INTERNATIONAL MONETARY FUND

IMF Country Report No. 13/323

THAILAND

2013 ARTICLE IV CONSULTATION

November 2013

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 2013 Article IV consultation with Thailand, the following documents have been released and are included in this package:

- The **Staff Report** for the 2013 Article IV consultation, prepared by a staff team of the IMF, for the Executive Board's consideration on September 20, 2013, following discussions that ended on June 13, 2013, 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 5, 2013.
- An **Informational Annex** prepared by the IMF.
- A **Press Release** summarizing the views of the Executive Board as expressed during its September 20, 2013 discussion of the staff report that concluded the Article IV consultation with Thailand.
- A **Statement by the Executive Director** for Thailand

The policy of publication of staff reports and other documents allows for the deletion of market-sensitive information.

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INTERNATIONAL MONETARY FUND

THAILAND

STAFF REPORT FOR THE 2013 ARTICLE IV CONSULTATION

September 5, 2013

KEY ISSUES

Context. The Thai economy has shown an impressive resilience to shocks and staged a strong recovery in 2012. However, growth slowed significantly in the first half of 2013 on account of the expiration of some domestic stimulus programs that were taken in 2012 in the wake of the flood disaster and weak external demand. The economy is being supported by strong fundamentals and expansionary fiscal and monetary policies. The government is seeking to shift public expenditure from boosting domestic consumption to infrastructure investment. Volatile capital flows have presented a challenge to macroeconomic policy.

Outlook and risks. Growth is expected to recover in the second half of the year, but at a more gradual pace than in the past, with low inflation. The global economy presents downside risks from a possible slowdown in EM growth and capital flow volatility. In addition, the impact of unwinding policies to boost consumption may be larger than anticipated, while public investment projects might be delayed. Labor skills mismatches and infrastructure bottlenecks are holding back potential growth.

Policy recommendations. With solid macroeconomic conditions, the key challenge is to foster higher inclusive growth with stability. Key recommendations are:

- Creating fiscal space for priority spending and gradually rebuilding policy buffers to prepare for adverse shocks. The government's commitment to fiscal discipline would be buttressed by strengthening the medium-term fiscal framework.
- Allowing the exchange rate to continue to move flexibly in line with fundamentals and respond with a mix of macroeconomic policies and, if needed, capital flow measures to deal with capital flow surges.
- While the banking sector remains sound, the regulatory and supervisory frameworks for specialized and non-bank institutions needs to be strengthened.
- Planned infrastructure investments should be implemented to enhance competitiveness and promote inclusive growth.

Approved By
Hoe Khor and Athanasios Arvanitis

Discussions took place in Bangkok during May 29–June 13, 2013. The staff comprised Messrs. Breuer (head), Klyuev, Schule, Sun, Yoshida (all APD). Mr. Khor (APD) and Ms. Soontornpoch (OED) participated in the key policy meetings while Mr. Santoso (OED) attended the concluding sessions.

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BACKGROUND

1. **The Thai economy has shown an impressive resilience to shocks.** In recent years, Thailand has been exposed to large shocks, including the global financial crisis (GFC), supply-chain disruptions following the tsunami in Japan, and devastating floods in late 2011. The economy's resilience has been underpinned by solid economic fundamentals, including a track record of growth, stability and fiscal discipline, healthy balance sheets of commercial banks and corporations, high international reserves, and a moderate level of public debt.

2. **The government is seeking to diversify the drivers of economic growth.** The authorities have pursued redistribution policies to boost domestic consumption, while attempting to maintain the dynamism of the export sector. They have also prepared an ambitious infrastructure program to lower logistics costs and further integration in the Mekong Region and with southern China, as well as to boost the economy's resilience to floods.

3. **Volatile capital flows have presented challenges to macroeconomic policy.** Starting in 2012, Thailand experienced a surge in capital inflows that was stronger than that experienced in the region, and peaked in the first quarter of 2013. In the first four months of 2013, the surge led to a sharp appreciation of the baht (7 percent with respect to the U.S. dollar), which became the strongest performing currency in the region. Since May, flows have reversed reflecting changing investor risk appetite owing to a weaker growth outlook and indication of a tapering of quantitative easing policy.

ECONOMIC CONTEXT

A. Macroeconomic Developments

4. **The economy staged a strong recovery in 2012**.

- After stalling in 2011 because of the floods, real GDP grew 6.5 percent in 2012 (Figure 1). Private consumption rose 6.7 percent reflecting pent-up demand and government measures, including the rice pledging scheme[1] and the first-car buyer scheme (Box 1). On the back of reconstruction spending, private investment grew by 14.4 percent, while government spending and inventory accumulation also made a significant contribution to growth. Despite the strength of the post-flood rebound, output in Thailand remained considerably below its pre-crisis trend—much more so than in other ASEAN economies (Appendix I).
- The current account balance declined to a balanced position (from 1.7 percent in 2011), reflecting a slowdown in trading partner growth and a boost to imports from reconstruction needs—even as tourism receipts continued to grow at a rapid clip.
- Despite two significant minimum wage hikes, core inflation declined gradually from 2¾ percent in early 2012 to under 1 percent in June 2013 (Figure 3). Increased labor costs appear to have been partly absorbed through lower profit margins, higher labor productivity or by cutting nonwage compensation. Headline inflation fluctuated in 2012 mirroring movements in energy and raw food prices, but fell significantly in the first half of 2013.

[1] In October 2011, the government committed to buying rice from farmers at a set price above the prevailing market price, with the objective of improving farmers' income. Further details on this scheme are contained in Box 2 of IMF Country Report No 12/124, June 2012.

5. **However, growth slowed significantly in the first half of 2013**. The expiration of the first-car buyer scheme appears to have had a larger-than-expected impact on private consumption, while exports were hurt by a slowdown in external demand and reconstruction spending had largely run its course. One-off supply factors, including temporary power shortages and shrimp diseases, exacerbated the impact of the broad-based weakening in demand. As a result, real GDP declined 1.7 percent (seasonally adjusted, not annualized) in the first quarter of 2013 from the previous quarter, and another 0.3 percent in the second quarter.

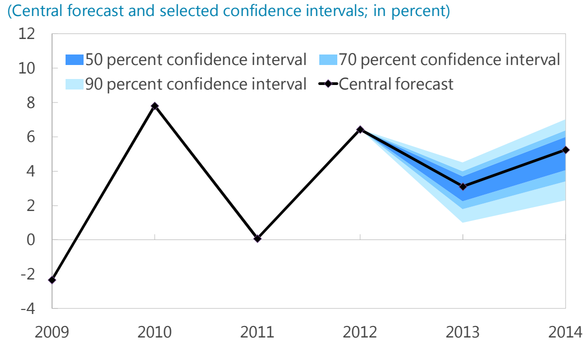
B. Outlook and Risks

6. **The external environment remains challenging and domestic tailwinds are weakening**. Monetary policy remains accommodative, but falling inflation is raising real rates. Credit growth remains strong, but has decelerated in recent months. The stock market rally has fizzled since May, even as housing price growth continues. Business sentiment and consumer confidence have weakened. Nonetheless, as the impact of the expiration of the first-car buyer scheme fades and the one-off factors are reversed, the economy is expected to resume growing in the second half of 2013, although at a slower pace than in the past, to a level of 3.0—3.5 percent in the year as a whole. In 2014, public investment projects are expected to become a key engine of growth, boosting growth to 5.2 percent. With growth driven by domestic demand, the current account is expected to reach a small deficit of 0.2 percent of GDP in 2014 (Table 1).

7. **Risks to the outlook are tilted to the downside, dominated by external factors.** (Appendix II). External risks deriving from an escalation of the euro area crisis or fiscal policy shocks in the United States have diminished, but are still skewed to the downside. Slower-than-expected growth in major emerging economies, particularly China, would also have a considerable impact because of trade linkages. The unwinding of monetary policy stimulus in the United States may trigger further capital flow reversal from emerging markets. Domestically, the impact of the unwinding of various government policies on private consumption may be larger than anticipated. Finally, political stability has strengthened, but remains a downside risk.

Thailand: GDP Growth

(Central forecast and selected confidence intervals; in percent)



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

Authorities' Views

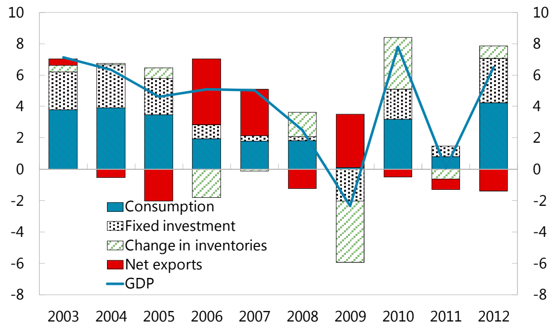
8. **The authorities broadly agreed with the staff's assessment of prospects and risks**. They saw the outturn in 2013Q1 as a temporary setback and expected growth momentum to resume. They agreed that risks to the outlook are largely external and are skewed to the downside. The Ministry of Finance felt that fiscal stimulus was essential for keeping the economy at its potential and that domestic demand would flag in the second half of 2013, if infrastructure projects were delayed. Growth forecasts by the Bank of Thailand and by the Ministry of Finance—released after the mission—were broadly in line with staff projections at the time of the Article IV mission.

Figure 1. Real Sector Developments

Recovery has been led by domestic demand…

Growth Decomposition

(In percent)

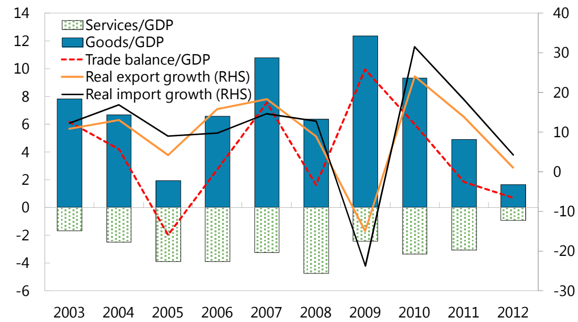


Sources: CEIC Data Co. Ltd.; and IMF staff calculations.

…while the trade surplus has declined as export growth slowed.

Trade Balance

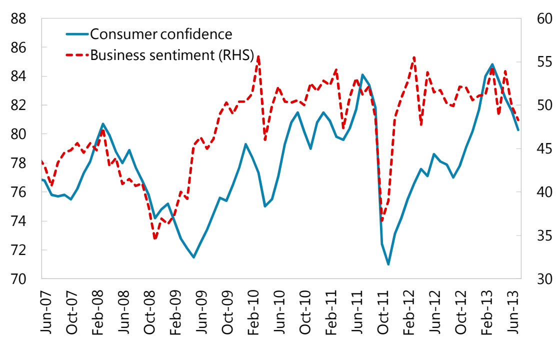
(In percent)



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

Recently private sector confidence has weakened…

Consumer Confidence and Business Sentiment Index

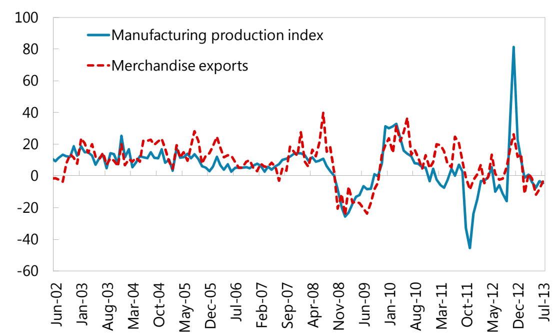


Sources: CEIC Data Co. Ltd.; and IMF staff estimates.

…and latest activity indicators point to deceleration…

Manufacturing Production Index and Export Growth

(In percent, year on year)

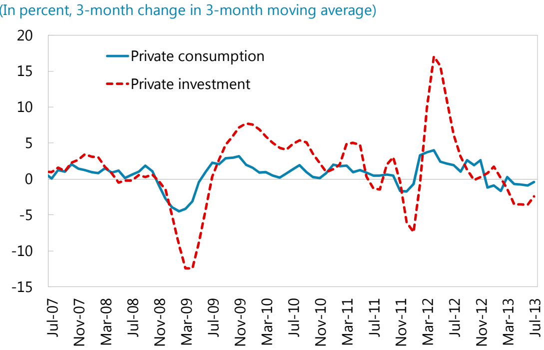


Source: Haver Data Analytics.

…as demand growth has slowed.

Private Investment and Consumption

(In percent, 3-month change in 3-month moving average)

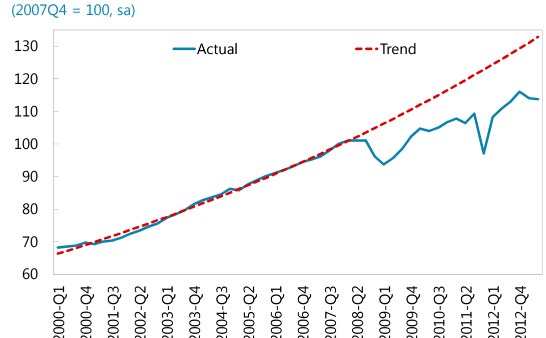


Sources: CEIC Data Co. Ltd.; and IMF staff calculations.

Output remains below the pre-crisis trend.

Real GDP Index

(2007Q4 = 100, sa)



Sources: Haver Data Analytics; and IMF staff calculations.

POLICY CHALLENGES

A. Rebuilding Fiscal Policy Buffers and Creating Fiscal Space

Background

9. **Fiscal balances weakened significantly in 2012, reflecting responses to the floods and other stimulus measures.** (Text table) The government reduced the corporate income tax (CIT) rate from 30 percent to 23 percent in 2012, then to 20 percent in 2013. The impact of tax incentives for first time car buyers on public finances will begin to show in 2013, and the trend of widening fiscal deficits is likely to continue in 2013 (Figure 2).

10. **The government plans major infrastructure projects, which would be implemented off-budget**. (Box 2). The projects are focused on improving the economy's resilience to floods and logistics efficiency, reducing reliance on oil, enhancing linkages with neighboring countries and spreading development from Bangkok to the provinces. The overall investment package amounts to 2.4 trillion baht (about 20 percent of 2013 GDP), to be implemented over seven years.

11. **The authorities intend to balance the central government budget by 2017 and keep the public debt below 50 percent of GDP.** Some measures to reach this target have already been taken and the Staff took them into account in fiscal baseline projections: the first car and house buyer tax relief schemes have ended and their fiscal impact is expected to subside. In addition, diesel excise tax cuts will be partially reversed next year. Moreover, in the coming years, the authorities plan to consolidate on-and off-budget public investment projects, reduce unproductive spending, revise excises, and strengthen tax collection. However, the latter plans are at this point policy intentions, which the Staff has not taken into account in its fiscal baseline projections.

Staff Position

12. **The fiscal stimulus in 2012/13 has been helpful, but should be gradually withdrawn once the recovery is firmly in place to create space for priority spending, and rebuild policy buffers.** Against the backdrop of the global financial crisis and the devastating 2011 floods, the expansionary fiscal policy pursued in recent years to support aggregate demand and reconstruction was appropriate. The authorities' intention to prioritize growth-enhancing investment projects is welcome. As the output gap closes, the stance of fiscal policy should be gradually tightened to avoid a further deterioration of external accounts and build policy buffers to address future shocks.

13. **The staff welcomes the authorities' commitment to fiscal discipline and the steps already taken toward fiscal consolidation, although under current policies the public debt-to-GDP ratio is projected to continue to rise**. The authorities' targets to balance the central government budget by 2017 and keep public sector debt below 50 percent of GDP are appropriate. On current policies however, the staff estimates that the central government fiscal deficit will rise to 3.4 percent of GDP in FY2013 (from 1.7 percent in FY2011) on account mainly of the lowered corporate income tax rates and tax relief granted (including for car and home-buying, and fuel

taxes). Moreover, the deficit of the overall public sector (a broader measure of the fiscal stance, which includes off-budget investment projects)[2] is projected to rise from 1.5 percent of GDP in FY2011, to 4.2 percent of GDP by FY2014, while the public debt ratio is projected to exceed 53 percent of GDP in FY2018. These projections are based on currently stated policies and a broadly favorable economic environment.

Thailand: Fiscal Developments, 2007/08-13/14 1/

						Proj.	
	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
General Government							
Revenue	21.4	20.8	22.4	22.6	23.0	21.5	21.6
Expenditure	21.2	24.0	23.2	23.4	24.7	24.2	24.9
Overall balance	0.1	-3.2	-0.8	-0.7	-1.7	-2.7	-3.3
Structural balance	-0.6	-2.2	-1.0	-0.9	-0.9	-2.6	-3.3
Structural primary balance	0.6	-1.1	0.3	0.4	0.4	-1.8	-2.4
Cumulative stimulus since 2007/08 2/	0.0	1.7	0.3	0.3	0.2	2.5	3.0
Public Sector							
Revenue	23.0	22.5	24.1	24.3	24.6	23.1	23.2
Expenditure	23.6	26.1	25.7	25.8	27.8	26.7	27.4
Overall balance	-0.6	-3.6	-1.6	-1.5	-3.1	-3.6	-4.2
Structural balance	-1.4	-2.6	-1.8	-1.7	-2.3	-3.6	-4.2
Structural primary balance	0.7	-0.5	0.5	0.4	0.1	-1.8	-2.4
Cumulative stimulus since 2007/08 2/	0.0	1.3	0.3	0.3	0.7	2.6	3.2

Sources: Thai authorities; and IMF staff projections.

1/ Fiscal year runs from October to September.

2/ Based on changes in structural primary balance.

14. **The authorities should consider additional measures to ensure meeting their fiscal objectives**. Possible new actions to reduce the fiscal deficit and reallocate spending to priority sectors include further reducing generalized energy subsidies and replacing the rice pledging scheme with budgetary transfers targeted to low-income rural households. Since savings from these policies alone are unlikely to suffice to achieve the targets, revenue-enhancing measures should also be considered, including raising consumption and property taxes, and widening the income tax base through the elimination of personal income tax credits. Finally, tax administration can build on recent improvements by strengthening compliance enforcement further.

15. **The authorities' commitment to fiscal discipline would be buttressed by strengthening the medium-term fiscal framework.** As is the case with the current definition of public debt, fiscal deficit targets should be set on a broader public sector basis. Enhanced transparency, including on operations of extra budgetary funds, state-owned enterprises, and Specialized Financial Institutions (SFIs) would contribute to strengthening investor confidence. Budget preparation would benefit from a fiscal risk statement and the budget process from enhanced transparency in fiscal data,

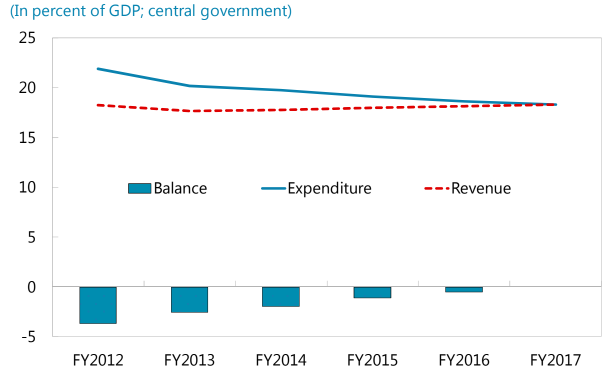
[2] IMF staff assume an execution rate of 70 percent of planned investment projects, in line with the historical pattern. It is further assumed that half of the Thai 2020 projects will be privately financed (through the use of PPP and infrastructure funds).

including implementation reports. Infrastructure projects should be included in the budget document. In line with best international practices, consideration should be given to introducing multiyear Parliamentary approvals of budget commitments, while annual spending plans are disclosed and monitored (see Box 3). Such arrangements would be reinforced if they are embedded in the planned revision of the Public Finance Act. The enactment of the new Private Investment in State Undertaking Act (PPP Act) in April 2013 is a welcome development in view of streamlining the project approval process and enhancing clarity on procedures for private sector participants.

Authorities' Views

16. **The authorities are confident that they will achieve their medium-term fiscal goals, including a balanced central government budget by 2017 and keeping public debt below 50 percent of GDP.** They explained that their strategy is based on three pillars: containing recurrent spending; adjusting excises, including on sumptuary goods and fuel; and expanding the tax base through strengthened tax administration. They noted that a number of measures have already been taken or proposed to Parliament for next year's budget, including an increase in diesel excises, expiration of first-buyer tax incentives, and ongoing efforts to improve the efficiency of tax collection. Other measures, in particular, additional spending cuts, would be introduced gradually over the coming budget cycles, at a rate that would reflect economic conditions. The authorities noted that Fund staff projections did not include the future spending cuts and therefore showed a somewhat higher path for the central government deficit and public debt ratio.

Authorities Consolidation Strategy
(In percent of GDP; central government)



Sources: Fiscal Policy Office; and IMF staff calculations.

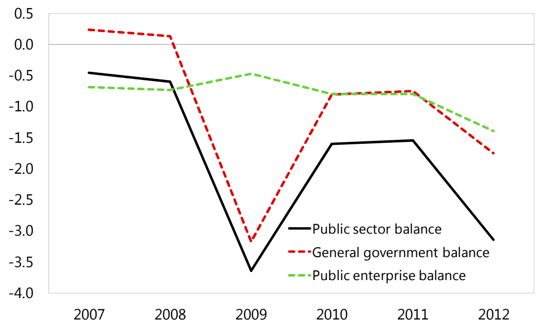
17. **The authorities stressed the critical importance of public infrastructure projects for inclusive growth, noting that financing them off-budget would improve implementation.** They estimate that the projects would contribute an average of 1 percent of GDP per year to the economy during the construction phase, and that improved logistics would reduce costs by 2 percent of GDP per year. The authorities explained that similar projects were tried unsuccessfully twice in recent years—they were crowded out by more urgent expenditure priorities during the budget discussions or delayed owing to political transitions. In contrast, the authorities cited the example of the off budget programs approved to address the GFC, which have been more successfully implemented by a series of successive governments. The authorities also assured that the project review process would include Parliament and thereby ensure full accountability and transparency of the program's implementation.

Figure 2. Thailand: Public Finances

Fiscal balances worsened in 2012, reflecting the responses to the floods and other stimulus measures.

Fiscal Balance

(In percent of fiscal year GDP)

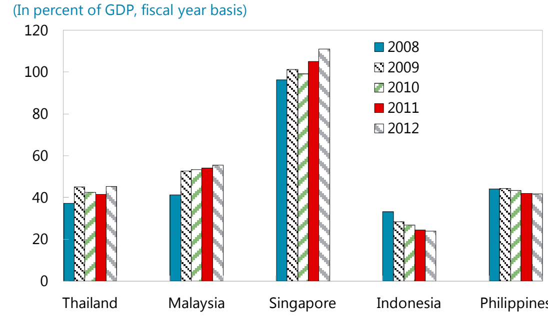


Sources: Ministry of Finance, Thailand; and IMF staff estimates.

As a result, public debt has increased.

ASEAN–5: General Government Gross Debt

(In percent of GDP, fiscal year basis)

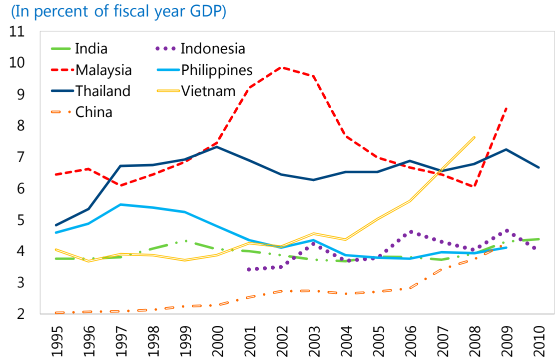


Sources: CEIC Data Co. Ltd; Bank of Thailand; IMF, *World Economic Outlook*; and IMF staff estimates.

Generating fiscal space is needed for achieving social policy goals....

Public Spending on Education and Health

(In percent of fiscal year GDP)

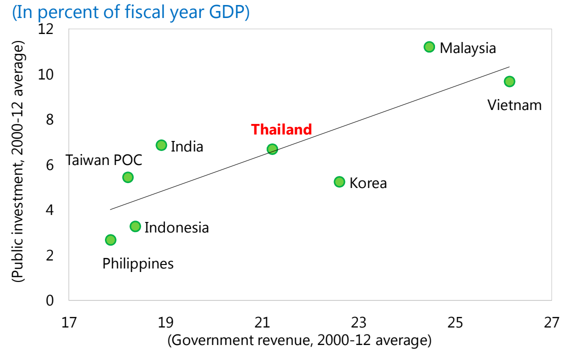


Sources: World Bank, World Development Indicators; and IMF staff estimates.

