SCB
Economic Intelligence Center

Outlook

Quarter 2/2016

Thai Economic Outlook in 2016

In focus: Accessing Financial Stability in the Thai household sector

Special issues:

- The 2016 U.S. Presidential Election of 2016
- Negative interest rate policy - implications for Japan and the Global Economy
- Key political situation in neighboring countries
- The government's National e-Payment plan and its benefits to the economy
- Current situation of Thailand's household debt

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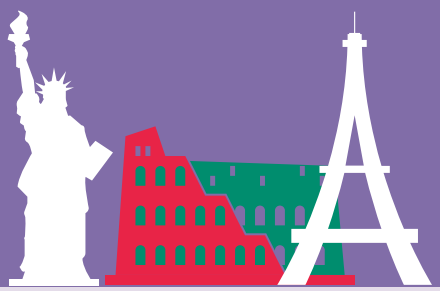
Global economy



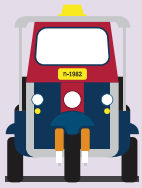
Global economy will expand gradually driven by domestic private consumption and the service sector, whereas trade growth remains sluggish.

Monetary policy divergence among major economies remains a key risk to the global financial markets and foreign exchange markets

Oil prices will likely remain at a low level due to the supply glut

Thai economy 2016

Keep an eye on government's infrastructure investments



"EIC maintains Thai GDP growth forecast at 2.5%"

Key Drivers

Government measures to support households' purchasing power, including farmer supports and stimulating tourism

Government infrastructure investments such as electric trains and motorways

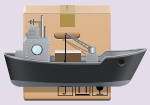
32 million foreign tourist arrivals supporting businesses related to tourism

Thai baht will likely depreciate to **37 THB/USD** at the end of 2016 ,supporting exporters'

Cost of borrowing from commercial banks remains low, since **the policy rate will likely remain at 1.50%** throughout 2016

Key Risks

Household incomes have not recovered both agriculture and non-agricultural sectors, due to severe drought and declining work hours.



Shrinking exports as global demand and trade volume slow down

Contraction of Japan's economy may affects foreign direct investment in Thailand

The volatility in the global financial markets and foreign exchange rate

Cost of borrowing from bond markets will be higher according to the rising US treasury yields

Source: EIC analysis based on data from CEIC, NESDB, BOT and MOC

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Thai Economic Outlook in 2016

EIC forecasts that the Thai economy in 2016 will grow 2.5%. The pace slows from the previous year as the economy still faces downward pressures from both external and internal factors. The Thai economy will need to rely on the government's supports for economic stimulus measures and public investment. Economic measures, such as assistance programs for farmers, income tax reduction and investment incentives, will be the main supporting factor for the recovery of private domestic demand; while the outlook of household income remains suppressed, reflected by lower working hours in both farm and nonfarm sectors, as a result of shrinking exports, drought and the high level of household debts. Additionally, public investment is also another hope as an economic driver this year. Public investment registered a record-high growth last year and will likely expand further this year considering the 20% increase of the planned budget. The construction of the new metro lines in Bangkok and Motorways will also be key to bring back investor confidence and private investment going forward; while other infrastructure projects will need to be kept on a close watch for possible delays.

Key challenges for the Thai economy this year are headwinds from abroad. Although the global economy continues to recover, structural changes in the global production chain to curb reliance on export and focus more on domestic growth will dampen the global demand for goods and trade flow. This along with low oil and commodity prices, which will increase slightly, put a considerable pressure on the recovery of Thai exports. EIC estimates that Thai exports will contract by 2.1% in 2016 compared to the previous year. Nonetheless, the capital outflow risks from movements in global monetary policies are reduced given that the U.S. Fed is likely to raise its policy rates more gradually. Moreover, Thailand's financial stability maintains a good standing with a large current account surplus and adequate foreign reserves. EIC views that the Bank of Thailand (BOT) will maintain the policy rate at 1.5% to accommodate domestic recovery, assuming that risks from external factors remain the same. We expect the baht to depreciate to 37 THB/USD at the end of 2016.

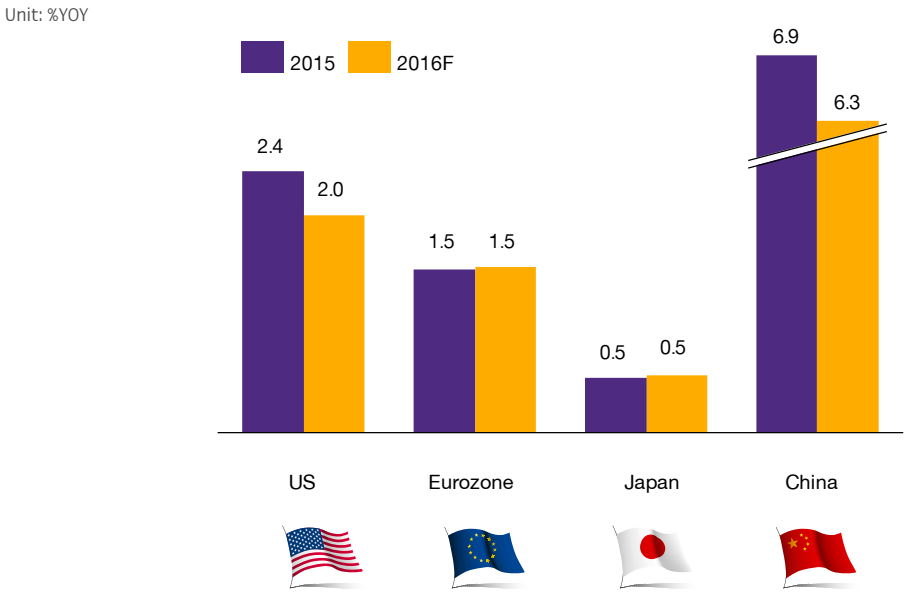
Global Economy in 2016

EIC predicts that the global economy in 2016 will expand gradually in all regions except China. European, and Japanese economies stalled in the beginning of 2016 despite showing some signs of recovery in the second half of 2015. The slower pace reflects fragility of the current recovery progress. This is partly due to the fact that the global economy is undergoing several structural changes in the production chain to lower reliance on exports. In particular, China's attempt to tackle the oversupply problem has a strong impact on its manufacturing sector and international trade. The recovery of the world economy therefore hinges on domestic-demand growth. Improving labor market and low inflation rate will support domestic private consumption and the service sector that are key to the global economic recovery going forward.

The main challenges to the world economy remain the same from last year. The oversupply conditions in both the global oil market and China's economy continue to suppress international trade value. EIC views that the oil market and the Chinese economy will return to their equilibria slowly, and so are the recovery pace of international trade and inflation rate. Many countries will likely rely on government's stimulus measures, especially for those with fragile growth and deflationary risks. Since the beginning of 2016, measures such as currency depreciation, extension of liquidity measures, and negative interest rate policy have been adopted. EIC expects that these measures will take time to see the effects trickled down to the real economy. The return of private-sector confidence is the main indicator for the policy's success. The Fed is likely to tighten its policy rate more gradually, lowering the volatility in the global financial markets and capital outflow risks from emerging markets.

