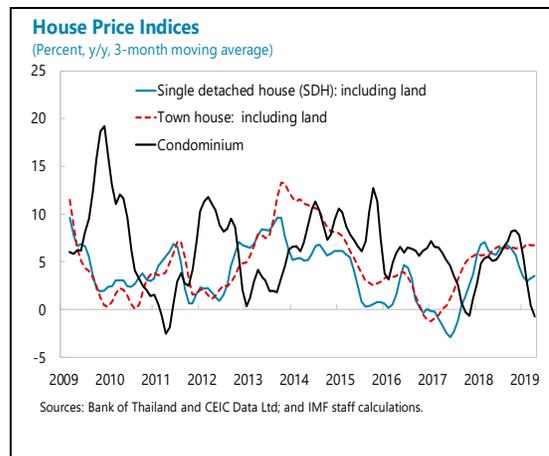
**4. A cyclical slowdown is underway.** Real GDP growth reached 4.8 percent year-on-year in 2018:H1 but declined to 3.4 percent in 2018:H2, and 2.8 percent and 2.3 percent in 2019:Q1 and 2019:Q2, respectively. Although private consumption held up, global trade tensions impacted Thai exports, particularly electronics, through the global value chains (GVC). Macro policies provided little support with a negative fiscal impulse in 2018 and a largely unchanged policy rate for most of the year. The Bank of Thailand's policy rate was cut by 25 basis points to 1.5 percent on August 7, 2019.



**5. Inflation dynamics remain weak.** Headline inflation averaged 1.1 percent in 2018 and declined to 0.5 percent in August 2019 on the back of food and energy prices, and core inflation also remained subdued at 0.5 percent. The output gap seems to be closing by some measures, although the combination of low inflation and a large current account surplus suggest a still negative gap.

**6. Credit and housing markets are also cooling down.** Total credit growth—including credit from nonresidents—moderated from 5.8 percent in 2018 to 4.8 percent year-on-year in 2019:Q1, led by declines in corporate borrowing. While loans to households picked up in 2018 and remained

buoyant through 2019:Q1—driven by auto loans and new mortgages—housing loan demand softened following the tightening of loan-to-value (LTVs) in April 2019, and condo prices declined by 1¾ percent (y/y) also reflecting weaker foreign demand. The housing market is already going through a period of adjustment consistent with the broad-based cooling of the Thai economy.

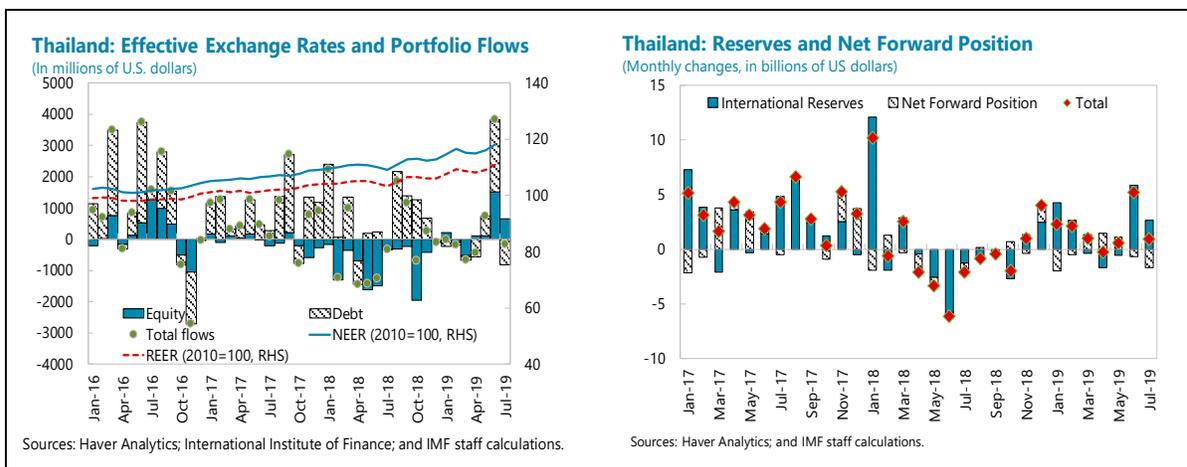


**7. The current account surplus has narrowed sharply.**

The decline of the surplus to 6.4 percent of GDP in 2018 from 9.7 percent in 2017 was driven partly by the U.S.-China trade tensions, which weighed on exports. Data as of end-June 2019 show the continued impact of trade tensions, as exports contracted by 2.2 percent y-o-y, driven by electronics and computer parts, with a 14.9 percent decline in China-bound goods and a 2.2 percent decline in U.S.-bound goods. Imports declined by 9.4 percent y-o-y, with lower capital goods, raw materials, and intermediate goods imports. Tourism receipts have also softened, led by a slowdown in Chinese tourists.

**8. A strong external position and looser global financial conditions have contributed to the recent appreciation pressures.**

Inflows have been only partially offset by rising outward FDI and other investment flows. Since December 2018, the baht has appreciated by about 5.5 percent against the U.S. dollar (4.7 percent in nominal effective terms through June), making it one of the best performers in the region. While evidence points to foreign exchange (FX) sales during the 2018 sell-off period, FX intervention has been largely one-sided (purchases) since November 2018. The level of reserves increased by nearly US\$11 billion by end-June 2019 to US\$250.3 billion, well above Fund adequacy metrics. Since May 2019, capital inflows have further accelerated, contributing to a sharper appreciation of the baht. On July 12, 2019, the Bank of Thailand announced measures aimed at curtailing short-term speculative capital inflows (a reduction in the limit of the outstanding balance for nonresident baht accounts) and the tightening of the reporting requirements for nonresident holdings of debt securities issued in Thailand.



**9. The external position remains substantially stronger than warranted by medium-term fundamentals and desired policies.** Based on the updated External Balance Assessment (EBA) model, and accounting for Thailand-specific factors, staff assess the cyclically adjusted current account (CA) gap to be around 3.2 percent to 6.4 percent of GDP (Appendix IV). Given the structural underpinnings of the macro imbalances (paragraph 3 and Appendix III), substantive policy effort to support domestic demand should help narrow the underlying savings-investment balance over time. Specifically, over the medium term, a mutually reinforcing macro policy stimulus, led by a fiscal expansion, and structural reforms should support domestic demand and gradually lower the current account surplus, with a growth-driven real appreciation.

**10. Growth is projected to slow in 2019–20 reflecting external and domestic headwinds.** Staff forecast growth to average about 3 percent. On the external side, the projected slowdown in global demand and escalation of trade tensions are expected to weigh on exports. Domestic factors include a weakening in consumption growth—as the debt overhang weighs on credit growth and the drought depresses farm incomes—and a slower pace of inventory accumulation. Fiscal policy support through public investment, which will be tepid in the remainder of 2019 and in 2020:H1, is assumed to take place in 2020:H2, as contracts for the main Eastern Economic Corridor (EEC) projects are signed and construction begins. This would allow for a modest loosening in the fiscal stance in 2020, after two years of negative stimulus. Although trade tensions would slow exports, challenges in engineering a large fiscal expansion suggest only a slight narrowing of the current account surplus to 6 percent of GDP in 2019. Over the medium term, private consumption and investment are expected to strengthen, supported by dissipating political uncertainty and a scale-up in public investment. This would also contribute to external rebalancing as demand feeds into higher imports. Public debt is expected to reach 45 percent of GDP by 2024—well below the 60 percent ceiling established in the Fiscal Responsibility Law—and to stabilize thereafter as the public investment scale up comes to an end.

**11. Risks to the outlook are tilted to the downside (Appendix II).** External risks include further escalation of protectionism<sup>1</sup> and restrictions to investment and trade in technology threatening the global trade system; intensification of geo-political tensions and security risks; a potential slowdown in China, Europe, and the United States; and lower-than-expected tourist arrivals, mainly from China. On the domestic side, a split lower house could potentially slow the pace of critical legislative reform agenda, including support for infrastructure projects. In addition, over the medium term, private domestic demand could fail to pick up owing to a prolonged household debt overhang and low productivity growth, slowing the external rebalancing. Upside risks include a faster-than-expected implementation of reforms and, in the medium term, reallocation of some of China's production to Thailand and other countries in the region in response to U.S.-China trade tensions.

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<sup>1</sup> In the event of further escalation in U.S./China trade tariffs, benefits from potential trade diversion would, at least partially, offset negative spillovers to Thailand along the value chain, particularly in sectors that compete with Chinese exports. However, trade diversion may only occur with a long delay and tariffs may also lead to lower global growth and therefore lower demand for Thai exports.

**12. The authorities broadly shared the staff’s assessment of the economic outlook and risks.** They expect the Thai economy to continue expanding albeit at a slower pace than previously assessed, as the export momentum moderates amid the heightened uncertainties surrounding the U.S.-China trade tensions. Nevertheless, they hold a more optimistic view than staff over the next two years with the output gap closing over the same period. They noted that domestic demand is still holding up, with continued growth in consumption and private investment, although, going forward, they expect consumption to be constrained by the elevated household debt. They agreed that risks remain tilted to the downside.

**13. The authorities reiterated that structural policies are key to addressing external imbalances and that the exchange rate should not be overburdened with the adjustment.** They welcomed staff’s assessment of the narrowing current account gap and stressed that this partly reflects ongoing structural rebalancing efforts. In line with the staff projections, they expect the CA surplus to narrow further over the medium term, supported by ongoing implementation of structural reforms and expected investment outlays, especially from the EEC projects in 2020. In this regard, they appreciated staff’s greater emphasis on macro- and structural policies in their recommendations to address the CA gap.

**14. The authorities urged caution in interpreting the results of the EBA assessment.** They argued that the current assessment relies too heavily on the current account approach, which has large unexplained residuals, and does not take into consideration the impact of capital flows. More could also be done to account for Thailand-specific factors, such as rapid population aging. They also reiterated that the assessment model does not reflect the large real appreciation realized over the past few years and could overstate the size of imbalances and the extent of currency valuation.

## SUPPORTING DOMESTIC DEMAND AND EXTERNAL REBALANCING

*Policies should aim at boosting growth while promoting domestic and external rebalancing and enhancing inclusive growth. This strategy should include: (i) using fiscal space and reforms to strengthen domestic demand; (ii) monetary easing—cutting the policy rate given further deterioration of both domestic and global economic conditions—while using macroprudential tools to preserve financial stability; and (iii) lifting potential growth in a broad-based manner to enhance inclusiveness. The start of the new government provides a timely opportunity to forge ahead with this concerted policy agenda.*

### A. Using Fiscal Space and Fiscal Reforms to Spur Domestic Demand

**15. Staff recommends a more front-loaded fiscal impulse in FY 2020.** Thailand has some fiscal space and staff recommends a frontloaded increase in public investment over and above the 5-year scaleup (from 5.4 percent to about 6.4 percent of GDP) already assumed in the baseline. The public debt ratio is projected to increase by 2.5 to 3 percentage points over the projection period to 45 percent, well below the 60 percent ceiling established in the fiscal responsibility law. An

additional 5 percentage points of GDP in public investment on macro-critical projects (e.g., EEC) is recommended over the next three years, which would crowd in private investment through PPP projects and increase productivity. With the export outlook uncertain due to trade tensions and risks to the current domestic demand recovery growing, the authorities should push ahead with public investment projects with a high multiplier impact. Assuming that they are financed with public debt to maximize the short-term impact on domestic demand, these projects would add about 1½ p.p. in fiscal stimulus and about 1 p.p. in annual real GDP growth during 2020–21. Long-run real GDP would also increase by about ¼–½ percentage points as public and private investment add to the capital stock and productivity.<sup>2</sup> The impact on the public debt ratio, an additional 2 percentage points of GDP, would leave public debt at 47 percent by 2024.

**16. Implementing a productive infrastructure scale-up would require leveraging on capacity development (CD) work and strengthening operational aspects of the procurement law.** Staff recommends stepping up efforts to implement past Fund CD recommendations to improve public investment management and maximize the return to capital. These include simplifying procurement procedures and appeal mechanisms, especially for SOEs; transparency in the land expropriation process; and publication of ex-post audits of investment projects. At the same time, Thailand's recently-approved procurement law is comprehensive, covering all stages of the procurement cycle, provides a good framework for controlling costs in public investment projects, and is strong on governance and anti-corruption, including an integrity pact. Staff recommends strengthening the operational aspects of the procurement law, including limiting common members across various subcommittees and strengthening the complaints process to include both actual and potential bidders. Consistent with the IMF's Fiscal Affairs Department (FAD's) Public Investment Management Assessment (PIMA) CD report, staff also recommends the restructuring of underperforming SOEs, increasing market access and strengthening regulation, bringing all capital spending on the budget, improving capacity for project appraisal, systemic audits of investment projects, and strengthening risk monitoring including for PPPs.

**17. Judicious use of fiscal space should be combined with fiscal reforms that spur domestic demand, and foster labor force participation and more inclusive growth.** The authorities have implemented a social assistance program over the last two years amounting to about 0.5 percent of GDP per year that in principle, is directed to low-income earners. This program has not only provided cash transfers, but also training aimed at improving the work opportunities of this population. As per last year's CD recommendations, broadly cost-neutral improvements to the social safety net program should be part of the structural agenda. These include prioritizing broad coverage of the most vulnerable households and enhancing the targeting of transfers to ensure fiscal sustainability. In addition, consolidation of the many different programs scattered across different government agencies could help improve the overall effectiveness of the social safety net. More generally, additional efforts in active labor market policies and other inclusive policies could improve labor force participation and attenuate the impact of aging on growth. The new cabinet has

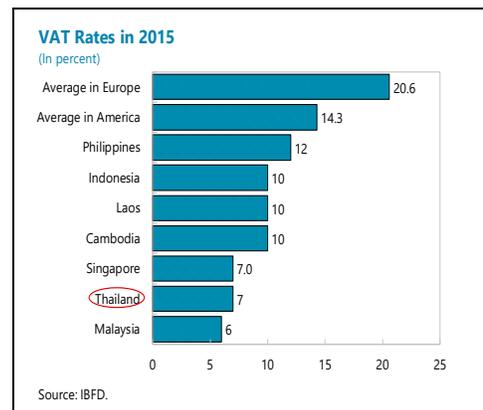
<sup>2</sup> The 2018 Selected Issues Paper (Chapter 1) presents the analytical work that underpins this policy advice. <https://www.imf.org/en/Publications/CR/Issues/2018/06/04/Thailand-Selected-Issues-45930>

recently approved a social expenditure package, which focuses on increased welfare spending and a small relief to farmers, while considering a gradual adjustment in the minimum wage. While supportive of measures to protect the poor and vulnerable households, staff notes the need to minimize any distortive impact by designing them to ensure incentive compatibility.

**18. The authorities agreed that expansionary fiscal policy will be key to maintaining growth momentum.** They were more optimistic than staff that the slight delays in the FY 2020 budget disbursement will not materially affect public expenditure: first, there is a provision for the FY 2019 budget to cover current spending before the FY 2020 budget comes into effect; second, delays on new projects for which disbursements were planned in the latter half of the fiscal year would be temporary. They reaffirmed their support for public investment projects, particularly in the EEC, which they expect will uplift Thailand’s competitiveness over the longer term. They remained positive that most public investment projects would be on track.

**19. In the medium term, revenue mobilization should address government development programs and long-run social protection needs.**

To do so, the revenue-to-GDP ratio needs to increase by about 3 percent of GDP on a permanent basis. In line with the recent FAD CD on a medium-term revenue strategy (MTRS), the authorities have started implementing measures to improve revenue administration, notably revisions to the personal income tax code and the enactment of a new law that allows the Revenue Department to access bank information on accounts with high transaction frequency. They also requested Fund CD to improve compliance in the hotel industry and e-commerce. In the near term, the authorities should continue to implement the MTRS recommendations, focusing on revenue administration reforms. In the medium term, once domestic demand has strengthened, tax policy reform should include a broader coverage of personal income, wealth, corporate income, and energy-related taxes, as well as a higher VAT rate. The authorities are currently working on revenue-neutral changes in tax policy that would allow for a more efficient and growth-friendly tax system.



**Does Thailand Have Fiscal Space?**

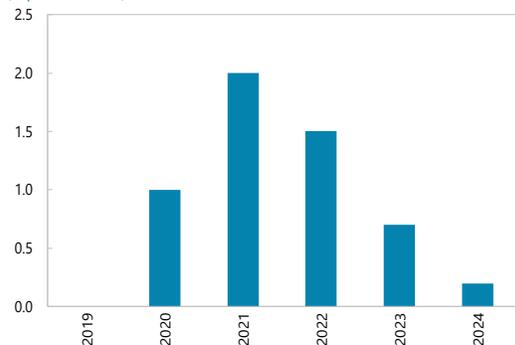
<b>On the positive side:</b>	<b>On the negative side:</b>
The overall fiscal balance of the public sector has been close to zero in recent years suggesting a good track record of fiscal discipline.	Quasifiscal activities by some SOEs are not properly tracked or reported. Risks of contingent liabilities are hard to quantify with the available information.
The current cost of debt financing is low but likely to increase in the medium term. Now is the time for debt financing at fixed rates for new debt issuance.	Age-related spending is projected to increase steadily for demographic reasons, threatening fiscal sustainability beyond the medium term.
Public debt and gross financing needs paths are below standard vulnerability benchmarks and below the Cabinet debt ceiling of 60 percent of GDP.	
<b>Bottom line:</b> Thailand has some fiscal space that should be used wisely.	

### Thailand—Alternative Scenarios Under Fiscal and Monetary Stimulus

A debt-financed public investment push totaling 5 percent of GDP and a 50 bps temporary cut in the policy rate would crowd in private investment....

#### Change in Public Investment

(In percent of GDP)

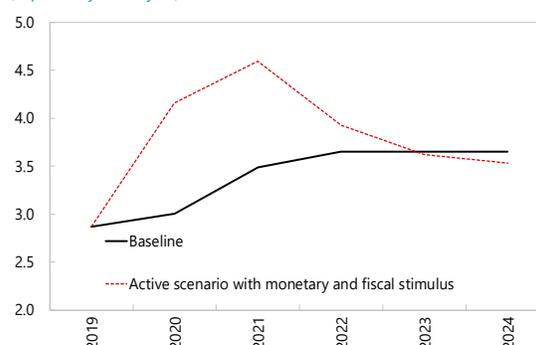


Source: IMF staff calculations.

and support growth up to 1.1 p.p. higher in the short and medium term....

#### Growth

(In percent, year-on-year)

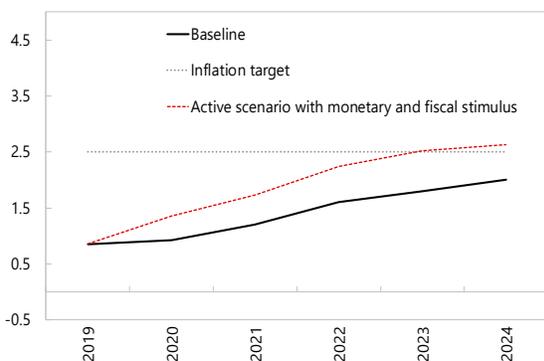


Source: IMF staff calculations.

Stronger domestic demand would push Inflation up about 0.7 p.p. towards the target range...

#### Inflation

(In percent, year-on-year)

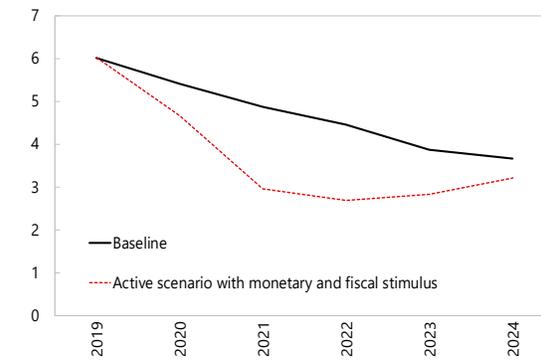


Source: IMF staff calculations.

...and would frontload external rebalancing, cutting the CA surplus by 1 3/4 p.p. of GDP in the short run.

#### Current Account Balance

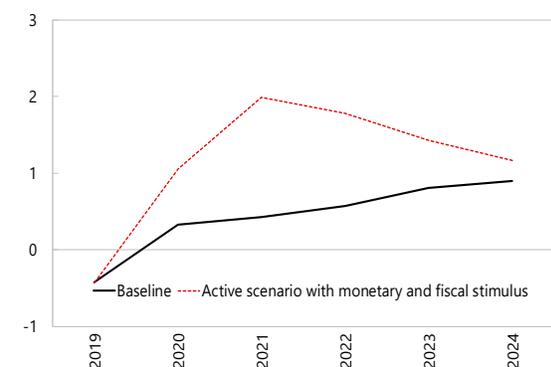
(In percent of GDP)



Source: IMF staff calculations.

#### Fiscal Deficit

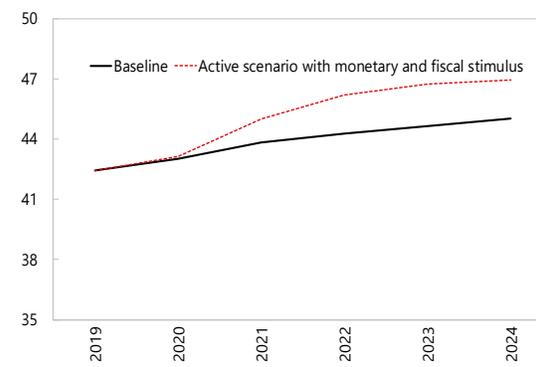
(In percent of GDP)



Source: IMF staff calculations.

#### Public Debt

(In percent of GDP)



Source: IMF staff calculations.

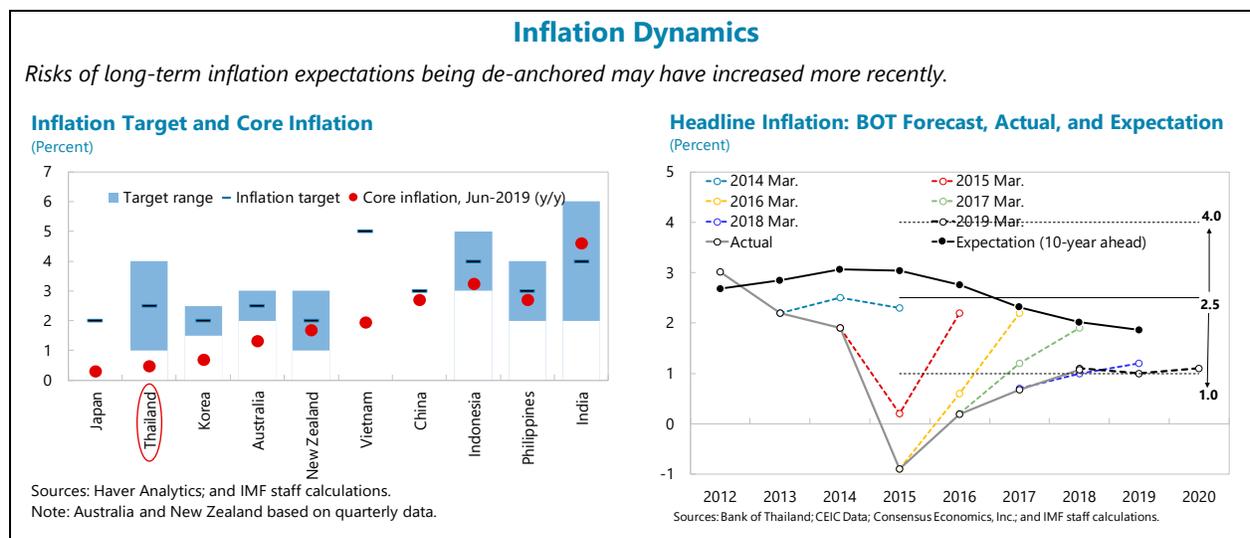
**20. The authorities noted their strong commitment to long-term fiscal sustainability.** They agreed that enhancing domestic revenue mobilization would be critical to meeting social spending needs, particularly programs to improve social welfare and educational outcomes, agreed with the need to strengthen revenue administration in the short term and to mobilize additional resources in the medium and long term. They noted that government obligations relating to population aging and PPP projects were likely to increase steeply beyond the five-year horizon, thereby limiting fiscal space.

## B. Steering Inflation Back to Target and Supporting External Rebalancing

**21. Staff welcomes the BOT's recent decision to cut the policy rate and recommends further monetary easing.** The delay in the FY 2020 Budget and the implied lack of fiscal support in the remaining months of 2019 will likely constrain domestic demand. Subdued inflation, the moderation of the domestic financial cycle and further deterioration of both domestic and global cyclical conditions—now reinforced by the recent escalation in trade tensions—all lend support to further monetary policy easing. The rate cut also has the added benefit of attenuating excessive appreciation pressures and potentially dampening speculative portfolio inflows into Thailand. If downside risks materialize—including further re-escalation of trade tensions—deeper cuts to the policy rate should be considered. Monetary easing would help curtail risks of low inflation becoming entrenched and would support domestic demand and external rebalancing in the short term. Policies should also aim to strengthen the monetary policy transmission, including more effective communication. Guidance on the commitment to meet the inflation target would enhance monetary policy effectiveness by strengthening the expectations channel.

**22. Monetary policy should focus on attaining the inflation target, with macroprudential policy targeted to address financial stability concerns.** “Leaning-against-the-wind” to mitigate financial risks can imply tighter monetary policy than justified by flexible IT with attendant output losses. Instead, financial stability risks should be primarily addressed by macroprudential policies, while monetary policy should focus on targeting inflation as its primary objective.<sup>3</sup> Consistent with the Financial Sector Assessment Program (FSAP) recommendations (see paragraph 32), this approach would require that the authorities address leakages in their macroprudential policy (MPP) toolkit to make it effective. Continued application of macroprudential policies in tandem with monetary easing would be important to preserve financial stability.

<sup>3</sup> The 2018 Selected Issues Paper (Chapter 3) <https://www.imf.org/en/Publications/CR/Issues/2018/06/04/Thailand-Selected-Issues-45930> and the staff paper on the nexus between macroprudential policies and monetary policy for the forthcoming BOT-IMF conference provide the analytical underpinnings of this policy advice.



**23. The BOT stressed that the current policy stance remains appropriately accommodative and reiterated its concerns of further monetary easing on financial stability risks.** They noted that appropriate policy needs to balance the trade-offs between output, inflation, and financial stability objectives. The authorities stressed that structural factors have contributed to the prolonged disinflationary environment while economic fundamentals remain robust. They expect the output gap to close over the forecast horizon, and deem inflation expectations well anchored. They noted that monetary policy decisions are data dependent, taking into account sources of shocks, and effectiveness and availability of policy space for each policy instrument, given that EMs like Thailand have a non-zero lower bound.

**24. A flexible exchange rate should be the first line of defense against external shocks.** FX intervention should be limited to avoiding disorderly market conditions (DMC), allowing the flexible exchange rate to further contribute to strengthening domestic demand and external rebalancing. Excessive FXI could also unnecessarily delay optimal adjustment in demand and prices to permanent real or financial shocks. The authorities' capacity to affect the real exchange rate through FXI may be limited to the very short term, requiring large and continuous FXI to offset the impact of a persistent shock. Staff recommends the publication of FXI data (with an appropriate lag to guard against market sensitivities), which would enhance communication and strengthen the commitment to the inflation target by reinforcing the view that FX intervention is being used for its stated purpose (i.e., to address DMC).

**25. The authorities reiterated their commitment to exchange rate flexibility but viewed the recent sharp appreciation of the baht as a result of spillovers from AEs that could pose macroeconomic stability risks.** According to the authorities, nearly 6 percent nominal appreciation in 2019 was not warranted by economic fundamentals and was driven mainly by the shift in investor sentiment as major central banks shifted towards an easing bias, compounded by the baht's perceived safe-haven status. They noted that large and rapid exchange rate movements could pose stability risks especially for small open economies, which usually are highly sensitive to capital flows

and exchange rate fluctuations, and whose financial markets are dwarfed by the size of cross-border flows. The authorities differed from staff's views on how to cope with recent capital inflows and stressed the need to factor in the impact of market dynamics on exchange rate movements. They stressed that a fully flexible exchange rate could become a shock amplifier in the face of strong appreciation driven by self-fulfilling expectations and herding behavior in the market, and FXI could be a useful short-term tool in the policy toolkit to cope with exchange rate volatilities. In their view, Thailand experiences such herding behavior especially when there are major push factors (i.e., policy announcement from AEs), which often leads to overshooting of exchange rate, particularly in the thin market sessions.

**26. The authorities welcomed the Fund's ongoing work on the Integrated Policy**

**Framework (IPF).** The IPF considers a combination of policy tools—namely monetary, exchange rate, macroprudential policies, and other policy levers—to address the multi-faceted challenges related to external spillovers. They noted that to deal with the challenges from the global financial conditions, small open economies would need an integrated, comprehensive policy package. They emphasized that using the policy rate to respond to short-term challenges such as sharp exchange rate appreciation would be sub-optimal, given its blunt nature, lagged transmission, and possible unintended consequences on financial stability. A more appropriate choice would be to use targeted measures that directly address the sources of risks.

**27. The authorities maintained that the disclosure of FX intervention data, even with a lag, might compromise their FX market operations.** Such information may induce speculative activities leading to disorderly exchange rate movements. They did not agree that publication would enhance monetary policy communication or commitment to the inflation target. They viewed the current biweekly release of the international reserves statistics as adequately transparent and providing sufficient information to the market.

**28. The Fund has assessed the recent reduction in the limit on nonresident baht accounts (NRBS and NRBA) introduced by the Bank of Thailand (BOT) to be a tightening of an existing residency-based capital flow management measure (CFM).<sup>4</sup>** The objective of the measure is to discourage short-term speculative capital inflows—fueled by global financial conditions—that have led to a rapid appreciation of the baht and heightened exchange rate volatility. While this measure could create distortions and increase operational cost and operational risk for investing in the baht, it would likely not have a material impact on net capital flows beyond the immediate horizon, in part due to the still large current account surplus and consequent expectation of baht appreciation. In line with the Institutional View on capital flows (IV), management of capital flows should be addressed primarily through macroeconomic, structural and financial policies. In the context of loosening of global financial conditions, a flexible exchange rate should serve as a key shock absorber in response to volatile and surge in capital flows, while targeted macroprudential policies can address possible financial stability risks, including the unhedged FX exposure for SMEs. The

<sup>4</sup> The second measure that tightened the reporting requirements of nonresident holdings of debt securities issued in Thailand with respect to ultimate beneficiary owners (UBOs) is not a CFM as it aligns the requirement that already exists for resident accounts with those of non-residents accounts.

delay in the formation of the new government has led to a temporary postponement of the FY 2020 Budget. However, the recent taking of office of the new government provides an opportunity to use the policy space, to push for an ambitious macro policy stimulus package to boost domestic demand, address external rebalancing and provide a robust and durable solution to attenuating volatile capital flows. Thus, staff recommends phasing out the reduction in NRBS/NRBA limits consistent with the IV, replacing them with a comprehensive package of macroeconomic, financial and structural policies. This would complement the authorities' efforts to liberalize capital outflows in an appropriately paced and sequenced manner (see paragraph 30).

**29. The authorities noted that the two measures announced in July 2019 are part of a multipronged approach where a combination of policy tools can more effectively address multi-faceted challenges confronting Thailand.** They pointed out that, in the current context of monetary easing in advanced economies, nonresident speculative flows were one of the factors leading to rapid exchange rate appreciation that did not reflect Thai fundamentals and were a potential source of financial risk through their impact on unhedged SMEs. While structural measures would take time to implement, including the gradual liberalization of capital outflows, space for managing pace of currency movement through monetary easing was limited by the potential impact of low interest rates on financial stability. They noted that the NRBA/NRBS are settlement accounts to facilitate nonresidents' transactions and that lowering the end-of-day outstanding balances is merely an adjustment in the degree of facilitation. They also consider the measure could potentially encourage investors toward more productive investment. The additional reporting requirements of ultimate beneficiary owners (UBOs) would help enhance the monitoring of nonresidents' investment behavior and was not expected to impose a significant burden on legitimate investors. They noted that these requirements are in line with existing visibility of domestic investors and similar measures are already in place in a number of countries.

**30. The BOT continues to pursue a gradual and prudent liberalization of the capital account.** By facilitating greater diversification by resident investors and more effective private FX risk management, this process should reduce the impact of non-resident capital flows and exchange rate volatility over time. Since 2007, the BOT has been gradually relaxing major capital outflow regulations, including the removal of limits on outward direct investment and amount limits on institutional and retail investors. More flexibility has also been provided to Thai companies in managing foreign exchange risk exposures and allowing them greater access to various hedging instruments. In 2019, the BOT is continuing a foreign exchange regulation reform that started in 2017, with the goal of enhancing ease of doing business, with measures that include: (i) the relaxation of repatriation requirements by exporters; (ii) streamlining rules on outflows and foreign currency deposit accounts; and (iii) allowing all retail investors, regardless of their asset sizes, to invest in securities abroad without the need to go through local intermediaries up to certain limits.

## C. Preserving Financial Stability

**31. Financial stability risks appear contained although pockets of vulnerability remain.** The Financial Stability Map ranks Thailand’s banking sector risks well within that of comparable EMs. The Financial Soundness Indicator map (also specific to the banking sector) shows low risks to banking system health. The financial system is well positioned to cope with most shocks—the recently concluded FSAP stress tests and sensitivity analysis on solvency and liquidity indicate that the largest banks can withstand an adverse scenario similar to the experience during the Asian Crisis. Systemic risk analysis and monitoring has improved, which led to a better identification of vulnerabilities by the BOT. The BOT designated five Domestic Systemically Important Banks, which are required to maintain higher capital and are subject to more rigorous supervisory measures. Pockets of vulnerability remain associated with high household indebtedness (including members of financial cooperatives) and signs of weakness in some corporates and SMEs. Non-performing loans (NPLs) have also been rising among the young cohort groups and SMEs.