...and boosting public investment

Link Between Government Revenue and Public Investment

(In percent of fiscal year GDP)

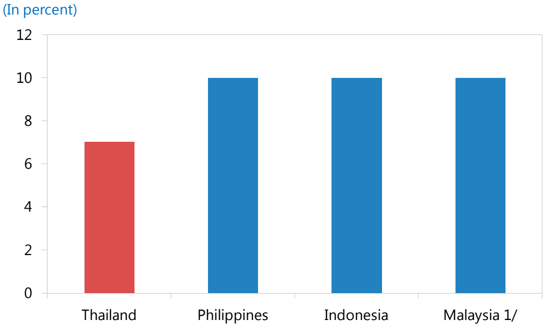


Sources: IMF, *World Economic Outlook*; and IMF staff estimates.

The VAT is lower than in neighboring countries...

Value Added Tax Rates

(In percent)



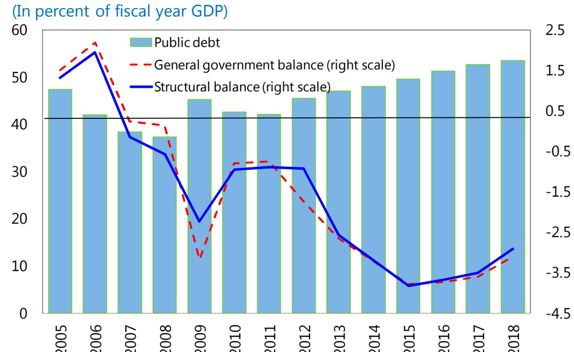
Source: Asian Development Bank.

1/ Sales tax rate as currently Malaysia does not have a value added tax system.

Based on current policies, the public debt is projected to continue to rise in coming years.

General Government Balance and Public Debt

(In percent of fiscal year GDP)



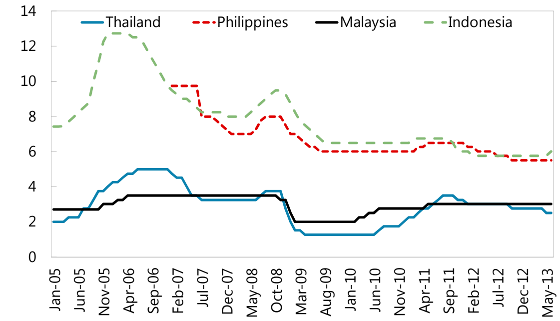
Sources: CEIC Data Co., Ltd.; and IMF staff estimates and projections.

B. Supporting Stable Noninflationary Growth

Background

18. **The stance of monetary policy is accommodative**. The policy rate was reduced in October 2012 to counter the risk of external demand slowdown, and then again in May 2013 to 2.5 percent to stimulate domestic demand after the disappointing first quarter growth results, in the context of low and declining inflation (Figure 3).

ASEAN-4: Policy Rates
(In percent, end of period)



Source: Haver Data Analytics.

19. **Core inflation is comfortably within the target band and risks to inflation are balanced**. The implementation of large public infrastructure projects may put pressure on production capacity and raise costs. Increases in excise taxes and in administered prices could feed into price pressures. A global oil shock triggered by geopolitical events remains a risk. However, the recovery of domestic demand might be weaker than anticipated.

Staff Position

20. **The accommodative stance is appropriate for the moment, but the Bank of Thailand (BOT) should closely monitor demand and wage pressures**. The interest rate cut was appropriate given tame inflation, a slowing economy, and deteriorating external environment. Once the recovery is entrenched and the output gap is clearly on a closing path, or if inflation starts to rise, the stance of monetary policy should be gradually normalized. In the staff's estimates, the fall in output in the first half of 2013 has opened a negative output gap of about -1.2 percent (Appendix III), but the gap is expected to close gradually over the course of this year.

21. **Monetary policy credibility is a key asset for Thailand**. The inflation-targeting framework and central bank independence have served the country well, helping to maintain macroeconomic stability in the face of powerful shocks. In the current period of volatile capital flows and rapid shifts in investor risk appetite, it is critical to preserve these arrangements to enjoy the benefits of policy credibility.

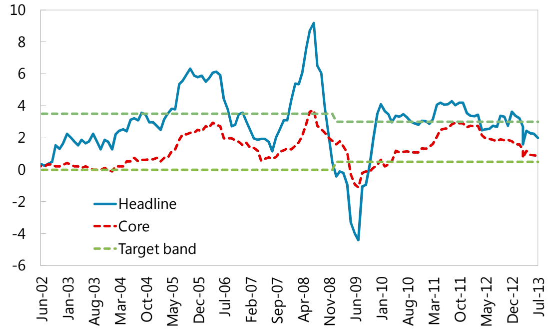
Authorities' Views

22. **The authorities explained that the slowdown in the first quarter of 2013 and the disappointing global recovery called for a continued accommodative stance**. They saw a need to complement fiscal policy in cushioning domestic demand and securing a firm recovery in a benign inflationary environment. They stressed that the latest rate cut, however small, sent an appropriate signal that monetary policy had to react to internal and external developments while maintaining sufficient ammunition if the need arises for further actions.

Figure 3. Inflation and Capacity Indicators

Core inflation has fallen, while headline has been more volatile…

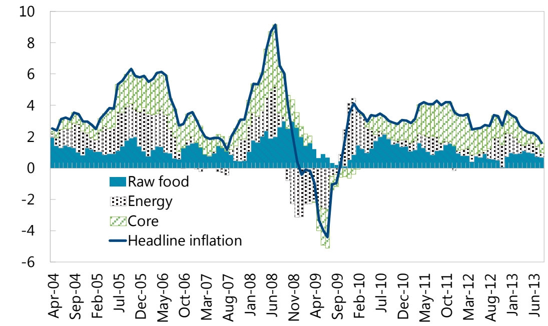
Headline and Core CPI Inflation
(In percent, year on year)



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

…reflecting fluctuations in food and energy prices.

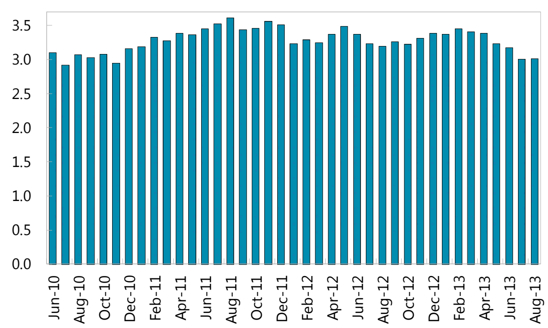
Contributions to Headline Inflation
(In percent, yoy)



Sources: Haver Data Analytics; and IMF staff calculations.

Inflation expectations have declined.

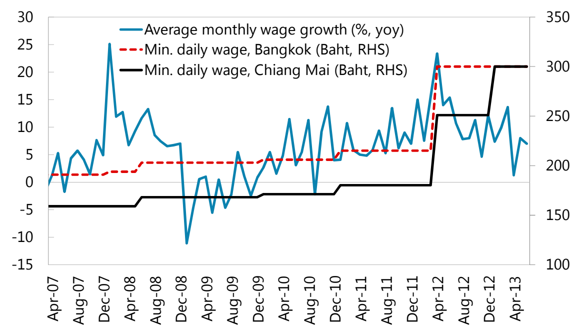
One-year Ahead Inflation Expectations
(Year-on-year growth, in percent)



Source: Consensus Economics.

Impact of minimum wage hike has been limited so far.

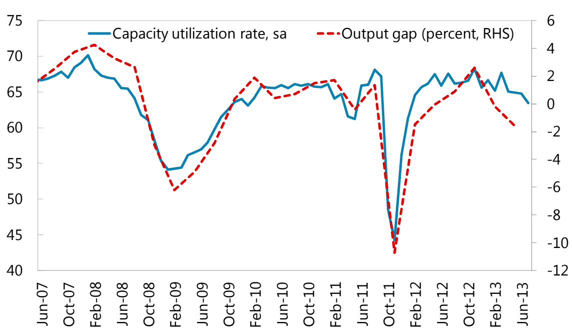
Wages



Source: CEIC Data Co. Ltd.

Capacity pressures have subsided…

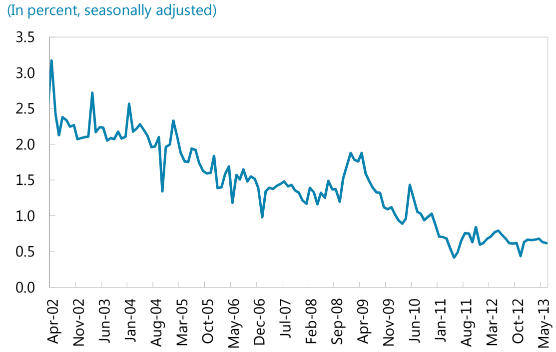
Output Gap and Capacity Utilization Rate



Sources: Haver Data Analytics; and IMF staff calculations.

…even though the labor market remains tight.

Unemployment Rate
(In percent, seasonally adjusted)



Source: Haver Data Analytics.

23. **The future course of monetary policy will depend on developments in Thailand and in the global economy**. The authorities made it clear that the current policy stance is accommodative, and there is no tightening or loosening bias for the near term—the Monetary Policy Committee will take a data-dependent approach.

C. External and Exchange Rate Assessment

Background

24. **The external position of Thailand, as measured by the international investment position, strengthened significantly in the decade ending in 2011.** The net debtor position of the country fell from about 44 percent of GDP in 2001, to 9 percent in 2011. Much of this improvement was due to the reduction in the debtor position of other investment and to the increase in reserve assets. In addition, a sharp increase in Thai foreign direct investment more than offset the increase in foreign direct investment in Thailand in the last few years—a trend that accentuated in 2012 and is expected to continue in the coming years.

Thailand: International Investment Position
(In percent of GDP)

	FDI	Portfolio Inflows	Financial Derivative	Other Investment	Reserve Assets	Net Foreign Liabilities
Foreign Assets						
2001	2.3	0.7	0.1	15.3	28.7	-
2005	3.7	2.0	0.3	17.7	29.5	-
2010	7.4	7.1	1.2	12.9	54.0	-
2011	11.8	6.5	1.9	11.3	50.6	-
Foreign Liabilities						
2001	28.8	14.8	0.4	47.0	-	-
2005	35.7	22.3	0.3	25.4	-	-
2010	44.7	26.5	1.0	23.5	-	-
2011	43.5	25.2	2.8	19.7	-	-
Net Debtor Position						
2001	26.6	14.1	0.3	31.6	-28.7	44.0
2005	32.0	20.3	0.1	7.7	-29.5	30.5
2010	37.3	19.4	-0.2	10.6	-54.0	13.1
2011	31.8	18.7	0.9	8.5	-50.6	9.2

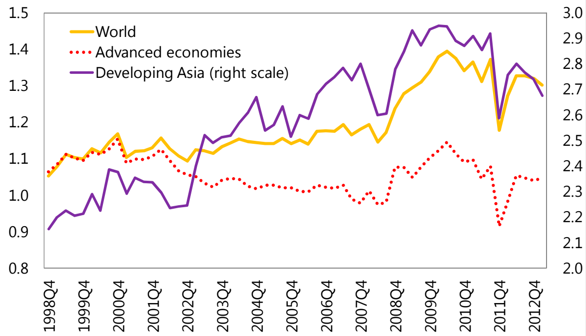
Sources: Haver Data Analytics; and IMF staff estimates.

25. **The surplus in the current account of the balance of payment fell in 2012, consistent with a trend observed in recent years.** The current account surplus has fallen sharply from its peak in 2009 at 8¼ percent of GDP to a balanced position in 2012. The trade surplus declined to 2 percent of GDP in 2012 (from 5 percent the previous year), due to persisting global demand headwinds and higher imports boosted by reconstruction expenditures. Export growth slowed in 2012, mainly because of weaker global demand and some supply constraints due to the floods. The deficit in services declined significantly on account of sharply higher tourism receipts, including a surge of visitors from China. At the same time, the capital and financial account turned into a surplus of 2.8 percent of GDP in 2012 (minus 1.5 percent in 2011).

Staff Position

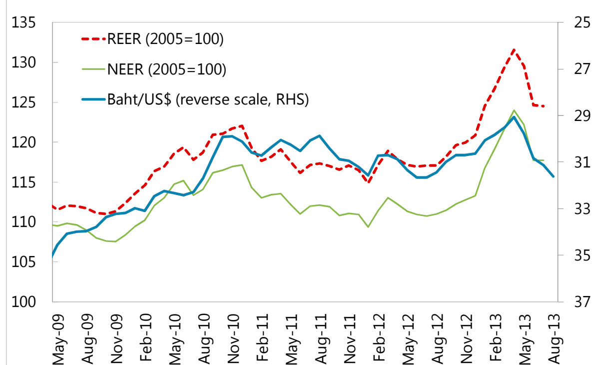
26. **The current account balance is close to equilibrium, the Thai baht is broadly in line with fundamentals, and Thailand's overall competitiveness remains strong**. Notwithstanding greater exchange rate volatility in 2013—a strong appreciation of the Thai baht in the first four months of the year was followed by the reversal of the appreciation by July—IMF staff estimates show a fairly valued real effective exchange rate at the current level.[3] Foreign direct investment, including that to the export sector, has been buoyant and market shares of Thai exports in global trade continue to expand. Thailand's latest position in the Global Competitiveness Ranking rose to 27 (from 30).

Thailand: Export Market Shares
(In percent, seasonally adjusted)



Sources: IMF, *Direction of Trade database, Information Notice System*; and IMF staff estimates.

Exchange Rates



Source: IMF, *Information Notice System*.

27. **Thailand's equilibrium real exchange rate is likely to appreciate over time as the economy catches up with more advanced countries.** The authorities should continue to allow the exchange rate to move flexibly in accordance with fundamentals while encouraging hedging by the private sector. Foreign exchange interventions, if needed, should be limited to preventing large volatility and overshooting. At present, the level of international reserves exceeds most international benchmarks for reserve adequacy, a condition that is projected to be sustained in the medium term. Thus, there is no need for further precautionary reserve accumulation.

Authorities' Views

28. **The authorities broadly agreed with the staff's exchange rate assessment.** They reiterated their commitment to the flexible exchange rate regime, and agreed that it would serve the country best to let the exchange rate follow fundamentals. However, they noted that markets are not always rational and are sometimes driven by distortions elsewhere in the world. Therefore occasional intervention might be needed to avoid overshooting and excessive volatility.

[3] EBA results, using year average data, show a zero real effective exchange rate (REER) gap for 2012, and the average REER gap, using the CGER methodology indicate a small (3 percent) undervaluation in 2013. While the two methodologies are not directly comparable, both indicate that the exchange rate is fairly valued.

D. Dealing with Capital Flows

Background

29. **Thailand experienced a surge in capital flows from early 2012 to mid-2013.** Gross capital inflows in 2012 reached US$42 billion (11.5 percent of GDP). Foreign direct investment (FDI) remains the largest form of capital inflows; however, net FDI was negative for the second time in 2012 as a result of increased outward FDI by Thai firms. Thailand's financial account surplus (US$11.5 billion) increased to 3.2 percent of GDP, the highest among ASEAN 5 economies. Major contributors were net portfolio inflows and other investments. On top of foreign inflows, private external financing by Thai residents reached almost US$20 billion in 2012. However, the entry for errors and omissions was a large negative possibly reflecting unregistered capital outflows. Half of capital inflows were invested in the local bond market, with the remaining half in equity, FDI and real estate (Figure 4). Strong capital inflows continued in early 2013(Appendix V). However, since late May, capital flows have reversed and the financial balance became negative. Net foreign portfolio outflows during late May and early July reached US$4 billion (1.1 percent of GDP) with the major contributions in the form of equity outflows (US$2.6 billion). Markets have calmed down in recent weeks after Federal Reserve Chairman Bernanke qualified his previous remarks in May.

30. **Large capital inflows have helped to reduce the cost of capital, contributed to rapid growth of asset prices and have complicated macroeconomic management**. Capital inflows, combined with improved market sentiment, led the Thai baht to appreciate sharply in the first four months of 2013 (7 percent with respect to the U.S. dollar) before reversing most of the appreciation in the following months. Reflecting ample liquidity and the low interest rate environment, the stock market index raised asset prices by 35 percent in 2012 and a further 12 percent during January and late May 2013, before falling by 12 percent by early July. Property prices have also risen, most prominently in selected areas of Bangkok and other large cities.

31. **The Thai authorities responded to the capital inflows with macroeconomic policies and indicated their readiness to use CFMs and macroprudential measures, if needed.** Publicly stated discomfort of the authorities about the rapid baht appreciation and press reports of contingency plans to address inflow surges changed market sentiment and initiated a reversal of portfolio inflows, starting in mid-May. Concurrently, comments by Fed Chairman Bernanke on May 22 about possible tapering of QE triggered a global outflow of funds from emerging markets, including Thailand. These outflows from Thailand have continued since late May and again accelerated in early August in line with developments in other emerging markets.

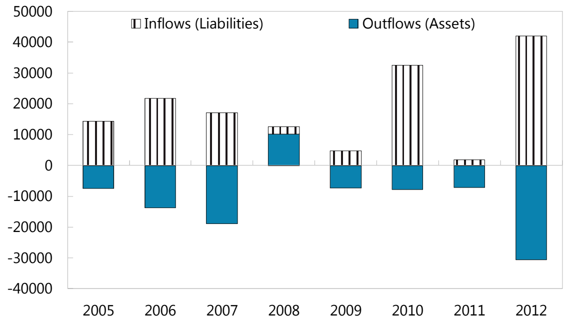
Staff Views

32. **While volatile in the short run, net capital flows are expected to be positive in the medium term.** Structural changes in portfolios of large international asset managers, Thailand's strong economic fundamentals, and easy monetary conditions in advanced countries are likely to continue to fuel capital inflows, which are projected to be only partially offset by Thai direct investment abroad and outward portfolio investments. The authorities' medium-term strategy of promoting greater exchange rate flexibility, gradual liberalization of capital outflows, and deepening the capital markets is appropriate.

Figure 4. Capital Flows

Thailand witnessed a surge in capital inflows and outflows in 2012…

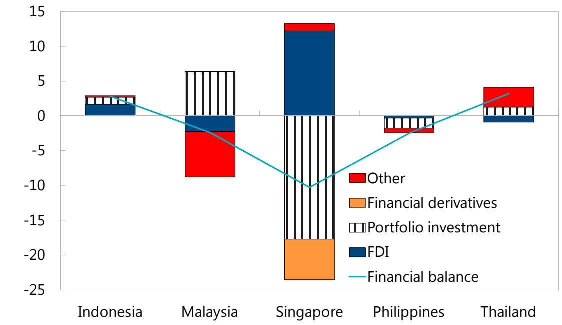
Capital Inflows and Outflows
(in millions of US$)



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

… receiving the most net capital inflows in 2012 in ASEAN 5 economies…

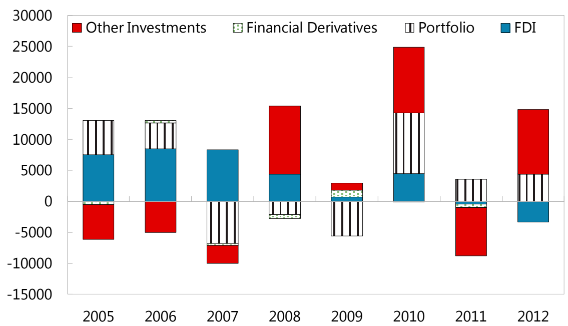
Financial Balance, 2012
(In percent of GDP)



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

…portfolio inflows and other investments dominated capital inflows in 2012…

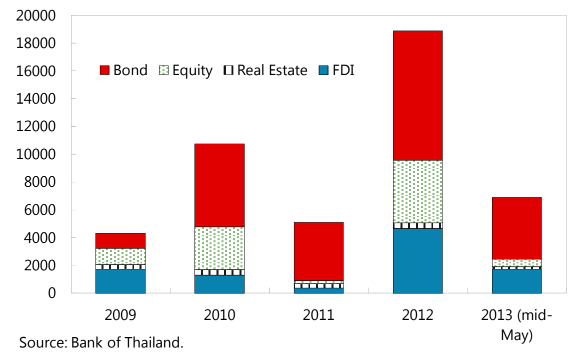
Net Inflows: Components
(In millions of US$)



Sources: CEIC Data Co. Ltd.; and IMF s

…capital inflows focused on the bond market…

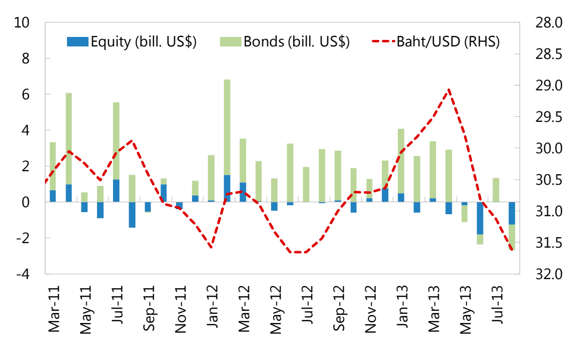
Capital Inflows Classified by Assets
(In millions of US$)



Source: Bank of Thailand.

…portfolio inflows appeared to be positively associated with Baht appreciation…

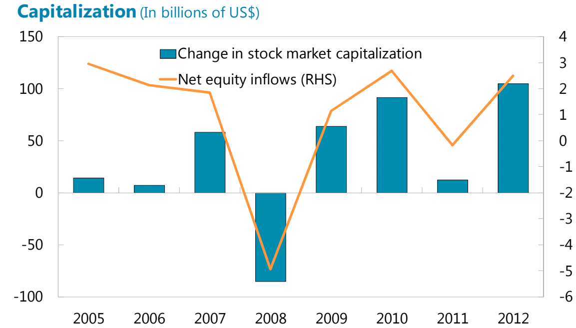
External Portfolio Inflows and Baht Appreciation



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

…net equity inflows seemed to be positively associated with stock market capitalization…

External Equity Inflows and Changes in Stock Market Capitalization (In billions of US$)



Sources: Bloomberg; IMF, *International Financial Statistics*; and IMF staff calculations.

33. **Dealing with short-term capital flow volatility will likely require a diversified toolkit depending on economic circumstances.** Given the current level of the exchange rate, the first line of defense should be exchange rate flexibility, with currency intervention limited to avoiding excessive volatility and overshooting. The policy rate could also be adjusted, depending on the cyclical position of the economy, and some macroprudential measures can be adopted to mitigate the risk of excessive leverage in the household or banking sectors. Finally, capital flow measures can be considered if the exchange rate had overshot and the flows remain strong. However, if capital measures are used, it is critical that markets are adequately informed and a gradual approach is used in order to avoid an overreaction of markets.

Authorities' Views

34. **The surge in capital flows and sharp appreciation of the baht in the first part of 2013 had complicated policy making in Thailand.** The authorities felt that the appreciation of the baht was appropriate in the context of robust economic recovery, and would actually encourage exporters to hedge their receipts. However, they indicated that by April there were clear signs of exchange rate overshooting. They expressed these views publicly and agreed with the Ministry of Finance on contingent capital flow measures to be implemented in case of continued overshooting. These actions succeeded in stabilizing the exchange rate by late April. In successive weeks, the appreciation began to revert when investor appetite waned as a result of a weaker growth outlook and early indications of tapering of quantitative easing in the United States.

E. Maintaining and Strengthening Financial Sector Resilience

Background

35. **The financial sector has benefited from the recovery.** Banks weathered the recent shocks to Thailand's economy relatively well and used the improved environment to strengthen balance sheets. In commercial banks, the nonperforming ratio has continued to decline; capital adequacy improved; and profitability remains strong. They are expected to meet Basel III capital and liquidity requirements on time. There has been significant progress in strengthening the AML/CFT regime, including by enacting legislation, which contributed to Thailand's removal from the Financial Action Task Force's Public Statement. Nevertheless, Thailand should continue strengthening its AML/CFT regime in line with the FATF standards.