1 The overall global economy in 2016 will expand gradually

GDP Growth Forecast for 2015 and 2016

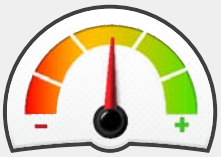


Source: Forecasts by EIC and foreign research houses (Goldman Sachs, J.P. Morgan, Deutsche Bank, and Bank of America)

The U.S. Economy: Gradual recovery supported by domestic factors

The U.S. economic recovery continued on the back of an improving labor market and increased consumer confidence. In 4Q2015, U.S. GDP expanded at 1.0% QOQ SAAR (Figure 2) due to solid domestic consumption from the labor market recovery, with an unemployment rate of less than 5% since January 2016. Non-farm payrolls continued to stay above 200,000 jobs. The declining unemployment rate also helped lift consumer confidence. Inflation, both headline and core, continued to recover. In January 2016, headline inflation was 1.3% and the core inflation rate was 1.7%.

The strong domestic economy will drive the U.S. economy. EIC expects the U.S. economy to grow 2.0% in 2016. Although U.S. economic growth has been slower than expected, the strengthening labor market and gradually expanding domestic consumption will support recovery going forward. Yet, the economy still face risks from abroad, especially the economic rebalancing in China and other emerging countries. Other risks include volatility in global financial markets from monetary policies divergence in developed countries. Furthermore, the USD appreciation also puts downward pressure on the U.S. export sector.



Implications for the Thai Economy

- The baht is likely to depreciate following the Fed's policy rate hike in the latter half of the year. The depreciation would help boost Thailand's export sector.
- Businesses with USD-denominated expenses should use financial tools to mitigate risks, especially from baht depreciation.
- The direction of the Fed's policy rate adjustment is the opposite of the adjustment of other major central banks (including European and Japanese central banks). The divergence of global monetary policies makes capital flows and exchange rates more volatile, especially in emerging countries.

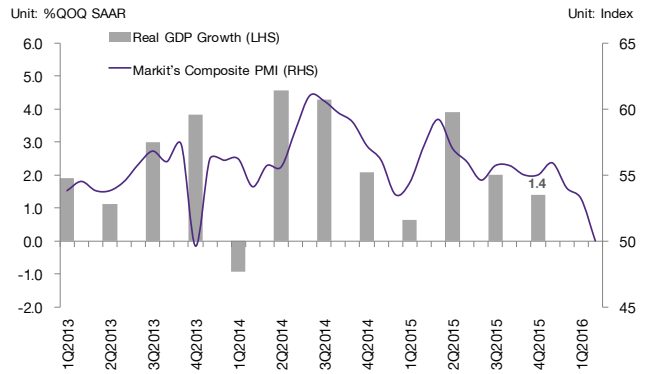
EIC expects the Fed to raise the policy interest rate twice this year, pushing the rate up to 0.75%-1.00% by the end of 2016. The low unemployment rate , a strong outlook for the labor market, and a steady rise in the inflation rate to the 2% target will increase the probability that the Fed will hike rates to restore internal balance for the economy. EIC expects there is a high probability of a policy rate adjustment since June onward.

What to watch for in 2016 is the 58th U.S. presidential election, scheduled for November 8, 2016. Presidential primaries and caucuses of the two major parties have been ongoing since February 1, 2016 and will continue until the end of July and will decide the presidential candidate for each party. In February the leading candidates were Donald Trump for the Republican Party, and Hillary Clinton, and Bernie Sanders for the Democratic Party which each of them could cause significant changes in economic and foreign policies stances. **(See more details in Box: The 2016 U.S. Presidential Election).**

2 The U.S. economy continues to grow gradually, supported by domestic factors

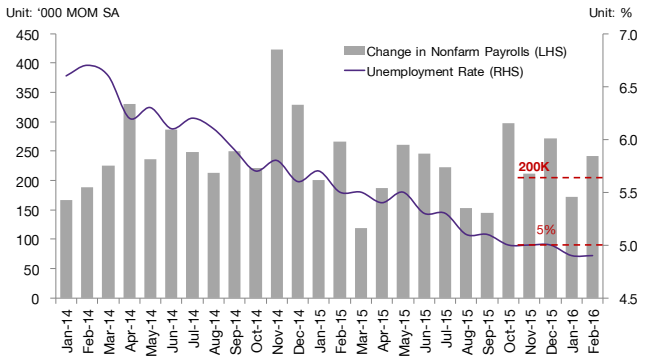
1. The U.S. economy continued to grow

Real GDP Growth and Markit's Composite PMI



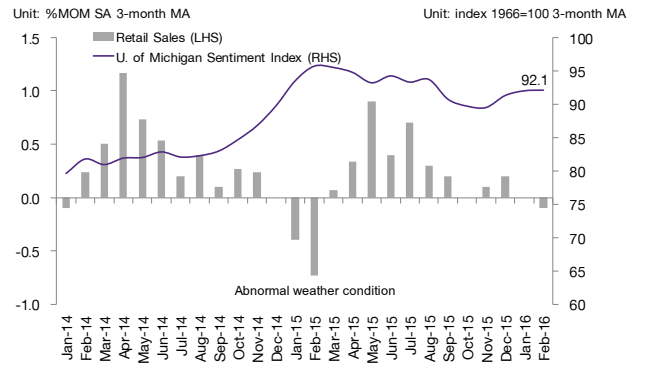
2. The labor market continued its recovery, with an unemployment rate of less than 5% since January

Change in Nonfarm Payrolls and Unemployment Rate



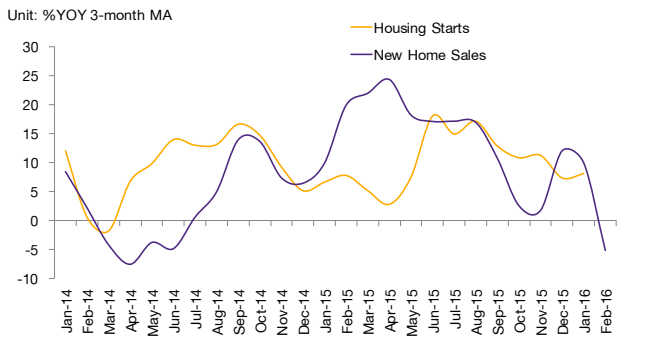
3. Retail sales started to stall while consumer confidence remained high

Retail Sales and U. of Michigan Sentiment Index



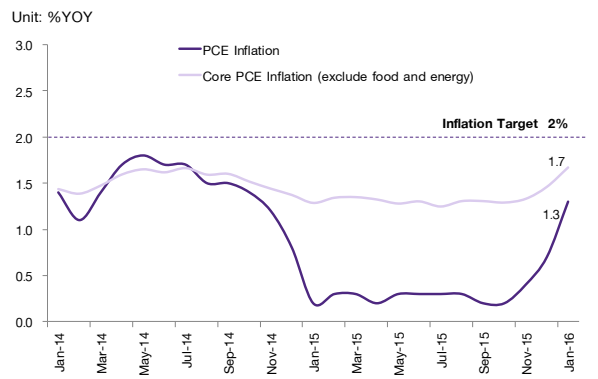
4. Housing starts slowed down slightly but continued to expand.