**32. Staff encourages the authorities to implement the recent FSAP recommendations, including:**

- a. Strengthening the macroprudential framework and policies.** To that end, it would be important to narrow the membership of the Financial Institutions Policy Committee (FIPC) (see bullet below) and clearly define the roles of FIPC and the Monetary Policy Committee to help ensure that systemic risks are primarily dealt with macroprudential tools. It is also key to address the current leakages in the BOT’s macroprudential toolkit. Thailand’s MPP coverage of Specialized Financial Institutions (SFIs), cooperatives, and other nonbank financial institutions is limited, potentially affecting the potency of the MPP toolkit. Existing LTV and debt-to-income (DTI) limits should be extended to a broader set of institutions including financial cooperatives and other nonbanks (and to SFIs in the case of DTI on personal loans). Furthermore, comprehensive debt-service-to income (DSTI) limits should be introduced covering all loans to consumers. The ongoing consideration by the BOT of debt service ratio (DSR)-related measures is welcome. This will help curb household debt in a holistic way based on the borrowers’ capacity to service their overall debt.
- b. Enhancing the operational independence and accountability of supervisory agencies while improving further the inter-agency coordination.** While there is no objective evidence of lack of independence of the supervisory agencies, the potential for interference would diminish by reducing the Ministry of Finance (MOF) involvement in prudential issues and eliminating cross directorships across the supervisory agencies. Policy coordination could take place instead by establishing an overarching body outside the BOT with the power to make recommendations to member agencies with a “comply or explain” mechanism. The overarching body (comprising all supervisory agencies, the Ministry of Agriculture and Cooperatives (MoAC), the Deposit Protection Agency, the Financial Institutions Development Fund and the MOF) would help reduce the inaction bias of regulators, strengthen accountability, and enhance coordination across all relevant agencies. The power of the overarching body to issue recommendations

would encourage relevant regulators to take action, while safeguarding the operational independence and effectiveness of the regulators over the long term.

- c. Harmonizing the regulatory framework for commercial banks and SFIs.** The BOT should be allowed to issue regulations related to SFIs or take corrective actions (without the approval of the MOF) at par with those of commercial banks. To that end, it would be important to prepare a roadmap with milestones for bringing regulation and supervision of the three largest retail-deposit-taking SFIs at par with those of commercial banks.
- d. Defining and initiating the implementation of a regulatory and supervisory regime for financial cooperatives that is proportionally equivalent to that applied in the banking system.** In addition, it is important to address the potential over-indebtedness of members of these institutions, including by defining maximum debt-to-income (DTI) ratios and requiring thrift and credit cooperatives (TCCs) and credit unions (CUs) to report to the National Credit Bureau to help ensure that their borrowers' overall debts are taken into account by other lenders.
- e. Enhancing the crisis management framework.** It is key to develop resolution toolkits, strengthen deposit insurance and emergency liquidity assistance (ELA), and align resolution powers with the key attributes through amendments to the related legislation.
- f. Addressing AML/CFT deficiencies leveraging on the Fund's recent CD work.** The authorities should continue to strengthen implementation of a risk-based approach to supervising banks and other financial institutions for AML/CFT compliance, including enforcement of dissuasive and proportionate sanctions. The authorities should in the near-term pass legislation currently being prepared to address the deficiencies identified by the Asia Pacific Group in 2017, some of which pose governance and corruption vulnerabilities. These include expanding the coverage of the AML/CFT framework to lawyers and accountants, verification of beneficial owners, improving the quality of suspicious transaction reports, and identification of sources of wealth of politically exposed persons.

**Thailand: Financial Soundness Indicator Map 1/**

	2014:Q4	2015:Q4	2016:Q4	2017:Q4	2018:Q1	2018:Q2	2018:Q3	2018:Q4
<b>Overall Rating</b>	M	M	L	L	L	L	L	L
<b>Credit cycle of all financial corporations</b>	M	M	L	L	L	L	L	L
Change in credit / GDP ratio (pp, annual)	3.2	3.4	-2.5	-1.6	0.2	-0.1	0.8	-0.4
Growth of credit / GDP (% , annual)	2.2	3.0	-1.8	-1.3	-1.1	0.2	-0.1	0.6
Credit-to-GDP gap (st. dev)	-1.2	-0.7	-0.1	1.5	1.3	1.4	1.8	1.8
<b>Balance Sheet Soundness of Depository Corporations 2/</b>	L	L	L	L	L	L	L	L
<b>Balance Sheet Structural Risk</b>	L	L	L	L	L	L	L	L

## Thailand: Financial Soundness Indicator Map 1/ (concluded)

	2014:Q4	2015:Q4	2016:Q4	2017:Q4	2018:Q1	2018:Q2	2018:Q3	2018:Q4
<i>Deposit-to-loan ratio</i> 3/	104.0	102.5	103.2	103.8	105.1	103.1	101.7	101.8
<i>FX liabilities % (of total liabilities)</i>	1.5	1.8	1.7	1.6	1.5	1.6	1.4	1.9
<i>FX loans % (of total loans)</i>	5.5	5.8	5.2	4.6	4.2	4.6	4.5	4.7
<b>Balance Sheet Buffers</b>	L	L	L	L	L	L	L	L
<b>Leverage</b>	L	L	L	L	L	L	L	L
Leverage ratio (%)	11.7	12.3	12.8	12.8	12.5	12.6	13.0	12.8
<b>Profitability</b>	L	L	L	L	L	L	L	L
ROA	1.7	1.4	1.4	1.2	1.3	1.4	1.3	1.3
ROE	14.7	11.1	10.7	9.1	9.5	9.9	9.7	9.4
<b>Asset quality</b>	L	M	M	L	L	L	L	L
NPL ratio	2.3	2.7	3.0	3.1	3.1	3.1	3.1	3.1
NPL ratio change (% annual)	0.1	16.4	11.3	2.9	-0.6	-0.8	-1.2	0.4
<b>Balance Sheet Soundness of Commercial Banks</b>	L	L	L	L	L	L	L	L
<b>Balance Sheet Structural Risk</b>	L	L	L	L	L	L	L	L
<i>Deposit-to-loan ratio</i> 3/	96.7	96.5	96.8	93.6	92.7	93.7	92.5	94.1
<i>FX liabilities % (of total liabilities)</i>	9.0	9.0	8.7	8.9	8.2	8.5	8.5	8.7
<i>FX loans % (of total loans)</i>	8.1	8.7	7.9	6.9	6.2	6.9	6.8	7.0
<b>Balance Sheet Buffers</b>	L	L	L	L	L	L	L	L
<b>Leverage</b>	L	L	L	L	L	L	L	L
Leverage ratio (%)	11.8	12.4	12.8	12.7	12.4	12.5	13.0	12.8
<b>Profitability</b>	L	L	L	L	L	L	L	L
ROA	1.6	1.3	1.3	1.2	1.2	1.3	1.3	1.2
ROE	14.6	11.2	10.4	9.2	9.6	10.0	9.8	9.5
<b>Asset quality</b>	L	M	M	L	L	L	L	L
NPL ratio	2.2	2.6	2.8	2.9	2.9	2.9	2.9	2.9
NPL ratio change (% annual)	1.0	18.7	10.0	3.0	-0.9	-1.9	-2.1	-0.2

Source: IMF staff calculations.

1/ The latest data is based on 2018:Q4. Credit cycle analysis is based on loans and securities by all financial corporations, including depository and nonbank institutions. Due to data constraints, balance sheet soundness analysis excludes credit cooperatives and small institutions, which represent 9.8 percent of total assets of depository corporations.

2/ Depository Corporations include commercial banks and special financial institutions.

3/ Deposits and loans exclude interbank data.

### 33. A multi-pronged approach to address the private sector debt overhang is warranted.

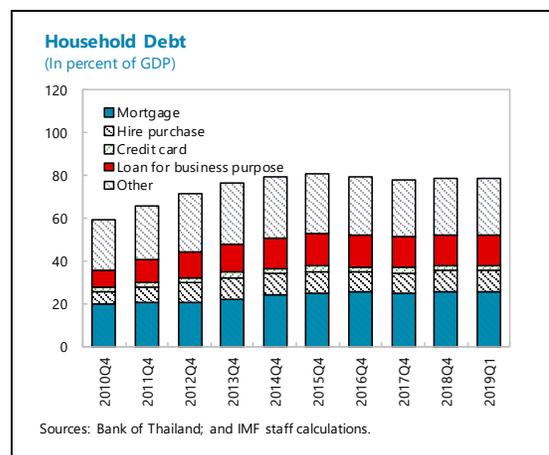
High household debt (at nearly 80 percent of GDP), driven by subsidized credit programs and accommodative global financial conditions, could further weigh upon private consumption and pose risks to growth.<sup>5</sup> The private debt overhang could also undermine the inclusive growth agenda as debt distress disproportionately impacts lower-income and younger households. Staff welcomes recent initiatives such as consideration of introducing DSR, formation of a Debt Clinic, and efforts to increase financial literacy and strengthen underwriting standards. Further policies to facilitate the deleveraging process and improve the debt resolution framework would better prepare the country for an eventual tightening in global financial conditions. Ex ante policies could include

<sup>5</sup> Staff analysis finds that cost of leverage on growth is higher at the lower end of the growth distribution and household debt poses a larger cost than corporate debt. On corporate indebtedness, staff analysis finds evidence that high corporate debt especially of zombie firms has undercut economy-wide productivity growth, reduced both tangible and intangible investments and thus growth (APD's Regional Economic Outlook, October 2018).

implementation of DSR based on borrowers' capacity to service their overall debt (backed by expanded credit information systems), the provision of legal and financial advice to indebted consumers, and encouraging responsible lending. Ex post measures could include out of court restructuring mechanisms and repayment plans that allow for the rehabilitation of debtors<sup>6</sup> (Appendix VII).

**34. The authorities generally agreed with the recommendations of the recent FSAP, but challenged some of the advice on enhancing the architecture of financial oversight.**

They have begun to expand the MPP toolkit and are addressing some of the gaps in the crisis management framework. The BOT emphasized the importance of recognizing merits of the current structure of financial oversight, focusing on substance—the outcomes achieved—rather than form. They stressed that the presence of the MOF representative on the FIPC does not compromise operational independence of the supervisory agency, as it facilitates coordination with MOF and the Cabinet and, constituting one out of eleven FIPC members, does not dominate the FIPC. Similarly, the authorities noted that cross directorships of supervisory agencies are useful in capitalizing on synergies among authorities and harmonizing regulations across sectors, especially given that the largest players in the capital market are subsidiaries of commercial banks.



## D. Raising Potential Growth and Enhancing Inclusiveness

**35. Targeted policies to enhance labor productivity can boost competitiveness.** Slowing labor productivity has held back competitiveness and potential growth, while large regional and income/wealth disparities prevail. To propel Thailand to higher-value activities and to a digital economy in line with the Thailand 4.0 strategy, it will be important to ensure that policies encourage broad-based productivity increases to promote inclusiveness and compensate for the impact of real appreciation. Investment in human capital across the regions will help unlock growth potential, including through education, health, and equalizing opportunities. Any adjustments to the minimum wage should be underpinned by underlying productivity growth. Better access by less developed regions to infrastructure and communications technology would help integrate them to more dynamic markets.<sup>7</sup> Thailand also faces both opportunities and challenges from a potential realignment of the global trading system; and a focus on boosting labor productivity will help the country strategically position itself in the evolving global environment. Addressing governance and corruption vulnerabilities would also promote growth. The 2018 amendment to the anti-corruption

<sup>6</sup> The analytical underpinnings behind this policy advice are contained in "Practical Lessons in Addressing the High Debt Overhang" a forthcoming IMF Working Paper that will also feed into the BOT-IMF Conference.

<sup>7</sup> This can be exemplified by the "Khon Kaen Model," which is designed to promote inclusive growth in Khon Kaen, the largest city in the Northeastern region, by establishing a smart city in a private and public partnership, including academia.

law, which introduced strict corporate liability, is a welcome development. Thailand's National Anti-Corruption Commission (NACC) is encouraged to further strengthen the implementation of the anti-corruption framework, including through enhanced verification of asset declarations of high-level public officials and establishing a robust whistleblower protection framework.

**36. Implementing pension reform combined with a move toward liberal immigration policies to attract foreign skilled labor should help address unfavorable demographic headwinds.** Rapid population aging will likely impact inequality, fiscal sustainability, and potential growth (Appendix VIII). The pension system is fragmented, and low coverage, particularly of the informal sector but also the formal private sector raises old-age poverty risks. It may also exacerbate precautionary savings and the external imbalance. Sustainability risks of current schemes should also be addressed, including by raising the retirement age and/or the contribution rate in the formal private sector, as recommended by the ILO, and in the civil service scheme. Staff welcomes the authorities' plans for strengthening the pension system covering the formal private sector, including through mandatory participation by private sector employees in the National Pension Fund to complement the assistance provided by the Social Security Fund. In the case of voluntary pension schemes, and in line with the FSAP recommendations, staff urges the authorities to revise the incentive structure to favor the PVD (Voluntary Provident Fund) plans over individual plans, focus it on the objective of providing adequate pension and encourage life cycle investment portfolios. The authorities should also consider policies to attract foreign skilled labor, including by removing administrative hurdles.

<b>Pension Reform Challenges</b>	
<i>Harmonization</i>	The pension system is fragmented in regimes for public, (formal) private, and informal employees.
<i>Sustainability</i>	The retirement age, 55, and the contribution rate, 6 percent, for the Old Age Benefit under the Social Security Fund are low.
<i>Coverage</i>	Over 60 percent of the working-age population is not covered by a formal pension.
<i>Adequacy</i>	The replacement rate for the private sector (30 percent) is too low.
<i>Fairness</i>	Pension for civil servants are much more generous than for private sector workers
<i>Poverty Alleviation</i>	The old-age allowance (minimum pension for those without a formal pension) is low and untargeted.

**37. The authorities agreed with the need to boost labor productivity and structural reforms to support Thailand's shift to the digital economy.** They noted supply side constraints in the labor market, and the need to better match wages to skills rather than degrees. They agreed that immigrant workers can help close labor market gaps. On structural reforms, the authorities noted that upgraded infrastructure along with an overhaul of the legal frameworks would allow the private sector to expand. They also pointed to the possible realignment of global trade patterns and GVCs in the medium term, and that Thailand's integration into the GVC of goods and services should improve due to their strategy to increase value added over the S-curve. Whereas this could create new activities in high-tech goods and services GVCs, such as medical hub and digital industry, the ultimate impact would depend on the pace of the development and execution of the strategy. The authorities also noted that, against the backdrop of aging demographics, the upcoming comprehensive pension reforms will be critical to secure longer fiscal sustainability.

**38. The authorities emphasized that their anti-corruption framework has been strengthened in recent years.** Their overarching goals are: to create a society which does not tolerate corruption, promote political will to fight corruption, deter corruption in public policy, develop proactive corruption prevention systems, reform corruption suppression mechanisms and processes and improve Thailand's corruption perception index (CPI). The Organic Act on Anti-Corruption that was adopted in 2018 aims to improve the capacity and effectiveness of Thailand's anti-corruption agency to counter corruption; comply with Thailand's mandatory international obligations as a state party to the United Nations Convention against Corruption (UNCAC) and comply with international standards and best practices (OECD Anti-Bribery Convention).

## STAFF APPRAISAL

**39. Thailand's robust policy framework and ample buffers continue to underpin its resilience to external headwinds.** Judicious management of the public finances over the years has created fiscal space to smooth shocks. The commendable progress in improving the coverage and effectiveness of financial supervision and macroprudential policies has enhanced financial stability. The economy is viewed as a safe haven in the region despite the ongoing cyclical slowdown. At the same time, domestic and external imbalances persist, and policy space and ample buffers should be deployed to spur domestic demand, support broader growth, and steer inflation back to target.

**40. External and domestic headwinds are challenging near term growth prospects.** Ongoing U.S.-China trade tensions and lower growth among Thailand's main trade partners has impacted Thai exports, particularly electronics, through the global value chains. Domestic factors include a weakening in consumption growth—as the debt overhang weighs on credit growth and the drought depresses farm incomes. Inflation dynamics remain subdued, and the external current account surplus continues to be high, although it narrowed significantly in 2018.

**41. The external position remains substantially stronger than warranted by medium-term fundamentals and desirable policies.** External imbalances should be addressed over the medium term through a multipronged policy stimulus comprising an investment-led fiscal expansion, and structural reforms. These would help boost domestic demand and raise inflation, supporting the growth-driven real appreciation.

**42. Using available fiscal space judiciously to spur domestic demand, reduce external imbalances, and support potential output growth is appropriate.** Strong implementation of macro-critical public infrastructure projects currently in the pipeline, including EEC projects, would crowd in private investment and stimulate demand in the short run while supporting potential output growth in the long run. Better targeting of the welfare program and other measures to protect the poor and vulnerable households should be part of the fiscal agenda but should also seek to minimize distortions through incentive-compatible design. In the medium to long run, additional domestic revenue mobilization will be needed to finance aging-related expenditure pressures.

**43. Staff welcomes the Bank of Thailand's recent decision to ease monetary policy and recommends further easing.** The recent escalation in U.S.-China trade tensions, delays in the

enactment of the FY 2019/20 budget, subdued inflation below target, moderation of the domestic financial cycle, and further deterioration in the outlook, all lend support to further easing of monetary policy. The cut in the policy rate will also help to attenuate appreciation pressures and potentially dampen the cycle of portfolio inflows into Thailand. Complementary use of macroprudential policy can address financial stability concerns to appropriately balance between output, inflation, and financial stability objectives while keeping the exchange rate as a key shock absorber. FX intervention should be limited to avoiding disorderly market conditions, allowing the flexible exchange rate to further contribute to external rebalancing. The recent tightening of existing CFMs to address speculative flows should be phased out and replaced with appropriate macroeconomic, financial and structural policies. Staff recommends the publication of FXI data (with an appropriate lag to guard against market sensitivities), which would enhance communication and strengthen the commitment to the inflation target.

**44. The financial system is well positioned to cope with shocks although pockets of vulnerability exist.** The recently concluded FSAP did not identify major risks to the financial sector. Risks to Thailand's banking sector are well within that of comparable EMs, and the largest banks can withstand an adverse scenario similar to the experience during the Asian Crisis, validated by FSAP stress tests and sensitivity analysis. Staff commends the authorities for the measures taken to strengthen financial system stability, including through systemic risk analysis and monitoring, which led to a better identification of vulnerabilities. Staff encourages the authorities to continue their efforts to address pockets of vulnerability that remain associated with high household indebtedness (including members of financial cooperatives) and signs of weakness in some corporates and SMEs. Strengthening the operational independence of supervisory agencies, the crisis management and resolution framework, and the macroprudential toolkits, while also enhancing SFI regulations, is important.

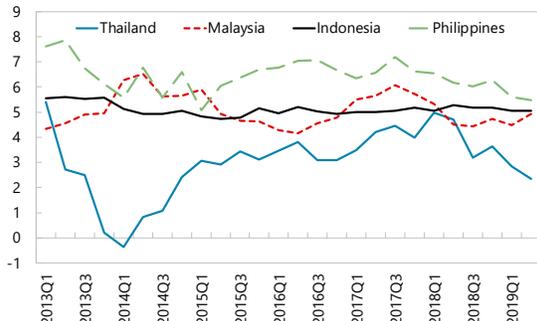
**45. The start of the new government provides a timely opportunity to forge ahead with a concerted reform agenda.** Targeted policies to enhance labor productivity across the regions can boost competitiveness, raise potential growth, and enhance its inclusiveness. A key priority is to address the demographic challenge from population aging through pension reform, domestic revenue mobilization, and investment in human capital across the regions that will help unlock growth potential, including through education, health, and equalizing opportunities. The forthcoming IMF TA should help with the design of a broader pension system reform strategy. Structural reforms that attain these objectives can help address macroeconomic imbalances, manifested through growing regional income disparities, large current account surplus, and weak wage and inflation dynamics. The modernization of the procurement law to maximize the return to capital of the envisaged fiscal push, the ongoing efforts to address the AML/CFT deficiencies and strengthen anti-corruption institutions are also fundamental to lifting up potentially growth.

**46. It is recommended that the next Article IV consultation with Thailand take place on a standard 12-month cycle.**

**Figure 1. Thailand: Recent Real Sector and Price Dynamics**

Like in other countries in the region, growth in Thailand lost momentum over the last year...

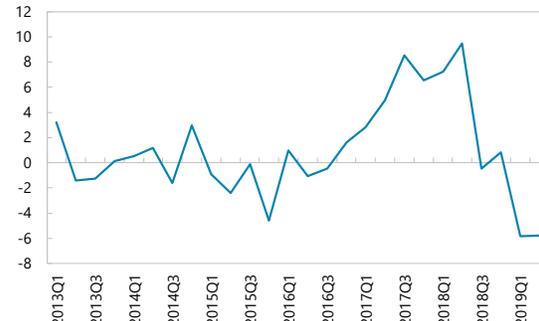
**Real GDP Growth**  
(Y/y percent change)



Source: Haver Data Analytics.

... as exports have been hard-hit by international trade tensions.

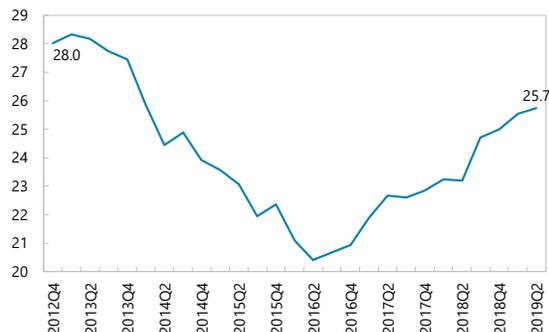
**Real Exports of Goods Growth**  
(Y/y percent change)



Sources: Thai authorities; and IMF staff calculations.

And despite still strong investment growth.

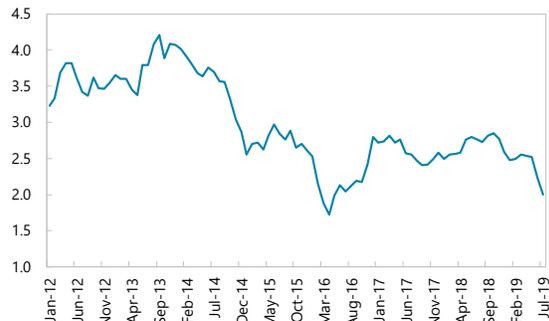
**Gross Investment**  
(In percent of GDP)



Sources: Thai authorities; and IMF staff calculations.

Sovereign-bond yields have remained low even during recent EM sell-off periods.

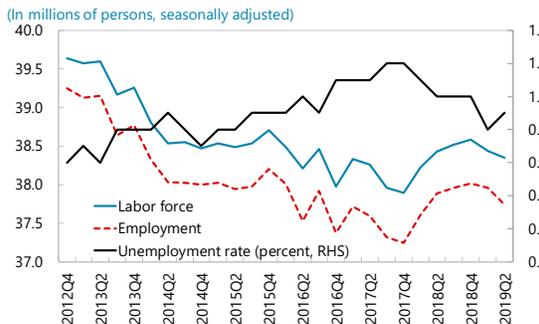
**Interest Rate**  
(10-year bond yield, percent)



Source: Haver Data Analytics.

As a result, labor market indicators have weakened.

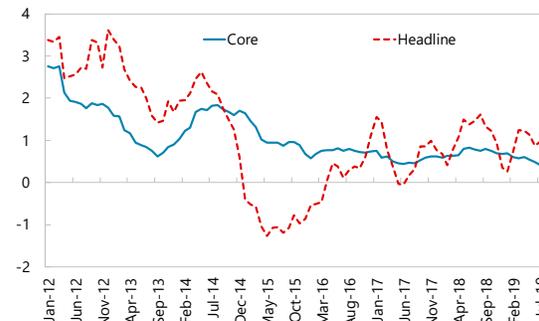
**Labor Market<sup>1</sup>**  
(In millions of persons, seasonally adjusted)



Source: Haver Data Analytics.  
<sup>1</sup> All series are affected by a methodological break in 2014 Q1 as the methodology for calculating the population structure was modified.

... but inflation remains subdued.

**Inflation**  
(Y/y percent change)

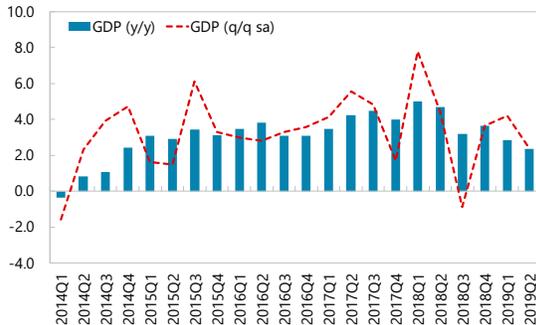


Source: Haver Data Analytics.

**Figure 2. Thailand: Macro-Fiscal Developments**

GDP was particularly impacted in 2018:Q3, with only a modest recovery thereafter.

**Real GDP Growth**  
(Percent)

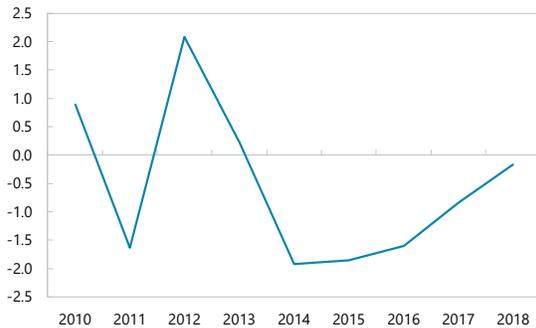


Sources: Thai authorities; CEIC Data Co. Ltd; and IMF staff calculations.

The output gap continued to close in 2018, reflecting still strong GDP growth in 2018H1.

**Output Gap**

(Percent of potential GDP)

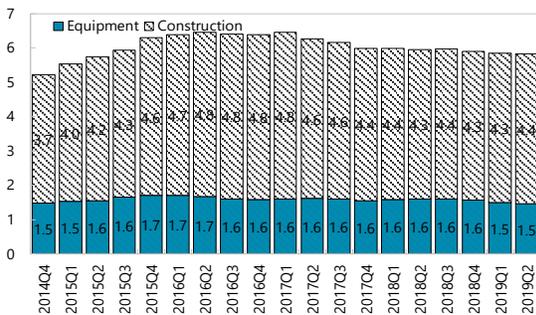


Source: IMF staff calculations.

...but public fixed investment has been on a declining path.

**Public Fixed Investment**

(Percent of GDP, sum of last 4 quarters)

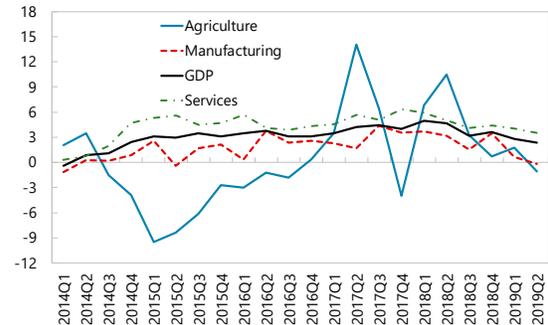


Sources: Thai authorities; CEIC Data Co. Ltd; and IMF staff calculations.

Agriculture was the hardest-hit sector, although manufacturing and services also slowed down.

**Real GDP Growth (Supply Side)**

(Y/y percent change)



Sources: Thai authorities; CEIC Data Co. Ltd; and IMF staff calculations.

Private fixed investment has remained relatively strong.

**Private Fixed Investment**

(Percent of GDP, sum of last 4 quarters)

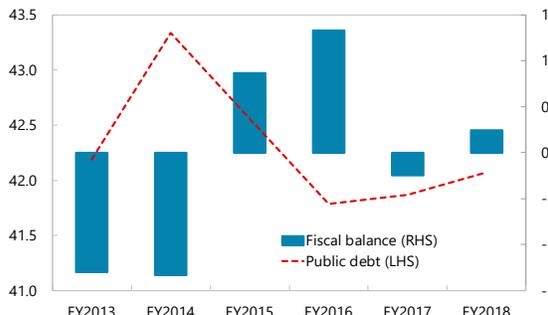


Sources: Thai authorities; CEIC Data Co. Ltd; and IMF staff calculations.

Public debt remained relatively flat in 2018.

**Fiscal Balance and Public Debt**

(Percent of GDP)



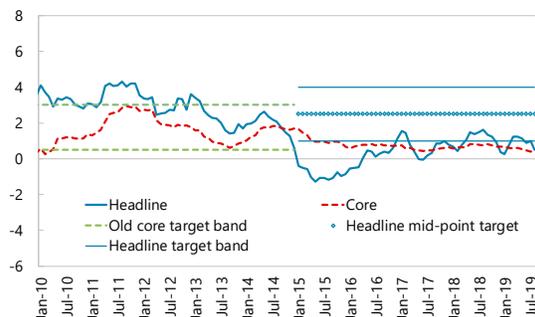
Sources: Thai authorities; and IMF staff calculations.

**Figure 3. Thailand: Inflation and Inflation Expectations**

Core inflation remains subdued and headline inflation has been below the lower end of the target band...

**Headline and Core CPI Inflation**

(Y/y percent change)

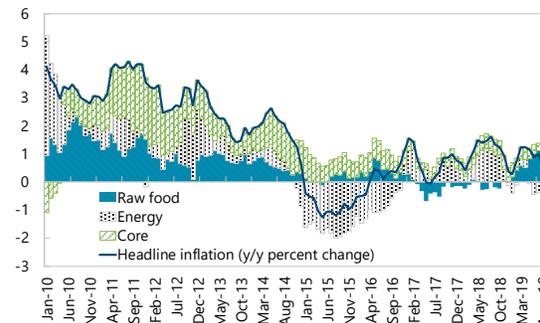


Sources: CEIC Data Co. Ltd.; and IMF staff calculations.

... despite recent pick up in food and energy prices.

**Contributions to Headline Inflation**

(In percentage points)

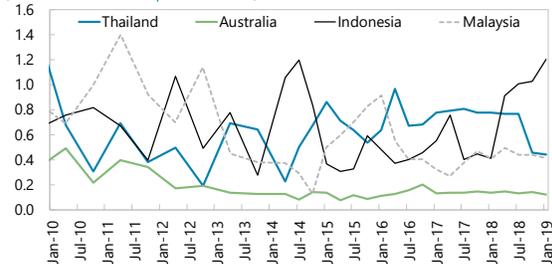


Sources: Haver Data Analytics; and IMF staff calculations.

Uncertainty over long-term inflation generates differences among consensus forecasters ...

**Selected Countries: Disagreement on Long-term Inflation Expectations**

(Standard deviation of point forecasts)



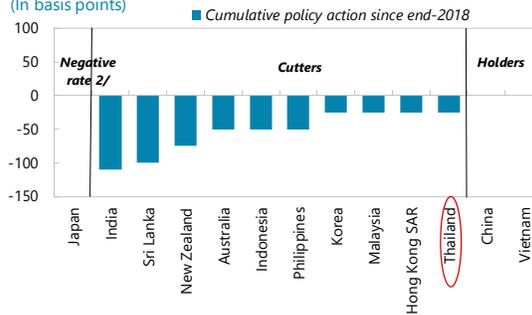
Source: Consensus Forecast.

Note: reflects the dispersion among panelists' expectations, with higher disagreement pointing to weaker anchoring of inflation expectations.

... BOT together with a number of EM central banks eased monetary policy since end-2018 in response to external headwinds including trade tensions.

**Selected Asia: Policy Rate Actions 1/**

(In basis points)



Sources: Haver Analytics; Bloomberg L.P.; and IMF staff calculations.

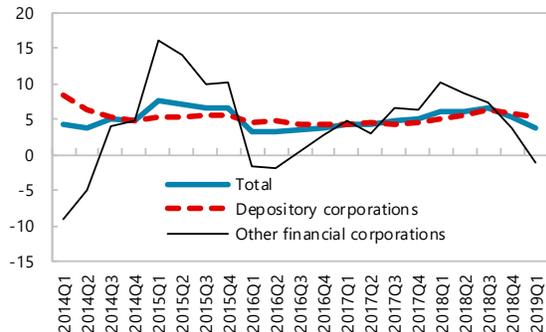
1/ Cutters/holders are classified based on policy action since December 2018.

2/ Japan announced negative rates on some bank excess reserves on Jan 29, 2016.

**Figure 4. Thailand: Financial Sector Developments**

After picking up in 2018, credit growth slowed down in 2019 ...

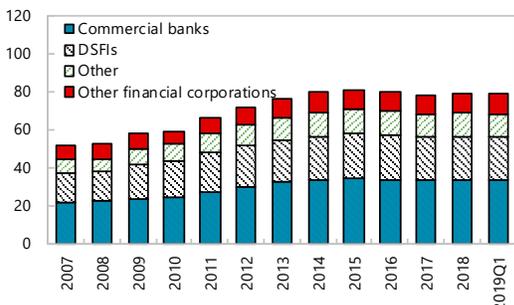
**Credit Growth**  
(Y/y percent change)



Sources: CEIC Data Co. Ltd; and IMF staff calculations.

With increases in deposits, DSFIs and saving cooperatives continued to expand their credit to households ...

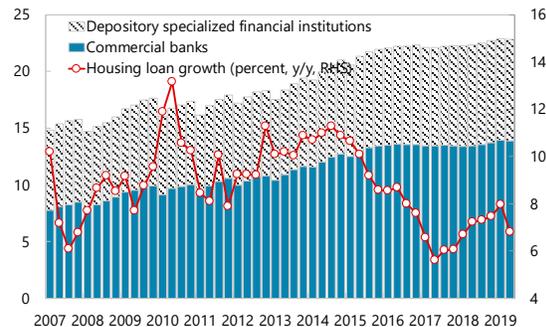
**Household Debt**  
(In percent of GDP)



Sources: Bank of Thailand; CEIC Data Analytics; and IMF staff calculations.

Following the LTV tightening in April 2019, mortgage demand declined ...