36. **While the banking sector remained sound (Figure 5), financial sector vulnerabilities are rising:**

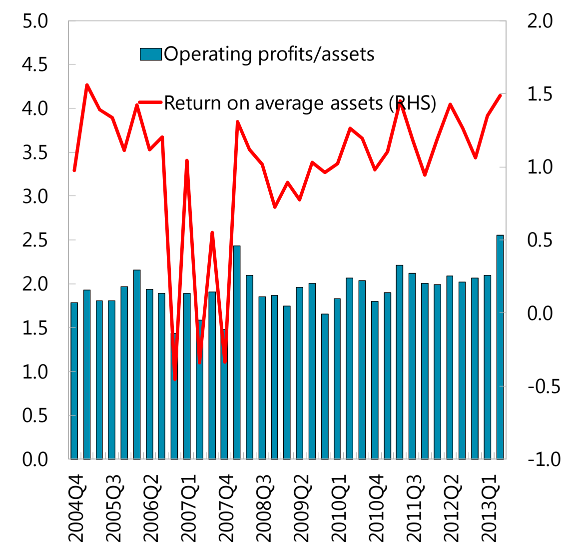
- **Credit expansion has continued at a rapid pace in the past two years, although it has decelerated somewhat since early 2013**. The private sector credit-to-GDP ratio and the deviation of credit/GDP are relatively high compared with other ASEAN 5 economies, this ratio expanded from 110 percent in 2012Q4 to 115 percent in 2013Q1. In addition, the deviation of credit/GDP growth from trend increased from 1.2 percent in 2012Q4 to 4.7 percent in 2013Q1.

Figure 5. Thailand: Banking Sector Developments

Bank profitability indicators remain stable....

Commercial Banks' Profitability 1/

(In percent, annualized)



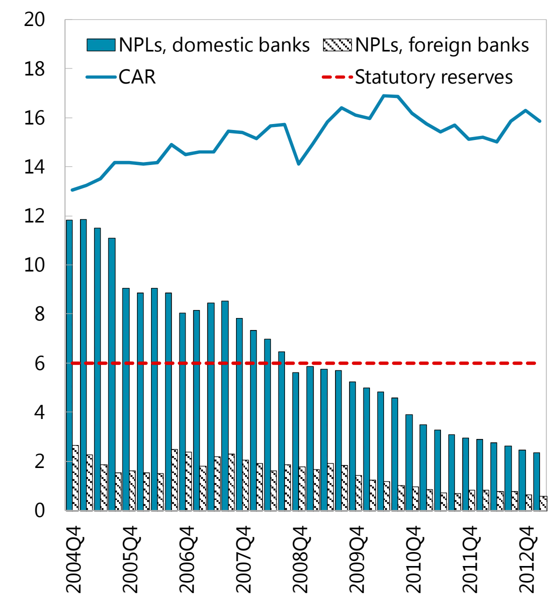
Sources: Bank of Thailand; CEIC Data Co. Ltd; and IMF staff estimates.

1/ Ratios are calculated based on the definitions suggested by the authorities.

Asset performance and capitalization ratios continue to improve....

Gross NPLs and Banking System CAR

(In percent)

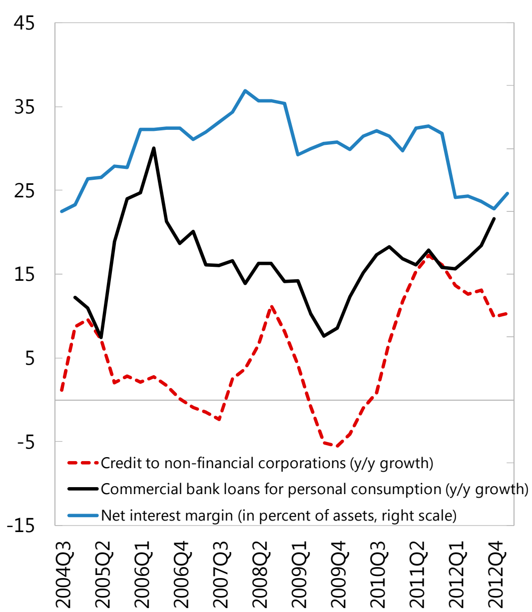


Sources: Bank of Thailand; and CEIC Data Co. Ltd.

The growth of loans for personal consumption has picked up since 2010...

Interest Margin and Loans

(In percent)

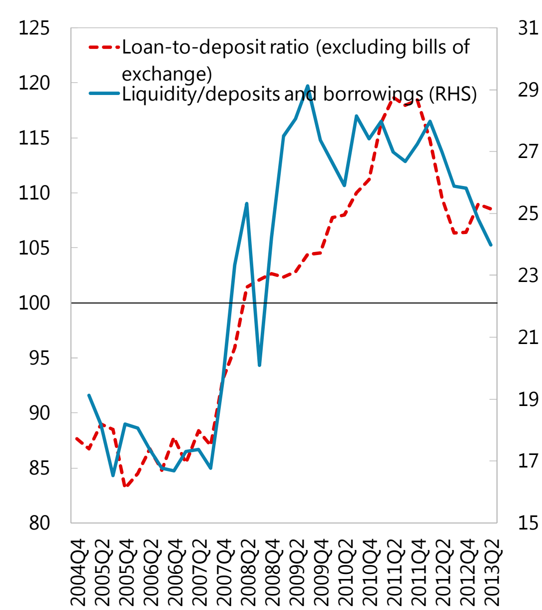


Sources: Bank of Thailand; CEIC Data Co. Ltd.; and IMF staff calculations.

While loan-to-deposit ratio declines, liquid assets-to-deposits ratio indicates a rising liquidity risk.

Liquidity Indicators

(In percent)



Sources: Bank of Thailand; and CEIC Data Co. Ltd.

- **Specialized Financial Institutions (SFIs) could be a source of contingent fiscal liabilities and rising financial risk**. SFIs are public banks that carry out government lending schemes. They are supervised by the Ministry of Finance (MOF) that has delegated examination responsibility to the BOT. SFIs operate under a regulatory framework determined by their originating law but in general, is prudentially weaker than the one that applies to commercial banks. Lending by SFIs has risen significantly in recent years, reaching 27 percent of total banking credit in 2012 (up from 18 percent in 2003). Compared with commercial banks, the quality of SFI assets tends to be weaker, they face higher funding costs and lower lending spreads, and their credit policies are influenced by government policies. There is some evidence that SFI interconnectedness with the rest of the financial sector has increased in recent years through bond issuance and interbank borrowings (Figure 6).
- **Rising household debt raises concerns about overindebtedness.** Household debt reached 78 percent of GDP in 2012, up from 63 percent in 2010, and continues to grow rapidly. While some of the increase can be attributed to one-off factors such as reconstruction and the first car buyer scheme, the rise in low-income household debt is a concern, given the vulnerability of that segment of the population. Both banks and nonbank institutions, including SFIs, credit cooperatives, credit card, and leasing, and personal loan companies have been very active in this market.
- **Nonbank financial institutions are expanding and could pose risks to financial stability**. An example is the rapid expansion of credit cooperatives, which are moving away from the traditional model, into more generalized financial services. Their assets amount to about 15 percent of GDP. In 2012, loans and assets for the Savings and Credit Cooperative group grew by 24.7 percent and 15.5 percent, respectively, while deposits and shares grew by 0.48 percent and 11.86 percent, respectively. These institutions are becoming more interconnected with the financial sector through the interbank market, while they also lend to each other and invest in other financial institutions. Regulation is carried out by the Ministry of Agriculture and Cooperatives (Box 5 and Figure 6).

Staff Views

37. **There is a growing need to enlarge the BOT's regulatory and supervisory perimeter to include SFIs and credit cooperatives.** Financial sector oversight has been proactive, but supervisory gaps arising from the current institutional setting may limit its scope to contain risks. It is important to strengthen the management and governance of SFIs in line with the 2008 FSAP recommendations. In particular, current prudential regulations and disclosure requirements that apply to commercial banks should be gradually extended to credit cooperatives and SFIs, starting with the largest institutions. This action need not weaken the SFIs' ability to fulfill social policies, which can continue under the current scheme of public sector accounts that allows the pass-through of the costs of these policies to the budget.

38. **The staff supports the authorities' efforts to strengthen prudential regulation.** The mission welcomes the BOT's use of moral suasion to encourage banks to strengthen their risk management policies, in particular with respect to mortgages, and to encourage banks to increase general provisions based on the assessment of credit default risks. While recognizing the role of nonbank financial intermediation in deepening access to financial markets, the staff cautions on possible consequences of shifting intermediation to segments that are subject to data gaps and less-stringent regulatory standards and oversight.

Figure 6. Financial Sector

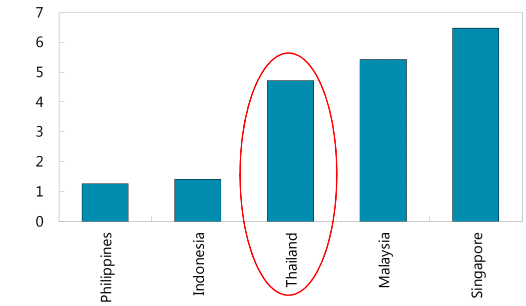
The credit-to-GDP ratio in Thailand is among the highest in the region...

Credit-to-GDP Ratio, 2013Q1
(In percent)

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

...and the deviation from trend growth was relatively high in 2013 Q1.

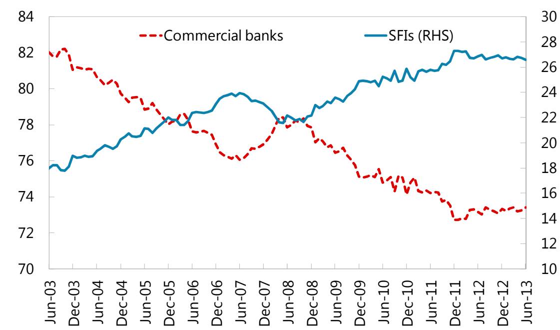
ASEAN: Deviation from Trend in Credit to Private Sector-to-GDP Ratio (In percent, data at 2013Q1, trend during 2000-2012)



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

SFIs' lending share in the banking sector has been increasing steadily before 2011.

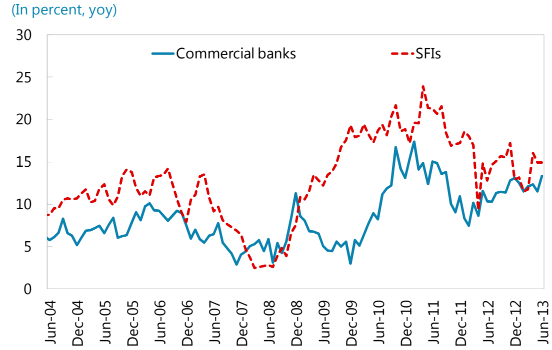
Rapidly Increasing Share of SFIs in Lending Market
(In percent)



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

... SFIs' assets have been growing faster than those of commercial banks, especially during the GFC.

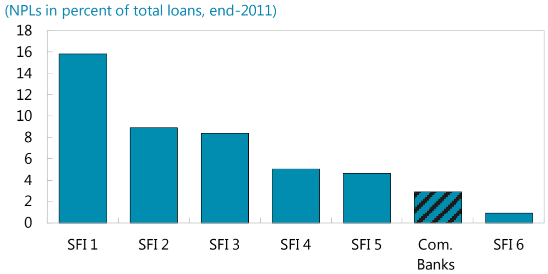
Asset growth in Commercial Banks and SFIs
(In percent, yoy)



Source: CEIC Data Co. Ltd.

SFIs have higher NPL ratios than commercial banks...

Asset Quality 1/
(NPLs in percent of total loans, end-2011)



Sources: BankScope; CEIC Data Co. Ltd.; and IMF staff estimates.
1/ Does not include The Small Business Credit Guarantee Corporations (SBCG) and Secondary Mortgage Corporation (SMC) due to lack of data; total combined assets of these two SFIs are less than 1 percent of total SFI assets.

...and face higher funding costs and lower lending spreads.

Funding Cost and Spread in SFIs and Commercial Banks, 2012

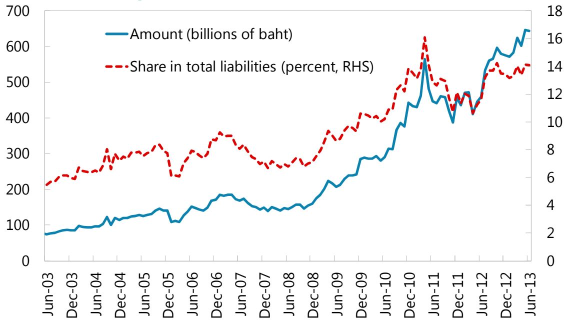
	SFIs	Commercial banks
Yield	5.21	5.71
Funding cost	2.81	2.45
Spread	2.40	3.26

Sources: Ministry of Finance; Bank of Thailand; and IMF staff estimates.
Note: SFIs have a higher funding cost and lower lending spread than commercial banks.

Figure 6. Financial Sector (Continued)

SFIs' liabilities to other financial institutions have been increasing,...

SFIs' Liabilities to Other Deposit Corporations and Other Financial Groups

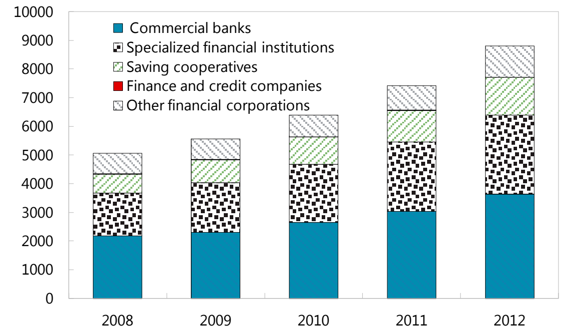


Sources: CEIC Data Co. Ltd.; and IMF staff calculations.

Loans to households by noncommercial banks increased rapidly, accounting for over 50 percent of total household debt in 2012.

Households' Creditors

(In billions of baht)

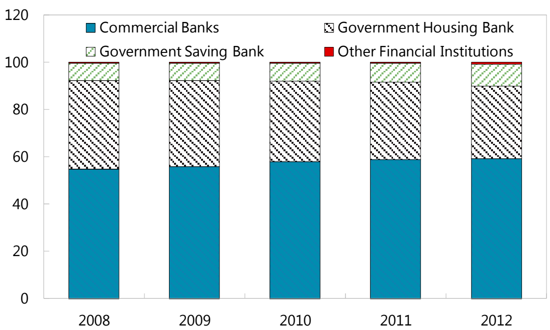


Sources: Bank of Thailand; and IMF staff estimates.

Mortgage loans provided by two SFIs accounted for 40 percent of total mortgage loans.

Market Share of Outstanding Mortgage Loans

(In percent)

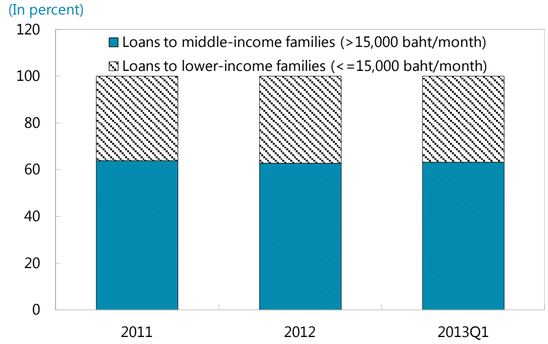


Sources: Government Housing Bank; and IMF staff estimates.

A SFI provided nearly 40 percent of loans to vulnerable segments--low-income families.

Share of Mortgage Loans by Government Housing Bank

(In percent)

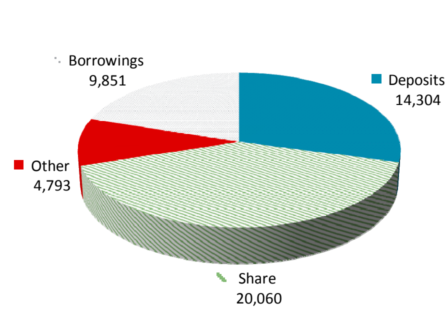


Sources: Government Housing Bank; and IMF staff estimates.

Savings and Credit Cooperatives borrowed heavily (30 percent of funding) from other financial institutions and played an increasing credit intermediation role in 2012.

Saving and Credit Cooperatives: Sources of Funds

(In millions of baht)

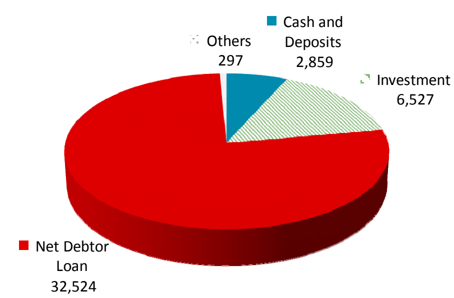


Source: The Federation of Savings and Credit Cooperatives of Thailand Limited.

... and made investments including in equity in financial institutions, indicating growing interconnectedness.

Saving and Credit Cooperative: Uses of Funds

(In millions of baht)



Source: The Federation of Savings and Credit Cooperatives of Thailand Limited.

39. **At this stage, there does not seem to be a pressing need to tighten macroprudential policies, but close monitoring of credit and asset markets is warranted.** There are signs that credit growth and selected asset price growth are slowing down, although household loans remain buoyant. Asset prices should continue to be monitored closely for evolving risks, in particular in the consumer loans and real estate sectors.

40. **However, the authorities should explore a variety of macroprudential tools, to be used if systemic risks increase.** Judicious tightening of loan-to-value ratios or debt-to-income ratios could be assessed, if needed. In this context, a levy on banks' non-core foreign liabilities could discourage reliance on foreign wholesale funding. Unremunerated reserve requirements on foreign borrowing can have a similar effect, and provide a liquidity buffer against a sudden withdrawal of foreign funding. Housing sector-related measures, such as LTV or DTI, may be considered for certain types of houses or areas. At the same time, it will be critical to coordinate these policies with the MOF.

Authorities' Views

41. **The authorities are generally satisfied with the stability of Thailand's financial sector.** They are confident in the robustness of the banking sector, and are promoting financial sector development and capital account liberalization to deepen financial markets and to deal with the volatility arising from capital flows. Going forward, the authorities will continue to strengthen the regulatory framework of the Thai financial sector through their gradual implementation of Basel III.

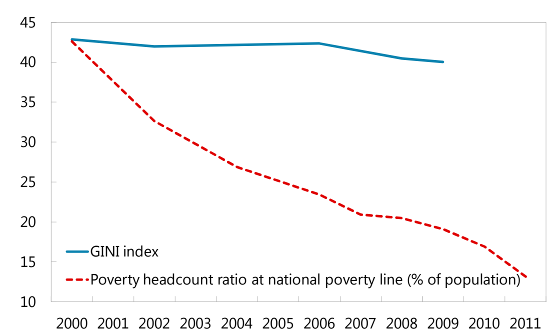
42. **The authorities agreed with the staff's assessment of the risks emanating from SFIs and household debt and stressed their actions to address them.** Both the Ministry of Finance and the BOT remain alert to these risks and have made concerted efforts in stepping up their supervision of these institutions. There have been changes in senior officials of selected SFIs to strengthen their management. The authorities plan to further improve the monitoring of vulnerabilities associated with SFIs and household debt. Moreover, the 2014 budget includes funds to inject capital (4.5 billion baht) into two SFIs. In addition, the authorities plan to provide a clear mandate and update the SFI legislation in order to strengthen the supervisory regime, and improve corporate governance. They have strengthened the data collection and prudential regulation of the providers of household loans. Thus far, the authorities do not see any imminent or potential systemic risks arising from credit cooperatives, which they believe are of relatively small size. However, the BOT is monitoring the systemic implications of these nonbank financial intermediaries closely.

F. Policies for Boosting Growth and Inclusiveness

Background

43. **Thailand's growth has been remarkable, but large income and regional disparities remain**. Thanks to Thailand's progress in social and economic development, the World Bank upgraded the country to the upper middle-income status in 2011. Strong growth has helped reduce dramatically the incidence of poverty, but income inequality persists at relatively high levels. To a large extent the inequalities reflect regional disparities.[4]

Poverty and GINI Coefficient



Source: World Bank, World development Indicators.

44. **The National Economic and Social Development Plan seeks to boost growth and reduce disparities**. The comprehensive plan aims at enhancing competitiveness and promoting inclusive, environment-friendly growth via augmentation of human capital, economic restructuring, and improved management of natural resources. The infrastructure projects at the heart of this plan will not only increase economy-wide productivity but will also improve connectivity and facilitate development in the less advanced provinces. In addition, these plans support increased cross-country linkages envisaged for the ASEAN Economic Community.

45. **Labor shortages present an obstacle to growth**. Thailand's population growth is slowing as the impact of falling fertility is only partially being offset by migrant workers from neighboring countries. As a result, the working-age population is expected to begin shrinking in the second half of this decade, while the dependency ratio will rise. Moreover, available resources are not always utilized in the most efficient way—nearly forty percent of the labor force is employed in low-productivity agriculture. While the employment ratio is among the highest in Asia, more than half of the labor force is classified as own-account workers or unpaid family workers—categories considered as "vulnerable employment" by the International Labor Organization. A skill mismatch has emerged, where unsatisfied demand for workers with technical skills coexists with an oversupply of university graduates with degrees in social sciences and management.

Staff Position

46. **Improving infrastructure is key to unleashing Thailand's growth potential**. Enhancing transportation links with neighboring countries and between regions within the country will make it easier to move goods and factors of production. This should spur regional development and help reduce inequality. Developing energy resources is also essential to avoid supply bottlenecks in the future.

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[4] See *Appendix V: Regional Disparities in Thailand—When Average National Growth is not Enough* in IMF Country Report No. 12/124 for a detailed discussion.

47. **Raising labor productivity is indispensable for improving the standard of living**. With working-age-population growth slowing rapidly, increasing output per worker is key to sustaining strong GDP growth (Appendix V). In addition, facilitating labor mobility to higher productivity sectors would allow Thailand to climb the technological ladder, but each new step presents a challenge, particularly in the environment of slow global growth and intense regional competition. In that context, a reallocation of resources from low-productivity to high-productivity sectors in the economy—in addition to increasing productivity in individual sectors—could play a bigger role (Box 4). Therefore, policies such as the rice support scheme that support small-scale, low-productivity agricultural activities may impede faster modernization of the economy.

48. **The staff sees clear merit in replacing the rice pledging scheme with budgetary transfers targeted at low-income agricultural households.** Targeted cash transfers are more effective in supporting those households most in need and could be made conditional on schooling and other measures to improve the labor market chances of the younger generation. Moreover, uncertainty and lack of data concerning the rice paddy pledging scheme has eroded confidence in Thailand's public finance. With the pledging prices about 40 percent above market prices, it is inevitable for the government to incur losses as long as the scheme remains unchanged. The government has committed 410 billion baht to the revolving fund for managing the scheme, but it is unclear how losses will be contained within the size of the fund.

Authorities' Views

49. **The authorities stressed that their income-support programs are also positive for productivity**. The minimum wage hikes have prompted a reallocation of low value-added industries to less developed neighboring countries, while the laid-off workers have quickly found more productive jobs (including in the auto industry). They also triggered technological upgrades and capital investment aimed at raising labor productivity.[5] The rice pledging scheme and other policies are helping the farmers improve their balance sheets, which could allow them to invest in new equipment. In addition, the government is working with the farmers to diversify their production to better benefit from higher prices in world markets.

50. **The authorities also reiterated that the key objectives of the rice pledging scheme were to address economic inequality in the country and to help poor farmers improve their productivity.** They acknowledged the staff's concerns about the effectiveness and transparency of the scheme and suggested that a reduction in the pledging prices or limits on the amount of purchase might be needed to ensure the sustainability of the policy.

STAFF APPRAISAL

51. **The Thai economy staged a strong recovery in 2012 and, notwithstanding the slowdown in recent months, growth is expected to recover, but at a more gradual pace than**

[5] Upgrades have also occurred in the process of replacing equipment damaged by the 2011 floods.

in the past, with low inflation. The authorities reacted decisively to the floods in late 2011 and with policies to support aggregate demand and actions to facilitate private investment, succeeded in supporting a strong recovery. Risks to the outlook are tilted to the downside, mainly from the external sector. Political stability has strengthened in Thailand, although downside risks remain.

52. **As the output gap closes, the stance of fiscal policy should be gradually tightened to rebuild policy buffers to address future shocks.** Against the backdrop of the global financial crisis and the devastating 2011 floods, the expansionary fiscal policy pursued in recent years was appropriate.