Housing Starts and New Home Sales



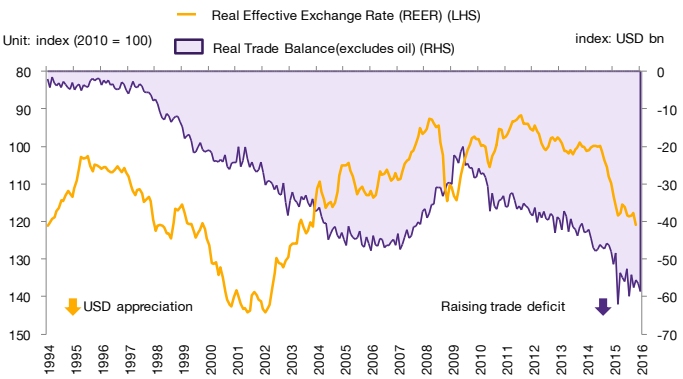
5. The interest rate is approaching the 2% target.

Price Index for Personal Consumption Expenditures (PCE Inflation)



6. USD appreciation poses a risk to the U.S. export sector

U.S. Dollar and Trade Balance



Source: EIC analysis based on data from Bloomberg, CEIC, and U.S. Commerce Department

BOX: The 2016 U.S. Presidential Election of 2016

The 58th U.S. president election is scheduled to be held on November 8, 2016. The primary election has been held in February to June. As of March, Donald Trump has been a dominant candidate from Republican. Meanwhile, Hillary Clinton has not gained votes much higher than Bernie Sanders. All candidates who will take a position after Barack Obama, each of them may have different policies from the previous resident. This could cause changes, leading to economic implications to Global and Thai economy especially in international trade and geopolitical risks. That makes this election become an event that should be aware.

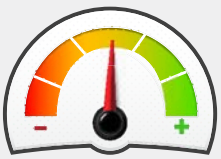
	Republican	Democrat	
Personal Information	**Donald Trump** CEO, Trump Organization website: www.donaldjtrump.com	**Hillary Clinton** Former U.S. Secretary of State website: www.hillaryclinton.com	**Bernie Sanders** U.S. Senator, Vermont website : www.berniesanders.com
Policies			
Economy	• To maintain the current minimum wage level • To raise import tariffs to support domestic manufacturers	• To raise the minimum wage to 15 USD per hour and boost the income of the middle class • To ease regulations on the financial industry, such as relaxing rules on small banks	• To cap credit card interest rates at 15% • To reduce the number of large banks • To prevent large banks from using the Fed's discount facility
Immigration	• To build a 2,000-mile wall on the U.S.-Mexico border • To deny citizenship to American-born children of undocumented immigrants	• To support a Senate bill granting citizenship to young immigrants	• To sign a bill granting citizenship to young immigrants, but not yet to the parents
Security	• Disagrees with President Obama's nuclear deal, stating that it was a disaster although Trump has mentioned that he is not ruling out the use of the weapon	• Agreed with President Obama's nuclear deal, but only the part related to Iran.	• Agreed with the nuclear deal Swith Iran.
Tax	• To prevent hedge fund managers from using carried interest to avoid taxes • To repeal the estate tax and end the marriage penalty	• Proposes a 4% income-tax surcharge for those earning more than 5 million dollars a year • To raise the tax ceiling to 45% • To decrease the minimum criterion for the estate tax exemption to 3.5 million USD • To reduce taxes for students paying for college with a maximum reduction of 2,500 U.S. dollars per person	• Proposes a progressive estate tax rate for assets exceeding 3.5 million USD • To double taxes for capital gains and dividends from 20% to 39.6%

Source: EIC analysis based on data from Thomson Reuters

Euro Zone: Gradual recovery with support from relaxed monetary policy

The euro economy gradually expanded in the first quarter of this year due mainly to growing domestic demand. The pace slowed slightly as a result of the stalled Chinese economy, the rising concern in the financial markets, and the Belgium attacks that affect private-sector confidence. This is reflected in the decline of the purchasing manager index (PMI) to 53.0 from an average of 54.1 in 4Q2015. Nonetheless, the volume of retail trade in the euro area grew 2.0%YOY in January 2016, reflecting continued growth from 2.5 YOY% expansion in 2015. Furthermore, the unemployment rate fell to 10.3%, the lowest since September 2011.

The inflation rate is likely to stay negative until the third quarter of this year with the ECB's bold stimulus plan helping reduce the deflation risk. With crude oil prices still lower than 2015 levels, Eurozone inflation will continue in negative territory and the market's inflation expectation are declining[1]. The ECB has therefore continued to roll out a large-scale stimulus measures in March[2] to bring inflation back to the target. EIC estimates that this year the euro economy will expand 1.5% from the previous year and the inflation rate will be 0.1%.



Implications for the Thai Economy

- Since the Eurozone economy tends to grow as the same rate as last year, Thai exports would not be seen a significant improvement from the last year.

- The ECB's monetary policy easing will help lift investor confidence in global financial markets. This, in turn, will decrease capital flight risks from Thailand. However, high volatility in financial markets remains, due to the global monetary policy divergence.

- The ECB's large easing package causes the euro to depreciate. As the baht is likely to move in the same direction, it would not change much against the euro. The effects of a change in export prices in euro and incomes of Thai exporters should be limited.

Despite the strengthening of the Euro after the ECB's announcement of its easing package in March, EIC expects the euro to weaken this year. The Euro appreciating to 1.12 USD/EUR resulted from market disappointment when the ECB president signaled no further cut in the interest rate. EIC sees this appreciation as a short-term fluctuation, as other announced measures will benefit the Eurozone economy and financial markets. Therefore, EIC expects the euro to depreciate to 1.08 USD/EUR by the end of this year.

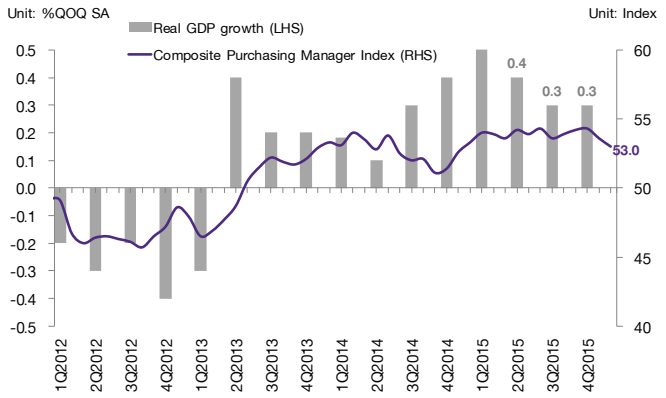
Risks for the Eurozone economy are instability in financial sector, and terrorism. The financial sector is at risk from the negative interest rate policy since this reduces banks' profit margins. The condition incentivizes commercial banks to give out loans with higher risks so that they can charge higher interest rates. The extra low interest rate can also affect other financial institutions that rely on long-term returns, such as insurance companies and pension funds. Lastly, terrorism continued to loom over the euro economy in 2016, as it directly affects on consumer sentiments and domestic consumption.