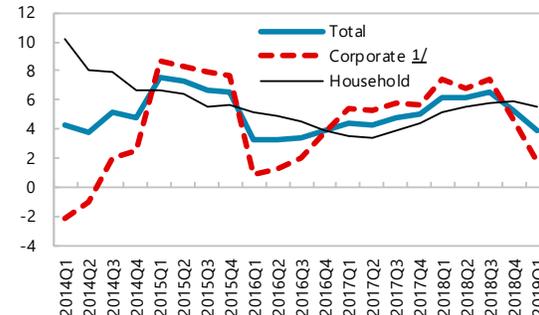
**Housing Loans**  
(In percent of GDP)



Sources: Bank of Thailand; and IMF staff calculations.

... largely reflecting a significant slowdown in credit to corporates.

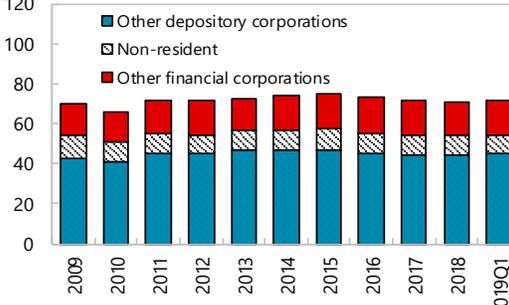
**Credit Growth by Sector**  
(Y/y percent change)



Sources: CEIC Data Co. Ltd; and IMF staff calculations.  
1/ Excludes external debt.

... while corporate debt has been growing at a similar pace with the economy.

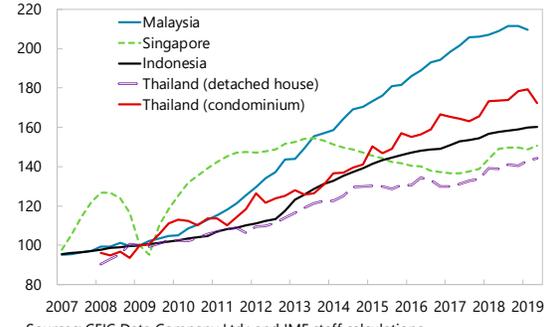
**Corporate Debt**  
(In percent of GDP)



Sources: Bank of Thailand; CIEC data Analytics; and IMF staff calculations.

... and the underlying housing prices started moderating in recent months.

**House Price Index 1/**  
(2009:Q1=100)

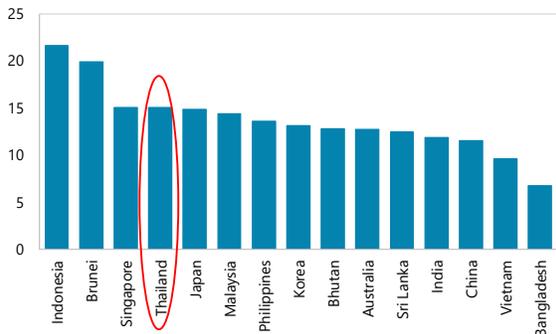


Sources: CEIC Data Company Ltd.; and IMF staff calculations.  
1/ Quarterly averages. House price indices for Thailand start in 2008:Q1.

**Figure 5. Thailand: Financial Soundness Indicators of Commercial Banks 1/**

Commercial banks have ample capital ...

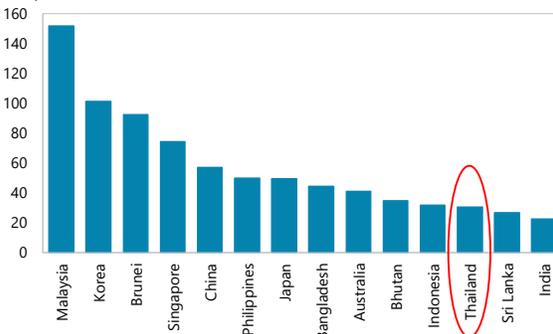
**Regulatory Tier 1 Capital to Risk-Weighted Assets**  
(In percent)



Source: IMF, *Financial Soundness Indicators*.

... and they rely more on short-term liabilities than commercial banks in other countries.

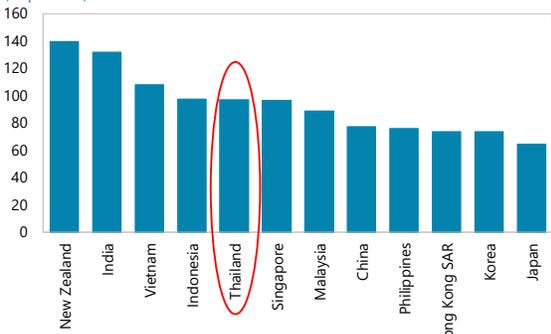
**Liquid Assets to Short-Term Liabilities**  
(In percent)



Source: IMF, *Financial Soundness Indicators*.

Thailand's loan to deposit ratio remains high ...

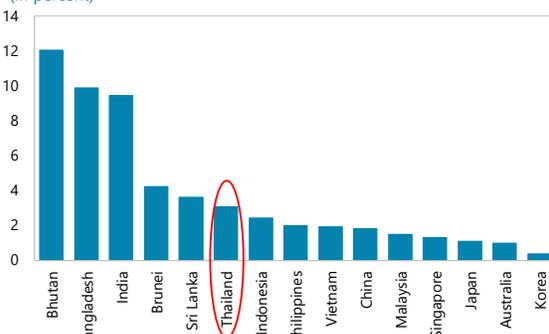
**Loans to Deposits**  
(In percent)



Sources: CEIC Data Co. Ltd.; Haver Analytics; and IMF staff calculations.

... and NPLs are well contained.

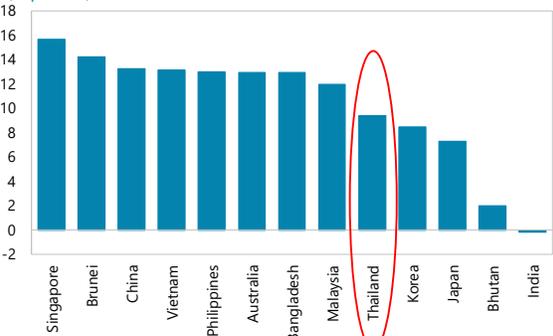
**Nonperforming Loans to Total Gross Loans**  
(In percent)



Source: IMF, *Financial Soundness Indicators*.

Profitability remains sound, as shown by return on equity...

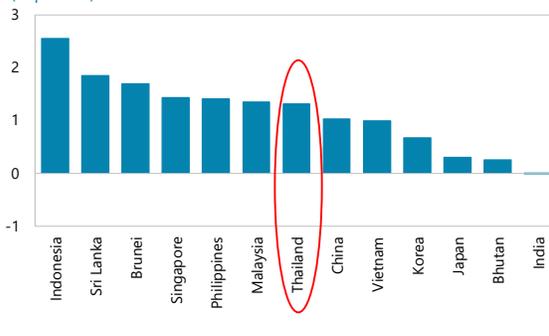
**Return on Equity**  
(In percent)



Source: IMF, *Financial Soundness Indicators*.

... and return on assets.

**Return on Assets**  
(In percent)



Source: IMF, *Financial Soundness Indicators*.

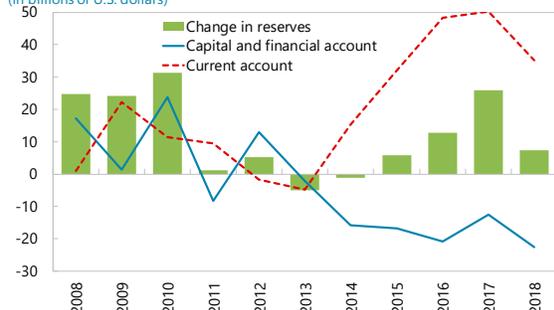
1/ 2019:Q1 or latest available.

**Figure 6. Thailand: External Sector Developments**

The current account surplus declined sharply in 2018, while reserves increased slightly.

**Current Account, Capital and Financial Account, and Reserves**

(In billions of U.S. dollars)

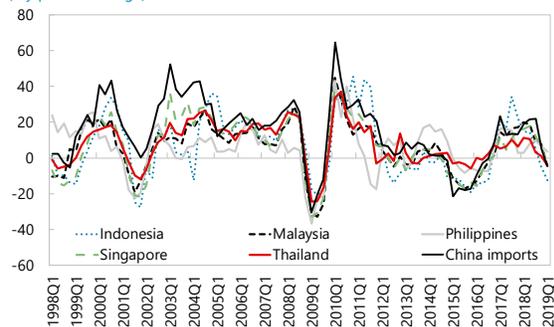


Sources: CEIC Data Company Ltd.; and IMF staff calculations.

Exports were dragged down in the 2018:H2 with the impact of the U.S.-China trade tensions.

**ASEAN-5 Export Growth and China's Imports**

(Y/y percent change)

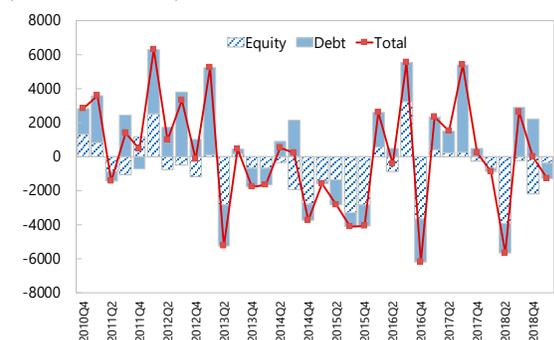


Sources: IMF, *Direction of Trade*; and IMF staff calculations.

Net nonresident portfolio inflows recovered in 2019 after the EM sell-off episode in 2018Q2-Q3.

**Nonresident Equity and Bonds Inflows**

(In millions of U.S. dollars)

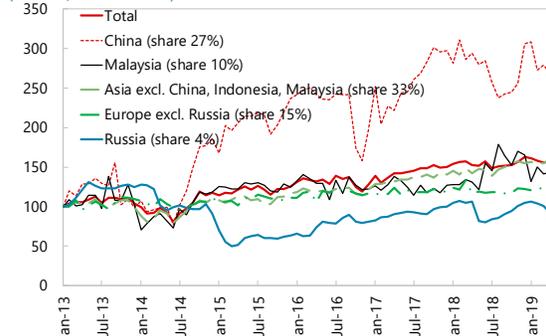


Sources: Bank of Thailand; Haver Data Analytics; and IMF staff calculations.

Tourist arrivals remained steady during most of 2018 but has softened in recent months.

**Tourist Arrivals**

(Index sa, Jan-2013=100)

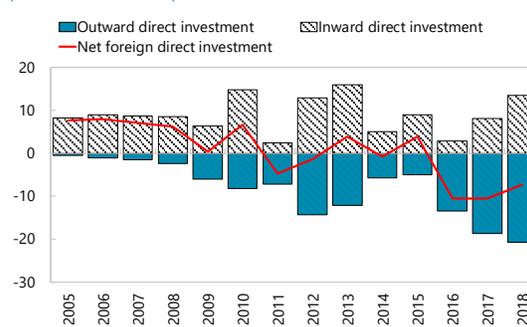


Sources: Haver Data Analytics; and IMF staff calculations.

Despite increasing inward investment, outward investment continued to accelerate, driven by Thai corporate investment in the CLMV.

**Inward and Outward Direct Investment**

(In billions of U.S. dollars)

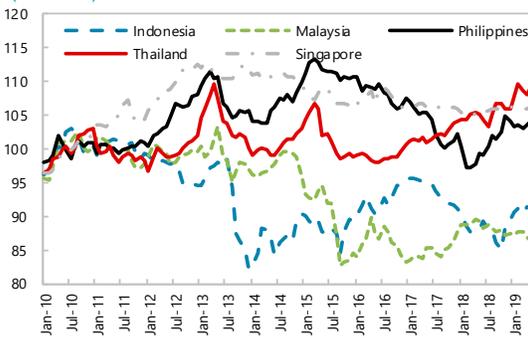


Sources: Haver Data Analytics; and IMF staff calculations.

The REER continued to appreciate in 2019, bolstered by monetary easing in AEs and in other EMs in the region, and strong macro fundamentals and external buffers.

**ASEAN-5: Real Effective Exchange Rate**

(2010=100)



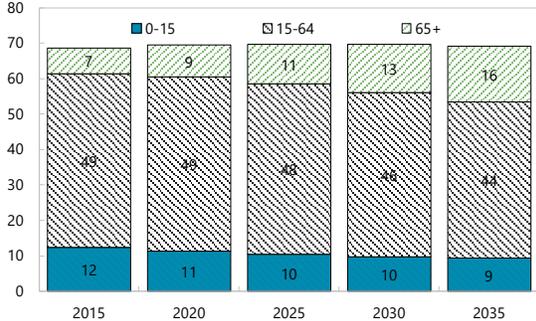
Source: IMF staff calculations.

**Figure 7. Thailand: Structural Challenges**

Thailand is one of the fastest aging populations in Asia.

**Projected Composition of Population**

(In millions of persons)

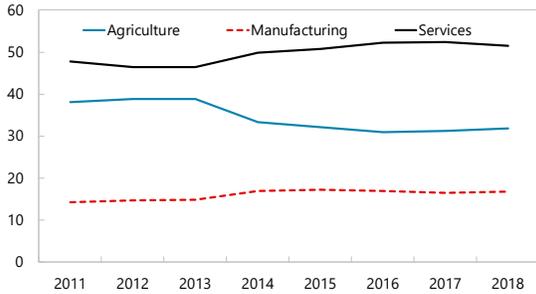


Source: United Nations, 2017 estimates.

Services dominate employment...

**Employment by Sector<sup>1</sup>**

(In percent of total employment)



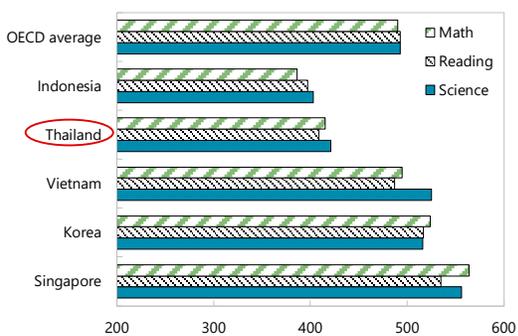
Source: Haver Data Analytics.

<sup>1</sup> All series are affected by a methodological break in 2014: Q1 as the methodology for calculating the population structure was modified.

Thailand lags competitors in educational attainment.

**Selected Countries: PISA Scores**

(Mean score)

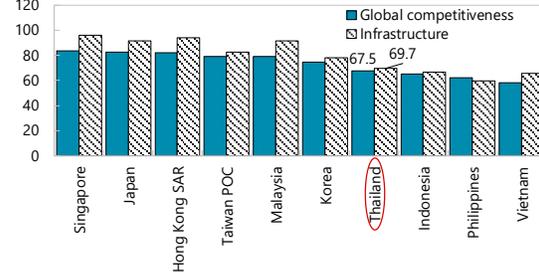


Source: OECD, Programme for International Student Assessment, 2015.

Relative to peers, Thailand has room to improve infrastructure and its overall global competitiveness.

**Global Competitiveness and Infrastructure**

(Score)

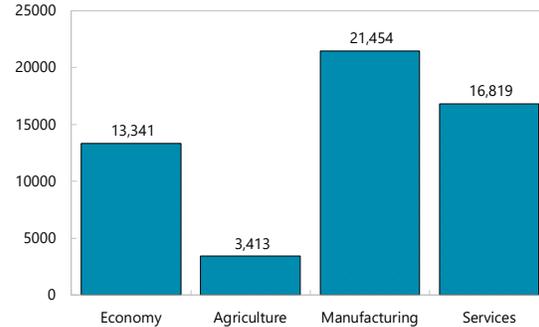


Source: World Economic Forum, Global Competitiveness Report 2018. The Global Competitiveness Index 4.0 is based on the official data and opinion survey of business executives and assesses the microeconomic and macroeconomic foundations of national competitiveness, which is defined as the set of institutions, policies, and factors that determine the level of productivity of a country.

Agriculture lags other sectors in productivity

**Value of Output per Worker, 2018**

(In U.S. dollars)

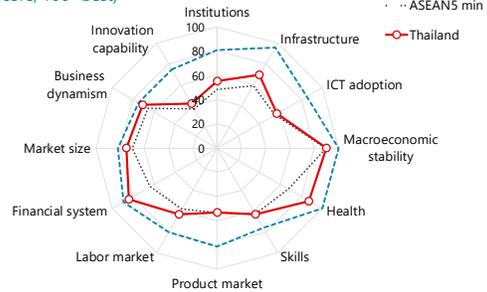


Sources: Thai authorities; Haver Data Analytics; and IMF staff calculations.

Key areas to improve competitiveness include ICT adoption and innovation capacity.

**Global Competitiveness, 2018**

(Score, 100=best)



Source: World Economic Forum, Global Competitiveness Report 2018. The Global Competitiveness Index 4.0 is based on the official data and opinion survey of business executives and assesses the microeconomic and macroeconomic foundations of national competitiveness, which is defined as the set of institutions, policies, and factors that determine the level of productivity of a country.

**Table 1. Thailand: Selected Economic Indicators, 2015–20**

Main exports (percent of total 2015): machinery (44), food (12)

GDP per capita (2017): US\$6,732

Unemployment rate (2017): 1.2 percent

Poverty headcount ratio at national poverty line (2014): 10.5 percent

Net FDI (2017): US\$-10.59 billion

Population (2016): 65.9 million

	2015	2016	2017	Prel.	Proj.	
				2018	2019	2020
Real GDP growth (y/y percent change) 1/	3.1	3.4	4.0	4.1	2.9	3.0
Consumption	2.4	2.7	2.3	4.0	3.6	3.8
Gross fixed investment	4.4	2.9	1.8	3.8	5.2	8.5
Inflation (y/y percent change)						
Headline CPI (end of period)	-0.9	1.1	0.8	0.4	1.3	1.2
Headline CPI (period average)	-0.9	0.2	0.7	1.1	0.9	0.9
Core CPI (end of period)	0.7	0.7	0.6	0.7	0.5	0.6
Core CPI (period average)	1.1	0.7	0.6	0.7	0.5	0.6
Saving and investment (percent of GDP)						
Gross domestic investment	22.4	20.9	22.8	25.0	24.9	25.3
Private	18.2	17.4	17.2	16.9	17.1	17.9
Public	6.3	6.4	6.0	5.9	6.2	6.5
Change in stocks	-2.2	-2.8	-0.3	2.1	1.7	0.9
Gross national saving	29.3	31.5	32.5	31.4	31.0	30.7
Private, including statistical discrepancy	22.2	24.3	27.1	25.7	25.1	24.7
Public	7.1	7.1	5.4	5.7	5.9	6.0
Foreign saving	-6.9	-10.5	-9.7	-6.4	-6.0	-5.4
Fiscal accounts (percent of GDP) 2/						
General government balance 3/	0.1	0.6	-0.9	-0.3	-0.2	-0.2
SOEs balance	0.7	0.8	0.7	0.5	0.4	0.4
Public sector balance 4/	0.9	1.3	-0.2	0.2	0.2	0.2
Public sector debt (end of period) 4/	42.6	41.8	41.9	42.1	42.4	43.0
Monetary accounts (end of period, y/y percent change)						
Broad money growth	4.4	4.2	5.0	4.7	4.0	3.6
Narrow money growth	5.7	4.8	9.4	2.8	3.7	3.6
Credit to the private sector by depository corporations	5.6	4.2	4.6	5.8	3.1	3.8
Balance of payments (billions of U.S. dollars)						
Current account balance	27.8	43.4	44.1	32.4	31.8	30.1
(Percent of GDP)	6.9	10.5	9.7	6.4	6.0	5.4
Exports, f.o.b.	213.4	213.5	233.7	251.1	245.2	263.0
Growth rate (dollar terms)	-5.9	0.1	9.5	7.5	-2.4	7.3
Growth rate (volume terms)	-1.5	0.5	6.0	5.1	-3.6	5.5
Imports, f.o.b.	187.2	177.7	201.1	228.7	223.0	243.1
Growth rate (dollar terms)	-10.6	-5.1	13.2	13.7	-2.5	9.0
Growth rate (volume terms)	0.3	-2.5	7.2	7.7	-1.2	9.1
Capital and financial account balance 5/	-21.9	-30.6	-18.1	-25.1	-20.9	-30.1
Overall balance	5.9	12.8	26.0	7.3	10.9	0.0
Gross official reserves (including net forward position, end of period) (billions of U.S. dollars)	168.2	197.6	239.3	239.4	251.1	251.1
(Months of following year's imports)	11.4	11.8	12.6	12.9	12.4	11.5
(Percent of short-term debt) 6/	280.2	273.8	326.8	301.9	307.0	298.2
(Percent of ARA metric)	203.9	211.2	221.2	222.2	...	...
Forward position of BOT (end of period)	-11.7	-25.8	-36.7	-33.7	...	...
Exchange rate (baht/U.S. dollar)	34.2	35.3	33.9	32.3	...	...
NEER appreciation (annual average)	4.4	-3.2	4.3	4.3	...	...
REER appreciation (annual average)	2.6	-4.0	3.4	3.4	...	...
External debt						
(Percent of GDP)	32.7	32.0	34.1	31.9	32.0	32.4
(Billions of U.S. dollars)	131.1	132.2	155.2	160.9	169.3	180.4
Public sector 7/	20.6	22.6	31.5	35.7	36.2	36.5
Private sector	110.5	109.5	123.7	125.2	133.1	144.0
Medium- and long-term	58.3	56.7	59.0	65.0	69.4	77.9
Short-term (including portfolio flows)	52.2	52.8	64.7	60.2	63.7	66.1
Debt service ratio 8/	7.6	6.0	5.8	6.0	6.3	6.3
Memorandum items:						
Nominal GDP (billions of baht)	13,743	14,555	15,452	16,318	16,922	17,536
(In billions of U.S. dollars)	401.3	412.4	455.4	505.0	...	...

Sources: Thai authorities; CEIC Data Co. Ltd.; and IMF staff estimates and projections.

1/ This series reflects the new GDP data based on the chain volume measure methodology, introduced by the Thai authorities in May 2015.

2/ On a fiscal year basis. The fiscal year ends on September 30.

3/ Includes budgetary central government, extrabudgetary funds, and local governments.

4/ Includes general government and SOEs.

5/ Includes errors and omissions.

6/ With remaining maturity of one year or less.

7/ Excludes debt of state enterprises.

8/ Percent of exports of goods and services.

Table 2. Thailand: Macroeconomic Framework, 2014–24

	2014	2015	2016	Prel.	Projections						
				2017	2018	2019	2020	2021	2022	2023	2024
Real GDP growth (y/y percent change)	1.0	3.1	3.4	4.0	4.1	2.9	3.0	3.5	3.6	3.6	3.6
Consumption	1.2	2.4	2.7	2.3	4.0	3.6	3.8	4.2	4.4	3.6	3.4
Gross fixed investment	-2.2	4.4	2.9	1.8	3.8	5.2	8.5	9.4	7.2	6.1	5.9
Headline CPI inflation (period average, y/y percent change)	1.9	-0.9	0.2	0.7	1.1	0.9	0.9	1.2	1.6	1.8	2.0
Core CPI inflation (period average, y/y percent change)	1.6	1.1	0.7	0.6	0.7	0.5	0.6	1.0	1.4	1.6	1.8
Saving and investment (percent of GDP)											
Gross domestic investment	23.9	22.4	20.9	22.8	25.0	24.9	25.3	25.7	26.6	27.1	27.9
Private	19.4	18.2	17.4	17.2	16.9	17.1	17.9	18.8	19.7	20.3	21.0
Public	5.2	6.3	6.4	6.0	5.9	6.2	6.5	6.9	6.9	6.9	6.8
Change in stocks	-0.7	-2.2	-2.8	-0.3	2.1	1.7	0.9	0.0	0.0	0.0	0.0
Gross national saving	26.8	29.3	31.5	32.5	31.4	31.0	30.7	30.6	31.0	31.0	31.5
Private, including statistical discrepancy	22.1	22.2	24.3	27.1	25.7	25.1	24.7	24.7	25.3	25.4	26.1
Public	4.7	7.1	7.1	5.4	5.7	5.9	6.0	6.0	5.7	5.6	5.5
Foreign saving (- = current account surplus)	-2.9	-6.9	-10.5	-9.7	-6.4	-6.0	-5.4	-4.9	-4.4	-3.9	-3.7
Fiscal accounts (percent of GDP, fiscal year basis)											
Public sector balance	-1.3	0.9	1.3	-0.2	0.2	0.2	0.2	-0.3	-0.6	-0.8	-0.8
Public sector debt (end of period)	43.3	42.6	41.8	41.9	42.1	42.4	43.0	43.8	44.3	44.6	45.0
Credit to the private sector by depository corporations (End of period, y/y percent change)	4.7	5.6	4.2	4.6	5.8	3.1	3.8	4.7	5.4	5.6	5.1
Balance of payments (billions of U.S. dollars)											
Exports, f.o.b.	226.6	213.4	213.5	233.7	251.1	245.2	263.0	280.9	298.2	315.8	335.8
(Volume growth)	1.1	-1.5	0.5	6.0	5.1	-3.6	5.5	5.9	5.3	5.0	4.9
Imports, f.o.b.	209.4	187.2	177.7	201.1	228.7	223.0	243.1	261.3	279.6	299.2	320.1
(Volume growth)	-6.2	0.3	-2.5	7.2	8.2	-1.2	9.1	6.3	5.5	5.3	5.0
Trade balance	17.2	26.1	35.8	32.6	22.4	22.2	20.0	19.6	18.6	16.7	15.7
Services, income, and transfers	-5.6	1.6	7.7	11.5	10.0	9.6	10.1	9.2	7.6	7.6	7.5
Current account balance	11.6	27.8	43.4	44.1	32.4	31.8	30.1	28.8	27.9	25.7	25.6
(Percent of GDP)	2.9	6.9	10.5	9.7	6.4	6.0	5.4	4.9	4.4	3.9	3.7
Financial account balance 1/	-12.9	-21.9	-30.6	-18.1	-25.1	-20.9	-30.1	-28.8	-27.9	-25.7	-25.6
Overall balance	-1.2	5.9	12.8	26.0	7.3	10.9	0.0	0.0	0.0	0.0	0.0
Gross official reserves (including net forward position, billions of U.S. dollars)	180.2	168.2	197.6	239.3	239.4	251.1	251.1	251.1	251.1	251.1	251.1
External debt											
External debt (billions of U.S. dollars)	141.7	131.1	132.2	155.2	160.9	169.3	180.4	190.2	202.7	217.0	231.2
External debt (percent of GDP)	34.8	32.7	32.0	34.1	31.9	32.0	32.4	32.2	32.4	32.6	33.0

Sources: Data provided by the Thai authorities; CEIC Data Co. Ltd.; and IMF staff estimates and projections.

1/ Includes errors and omissions.

Table 3. Thailand: Balance of Payments, 2014–24 1/

	2014	2015	2016	2017	2018	Projections					
						2019	2020	2021	2022	2023	2024
(In billions of U.S. dollars)											
Current account balance	11.6	27.8	43.4	44.1	32.4	31.8	30.1	28.8	27.9	25.7	25.6
Trade balance	17.2	26.1	35.8	32.6	22.4	22.2	20.0	19.6	18.6	16.7	15.7
Exports, f.o.b.	226.6	213.4	213.5	233.7	251.1	245.2	263.0	280.9	298.2	315.8	335.8
Imports, f.o.b.	209.4	187.2	177.7	201.1	228.7	223.0	243.1	261.3	279.6	299.2	320.1
Services balance	6.7	15.6	20.3	24.3	26.2	27.9	30.2	30.1	30.0	29.8	29.9
Of which: tourism receipts	34.8	41.2	44.8	52.4	60.2	63.1	67.9	70.6	73.4	76.4	79.5
Income and transfers balance	-12.3	-13.9	-12.6	-12.8	-16.2	-18.3	-20.1	-20.9	-20.8	-20.8	-20.0
Capital and financial account balance	-15.9	-16.8	-20.8	-12.6	-21.4	-20.9	-30.1	-28.8	-27.9	-25.7	-25.6
Foreign direct investment	-0.8	3.9	-10.6	-10.6	-7.3	-6.6	-6.0	-5.4	-4.8	-4.1	-3.5
Portfolio investment	-12.0	-16.5	-2.8	-2.1	-5.8	-5.8	-5.1	-4.9	-5.2	-6.6	-7.9
Financial derivatives	1.0	0.9	0.3	0.1	0.1	0.2	-0.3	0.0	0.1	0.0	0.0
Other investment	-4.1	-5.1	-7.8	0.2	-7.8	-8.6	-18.5	-18.3	-17.7	-14.7	-14.0
Errors and omissions	3.0	-5.1	-9.8	-5.5	-3.7	0.0	0.0	0.0	0.0	0.0	0.0
Changes in official reserves (increase -)	1.2	-5.9	-12.8	-26.0	-7.3	-10.9	0.0	0.0	0.0	0.0	0.0
(In percent of GDP)											
Current account balance	2.9	6.9	10.5	9.7	6.4	6.0	5.4	4.9	4.4	3.9	3.7
Trade balance	4.2	6.5	8.7	7.2	4.4	4.2	3.6	3.3	3.0	2.5	2.2
Exports, f.o.b.	55.6	53.2	51.8	51.3	49.7	46.3	47.2	47.6	47.6	47.5	48.0
Imports, f.o.b.	51.4	46.7	43.1	44.2	45.3	42.1	43.6	44.3	44.6	45.0	45.7
Services balance	1.6	3.9	4.9	5.3	5.2	5.3	5.4	5.1	4.8	4.5	4.3
Of which: tourism receipts	8.5	10.3	10.9	11.5	11.9	11.9	12.2	12.0	11.7	11.5	11.4
Income and transfers balance	-3.0	-3.5	-3.1	-2.8	-3.2	-3.5	-3.6	-3.5	-3.3	-3.1	-2.9
Capital and financial account balance	-3.9	-4.2	-5.1	-2.8	-4.2	-3.9	-5.4	-4.9	-4.4	-3.9	-3.7
Foreign direct investment	-0.2	1.0	-2.6	-2.3	-1.4	-1.2	-1.1	-0.9	-0.8	-0.6	-0.5
Portfolio investment	-2.9	-4.1	-0.7	-0.5	-1.1	-1.1	-0.9	-0.8	-0.8	-1.0	-1.1
Financial derivatives	0.2	0.2	0.1	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0
Other investment	-1.0	-1.3	-1.9	0.0	-1.5	-1.6	-3.3	-3.1	-2.8	-2.2	-2.0
Of which: Net foreign assets of banks	-1.0	-1.3	-1.9	0.0	-1.5	-1.6	-3.3	-3.1	-2.8	-2.2	-2.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Errors and omissions	0.7	-1.3	-2.4	-1.2	-0.7	0.0	0.0	0.0	0.0	0.0	0.0
Overall balance	0.3	-1.5	-3.1	-5.7	-1.4	-2.1	0.0	0.0	0.0	0.0	0.0
Changes in official reserves (increase -)	0.3	-1.5	-3.1	-5.7	-1.4	-2.1	0.0	0.0	0.0	0.0	0.0
Memorandum item											
Gross official reserves (incl. net forward position)											
(In billions of U.S. dollars)	180.2	168.2	197.6	239.3	239.4	251.1	251.1	251.1	251.1	251.1	251.1
(Percent of GDP)	44.2	41.9	47.9	52.5	47.4	47.4	45.0	42.5	40.1	37.8	35.9
(Months of following year's imports)	11.6	11.4	11.8	12.6	12.9	12.4	11.5	10.8	10.1	9.4	9.5
(In percent of short-term debt)	257.7	280.2	273.8	326.8	301.9	307.0	298.2	285.0	274.4	262.7	249.3
Forward/swap position of BOT	-23.1	-11.7	-25.8	-36.7	-33.7	-34.5	-34.5	-34.5	-34.5	-34.5	-34.5
Export growth (y/y percent change)	-0.4	-5.9	0.1	9.5	7.5	-2.4	7.3	6.8	6.2	5.9	6.3
Export volume growth	1.1	-1.5	0.5	6.0	5.1	-3.6	5.5	5.9	5.3	5.0	4.9
Export unit value growth	-1.3	-4.1	-0.4	3.6	2.2	1.2	1.7	0.8	0.8	0.9	1.4
Import growth (y/y percent change)	-7.9	-10.6	-5.1	13.2	13.7	-2.5	9.0	7.5	7.0	7.0	7.0
Import volume growth	-6.2	0.3	-2.5	7.2	8.2	-1.2	9.1	6.3	5.5	5.3	5.0
Import unit value growth	-1.8	-10.8	-2.7	5.5	5.6	-1.3	-0.1	1.2	1.4	1.6	1.9
External debt (percent of GDP)	34.8	32.7	32.0	34.1	31.9	32.0	32.4	32.2	32.4	32.6	33.0
(Billions of U.S. dollars)	141.7	131.1	132.2	155.2	160.9	169.3	180.4	190.2	202.7	217.0	231.2
Debt service ratio (percent) 2/	4.9	6.3	5.8	5.7	6.2	6.7	6.5	6.2	6.0	5.9	5.7
GDP (billions of U.S. dollars)	407	401	412	455	505	529	557	590	626	665	700

Sources: Thai authorities; CEIC Data Co. Ltd.; and IMF staff estimates and projections.

1/ Includes financing facilities arranged by AsDB and IBRD and disbursements under the Miyazawa Plan.

2/ Percent of exports of goods and services.