53. **Staff endorses the authorities' medium-term fiscal targets, including keeping the public debt below 50 percent of GDP and balancing the central government budget by 2017.** Recent events have shown that the Thai economy is exposed to large shocks. Addressing potential shocks requires policy buffers, including a low public debt level. With the ongoing recovery and new policy priorities, the authorities have started to gradually withdraw the fiscal stimulus, although additional actions will be needed to meet the authorities' fiscal targets.

54. **Fiscal discipline would be buttressed by strengthening the medium-term fiscal framework.** Fiscal deficit targets should be set on a broader public sector basis, with enhanced transparency, including on operations of extra-budgetary funds, state-owned enterprises, and SFIs. Infrastructure projects should be included in the budget, possibly with a concurrent Parliamentary approval of multiyear budget commitments, while annual spending plans are disclosed and monitored.

55. **While the BOT should closely monitor demand and wage pressures, the current stance of monetary policy is appropriate**. The output gap is estimated to be negative and the monetary stance remains accommodative. Monetary policy should be gradually normalized once the output gap is clearly on a closing path or if inflation starts to rise. The inflation targeting regime and independence of the central bank have served Thailand well.

56. **The external sector of the Thai economy is strong and the currency is assessed as being fairly valued.** The staff's assessment of Thailand's external position and exchange rate uses a number of approaches, including recent trends in the external accounts, medium-term balance of payments projections, and quantitative models of the current account and real effective exchange rate. The current level of the Thai baht is viewed as consistent with medium-term fundamentals and desirable policy settings.

57. **The authorities are encouraged to allow the exchange rate to continue to move flexibly, in combination with other policies, to address the volatility of capital inflows.** The authorities should continue with their strategy of encouraging private sector hedging by allowing two-way exchange rate flexibility, with foreign exchange interventions, if needed, limited to preventing excessive volatility and overshooting.

58. **The financial sector has benefited from the economy's strong recovery in 2012, but vulnerabilities are rising**. Commercial banks weathered the global financial crisis well and have used the improved economic environment to strengthen their balance sheets. However, vulnerabilities have risen reflecting rapid credit growth to households by weakly regulated SFIs. In addition, the changing landscape of the financial sector—including the expansion of nonbank financial institutions—poses a growing risk from a regulatory perspective that should be addressed.

59. **While the authorities are aware of these vulnerabilities and are taking actions, additional efforts are needed.** Tightening prudential regulations on commercial banks to take advantage of the business cycle and strengthening the management and enhancing the mandates of SFIs are appropriate. However, the authorities should consider extending the current regulatory and supervisory regime of commercial banks to all deposit-taking institutions.

60. **While Thailand's record of economic development in recent decades has been remarkable, the authorities' goals of strengthening inclusive growth are appropriate.** ASEAN integration has the potential to bring about productivity gains derived from economies of scale. Infrastructure projects are aimed at lowering logistics costs, while plans to strengthen vocational training would target shortages of skilled labor. Strengthening inclusive growth may require replacing generalized subsidies, in particular energy and the rice pledging scheme, with programs targeted at vulnerable groups, thereby also strengthening market confidence in the public finances. Addressing infrastructure bottlenecks and continued skills upgrading of the labor force are critical to sustaining growth in the medium and long term.

61. **It is proposed that the next Article IV consultation take place on the standard 12-month cycle.**

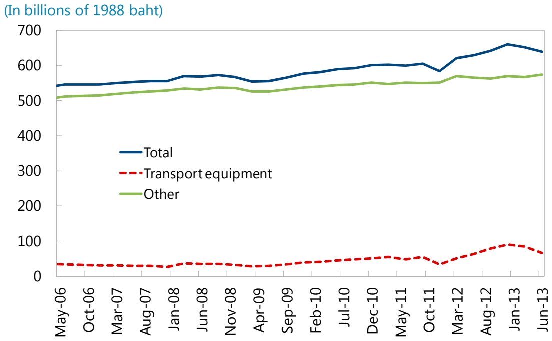
Box 1. First Car Tax Rebate Program

In September 2011, the Cabinet approved the excise tax rebate on selected purchases of passenger vehicles, which proved to be very popular. To qualify, the buyer had to be at least 21 years old and not already own a car, and the car had to be manufactured domestically and not exceed a certain price and size limits. The rebate, which amounted to about 16 percent of the cost of the car (capped at 100,000 baht) is given one year after the purchase of the car. The program lasted until end-2012 and included about 1.25 million orders, of which 850,000 vehicles had been delivered as of April 2013. In recent months, there had been some cancellations by buyers who could not assure financing.

The program gave a major boost to production and consumption. Private consumption rose above trend in 2012, with higher spending on automobiles apparently not crowding out other expenditure. On the production side, the increased demand was accommodated by expanding capacity and by utilizing it fully (with considerable overtime), while exports stayed roughly at pre-flood levels.

Private Consumption Expenditure

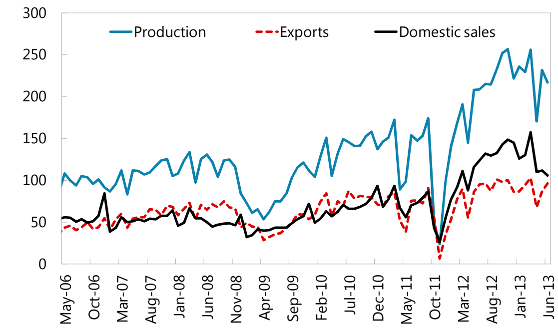
(In billions of 1988 baht)



Source: CEIC Data Co. Ltd.

Car Production and Sales

(In thousand units)



Source: CEIC Data Co. Ltd.

The key question is what will happen in the future. The auto makers plan to increase car production further this year with the hope that the decline in domestic sales after the rebate scheme runs out will be minor, while export markets will be able to absorb a 50 percent increase in Thailand's car exports. However, these expectations might prove too optimistic given the slowdown in domestic and external demand.

Box 2. Large-Scale Infrastructure Projects in Thailand

Thailand's national development strategy aims at economic growth rates of 4–5 percent, sustained in the long term. Supply side bottlenecks need to be overcome to achieve this target, and the government intends to raise significantly the share of public investment in GDP. As an integral part of its strategy, the government is embarking on a Logistics Infrastructure Development and Investment Plan for Thailand 2013–2020 (Thailand 2020), with the aim of moving Thailand up the value chain, enhancing productivity, and take advantage of integration into one of the most dynamic economic growth regions. In addition, the authorities are also planning water management projects in response to the 2011 floods.

- **Thailand 2020**

  The plan focuses on transportation infrastructure, with a strong emphasis on rail networks which account for 83 percent of the planned expenditures. Key projects include adding second rail tracks to existing single tracks, building a high-speed train network between major cities, replacing equipment, and significantly enlarging Bangkok's mass rapid transit network (from today's 80 kilometers to 464 kilometers by 2019). Other projects include new motorways, improvements in national highways and rural road networks, water transportation and port developments, and better customs and border facilities. The government estimates that these investments will reduce annual logistics costs by 2 percent of GDP, lower the energy bill by about 1 percent of GDP a year, and lead to lower transport times, improved connectivity between Bangkok and the provinces, and boost cross-border trade, thereby consolidating Thailand's role as the region's connectivity and logistics hub. It should also contribute to sustainable development and raise living standards by reducing traffic congestion in the metropolitan Bangkok area. The government is seeking Parliamentary authorization to borrow up to 2 trillion baht (16 percent of 2013 GDP) to finance the projects, implementing them over 7 years. While Thailand's public finances would allow full public financing, the government is also seeking private participation through PPPs and infrastructure funds.

- **Water Management Projects**

  These projects aim to strengthen the economy's resilience to floods and raise productivity in the agriculture sector. The plan foresees the restoration of the forest and ecosystem; construction of roads; restoration and efficiency improvements of flood prevention structures; management of water reservoirs; floodways and flood diversion channels, and agriculture and urban development. An Emergency Decree to authorize the government to borrow 350 billion baht (3 percent of 2013 GDP) for these projects has been issued, However disbursements have been held up by legal disputes and only about 7 percent of the allocated financial resources have so far been used.

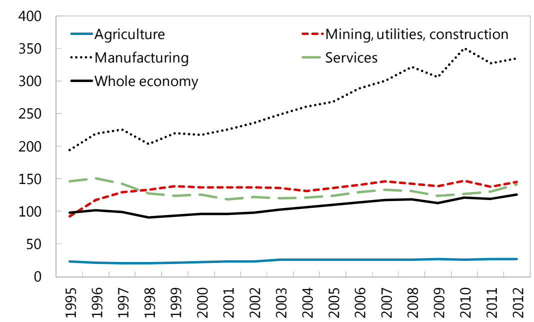
Box 3. Infrastructure Financing—International Best Practices

- **Long-term contracts, such as the ones related to infrastructure, create budgetary challenges that are typically not resolved by basic cash budgeting.** The use of commitment appropriations—in addition to spending appropriations—can address this problem, following international best practices in budgeting for capital spending.
- **Under this budgetary process, which is used in France and Germany, the budget provides two kinds of authorizations, spending appropriations and commitment appropriations.** Spending appropriations authorize government spending in the current year. Commitment appropriations authorize the government to commit public resources for future years. If authorization is required before the government enters into any long-term contract, the parliament will be informed about, and have the power to limit the future implications of investment decisions. The presence of commitment appropriations also draws attention to the future costs of all long-term investment projects, including PPPs.

Box 4. Sectoral Distribution of Employment and Productivity

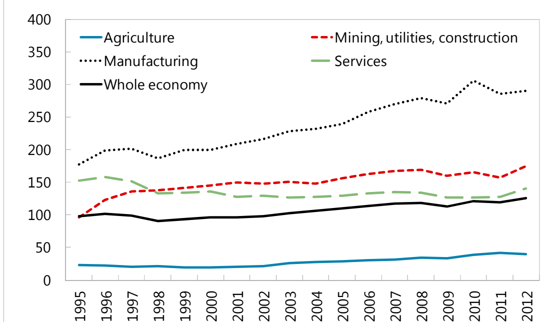
Thailand exhibits large differences in labor productivity across sectors. Real output per worker in manufacturing (in constant 1988 prices) is much higher than the economy-wide average, while agricultural productivity lags considerably behind. Moreover, labor productivity has been growing much faster in manufacturing than in the rest of the economy over the last two decades. Differences are less dramatic when movements in relative prices are taken into account, because the prices of agricultural products have been growing much faster than those of manufactured goods since 2000. Still the ratio of manufacturing value added per worker to that in agriculture has been in the range of 7 to 9 over the last ten years.

Labor Productivity
(In thousand 1988 baht per worker)



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

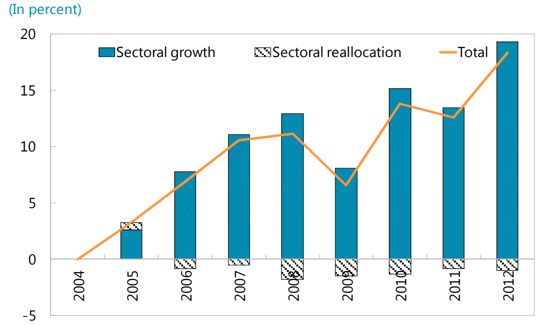
Output per Worker Deflated with Economy-Wide Deflator



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

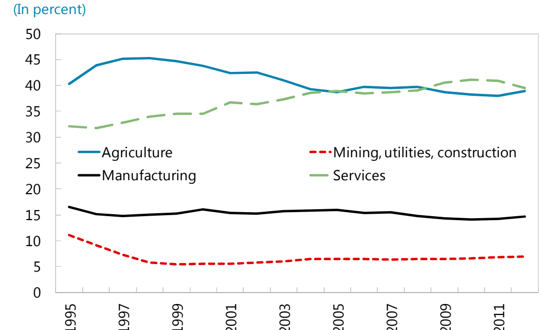
Despite the big differences, the movement of resources from low to high productivity sectors has been limited. The share of workers employed in the agricultural sector has been broadly stable since 2004, and the manufacturing share has *declined* by one percentage point. As a result, the increase in economy-wide productivity in the last eight years has been achieved exclusively through productivity growth within individual sectors (primarily manufacturing). On the contrary, the reallocation of labor between sectors has made a negative contribution (as the employment share of less productive sectors has increased).

Labor Productivity Increase Since 2004
(In percent)



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

Shares of Employment
(In percent)



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

Box 5. Changing Financial Landscape and Regulatory Challenges

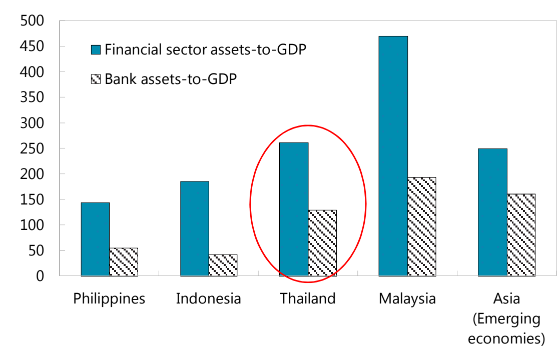
The financial landscape is changing. The financial sector in Thailand is large, with assets near 261 percent of GDP. Banks assets account for 129 percent of GDP, higher than in Indonesia and the Philippines. A comparison between bank assets and financial sector assets to GDP ratios shows that growth in nonbank financial assets has outpaced that of banking sector assets since 2008. A further comparison between the share of credit by other depository corporations and other financial corporations further underpins the growing role of other financial corporations, including credit card, leasing companies and personal finance companies. Finally, the interconnectedness among financial institutions on both the domestic and external fronts has been rising. For instance, other depository corporations have become net borrowers from other financial corporations and from abroad since early 2008, with total liabilities amounting to about 6 percent of GDP at end-2012.

The rapid evolution of the Thai financial sector is creating new challenges for the current regulatory structure. A more comprehensive regulatory approach may be needed to address the challenges arising from the changing financial landscape.

- **Regulatory gaps.** The BOT holds no regulatory power over SFIs and nonbank financial institutions. Responsibility for SFI regulation is with the MOF, which has delegated examination responsibility to the BOT, and its recommendations are not binding. The legal subordination of the BOT to the MOF has the potential to lead to interference or delays in taking needed regulatory or supervisory actions.

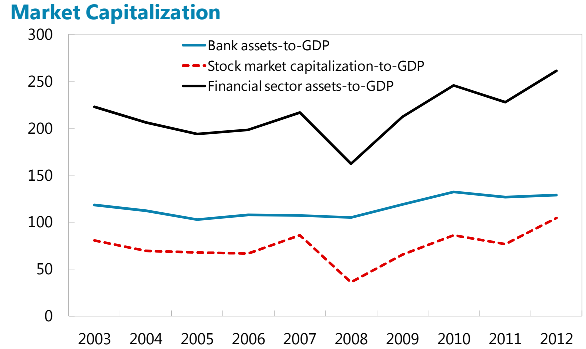
- **Information gaps.** Both SFIs and nonbank financial institutions are subject to lax disclosure requirements. The information published by SFIs is normally more aggregated and less timely than that of commercial banks. The same is the case of credit cooperatives. In this context, there is a risk of regulatory arbitrage, which requires the improvement of the regulatory and supervisory framework across different types of financial institutions that accept deposits from the public.

Financial Sector Assets and Bank Assets



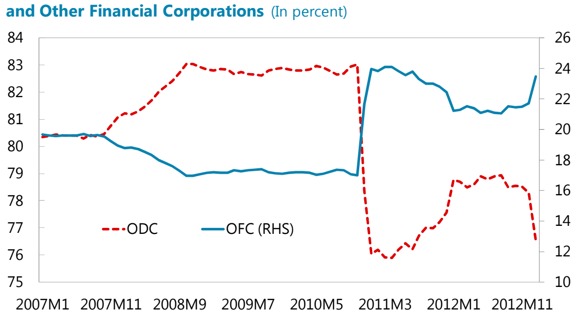
Sources: Bankscope; Bloomberg Ltd.; and Bank for International Settlements.

Comparing Bank Asset, Financial Sector Assets, and Stock Market Capitalization



Sources: Bankscope; Bloomberg Ltd.; and Bank for International Settlements.

Share of Credit to Private Sector by Other Depository Corporations and Other Financial Corporations (In percent)

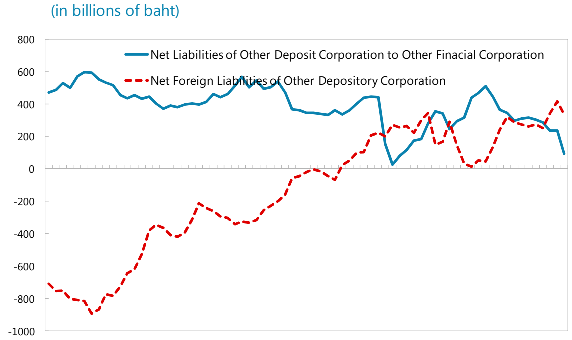


Sources: Bank of Thailand; and IMF staff estimates.

Notes: ODCs include commercial banks, SFIs, and savings cooperatives. OFCs include pension funds, insurance companies, leasing companies, personal finance companies, and asset management companies. The increase in OFC's share in 2011 partially reflects an extended data coverage on car leasing companies, credit card, and personal loans.

Net Liabilities of Other Depository Corporation

(in billions of baht)



Sources: Bank of Thailand; IMF Staff estimates.

Table 1. Thailand: Selected Economic Indicators, 2010–14

Main exports (percent of total 2012): machinery and appliances (12.2), automotives (12.8)
GDP per capita (2012): US$5,472
Unemployment rate (2012): 0.7 percent
Poverty headcount ratio at national poverty line (2011): 13.2 percent
Net FDI (2012): US$-4.87 billion
Population (2012): 67.9 million

				Projections	
	2010	2011	2012	2013	2014
Real GDP growth (percent)	7.8	0.1	6.5	3.1	5.2
Inflation					
Headline CPI (period average, percent)	3.3	3.8	3.0	2.2	2.1
Core CPI (period average, percent)	0.9	2.4	2.1	1.1	1.8
Saving and investment (percent of GDP)					
Gross domestic investment (excl. stocks)	24.7	26.3	28.5	29.0	30.2
Private	18.8	20.8	22.8	23.1	23.6
Public	5.9	5.5	5.7	5.9	6.6
Gross national saving	29.1	28.3	29.8	29.8	30.8
Private, including statistical discrepancy	23.8	24.0	27.0	27.4	28.3
Public	5.3	4.3	2.8	2.5	2.5
Foreign saving	-3.1	-1.7	0.0	-0.1	0.2
Fiscal accounts (percent of GDP) 1/					
Central government budgetary balance	-2.6	-1.7	-2.6	-3.4	-2.8
Revenue and grants	18.2	18.9	19.5	18.1	18.3
Expenditure and net lending	20.8	20.6	22.1	21.6	21.1
General government balance 2/	-0.8	-0.7	-1.7	-2.7	-3.3
Public sector balance 3/	-1.6	-1.5	-3.1	-3.6	-4.2
Public sector debt	42.6	41.7	45.4	47.2	48.5
Monetary accounts (end-period, percent change)					
Broad money growth	10.9	15.1	10.4	...	...
Narrow money growth	10.9	8.6	13.0	...	...
Private sector credit growth	12.3	17.0	14.6	...	...
Balance of payments (billions of U.S. dollars)					
Current account balance	10.0	5.9	0.2	0.4	-0.7
(Percent of GDP)	3.1	1.7	0.0	0.1	-0.2
Exports, f.o.b.	191.6	219.1	225.9	237.5	250.4
Growth rate (in dollar terms)	27.1	14.3	3.1	5.1	5.4
Imports, f.o.b.	161.9	202.1	219.9	229.0	243.7
Growth rate (in dollar terms)	37.0	24.9	8.8	4.1	6.4
Capital and financial account balance 4/	21.3	-4.7	5.1	3.3	1.8
Overall balance	31.3	1.2	5.3	3.7	1.1
Gross official reserves (end-year)	191.7	206.3	205.7	211.7	216.6
(Months of following year's imports)	11.4	11.3	10.8	10.0	9.2
(Percent of maturing external debt)	327.0	356.7	285.6	299.0	326.4
Exchange rate (baht/U.S. dollar)	31.7	30.5	31.1	...	...
NEER appreciation (annual average)	4.5	-1.6	-0.5	...	...
REER appreciation (annual average)	5.3	-0.8	0.5	...	...
External debt					
(In percent of GDP)	31.5	30.3	36.4	41.4	40.2
(In billions of U.S. dollars)	100.6	104.6	133.2	166.7	170.2
Official 5/	12.7	16.2	26.2	27.7	26.9
Non-official	87.9	88.4	107.0	139.0	143.3
Debt service ratio 6/	4.7	3.5	4.2	4.8	5.2
Memorandum items:					
Nominal GDP (In billions of baht)	10,105	10,540	11,375	12,060	13,016
(In billions U.S. dollars)	318.9	345.7	366.0	403.0	423.0

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

1/ On a fiscal year basis. The fiscal year ends on September 30.
2/ Includes budgetary central government, extrabudgetary funds, and local governments.
3/ Includes general government and nonfinancial public enterprises.
4/ Includes errors and omissions.
5/ Includes debt of general government and monetary authorities.
6/ Percent of exports of goods and services.