[1] ECB uses the 5-Year Forward Inflation Expectation Rate as the predicted inflation rate in the financial market
[2] See further information in EIC Flash: ECB rolled out a large-scale stimulus package to cope with risks as 11 March 2016

3 The Eurozone economy will likely continue to grow, supported by monetary policy easing

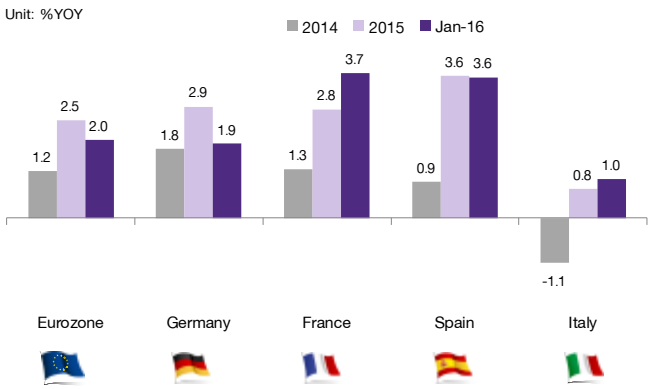
1. Eurozone GDP in 1Q2016 slowed down slightly

Real GDP and Purchasing Manager Index of the Euro area



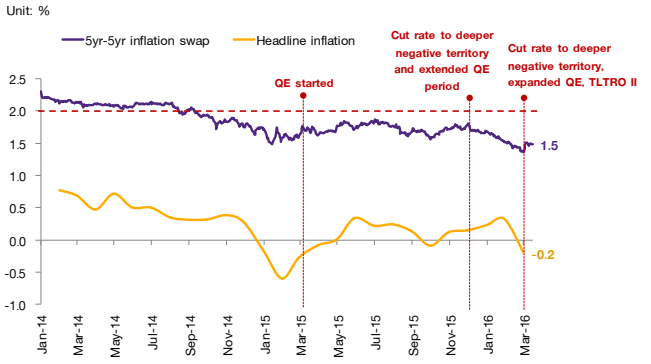
2. Household spending continued to grow in 1Q2016

Growth of the volume of retail sale



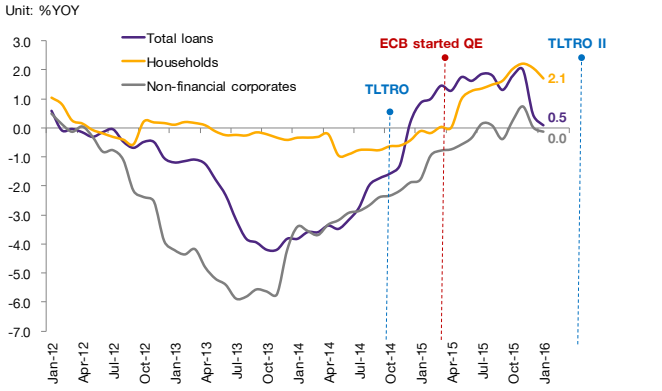
3. The deflationary risk and the lower inflation expectation prompted additional monetary policy easing from ECB

Headline inflation and inflation expectation



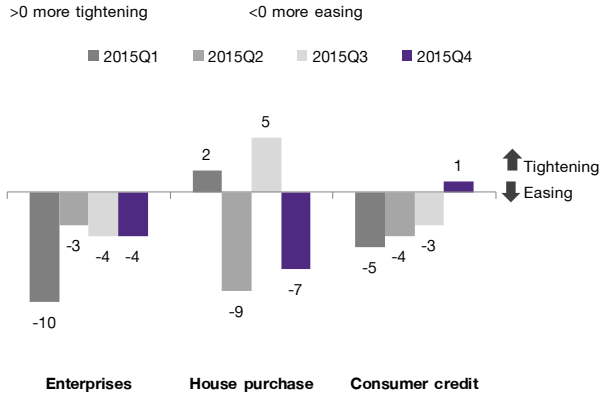
4. The TLTRO II program and expansion of the QE measures will likely help credit growth in the future

Lending growth of financial institutions



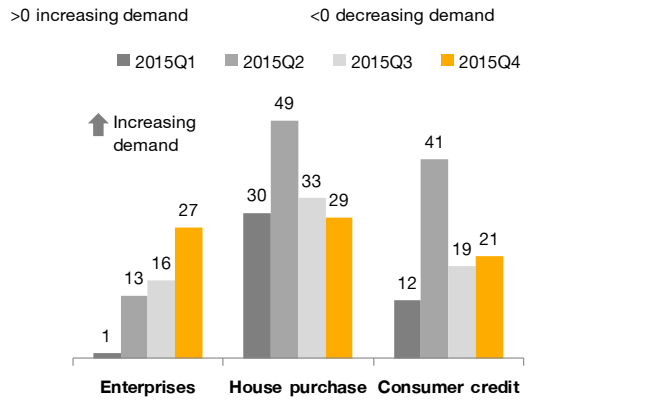
5. Lending standards will continue to relax following the ECB's stimulus package

Credit standard of Eurozone's commercial banks



6. Stronger economies in the Eurozone have increased loan demand.

Loan demand in Eurozone

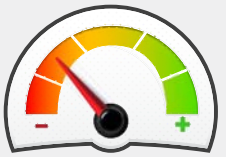


Source: EIC analysis based on data from Bloomberg, CEIC, and Eurostat

Japanese Economy: Weak from fragile domestic and external demand

The Japanese economy continued to stall due to private consumption. GDP in 4Q2015 contracted by 1.1%QOQ SAAR[3] owing mainly to a large drop in private consumption of -3.4%QOQ SAAR (Figure 4). The contraction was partly due to the unusually warm winter. Public investment and exports also slowed down despite a small improvement in overall domestic investment, growing at 0.4%QOQ SAAR. Overall GDP growth in the beginning of the year was likely held back by stalled private consumption, reflected in retail sales that continued to decline in January 2016. Nevertheless, private investment in capital goods, as measured by machinery orders, spiked 15% MOM SA. The index of shipment of construction goods also started to show signs of expansion in January.

The Bank of Japan (BOJ) adopted a negative interest rate policy for the first time. On 29 January 2016, the BOJ announced its decision to cut the base interest rate on commercial bank deposits to -0.1%, based on the result of a narrow 5-4 majority vote. This means commercial banks has to pay interest to the BOJ for their deposits (excess reserve) instead of previously earning interest of 0.1%. **(See more details in Box: Negative interest rate policy - implications for Japan and the Global Economy).** In setting the interest rate below zero, the BOJ hopes for the yen to depreciate to spur Japan's exports and to incentivize commercial banks to expand credit to boost private investment and spending and eventually ease chronic deflation in Japan. In January, Japan's core inflation was recorded at 0.7%YOY, still much lower than the BOJ's 2% target.



Implications for the Thai Economy

- The overall economic outlook for Japan remains dim with a higher probability of contraction given stagnant domestic demand and exports. In the event of an economic recession in Japan, the nation's FDI to Thailand, which accounts for the largest share, may drop.

- In January 2016 Thai exports to Japan contracted, but recovered in February. The number of inbound Japanese tourists to Thailand remains moderate.

- EIC expects a long-term depreciation of the yen following the negative interest rate policy. However, given a short-term appreciation of the yen, businesses with yen-denominated transactions should consider financial tools to mitigate risks during the yen strengthening period.

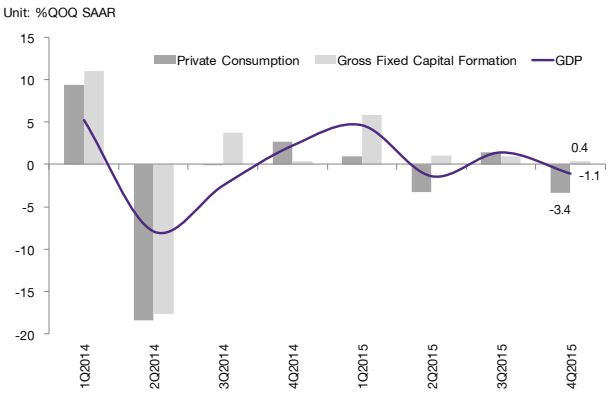
EIC believes that Japan's economy in 2016 will grow 0.5%-1%, lower than previously expected. Although the unemployment rate is low, several risks to the economy remain, including the strengthening yen, China's slowdown, and limited fiscal space. In February, the yen started to appreciate because the market perceived the yen as a safe-haven asset compared to other currencies. The stagnant Chinese economy continues to affect Japan's exports and tourism sector in terms of export volume and the number of inbound Chinese tourists in Japan. In addition, the high level of public debt limits the use of expanding fiscal policies.