**Table 4. Thailand: Monetary Survey, 2010–19**  
(In billions of baht, unless otherwise stated)

	2010	2011	December		2014	2015	2016	2017	2018	Jun-19
			2012	2013						
<b>Central bank survey</b>										
Net foreign assets	5,082	5,441	5,359	5,444	5,262	5,762	6,043	6,398	6,523	6,439
Net domestic assets	-3,840	-4,076	-3,862	-3,863	-3,595	-4,052	-4,226	-4,461	-4,523	-4,534
Reserve money - Monetary base (M0)	1,243	1,365	1,497	1,581	1,667	1,710	1,816	1,937	2,001	1,905
<b>Depository corporations survey</b>										
Net foreign assets	4,884	5,426	4,943	5,007	5,041	5,873	6,152	6,410	6,715	6,614
Net domestic assets	6,894	8,133	10,023	11,055	11,768	11,681	12,144	12,803	13,395	13,605
Domestic credit	11,018	12,781	14,722	15,889	16,728	17,608	18,396	19,265	20,196	20,303
Net credit to central government	155	201	352	235	399	418	482	500	408	220
Credit to local government	18	18	22	25	22	19	18	16	14	13
Credit to nonfinancial public enterprises	372	392	354	334	322	291	287	306	339	356
Credit to other financial corporations	668	699	846	892	903	955	1,012	1,079	1,072	1,072
Total credit to private sector	9,804	11,471	13,147	14,403	15,082	15,926	16,598	17,363	18,364	18,642
Credit to other nonfinancial corporations	4,132	4,837	5,393	5,838	5,956	6,188	6,412	6,735	7,138	7,243
Credit to other resident sector	5,671	6,634	7,755	8,565	9,126	9,738	10,186	10,628	11,226	11,399
Other items (net)	-4,124	-4,648	-4,699	-4,833	-4,960	-5,926	-6,252	-6,462	-6,801	-6,698
<b>Broad money</b>										
Broad money	11,778	13,559	14,966	16,062	16,809	17,555	18,296	19,213	20,110	20,219
Narrow money	1,302	1,414	1,597	1,661	1,682	1,778	1,864	2,039	2,095	2,104
Currency in circulation	937	1,036	1,136	1,189	1,200	1,251	1,336	1,438	1,504	1,486
Deposits at depository corporations	365	378	461	472	482	527	528	601	591	618
Quasi-money	10,476	12,146	13,369	14,401	15,127	15,777	16,432	17,174	18,014	18,115
<b>Memorandum items:</b>										
Broad money growth (y/y percent change)	10.9	15.1	10.4	7.3	4.6	4.4	4.2	5.0	4.7	3.3
Narrow money growth (y/y percent change)	10.9	8.6	13.0	4.0	1.3	5.7	4.8	9.4	2.8	6.8
Credit to private sector growth by depository corporations (y/y percent change)	12.3	17.0	14.6	9.6	4.7	5.6	4.2	4.6	5.8	4.7
<b>Contribution to broad money growth</b>										
Net foreign assets (in percent)	3.0	4.6	-3.6	0.4	0.2	5.0	1.6	1.4	1.6	-0.8
Net domestic assets (in percent)	8.0	10.5	13.9	6.9	4.4	-0.5	2.6	3.6	3.1	4.1
Domestic credit (in percent)	9.4	15.0	14.3	7.8	5.2	5.2	4.5	4.7	4.8	3.8

Sources: CEIC Data Co. Ltd.; and IMF staff calculations.

**Table 5. Thailand: Medium-Term Fiscal Scenario, FY 2014–FY 2024 1/**  
(In percent of fiscal year GDP, unless otherwise stated)

	FY 2014	FY 2015	FY 2016	FY 2017	Projections						
					FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
<b>General Government</b>											
Revenue	21.4	22.3	21.9	21.0	21.4	21.4	21.4	21.5	21.5	21.5	21.5
Tax revenue	17.2	17.7	17.2	16.6	16.7	16.7	16.7	16.8	16.8	16.8	16.8
Taxes on income	6.7	6.6	6.2	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
Taxes on goods and services	9.3	10.0	9.9	9.5	9.4	9.5	9.5	9.5	9.5	9.5	9.5
Taxes on international trade	0.8	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Other	0.4	0.4	0.4	0.5	0.9	0.8	0.8	0.8	0.8	0.8	0.8
Social contributions	1.1	1.2	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Other revenue	3.1	3.4	3.6	3.5	3.6	3.7	3.7	3.7	3.7	3.7	3.7
Total expenditure	22.2	22.2	21.4	22.0	21.6	21.6	21.6	22.2	22.4	22.6	22.6
Expense	19.3	18.6	19.1	19.5	19.1	19.1	19.1	19.1	19.4	19.6	19.6
Compensation of employees	6.5	6.6	6.6	6.3	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Purchase/use of goods and services	6.2	6.1	6.2	6.2	6.3	6.3	6.3	6.3	6.3	6.3	6.3
Interest	1.1	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.1	1.2	1.2
Social benefits	2.2	2.2	2.5	2.6	2.6	2.6	2.6	2.7	2.8	2.9	3.0
Other	3.3	2.7	2.9	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.2
Net acquisition of nonfinancial assets	2.9	3.6	2.3	2.5	2.5	2.5	2.6	3.0	3.0	3.0	3.0
o.w. fixed assets	2.9	3.6	3.9	2.6	2.5	2.5	2.6	3.0	3.0	3.0	3.0
o.w. nonproduced assets	0.0	0.0	-1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overall fiscal balance	-0.8	0.1	0.6	-0.9	-0.3	-0.2	-0.2	-0.7	-0.9	-1.1	-1.1
<b>SOEs</b>											
Overall fiscal balance 2/	-0.5	0.7	0.8	0.7	0.5	0.4	0.4	0.3	0.3	0.3	0.4
<b>Public Sector</b>											
Overall fiscal balance 3/	-1.3	0.9	1.3	-0.2	0.2	0.2	0.2	-0.3	-0.6	-0.8	-0.8
Primary balance	0.3	2.3	2.5	1.1	1.6	1.5	1.4	0.8	0.7	0.6	0.6
Cyclically adjusted primary balance	0.4	2.7	2.8	1.3	1.6	1.7	1.6	1.0	0.9	0.8	0.8
Structural primary balance	0.4	2.7	1.2	1.3	1.6	1.7	1.6	1.0	0.9	0.8	0.8
Debt	43.3	42.6	41.8	41.9	42.1	42.4	43.0	43.8	44.3	44.6	45.0
<b>Memorandum items:</b>											
Public sector investment 4/	5.3	5.9	6.4	5.6	5.4	5.6	5.8	6.4	6.4	6.3	6.3
General government	3.6	4.4	4.7	3.8	3.7	3.7	3.7	4.2	4.2	4.2	4.2
Public enterprises	1.7	1.6	1.7	1.8	1.7	2.0	2.1	2.2	2.2	2.2	2.2

Sources: Thai authorities; and IMF staff estimates and projections.

1/ Fiscal year runs from October to September.

2/ Estimated from the evolution of SOEs debt.

3/ Includes General Government and SOEs.

4/ Official GFS data are not available for the Public Sector. Historical data are estimated based on GFS General Government official data, and information from SEPO and national accounts.

**Table 6. Thailand: Banks' Financial Soundness Indicators, 2010–19**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 March
(In percent)										
Capital adequacy										
Regulatory capital to risk-weighted assets	16.1	14.8	16.2	15.5	16.5	17.1	17.8	18.0	17.9	17.7
Regulatory Tier 1 capital to risk-weighted assets	11.9	11.0	11.0	11.9	13.0	13.9	14.5	15.1	15.0	14.9
Asset quality										
Nonperforming loans net of provisions to capital	13.8	10.6	7.4	7.7	7.8	8.0	8.4	9.1	9.1	9.4
Nonperforming loans to total gross loans	3.9	2.9	2.4	2.3	2.3	2.7	3.0	3.1	3.1	3.1
Earnings and profitability										
Return on assets	1.6	1.6	1.6	1.8	1.7	1.4	1.4	1.2	1.3	1.4
Return on equity	14.1	14.9	14.9	15.9	14.7	11.1	10.7	9.1	9.4	9.9
Liquidity										
Liquid assets to total assets (liquid asset ratio)	19.4	19.0	20.2	19.2	20.9	20.0	18.8	19.9	18.9	19.4
Liquid assets to short term liabilities	29.7	29.7	32.3	31.8	35.6	33.1	30.7	32.6	30.7	31.8
Loan-deposit ratio 1/	100.0	107.8	96.4	97.9	96.1	97.6	96.9	96.3	98.3	96.9

Sources: Bank of Thailand; and Haver Analytics.

1/ This ratio excludes interbank data and covers all commercial banks (commercial banks registered in Thailand and foreign bank branches).

## Appendix I. Staff Policy Advice from the 2018 Article IV Consultation

Staff Advice	Policy Actions
Use fiscal space to boost public investment.	Public investment contracted in 2018 in percent of GDP, partly reflecting delays in auctions and contracts for large EEC projects. Contracts for two large projects have now been signed with other three expected to be signed by year-end.
Better targeting of social expenditure to address poverty and inequality.	The authorities have implemented a social assistance program amounting to about 0.5 percent of GDP per year and covering about 12 million low-income earners. Procedures for better targeting will only be implemented in FY 2019/20 year with a new registration process, data cross-checking against land registries, and with programs focused on mothers and children. The new cabinet has also recently approved a social expenditure package, which focuses on increased welfare spending and a small relief to farmers.
Prepare for expenditure pressures associated with aging: Reforms to the pension and health systems	The Ministry of Finance prepared a draft bill to strengthen the pension coverage of the formal private sector through mandatory contributions into the National Pension Fund, a defined-contribution pension scheme. Forthcoming IMF TA should help with the design of a pension system reform.
Monetary easing to steer inflation towards its target.	Policy rate was increased in December 2018. Headline (at the lower limit of the target band) and core inflation remain subdued. The policy rate was cut by 25 basis points to 1.5 percent on August 7 on the basis of weaker economic outlook.
Maintain exchange rate flexibility as first line of defense, with FX intervention limited to avoiding disorderly market conditions.	While evidence points to FX sales during the 2018 sell-off period, FX intervention has been largely one-sided (purchases) since November 2018. Reserves increased by nearly US\$11 billion in 2019. In July 2019, a CFM was introduced in response to a capital inflow surge.

<b>Staff Advice</b>	<b>Policy Actions</b>
Strengthen financial stability and further develop macroprudential tools to deal with emerging pockets of fragility.	Stability of the financial system has been strengthened including through systemic risk analysis and monitoring. Recent broadening application of Loan-to-Values (LTVs) to Specialized Financial Institutions (SFIs) and tightening of LTVs on bank mortgage loans are helping address some pockets of vulnerability but more work needs to be done to reduce leakages in the Macroprudential Policy (MPP) toolkit.
Reform pension scheme to address design shortcoming and population aging	A National Pension Committee has been formed to propose a national strategy that addresses system fragmentation and design shortcomings. Forthcoming IMF TA will help with this strategy.
Comprehensive package to boost all drivers of potential growth.	Work on infrastructure projects, including motorways, railway, and ports continues. Stronger and more effective investment in human capital, especially in the regions is still needed to strengthen educational outcomes and equality in access to opportunities.

## Appendix II. Risk Assessment Matrix

Nature/Source of Threat	Likelihood	Impact	Policies to Minimize Impact
<b>External Risks</b>			
<b>Rising protectionism and retreat from multilateralism</b>	<b>H</b>	<b>H:</b> In the near term, escalating and unpredictable trade actions and a WTO dispute settlement system under threat imperil the global trade system and international cooperation. Additional barriers, including investment and trade restrictions in technology sectors, and the threat of new actions reduce growth both directly, and through adverse confidence effects and financial market volatility. In the medium term, geopolitical competition, protracted tensions, and fraying consensus about the benefits of globalization lead to economic fragmentation and undermine the global rules-based order, with adverse effects on investment, growth, and stability.	Strengthen domestic drivers of growth. Deepen regional trade integration and seek new opportunities to enhance position in global value chains. Greater orientation toward CLMV could buttress exports.
<b>Sharp rise in risk premia</b>	<b>H</b>	<b>M:</b> An abrupt deterioration in market sentiment (e.g., prompted by policy surprises, renewed stresses in emerging markets, or a disorderly Brexit) could trigger risk-off events such as recognition of underpriced risk. Higher risk premia cause higher debt service and refinancing risks; stress on leveraged firms, households, and vulnerable sovereigns; disruptive corrections to stretched asset valuations; and capital account pressures—all depressing growth.	Allow exchange rate flexibility to be the first line of defense, with judicious intervention to avoid disorderly markets. If financial volatility and capital outflows affect the real economy and constrain monetary stimulus, redouble efforts to accelerate public investment execution to bolster domestic demand.
<b>Further build-up of financial vulnerabilities</b>	<b>H</b>	<b>M:</b> Although the turn in the monetary policy cycle toward easing provides a reprieve for risky assets, it encourages risk taking through underpricing of risk and reduces financial resilience to shocks and risk-off events.	Strengthen the macroprudential framework and policies. This includes addressing current leakages in the macroprudential toolkit by covering cooperatives and nonbanks, by broadening the set of macroprudential tools used, and by clearly defining the roles of the FIPC and MPC to help ensure that systemic risks are primarily dealt with macroprudential tools.
<b>Weaker-than-expected global growth</b> <b>US</b> <b>Europe</b> <b>China</b> <b>Large stressed EMs</b>	<b>M</b> <b>H</b> <b>H</b> <b>M</b>	<b>H:</b> Idiosyncratic factors in the U.S., Europe, China, and stressed emerging markets feed off each other to result in a synchronized and prolonged growth slowdown: <ul style="list-style-type: none"> <li>• U.S.: Confidence wanes against a backdrop of a long expansion with stretched asset valuations, rising leverage, and policy uncertainty, leading to weaker investment and a more abrupt closure of the output gap.</li> <li>• Europe: Weak foreign demand, Brexit, or concerns about some high-debt countries makes some euro area businesses delay investment, while faltering confidence reduces private consumption. Inflation expectations drift lower, and the region enters a prolonged period of anemic growth and low inflation.</li> <li>• China: In the near term, further escalation in trade tensions not only reduce external demand, disrupt supply chains, and depresses confidence and investment, but potentially also trigger tighter financial conditions, a sharp downturn in the property market, renewed PPI deflation, and a drop in commodity prices. In the medium term, weaker external demand, the potential reversal of globalization, and the increasing role of the state could weigh on growth prospects. Moreover, excessive policy easing-reversing progress in deleveraging and rebalancing-increases risks over time of a disruptive adjustment or a marked growth slowdown.</li> <li>• Large stressed emerging economies: Policy missteps, idiosyncratic shocks and/or contagion prevent expected stabilization or recovery in stressed economies from materializing, generating negative spillovers and reducing global growth.</li> </ul>	Structural reforms and infrastructure development would raise returns to private investment and strengthen domestic-demand-led growth. Greater orientation toward CLMV could buttress exports. Allow exchange rate flexibility to be the first line of defense.

Nature/Source of Threat	Likelihood	Impact	Policies to Minimize Impact
<b>External Risks</b>			
<b>Intensification of geopolitical tensions and security risks</b>	<b>H</b>	<b>H:</b> (e.g., in the Middle East) cause socio-economic and political disruption, disorderly migration, volatile commodity prices, and lower confidence.	Structural reforms and infrastructure development would raise returns to private investment and strengthen domestic-demand-led growth. Allow exchange rate flexibility to be the first line of defense.
<b>Large swings in energy prices</b>	<b>M</b>	<b>M:</b> Risks to prices are broadly balanced, reflecting offsetting—but large and uncertain—supply and demand shocks. In the near term, uncertainty surrounding the shocks translates to elevated price volatility, complicating economic management and adversely affecting investment in the energy sector. As shocks materialize, they may cause large and persistent price swings. While, on aggregate, higher oil prices would harm global growth, they would benefit oil exporters.	Allow exchange rate flexibility to be the first line of defense. Structural reforms and infrastructure development would raise returns to private investment and strengthen domestic-demand-led growth.
<b>Cyber-attacks</b>	<b>L</b>	<b>M:</b> On critical global financial systems, infrastructure and institutions trigger systemic financial instability or widespread disruptions in socio-economic activities.	BOT should sustain current efforts to strengthen its capacity to deal with cyber attacks and fintech-related challenges.
<b>Higher frequency and severity of natural disasters</b>	<b>M/L</b>	<b>M:</b> Cause severe economic damage to smaller economies susceptible to disruptions (medium probability). A sequence of severe events in large economies reduces global GDP and prompts recalculation of risk and growth prospects. Disasters hitting key infrastructure or disrupting trade raise commodity price levels and volatility (low probability).	Improve social safety net programs to better target most vulnerable populations. Rural areas have been particularly hit by drought this year.
<b>Domestic Risks</b>			
<b>Heightened political uncertainty</b>	<b>M</b>	<b>H:</b> Consumer and business confidence would be damaged, dampening private investment and FDI inflows. Public investment execution would slow down. Capital outflows would put pressure on credit and asset markets. Tourism could also be affected.	Allow automatic stabilizers to work. Provide adequate liquidity to banks to minimize disruptions in the financial system. Let the exchange rate be the first line of defense in case of capital outflows, but use intervention to avoid disorderly market conditions.
<b>Weaker crowding-in of private investment</b>	<b>M</b>	<b>M:</b> Lower-than-projected private investment would reduce domestic demand in the cyclically weak economy and undermine Thailand's potential in the longer term. It may also weaken confidence in the government's ability to improve the business environment, denting private sentiment and FDI.	Use available room for additional fiscal and monetary stimulus. Strengthen efforts to implement structural reforms and improve the business and investment environment. Accelerate the execution of large infrastructure projects and PPPs with capacity to crowd-in private sector interest.
<b>Entrenched low inflation</b>	<b>M</b>	<b>H:</b> Entrenched low inflation would worsen the macroeconomic environment, increasing real interest rates and the real debt burden, and posing risks to corporate, household, and financial sector balance sheets.	Lower the policy rate and strengthen communication to anchor inflation expectations. Consider additional fiscal stimulus, consistent with long-term goals and fiscal sustainability, within a credible medium-term fiscal framework.
<b>Household debt overhang boiling over</b>	<b>M</b>	<b>M:</b> Highly leveraged households may hold back spending or banks may tighten credit supply, which would dampen consumption. Furthermore, the debt-servicing capacity of households could be constrained in a vicious cycle of deleveraging and low growth.	Use available room for additional fiscal and monetary stimulus. Explore options for household debt restructuring and insolvency.
<p><i>"L"=Low; "M"=Medium; "H"=High. The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of IMF staff). The relative likelihood of risks listed is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly.</i></p>			

## Appendix III. Structural Changes in Thailand: Their Influence on Inflation Dynamics and Macroeconomic Imbalances<sup>1</sup>

*Thailand's economy currently has sizable imbalances manifesting itself in sluggish domestic demand, weak inflation dynamics and large external imbalances. Looking at both product and labor markets, this appendix summarizes the structural underpinnings of these imbalances and thereby provides the micro foundations to the large existing macro imbalances. Over the last decade, with increasing globalization and eminent role played by China, Thai firms have confronted increasing competition against foreign firms in goods and services markets and deflationary pressure of producer prices on final goods which adversely impact corporate profitability and labor market outcomes. Anemic wage growth, sluggish inflation dynamics and macroeconomic imbalances (including regional income disparities) are symptoms of these and other developments. Raising competitiveness of Thai corporates, promoting environment for investment growth, and upgrading skills of the labor force will be key to boosting domestic demand and raising potential growth, and engineering the needed external rebalancing.*

### A. Changes in the Landscape of Goods and Services Market Competition

**1. Following the 2011 floods, a surge in minimum wage and deflation in producer prices have adversely impacted profitability of Thai firms and wage dynamics.** Deflation started in 2012, initially led by PPI on intermediate goods and crude materials (Figure 1). Largely influenced by the oversupply of natural rubber, its global price started falling sharply after its peak in 2011. Deflation in crude materials was conducive to the price dynamics of intermediate materials. Having deeply exposed to the global supply chains, operations of many Thai firms have been influenced by growing competition in both domestic markets and abroad. A 40 percent increase in the minimum wage in April 2012 has deteriorated their balance sheets which were also adversely impacted by the 2011 floods. Deflation in final goods prices, started in 2015, further squeezed their profit margins and contributed to sluggish wage growth thereafter.

**2. Thai firms face growing competition in the domestic market through:**

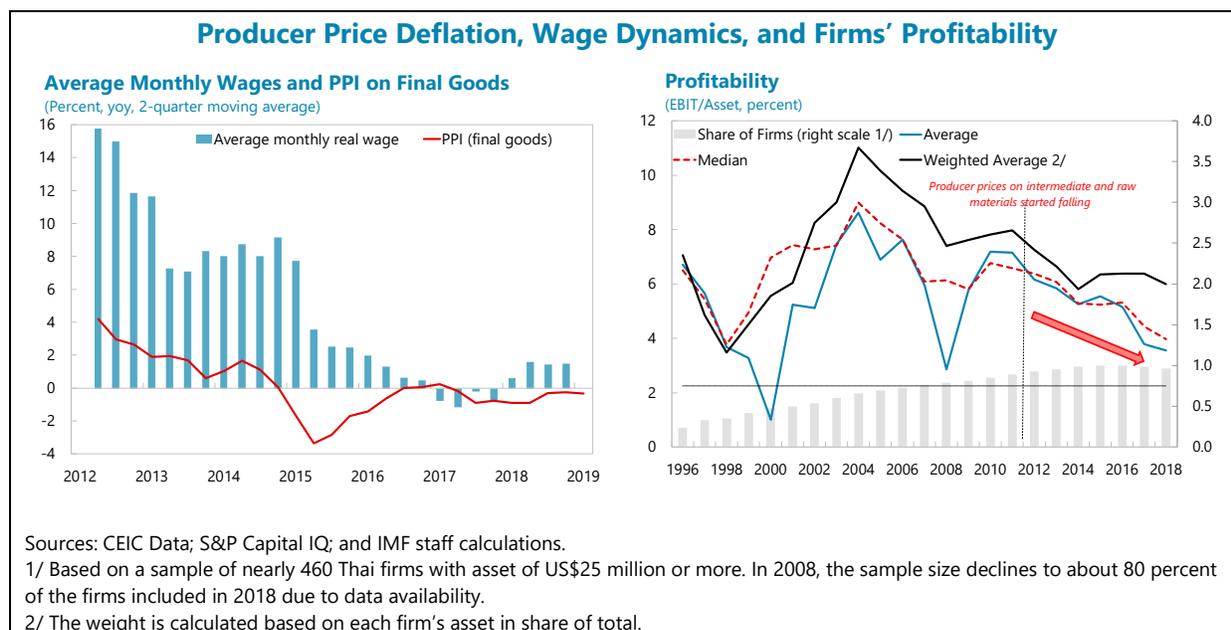
- **Implementation of the ASEAN-China FTA<sup>2</sup>:** Elimination of tariffs on imports from China by 2010, guided by the ASEAN-China FTA, has created opportunities for Chinese firms to invest in Thailand. FDI inflows from China jumped during the first four years (2010-13), which raised FDI-related imports in raw and intermediate materials as well as other imports in broad categories

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<sup>1</sup> This appendix was prepared by Kenichiro Kashiwase.

<sup>2</sup> Leaders of the ASEAN economies and China have agreed to establish ASEAN-China free trade area (FTA), which was signed on November 4, 2002 and eliminated tariffs on about 90 percent of goods by 2010.

(Figure 2). China has become the largest trading partner of Thailand, which has changed the landscape of goods and services market competition for Thai firms.



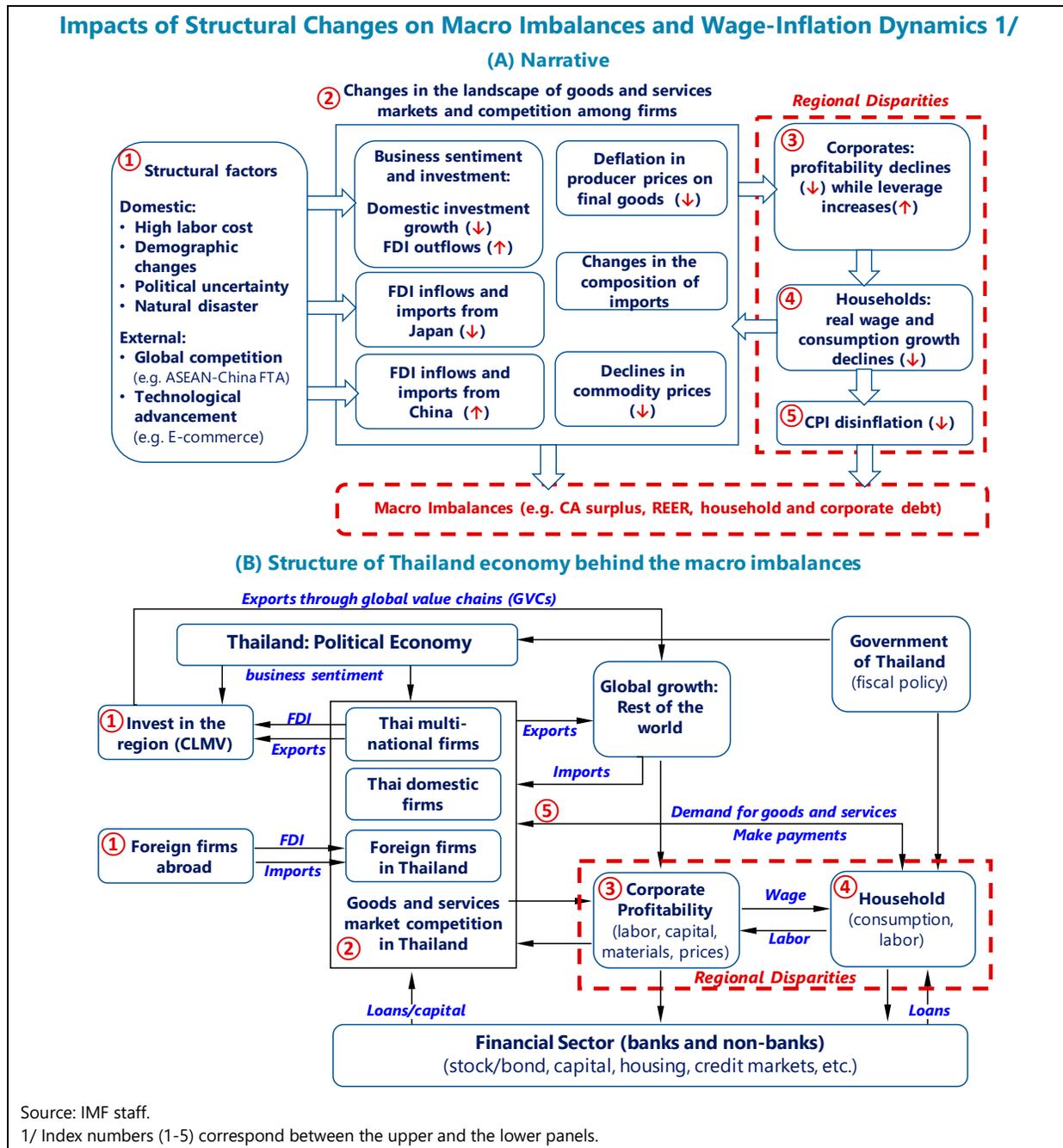
- Increase in FDI inflows to services sector:** The gain in FDI inflows from China was more than compensated by declines in FDI from Japan (the largest contributor) and a group of other economies, resulting overall declines in FDI inflows. Despite the declines from Japan, annual surveys conducted by Japan External Trade Organization (JETRO) indicate the number of Japanese firms in Thailand has increased by nearly 20 percent between 2014 and 2017. While investment in manufacturing is still a dominant sector for Japanese firms in Thailand, wholesale and retail businesses and other services have attracted a growing share of FDI from the increasing number of Japanese SMEs, raising competition in services to a new level.

**3. Thailand's direct investment (DI) in CLMV<sup>3</sup> countries has continued to increase since 2011, which was followed by corresponding increases in exports to these economies.** Driven by the protracted political uncertainty, delays in public investment projects, and the aftermath of the 2011 floods, Thai corporates began to move their investment abroad to take better advantage of the global value chains (GVCs) at the expense of sluggish growth in domestic investment. Outward DI continued to increase at a record pace during 2011–17, outpacing the increase in outward DI by the peers (Figure 3). As the cost of labor in Thailand remained elevated relative to those in the region and neighboring countries gain their competitiveness, large multinational Thai firms have moved to the CLMV region to raise their profitability.

**4. Structural changes and supply-side shocks have contributed to labor market outcomes and inflation dynamics.** Against the background, these factors influenced firms' decisions to invest

<sup>3</sup> CLMV refers to Cambodia, Lao People's Democratic Republic, Myanmar, and Vietnam.

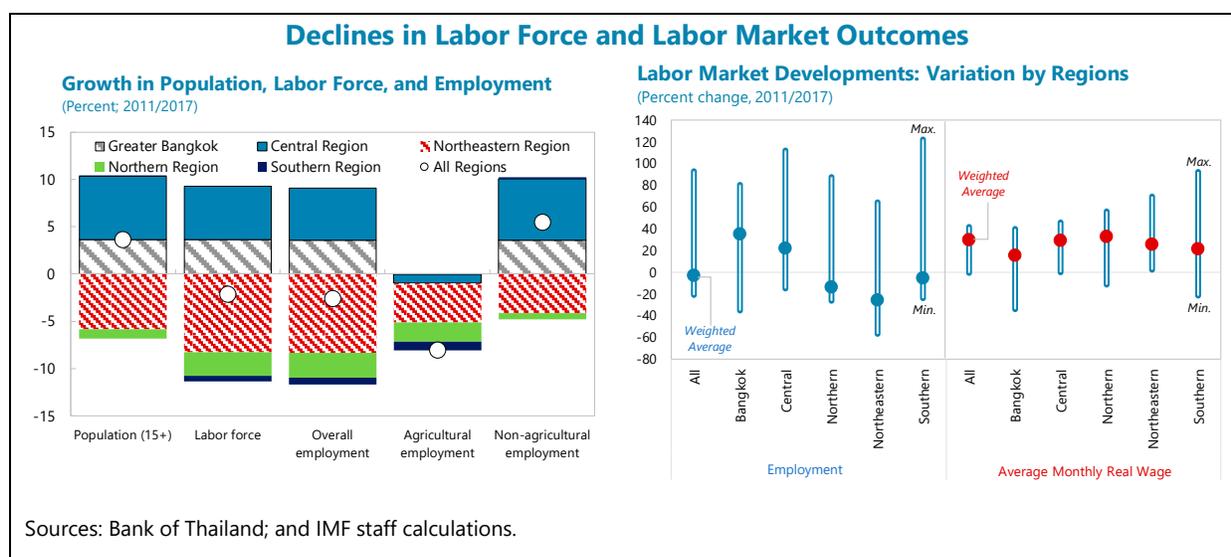
in Thailand. For large Thai corporates, they had an option to go abroad to take advantage of the global supply chains in the region. FDI outflows and outward direct investment picked up, and the multinational Thai corporates maneuvered through rapidly changing landscape of the Thai economy. For others, they faced increasingly competitive product and labor market pressures, with increases in imports from China and FDI inflows in services though their overall inflows declined. Deflation in PPI on final goods, partly driven by supply side shocks and competition with cheap imports, further squeezed profit margins and put a lid on the wage growth. All these factors have contributed to sluggish headline and core disinflation.



## B. Implications of Structural Changes on Macroeconomic Imbalances

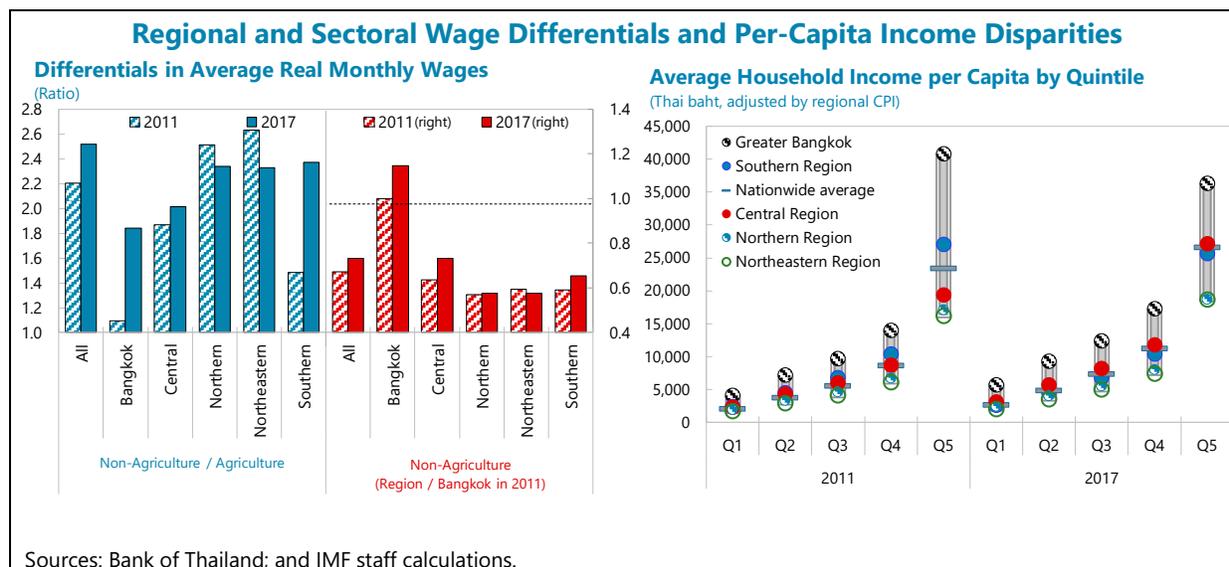
### The Great Moderation in Real Wage Growth

**5. Ominous developments in labor market were symptoms of structural changes confronted by Thai economy.** Real wage growth in non-agriculture secularly declined from 15¼ percent (y/y) in 2012 to –0.7 percent in 2017. The great moderation in real wage growth was accompanied by declines in private sector employment growth during 2015–17. The resulting pronounced and synchronized declines in real wage and employment growth weighed on private consumption which increased by merely 2 percent per annum during 2013–17, as compared to 4½ percent during 2000–12. Weak domestic demand growth was conducive to imports growth which declined to 0.3 percent relative to 9.3 percent during the comparable periods and macroeconomic imbalances.