Table 2. Thailand: Macroeconomic Framework, 2009–18

					Projections					
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Real GDP growth (percent)	-2.3	7.8	0.1	6.5	3.1	5.2	5.0	4.4	4.7	4.7
Consumption	0.1	5.1	1.3	6.8	3.2	4.4	4.6	4.5	4.5	4.5
Gross fixed investment	-9.2	9.4	3.3	13.2	6.2	10.4	8.3	3.9	4.9	4.9
Headline CPI inflation (period average, percent)	-0.9	3.3	3.8	3.0	2.2	2.1	2.0	2.0	2.0	2.0
Core CPI inflation (period average, percent)	0.3	0.9	2.4	2.1	1.1	1.8	2.0	2.0	2.0	2.0
Saving and investment (percent of GDP)										
Gross domestic investment (excluding stocks)	24.1	24.7	26.3	28.5	29.0	30.2	31.2	31.0	31.1	31.3
Private	17.6	18.8	20.8	22.8	23.1	23.6	24.2	24.1	24.3	24.5
Public	6.5	5.9	5.5	5.7	5.9	6.6	7.0	6.9	6.8	6.8
Gross national saving	29.5	29.1	28.3	29.8	29.8	30.8	31.4	31.4	31.6	31.8
Private, including statistical discrepancy	26.7	23.8	24.0	27.0	27.4	28.3	28.8	28.8	28.8	29.1
Public	2.8	5.3	4.3	2.8	2.5	2.5	2.6	2.6	2.7	2.7
Foreign saving (- = current account surplus)	-8.3	-3.1	-1.7	0.0	-0.1	0.2	0.2	0.0	0.0	-0.1
Fiscal accounts (percent of GDP, fiscal year basis)										
Central government budgetary balance	-4.2	-2.6	-1.7	-2.6	-3.4	-2.8	-2.7	-2.8	-2.8	-2.4
General government balance	-3.2	-0.8	-0.7	-1.7	-2.7	-3.3	-3.8	-3.8	-3.6	-3.1
Revenue and grants	20.8	22.4	22.6	23.0	21.5	21.7	21.8	21.9	22.0	22.4
Expense and net acquisition of nonfinancial assets	24.0	23.2	23.4	24.7	24.2	24.9	25.6	25.6	25.6	25.5
Public sector balance	-3.6	-1.6	-1.5	-3.1	-3.6	-4.2	-4.7	-4.7	-4.5	-4.0
Total public sector debt (end-period)	45.2	42.6	41.7	45.4	47.2	48.5	50.0	51.7	53.1	53.9
Balance of payments (billions of U.S. dollars)										
Exports, f.o.b.	150.8	191.6	219.1	225.9	237.5	250.4	264.3	280.6	298.7	318.6
(Volume growth)	-14.2	16.5	8.3	2.5	4.8	5.1	5.1	5.2	5.4	5.8
Imports, f.o.b.	118.2	161.9	202.1	219.9	229.0	243.7	260.4	275.4	294.3	316.0
(Volume growth)	-23.2	26.7	13.4	7.1	5.7	7.5	7.2	5.6	6.3	6.6
Trade balance	32.6	29.8	17.0	6.0	8.5	6.7	3.9	5.2	4.4	2.6
Services, income, and transfers	-10.7	-19.7	-11.1	-5.8	-8.1	-7.4	-4.9	-5.2	-4.2	-1.8
Current account balance	21.9	10.0	5.9	0.2	0.4	-0.7	-1.0	0.0	0.2	0.8
(Percent of GDP)	8.3	3.1	1.7	0.0	0.1	-0.2	-0.2	0.0	0.0	0.1
Financial account balance 1/	2.2	21.3	-4.7	5.1	3.3	1.8	2.3	1.9	2.6	2.1
Overall balance	24.1	31.3	1.2	5.3	3.7	1.1	1.3	2.0	2.8	2.9
Gross official reserves (including net forward position, US$ billions)	154.1	191.7	206.3	205.7	211.7	216.6	220.6	222.8	223.8	226.7
(Months of following year's imports of goods)	11.4	11.4	11.3	10.8	10.0	9.2	8.5	7.9	7.3	6.8
(Percent of short-term debt by remaining maturity)	363	327	357	286	299	326	312	318	307	408
External debt (percent of GDP)	28.6	31.5	30.3	36.4	41.4	40.2	38.7	36.8	35.4	34.1
Debt-service ratio (percent of exports of goods and nonfactor services)	7.6	4.7	3.5	4.2	4.8	5.2	5.1	4.8	4.9	4.9

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, 2009–18 1/
(In billions of U.S. dollars, unless otherwise specified)

					Projections					
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Trade balance (in percent)	12.4	9.3	4.9	1.6	2.1	1.6	0.9	1.1	0.8	0.5
Current account balance	21.9	10.0	5.9	0.2	0.4	-0.7	-1.0	0.0	0.2	0.8
(In percent of GDP)	8.3	3.1	1.7	0.0	0.1	-0.2	-0.2	0.0	0.0	0.1
Trade balance	32.6	29.8	17.0	6.0	8.5	6.7	3.9	5.2	4.4	2.6
Exports, f.o.b.	150.8	191.6	219.1	225.9	237.5	250.4	264.3	280.6	298.7	318.6
(In percent of GDP)	57.2	60.1	63.4	61.7	58.9	59.2	58.6	57.6	57.2	57.1
Imports, f.o.b.	118.2	161.9	202.1	219.9	229.0	243.7	260.4	275.4	294.3	316.0
(In percent of GDP)	44.8	50.8	58.5	60.1	56.8	57.6	57.7	56.5	56.3	56.6
Of which: oil and oil products	24.8	31.9	43.3	47.4	47.2	48.2	48.8	49.7	51.2	53.1
Services	-6.4	-10.7	-10.6	-3.4	-5.6	-5.3	-4.1	-4.6	-4.4	-3.9
Income and transfers	-4.4	-9.0	-0.5	-2.4	-2.4	-2.1	-0.8	-0.7	0.2	2.1
Capital and financial account balance	-2.5	25.1	-5.2	10.1	3.3	1.8	2.3	1.9	2.6	2.1
Foreign direct investment, net	0.7	4.5	-0.4	-4.9	-6.2	-6.2	-6.8	-7.6	-7.8	-8.0
Portfolio investment, net	-5.5	9.8	3.6	4.3	3.8	3.7	3.7	3.8	3.9	3.9
Financial derivatives, net	1.1	-0.1	-0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Other investment, net	1.1	10.6	-7.8	10.5	5.7	4.3	5.3	5.7	6.5	6.1
Errors and omissions	4.8	-3.8	0.6	-5.0	0.0	0.0	0.0	0.0	0.0	0.0
(In percent of GDP)	1.8	-1.2	0.2	-1.4	0.0	0.0	0.0	0.0	0.0	0.0
Overall balance	24.1	31.3	1.2	5.3	3.7	1.1	1.3	2.0	2.8	2.9
Changes in official reserves (increase -)	-24.1	-31.3	-1.2	-5.3	-3.7	-1.1	-1.3	-2.0	-2.8	-2.9
Memorandum items:										
Gross official reserves (incl. net forward position, US	154.1	191.7	206.3	205.7	211.7	216.6	220.6	222.8	223.8	226.7
(In months of following year's imports)	11.4	11.4	11.3	10.8	10.0	9.2	8.5	7.9	7.3	6.8
(In percent of short-term debt) 2/	363	327	357	286	299	326	312	318	307	408
Export growth	-13.9	27.1	14.3	3.1	5.1	5.4	5.6	6.2	6.4	6.7
Export volume growth	-14.2	16.5	8.3	2.5	4.8	5.1	5.1	5.2	5.4	5.8
Export unit value growth	0.3	9.1	5.6	0.6	-1.0	-0.9	-0.1	0.3	0.7	0.8
Import growth	-25.1	37.0	24.9	8.8	4.1	6.4	6.9	5.8	7.0	8.0
Import volume growth	-23.2	26.7	13.4	7.1	5.7	7.5	7.2	5.6	6.3	6.6
Import unit value growth	-2.6	8.1	10.1	1.6	-2.4	-2.5	-1.0	-0.4	0.1	0.3
External debt/GDP	28.6	31.5	30.3	36.4	41.4	40.2	38.7	36.8	35.4	34.1
(In billions of U.S. dollars)	75.3	100.6	104.6	133.2	166.7	170.2	174.6	179.3	184.9	189.9
Debt service ratio 3/	7.6	4.7	3.5	4.2	4.8	5.2	5.1	4.8	4.9	4.9
GDP (US$ billion)	263.7	318.9	345.7	366.0	403.0	423.0	451.1	487.4	522.5	558.3

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

1/ Balance of payments data are presented in accordance with Balance of Payments Manual 6 methodology, and therefore differ in some presentational aspects from data released by the BOT.

2/ With remaining maturity of one year or less.

3/ In percent of exports of goods and services.

Table 4. Thailand: Monetary Survey, 2008–13

(In billions of baht)

	December					July
	2008	2009	2010	2011	2012	2013
Bank of Thailand						
Net foreign assets	3,872	4,525	5,082	5,441	5,359	5,221
Net domestic assets	-2,833	-3,422	-3,839	-4,075	-3,861	-3,833
Narrow money	1,041	1,175	1,302	1,414	1,598	1,452
Currency in circulation	752	844	937	1,036	1,136	1,033
Deposits at Bank of Thailand	289	331	365	378	462	419
Reserve money - Monetary base (M0)	1,040	1,103	1,243	1,365	1,498	1,388
Monetary survey						
Net foreign assets	4,132	4,570	4,884	5,426	4,943	4,771
Net domestic assets	5,812	6,047	6,895	8,134	10,024	10,653
Domestic credit	9,568	10,014	11,015	12,779	14,719	15,243
Net credit to central government	204	292	155	201	352	222
Credit to nonfinancial public enterprises	325	366	372	392	354	341
Credit to financial corporations	520	625	668	699	846	892
Total credit to private sector	8,514	8,726	9,801	11,469	13,145	13,763
Credit to other nonfinancial corporations	4,136	3,847	4,132	4,837	5,393	5,610
Credit to other resident sector	4,378	4,879	5,669	6,632	7,752	8,153
Other items (net)	-3,756	-3,967	-4,120	-4,645	-4,695	-4,590
Broad money	9,944	10,617	11,779	13,560	14,967	15,424
Currency	752	844	937	1,036	1,136	1,033
Deposits	289	331	365	378	462	419
Quasi-money	8,903	9,442	10,476	12,146	13,369	13,972
Memorandum items:						
Broad money growth (y/y percent change)	9.2	6.8	10.9	15.1	10.4	9.1
Narrow money growth (y/y percent change)	4.1	12.8	10.9	8.6	13.0	2.7
Credit to private sector growth (y/y percent change)	8.8	2.5	12.3	17.0	14.6	12.1
Contribution to broad money growth	9.2	6.8	10.9	15.1	10.4	9.1
Net foreign assets	5.9	4.4	3.0	4.6	-3.6	-2.3
Net domestic assets	3.3	2.4	8.0	10.5	13.9	11.4
Domestic credit	7.5	4.5	9.4	15.0	14.3	10.8

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

Table 5. Thailand: Medium-Term Fiscal Scenario, 2008/09–2017/18 1/

(In percent of fiscal year GDP, unless otherwise stated)

					IMF Projections					
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
A. Central government										
1. Revenue	17.0	18.2	18.9	19.5	18.1	18.3	18.4	18.5	18.6	19.0
Tax revenue	14.9	15.8	16.9	16.9	15.9	16.1	16.2	16.3	16.4	16.8
Taxes on income and profits	7.2	6.9	8.0	7.8	7.1	7.0	7.1	7.2	7.3	7.4
Taxes on goods and services	6.7	7.9	7.8	7.9	7.6	7.9	7.9	7.9	7.9	8.2
Taxes on international trade	0.9	0.9	0.9	1.1	1.0	1.0	1.0	1.0	1.0	1.1
Taxes not elsewhere classified	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Social contributions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other revenue	2.0	2.4	2.0	2.6	2.2	2.2	2.2	2.2	2.2	2.2
2. Total expenditure	21.2	20.8	20.6	22.1	21.6	21.1	21.2	21.3	21.4	21.5
Expense	19.2	18.4	18.7	20.3	19.7	19.3	19.3	19.4	19.5	19.6
Compensation of employees	7.2	7.6	6.8	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Purchase/use of goods and services	5.1	4.9	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Interest	1.1	1.3	1.3	1.3	0.8	0.9	0.9	1.0	1.1	1.1
Social benefits	1.3	0.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Expense not elsewhere classified	4.5	4.3	6.3	7.1	7.1	6.6	6.6	6.6	6.7	6.7
Net acquisition of nonfinancial assets	2.0	2.4	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
3. Net lending/borrowing (budgetary)	-4.2	-2.6	-1.7	-2.6	-3.4	-2.8	-2.7	-2.8	-2.8	-2.4
4. Nonbudgetary/loan expenditure 2/	0.2	2.4	0.5	0.1	0.0	0.7	1.3	1.3	1.2	1.0
of which: water management projects	0.0	0.0	0.0	0.1	0.0	0.3	0.5	0.3	0.3	0.2
of which: Thailand 2020 projects	0.0	0.0	0.0	0.0	0.0	0.4	0.8	0.9	0.9	0.8
5. Extrabudgetary balance	0.8	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
6. Social security balance	0.3	1.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
7. Net lending/borrowing (consolidated)	-3.4	-3.1	-1.7	-2.2	-2.9	-3.0	-3.6	-3.6	-3.5	-3.0
B. Local government										
8. Revenue	3.8	3.5	4.0	4.6	4.6	4.6	4.6	4.6	4.6	4.6
9. Total expenditure	3.8	3.7	3.5	4.2	4.2	4.2	4.2	4.2	4.2	4.2
10. Net lending/borrowing	-0.1	-0.2	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
C. General government										
Revenue	20.8	22.4	22.6	23.0	21.5	21.7	21.8	21.9	22.0	22.4
Tax revenue	16.7	17.5	18.8	18.8	17.7	17.9	18.0	18.1	18.2	18.6
Taxes on income and profits	7.2	6.9	8.0	7.8	7.1	7.0	7.1	7.2	7.3	7.4
Taxes on goods and services	8.2	9.3	9.3	9.4	9.0	9.3	9.3	9.3	9.3	9.6
Taxes on international trade	0.9	0.9	0.9	1.1	1.0	1.0	1.0	1.0	1.0	1.1
Taxes not elsewhere classified	0.5	0.4	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Social contributions	0.9	1.3	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other revenue	3.1	3.5	2.9	3.4	3.0	3.0	3.0	3.0	3.0	3.0
Total expenditure	24.0	23.2	23.4	24.7	24.2	24.9	25.6	25.6	25.6	25.5
Expense	20.8	19.8	20.1	21.1	20.6	20.6	20.7	20.8	20.9	20.9
Compensation of employees	8.4	8.6	7.7	8.4	8.4	8.4	8.4	8.4	8.4	8.4
Purchase/use of goods and services	7.3	7.4	5.9	6.4	6.4	6.4	6.4	6.4	6.4	6.4
Interest	1.1	1.3	1.3	1.3	0.8	0.9	0.9	1.0	1.1	1.1
Social benefits	2.7	1.2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Expense not elsewhere classified	1.3	1.3	3.3	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Net acquisition of nonfinancial assets	3.2	3.5	3.3	3.6	3.6	4.3	4.9	4.8	4.7	4.6
Net lending/borrowing (consolidated)	-3.2	-0.8	-0.7	-1.7	-2.7	-3.3	-3.8	-3.8	-3.6	-3.1
Memorandum items:										
Central government net lending/borrowing (budgetary)	-4.2	-2.6	-1.7	-2.6	-3.4	-2.8	-2.7	-2.8	-2.8	-2.4
Central government net lending/borrowing (consolidated	-3.4	-3.1	-1.7	-2.2	-2.9	-3.0	-3.6	-3.6	-3.5	-3.0
Local government net lending/borrowing	-0.1	-0.2	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
General government net lending/borrowing (consolidate	-3.2	-0.8	-0.7	-1.7	-2.7	-3.3	-3.8	-3.8	-3.6	-3.1
General government cyclically adjusted balance	-2.2	-1.0	-0.9	-0.9	-2.5	-3.0	-3.6	-3.5	-3.3	-2.7
General government primary balance	-2.4	0.1	0.2	-0.8	-2.2	-2.7	-3.2	-3.1	-2.9	-2.3
Public enterprise balance	-0.5	-0.8	-0.8	-1.4	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9
Public sector balance	-3.6	-1.6	-1.5	-3.1	-3.6	-4.2	-4.7	-4.7	-4.5	-4.0
Public sector debt 3/	45.2	42.6	41.7	45.4	47.2	48.5	50.0	51.7	53.1	53.9
Central government	29.2	29.3	29.8	32.4	32.6	33.7	35.0	36.4	37.5	38.1
Financial Institutions Development Fund	1.1	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-financial Public Enterprises	12.5	10.9	10.1	9.8	9.9	10.2	10.4	10.7	10.9	11.1
Specialized Financial Institutions guaranteed debt, and Autonomous Agency Debt	2.4	1.8	1.5	3.3	4.6	4.6	4.6	4.6	4.6	4.6
Public sector consumption	21.9	21.0	20.8	22.7	22.1	21.7	21.8	21.9	22.0	22.1
Public sector investment 4/	5.4	7.1	6.2	6.1	6.0	6.7	7.3	7.3	7.2	7.0
General government	3.3	4.6	3.8	3.7	3.6	4.3	4.9	4.8	4.7	4.6
Public enterprises	2.1	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4

Source: IMF Staff estimates and projections.

1/ The fiscal year runs from October 1 to September 30.

2/ Expenditures related to Stimulus Package II, water management projects and insurance fund undertaken outside the budget.

3/ Public debt includes any debt incurred by the central government, extrabudgetary funds or autonomous agencies, and state-owned enterprises. Special financial institutions' debt guaranteed by government is also included.

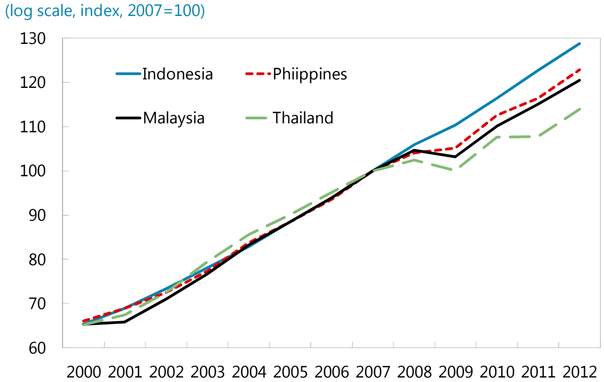
4/ Fiscal basis; differs from national account.

Appendix I. Crisis and Recovery in ASEAN-4

The trajectories of output in ASEAN-4 countries (Indonesia, Malaysia, the Philippines and Thailand) were similar before the Global Financial Crisis (GFC), but diverged sharply in its aftermath. Indonesia has accelerated relative to the pre-crisis trend; the Philippines has returned to the trend; and, in Malaysia, a negative gap has opened with the trend. Thailand has not fared as well as its neighbors, with output considerably below the trend and the gap widening. There are several reasons for this divergence: (i) more open economies (Malaysia and Thailand) suffered larger trade shocks; (ii) counter-cyclical fiscal stimulus in Indonesia and the Philippines was larger and longer; (iii) idiosyncratic factors have pushed output up in Indonesia and down in Thailand.

The four ASEAN neighbors were on similar trajectories before the GFC, but their paths diverged dramatically in the aftermath of the crisis. The average annual growth rates for the four economies from 2000 to 2007 were nearly identical at 5.0–5.1 percent. In contrast, post-2007 performance has varied widely reflecting differences in the depth and the length of output decline at the peak of the crisis as well as in subsequent growth rates. As a result, in 2012 real GDP in Indonesia was about 5 percent above the pre-crisis trend line, in the Philippines 1 percent below, and in Malaysia 5 percent below. Thailand had the largest output drop during the crisis and the slowest growth after the crisis. Consequently, its real GDP was 12 percent below trend in 2012—by far the worst outcome among the group.

Real GDP
(log scale, index, 2007=100)



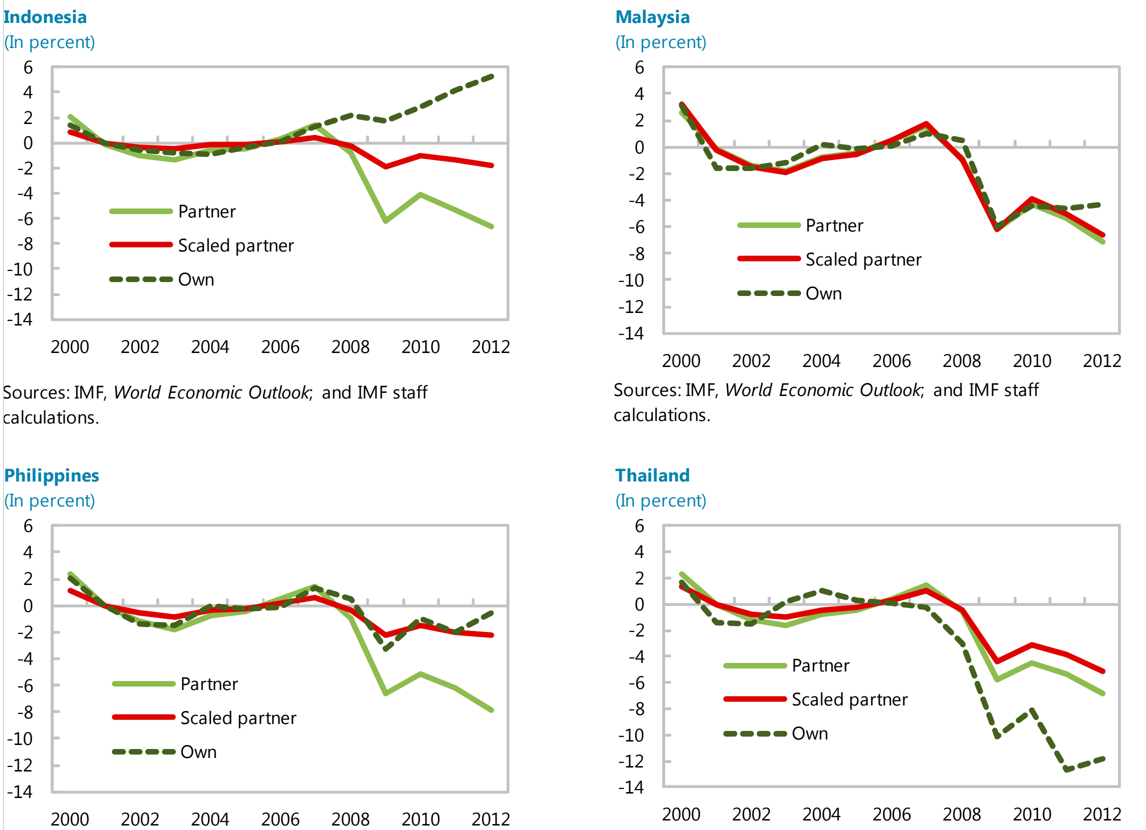
Sources: IMF, *World Economic Outlook*; and IMF staff calculations.

Explanations for this divergence fall into three broad categories. The first is the size of the external shock that interacted with the countries' characteristics. The second is the strength of policy response. And the third group comprises various idiosyncratic factors.

The impact of the initial trade shock varied with the degree of openness. The declines in output relative to the pre-crisis trend in each country's trading partners (scaled by the countries' export shares to these partners) were nearly identical. This is not surprising since their export destinations are broadly similar. However, when scaled by the ratio of exports to GDP for each economy, the gaps become much smaller for less open economies. One can take these gaps as a proxy for the size of the trade shock. With unitary elasticity of exports with respect to partner GDP and in the absence of other influences and offsets, real GDP should have declined proportionately to the decline in trading partners, with the coefficient of proportionality equal to the export ratio. Interestingly, in Malaysia and the Philippines the domestic GDP gap is quite close to that in trading partners scaled by the degree of export dependence. On the other hand, Indonesia has clearly done much better and Thailand considerably worse than what one would expect based on the size of the trade shocks.

Hence, the degree of trade openness is an important, but only partial explanation of cross-country differences in post-crisis performance.[6]

ASEAN-4: Deviation of Real GDP from Pre-crisis Trend



Sources: IMF, *World Economic Outlook*; and IMF staff calculations.

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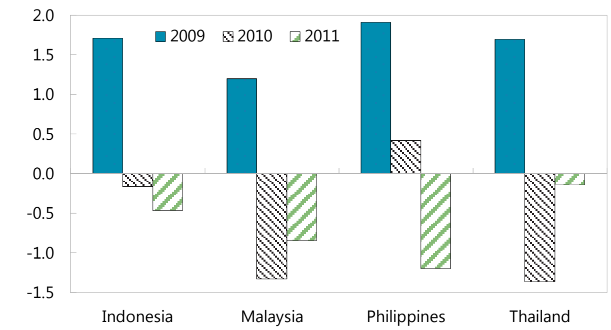
Monetary, financial, and exchange rate policies were broadly similar. In the early stages of the crisis the shock was largely financial. Capital outflows put pressure on the exchange rates. The authorities allowed considerable depreciation, particularly large in Indonesia and the Philippines. At the same time, they leaned against the wind, intervening in foreign exchange markets and raising policy rates. Malaysia was the only country that did not raise the policy rate in 2008, but it spent the most reserves. As financial pressures subsided and the demand shock (both external and domestic) became the main concern, the policy rates were lowered significantly in all four countries in late 2009 and early 2010, all moving to historically low levels. The difference from the pre-crisis rate was the largest in Indonesia and Thailand, while Malaysia had the least easing and was the first to start normalizing rates. All countries except Thailand took a variety of steps to maintain liquidity provision (e.g., by lowering reserve requirements; Indonesia and the Philippines also undertook foreign exchange liquidity injections). All four supported their financial systems (e.g., via increases in deposit insurance limits). It is difficult to compare the magnitude of these measures across countries.

[6] It could also be noted that the financial account shock—measured as the decline or reversal in portfolio inflows—was the largest in Malaysia and the longest-lasting in the Philippines. Indonesia experienced the smallest decline, and on an annual basis the inflows remained positive.

It does appear, however, that Indonesia provided the most support to exporters via depreciation and was the most aggressive in both conventional and unconventional monetary easing, but these outcomes reflect not only policy choices, but also exogenous pressures.

Fiscal policy reaction differed considerably among the four countries. Initially they all responded with a significant loosening of the fiscal stance, as measured by the decline in the ratio of the cyclically adjusted general government primary balance to potential GDP in 2009. On that measure, the fiscal impulse ranged from 1.2 percentage points in Malaysia to 1.9 percentage points in Indonesia. However, Thailand and particularly Malaysia were much quicker to withdraw fiscal stimulus than the other two countries.[7] In Malaysia the turn toward consolidation may have been triggered by concerns about running out of fiscal space, with government debt and deficits noticeably higher than in the other three countries.[8] In Thailand plans for a second round of fiscal stimulus (that was supposed to center on infrastructure projects as opposed to income support in the first round) were shelved amid political turmoil that marked the year 2010.