[3] The change is compared quarter-on-quarter and seasonally adjusted at annualized rate.

4 Japan's economy faces a recession risk

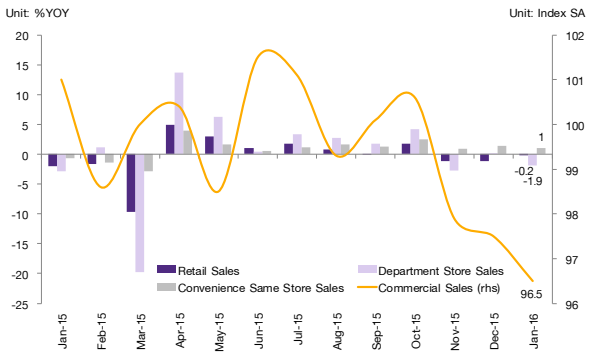
1. The Japanese economy contracted as private consumption plunged and domestic demand weakened.

Real GDP, Private Consumption and Gross Fixed Capital Formation



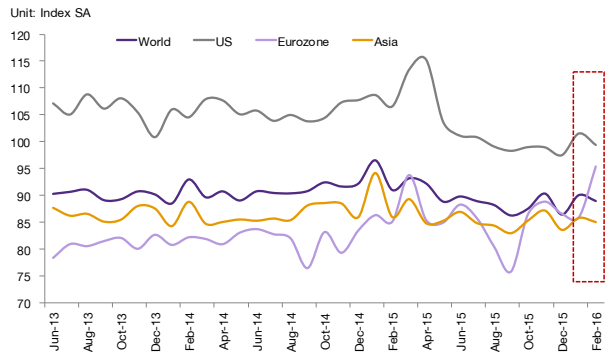
2. Private consumption declined in almost all categories, especially in retail sales and department store sales

Various Consumer Sale Indicators and Commercial Sales



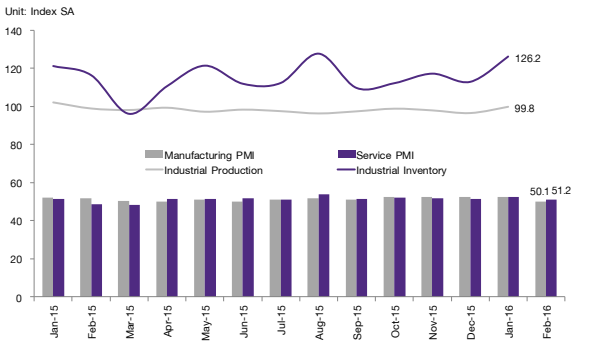
3. Export growth remained fragile, with a slight increase in overall export volume.

Japan's Export Amount Index by Region



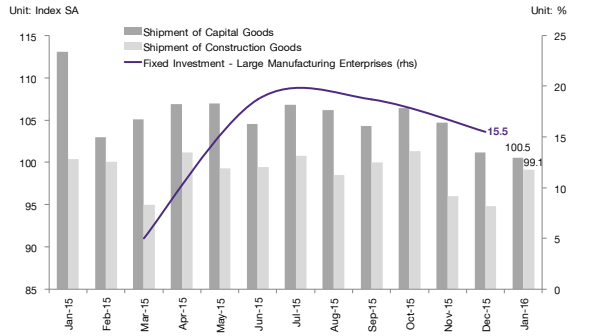
4. Manufacturing activities and output are stable, with an increasing inventory index.

Manufacturing and Service PMIs, Industrial Production Index and Inventory Index



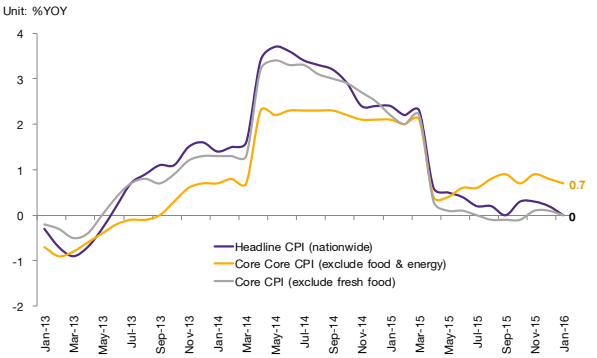
5. Investments in capital goods stalled, yet there are signs of recovery in rising machinery orders.

BOJ Tankan Fixed Investment Survey and Shipments of Capital and Construction Goods



6. Plunging oil and commodity prices along with weak domestic demand put pressure on inflation.

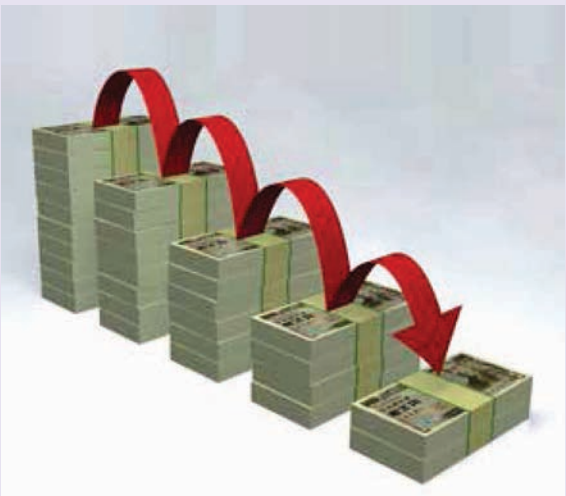
Japan's Inflation – Headline Inflation, Core Inflation and Core Core Inflation



Source: EIC analysis based on data from Bloomberg and CEIC

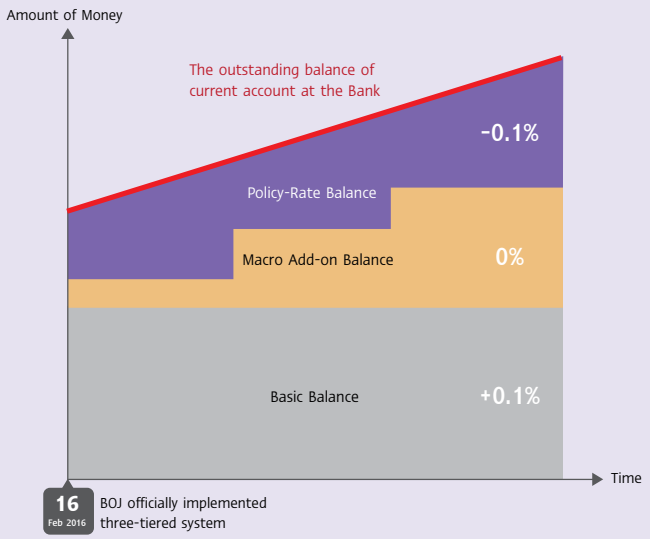
BOX: Negative interest rate policy - implications for Japan and the Global Economy

The Bank of Japan (BOJ) surprised global financial markets with its adoption of a negative interest rate of 0.1% for the first time to stimulate the economy. The BOJ introduced a three-tiered system for reserve deposits. The system specifies different interest rates for the three types of current accounts (Figure 5). The -0.1% interest rate will only apply to the "policy-rate balance," which is the reserve leftover after deducting the "basic balance" (remaining balance that financial institutions deposited with the BOJ as a result of previous QQE measures) and the "macro add-on balance" (the mandatory deposits at the BOJ as required by regulations). The amount of reserves affected by the negative rate is currently about 10% of the BOJ's reserves from commercial banks but the volume will likely grow with the size of the QQE. The effect of the negative rate on the Japanese government bond market began to show as banks moved their excess reserves to buy other assets such as government bonds to avoid being charged the negative rate. As a result, Japanese government bond yields of all maturities, even for those with ten-year terms, fell below zero after the BOJ announced the new policy (Figure 6).