**6. In addition, demographic headwinds continue to reshape the structure of Thai economy and influence labor market developments.** Due to population aging, labor force in Thailand started declining, which was unevenly felt across the regions. Internal migration may have exacerbated the existing demographic transformation. Three regions (Northeast, North, South), which experienced more severe disinflation, contributed to the overall declines in the labor force. Employment in agriculture has declined by more than 20 percent during 2011-17 while non-agricultural employment gained by 9 percent during the same period, led by manufacturing, transportation and storage, wholesale and retail trade, and accommodation and food services. A similar trend in employment growth is largely observed in Bangkok and the central region, the three regions share a different labor market landscape. In the North, sectors that employ the most (wholesale and retail trade, manufacturing) are losing jobs while a number of small sectors are growing from the low base. Employment in tourism related and public sectors contributed most. In the Northeast, almost all sectors have shed their employment, except real estate and public utilities. In the South, employment growth in tourism related sectors have more than compensated lost jobs

in manufacturing and wholesale and retail trade. Across the country, employment in real estate has increased most, with some regions (Central, South) experiencing more than two-fold gains.

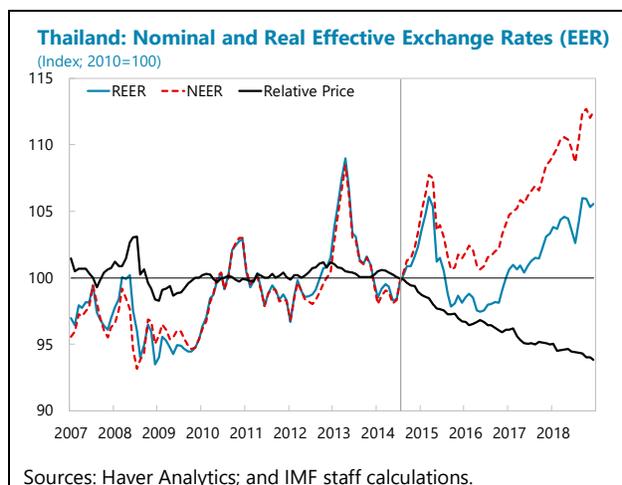


**7. Wage differentials have grown over time and have contributed to per-capita income disparities within and across the regions.** Agriculture offered nearly 40 percent of total employment in the economy in 2011 but shed its labor by 21 percent through 2017. The non-agricultural sector has grown over time, accounting for 68½ percent of total employment in 2017. A wage differential, comparing average real monthly wages in non-agriculture to agriculture, has grown over time. In addition, wage differentials within non-agriculture and across the regions have also increased. These developments have been conducive to growth in per-capita household income. When the changes are compared across its quintile and the regions, regional disparities within each quintile have grown over time. In the central region, the disparity between the top and the bottom quintile has also grown.

### Weak Domestic Demand and Thus Large External Imbalances

**8. These developments in both the product and labor markets help to explain the declines in domestic investment growth and weakening of consumption growth.** At the firm level, multinational Thai firms have increased investment abroad, particularly in CLMV, to take advantage of lower labor costs and access to global supply chains. The profitability of small firms (and opportunities for additional domestic investment) has declined in the face of increasing global competition (most notably from China), and imported producer price deflation followed. The rise of corporate debt and zombie firms further constrained both firms tangible and

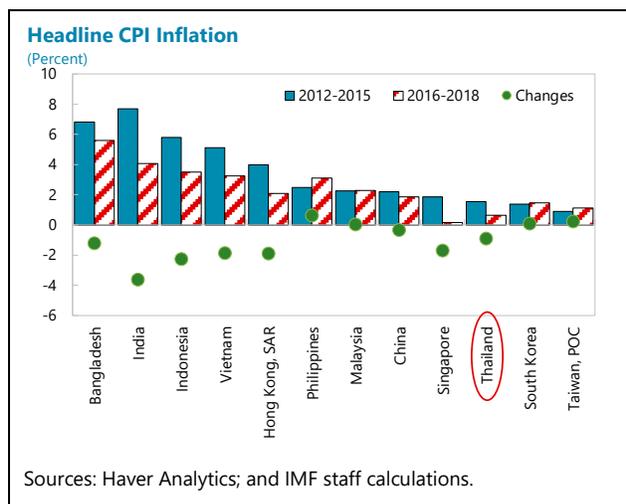
intangible investment.<sup>4</sup> At the household level, the moderation of wage growth amidst the increased accumulation of debt and the resulting debt overhang is now constraining private consumption growth. Amidst population aging,<sup>5</sup> insufficient coverage of social safety nets, including the pension system, may also be leading to excessive precautionary savings especially at the lower income deciles, thereby dampening the average marginal propensity to consume. Sluggish domestic demand in turn help explain the persistently weak inflation dynamics.



**9. Subdued inflation is symptomatic of the broader underlying macroeconomic imbalances.** Since 2015, macroeconomic imbalances (e.g. large current account surplus) have grown despite sizable appreciation in nominal EER (13¾ percent) and real EER (6¾ percent). Thailand's prolong disinflation has partly cushioned further loss in competitiveness.

### Inflation Dynamics Driven by Demand and Supply Factors

**10. Headline inflation in Thailand is among the lowest in the region.** Many economies in the region experienced sharp declines in inflation during 2012-15, which was broad-based across sectors and inflation measures.<sup>6</sup> Global factors, such as the slowdown in global economic growth and commodity price shocks in 2015, have influenced the inflation dynamics. Since 2016, inflation has picked up in several economies, driven by goods and services inflation, recoveries in manufacturing producer price indices (PPI) and commodity prices. However, the average inflation during 2016-18 remains low. The inflation process in Asia has become more backward looking, with temporary factors driving disinflationary pressures, including imported price



<sup>4</sup> For details on the increasing role of zombie firms and corporate debt, see both the 2018 APD Fall REO analytical chapter and appendix VII on the private debt overhang and its impact on growth.

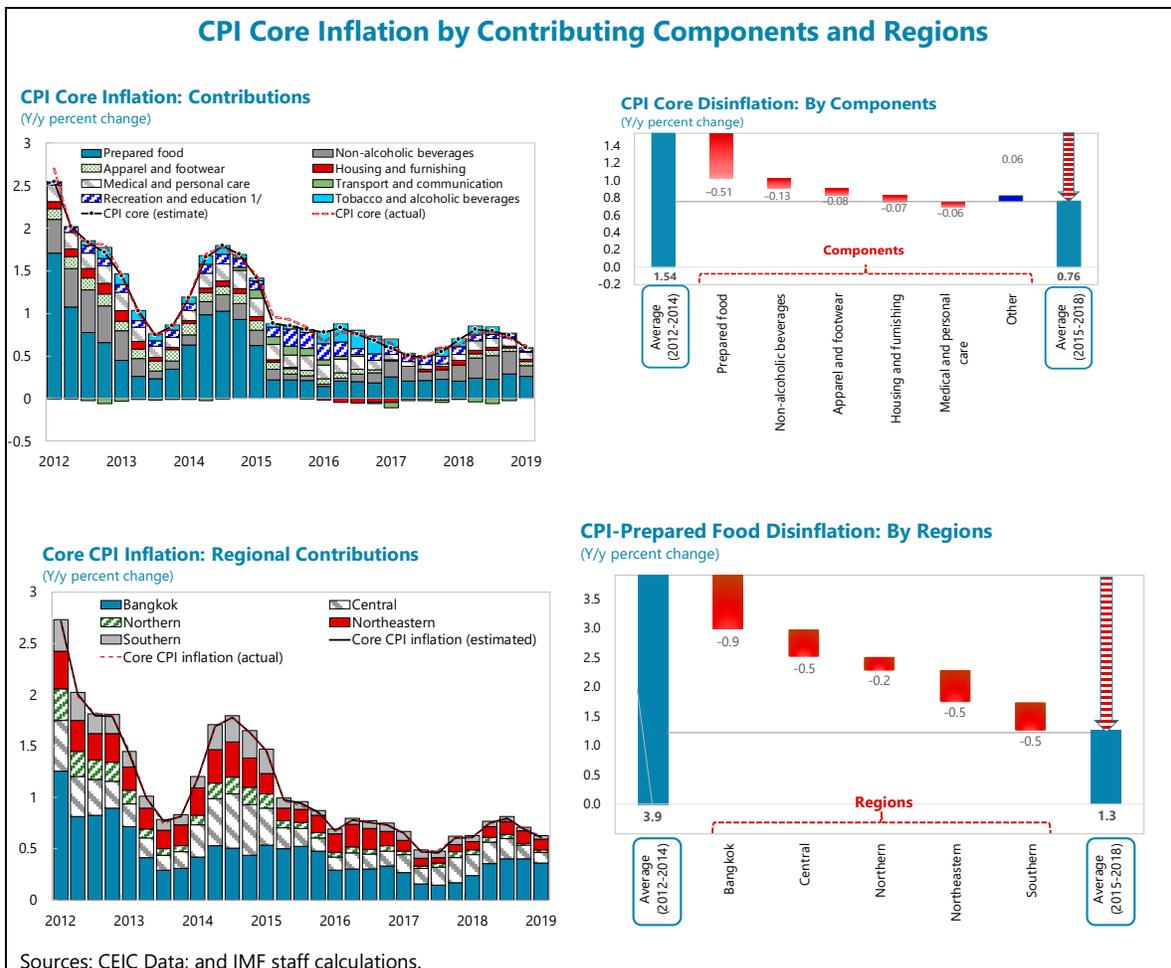
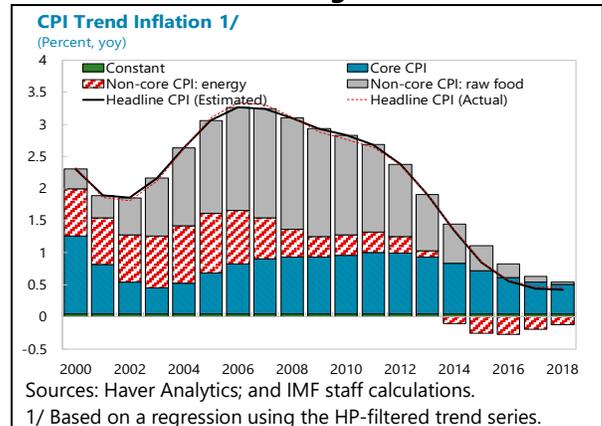
<sup>5</sup> For more details of the fiscal implications of aging, see appendix VIII.

<sup>6</sup> IMF (2018), *Regional Economic Outlook*, Chapter 2 "Low Inflation in Asia and How Long Will It last," Asia and Pacific Department, April 2018.

dynamics and declines in the sensitivity of inflation to the unemployment gap (i.e. flattening of the Philipps curve).

**11. Peaked in 2006, trend inflation in Thailand continued to decline through 2018, driven**

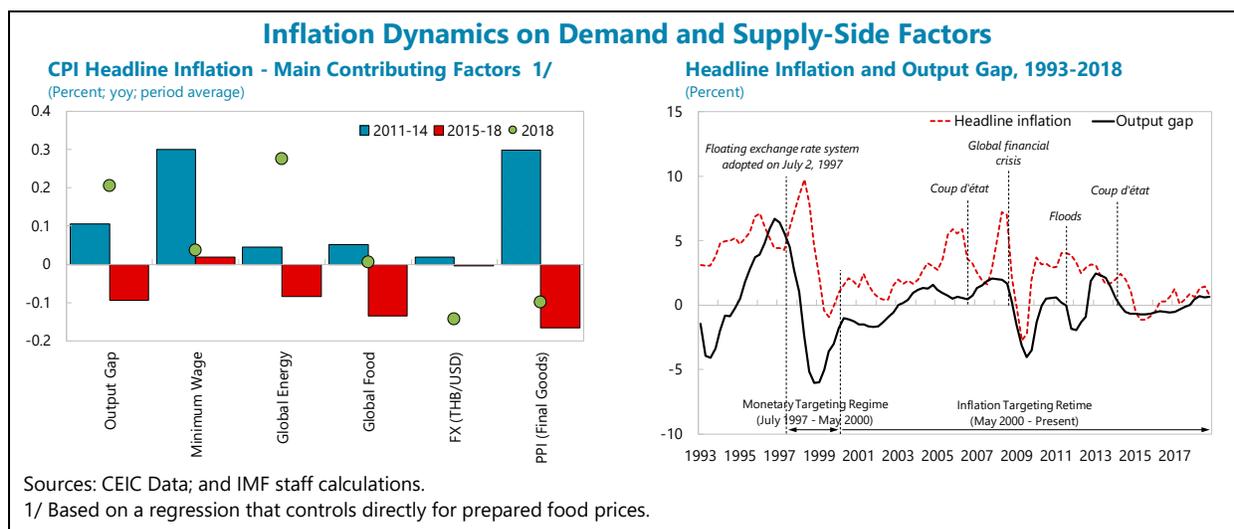
**by supply side factors.** Much of this decline was driven by decelerating trend inflation of non-core CPI, comprising raw food and energy prices while the latter has been under deflationary pressures since the onset of global commodity price shocks in 2014. The speed of deceleration appears to have increased since 2012, with trend inflation declining by 2 percentage points during 2012-18, and three quarters of which can be explained by declines in non-core CPI inflation. While core CPI inflation has been relatively stable, its trend inflation has declined since 2012, which contributed to the remaining decline (about a 0.5 percentage point) in the trend inflation of the headline CPI.



**12. Disinflation in prepared food prices was the key driving factor behind the decline in core CPI inflation.** While global factors, such as energy and food prices, explain nearly 85 percent of the year-to-year variation in headline inflation, country-specific factors influence the core inflation dynamics in Thailand. Starting 2015, core inflation fell sharply, and has since remained persistently low. A regression analysis indicates that disinflation during 2015–18 was mainly driven by declines in inflation of prepared food prices. Other components, such as prices of non-alcoholic beverages, apparel and footwear, among other, have also contributed but by a lesser extent.

**13. Regions outside Bangkok account for nearly two thirds of the disinflation in core CPI and prepared food prices during 2015–18.** In particular, three regions (North, Northeast and South) have experienced substantial declines in inflation during 2015–18 while disinflation in Bangkok has been marginal. The regional inflation dynamics appears to have further diverged most recently. While core inflation picked up in Bangkok and the central region, the three regions have continued to experience slower inflation. Likewise, disinflation in prepared food prices has been more pronounced in the three regions, which together with the central region—accounting for only one third of the total weight of the basket—contributed nearly two thirds of the aggregate disinflation in prepared food prices.

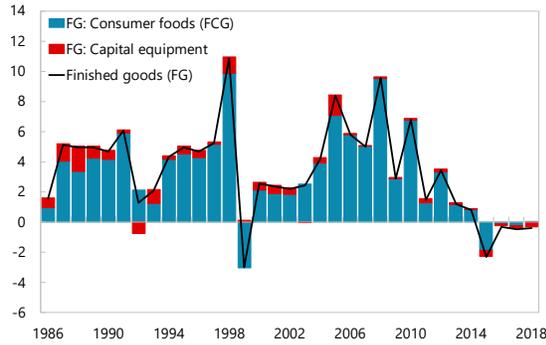
**14. A combination of regional as well as national factors may have influenced the inflation dynamics of prepared food prices.** Regression results seem to suggest that there are two sources of supply-side drivers, including local attributes such as cost of electricity, fuel, and water in a respective region and national attributes including foreign exchange rates (THB/USD) and import prices of raw materials. On the demand side, labor market developments (employment and average monthly wage growth) in a respective region and political and economic situations at the national level have all played a role. In particular, public sector's wage dynamics in the regions (Bangkok, North, Northeast, South) appears to broadly reflect the situations of local economies. Since prepared food is a normal good, its demand rises with households' earnings. In the Central region, employment growth is also important to explain the inflation dynamics of prepared food prices.



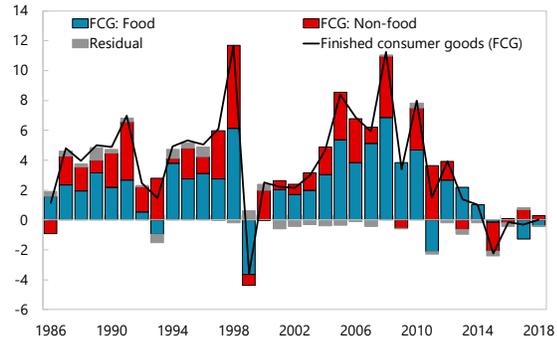
**15. While the linkage between output gap and inflation has recently strengthened, underlying structural factors have weighed more on declines in headline inflation since 2015, and on the South.** During the past two decades, Thailand has faced several economic and political challenges. While the country displayed strong resilience, Thailand was also influenced by external shocks, including most importantly the global commodity price shocks in 2014-15. The sharp slowdown in the trend inflation of global oil and food prices has narrowed the wedge between average inflation and output gap, and the latter—two consecutive years (2017–18) of economic expansion above the potential growth—contributed to the recent reflation albeit from the low base. Influences of structural factors appear lingering and pervasive as exhibited through continued declines in producer prices (PPI) on final goods since 2015, which have disproportionately impacted households in the South which has a high concentration of natural rubber farmers (Figure 4).

**Figure 1. Thailand: Producer Price Inflation, 1986–2018 1/**

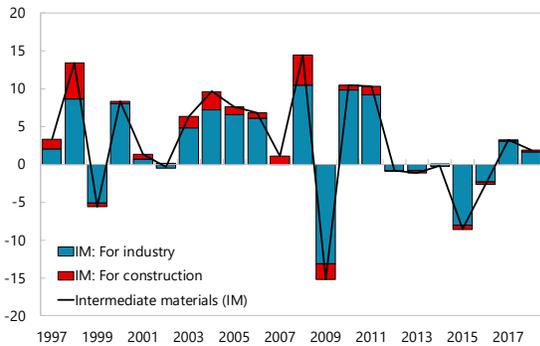
**Finished Goods**  
(Y/y percent change)



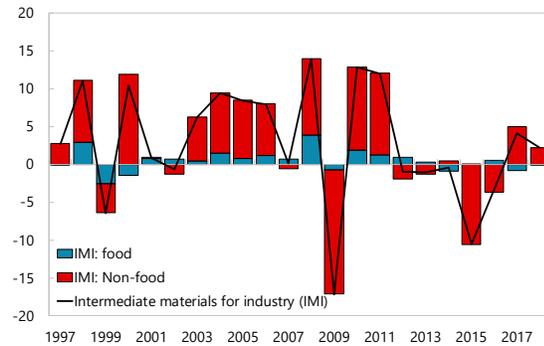
**Finished Consumer Goods**  
(Y/y percent change)



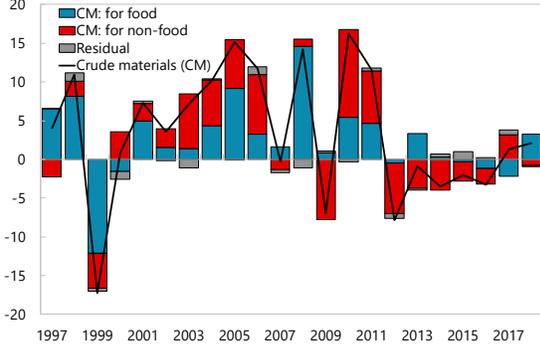
**Intermediate Materials**  
(Y/y percent change)



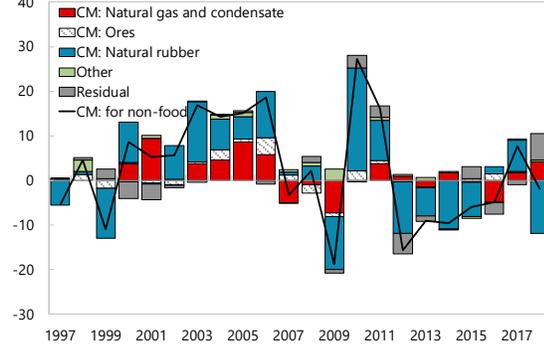
**Intermediate Materials for Industry**  
(Y/y percent change)



**Crude Materials**  
(Y/y percent change)



**Crude Materials for Non-food**  
(Y/y percent change)

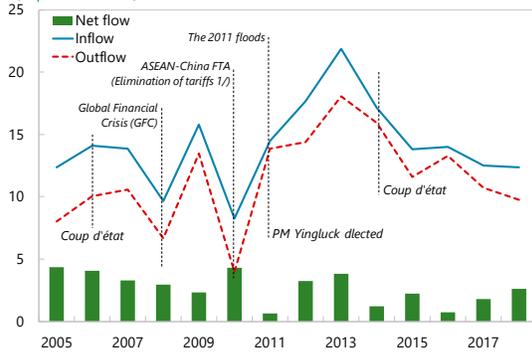


Sources: CEIC Data; and IMF staff calculations.

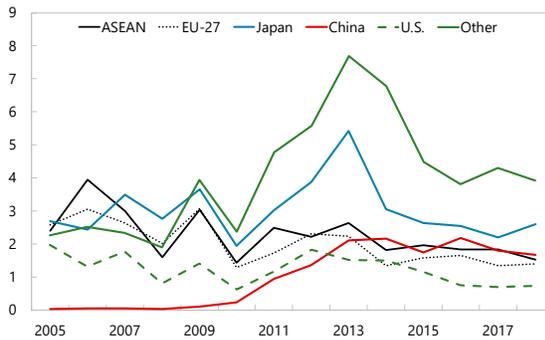
1/ Producer price inflation is decomposed by its major components based on a regression approach.

**Figure 2. Thailand: FDI Inflows and Imports**

**FDI Flows**  
(In percent of GDP)

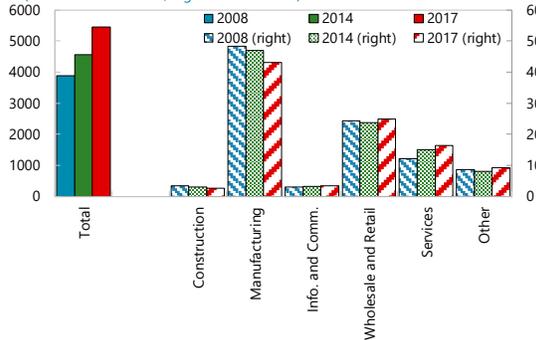


**FDI Inflow by Major Economies and Regions**  
(In percent of GDP)



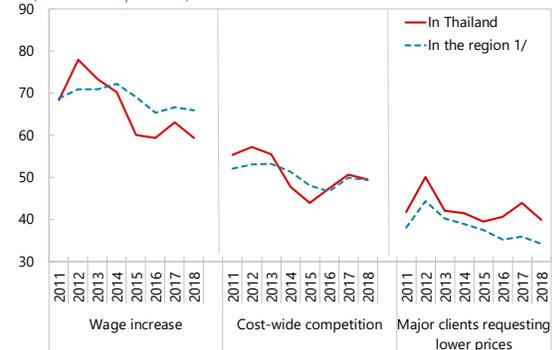
**Japanese Corporates in Thailand**

(Left: Number of firms, Right: Share in total)



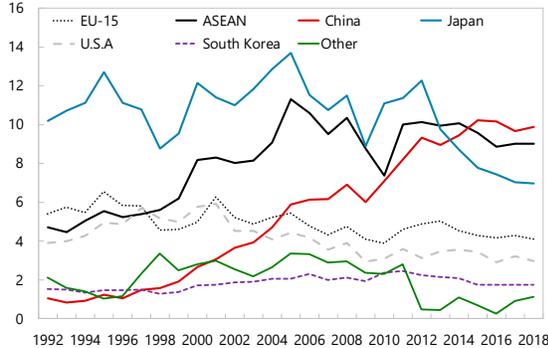
**Major Concerns Faced by Japanese Corporates 1/**

(Percent of respondents)



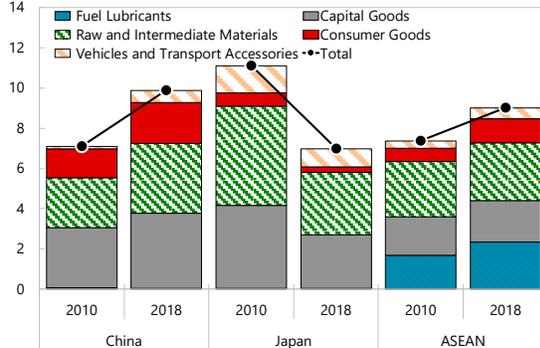
**Imports by Thailand: From Country 2/**

(In percent of GDP)



**Imports by Thailand: Major Countries and Categories**

(In percent of GDP)



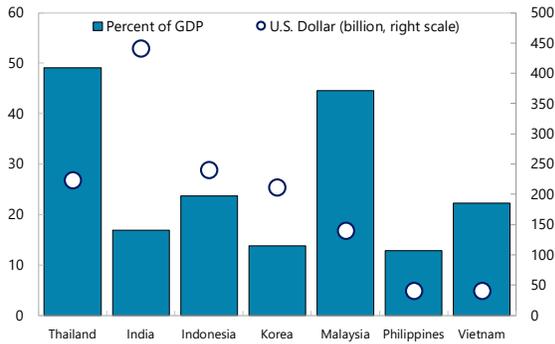
Sources: JETRO, Surveys of Japanese Corporates in Thailand (2008; 2014; and 2017); and IMF staff calculations.

1/ Based on the annual surveys of Japanese corporates in 19 economies in the Asia-Oceania region, including 5 advanced economies and 14 emerging and developing economies. Respondents selected multiple answers.

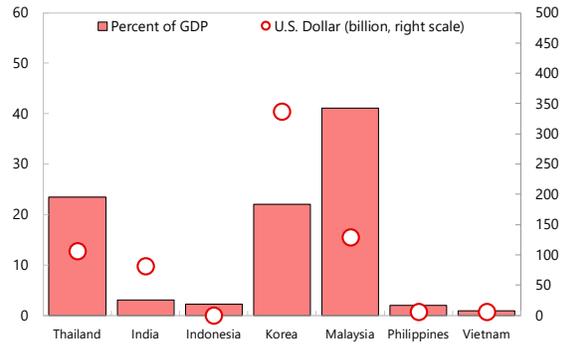
2/ Excludes imports of arms and munitions used in official services.

**Figure 3. Thailand: Stock of Direct Investment (DI), Exports, and Labor Cost**

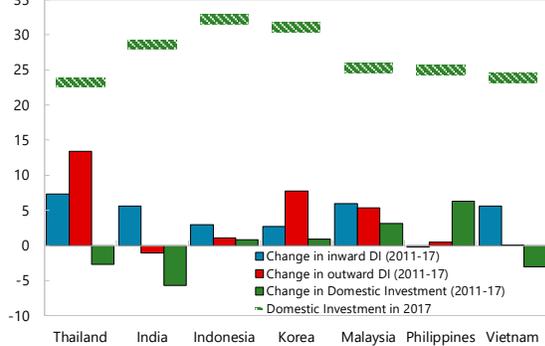
**Inward DI, 2017**  
(In percent of GDP)



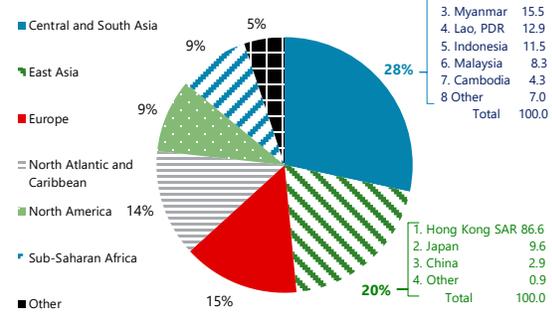
**Outward DI, 2017**  
(In percent of GDP)



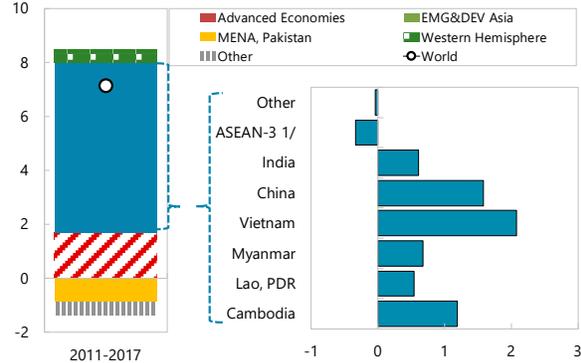
**Domestic and Direct Investment (DI)**  
(In percent of GDP)



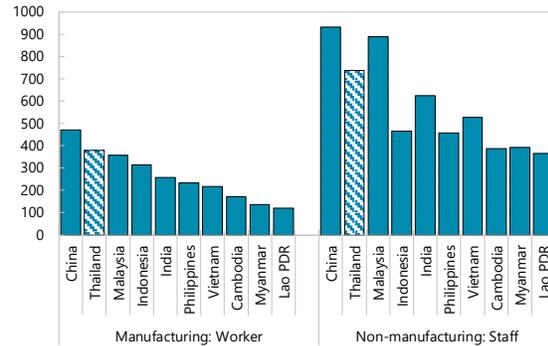
**Thailand's Outward DI: Destinations**  
(Percent, change in 2011-2017)



**Thailand Export Growth by Destination, 2011-2017**  
(Percent)



**Monthly Base Salary, 2017**  
(U.S. dollar)

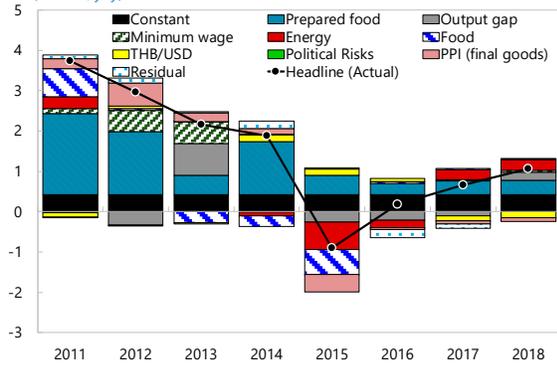


Sources: Haver Analytics; IMF, *Coordinated Direct Investment Survey*; IMF staff calculations; and JETRO, *Surveys of Japanese Corporates in Thailand* (2008; 2014; and 2017).

**Figure 4. Thailand: Inflation Dynamics by Regions**

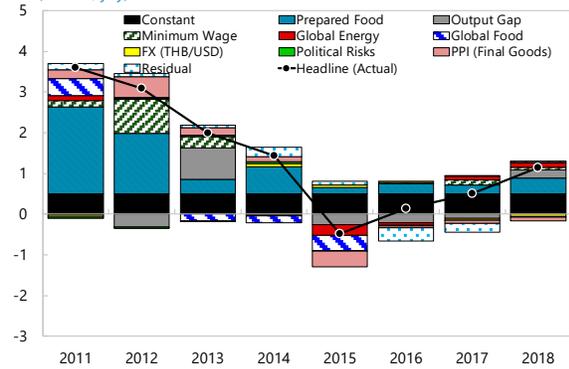
**Headline Inflation - All Regions**

(Percent; yoy)



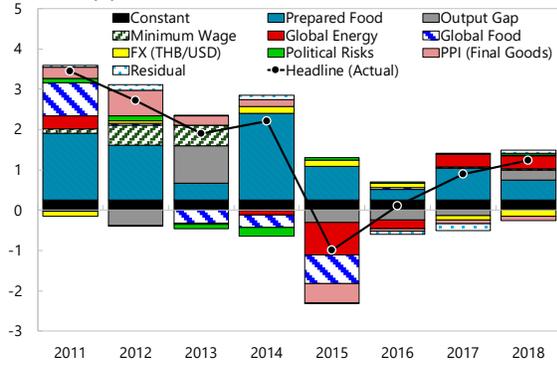
**Bangkok**

(Percent; yoy)



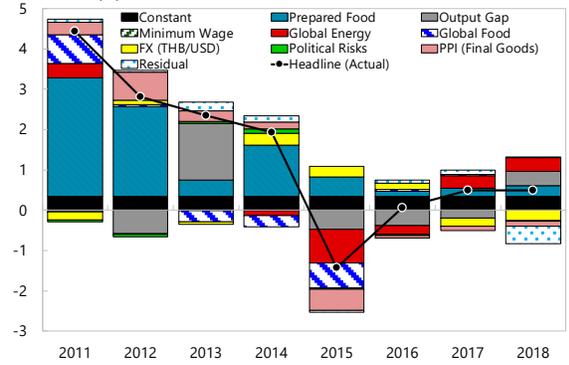
**Central Region**

(Percent; yoy)



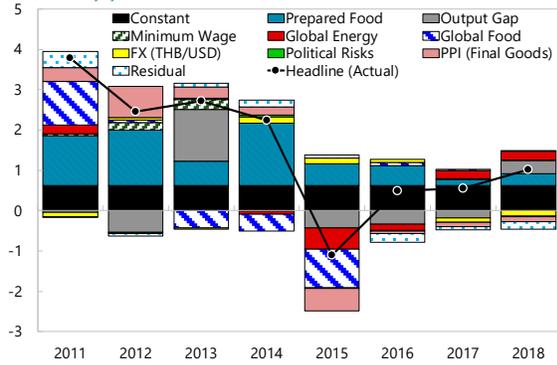
**Northern Region**

(Percent; yoy)



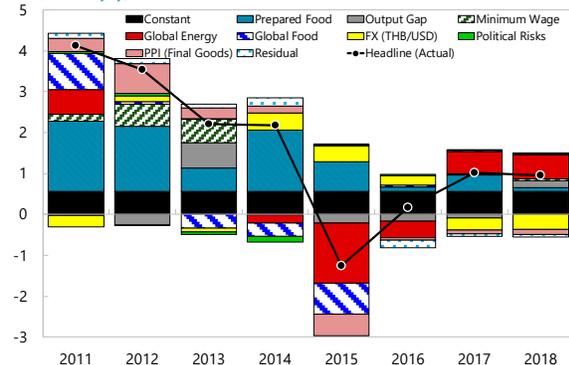
**Northeastern Region**

(Percent; yoy)



**Southern Region**

(Percent; yoy)



Sources: CEIC Data; and IMF staff calculations.