Fiscal Impulse 1/
(In percent of potential GDP)

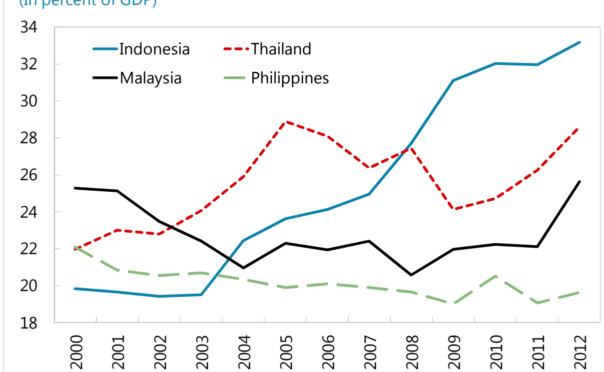


Sources: IMF, World Economic Outlook; and IMF staff calculations.
1/ Change in GG CAPB.

In addition to the real and financial shocks associated with the global financial crisis the ASEAN countries were subject to various other external and domestic influences. Indonesia and Thailand present particular interest in view of the fact that their output trajectories deviate the most from what could be attributed to the crisis.

- In *Indonesia*, a surge in government spending induced by the 2009 election propped up domestic demand in the crucial early stage of the crisis, helping maintain positive, if slower, momentum in the economy. But more important than this timely but temporary crutch were structural reforms implemented in the mid-2000s, which aimed at improving the business climate and facilitating foreign direct investment. Between 2005 and 2011 the investment-to-GDP ratio surged in Indonesia, while it moved broadly sideways in Malaysia and the Philippines, and declined in

Investment
(In percent of GDP)



Source: IMF, *World Economic Outlook*.

[7] Part of the increase in the deficit in 2009 and the decrease in 2010 was due to commodity price movements, but the non-oil balance also exhibited similar swings.

[8] Fitch downgraded Malaysia's local currency sovereign bond rating in June 2009. Thailand's local and foreign currency ratings were downgraded in December 2008 and in April 2009, respectively.

Thailand. A considerable part of that surge was foreign investment in the commodity sector (prompted, of course, by buoyant prices in addition to an improved business environment), which slowed but did not stop during the crisis.

- In *Thailand*, on the other hand, investment growth slowed after 2005. More broadly, while the other three countries were accelerating right before the crisis hit, with output about one percent above trend in 2007, Thailand was already slowing. Even though the reasons are difficult to pinpoint exactly, political uncertainty and, at times, turmoil that took a toll on private sector confidence is likely among them. In addition, in 2011 Thailand suffered from two major shocks that delayed its recovery further. In the first half of the year Japan was broadsided by a devastating earthquake and tsunami. Among Japan's trading partners, Thailand was affected disproportionately because of the integration of its auto industry with that of Japan. And, in the second half of the year, Thailand itself was hit by its worst floods in half a century, lasting for nearly half a year, resulting in major destruction of life and property, and bringing production to a halt in many parts of the country.

Appendix II. Thailand—Risk Assessment Matrix

Source of Main Risks	Overall Level of Concern	
	Likelihood in the Next 1–3 Years (high, medium, or low)	**Impact and Policy Response** (high, medium, or low)
1. Stalled or incomplete delivery of euro area policy commitments	**Medium** • Financial stress could reemerge, spilling over beyond Europe and slowing global growth. • The global risk aversion would increase.	**Medium** • Direct trade and financial linkages with the euro area are limited. However, if the crisis assumes global dimensions, Thailand will be adversely affected via lower confidence, tighter financial conditions, capital flow reversal, and shrinking trade and tourism. • *Policy Response*. If growth were to fall significantly into negative territory, moderate fiscal stimulus should be used in a manner that supports growth and protects vulnerable groups.
2. Fiscal policy shock in the United States	**Low** • The debt ceiling will become binding again in late summer or early fall, and a failure to raise it would lead to financial disruption and a sharp fiscal contraction, posing a threat to both the U.S. and the global economic recovery.	**Medium** • Similar impact on Thailand to that of a euro area shock – limited direct effect, but notable spillovers through global trade and financial conditions. • *Policy Response*. If growth were to fall significantly into negative territory, moderate fiscal stimulus should be used in a manner that supports growth and protects vulnerable groups.
3. Global oil shock triggered by geopolitical events	**Low** • Geopolitical tensions in the Middle East could precipitate a sharp fall in the oil supply.	**Medium** • A substantial and prolonged increase in oil prices would have a significant fiscal cost or, if passed onto the users, reduce purchasing power, contract demand, and drive up production costs. • *Policy Response*. If shock is sustained, gradual pass-through to the economy and targeted protection of vulnerable groups.
4. Deeper-than-expected slowdown in key emerging markets	**Medium** • Disappointing performance could bring about a reassessment of medium-term prospects, potentially triggering capital outflows, stressing financial conditions, and exacerbating the impact on the real economy via feedback loops.	**High** • Given Thailand's integration in the regional supply chains, a slowdown in major Asian economies would have a severe effect on the country. The impact would be reinforced by financial stress and capital outflows. • *Policy response*. If growth were to fall significantly into negative territory, moderate fiscal stimulus should be used in a manner that supports growth and protects vulnerable groups.
5. Distortions from unconventional monetary policy	**Medium** • These include sharp shifts in risk-taking with ensuing spillovers to capital flows and side effects from exit strategies when they are implemented.	**Medium** • Spillovers from excess global liquidity may encourage too much risk-taking and drive asset prices away from fundamentals in Thailand. Alternatively, excessive tightening of financial conditions associated with exit from QE easing would put a squeeze on the real economy. • *Policy response*. Exchange rate flexibility, interest rate response, and provision of liquidity (in case of capital flight)
7. Larger-than-expected impact of unwinding of government support on private consumption	**Medium** • The extent to which the first-car scheme brought forward future demand is not clear, and the decline in car purchases may be larger than anticipated. A reduction in pledge price under the rice scheme might reduce farmers' income and their consumption.	**Medium** • The impact will depend on the extent to which export markets will be able to accommodate excess supply of Thai automobiles if domestic demand flags. In the subdued global environment, external demand may disappoint. • *Policy response*. Accelerate implementation of public expenditure projects and other high priority spending.
8. Domestic political tensions	**Low** • Political stability has increased since 2011, but unrest remains a risk due to lingering divisions.	**Medium** • Consumer and business confidence would be damaged. • Public and private investment plans would be put on hold. • Capital flight would put pressure on credit and asset markets.

Appendix III. Estimating the Output Gap

Using a variety of univariate and multivariate approaches, we estimate that the output gap was around -1½ percent in the second quarter of 2013. This negative number likely overstates somewhat the cyclical weakness of the economy since the slowdown was exacerbated by several one-off factors.

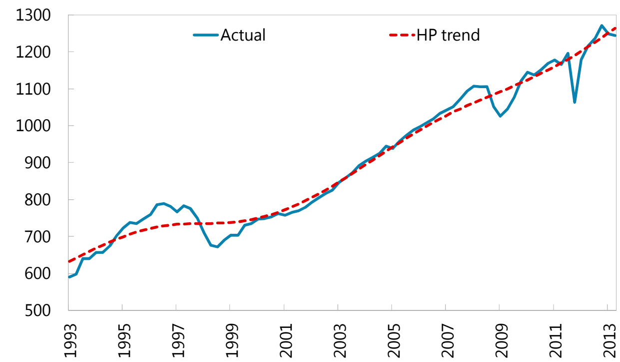
Methodology

A variety of techniques can be used to assess the cyclical state of the economy. Common methodologies for estimating the output gap fall into two broad categories. The first consists of univariate filters, which extract trend behavior from the GDP series. The traditional Hodrick-Prescott (HP) filter and two frequency filters are used in this analysis. The second group comprises multivariate models, which postulate a relationship between the output gap and a number of observable variables based on economic theory.

The HP filter is a well-established, widely used method. It decomposes real GDP into two components—a persistent trend (whose growth is not allowed to change abruptly) and fluctuations around the trend (the output gap). The filter is run on quarterly data with the standard smoothing parameter of 1600. To alleviate the well-known end-of-sample problem, historical data is supplemented with near-term projections. The results conform to our priors, showing large, positive output gaps before the Asian crisis and the global financial crisis and large negative gaps during the crises, as well as in the late 2011 flood period.

Real GDP and HP Trend

(In billions of 1988 baht)



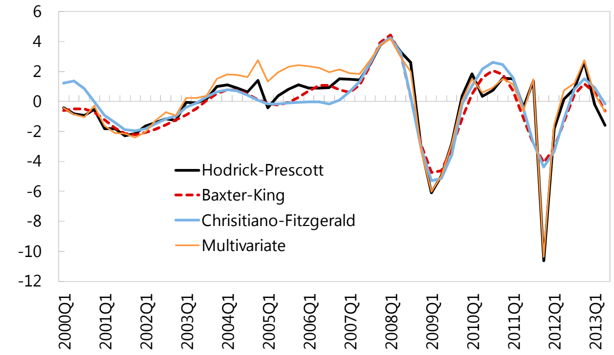
Sources: IMF, *World Economic Outlook*; and IMF staff calculations.

Various frequency filters have recently gained popularity. They have been developed to isolate the business cycle, which they do by cutting off very long-term and very short-term movements in output. In other words, they filter out not only trends, but also noise. The resulting series is smooth and may serve as a better representation of underlying processes that monetary policy should pay attention to. On the other hand, the residual is quite noisy and should not be equated with trend. In the case of Thailand, two popular filters are applied—Baxter-King (BK) and Christiano-Fitzgerald (CF),[9] with the standard choice of the typical length of the business cycle from 6 to 32 quarters. As with the HP filter, data is complemented with staff projections.[10]

[9] A symmetric version of the Christiano-Fitzgerald filter is used.

[10] This is essential because these methods cannot yield estimates at or near the end of the sample.

Over past years, the estimates produced by different univariate filters move broadly together, but considerable disparities emerge at times. The BF and HP gaps tend to move closely together, except the latter is noisier. Large differences between them arise only during very sharp movements in output that are reversed quickly, which the BK filter smoothes over. This is particularly salient during the end-2011 floods.[11] Most of the time the CF filter produces numbers similar to those coming from the BK filter.

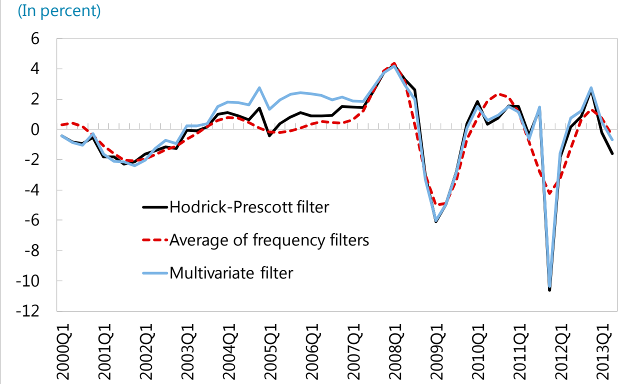


Sources: IMF, *World Economic Outlook*; and IMF staff calculations.

Multivariate filters (MVF) allow the incorporation of additional information. They treat potential output and the output gap as latent variables that have certain relationships with observables. One of those observables is real GDP, but the set can also include inflation, unemployment, capacity utilization, and other variables. For example, the output gap affects inflation via a Phillips curve and is linked to the unemployment rate via Okun's Law. The postulated relationships need to be estimated. The framework admits considerable flexibility in the specification of the underlying model.

A filter developed at the IMF and used widely by country desks is applied to Thailand.[12] It uses quarterly observations on seasonally adjusted real GDP, core inflation (quarter-on-quarter), the unemployment rate and the rate of capacity utilization in manufacturing. The parameters are estimated using Bayesian techniques. Given that the Thai economy underwent considerable structural transformation (including the introduction of inflation targeting) after the Asian crisis, the estimation period runs from 2000Q1 to 2013Q2.

The multivariate filter yields output gap estimates close to those obtained with the HP filter. The only significant, sustained divergence arose in the mid-2000s, with the MVF gap on average one percentage point higher than the HP gap between 2004 and 2006, probably reflecting the rising inflation rate in that period.



Sources: IMF, *World Economic Outlook*; and IMF staff calculations.

[11] In that period the economy was hit by a large, temporary supply shock, affecting primarily 2011Q4. While it is common to associate a negative output gap with excess capacity, clearly one should not interpret the late-2011 episode as a period of deficient demand.

[12] Benes and others, 2010, "Estimating Potential Output with a Multivariate Filter," IMF Working Paper WP/10/285.

For the most recent period, the filters detect a shift from a large positive output gap in late 2012 to a negative gap in mid-2013. The magnitudes of the shift differ across techniques, with the HP filter showing the biggest swing. The differences reflect the interpretation of the notio of the output gap implicit in these approaches. The HP filter separates short-term movements in output from long-term trends. Hence, most of the sharp increases (as in 2012Q4) or decreases (as in 2013Q1) in GDP will show in changes in the output gap rather than potential GDP. On the other hand, frequency filters see through short-term volatility. For them, the upswing in 2012Q4 and the downswing in 2013Q1 were too abrupt to be associated with the business cycle, so they treat these movements to a large extent as reversible noise. Finally, for the MVF the output gap is a latent variable that affects not only output, but also inflation, unemployment, and capacity utilization. A fairly low unemployment rate and high capacity utilization in the most recent quarters may have pulled up the estimates of the output gap, although tame inflation should have worked in the opposite direction.[13]

Filter	Estimate		
	2012Q4	2013Q1	2013Q2
Hodrick-Prescott	2.6	-0.2	-1.6
Baxter-King	1.2	0.6	-0.6
Christiano-Fitzgerald	1.5	0.9	-0.2
Multivariate	2.8	0.5	-0.7

HP filter is used for the numerical estimate of the output gap, but information obtained through other approaches is also considered. It is a simple, robust method that has been widely used for many years. Unlike frequency filters, it produces a smooth trend and allocates noise to the cycle, supporting the interpretation of the trend as potential output and deviation from trend as the output gap. The MVF might not be robust to changes in the structure of the economy, in model specification, or in priors on parameter values. It is also subject to the end-of-sample problem, which is particularly relevant given our focus on the current situation. Hence, the point estimate for the output gap is obtained from the HP filter, yielding the output gap of -1.6 percent in 2013Q2. At the same time, the frequency filters suggest that the economy's cyclical position was somewhat stronger that this number implies and that output was likely pushed down by temporary factors.

[13] The fact that the MVF sample only covered data through 2013Q2 while the HP filter was run on numbers that included near-term projections may also account for the differences between them near the end of the data sample.

Appendix IV. Potential Growth

Potential growth has slowed from close to 5 percent in the mid-2000s to about 3 percent in recent years, primarily because of a decline in TFP growth. Going forward, strong investment and more efficient use of resources should allow potential growth to rebound to about 4¾ percent. Even faster growth is within reach if private capital accumulation, infrastructure development, education and training, and the reallocation of resources to more productive uses accelerate.

The production function approach is used to analyze past performance and project future growth. This approach allows one to decompose past trend and cyclical movements in real GDP into trend and cyclical movements of factors of production. It also helps make projections of potential growth building on available forecasts of employment, human capital development, investment, and productivity growth.

A production function combines three fundamental factors of production—physical capital, raw labor, and human capital—as well as technology. The production function approach is built on the following equation (assuming Cobb-Douglas technology):

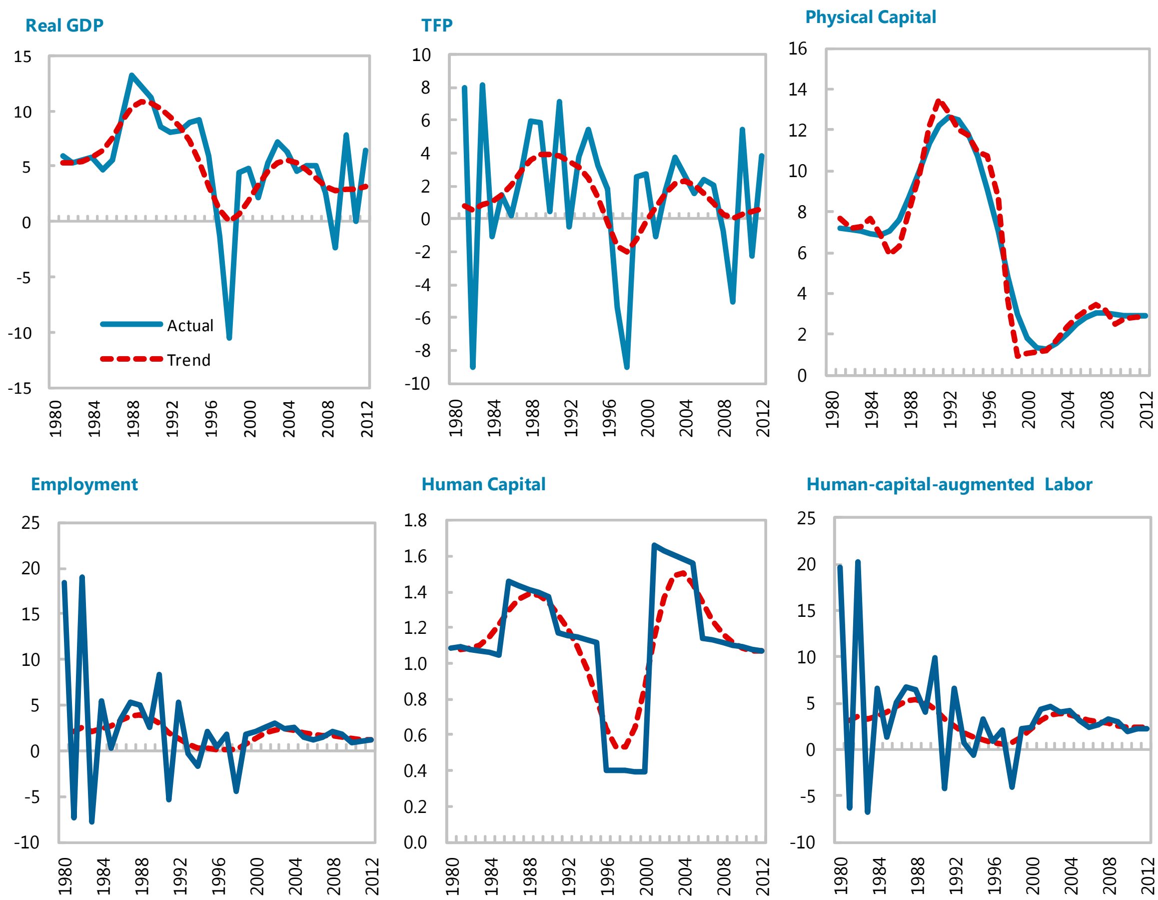
$$Y = AK^{\alpha}\left(HL\right)^{1-\alpha}$$

where Y is real GDP, K is the stock of physical capital, L is employment, H is an index of human capital, and A is total factor productivity (TFP). H and L are combined to form a human-capital augmented labor index. Ideally, capital input should be measured via capital services rather than capital stock, but the former number is not available for Thailand. Hence a standard assumption is made that capital services are proportional to capital stock. The parameter α is a technology parameter. Under certain conditions—including perfect competition in factor markets—it also represents the capital share in the national income. Given that the assumption of perfect competition is unlikely to apply, a standard value of 0.33 is used.

We use the following data (all series are annual, starting in 1980 and ending in 2012):

- *Output*. Real GDP at constant 1988 prices from the National Economic and Social Development Board (NESDB).
- *Capital*. Net capital stock at constant 1988 prices, for the total economy, from NESDB, 1980-2011. For 2012, it is calculated based on gross investment for 2012 and a depreciation rate of 5.7 percent (in line with latest depreciation figures). Capital stock data pertain to year-end. Year-average stock is approximated by the average of adjacent end-year figures
- *Labor*. Total employment (annual average) from the National Statistical Office.
- *Human capital*. The estimate of H is based on the Barro and Lee dataset on educational attainment, converted into an index using Mincerian coefficients. Data are available at 5-year frequency, with the latest in 2010. For other years, linear interpolation (before 2010) or extrapolation (after 2010) is used.
- *Total factor productivity*. It is computed using the Cobb-Douglas formula, where A is the only unknown. Given that it is calculated as a residual, this number will pick up any fluctuations in real GDP not explained by changes in factors of production.

Growth Rates of Real GDP and Production Function Inputs: Actual and Trends



Sources: Thailand Office of the National Economic and Development Board; and IMF staff calculations.

The HP filter is used to estimate trends in real GDP and production function components. The smoothing parameter is set to 6.25 since for annual series this value is compatible with the standard parameter of 1600 in quarterly series employed in the filtering approaches (Appendix III). The figure below shows the growth rates of real GDP and its components as well as their trends.

Trend growth rates have undergone considerable changes over time. Growth accelerated dramatically in the late 1980s as Thailand joined the ranks of Asian "tigers." After the Asian financial crisis there was a dramatic decline in the growth rate of physical capital, a noticeable one in the growth rate of TFP, and some drop in employment growth.

Over the last decade, changes in TFP growth explain most of the variability in potential growth. Employment growth has been slowing gradually in line with changing demographics, while capital stock growth has been broadly stable during last five years after accelerating through the mid-2000s. Thus most of the ups and downs in output growth are accounted for by TFP. Of course, measured productivity could have declined because the intensity of factor use went down. Indeed, the rate of capacity utilization dropped dramatically at the onset of the global financial crisis and also during the floods. The number of hours worked per employee most likely fell as well as in line with experiences in most other countries, but there is no direct evidence of that. In addition, some workers may have moved into less productive occupations (such as unpaid family work or self-employment). And the bulk of those who actually lost their jobs could be migrants not picked up by labor statistics.

The latest trend numbers for production function components paint a fairly bleak picture. In particular, trend capital accumulation is near the lowest level in 30 years with the exception of the aftermath of the Asian financial crisis. TFP growth is rebounding from stalling during the global financial crisis, but is still very low from a historical perspective. As a result, trend GDP growth registered a lackluster 3.2 percent in 2012.

Contributions to Potential Growth Rate

Component	Growth Rate	Coefficient	Contribution
Raw labor	*1.2*	*0.67*	*0.8*
Human capital	*1.1*	*0.67*	*0.7*
Human-capital-augmented labor	2.3	0.67	1.6
Physical capital	2.9	0.33	0.9
TFP	0.7	1.00	0.7
Total (=GDP)			3.2

Sources: Thailand Office of the National Economic and Social Development Board; and IMF staff calculations.

However, there are reasons to expect stronger growth of production potential going forward. Granted, one cannot anticipate a bigger contribution from the labor side—the employment rate is already very high, and population growth is slowing.[14] Also, the education level cannot be increased dramatically over several years. On the other hand, there are reasons to expect stronger contributions from physical investment and from TFP.

Physical capital contribution should increase. Gross fixed investment has been highly volatile in Thailand, with periods of optimism punctuated by episodes of political instability, external shocks, and natural disasters. Going forward, investment is projected to grow robustly, yielding the growth rates of fixed capital at around 4½ percent, which would contribute about 1½ percentage points per year to GDP growth—considerably higher than the estimated trend. Should investment plans be scaled up, physical capital will grow even more.

TFP growth should also be higher than what the HP filter suggests, although it is hard to tell how much higher. The filter has a well-known end-of-sample problem, and the trend estimate has been influenced by a series of negative shocks in the last few years. One can hope that TFP growth could bounce back to the rates close to 2 percent that prevailed in a few years before the onset of the global financial crisis, particularly given that TFP and physical capital growth rates tend to be positively correlated, although a somewhat lower rate is probably more realistic.

Potential growth could be close to 5 percent in the future. Combining the contributions of capital (1½ p.p.) and human-capital augmented labor (1½ p.p.) with TFP growth of 1¾ percent yields a potential growth estimate of 4¾ percent. With more investment and somewhat higher TFP growth, even rates above 5 percent are within reach. Key to reaching higher potential growth are increasing private and public investment, enhancing human capital, and faster reallocation of resources toward more productive sectors of the economy (see Box 4).

[14] Migration from neighboring countries could boost the labor supply.