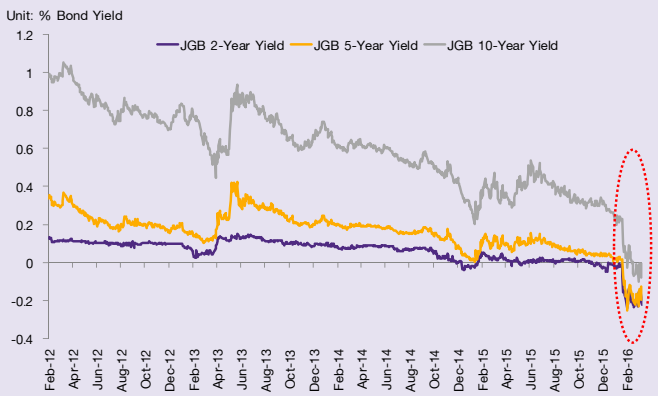
5 BOJ divides current accounts into three tiers with different interest rates.

Quantitative and Qualitative Monetary Easing (QQE) with Negative Interest Rate



6 Yields for Japanese government bonds of all maturities dropped below zero after the BOJ announced its negative interest rate policy.

Yields of Japanese Government Bond (JGB)



Source: EIC analysis based on data from Bloomberg, CEIC and the BOJ

The main reason for the negative interest rate adoption is the BOJ's intention to demonstrate that monetary policies can tackle deflation and to reduce both short and long term borrowing costs. The BOJ's objectives for their current policy are:

1. To increase credit granted by financial institutions, directly leading to more consumption and investment, while reducing financial costs for investors, the government, and consumers to improve balance sheets for all borrowers;

2. To prevent yen appreciation, indirectly stimulating the export sector and to help Japanese exporters, who are mostly large corporates, maintain their profit-making ability;

3. To send signals that the BOJ has not run out of bullets to overcome Japan's deflation. The BOJ reaffirms the economy with three tools –quantitative tools to increase the amount of bond purchases as well as other funds to inject liquidity, qualitative tools to extend the bond purchasing period and buy a wider range of asset types, and finally the negative interest rate with no lower bound. The BOJ stands ready to use these tools to boost the economy. Together, they are called QQE with negative interest rate.

The effect of the negative rate in stimulating household consumption and spending is unclear in the short term. The effects of such policies vary across people of different age groups. The negative rate will likely increase spending of working-age consumers as they have a higher tendency to consume and invest through loans. The lower lending rate will therefore incentivize this group to spend more. However, it might induce the elderly to consume less because they rely more on yields from their deposits. The lower returns in

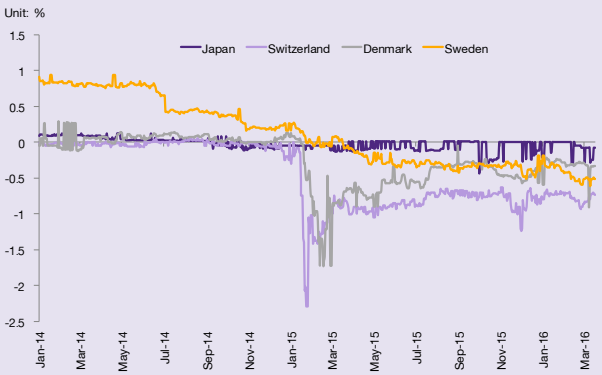
the money and bond markets (which have already been low) will therefore affect their wealth. The contrasting effects suggest ambiguous conclusions for the short-term effects of the stimulus on consumption. As for long-term effects, however, EIC expects that overall consumption will rise if the policy leads to higher economic growth, raising wages, and eventually household confidence and purchasing power.

The BOJ hopes the negative rate along with its ongoing QQE measures will help lift investment. The real interest rate, considered the real borrowing cost, will decrease along with the policy rate. The lower real interest rate will make it easier for companies to manage their debts and lower their borrowing costs. This should therefore prompt the private sector to invest more. Nonetheless, the decrease in investment costs might not always lead to more investment because a company's large investment plan is generally based on the long-term demand prospect for goods and services. Therefore, if a company is not optimistic about the economy it will not invest regardless of how low the borrowing rate is. Some surveys of Japanese companies find that the private sector has excess profits from the previous depreciation of the yen and, in fact, does not need additional cash to invest. This adds to the uncertainty of the policy's effectiveness in boosting the investment.

The effects of the negative interest rate on Japan's money and capital markets are similar to those found in the Eurozone. Short-term interest rates (Figure 7) such as the 3-month average interest rate in the money market, declined as commercial banks cut their lending rates to increase demand for loans and/or cut the deposit rates to maintain the net interest margin. Long-term interest rates, such as yields for 10-year government bonds, also adjusted downward after the central bank adopted negative interest rate policy (Figure 8). Stock markets rallied as investors rebalanced their portfolios following the negative rate policy announcement. Yet the impact of stock markets on the real economy is still limited. This is especially the case for Japan, because a large portion of stock investment comes from financial institutions through funds, while the share of retail investors is still small.

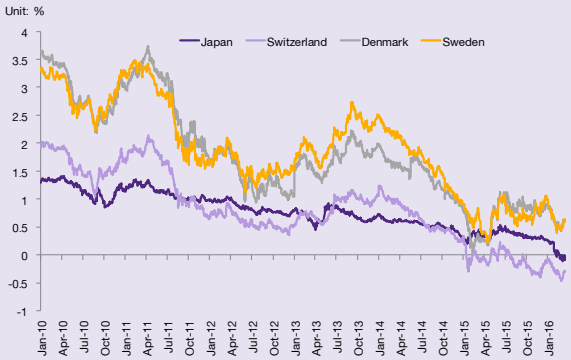
7 Short-term interest rates in countries whose central banks used a negative interest rate policy

3-Month Money Market Rate



8 Yields for long-term government bonds in countries whose central banks used a negative interest rate policy

10-Year Government Bond Yield



Source: EIC analysis based on data from Bloomberg and CEIC

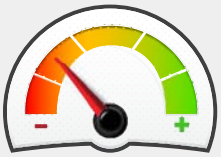
EIC views that the current level of the negative interest rate cannot pull Japan's economy out of stagnation. Perceptions of the economy by businesses and the public remain pessimistic. This is reflected in business and consumer confidence indicators. And, without better confidence, there will be no real investment and consumption. EIC believes that companies will borrow more when they see opportunities to expand their businesses, and that people will consume more if they accumulate more wealth from higher wages, and if they are confident of adequate savings for the future. Thus real progress for Japan's economy depends on an improvement in business and consumer confidence, which cannot be built by lowering the interest rate alone. In addition to its QQE with negative interest rate, the BOJ is likely to push for policies that support business and consumer confidence. Such policies include, for example, raising wages during the 2016 spring wage negotiation. The official results will come out during 2Q 2016. It will likely aim for other investment incentives, supported by additional fiscal policies (although the fiscal room is quite limited by Japan's high level of public debt). Whether Japan's negative rate policy can really stimulate consumption and investment is the next step being watched by the Japanese public, its policymakers, as well as global markets.