## Appendix IV. External Sector Assessment<sup>1</sup>

*The external position of Thailand in 2018 was substantially stronger than warranted by medium-term fundamentals and desirable policy settings. Outturns in the first half of 2019 reflect the continued impact of the ongoing trade tensions, with weakened exports and intermediate goods imports. Together with still sluggish domestic demand, the 2019 current account (CA) surplus is expected to narrow only slightly to about 6 percent of GDP. Over the medium term, macro policy stimulus combined with targeted structural reforms should support a pickup in domestic demand, helping to narrow the CA surplus. FX reserves remain well above reserve adequacy metrics, the NIIP position is small and stable, and external debt is assessed as sustainable with limited vulnerabilities.*

### A. External Balance Sheets

#### Background

1. Thailand's net international investment position (NIIP) has continued to strengthen over the last 5 years, reaching -1.1 percent of GDP in 2018 from -9.1 percent of GDP in 2017 and -23.9 percent of GDP in 2014. Changes in the financial account contributed to nearly three-fourths of the change in NIIP in 2018, as valuation effects declined. Gross assets fell slightly to around 96 percent of GDP (41 percent being reserve assets) while gross liabilities declined 13 percentage points to 97 percent of GDP (dominated by declines in net direct (about half) and portfolio (a third) investment). Net FDI continued to fall as outward investment (particularly by Thai corporates to CLMV<sup>2</sup>) has strengthened, offsetting still robust inward FDI. Portfolio (equities) and other investment also declined (by about 1-2 percentage points of GDP). External debt, at 32 percent of GDP in 2018, remains low and stable, and has limited risks (see External DSA—appendix V).

#### Assessment

2. Given prospects of still sizeable though narrowing current account surpluses and notwithstanding the recent increase in outward investment, Thailand's NIIP position is expected to approach a small surplus over the medium term, and its structure poses limited risks to external sustainability.

### B. Current Account

#### Background

3. In 2018, the current account surplus narrowed sharply to 6.4 percent of GDP from 9.7 percent in 2017, primarily reflecting the impact of the U.S.-China trade tensions on exports. Thailand's persistent and large CA surpluses in recent years (an average of 5.6 percent of GDP in

<sup>1</sup> This appendix was prepared by Sanaa Nadeem.

<sup>2</sup> CLMV refers to Cambodia, Lao, Myanmar and Vietnam.

2013–2017) have been driven by positive terms of trade shocks, a boom in tourism receipts, and strong value-added exports, which has led to sizeable savings rates. Meanwhile, structural constraints (such as high relative labor costs, slowing productivity and incomes, and an aging population) compounded by prolonged political uncertainty have constrained domestic demand, muting investment rates, which has hampered downward adjustment to the CA surplus. In the near term, external factors such as the impact of the ongoing U.S.-China trade tensions and concerns around global growth are likely to continue weighing on exports while the recovery in domestic demand will remain somewhat tepid due to the underlying structural factors (Appendix III). Over the medium term, as trade tensions dissipate, new export markets are tapped, and domestic demand is lifted by policy stimulus, the CA surplus is expected to narrow to around 4 percent of GDP.

## Assessment

4. The IMF's EBA methodology suggests that Thailand's current account is higher than warranted by macro fundamentals and desirable policy settings. The EBA CA model estimates a cyclically-adjusted CA of 6.4 percent of GDP and a CA norm of 0.1 percent of GDP for 2018, yielding a CA gap of 6.3 percent of GDP.<sup>3</sup> This gap consists of an identified policy gap of 1.5 percent of GDP (0.9 pp from domestic policy gaps), and an unexplained residual of 4.8 percent of GDP, which partly reflects Thailand-specific features and structural challenges not fully captured by the EBA model. Staff continues to use Thailand-specific adjusters to account for features not fully accounted for in the EBA CA model. These include:<sup>4</sup>

<b>Thailand 2018 EBA Assessment<sup>1/</sup></b>	
	Percent of GDP
Actual CA	6.4
Cyclically-adjusted CA	6.4
EBA CA Norm	0.1
EBA CA Gap	6.3
Of which: Policy gap	1.5
Residual	4.8
Staff adjustments	0.5-2.5
Of which: Political uncertainty	0-1.5
Terms of trade	0.5-1
Staff CA Gap (midpoint)	4.8
(EBA CA gap – midpoint of staff adjustments)	
Standard error	1.6
<b>Staff adjusted CA gap, range</b>	<b>3.2-6.4</b>
(Staff CA gap midpoint ± standard error)	
Source: IMF staff calculations.	
1/ EBA Current Account methodology	

- *Political uncertainty.* In 2018, private investment continued to be weighed down by ongoing political uncertainty and the prospects of delays in the democratic transition, although its effect moderated somewhat following the confirmation of the elections date by the end of the year. As

<sup>3</sup> The EBA's REER level approach suggests an REER gap of -6.1 percent (almost entirely accounted for by policy gaps), while the index REER approach suggests an REER gap of 7.3 percent. For Thailand, the CA approach and level REER approach lead to very similar REER gap results (indeed, structural breaks can render the Index REER approach less useful). In general, a higher weight tends to be placed on the implied REER gaps from CA model, especially when the results of CA and REER models differ on grounds that quantity-based estimates tend to be more stable and reliable than price-based estimates. The large differences between the different models also signals uncertainty ranges (beyond the statistical approach, which is based on estimating norm standard errors).

<sup>4</sup> Staff no longer sees justification for the tourism adjuster, which was introduced in the 2018 Article IV consultation. The restriction on Chinese tourists to Korea (which was associated with an inflow in tourists to Thailand in 2017) has been lifted. Further, other factors explain the rise of Chinese tourists to Thailand, which cannot be attributed to temporary or cyclical factors.

in the 2018 Article IV, staff's analysis<sup>5</sup> suggests a significant decline in private investment owing to political uncertainty in recent years, based on a rolling regression of private investment on the ICRG index, controlling for external demand. Accordingly, staff's adjustment is 0-1.5 pp of GDP (about half of last year's adjustment).

- *Terms of trade adjustment.* As before, alternative terms of trade show a larger contribution from the terms of trade variable than that used in the EBA model. To account for these measurement issues, staff's adjustment of 0.5-1 pp of GDP (compared to 1-1.5 pp of GDP last year).

5. Considering these and other Thailand specific factors (including structural constraints to domestic demand, such as population aging and large informality in social safety nets), and recognizing uncertainties related to the output gap, staff's assessment is that the Thailand's 2018 current account was around 3.2 percent to 6.4 percent of GDP higher than warranted by fundamentals and desired policies. This CA gap is expected to narrow over the medium term, as policy stimulus is deployed, political uncertainty dissipates, domestic demand recovers, and structural reforms take root.

## C. Real Exchange Rate

### Background

6. The REER appreciated overall by 3.0 percent in 2018, despite some volatility through the year, with marked depreciations in the second quarter and third quarter related to turmoil in other emerging markets. This comes on the back of a gradual appreciating trend since the mid-2000s despite occasional bouts of volatility (such as the mid-2013 U.S. Fed tapering talks, and domestic monetary policy easing cycle in early 2015). As of June 2019, the REER had appreciated a further 5.5 percent relative to the 2018 average, reflecting the continued perception of the strength of the Thai baht.

### Assessment

7. Consistent with the EBA CA approach, using an elasticity of 0.64, the 2018 REER would be assessed as around 5 percent to 10 percent below the levels consistent with medium-term fundamentals and desirable policies. Over the medium term, as macro stimulus is deployed and structural rigidities are addressed, the REER gap should narrow with a growth driven appreciation.

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<sup>5</sup> Using the Big Data approach of measuring political uncertainty, we calculate 3-year rolling correlations between our big data measure of political uncertainty and national accounts based private consumption data and this suggests an increasingly highly negative correlation between the two variables in recent years. Furthermore, regression analysis also show that political uncertainty tends to negatively impact private consumption in Thailand. These results suggest that political uncertainty has contributed to weak domestic demand in Thailand, over and above what the EBA model captures for the average country.

## D. Capital and Financial Flows

### Background

8. In 2018, the capital and financial account balance weakened to -4.2 percent of GDP from -2.8 percent in 2017. This has been driven primarily by net portfolio outflows—which increased to 1.1 percent of GDP reflecting a reversal in non-resident portfolio flows away from equity—and other investment. Nevertheless, nonresident investment in long-term government and corporate debt increased. After a decline in 2018H1—given broader uncertainty including around the impact of US-China trade negotiations—nonresident holdings of Thai bonds recovered in the 2018H2, partly attracted by Thailand’s strong external position relative to other EMs. Outward FDI remained robust at 4 percent of GDP owing to Thai firms’ overseas investment. Net other investment outflows were about 1 percent of GDP. The authorities continued with their gradual and prudent financial account liberalization, encouraging outward investment by residents. The capital and financial account balance has been negative since 2013.

### Assessment

9. Since 2013, Thailand has experienced episodes of volatility reflecting changes in external financial conditions and continued political uncertainty, and more recently, concerns about the impact of U.S.-China trade tensions. Nevertheless, Thailand has been able to weather well such episodes, given its strong external buffers and fundamentals, which has supported the ability of investors to distinguish Thailand from others in the EM asset class.

## E. Reserves

### Background

10. Gross reserves (including net forward positions) were stable at US\$239.4 billion at end-2018 (47.4 percent of GDP) and had strengthened to US\$251.1 billion as of end-July 2019; they remain well above reserve adequacy metrics (over 200 percent of the IMF’s Reserve Adequacy Metric for EMs and 12 months of imports). Although data on FX intervention is not available, staff estimates suggest foreign exchange (FX) sales during the 2018 sell-off period, and that FX intervention has been largely one-sided (purchases) since November 2018. In recent years, FXI has generally offset valuation changes. The exchange rate regime is freely floating.

### Assessment

11. Given FX reserves exceed all adequacy metrics, there is no need to build up reserves for precautionary purposes. The exchange rate should move flexibly as the key shock absorber. FX intervention should be limited to avoiding disorderly market conditions.

### Thailand—External Balance Assessment

**Overall Assessment:** *The external position in 2018 was substantially stronger than warranted by medium-term fundamentals and desirable policy settings. While the current account surplus has narrowed since peaking in 2016, it remains sizable, continuing to reflect the tepid recovery of domestic demand amid political uncertainty.*

**Potential policy responses:** Mutually reinforcing macro policy stimulus, led by a fiscal expansion, and structural reforms, should support domestic demand and lower the current account surplus over time. Such a strategy would facilitate the needed REER appreciation through a growth-driven process, boosting real incomes. Higher public infrastructure within available fiscal space should crowd-in private investment, while efforts to reform and expand social safety nets, notably the fragmented pension schemes, should reduce precautionary saving and widespread informality. Reforms to reduce barriers to investment, especially in the services sector, are also necessary. The exchange rate should move flexibly as the key shock absorber. Intervention should be limited to avoiding disorderly market conditions. With reserves exceeding all adequacy metrics, there is no need to build up reserves for precautionary purposes.

Foreign Asset and Liability Position and Trajectory	<p><b>Background.</b> Thailand's net international investment position (NIIP) continued to strengthen in 2018 to about -1.1 percent of GDP, compared to -9.1 percent of GDP in 2017 and -24 percent of GDP in 2014. Gross assets declined to around 96 percent of GDP (41 percent being reserve assets) while gross liabilities declined 13 percentage points to 97 percent of GDP (dominated by direct (about half) and portfolio (a third) investment). Net FDI continued to decline as outward investment (particularly by corporates) increased; portfolio (equities) and other investment also declined (by about 2 percentage points of GDP).</p> <p><b>Assessment.</b> External vulnerabilities have been reduced with the strengthening of the NIIP, which is projected to reach a small creditor position over the medium term. With external debt steady at about 32 percent of GDP, of which short-term debt (on a remaining maturity basis) amounts to 16 percent of GDP, external debt sustainability and liquidity risk are limited.</p>					
2018 (% GDP)	NIIP: -1.1	Gross Assets: 96.0	Res. Assets: 40.7	Gross Liab.: 97.2	Debt Liab.: 31.9	
Current Account	<p><b>Background.</b> Thailand's current account (CA) surplus declined sharply to 6.4 percent of GDP in 2018, following the continued strengthening of the CA surplus since 2014, which reached an all-time high surplus of 10.5 percent in 2016 (driven by favorable terms of trade and strong tourism receipts). The reduction in the surplus in 2018 reflects a consumption-led strengthening of domestic demand and a decline in net exports. Exports slowed due mainly to US-China trade tensions as well as an overall moderation in global external demand; imports remained robust, but with the broader regional trade slowdown weighing on the import of intermediate goods towards the end of the year. The services account remained steady relative to 2017, as tourism receipts stalled following a tourist accident in mid-2018, but with signs of a recovery by end-2018.</p> <p><b>Assessment.</b> The EBA CA model estimates a cyclically-adjusted CA of 6.4 percent of GDP and a CA norm of 0.1 percent of GDP for 2018. The CA gap of 6.3 percent of GDP consists of an identified policy gap of 1.5 percent of GDP, and an unexplained residual of 4.8 percent of GDP, which partly reflects Thailand-specific features and structural challenges not fully captured by the EBA model. Political uncertainty continued to weigh on investment in 2018, although its effect has moderated somewhat (0-1.5 percent of GDP), including following the confirmation of the elections date.<sup>1</sup> Taking all of this into account, and recognizing uncertainties related to the output gap measure, staff assess the CA balance to be around 3.2-6.4 percent of GDP stronger than warranted by fundamentals and desired policies. This CA gap is expected to narrow over the medium term, as policy stimulus is deployed, political uncertainty dissipates, private confidence recovers, and steps are taken to reform the social safety net.</p>					
2018 (% GDP)	Actual CA: 6.4	Cycl. Adj. CA: 6.4	EBA CA Norm: 0.1	EBA CA Gap: 6.3	Staff Adj.: 1.5	Staff CA Gap: 4.8
Real Exchange Rate	<p><b>Background.</b> The baht has been on a gradual real appreciation trend since the mid-2000s, despite occasional bouts of volatility (such as the mid-2013 US Fed tapering talks, and domestic monetary policy easing cycle in early 2015). In 2018, despite some volatility through the year, with marked depreciations in Q2 and Q3, the REER appreciated overall by 3.0 percent relative to 2017. As of June 2019, the REER had appreciated an additional 5.5 percent relative to the 2018 average.</p> <p><b>Assessment.</b><sup>2</sup> Using an elasticity of 0.64, the 2018 REER would be assessed as around 5-10 percent below the levels consistent with medium-term fundamentals and desirable policies.</p>					

### Thailand—External Balance Assessment (concluded)

<p>Capital and Financial Accounts: Flows and Policy Measures</p>	<p><b>Background.</b> In 2018, the capital and financial account balance weakened to -4.2 percent of GDP from -2.8 percent in 2017. This has been driven primarily by net portfolio outflows—which increased to 1.1 percent of GDP reflecting a reversal in nonresident portfolio flows away from equity—and other investment. Nevertheless, nonresident investment in long-term government and corporate debt increased. After a decline in 2018H1—given uncertainty on the impact of US-China trade negotiations—nonresident holdings of Thai bonds recovered in the 2018H2, partly attracted by Thailand’s strong external position relative to other EMs. Outward FDI remained robust at 4 percent of GDP owing to Thai firms’ overseas investment. Net other investment outflows were about 1 percent of GDP. The authorities continued with their gradual and prudent financial account liberalization, encouraging outward investment by residents. The capital and financial account balance has been negative since 2013.</p> <p><b>Assessment.</b> Since 2013, Thailand has experienced episodes of volatility reflecting changes in external financial conditions continued political uncertainty, and more recently concerns about the impact of US-China trade tensions. Nevertheless, Thailand has been able to weather well such episodes, given its strong external buffers and fundamentals, which has supported the ability of investors to distinguish Thailand from others in the EM asset class.</p>
<p>FX Intervention and Reserves Level</p>	<p><b>Background.</b> The exchange rate regime is classified as (de jure and de facto) floating. International reserves stood at 47.4 percent of GDP in 2018, standing at over three times short-term debt and 12 months of imports, and over 200 percent of the IMF’s standard reserve adequacy metric (unadjusted for capital controls).</p> <p><b>Assessment.</b> While evidence points to FX sales during the 2018 sell-off period, FX intervention has been largely one-sided since November 2018 (official interventions data are not published). Gross international reserves (including net forward position) remained stable during 2018. Reserves are higher than the range of IMF’s adequacy metrics and there continues to be no need to build up reserves for precautionary purposes. The exchange rate should move flexibly to act as a shock absorber, with FX intervention limited to avoiding disorderly market conditions.</p>
<p><sup>1</sup> Staff uses a Big Data approach as in Baker et al. (2016) and Hlatshwayo (2016, 2018) to calculate 3-year rolling correlations between a big data measure of political and economic uncertainty and national accounts based private consumption and investment data; the approach suggests a significant negative correlation between the uncertainty indices and the outcome variables, albeit a smaller degree relative to 2017. As in prior years, staff also adjusts the cyclically-adjusted CA for measurement biases in the EBA terms of trade estimates (about 0.5-1 pp of GDP).</p> <p><sup>2</sup> The EBA index REER gap in 2018 is estimated at 7.3 percent; the EBA level REER gap is estimated at -6.1 percent.</p>	

## Appendix V. External Debt Sustainability Analysis

**External debt is projected to remain low and stable, with limited risks.** Thailand's external debt is projected to remain stable at about 32 percent of GDP in 2019. Of this, short term debt (on a remaining maturity basis) comprises 15.3 percent of GDP; over two-thirds of total external debt is held by the private sector. Over the medium term, external debt is projected to remain contained, at about 32½ percent of GDP by 2024, while debt service is expected to remain low at around 6 percent of GDP. The external debt trajectory remains robust to a range of stress tests, including shocks to interest rates, GDP growth, the current account balance, and the exchange rate. Under the most extreme stress scenario, a one-time 30 percent depreciation of the baht, the external debt to GDP ratio would rise to 48 percent. Also, such a scenario does not account for trade flow adjustments that could take place if such a depreciation were to occur (i.e., a sharp improvement in the current account that could significantly bring down the debt ratio). Whereas the share of short-term debt remains high, rollover risks from a global funding shock could be mitigated by a well-capitalized domestic financial system.

**Table 1. Thailand: External Debt Sustainability Framework, 2014–2024**  
(In percent of GDP, unless otherwise indicated)

	Actual					Projections							Debt-stabilizing non-interest current account 6/ 0.2
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
<b>Baseline: External debt</b>	34.8	32.7	32.0	34.1	31.9	<b>32.0</b>	<b>32.4</b>	<b>32.2</b>	<b>32.4</b>	<b>32.6</b>	<b>33.0</b>		
Change in external debt	1.0	-2.1	-0.6	2.0	-2.2	0.1	0.4	-0.2	0.1	0.3	0.4		
Identified external debt-creating flows (4+8+9)	-0.2	-5.1	-8.7	-10.5	-6.9	-5.1	-5.3	-5.2	-5.0	-4.4	-4.4		
Current account deficit, excluding interest payments	-3.2	-8.0	-10.9	-10.2	-6.9	-7.1	-6.8	-6.3	-5.9	-5.3	-5.1		
Deficit in balance of goods and services	-130.9	-124.9	-120.9	-121.3	-122.1	-115.4	-118.5	-119.3	-119.5	-119.5	-120.5		
Exports	68.4	67.6	67.2	66.9	65.8	62.5	64.0	64.1	63.9	63.5	63.8		
Imports	-62.5	-57.3	-53.6	-54.4	-56.2	-52.9	-54.5	-55.2	-55.6	-56.0	-56.8		
Net non-debt creating capital inflows (negative)	1.6	1.3	2.7	2.2	2.9	1.9	1.5	1.2	1.1	1.1	0.9		
Automatic debt dynamics 1/	1.5	1.6	-0.5	-2.5	-2.8	0.1	0.0	-0.1	-0.2	-0.2	-0.2		
Contribution from nominal interest rate	0.4	1.1	0.4	0.5	0.5	1.0	0.9	0.9	0.9	0.9	1.0		
Contribution from real GDP growth	-0.3	-1.1	-1.1	-1.2	-1.3	-0.9	-0.9	-1.1	-1.1	-1.1	-1.1		
Contribution from price and exchange rate changes 2/	1.4	1.6	0.2	-1.9	-2.1	...	...	...	...	...	...		
Residual, incl. change in gross foreign assets (2-3) 3/	1.2	3.0	8.0	12.5	4.7	5.2	5.7	5.1	5.1	4.7	4.7		
External debt-to-exports ratio (in percent)	50.9	48.3	47.7	51.0	48.4	51.2	50.6	50.2	50.7	51.4	51.8		
<b>Gross external financing need (in billions of US dollars) 4/</b>	62.9	45.5	24.2	25.9	54.4	47.0	48.9	52.5	57.1	62.5	66.4		
in percent of GDP	15.4	11.3	5.9	5.7	10.8	10-Year	10-Year	8.9	8.8	8.9	9.1	9.4	9.5
<b>Scenario with key variables at their historical averages 5/</b>						<b>32.0</b>	<b>32.5</b>	<b>32.4</b>	<b>32.4</b>	<b>32.0</b>	<b>31.4</b>	<b>-0.7</b>	
<b>Key Macroeconomic Assumptions Underlying Baseline</b>						Historical Average	Standard Deviation						
Real GDP growth (in percent)	1.0	3.1	3.4	4.0	4.1	3.3	2.6	2.9	3.0	3.5	3.6	3.6	
GDP deflator in US dollars (change in percent)	-4.0	-4.5	-0.6	6.2	6.5	2.4	5.7	1.9	2.2	2.4	2.4	2.4	
Nominal external interest rate (in percent)	1.1	3.0	1.2	1.7	1.6	1.5	0.6	3.1	3.0	3.0	3.0	3.1	
Growth of exports (US dollar terms, in percent)	-1.3	-2.6	2.1	9.9	9.1	5.2	10.4	-0.5	7.9	6.1	5.7	5.5	
Growth of imports (US dollar terms, in percent)	-7.3	-9.8	-3.7	12.0	14.6	4.6	17.0	-1.3	8.5	7.3	6.9	6.9	
Current account balance, excluding interest payments	3.2	8.0	10.9	10.2	6.9	5.1	4.4	7.1	6.8	6.3	5.9	5.3	
Net non-debt creating capital inflows	-1.6	-1.3	-2.7	-2.2	-2.9	-0.6	2.2	-1.9	-1.5	-1.2	-1.1	-1.1	

1/ Derived as  $[r - g - r(1+g) + ea(1+r)] / (1+g+r+gr)$  times previous period debt stock, with  $r$  = nominal effective interest rate on external debt;  $r$  = change in domestic GDP deflator in US dollar terms,  $g$  = real GDP growth rate,  $e$  = nominal appreciation (increase in dollar value of domestic currency), and  $a$  = share of domestic-currency denominated debt in total external debt.

2/ The contribution from price and exchange rate changes is defined as  $[-r(1+g) + ea(1+r)] / (1+g+r+gr)$  times previous period debt stock.  $r$  increases with an appreciating domestic currency ( $e > 0$ ) and rising inflation (based on GDP deflator).

3/ For projection, line includes the impact of price and exchange rate changes.

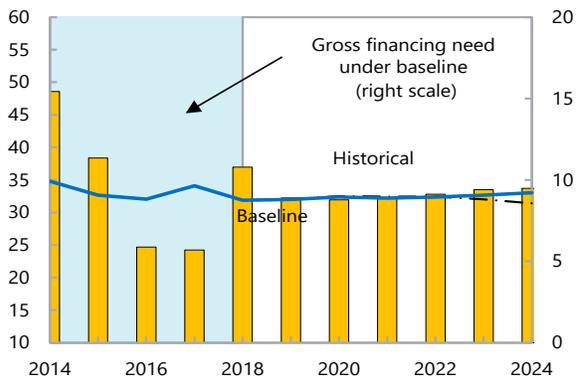
4/ Defined as current account deficit, plus amortization on medium- and long-term debt, plus short-term debt at end of previous period.

5/ The key variables include real GDP growth; nominal interest rate; dollar deflator growth; and both non-interest current account and non-debt inflows in percent of GDP.

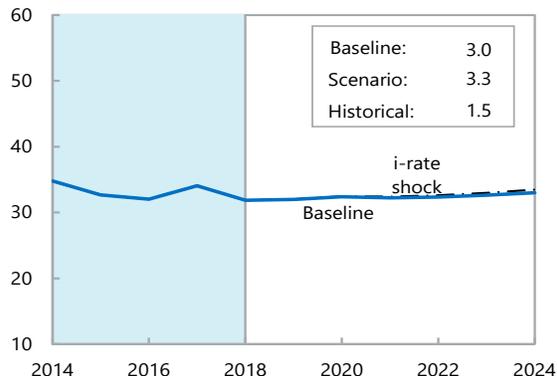
6/ Long-run, constant balance that stabilizes the debt ratio assuming that key variables (real GDP growth, nominal interest rate, dollar deflator growth, and non-debt inflows in percent of GDP) remain at their levels of the last projection year.

### Thailand: External Debt Sustainability: Bound Tests 1/ 2/ (External debt in percent of GDP)

**Baseline and historical scenarios**

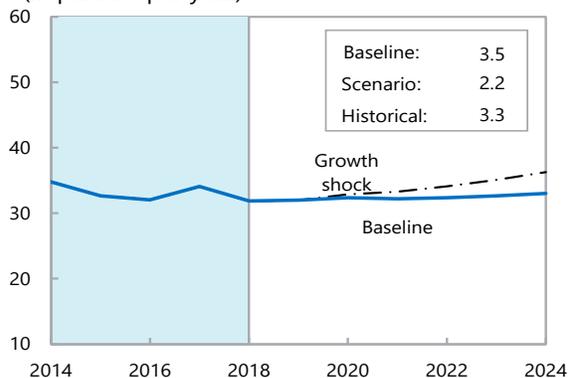


**Interest rate shock (in percent)**



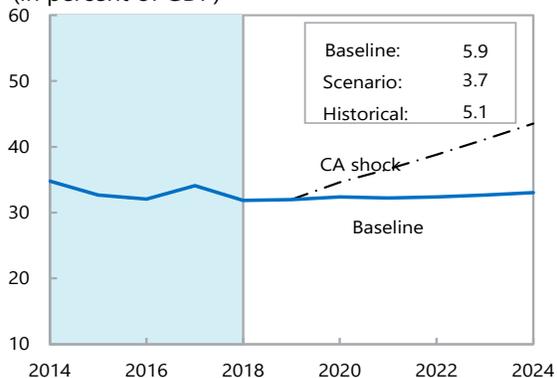
**Growth shock**

(in percent per year)

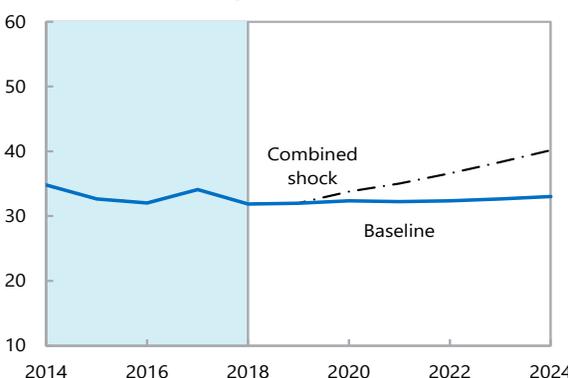


**Non-interest current account shock**

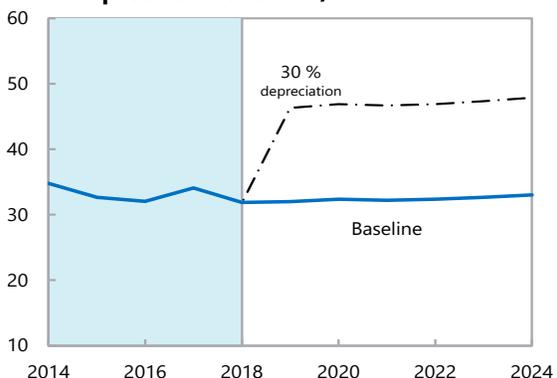
(in percent of GDP)



**Combined shock 3/**



**Real depreciation shock 4/**



Sources: International Monetary Fund, Country desk data, and staff estimates.

- 1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.
- 2/ For historical scenarios, the historical averages are calculated over the ten-year period, and the information is used to project debt dynamics five years ahead.
- 3/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and current account balance.
- 4/ One-time real depreciation of 30 percent occurs in 2019.

## Appendix VI. Public Debt Sustainability Analysis

### Thailand Public Sector Debt Sustainability Analysis (DSA)—Baseline Scenario

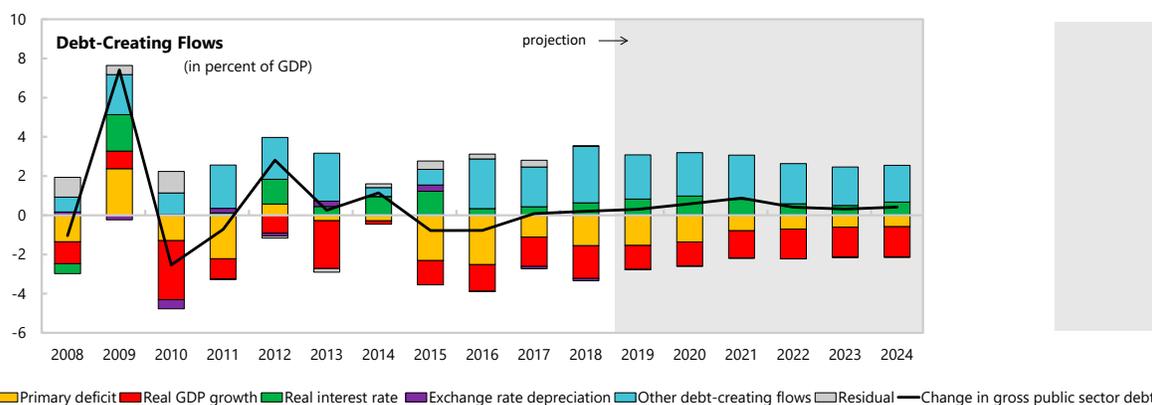
(In percent of GDP unless otherwise indicated)

#### Debt, Economic and Market Indicators <sup>1/</sup>

	Actual			Projections						As of June 05, 2019		
	2008-2016 <sup>2/</sup>	2017	2018	2019	2020	2021	2022	2023	2024			
Nominal gross public debt	40.9	41.9	42.1	42.4	43.0	43.8	44.3	44.6	45.0	Sovereign Spreads		
Of which: guarantees	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	EMBIG (bp) 3/ 14		
Public gross financing needs	6.2	5.4	4.9	4.5	4.9	5.4	5.0	4.7	4.4	5Y CDS (bp) 36		
Real GDP growth (in percent)	3.0	3.8	4.2	3.0	3.0	3.4	3.6	3.6	3.6	Ratings	Foreign	Local
Inflation (GDP deflator, in percent)	2.5	2.3	1.7	1.1	0.5	0.9	1.5	1.9	1.6	Moody's	Baa1	Baa1
Nominal GDP growth (in percent)	5.6	6.1	5.9	4.1	3.5	4.3	5.3	5.6	5.3	S&Ps	BBB+	A-
Effective interest rate (in percent) <sup>4/</sup>	4.2	3.5	3.3	3.1	3.0	2.9	3.0	3.1	3.3	Fitch	BBB+	BBB+

#### Contribution to Changes in Public Debt

	Actual			Projections						cumulative	debt-stabilizing primary balance <sup>9/</sup>
	2008-2016	2017	2018	2019	2020	2021	2022	2023	2024		
Change in gross public sector debt	0.6	0.1	0.2	0.3	0.6	0.9	0.4	0.3	0.4	2.9	
Identified debt-creating flows	0.3	-0.3	0.2	0.3	0.6	0.9	0.4	0.3	0.4	3.0	
Primary deficit	-0.8	-1.1	-1.6	-1.5	-1.4	-0.8	-0.7	-0.6	-0.6	-5.6	1.0
Primary (noninterest) revenue and grants	23.5	23.9	23.9	24.1	24.1	24.2	24.2	24.2	24.2	144.9	
Primary (noninterest) expenditure	22.7	22.8	22.3	22.6	22.7	23.4	23.5	23.6	23.6	139.4	
Automatic debt dynamics <sup>5/</sup>	-0.5	-1.2	-1.2	-0.4	-0.2	-0.6	-0.9	-1.0	-0.9	-4.0	
Interest rate/growth differential <sup>6/</sup>	-0.5	-1.1	-1.0	-0.4	-0.2	-0.6	-0.9	-1.0	-0.9	-4.0	
Of which: real interest rate	0.6	0.4	0.6	0.8	1.0	0.8	0.6	0.5	0.7	4.4	
Of which: real GDP growth	-1.2	-1.5	-1.7	-1.2	-1.2	-1.4	-1.5	-1.5	-1.5	-8.4	
Exchange rate depreciation <sup>7/</sup>	0.0	-0.1	-0.1	...	...	...	...	...	...	...	
Other identified debt-creating flows	1.6	2.0	2.9	2.3	2.2	2.3	2.0	2.0	1.9	12.6	
Please specify (1) (e.g., drawdown of deposits) (negative)	1.6	2.0	2.9	2.3	2.2	2.3	2.0	2.0	1.9	12.6	
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Please specify (2) (e.g., ESM and Euroarea loans)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Residual, including asset changes <sup>8/</sup>	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	



Source: IMF staff.

1/ On fiscal year basis. Public sector debt includes central government debt, nonfinancial SOEs' debt, and SFI guaranteed debt.

2/ Based on available data.

3/ Long-term bond spread over U.S. bonds.

4/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.

5/ Derived as  $[(r - \pi(1+g) - g + ae(1+r)] / (1+g+\pi+gr)$  times previous period debt ratio, with  $r$  = interest rate;  $\pi$  = growth rate of GDP deflator;  $g$  = real GDP growth rate;  $a$  = share of foreign-currency denominated debt; and  $e$  = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

6/ The real interest rate contribution is derived from the numerator in footnote 5 as  $r - \pi(1+g)$  and the real growth contribution as  $-g$ .

7/ The exchange rate contribution is derived from the numerator in footnote 5 as  $ae(1+r)$ .