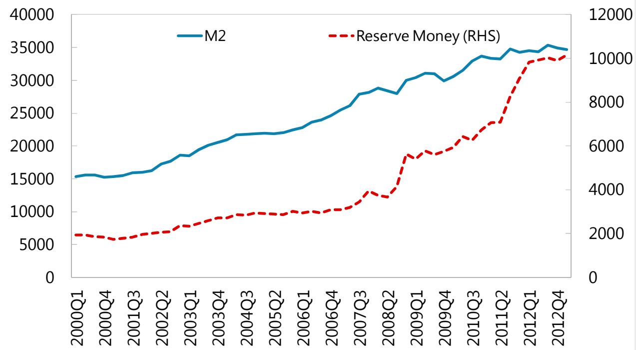
Appendix V. Capital Flows in Thailand

A. The Global and Regional Context

Thailand saw a surge in capital inflows since 2012 amid global liquidity expansion and asset reallocation by investors. The global liquidity cycle started in 2003 and accelerated from the second half of 2007 when country authorities began to undertake unprecedented liquidity-easing measures to mitigate the effects of the crisis. The aggregated money supply and reserve money in the G4 in 2013Q1 amounted to US$35 trillion and 10 trillion, respectively. The abundant global liquidity underpins capital inflows to emerging economies.

Global Liquidity Expansion

(In billions of U.S. dollars)

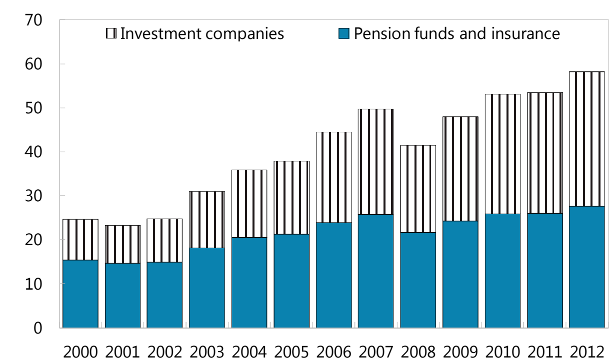


Sources: Haver Data Analytics; and IMF staff estimates.

Asset reallocation by real money holders may also contribute to capital flows. A 1 percentage point reallocation of global equity and debt securities held by G4 real money investors, which amounts to about $57 trillion, would result in additional portfolio flows to EM of $570 billion. This would be larger than the record annual portfolio flows to emerging markets of $424 billion recorded in 2007. Countries receiving a larger share of these flows relative to the size of their markets could face significant challenges, although the potential pressure would be mitigated by the likely gradual nature of such a portfolio reallocation.

Real Money Holdings by G4 Investors

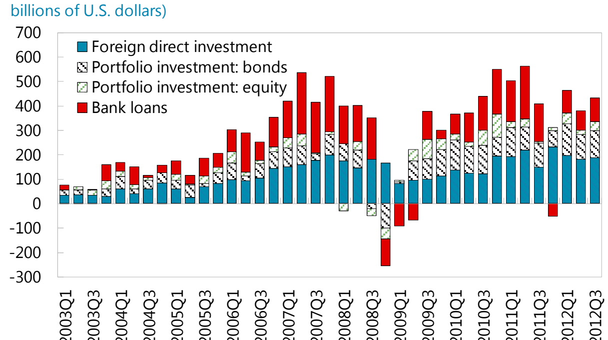
(In trillions of US$)



Sources: Haver Data Analytics; and IMF staff estimates

Amid the global liquidity expansion and asset reallocation, capital flows surged despite much volatility. Capital flows first peaked in 2006–07 before the global financial crisis, then experienced a sharp slump during 2007–08, and resumed since the second and third quarters of 2009. The flows consisted primarily of portfolio investment and cross-border bank flows.

Liquidity-Receiving Economies: Composition of Capital Inflows (In billions of U.S. dollars)

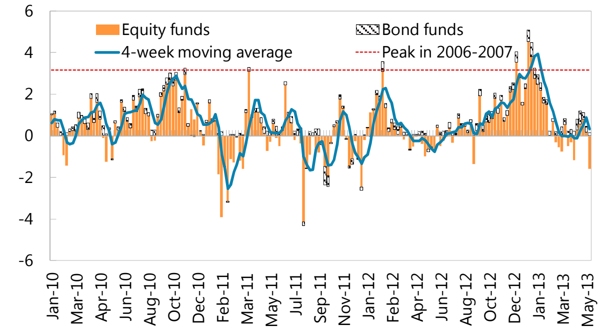


Source: IMF, *International Financial Statistics*.

Note: Data for some countries in 2012 are estimated.

Against the background of increasing capital flows across the world, capital flows to Asia have surged since 2010, following two previous episodes in the early 1990s and the early 2000s respectively. In the current episode, capital flows in 2012–13 have surpassed previous peaks.

Emerging Asia: Equity and Bond Funds—Weekly Net Flows during 2011–13 1/ (In billions of US$)



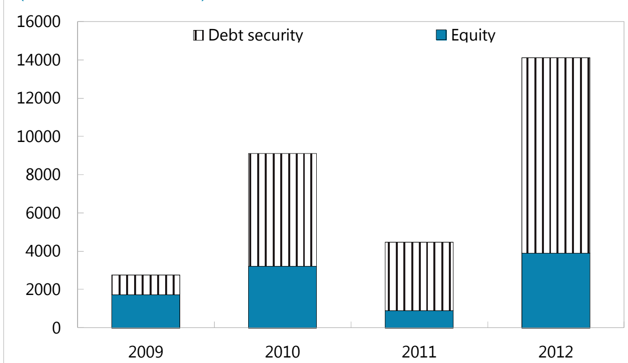
Sources: EPFR; IMF Staff estimates.
1/ Includes exchange traded fund flows and mutual fund flows.

Capital Flows in Thailand

Capital flows to Thailand have rebounded with the ebbing of the global financial crisis. The duration and magnitude of inflows has risen with each wave.

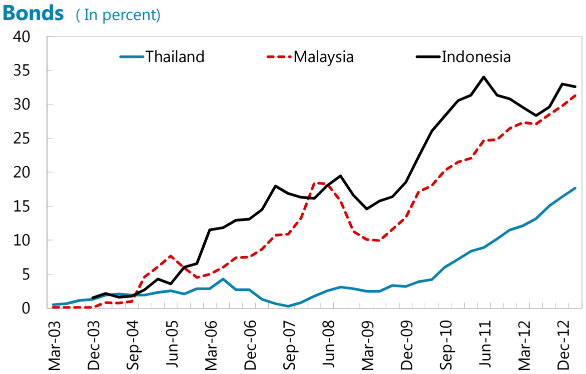
- Gross inflows amounted to US$42 billion in 2012. Among gross inflows, foreign portfolio inflows in 2012 amounted to US$14 billion, with about three quarters of foreign portfolio inflows investing in bond markets. However, the share of foreign investors in local government bond market is still lower than Malaysia and Indonesia. Beyond these external inflows, private external financing by Thai residents reached almost 20 billion U.S. dollars in 2012, further adding to capital inflows.

Net Foreign Portfolio Inflows (BOP basis)
(in millions of U.S. dollars)



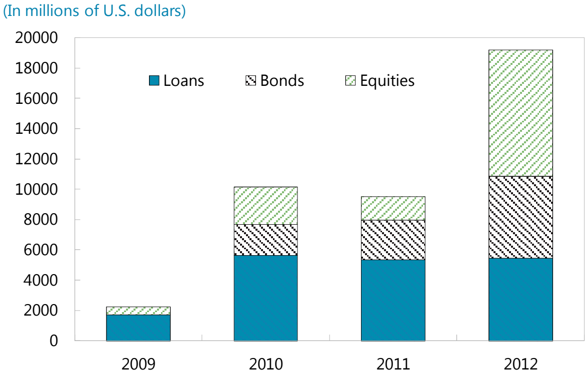
Source: Bank of Thailand.

Share of Foreign Holdings in Local Currency Government Bonds (In percent)



Source: Asia Bonds Online.

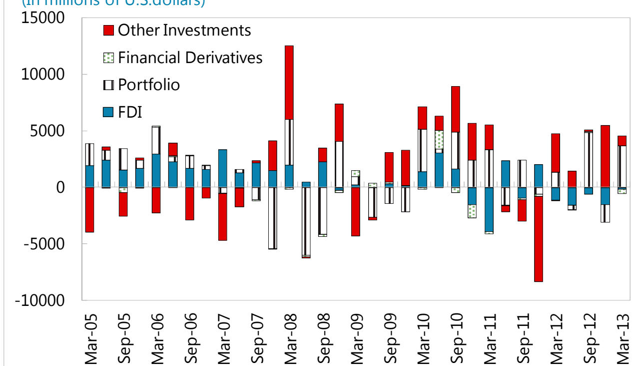
Private External Financing: Total Bonds, Equities, and Loans
(In millions of U.S. dollars)



Source: Dealogic.

- Net capital inflows to Thailand amounted to about US$ 10 billion in 2012, accounting for 2.8 percent of GDP. The net capital inflows to Thailand during 2005-12 amounted to US$ 53 billion (about 2.5 percent of GDP in average in the same period).
- Compared with other waves of inflows, the current episode is characterized by a predominance of volatile portfolio inflows. The shift toward portfolio flows could be structural in nature and imply continued volatility. During 2005-12, portfolio inflows accounted on average for almost 25 percent of total net inflows, and net direct investment is still the major component of capital inflows, accounting for nearly 55 percent. However, in 2012, net portfolio inflows and other investments accounted for 43 percent and 106 percent, respectively, more than offsetting net FDI outflows (-49 percent of net inflows).
- Compared with advanced economies, Thailand is relatively more exposed to fluctuations in global capital flows. In contrast to AEs, where large inflows and outflows traditionally take place against generally stable net flows, swings in gross inflows to Thailand generally result in significant changes in net capital flows. The modest size of Thailand's capital markets relative to AEs' also means that a small shift in portfolio allocations from AEs to Thailand could easily overwhelm Thailand's absorptive capacity. For instance, a 0.1 percentage point reallocation of the real money flows to Thailand, would be larger than the record annual capital inflows to Thailand in 2012.

Net Inflows: Components
(In millions of U.S.dollars)



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

Appendix VI. Thailand—Public and External Debt Sustainability

A. Public Debt Sustainability

Thailand's public debt has started to rise again in FY2012. Since the early 2000s, it has been on a downward trend in percent of GDP except for a sharp increase in FY2009, but the trend reversed in FY2012 and is expected to continue in FY2013 and beyond under the current policies. Low GDP growth, lower government revenue from fuel excise tax cut, as well as additional borrowing for water management projects and government guarantee for SOE borrowing to implement the rice price guarantee scheme have pushed up the public debt in FY2012. Announced revenue policy (CIT cut, tax incentive for first-time car buyers) will further reduce government revenue in FY2013, and current expenditure will stay at around the level of FY2012. While some measures to improve fiscal balance are proposed in the FY2014 budget (increases in fuel, alcohol, and tobacco excise tax, reduction in the Village Fund spending, and containment of medical costs for government employees), the saving from these measures are not enough to stabilize the public debt trajectory. Under these assumptions, the public debt path would be on upward trend, with the ratio to GDP reaching 52 percent at the end of projection period. Within the overall public debt, direct government debt would increase by 4 percentage points from FY2013 to FY2018, while the public enterprise debt would increase by 1 percentage point during the same period.

This profile is relatively resilient to interest rate shocks and exchange rate shocks. With the stable interest rates in the past and very little debt owed externally, shocks to interest and exchange rates make only modest differences to the medium-term forecast.

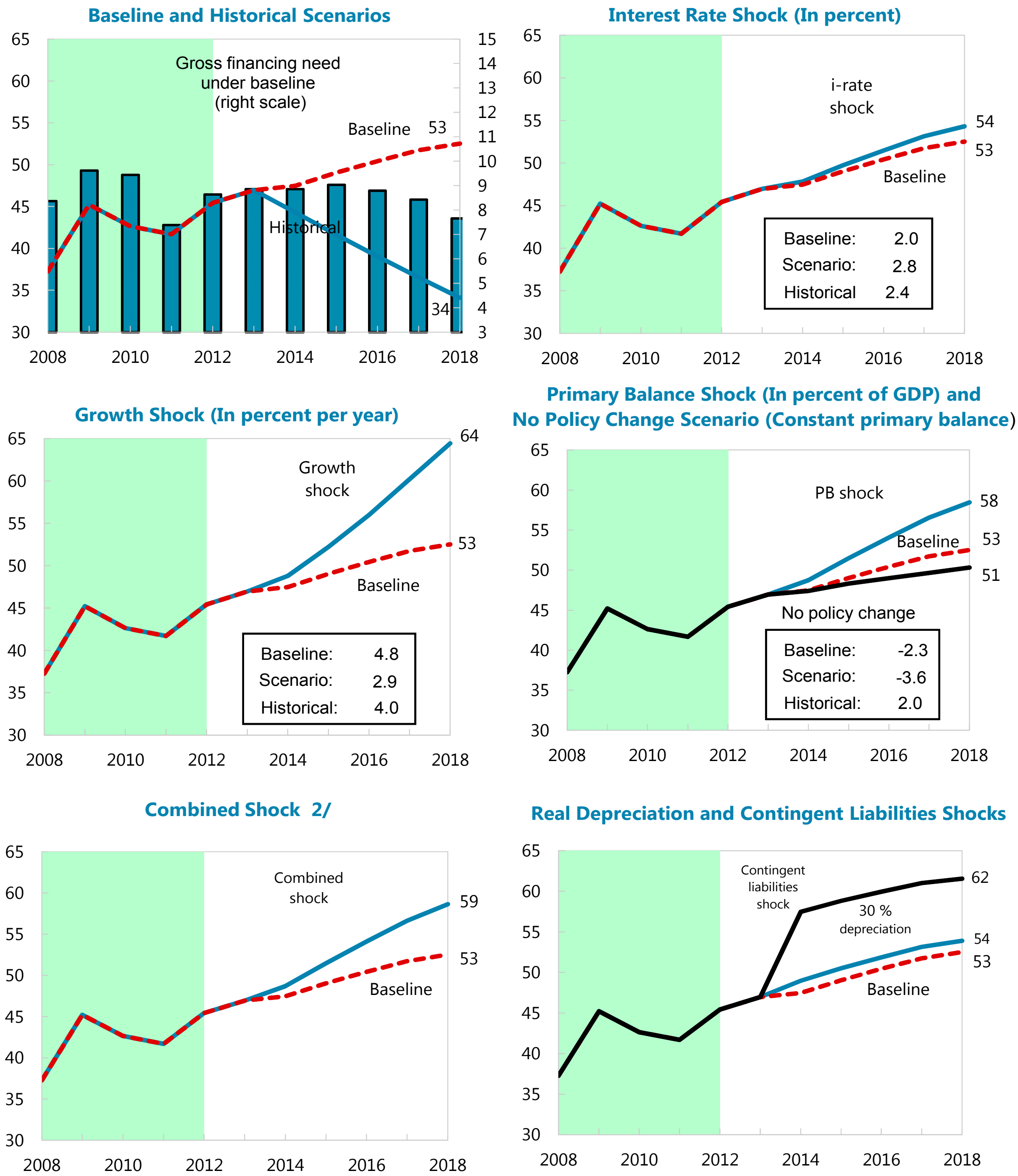
A more sizable impact would come from shocks to the primary balance, or a combination shock. If the primary balance records an average deficit of 3½ percent of GDP over the forecast horizon, instead of averaging 2½ percent as assumed, then by 2018 the debt/GDP ratio would be 6 percentage points higher than in the baseline. A combined shock, in which the real interest rate, growth rate, and primary balance are permanently worse than under the baseline by one quarter standard deviation, would also increase the debt/GDP ratio by 6 percentage points.

A contingent liabilities shock would generate a large deviation from the baseline. That is, if 10 percent of GDP in contingent liabilities are brought on budget in 2014, then even by 2018 the debt-to-GDP ratio would still remain 9 percentage points higher than in the baseline.

The most significant risk to the debt outlook comes from a potential slowdown in growth. Under the baseline scenario, growth is forecast to average around 5 percent over the medium term, higher than the historical average by 1 percent. But if growth proved lower than assumed by one-half a standard deviation, then the growth rate would average just 3 percent as the standard deviation of growth in Thailand is relatively high. This, in turn, would push up the debt/GDP ratio by 12 percentage points.

These scenarios suggest proactive actions are needed for Thailand's public debt path to be sustainable and resilient to shocks.

Figure A1. Thailand: Public Debt Sustainability: Bound Tests 1/
(Public debt in percent of GDP)



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/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and primary balance.

3/ One-time real depreciation of 30 percent and 10 percent of GDP shock to contingent liabilities occur in 2013, with real depreciation defined as nominal depreciation (measured by percentage fall in dollar value of local currency) minus domestic inflation (based on GDP deflator).

B. External Debt Sustainability

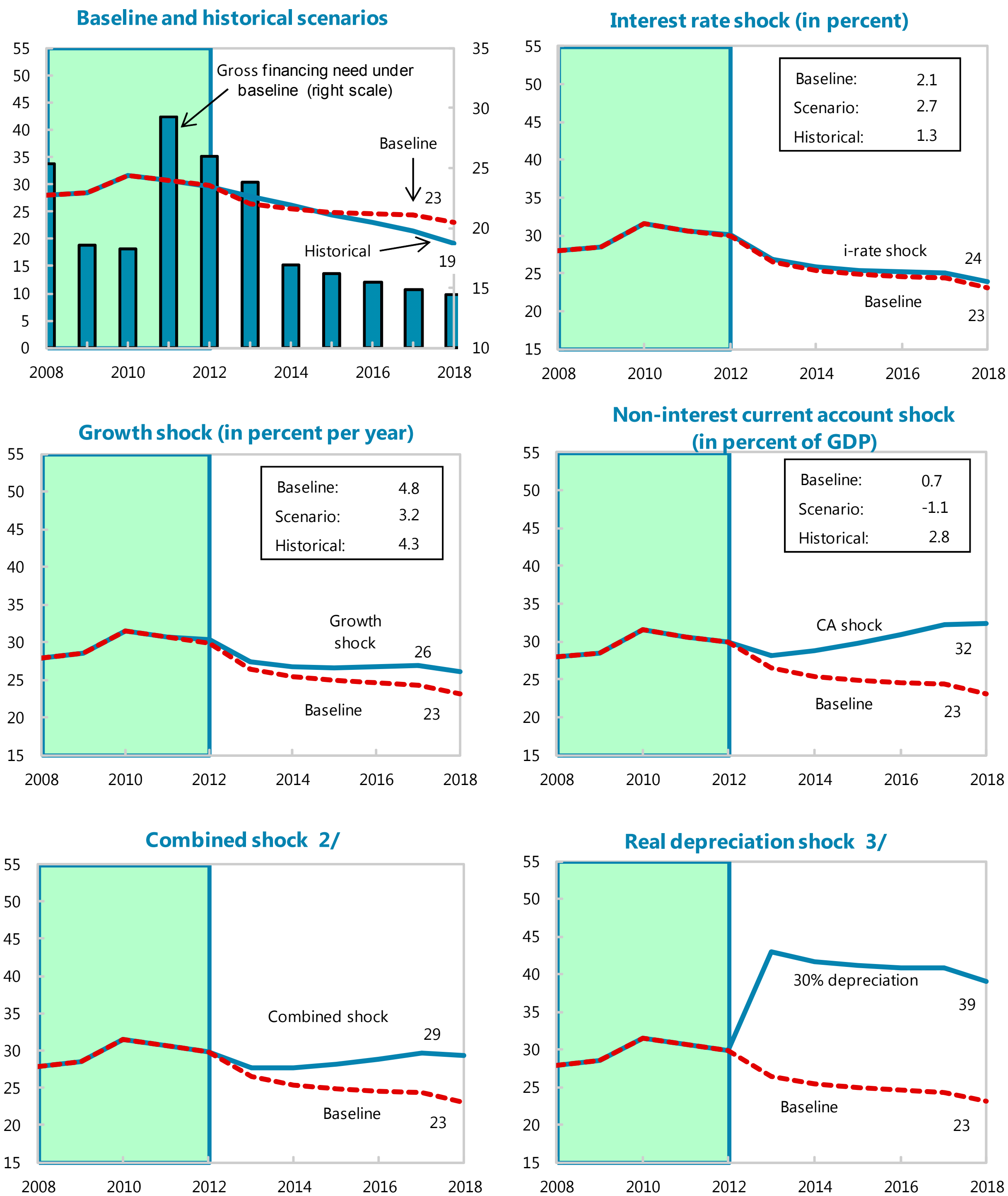
Thailand's external debt is projected to remain low and stable over the medium term. External debt amounted to $133 billion at the end of 2012 (36.4 percent of GDP), up by $29 billion from the previous year. The increase over 2012 came from short-term borrowing by other depository corporations. Short-term debt outstanding increased, while long-term debt also rose marginally. Going forward, Thailand's external debt is expected to continue to rise, albeit at a slower pace than national income, thus declining from 36.4 percent of GDP in 2012 to 34.1 percent by 2018.

External debt trajectories appear broadly stable under macroeconomic shocks based on historical levels. The shock levels in the stress tests are based on 10-year historical standard deviations, and thus represent "plausible," rather than "extraordinary" permanent shocks (see Figure A2 for the shock values). Under such plausible scenarios, a slowdown in the economic growth rate or a rise in the external interest rate does not cause a large deviation in the external debt outlook for Thailand. A permanent one-half standard deviation shock to the non-interest current account balance has a relatively larger impact, raising external debt by 11 percentage points above the baseline by 2018 to 34 percent of GDP. Similarly, a combination of shocks such that the external interest rate, the non-interest current account balance, and economic growth all deviate from the baseline by a one-quarter standard deviation; external debt would rise by 6 percentage points from the baseline by the end of the medium term to 30 percent of GDP.

A large depreciation of the real exchange rate would have a larger impact on external debt. A real depreciation of 30 percent in 2013, which is equivalent to about a 32 percent nominal depreciation, would simultaneously raise the debt ratio by about 20 percentage points. However, this analysis excludes the adjustment that trade flows would have if such a depreciation were to occur, such as a sharp improvement in the current account that would—after the initial rise—bring the debt ratio back down significantly over the medium term.

Overall, Thailand's external debt remains stable under all reasonable stress scenarios.

Figure A2. Thailand: External Debt Sustainability: Bound Tests 1/
(External debt in percent of GDP)



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/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and current account balance.

3/ One-time real depreciation of 30 percent occurs in 2013.

INTERNATIONAL MONETARY FUND

THAILAND

STAFF REPORT FOR THE 2013 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

September 5, 2013

Prepared By

Asia and Pacific Department

CONTENTS

FUND RELATIONS

(As of July 31, 2013)

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 restrictions on the making of payments and transfers for current international transactions.

General Resources Account:

	SDR Million	Percent Quota
Quota	1,440.50	100.00
Fund holdings of currency	997.99	69.28
Reserve position in Fund	442.52	30.72
Lending to the Fund		
New Arrangements to borrow	44.53	

SDR Department

	SDR Million	Percent Allocation
Net cumulative allocation	970.27	100.00
Holdings	973.97	100.38

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	6/19/2000	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):

	2013	2014	2015	2016	2017
Principal					
Charges/interest		0.01	0.01	0.01	0.01
Total		**0.01**	**0.01**	**0.01**	**0.01**

Exchange Rate Arrangement:

After more than a decade when the baht was effectively pegged closely to the U.S. dollar through a basket of currencies, the exchange rate regime was changed on July 2, 1997. Both the de jure and de facto exchange rate arrangements are classified as floating.

Last Article IV Consultation:

At the conclusion of the 2012 Article IV consultations, Executive Directors observed that Thailand has made a remarkable comeback from the effects of the global crisis and the supply disruption from the natural disaster in Japan. They welcomed the authorities' forceful policy response that enabled a sharp rebound in the economy at the first quarter of 2012. They discussed the challenges in securing the recovery from the flood, enhancing macroeconomic stability despite the elevated external risks. They supported the government's plan to gradually scale back the fiscal. Directors noted that, with the economy recovering rapidly, capital inflows could complicate policymaking. They broadly agreed that, in such circumstances, the exchange rate should be allowed to serve as a buffer. For the medium term, Directors supported the authorities' ambitious reform agenda aimed at strengthening infrastructure and developing the financial sector to help restore economic dynamism and raise growth potential. At the same time, they called for swift action to mitigate risks from government-owned specialized financial institutions by improving their risk assessment standards, strengthening supervision, defining their role more clearly and subjected them to the same levy as commercial banks.