China's Economy: Continued slowdown as the government tackled the oversupply problem.

China's economy continued to slow due to the contraction in its manufacturing sector and signs of deceleration in the service sector. Growth in two parts of the economy, manufacturing and services, diverged clearly. For the manufacturing sector, the purchasing manager index (PMI) in the first quarter of 2016 dropped to 49.5, still below the expansion threshold of 50. The drop was partly due to a decline in export orders as China's exports contracted by 18%YOY in the first two months of this year. The service sector that had been cushioning the Chinese economy from a hard landing last year grew more slowly at the beginning of this year. The service PMI index moderated to 53.3 from an average of 53.6 in 2015. Moreover, retail sales growth also slowed to 10.2% YOY in January and February, decelerating from 11.1% YOY in December 2015. The contraction of the manufacturing sector and softening service sector growth pointed to weak economic drivers for China this year.

The government is ready to pursue proactive fiscal measures to keep growth from falling below the target of 6.5% - 7.0%. The continued slowdown in China prompted the government to prepare for a larger fiscal deficit, targeting 3% of GDP this year, an increase from the 2.3% target in 2015. The government has allocated a budget for infrastructure investments and measures to support businesses in the service and technology sectors. The government has also set up venture capital funds worth more than 2.2 trillion yuan to support businesses in the aforementioned sectors. Additionally, income tax for small businesses will be cut to boost investment. The People's Bank of China (PBOC) stands ready to ease its monetary policies further via a cut in the reserve requirement ratio (RRR) for commercial banks and various capital control measures to curb the yuan's fluctuation.

EIC predicts that China's economic growth in 2016 will fall short of the government's target. The economy is likely to grow only 6.3%, slowing from 6.9% growth last year, despite government stimulus measures. Chinese policymakers are pursuing supply-side reforms to address the oversupply problem in heavy industries such as steel and coal. The reform will introduce several mergers and allow loss-generating and inefficient companies or the so-called zombies companies, to fail. The transition will have a strong impact on the industrial sector, which makes up 40% of China's GDP. Mass lay-offs that follow will put downward pressure on domestic consumption and in turn lead to a slowdown in the service sector. Moreover, allowing zombie companies to go bankrupt will increase default risks, resulting in a rise in non-performing loans. Furthermore, China also faces capital outflow risks due to falling confidence in its economic growth and stability and the yuan will likely continue to weaken.



Implications for the Thai Economy

- China's economic reform will affect Thailand and other emerging countries especially in manufacturing sector and export. Major export products from Thailand to China include chemical and plastics, rubber and rubber products. However, export of consumer goods such as processed fruit to China continues to expand.

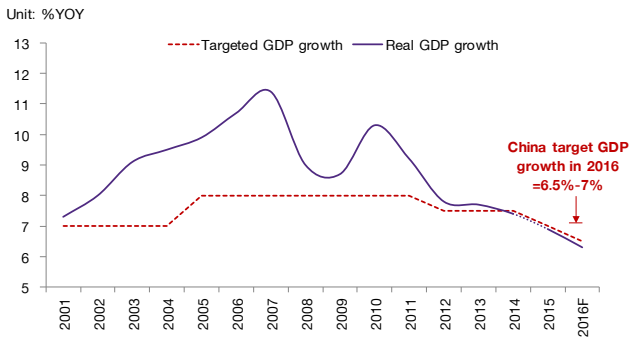
- If supply side reform is so drastic as to cause a slowdown in China's consumption, Thailand's tourism sector might be impacted as Chinese tourists account for 27% of Thailand's foreign tourists.

- Thai baht will depreciate along with yuan, with risk arises if China central bank unexpectedly devalued yuan.

9 China's economy continued to slow as it tackled the oversupply problem.

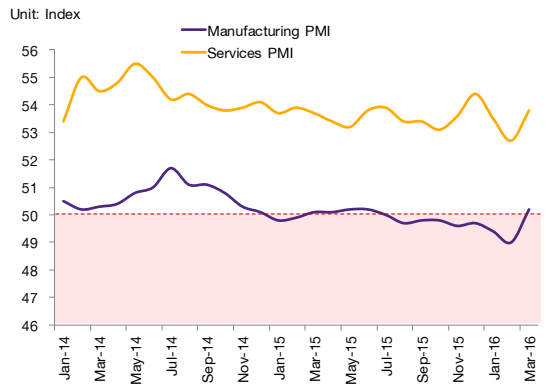
1. The government has lowered its growth target to 6.5%-7% this year

Targeted GDP growth and real GDP growth



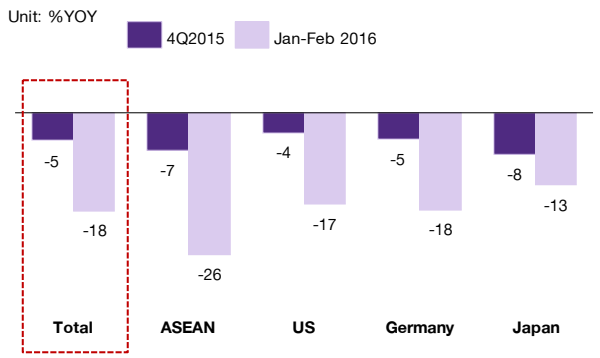
2. The manufacturing sector continued to contract, while the service sector began to decelerate