8/ Includes changes in the stock of guarantees, asset changes, and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

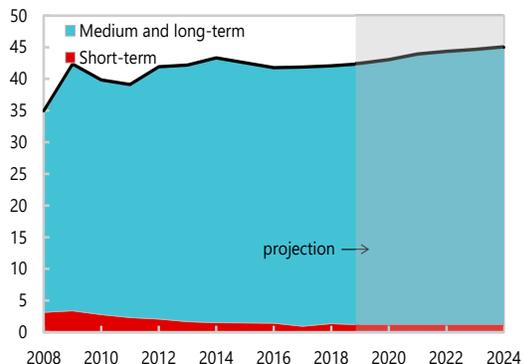
9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

## Thailand Public DSA – Composition of Public Debt and Alternative Scenarios

### Composition of Public Debt

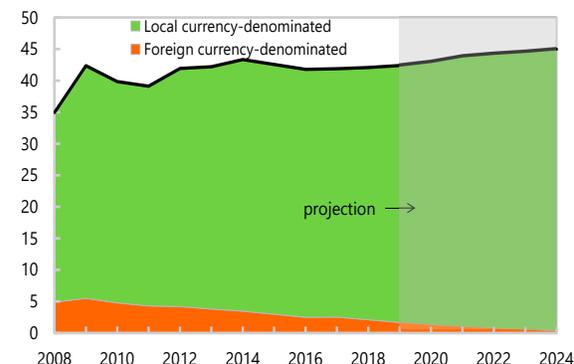
#### By Maturity

(in percent of GDP)



#### By Currency

(in percent of GDP)



### Alternative Scenarios

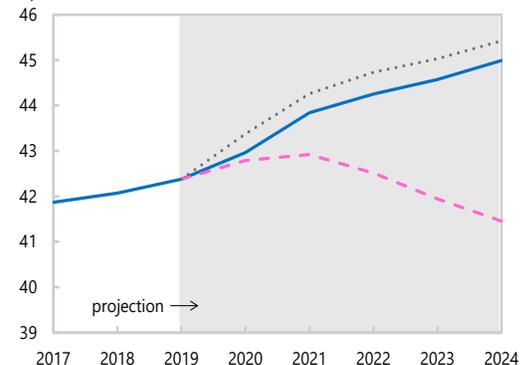
— Baseline

..... Historical

- - - Constant Primary Balance

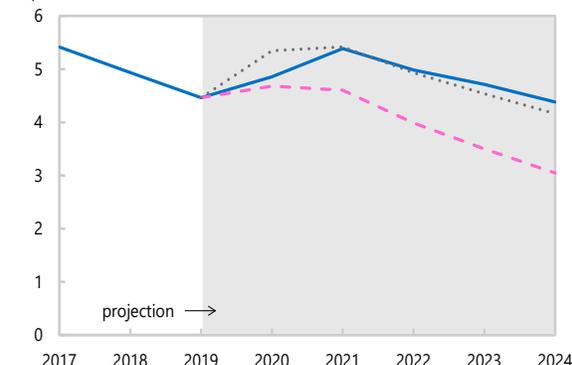
#### Gross Nominal Public Debt

(in percent of GDP)



#### Public Gross Financing Needs

(in percent of GDP)



### Underlying Assumptions

(in percent)

#### Baseline Scenario

	2019	2020	2021	2022	2023	2024
Real GDP growth	3.0	3.0	3.4	3.6	3.6	3.6
Inflation	1.1	0.5	0.9	1.5	1.9	1.6
Primary Balance	1.5	1.4	0.8	0.7	0.6	0.6
Effective interest rate	3.1	3.0	2.9	3.0	3.1	3.3

#### Constant Primary Balance Scenario

Real GDP growth	3.0	3.0	3.4	3.6	3.6	3.6
Inflation	1.1	0.5	0.9	1.5	1.9	1.6
Primary Balance	1.5	1.5	1.5	1.5	1.5	1.5
Effective interest rate	3.1	3.0	2.9	3.0	3.1	3.3

#### Historical Scenario

	2019	2020	2021	2022	2023	2024
Real GDP growth	3.0	3.2	3.2	3.2	3.2	3.2
Inflation	1.1	0.5	0.9	1.5	1.9	1.6
Primary Balance	1.5	0.9	0.9	0.9	0.9	0.9
Effective interest rate	3.1	3.0	3.0	3.1	3.2	3.4

Source: IMF staff.

## Appendix VII. Practical Lessons in Addressing Private Debt Overhang<sup>1</sup>

*Thailand's household debt has soared to nearly 80 percent of GDP, while nonfinancial corporate debt has steadily risen to a somewhat moderate 50 percent of GDP. High private leverage can pose a drag on consumption and growth, slowing the external rebalancing, as well as constraining policy space. This appendix uses the Growth at Risk (GaR) framework to quantify the cost of Thailand's private debt overhang on the expected distribution of GDP growth. It finds increases in household debt raise downside risks to growth over the medium term, and that household debt poses a larger cost than corporate debt. It also discusses legal strategies to prevent over-indebtedness (ex-ante measures) and address debt resolution (ex-post measures) Finally, the overall macroeconomic policy mix plays a fundamental role, as the envisioned macro stimulus could boost incomes and inflation, reducing debt burdens.*

### A. Introduction

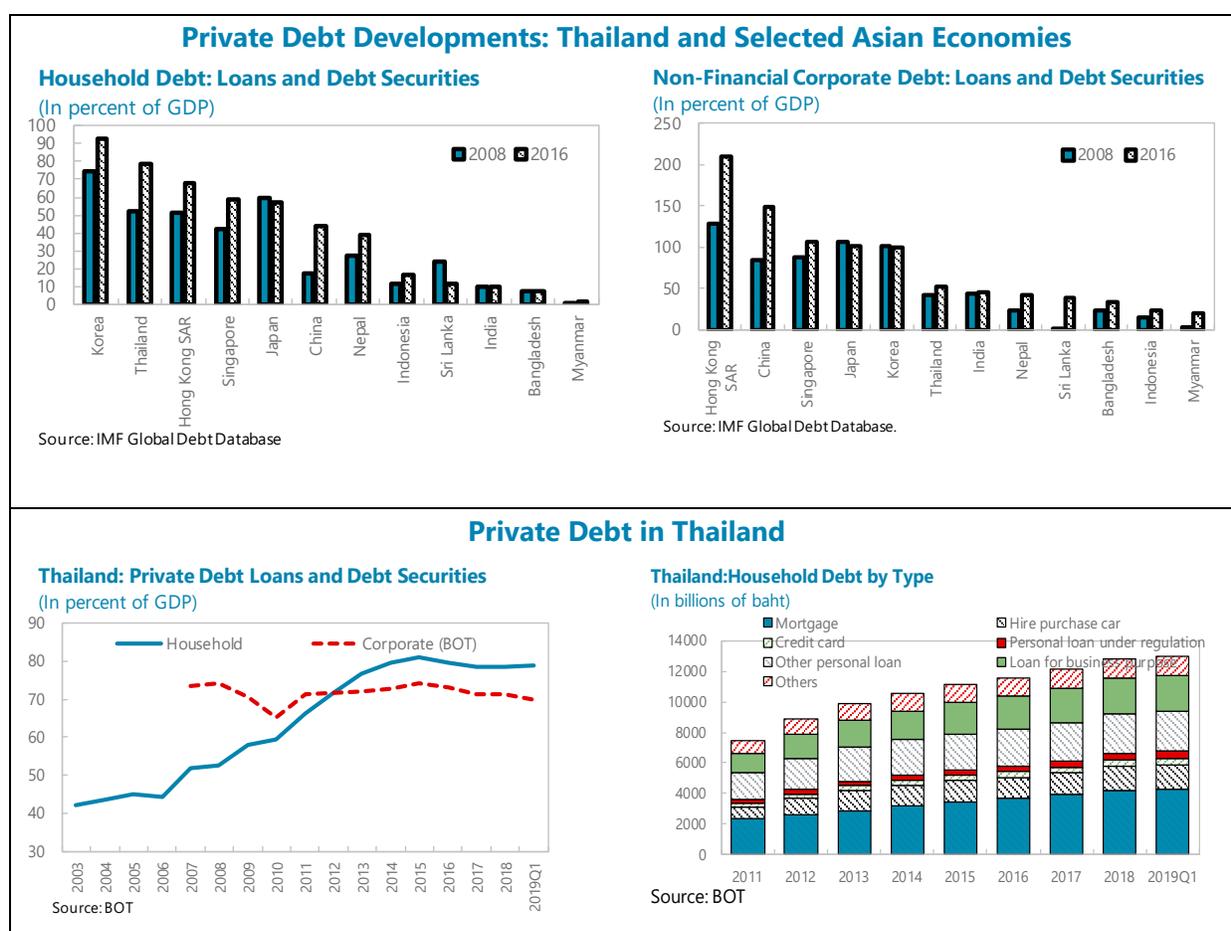
**1. Since the GFC, accommodative international financial conditions have fueled the rise of private debt in emerging markets, including Thailand.**<sup>2</sup> Since 2007, Thai household debt has risen by nearly 30 pp of GDP to reach 78.6 percent of GDP or THB12.6 trillion (US\$406 billion) at end-2018, outpacing most other Asian economies. This rise has been driven by increasing personal and auto loans in the face of higher living costs, as consumption (particularly durables) outstrips slowing incomes, while access to credit from both formal and informal institutions has become easier. Meanwhile, nonfinancial corporate debt has risen about 10 pp of GDP between 2007 and 2018 and remains somewhat contained at about 50 percent of GDP (US\$250 billion), with the rise of FX bond markets marking a shift towards market-based financing from bank lending.

**2. The private debt overhang can pose a drag on private consumption and investment, and ultimately growth.** Although moderate household debt levels can help boost demand and build personal wealth, high indebtedness can curtail growth over the medium term. Over-indebted households cut back on consumption as their perception of permanent income and wealth is reduced, (Mian and Sufi 2017, IMF GFSR 2017). High corporate debt can weigh on investment and distort resource allocation; IMF 2018 finds that for Asian economies, excessively leveraged firms had persistently lower investment, which in turn dampened productivity growth. Moreover, the Great Recession not only brought to the fore the costs on growth of high levels of debt and slow balance sheet adjustment, but also potential nonlinearities in these costs (Reinhart and Rogoff 2010, Cecchetti et al 2011, Lombardi et al 2017). In this vein, the Growth at Risk (GaR) framework (Adrian, Boyarchenko and Giannone 2019) provides a novel framework to illustrate these nonlinearities.

<sup>1</sup> This appendix was prepared by Jose Garrido, Sanaa Nadeem, and Nagwa Riad, based on Garrido, Nadeem and Riad (forthcoming). To-Nhu Dao provided invaluable research assistance.

<sup>2</sup> Global debt stood at US\$182 trillion in 2017, or 224 percent of global GDP. Private debt in EMs increased by US\$36 trillion between 2007 and 2017, with China accounting for 40 percent of this increase (IMF October 2018 Fiscal Monitor).

**3. Such costs motivate the need to proactively deleverage in an orderly manner, a process, which, for emerging markets, may require accounting for movements in the international financial cycle.** An orderly deleveraging typically requires measures that tackle both the stock of debt (ex-post through debt resolution frameworks) and its flow (ex-ante through macroprudential frameworks; institutional coordination and other preventive measures). Whereas international best practice in dealing with corporate debt overhang is well established, best practices in dealing with household debt are more limited. A review of international best practice on the effective combination of such tools can help distill practical lessons for Thailand on dealing with household and corporate over-indebtedness. Due consideration must also be given to the overall macroeconomic policy mix, and, for a small open economy such as Thailand, to movements in the international financial cycle, including monetary policy stances in advanced economies and more limited policy space than prior to the crisis.



**4. The remainder of this note presents two complementary approaches:** Section B uses the Growth at Risk (GaR) framework to quantify the costs of over-indebtedness on growth; Section C employs examples from the analysis of legal frameworks in select Asian countries (ASEAN-5, China, India, Japan and Korea) to derive lessons on orderly deleveraging; and Section D discusses implications for the broader macroeconomic policy mix.

## B. A Growth at Risk Model for Thailand

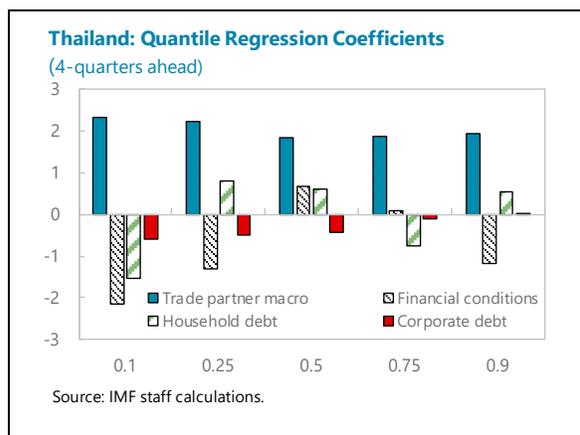
**5. To assess the role of private leverage on Thailand’s growth, the conditional distribution of GDP growth is estimated using the Growth at Risk (GaR) framework.**<sup>3</sup> Rather than focusing on a point estimate of growth, the GaR methodology estimates the full conditional distribution of GDP growth, which can better capture nonlinearities. This involves estimating quartile regressions of GDP growth on partitions, which summarize groups of related variables (using principal components analysis to reduce dimensionality). The quartile regression estimates are then used to generate a t-skew distribution of growth.

**6. The Growth-at-Risk model fits Thailand’s growth  $q$  quarters ahead on the following three regressor groups:** financial conditions, trade partner macroeconomic conditions, and measures of private leverage (household and corporate).

$$y_{t+q} = \beta_y^q y_t + \beta_f^q \text{fin}_t + \beta_{tp}^q \text{tp}_t + \beta_l^q \text{lv}_t + \varepsilon_{t+q}^q$$

Financial conditions consist of credit growth, sovereign and corporate bond spreads, REER change and volatility, terms of trade, VIX, equity and house price growth.<sup>4</sup> Trade partner macroeconomic indicators comprise US and China GDP growth. Finally, private leverage comprises household and corporate debt to GDP ratios (level and change). The model uses quarterly data from 1995Q1 to 2018Q4, and the choice of macrofinancial variables is influenced by data availability.

**7. Preliminary results confirm the importance of leverage in driving tail risks to future GDP growth.** As shown in, the conditional quartile functions confirm the nonlinear impact of financial conditions, including leverage, on growth: the estimated quartile coefficients differ over the distribution, with larger coefficients at the left tail of the growth distribution rather than the mean and upper tail. This means that a tightening in financial conditions raises the downside risk to growth. By contrast, trade partner macro indicators appear to have a more consistent contribution to Thailand’s GDP growth.

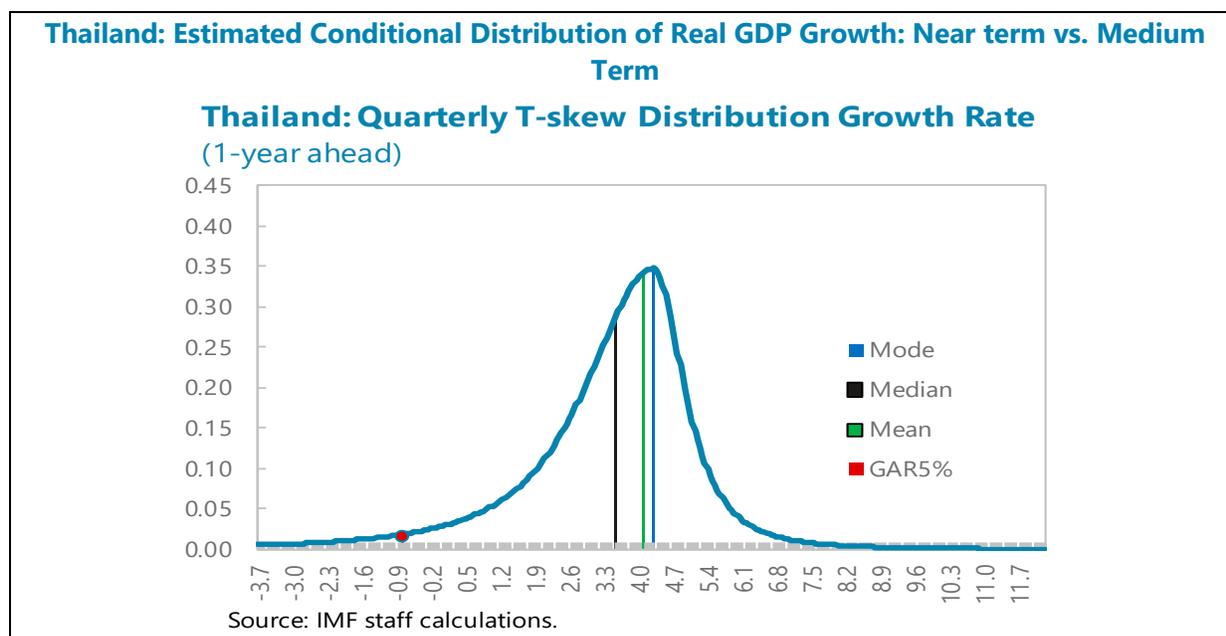


**8. The conditional distribution of GDP growth has a slight positive skew, and medium-term risks are tilted to the downside.** In the near term, the conditional distribution of GDP growth (estimated for 4-quarters ahead) is centered at a mode of 4.39 percent of GDP, with a positive skew, reflecting high export-driven growth outturns in the early 2000s. The GAR 5 percent measure, the level of growth below which 5 percent of the growth distribution lies is -0.8 percent.

<sup>3</sup> See Adrian, Boyarchenko and Giannone (2019) and IMF (2019) for background on the framework.

<sup>4</sup> See IMF Selected Issues Paper, Financial Conditions (2018) for a discussion on key drivers of financial conditions in Thailand.

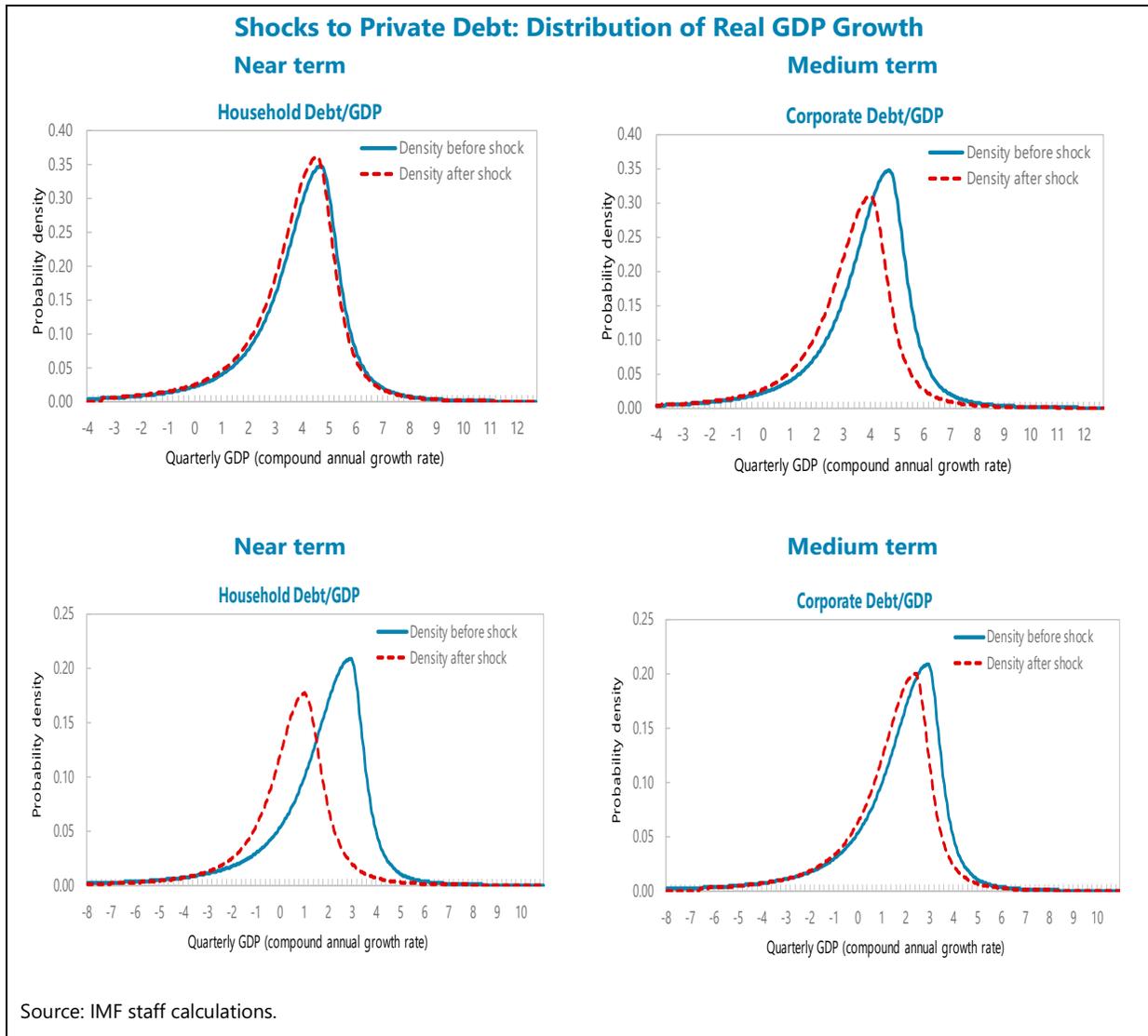
The probability that growth falls below 0 is 11.1 percent. Risks are tilted to the downside, however: the medium term distribution has a lower mode (2.8 percent) and a left tail (GAR 5 percent at -2.4 percent).



**9. Household debt poses a stronger drag on growth than corporate debt in the medium term.** In the short run, an increase in household debt does not result in a large leftward shift of the growth distribution; this confirms findings in the literature that in the very short run, household debt may boost growth (see Mian et al 2015, IMF GFSR 2017). However, in the medium term, the effects of household debt on the growth distribution are more pronounced: a one standard deviation increase in the household debt/GDP ratio shifts the distribution of GDP growth to the left, with a decline in the mode (from 2.8 percent to 0.6 percent) and a thickening in the left tail. Meanwhile, a one standard deviation shock to the corporate debt/GDP ratio shifts the distribution of GDP growth to the left but by less: the mode declines (2.8 to 1.7 percent), and the left tail thickens but by a lesser degree.

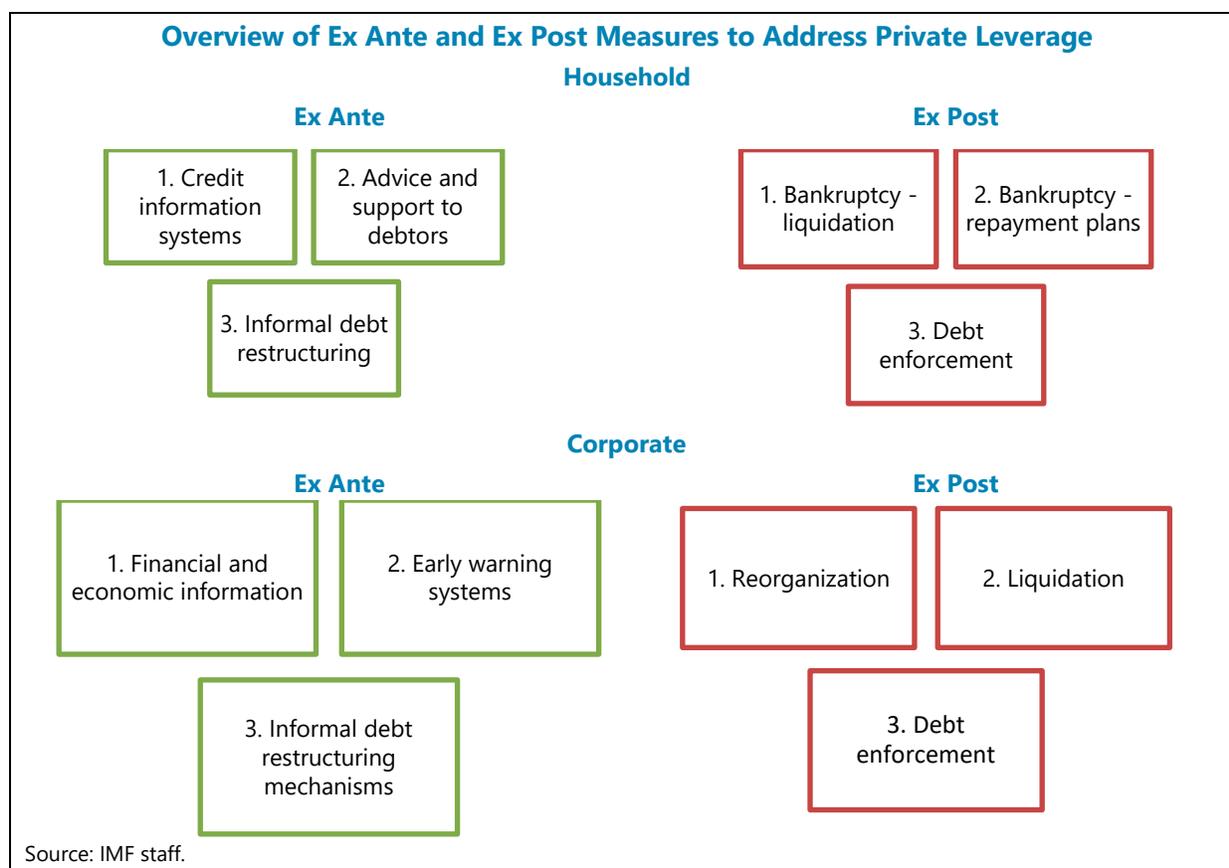
**10. This differential impact could be explained by the level of debt, as well as the importance of consumption in driving Thai growth.** Household debt levels are much higher than (nonfinancial) corporate debt levels.<sup>5</sup> Further household debt plays an important role in fueling consumption (rather than productive investment), which has in turn been a significant driver of growth in recent years. Meanwhile, corporate leverage has increasingly been used to invest (on the margin) abroad or in equity markets, as does not affect domestic demand, and thus growth as much.

<sup>5</sup> Household debt levels are also close to above high-risk thresholds identified by the literature (see [Lombardi, Mohanty, and Shim 2017](#)). The BOT corporate debt numbers, however are more elevated. The BOT numbers have limited availability, and thus cannot be used in the GAR estimation.



## C. Addressing Over-Indebtedness: Ex Ante and Ex Post Tools

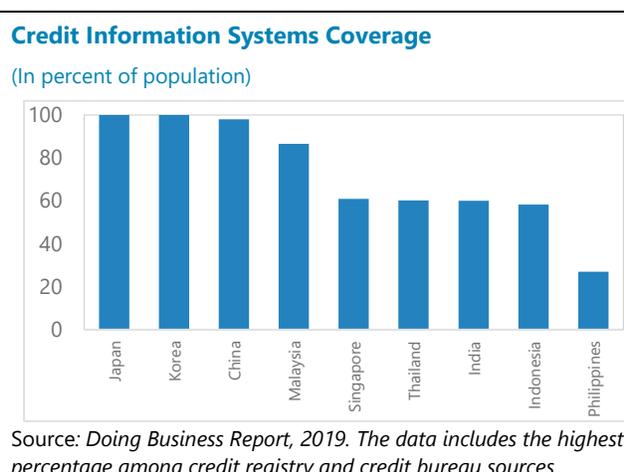
**11. An effective strategy to tackle over-indebtedness involves both ex-ante measures and ex-post debt resolution frameworks.** There is a growing trend to adopt ex ante tools that would prevent insolvency from arising in the first place either by preventing excessive borrowing or by reducing debt through informal mechanisms. The former is clearly connected with the use of macroprudential tools in the financial sector. Meanwhile, ex post tools, such as insolvency regimes, have increasingly focused on rehabilitation and recovery, while minimizing the costs of debt resolution. In the case of Thailand, high levels of household debt are the main concern.



## Household Debt

### 12. Ex ante measures may include credit information systems, support and advice to debtors, and informal debt restructuring mechanisms.

- **Credit information systems** should aim for widening coverage to provide ample information for risk assessment. Coverage of credit information systems in Asia varies. Credit information systems are essential for the effectiveness of several macro-prudential tools, and also underpin policies of responsible lending.
- **Specialized legal and financial advice** to debtors can prevent over-indebtedness. This supports and complements financial education programs. Advice to debtors can be provided by public institutions (Malaysia), or by private entities (Singapore). In Thailand, support to debtors is provided by the Debt Clinic, which was created by private sector entities



with Bank of Thailand support and is managed by an Asset Management Company (Sukhumvit AM). It is an example of cooperation between the public and private sectors.

- **Informal debt restructuring.** Alternative dispute resolution (ADR) solutions including mediation, conciliation and arbitration avoid the involvement of courts and the costs and legal consequences of formal insolvency procedures. These techniques are being used extensively in some ASEAN countries (Malaysia, Singapore) to avoid the negative social consequences of personal insolvency. Thailand is also supporting informal debt restructuring through the Debt Clinic Program, which is designed to offer restructuring solutions to debtors who have debts with multiple banks and has now been expanded to cover credit card and personal loans to non-bank financial institutions, given their important role in consumer finance. In addition, Thai debtors can use the “composition prior to bankruptcy”, as a last attempt at reaching an agreement with creditors.

**13. Most ex post measures to address household debt require insolvency procedures, with an increasing emphasis on rehabilitating debtors.** Not all Asian countries have a personal insolvency system (e.g. China), and in some countries the personal insolvency system is still inspired by notions of retribution against the defaulting debtor (Malaysia, Singapore). In countries where there is no personal bankruptcy regime, the alternatives to provide relief to debtors are limited. A developed toolkit would include the following measures:

- **Personal bankruptcy – with liquidation.** After liquidation of the estate, the outstanding debt is discharged, providing the debtor a fresh start. Even the Asian countries with more advanced systems (Japan, Korea) are more restrictive than American or European systems. Thailand provides a discharge after three years of commencement of proceedings, or when the debtor has paid 50 percent of the debts. However, the bankruptcy process can only be accessed at the creditors’ request, whereas the global trend is to make the process easily accessible to debtors.
- **Personal bankruptcy – repayment plans.** This modality allows debtors to retain some or all of their assets and commit to a repayment plan for a specified period, after which the debtor receives a discharge. Repayment plans are frequent in systems worldwide, and in some Asian countries (Japan, Korea), but Thailand has not introduced them so far.
- **Debt enforcement tends to play a lesser role in most situations of personal over-indebtedness as the consumer is typically indebted to several parties.** Plurality of creditors requires insolvency. In any case, effective debt enforcement is a fundamental element that creates incentives for payment discipline and for the restructuring negotiations between debtors and creditors. Functioning of debt enforcement mechanisms in Thailand tends to be effective.

## D. Conclusions and Policy Recommendations

**14. Addressing the private debt overhang will require both ex ante and ex post measures.** Thailand has taken important steps such as extending the Debt Clinic for debtors to claims with nonbank institutions; and enacting regulations on debt repayment and debt servicing ability. The

experience of Asian countries reveals that the deleveraging toolkit can be bolstered by further strengthening the coverage of tools to liabilities with other creditors (including nonbank financial institutions) and to other debtors (for instance, small and micro- enterprises). A revision of the instruments that could be potentially added to the existing toolkit would be a necessary first step. The recommended approach should be based on the development of ex ante measures that would avoid widespread debt overhang in the first place. In any case, revisions to ex post measures (personal insolvency) are also necessary, because there will always be cases where over-indebtedness materializes, and because the existence of the ex post measures provides the incentives and the backdrop necessary for the negotiation of ex ante informal restructuring solutions.

**15. Macroeconomic policies also play a vital role.** Typically, over-indebtedness is a symptom of deeper structural problems, including those behind sluggish output and productivity growth and weak social safety nets. In some cases, this could be amplified by easy credit conditions. Given Thailand's available fiscal space and strong external buffers, over the medium term, the envisioned fiscal stimulus—based on productivity enhancing infrastructure—and structural reforms package should help boost incomes and drive higher and more inclusive growth, lowering debt burdens on the aggregate as well as for individual households. Nevertheless, indebtedness could constrain monetary policy, with the need to balance cyclical and financial stability considerations. In this light, there is room to further use macroprudential tools to target specific pockets of vulnerability (Thailand has already implemented LTVs on mortgage lending). Enhancing the quality of financial information and, especially, credit information systems, lends support and credibility to a whole set of macro-prudential tools.

**16. The optimal pace of deleveraging will also depend on the evolution of the international financial cycle.** As a small open economy, Thailand will inevitably be attuned to movements in the international financial cycle, such as interest rates, terms of trade shocks, and investor sentiment, all of which affect the net benefit and risks of borrowing, the ability to repay, as well as the authorities policy space to react to leverage.