Recent Technical Assistance:

STA: A TA mission on national account statistics took place in October 2012, a TA mission on government finance statistics in December 2012 and a TA mission on consumer/producer prices in November 2012.

FAD: A mission on tax administration as part of public financial management took place in April 2013.

LEG: Several LEG missions took place during 2012–13 to produce a national AML/CFT strategy for Thailand, as part of a three- to five-year strategic partnership to improve Thailand's AML/CFT regime.

MCM: A mission on monetary and foreign exchange policy took place in February – March 2013 and a mission on financial stability analysis including stress testing and early warning system back to back with macro prudential workshop took place in April 2013.

Resident Representative: None

BANK-FUND COLLABORATION

Thailand: JMAP Implementation Table			
Title	**Products**	**Provisional Timing of Missions**	**Delivery Date (tentative)**
A. Mutual information on relevant work programs			
Bank work program	Thailand Economic Monitor (June and November 2011)		Published online in June and November 2011
	Public Finance Management Report		March 2012
	Revenue Policy Review		November 2010
	Thailand Development Report 2012 (Country Economic Memorandum)		June 2012
	Public Investment Management Review		December 2012
	Financial Projection Model support for Specialized Financial Institutions	Ongoing	December 2013
	Strengthening Insurance Supervision	Ongoing	June 2014
	Strengthening corporate governance and the business environment	Under Preparation	TBD
	Building the legal framework for community finance institutions	Under Preparation	TBD
IMF work program	2013 Article IV mission	June 2013	Board discussion expected in September 2013
	2014 Staff Visit	January 2014	
Joint work program	Modular FSAP to assess the Specialized Financial Institutions of Thailand	2010-2011	Technical notes were completed in the fourth quarter of 2011 and FSAP finalized in Feb. 2012
B. Request for work program inputs			
Fund request to Bank	Assessment of economic developments and structural policies	Semi-annual or more frequent	Ongoing
	Information sharing	Semi-annual or more frequent	Ongoing
Bank request to Fund	Assessment of macroeconomic developments and policies	Semi-annual or more frequent	Ongoing
	Information sharing	Semi-annual or more frequent	Ongoing

RELATIONS WITH THE ASIAN DEVELOPMENT BANK[1]

(As of June 30, 2013)

Table 1. Cumulative ADB lending to Thailand 1/
(In millions of U.S. dollars)

	Number of Loans	Amount of Loans	Percent
Agriculture and natural resources	*9*	*409.21*	*6.39*
Education	*5*	*160.72*	*2.51*
Energy	*35*	*2,313.35*	*36.11*
Finance	*12*	*1,044.50*	*16.30*
Health and social protection	*1*	*500.0*	*7.80*
Industry and trade	*3*	*90.46*	*1.41*
Public sector management	—	—	—
Transport and ICT	*18*	*1,291.60*	*20.16*
Water supply and other municipal infrastructure and services	*9*	*595.00*	*9.29*
Multisector	*1*	*1.38*	*0.02*
Total	**93**	**6,406.22**	**100**

1/ Includes private sector loans.

Since joining the Asian Development Bank (ADB) in 1966, Thailand has received about $6.41 billion for 93 loans as of the end of June 2013 (see table) Thailand did not borrow from ADB for almost a decade following the Asian financial crisis. However, Thailand resumed borrowing from ADB in 2009 for the GMS Highway Expansion Project, and in 2010 for the Capital Markets Development Program. An investment grant was provided in response to the 2011 floods. ADB's active technical assistance (TA) portfolio comprises 9 projects totaling $6.9 million, mainly in the areas of transport development, capital markets development and access to finance, and water resources management.[1]

ADB's partnership with Thailand—as reflected in the country partnership strategy (CPS), 2007–11—focuses on knowledge support, advisory services and institutional strengthening for more inclusive economic growth, improving infrastructure, promoting private and financial sector development, strengthening environmental management, and enhancing regional cooperation. A large and growing part of ADB's work concerns nonsovereign operations, and the promotion of public–private partnerships (PPPs). ADB is preparing a new country partnership strategy for Thailand, 2013–16.

Links:
http://www.adb.org/countries/thailand/main;
http://www.adb.org/sites/default/files/pub/2013/THA.pdf;
http://www.adb.org/countries/thailand/cofinancing

[1]Based on information provided by AsDB staff.

STATISTICAL ISSUES

(As of July 2013)

I. Assessment of Data Adequacy for Surveillance	
General: Data provision is broadly adequate for surveillance. The authorities have continued to improve the quality and coverage of data, but dissemination of additional data would enhance the basis for macroeconomic policy analysis, particularly in the fiscal sector.	
National accounts: 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. Quarterly national accounts estimates are still compiled using a fixed base year (1998). The NESDB plans to introduce new quarterly GDP current price and chain-linked volume estimates in 2013. **Price statistics**: 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 2011 Socio-Economic Survey. Index coverage is restricted to middle-income urban households only. In addition to the headline CPI, the BTEI publishes aggregate indexes for the low-income and rural populations.	
Government finance statistics: The authorities provide data to the Fund consistent with the *Government Finance Statistics Manual, 2001* (GFSM 2001). Data are contributed to both the *Government Finance Statistics Yearbook* and the *International Finance Statistics*. However, general government fiscal data are only provided annually and more timely publication is desirable. In addition, GFSM 2001-based data are not available for the state enterprises, so the public sector balance is imperfectly calculated in GFSM 2001-basis. Given the growing importance of state enterprises having timely data on their operations is desirable for more effective surveillance. General government debt, including an amortization schedule, is not available either, and is desirable for more effective surveillance.	
Monetary statistics: The authorities submit the Standardized Reporting Forms (SRFs) for monetary statistics on a timely basis.	
Balance of payments: The authorities started publishing balance of payments statistics under BPM6 in September 2011. The historical data goes back to 2005, and a longer historical time series is desirable for analysis. The methodology for compiling balance of payments data remains adequate, but errors and omissions ranging from 0.2 percent of GDP to -1.4 percent of GDP, both under BPM5 and BPM6, point to weaknesses in data collection. IIP data are collected quarterly and publicly available only on an annual basis. The last observation available is 2012. Data on external debt and debt service have significantly improved since the introduction of a quarterly survey of private nonbank external debt.	
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 August 14, 2013

	Date of Latest Observation	Date Received	Frequency of Data[6]	Frequency of Reporting[6]	Frequency of Publication[6]	Memo Items:	
						Data Quality – Methodological Soundness[7]	Data Quality – Accuracy and Reliability[8]
Exchange Rates	8/14/2013	8/14/2013	D	D	D		
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	8/2/2013	8/9/2013	W	W	W		
Reserve/Base Money	6/2013	8/9/2013	M	M	M	O, O, LO, O	O, O, O, O, O
Broad Money	6/2013	8/9/2013	M	M	M		
Central Bank Balance Sheet	6/2013	8/9/2013	M	M	M		
Consolidated Balance Sheet of the Banking System	6/2013	8/9/2013	M	M	M		
Interest Rates[2]	8/14/2013	8/14/2013	D	D	D		
Consumer Price Index	7/2013	8/9/2013	M	M	M		
Revenue, Expenditure, Balance and Composition of Financing[3]– General Government[4]	2012	1/31/2013	A	A	A	O,LO,O,LO	LO, O, O, O, O
Revenue, Expenditure, Balance and Composition of Financing[3]– Central Government	6/2013	8/13/2013	M	M	M		
Stocks of Central Government and Central Government-Guaranteed Debt[5]	6/2013	8/13/2013	M	M	M		
External Current Account Balance	6/2013	8/13/2013	M	M	M	O, LO,LO,LO	LO, O, O, O, LO
Exports and Imports of Goods and Services	6/2013	8/13/2013	M	M	M		
GDP/GNP	Q1 2013	5/20/2013	Q	Q	Q	LO, LO, O, LO	O, O, LO, O, O
Gross External Debt	5/ 2013	8/9/2013	M	M	M		

[1] Includes reserve assets pledged or otherwise encumbered, as well as net derivative positions.
[2] Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.
[3] Foreign, domestic bank, and domestic nonbank financing.
[4] The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.
[5] Including currency and maturity composition.
[6] Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A); Irregular (I); Not Available (NA).
[7] Reflects the assessment provided in the data ROSC (published on April 10, 2006 and based on the findings of the mission that took place during October 3–17, 2005) for the dataset corresponding to the variable in each row. The assessment indicates whether international standards concerning concepts and definitions, scope, classification/sectorization, and basis for recording are fully observed (O); largely observed (LO); largely not observed (LNO); not observed (NO); and not available (NA).
[8] Same as footnote 7, except referring to international standards concerning source data, statistical techniques, assessment and validation of source data, assessment, and revision studies.

INTERNATIONAL MONETARY FUND
COMMUNICATIONS DEPARTMENT

International Monetary Fund
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Press Release No. 13/441
FOR IMMEDIATE RELEASE
November 11, 2013

IMF Executive Board Concludes 2013 Article IV Consultation with Thailand

On September 20, 2013, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Thailand.[1]

In 2012, Thailand's economy rebounded strongly from the devastating floods, with real GDP growing by 6.5 percent. Private consumption rose 6.7 percent, reflecting pent-up demand and government measures, including the rice pledging scheme, where the government committed to buying rice from farmers at a set price above the prevailing market price, and the first-car buyer scheme. On the back of reconstruction spending, private investment grew by 14.4 percent, while government spending and inventory accumulation also made a significant contribution to growth.

However, growth slowed significantly in early 2013. The expiration of the first-car buyer scheme appears to have had a larger-than-expected impact on private consumption, while exports were adversely affected by a slowdown in external demand. Real GDP was reported to have declined 1.7 percent (seasonally adjusted, not annualized) in the first quarter of 2013 from the previous quarter, and another 0.3 percent in the second quarter.

The external environment remains challenging and domestic tailwinds are weakening. Credit growth remains strong, but has decelerated in recent months. The stock market rally has fizzled since May, even as housing price growth continues. Business sentiment remains robust while consumer confidence has weakened. In this context, real GDP growth is projected to slow down to 3.0–3.5 percent in 2013. Next year, public investment projects are expected to become a key engine of growth, boosting growth to 5.2 percent. With growth driven by domestic demand, the current account surplus is expected to reach a small deficit of 0.2 percent of GDP in 2014.

Risks to the outlook are tilted to the downside, dominated by external factors. External risks deriving from an escalation of the euro area crisis or fiscal policy shocks in the United States have diminished, but are still skewed to the downside. Slower-than-expected growth in major emerging economies, particularly China, would also have a considerable impact because of trade

[1] 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. 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 summing up can be found here: http://www.imf.org/external/np/sec/misc/qualifiers.htm.

linkages. The unwinding of monetary policy stimulus in the United States may trigger further capital flow reversal from emerging markets. Domestically, the impact of the unwinding of various government policies on private consumption may be larger than anticipated. Finally, political stability has strengthened, but remains a downside risk.

The government is seeking to diversify the drivers of economic growth. The authorities have pursued redistribution policies to boost domestic consumption, while attempting to maintain the dynamism of the export sector. They have also prepared an ambitious infrastructure program to lower logistics costs and further integration in the Mekong Region and with southern China, as well as to boost the economy's resilience to floods.

Executive Board Assessment

Executive Director noted that skillful macroeconomic management, as well as the strong fundamentals of the Thai economy—including low inflation, healthy balance sheets of commercial banks and corporations, high international reserves, and a moderate level of public debt—have blunted the impact of recent severe shocks and are underpinning a recovery. Against this background, Directors concurred that the current stance of fiscal and monetary policies remains broadly appropriate. Looking ahead, Directors encouraged the authorities to persevere in their efforts to rebuild fiscal buffers, strengthen financial stability, and promote more inclusive growth.

Directors considered that a gradual return to fiscal consolidation will broaden the room for policy maneuver over the medium term and create space for priority spending. They noted, however, that the achievement of the authorities' targets may require additional measures and would benefit from a stronger medium-term fiscal framework. Against this background, Directors supported expanding investment in infrastructure and education, and replacing generalized subsidies with targeted income support for vulnerable groups.

Directors considered that the currently accommodative monetary policy stance is appropriate. Nonetheless, they encouraged the authorities to stand ready to normalize the policy stance if inflationary pressures re-emerge. Directors also observed that capital flow volatility has presented challenges to macroeconomic management. They agreed that Thailand's strong international reserve position, together with exchange rate flexibility and macroprudential and capital flow measures as appropriate, will help address such volatility going forward.

Directors welcomed the progress in developing the non-bank financial sector, which should boost financial inclusion and facilitate investment. They also agreed that policy actions to strengthen the regulatory and supervisory frameworks for non-bank and specialized financial institutions are essential to safeguard the soundness of the financial system.

Directors welcomed the authorities' aim to promote more inclusive growth. Highlighting the need to enhance labor productivity, they endorsed plans to boost workers' skills to address skills mismatches and labor shortages. They also supported plans to expand infrastructure to lower transportation costs, promote commerce, and boost long-term growth.

Thailand: Selected Economic Indicators, 2010–13

	2010	2011	2012	Projections 2013
Real GDP growth (percent)	7.8	0.1	6.5	3.1
Inflation				
Headline CPI (period average, percent)	3.3	3.8	3.0	2.2
Core CPI (period average, percent)	0.9	2.4	2.1	1.1
Saving and investment (percent of GDP)				
Gross domestic investment (excl. stocks)	24.7	26.3	28.5	29.0
Of which: private	18.8	20.8	22.8	23.1
Gross national saving	29.1	28.3	29.8	29.8
Of which: private, including statistical discrepancy	23.8	24.0	27.0	27.4
Fiscal accounts (percent of GDP) 1/				
Central government budgetary balance	-2.6	-1.7	-2.6	-3.4
Revenue and grants	18.2	18.9	19.5	18.1
Expenditure and net lending	20.8	20.6	22.1	21.6
General government balance 2/	-0.8	-0.7	-1.7	-2.7
Public sector balance 3/	-1.6	-1.5	-3.1	-3.6
Public sector debt	42.6	41.7	45.4	47.2
Monetary accounts (end-period, percent change)				
Broad money growth	10.9	15.1	10.4	...
Private sector credit growth	12.3	17.0	14.6	...
Balance of payments (billions of U.S. dollars)				
Current account balance	10.0	5.9	0.2	0.4
(Percent of GDP)	3.1	1.7	0.0	0.1
Exports, f.o.b.	191.6	219.1	225.9	237.5
Growth rate (in dollar terms)	27.1	14.3	3.1	5.1
Imports, f.o.b.	161.9	202.1	219.9	229.0
Growth rate (in dollar terms)	37.0	24.9	8.8	4.1
Gross official reserves (end-year)	191.7	206.3	205.7	211.7
(Months of following year's imports)	11.4	11.3	10.8	10.0
Exchange rate (baht/U.S. dollar)	31.7	30.5	31.1	...
External debt (In percent of GDP)	31.5	30.3	36.4	41.4
Debt service ratio 4/	4.7	3.5	4.2	4.8

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

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

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

3/ Includes general government and nonfinancial public enterprises.

4/ Percent of exports of goods and services.

Statement by Mr. Wimboh Santoso, Executive Director for Thailand and Ms. Nithiwadee Soontornpoch, Advisor to Executive Director September 20, 2013

1. On behalf of the Thai authorities, we would like to express our appreciation to staff for the 2013 Article IV Consultation. This year's discussion focused on various policy approaches to support economic growth, and various measures to secure a sustained recovery back to growth potential. Nonetheless, there have been several developments since the mission concluded, and thus, we would like to provide the Board a summary of the authorities' view on recent economic developments as well as our responses to the staff assessment, additional information of the Thai economy and the various challenges.

Updates on the Thai Economy and Near-Term Outlook

2. The authorities echo the staff's assessment on the resilience of Thai economy in the last few years despite being exposed to various shocks including global financial crisis (GFC), supply disruption from natural disaster in Japan and the historical flood of the country in 2011. The government has successfully adjusted its macroeconomic policies to focus on stimulating domestic demand while at the same time supporting exports. As a result, the Thai economy recorded a sharp recovery in 2012 with real GDP growth at 6.5 percent.

3. Nevertheless, the Thai economy in the first half of 2013 decelerated from the latter half of the previous year. Sources of the slowdown can be traced to various temporal factors; the expiration of fiscal stimulus packages, and the slower-than-expected export growth together with some supply-side constraints. In this light, the upcoming official growth forecasts for the year are likely to be adjusted in accordance with these developments.

4. Growth in the second half of 2013, however, is expected to gradually recover on the back of exports in tandem with the positive trajectory of G3 economies and improved private sector sentiments from greater clarity in the government's large-scale investment plans. This infrastructure spending would not only provide an additional boost to the recovery, but also induce the crowding-in of private investments. Additionally, these key drivers will continue to be underpinned by accommodative financial conditions as well as favorable employment conditions and income of non-agricultural sectors.

5. That being said, the authorities are especially mindful of several downside risks to Thailand's economic outlook. These include (i) the supply constraints in some industries that may hinder exporters' competitiveness and limit Thailand's ability to reap the full benefit of the ongoing global recovery, (ii) the delayed implementation of government infrastructure projects, and (iii) the increasing household debt that may dampen private consumption. The authorities will continue to closely monitor these risks and remain vigilant to take necessary actions where appropriate.

6. While my authorities broadly share the staff's assessment on the set of risk factors to the economy, they have a slightly more optimistic view on the prospect of the government's infrastructure investment plans that could support the growth momentum going forward.

Given such differences in the underlying assumptions, downward revision of official growth figures for 2013 may differ from the staff's latest projection.

Monetary Policy

7. With regard to monetary policy, my authorities share the staff's view that the current accommodative stance is appropriate and supportive of a stable growth path. The interest rate cut in May 2013 was intended to cushion against downside risks of domestic demand as both inflation and inflation expectations remain subdued and well-anchored, with core inflation projected to remain close to the lower bound of the target range of 0.5 to 3.0 percent throughout 2013. This condition allows monetary policy to be able to complement fiscal policies in supporting domestic spending and safeguarding growth, while at the same time maintaining price and financial stability.

8. Given the current growth momentum, the policy path towards normalization could be less steep. Any change in policy stance would have to be state-contingent and warranted by an optimal balance between the policy's effectiveness and cost of financial instability as well as the need to maintain policy space for future uncertainties.

Capital Flows and Exchange Rate Policy

9. Thailand continues to witness volatile capital flows with several periods of large influx and rapid outflows from portfolio investment. The recent episode of capital flow reversals could be attributed to a temporary reaction to the uncertainties surrounding the Fed's QE tapering. As a result, Thailand's portfolio investment has turned from net inflows with large influx during the first quarter of 2013, to net outflows at the end of August.

10. The excessive exchange rate volatilities were caused by sharp swings in global financial market sentiment despite sound economic fundamentals. Although the appreciation trend of the Thai baht was in line with the economic fundamental and would actually encourage local businesses to adjust, excessive short-term fluctuation could threaten businesses' viability and complicate policy decision. Although corrections in the market have generally been observed, the risk of temporary disorderly movements in the future caused by global uncertainties cannot be ruled out and may prompt the authorities to respond as necessary.

11. During the period of large capital inflows, the Bank of Thailand (BOT) has managed market volatilities by deploying various measures, mainly through exchange rate flexibility as well as verbal and limited actual interventions. At this current juncture however, the authorities' attention has shifted to containing the adverse impacts of potentially sharp capital reversals. The stock of international reserves, which currently stands at 168.8 billion USD[1], would serve as an important buffer. This, in combination with sound economic fundamentals and flexibility in the authorities' policy framework, would help to cushion the economy from adverse external shocks.

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[1] Gross reserve as of end-August 2013

Fiscal Policy

12. For fiscal policy, the key message shared by both the authorities and staff is that the large-scale public investment projects are key to unlock supply constraints and shore up confidence. These projects have shifted the focus of earlier consumption-led initiatives towards longer-term investments. The multi-year investment expenditure of 2 trillion baht, almost 20 percent of GDP, in infrastructure projects would not only play an important role in supporting domestic demand in the next seven years, but also crowd-in private investments which would elevate the economy's growth path in the long run.

13. The authorities are also mindful of the potential build-up of public debt from the large-scale infrastructure investments in addition to other possible fiscal measures down the road. The authorities recognize the importance of fiscal discipline and the need to preserve fiscal space for economic uncertainties in the period ahead. On this note, the fiscal agencies aim to achieve a balanced budget by Fiscal Year 2017 and maintain public debt at a level not exceeding 50 percent of GDP.

14. In this regard, the efficiency of revenue collection and expenditure measures has been prioritized. On expenditure, the authorities have been more conservative in their formulation and implementation of fiscal measures as exemplified by the gradual removal of energy subsidies. Fiscal spending would also be shifted towards specific sectors, such as social security and public health programmes, to better target individuals in need. For the rice pledging scheme, the authorities are carefully reviewing its operational design. The latest development was to cap the maximum value of rice pledged by each household to help limit fiscal costs. Meanwhile, a tax reform, which includes a plan to expand the tax base and the recent revision of personal income tax structure, would broaden the coverage of tax payers in the long run.

15. In conjunction with the recent slowdown, the government has recently announced an additional policy package to help boost private sector confidence. With long-run fiscal sustainability in mind, the package therefore contains mostly measures aimed at facilitating investments such as tax incentives for the tourism industry as well as measures to support investment in agricultural product processing and eco-car industries.

Financial Sector

16. Regarding the financial sector, my authorities share staff's continued concerns over the potential risks emanating from SFIs especially given their growing importance in domestic financing. The current institutional arrangement allows the Ministry of Finance (MOF) and the BOT to concertedly address the issue by stepping up the supervision of these institutions. The MOF has been on track in steering SFIs' operation to serve their intended objectives and improve their corporate governance and accounting standards. Nonetheless, the authorities see the need to appropriately pace the strengthening of prudential regulations and supervisions of SFIs in order to retain their ability to operate as the government's arm in promoting financial access and growth inclusiveness.

17. The authorities also acknowledge staff's concern on the increase in interconnectedness of nonbank financial institutions, especially credit cooperatives, to the

financial sector. Despite their moderate share in the total assets of the financial system, the authorities and their respective supervisory bodies are watchful on potential risks stemming from these institutions. The process has been underway for the relevant authorities to enhance their overall regulatory standard and risk management.

18. In terms of toolkit for addressing financial stability concerns, the BOT has previously made use of prudential measures ranging from LTV to debt service ratios and the tightening of credit underwriting standards. Recently, the BOT has also initiated a targeted examination on housing loans and has used moral suasion to encourage more cautious lending behavior by commercial banks. The authorities acknowledge the staff's position on the potential merits of levies on foreign borrowing as an additional liquidity buffer against sudden withdrawals. However, its practical benefits are limited in the context of Thailand as the share of foreign borrowings constitutes a mere 8.8 percent of commercial banks' total liabilities and its use may impair investors' confidence in the long run.

Policies for Promoting Potential Growth and Income Distribution

19. The authorities view that the structural reform policies underway will play a pivotal role to overcome the country's middle income trap. Significant progress has been made in the large-scale investment plans to uplift the country's potential growth through enhanced trade linkages and logistics upgrades. In addition, the authorities are in the process of redesigning the generalized subsidy schemes to better serve specific target groups and lessen the degree of price distortion in the market.

20. The authorities appreciate staff's commitment to further investigate the ongoing issues in the Thai labor market, and share the view that labor productivity enhancement remains a critical component of the government's overall policy mix. To alleviate the skill mismatch and shortages in the labor market, the government has put in place various measures, including tax incentives, to encourage the private sector to train and develop workers' skills. The implementation of the nationwide minimum wage hikes could continue to induce the enhancement of labor productivity and firms' production process.

Final Remarks

21. To conclude, my authorities are committed to safeguarding the Thai economy and financial system against short-term shocks while maintaining monetary and fiscal prudence. In parallel, the implementation of structural reform measures is essential in securing growth momentum in the longer run. The authorities also see the necessity in nurturing a favorable environment for the private sector. Their sustained investments would bring about broad-based productivity enhancements and unlock supply constraints to allow Thailand to maximize benefits from prospective global recovery.

22. Finally, the authorities would like to thank staff for their effort in producing this comprehensive assessment on the recent economic and financial developments in Thailand as well as policy recommendations. Looking ahead, the authorities deem that maintaining a two-way communication and collaboration between the authorities and the Fund remains a vital part of improving the Fund's effectiveness in its surveillance role.