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## Appendix VIII. The Fiscal Impact of Aging<sup>1</sup>

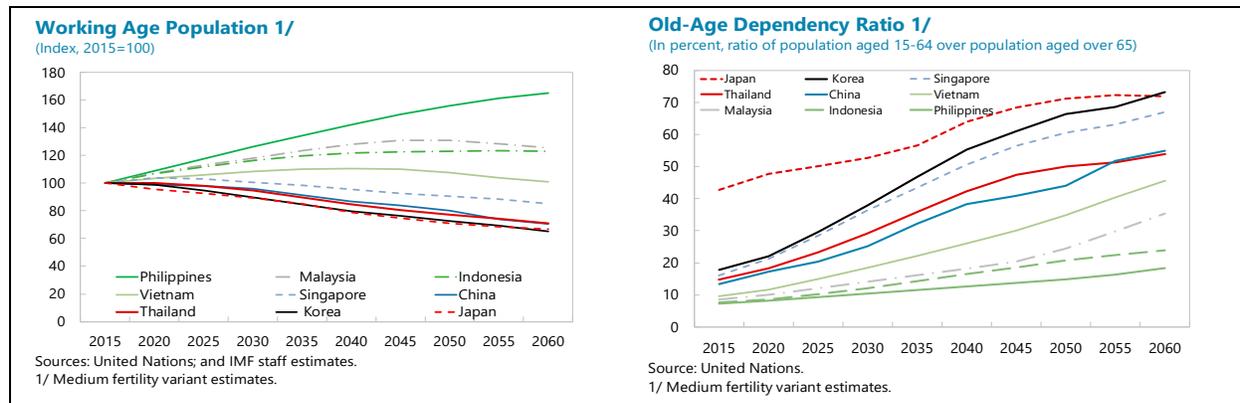
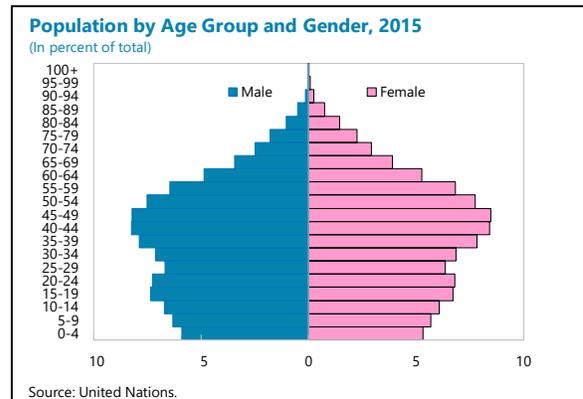
The demographic headwinds facing Thailand will have fiscal implications both in terms of pension and health care spending and more broadly affect the general macroeconomy in terms of potential rise in precautionary savings which will further add to the current imbalances. This appendix provides estimates for the likely fiscal cost of aging and the need to reform the fragmented pension system to help smooth the demographic shock. Over the medium term, additional domestic revenue mobilization will also be needed to finance aging related expenditures.

### A. Thailand's Demographics

**1. Thailand's population is projected to age relatively quickly over the next 40 years relative to other middle-income countries.** Its working-age population is expected to decline by 11 percent by 2035 and by about 30 percent by 2060. At the same time, its old-age dependency ratio is expected to increase from 14.8 percent in 2018 to 36 percent in 2035 and 54 percent in 2060.

**2. This appendix looks at the impact of population aging on public finances in Thailand.**

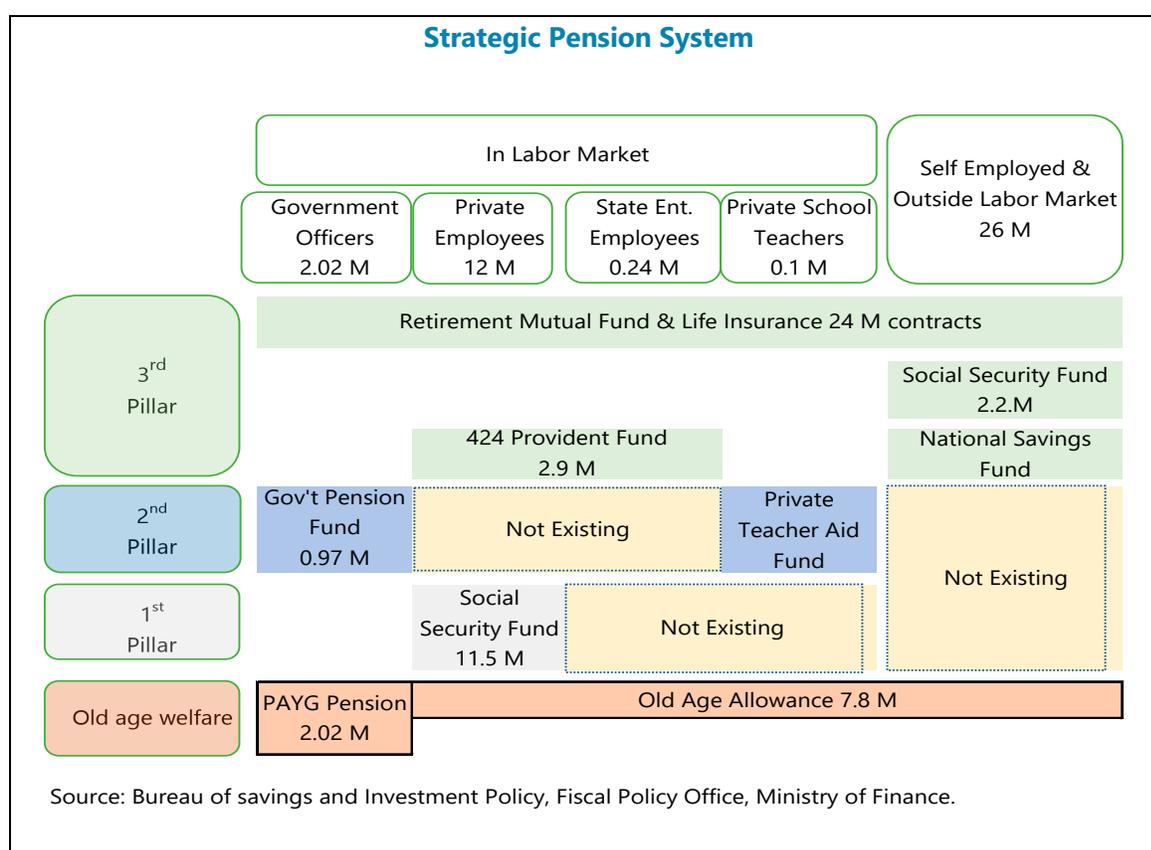
Population aging is expected to strain public finances. Pension and health expenses covered by public regimes, some of which will be financed by the government budget, are expected to increase. Moreover, to the extent that coverage or generosity of current regimes is insufficient, aging would place additional pressure on public finances to relief the pressure on families and contain old-age poverty in the future. At the same time, the decline in working-age population will impact GDP growth in the long term, as it impacts both labor and productivity growth. As a result, additional fiscal revenue mobilization will be needed in the medium term.



<sup>1</sup> This appendix was prepared by Manrique Saenz. This note benefitted extensively from Mauricio Soto's advice and FAD's templates used to project the cost of population aging to the pension and health care systems.

## B. The Current Pension and Health Care System

**3. The current pension system is fragmented into several regimes.** The first layer is constituted by non-contributive regimes: (i) an old-age allowance for which all Thais 60 or older qualify, except for civil servants; and (ii) a pay as you go system for civil servants. A second layer (first pillar in Figure 4) is constituted by the Social Security Fund, a defined benefit, pay as you go system funded through compulsory contributions from the employer and employee, which covers all private employees in the formal private sector. The third and fourth layers (second and third pillars) are constituted by defined contribution systems that do not have a significant impact on fiscal expenditures because they are fully funded. This appendix focuses on defined-benefit regimes only (the first two layers) and their potential impact on the fiscal balance.



**4. The degree of coverage for different population groups varies significantly.** While civil servants are covered by a generous PAYG system (with average benefits per beneficiary amounting to 135 percent of GDP per capita) and a Government Pension Fund, most of the informal private sector is only covered by the old-age allowance with average benefits amounting to 4 percent of GDP per capita.

### Summary of Thailand's Defined Benefit Pension Systems

	Old-Age Allowance	Civil service PAYG	Social Security Fund
<b>Coverage</b>	Old-age population excl. civil servants	Civil servants	Private employees (formal)
<b>Funding</b>	Gov. budget, pay as you go	Gov. budget, pay as you go	Contributions from employer and employee, pay as you go
<b>Contribution (% of wages)</b>	Non contributory, funded from budget	Non contributory, funded from budget	Employer 3 percent, employees 3 percent
<b>Benefit formula</b>	Defined benefit only a function of age	Defined benefit	Defined benefit
<b>Pensionable age</b>	60	60	55
<b>Contributions in 2018</b>			
Billion baht <sup>1</sup>	0	0	108
Percent of GDP	0	0	0.7
<b>Contributors in 2018</b>			
Million <sup>1</sup>	0	0	11.5
Percent of population 15-59 <sup>2</sup>	0	0	25
<b>Expenditure in 2018</b>			
Billion baht <sup>3</sup>	87	158	13
Percent of GDP	0.5	1.0	0.1
<b>Beneficiaries in 2018</b>			
Million <sup>4</sup>	9.0	0.5	0.5
Percent of population 60+ <sup>2</sup>	83	5	5
<b>Average annual benefit in 2018 (per year)<sup>5</sup></b>			
Thousand baht	10	319	25
Percent of GDP per capita	4	135	11

<sup>1</sup> Social Security Fund figures based on 2013 ILO report.

<sup>2</sup> Based on population figures from United Nations World Population Prospects 2019.

<sup>3</sup> Expenditure in old-age allowance estimated based on population structure and allowance schedule. Estimate for civil service PAYG are based on GFS old-age expenditure data. Social Security Fund figures based on 2013 ILO report.

<sup>4</sup> Old-age allowance and Civil Services PAYG estimates based on UN World Population Prospects 2019 and total population covered according to Government Pension Fund. Social Security Fund figures based on 2013 ILO report.

<sup>5</sup> Staff estimates.

**5. Thailand achieved universal health care coverage in 2002, but the system remains fragmented with wide differences in benefits and contributions (2016 SIP, Table 1).** The system is composed of three insurance schemes: the Civil Servant Medical Benefit Scheme (CSMBS), covering about 5 million people; the Social Security Scheme (SSS), covering about 10 million people; and the Universal Coverage Scheme (UCS), covering 48 million people.

## C. Fiscal Cost of Pension and Health Care Regimes<sup>2</sup>

**6. Public expenditure in pensions funded by the budget is expected to increase significantly over the next 4 decades as the old-age dependency ratio increases.** As shown in Table 2, this expenditure is expected to increase from 1.4 percent of GDP in 2017 to 2.7 percent and 5.6 percent of GDP in 2035 and 2060. The old-age allowance and civil servant regimes are funded by the Central Government budget entirely, and therefore the cost to the Central Government coincides with the total expenditure in pensions under these two regimes. In the case of the Social Security Fund, Table 2 only includes the projected impact on the Central Government budget once

<sup>2</sup> The methodology used to project pension and healthcare costs is described in Box 1 of SDN/15/21, "The Fiscal Consequences of Shrinking Populations".

the Fund runs out of reserves. According to an ILO actuarial study<sup>3</sup>, the SSF is projected to run out of reserves shortly after 2053. In the absence of reforms, at that point the SSF scheme would require funding from the budget to finance part of the pension payments. By 2060, funding required by SSF from the Central Government budget would amount to 1.9 percent of GDP.

### 7. Expenditure on healthcare is also expected to increase over the coming decades.

Higher expenditure is driven by the fact that older populations use health care services more intensively, but also because additional health services are provided as new technologies allow for this. Total public expenditure in health is expected to rise from 2.9 percent of GDP in 2017, to 4 and 4.9 percent of GDP in 2035 and 2060. Although this estimate includes expenditure financed by contributions, it is likely that a large proportion of the observed increase in expenditure (1.1 percent of GDP by 2035 and 2 percent of GDP by 2060) will need to be financed from the budget.

Fiscal Cost of Pensions and Health Care					
	2017	2035	2060	Change	
				2017-2035	2017-2060
<b>Fiscal cost of publicly-funded pensions<sup>1</sup></b>	<b>1.4</b>	<b>2.7</b>	<b>5.6</b>	<b>1.3</b>	<b>4.2</b>
Old-Age Allowance	0.5	1.0	1.3	0.5	0.8
Civil servants	0.9	1.8	2.4	0.8	1.5
Social security	0	0	1.9	0.0	1.9
<b>Public expenditure in health<sup>2</sup></b>	<b>2.9</b>	<b>4.0</b>	<b>4.9</b>	<b>1.1</b>	<b>2.0</b>
Memo item:					
Population 60+ / Population 15-59	25.4	52.8	78.2		

Source: IMF staff estimates.

<sup>1</sup> Includes only transfers from the Central Government budget.

<sup>2</sup> Includes expenditures funded from employer and employee contributions to the health care scheme.

## D. The Need for Pension Reform and Risk of Old-Age Poverty

**8. The limited coverage of pension systems other than the old-age allowance raises the risk of old-age poverty.** Under the current pension system, the informal sector (more than half of the work force) is only covered by the old-age allowance. At about 660 baht per month on average, the old-age allowance is less than US\$1 per day and less than one-tenth of the minimum wage. Although old-age income is likely to be complemented by family networks in addition to old-age allowance, the increasing old-age dependency ratio is likely to strain the capacity of these networks to sustain their current transfers per elderly, thereby raising the risk of old-age poverty.

**9. Workers that started contributing to the SSF only recently but are close to retirement may also find themselves at risk.** These workers would not complete the minimum number of years required for a minimum pension under the SSF. The lump-sum that they would receive from

<sup>3</sup> International Labor Organization, "Actuarial Valuation of Thailand Social Security Scheme administered by the Social Security Office as of 31 December 2013".

SSF at retirement (equivalent to the total contributions accumulated for this worker) plus other sources of income, may be insufficient to adequately complement the old-age allowance. A similar situation would apply for informal workers that may join the formal sector in the future, already late in their working years.

**10. Addressing these risks will require a reform that takes into account the trade-offs from raising the old-age allowance and/or increasing the incentives for workers to join other pension regimes.** For example, increasing the old-age allowance would address the old-age poverty risks of workers in the informal sector directly, but it would be expensive<sup>4</sup> and would undermine the incentives for joining the SSF or other pension schemes that are partly or fully funded through worker and employer contributions. Technical assistance on pension reform would help address these and other issues under the current system.

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<sup>4</sup> To fix ideas, increasing the old-age allowance (660 baht per month on average) to the equivalent of 25 percent of the minimum wage (1950 baht) would add approximately 1 percent of GDP in public expenditure in 2019, 2 percent by 2035, and 2.8 percent by 2060.



# THAILAND

## STAFF REPORT FOR THE 2019 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

September 11, 2019

Prepared By

Asia and Pacific Department

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## FUND RELATIONS

(As of July 31, 2019)

**Membership Status:** Joined 05/03/1949; Article VIII.

**Article VIII Status:** Thailand has accepted the obligations of Article VIII, Sections 2, 3, and 4, and maintains an exchange system free of multiple currency practices and restrictions on the making of payments and transfers for current international transactions.

### General Resources Account:

	SDR Million	Percent Quota
Quota	3,211.90	100.00
Fund holdings of currency	2,626.19	81.76
Reserve position in Fund	585.72	18.24
Lending to the Fund		
New Arrangements to borrow	22.43	

### SDR Department:

	SDR Million	Percent Allocation
Net cumulative allocation	970.27	100.00
Holdings	985.23	101.55

**Outstanding Purchases and Loans:** None

### Latest Financial Arrangements:

In millions of SDR				
Type	Approval Date	Expiration Date	Amount Approved	Amount Drawn
Stand-by	8/20/97	6/19/00	2,900.00	2,500.00
Stand-by	6/14/85	12/31/86	400.00	260.00

### Projected Obligations to Fund

(SDR million; based on existing use of resources and present holdings of SDRs):

	2019	2020	2021	2022	2023
Principal					
Charges/interest		0.02	0.02	0.02	0.02
<b>Total</b>		<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>

**Exchange Rate Arrangement:**

The de jure and de facto exchange rate arrangements are classified as floating. Under the inflation-targeting monetary policy framework, the value of the baht is allowed to be determined by market forces, reflecting demand and supply in the foreign exchange market. In the case that the resulting movements in Thai baht (THB) are deemed excessive and unjustified by fundamentals, foreign exchange intervention can be undertaken.

During 2018, the REER further appreciated, resulting in 3 percent real effective appreciation and 1 percent nominal appreciation versus the dollar. The large current account surplus and portfolio inflows continue to be the main drivers, only partially offset by net outflows in FDI and other investment.

**Last Article IV Consultation:**

Thailand is on the standard 12-month Article IV consultation cycle. The previous Article IV consultation was concluded on May 21, 2018. Copy of the Staff Report could be downloaded from this [link](#).

**FSAP Participation**

The Financial Sector Assessment Program (FSAP) missions took place in November 2018 and February 2019. The main findings are presented in the accompanying Financial System Stability Assessment.

**Recent Technical Assistance:**

**FAD:** A mission in August 2018 reviewed the current revenue strategy in light of the development agenda detailed in the 20-year National Strategy and the 12th 5-year plan, and assisted the Government in formulating a Medium-Term Revenue Strategy for financing its development plans.

**LEG:** A mission in March 2019 reviewed the existing income tax law, comprising Title 2 of the revenue code and relevant subsidiary legislation, and suggested a need of simplification and modernization to improve its effectiveness to align it with international best practices. A mission in April 2019 conducted a diagnostic evaluation of the capacity development needs for strengthening the anti-money laundering and combating the financing of terrorism (AML/CFT) regime of the country.

**Resident Representative:** None

## RELATIONS WITH OTHER INTERNATIONAL FINANCIAL INSTITUTIONS

**World Bank:** <http://www.worldbank.org/en/country/thailand>

**Asian Development Bank:** <https://www.adb.org/countries/thailand/main>

## STATISTICAL ISSUES

(As of August 15, 2019)

<b>I. Assessment of Data Adequacy for Surveillance</b>
<p><b>General:</b> Data provision is broadly adequate for surveillance. The authorities have continued to improve the quality and coverage of data. The dissemination of additional data may enhance the basis for macroeconomic analysis.</p>
<p><b>National accounts:</b> The National Economic and Social Development Board (NESDB) compiles annual and quarterly GDP estimates using both the production and expenditure approaches. The annual GDP volume measures are derived at previous year's prices and as chain-linked indices with 2002 as the reference year. The NESDB introduced new quarterly GDP current price and chain-linked volume estimates in May 2015.</p> <p><b>Price statistics:</b> The Bureau of Trade and Economic Indexes (BTEI) compiles and disseminates a monthly consumer price index with weights based on expenditure data collected from households during the 2015 Socio-Economic Survey since January 2017. Index coverage is restricted to middle-income urban households. In addition to headline CPI, the BTEI publishes aggregate indexes for the low-income and rural populations. The BTEI also publishes monthly producer price index with base year 2010. The Bank of Thailand disseminates a RPPI covering metropolitan Bangkok and STA has provided technical assistance towards broadening coverage to include other regions.</p>
<p><b>Government finance statistics:</b> The authorities provide data to the Fund, consistent with the <i>Government Finance Statistics Manual, 2014 (GFSM 2014)</i>, for publication in the <i>Government Finance Statistics Yearbook</i> and the <i>International Finance Statistics</i>, as well as for surveillance purposes. General government fiscal data are reported to the Fund annually. The authorities also publish monthly and quarterly data for key general government GFS-based numbers on their website. In addition, the authorities compile and publish aggregated <i>GFSM 2014</i>-based data for selected nonfinancial state-owned enterprises (SOEs), although with substantial delays. The authorities also publish public sector debt data in their website, including debt of nonfinancial SOEs and Specialized Financial Institutions.</p>

**Monetary statistics:** The authorities submit the Standardized Reporting Forms (SRFs) for monetary statistics on a timely basis for publication in *IFS*. The reported SRFs include the central bank, other depository corporations, and other financial corporations (OFCs).

**Financial Soundness Indicators:** The authorities report 11 of the 12 core financial soundness indicators (FSIs) and 7 of the 13 encouraged FSIs for deposit takers, one FSI for OFCs, one for households, and 3 FSIs for real estate markets—on a quarterly basis—for posting on the IMF’s FSI website with about one quarter lag.

**Financial Access Survey:** The authorities also report data on several series and indicators to the Financial Access Survey (FAS), including mobile money and the two indicators (commercial bank branches per 100,000 adults and ATMs per 100,000 adults) adopted by the UN to monitor Target 8.10 of the Sustainable Development Goals (SDGs).

**External sector statistics:** The Bank of Thailand (BOT) compiles and disseminates balance of payments (BOP) and international investment position (IIP) statistics with quarterly frequency following the sixth edition of the *Balance of Payments and International Investment Position Manual (BPM6)*. The quarterly BOP and IIP are available for 2018Q4 (at the time of assessment); timeliness for dissemination could be improved. The historical data on *BPM6* based BOP and IIP goes back to 2005—a longer historical series would be useful. The methodology for compiling balance of payments data remains adequate. Additional source data to complement the international transactions reporting system (ITRS) have been developed recently and coverage has been expanded to include estimates of reinvested earnings and worker remittances outflows. Further improvements are expected to enhance the data coverage and accuracy of BOP and IIP statistics, particularly in areas where new concepts, such as digital trade have been introduced. Data on external debt and debt service have significantly improved since the introduction of a quarterly survey of private nonbank external debt. The BOT participates in the coordinated direct and portfolio investment surveys of STA and regularly reports International Reserves and Foreign Currency Liquidity Data Template. A TA in ESS will be fielded in November 2019, aiming at identifying major data gaps and improvements needed in major areas, including coverage of new developments brought by globalization and digitalization.

## II. Data Standards and Quality

Subscriber to the Special Data Dissemination Standard (SDDS) since 1996.

Data ROSC published in April 2006.

**Thailand: Table of Common Indicators Required for Surveillance**  
As of September 4, 2019

	Date of Latest Observation	Date Received	Frequency of Data <sup>6</sup>	Frequency of Reporting <sup>6</sup>	Frequency of Publication <sup>6</sup>
Exchange Rates	9/4/2019	9/4/2019	D	D	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities <sup>1</sup>	8/23/2019	8/30/2019	W	W	W
Reserve/Base Money	6/2019	8/9/2019	M	M	M
Broad Money	6/2019	8/9/2019	M	M	M
Central Bank Balance Sheet	6/2019	8/9/2019	M	M	M
Consolidated Balance Sheet of the Banking System	6/2019	8/9/2019	M	M	M
Interest Rates <sup>2</sup>	8/12/2019	8/12/2019	D	D	D
Consumer Price Index	7/2019	8/1/2019	M	M	M
Revenue, Expenditure, Balance and Composition of Financing <sup>3</sup> —General Government <sup>4</sup>	2018	7/2019	A	A	A
Revenue, Expenditure, Balance and Composition of Financing <sup>3</sup> — Central Government	12/2018	7/2019	M	M	M
Stocks of Central Government and Central Government-Guaranteed Debt <sup>5</sup>	12/2018	7/2019	M	M	M
External Current Account Balance	6/2019	7/2019	M	M	M
Exports and Imports of Goods and Services	6/2019	7/2019	M	M	M
GDP/GNP	2019: Q1	5/2019	Q	Q	Q
Gross External Debt	12/2018	3/2019	M	M	M
International Investment Position	2019: Q1	6/2019	Q	Q	Q

<sup>1</sup>Includes reserve assets pledged or otherwise encumbered, as well as net derivative positions.

<sup>2</sup> Both market-based and officially determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.

<sup>3</sup> Foreign, domestic bank, and domestic nonbank financing.

<sup>4</sup> The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.

<sup>5</sup> Including currency and maturity composition.

<sup>6</sup> Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A); Irregular (I); Not Available (NA).

**Statement by Ms. Alisara Mahasandana, Executive Director for Thailand, and  
Mr. Acharawat Srisongkram, Advisor to the Executive Director  
September 30, 2019**

1. On behalf of the Thai authorities, we would like to thank the IMF Article IV and FSAP mission teams for the constructive engagement and candid discussions which centered on policies to achieve sustained and more inclusive growth and to address structural challenges in the Thai economy.
2. The authorities share staff's assessment of the economic outlook and risks, and medium-term structural challenges. The authorities also welcome staff's policy recommendations, albeit with notable divergence in a few areas.

Recent economic developments and outlook

3. **Thailand's economic growth has slowed down amidst intensified trade tensions, led by a contraction in exports which has weighed on domestic demand.** The authorities expect the economic expansion to continue, albeit at a slower pace, and project a lower GDP growth of 2.8 percent for 2019 compared to 4.1 percent growth achieved in 2018. Headline inflation is projected to be slightly below the lower bound of the 2.5±1.5 percent target range due to structural factors including technological advancements, expansion of e-commerce, growing price competition as well as a low global inflation environment. Risks to the growth outlook remain tilted to the downside mainly from external uncertainties including protracted trade tensions and geopolitical situations.
4. **The authorities have employed an accommodative macroeconomic policy mix** to sustain growth momentum while also pushing ahead with various structural reforms to address structural bottlenecks and improve productivity to ensure sustainable growth over the longer term.

Monetary policy

5. **Consistent with the data-dependent approach, the Monetary Policy Committee (MPC) decided to cut the policy rate by 25 bps from 1.75 to 1.50 percent at the August meeting.** Given heightened global uncertainties and observable signs of domestic slowdown and inflation projected to be below the lower bound of the target range, the MPC assessed then that a more accommodative monetary policy stance was appropriate to sustain the growth momentum. The policy rate was kept unchanged at its September 25 meeting as the MPC viewed that the current monetary policy stance is sufficiently accommodative to support the continuation of economic growth and the rise of headline inflation toward target.
6. **The authorities noted staff's recommendation for further easing to support growth and inflation, but emphasized that future policy actions need to be carefully calibrated based on assessment of risks and policy options.** While the primary objective of monetary policy framework is inflation, supply side developments have weighed down and delayed the return of inflation to its target range. Further monetary easing to meet the growth and inflation

objectives in the near term may put financial stability and future growth at risk in the longer term.

7. **While there are no immediate systemic risks in the Thai financial system, elevated household debt and search-for-yield behavior warrant close monitoring.** The BOT has deployed several macroprudential measures, such as the recent tightening of the LTV ratio which helped curb speculative activities in the housing market. However, not all pockets of vulnerabilities are within the BOT's regulatory reach particularly non-bank financial institutions. The authorities agree on the need to further strengthen the macroprudential toolkits, though such efforts may take time.

#### Exchange rate policy and capital flows

8. **The authorities underscore the need to remain vigilant of the adverse impact of volatile capital flows,** especially given waning domestic growth momentum and more challenging global environment.

9. **The authorities reiterate their commitment to exchange rate flexibility as evidenced by the more than 17% appreciation of the Thai baht both in USD term and NEER term during the past 3 years.** The Thai baht appreciated by almost 6 percent against the US dollar year-to-date. The continued appreciation followed the baht's perceived safe haven status in spite of significant decline in current account (CA) surplus (from around 11 percent of GDP in 2016 to 6 percent in 2019), and the shift in investors' sentiment as major central banks rotated towards an easing bias. This has necessitated occasional foreign exchange intervention (FXI) especially during periods of intense inflows to forestall the risks of further inflow amplification of the exchange rate.

10. **The authorities viewed that recent episodes of the baht's sharp appreciation were not warranted by economic fundamentals, and could pose risks to macroeconomic stability.** To follow staff's recommendation to let the exchange rate act as shock absorber would risk disrupting real-sector adjustments as such recommendations do not take into account the impact of foreign exchange market dynamics and the fact that exchange rate can become a shock amplifier in an environment of excessive global liquidity.

11. **In dealing with the multi-faceted challenges from global financial conditions, small open economies like Thailand require integrated policy package and tools to address various areas and sources of risks in foreign exchange markets.** Staff's argument that a policy rate cut would also attenuate short-term exchange rate pressures might be sub-optimal, given the blunt nature of the instrument and possible unintended consequences on financial stability. The authorities believe that measures to address the source of pressure would be a more effective policy alternative. The measure to lower the ceiling on the end-of-day outstanding balance of baht accounts for non-residents (NBRA/NRBS) neither prevents nor limits the quantity of inflows into Thai financial markets and NR's purchase of domestic securities. On the other hand, it aims directly at transactions that are not supported by underlying economic activity. The measure was necessary to help the economy navigate through the risk from volatile capital flows in the short run, while the ongoing macroeconomic adjustments and reforms to further liberalize outward flows would take some time.

12. **The authorities will continue to engage with staff in the policy discussion on capital flows** and encourage the Fund to undertake studies on the spillover effect of policy implementations from advanced economies that may have impact on small open economies.

13. **The authorities reiterate the view that the disclosure of FXI data would be counter-productive at this juncture.** Such information, even with a lag, can undermine the effectiveness of central bank foreign exchange operations as it could be exploited for speculative purposes. The current publication of Thailand's international reserves data every two weeks has already provided sufficient information on their FX operation.

#### External Balance Assessment

14. **On the external balance assessment (EBA), the authorities welcome staff's focus on structural factors and concur that macro- and structural policies are key to addressing the CA gap.** Thailand's CA gap has narrowed from recent decline in trade surplus as well as the ongoing structural balancing efforts. Going forward, the authorities expects the CA surplus to narrow further over the medium term as private and government investments pick up pace.

15. **The authorities maintain that the EBA results must be communicated with caution given the model's inherent limitations, particularly implications being drawn regarding currency valuation.** It is critical to acknowledge the inherent limitations of the model, including its narrow and CA-centric focus of external imbalances as it does not account for capital account transactions which have larger impact on the exchange rates. In Thailand's case for instance, the EBA model does not seem to account for the fact that the baht has already appreciated significantly over the years as the model continues to suggest large REER undervaluation given that the CA gap remains positive. In addition, given the large unexplained residuals in many country cases, including Thailand, the model results must be interpreted carefully and take into account country specificities in order to draw appropriate policy implications.

#### Financial Sector

16. **The authorities welcome the FSAP's assessment that the Thai financial system remains sound,** with strong and independent supervisory agencies and frameworks. Financial stability risks are contained while pockets of vulnerability remain under close monitoring.

17. **The authorities broadly agree with the FSAP recommendations which were consistent with their ongoing efforts to buttress financial sector resilience.** Many enhancements are well underway including SFI regulations, strengthening crisis management and banking resolution, as well as the macroprudential toolkits. Currently, the Thai authorities are discussing the possibility of setting up a financial stability advisory body consisting of regulators of significant financial intermediaries.

18. **The authorities have different view from staff's recommendation regarding institutional arrangement.** They stress that there are merits to each institutional arrangement design which must be considered within the country's context. There is no one-size-fits-all, but rather one that is 'best suited' to the country's working culture and constraints, and shaped through experiences. The current institutional arrangement in Thailand has been purposely

designed based on our experiences, particularly by drawing upon lessons learned during the 1997 financial crisis which arose partly from the lack of interagency coordination and oversight. The current governance structure of each committee is focused on the desired outcomes. The setup of the Financial Institution Policy Committee (FIPC), in particular, has proven to be practical and effective in the Thai context.

19. **The presence of the MOF representative on the FIPC brings a broader perspective and policy recommendations that take into account potential impact on the overall economy, while not compromising the operational independence of the supervisory agencies.** Furthermore, the MOF representative facilitates the decision-making process involving the MOF and the Cabinet.

20. **The authorities underscore the merits of cross directorships of supervisory agencies especially with increased interconnectedness within the financial sector,** given that most of the largest players in the capital market in Thailand such as securities companies and asset management companies are subsidiaries of commercial banks. This inter-agency coordination promotes collective accountability and timely engagement of the authorities in decision-making and crisis management should the situation warrant. The authorities welcome staff's acknowledgement that the current arrangement of the supervisory agencies does not undermine each agency's operational independence.

#### Fiscal Policy and Structural Reforms

21. **The fiscal stance is expected to remain expansionary for FY2020.** On September 3, 2019, the Cabinet approved a budget envelope of 3.2 trillion baht for FY2020, an increase of 6.7% over last year with the same level of fiscal deficit coming in at 2.6% of GDP. Higher spending is expected to be driven mainly by the replenishment of the treasury balance as pension and medical expenses for government officials were underestimated in 2018. The draft budget bill will be tabled to the Parliament in mid-October.

22. **The authorities are positive that fiscal spending will largely be on track.** Disbursement for current spending and approved investment projects from FY2019 can continue to be disbursed despite the delay in the budget approval process. Most investment outlays would not be materially affected since it is set to be disbursed in the latter half of 2020. Macro-critical infrastructure projects under the EEC are implemented through PPP with most of the financing to come from the private sector. The construction of two out of the five EEC main projects should begin in 2020, while the rest are in the bidding and negotiation process.

23. **Our authorities remain steadfast in implementing the structural reform agenda to ensure long-term fiscal sustainability and uplift potential growth.** Regarding fiscal reforms, on the expenditure side, the government has set out a plan to revise the eligibility criteria for low-income earners so that the welfare program is better targeted to the lower income group. A group of subnational committees will be set up to closely monitor the eligibility to the program. On the revenue side, the government has embarked on a number of tax reforms to increase revenue, for example, the enforcement of the new Land and Property Tax Law and the revision of the taxation of investment income from bonds through mutual funds. The E-payment Law,

which will be effective from the beginning of 2020, will prevent local online vendors from avoiding income tax payment.

24. **There has also been continuous effort on pension reforms to enhance its sustainability.** The authorities agree that pension reform will be critical to longer-term fiscal sustainability in light of aging demographics and would help strengthen social safety net to close the savings-investment gap. The government is discussing the National Pension Fund (NPF) draft bill to make participation of private sector employees in pension schemes mandatory. At the same time, the government is conducting a study on the extension of retirement age from 60 to 63 years for government and state enterprise officials in order to prepare for potential labor-shortages from population aging in the medium-term. Meanwhile, productivity in the medium term will also be enhanced through the new investment particularly in the EEC projects, as well as the ongoing government training schemes to re-skill and up-skill the labor force.

25. **The authorities are committed to fighting corruption.** The new Public Procurement Act (2017) entailed major overhauls to create a more efficient and transparent procurement process. This includes a shift to an electronic platform (eProcurement) with features that permit increased public scrutiny through appeal and complaint mechanisms. Businesses are more aware of the process as reflected by significant increases in the number of appeal and complaints. In term of cost saving, in 2018, the public sector saved more than 7% of procurement budget in actual bidding price when compared to the budget allocation.

26. **The private sector has long been a part of the fight against corruption in Thailand.** In 2016, the Collective Action Coalition Against Corruption (CAC) launched an initiative to call on Thai firms to support and implement the government's National Anti-Corruption Strategy. So far, 953 companies are signatory to this declaration, of which 397 have been certified.

#### Final Remarks

27. The Thai authorities would like to express their appreciation to the Fund for its long-standing support through policy dialogue and technical assistance to accelerate structural reforms and fortify macroeconomic and financial stability. The authorities look forward to future engagement and continued support from the Fund. They would like to also thank the Fund in facilitating the upcoming technical assistance mission on external sector statistics in November.