Purchasing Managers Index (PMI) reported by National Bureau of Statistic



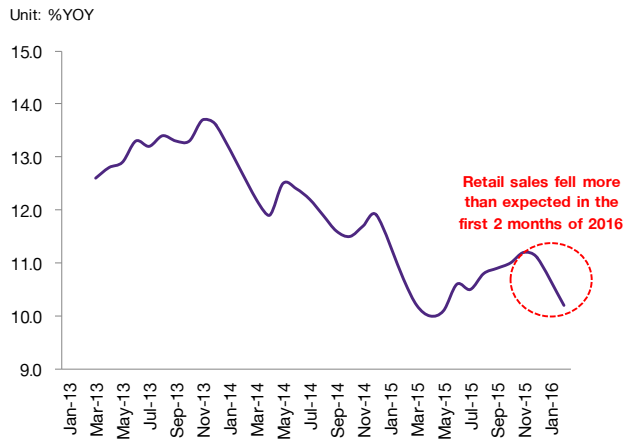
3. Exports continued to shrink

Chinese export to various market



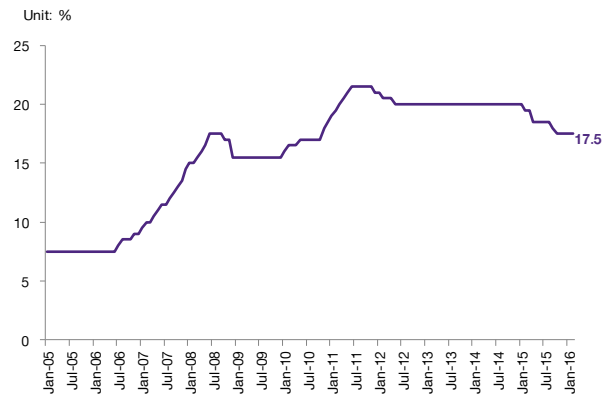
4. Retail sales growth has slowed

Retail sales growth



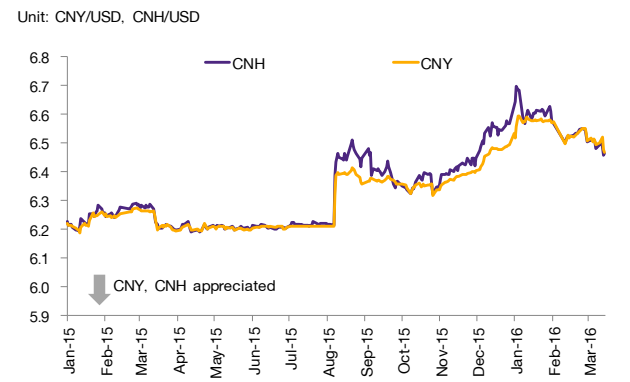
5. China's RRR remained high relative to past levels

Reserved Requirement Ratio (RRR)



6. The PBOC affirmed there would be no sharp yuan devaluation

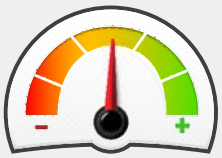
CNY and CNH movement against US dollar



Source: EIC analysis based on data from Bloomberg and CEIC

ASEAN's economy: The CLMV economies are the key growth markets.

ASEAN-4's economic growth remained subdued by the slowing manufacturing sector and will rely on domestic growth as the key economic engine. The manufacturing sectors in Malaysia, Indonesia, and Singapore continued to shrink due to sluggish trade. In early 2016 exports from Malaysia, Indonesia, and the Philippines dropped by 20%YOY, 14%YOY, and 14%YOY respectively due to China's slowdown, structural changes in global trade, and dwindling commodity prices. Singapore's exports, which mostly consist of refined fuel, shrank by 14%YOY. Given the outlook of the export and manufacturing sectors, the ASEAN economy needs to rely on domestic demand growth through stimulating consumption and investment with fiscal expansionary and easing monetary policies. Since the beginning of 2016 the central bank of Indonesia has cut its policy interest rates three times to 6.75%. The government of Indonesia also bumped up the investment budget this year by 8%YOY. Meanwhile, the central bank of Malaysia cut the reserve requirement ratio (RRR) for commercial banks to 3.5% to boost domestic economy.



Implications for the Thai Economy

- The deceleration of the ASEAN-4 economy will affect Thailand's export growth. Thai exports to ASEAN-4 account for about 15% of total exports; major export goods include cars and parts, electronics, machinery, and refined fuel.

- CLMV countries provide both investment and export opportunities for Thai businesses, as the economies are still expanding rapidly.

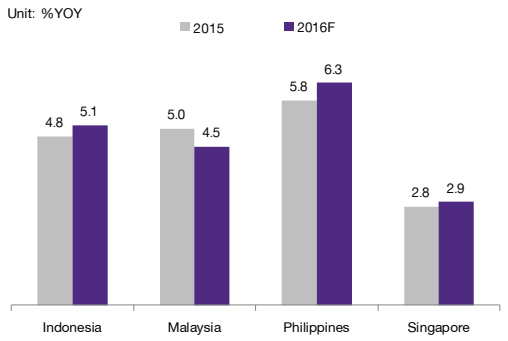
Currency volatility and lackluster Chinese economic growth are major headwinds for the ASEAN economy. Since early 2016 the ASEAN currencies have strengthened against the US dollars despite further easing of monetary policies in the region. This is partly because the Fed's message delaying its rate hike caused foreign capital to flow into emerging markets. Nonetheless, EIC expects the Fed to raise the federal fund rate this year, which will consequently weaken ASEAN currencies. Capital outflow poses a major risk that may lead to higher volatility in foreign exchange markets. The slower Chinese economy also put downward pressure on ASEAN's exports given that more than 11% of ASEAN-4's exports go to China.

CLMV economies will be the growth engines for the ASEAN region. The economies of Cambodia, Laos, Myanmar, and Vietnam boasted high growth in 2015. In 2015, Vietnam's economy expanded 6.7%, surpassing market expectations. In 2016 the economy will likely maintain growth momentum, especially in the manufacturing and export sectors. In the first two months of 2016 Vietnam's exports rose 2.4%YOY, bolstered by exports of electronics products. Approved foreign direct investments continued to flow in, expanding by 164%YOY during the first 2 months of 2016. The country has recently attracted much attention from foreign investors as it holds many trade agreements with countries around the world. Vietnam recently completed a new free trade agreement deals with the European Union (EU) and joined the TPP. The Vietnamese government has positioned itself as the world's production hub for electronics. Aside from Vietnam, the economies of Cambodia, Laos, and Myanmar also continued to expand at high rates. The IMF forecasts these economies to grow 7.2%, 7.0% and 8.2% respectively in 2016. However, political uncertainties in CLMV countries are still important factors to keep an eye on **(See more detail in the BOX: Key political situation in neighboring countries)**

10 The economy of CLMV will be the main growth driver for the region.

1. The ASEAN-4 economy gradually recovered, except for Malaysia

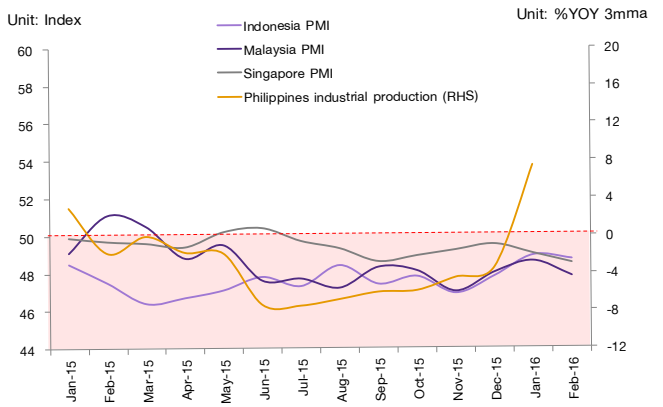
Real GDP growth- by country



GDP growth is based on IMF forecast

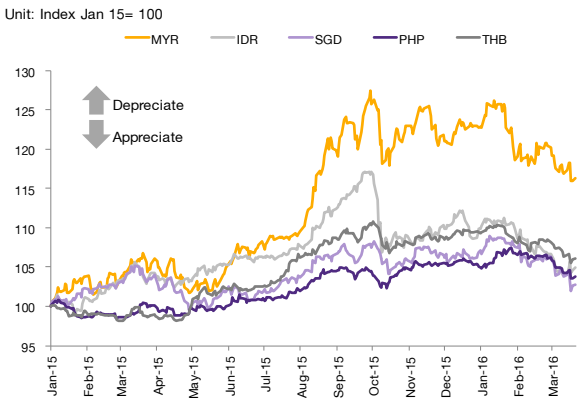
2. Manufacturing sectors in ASEAN-4 slowed due to sluggish exports, except for the Philippines

Manufacturing PMI and industrial production



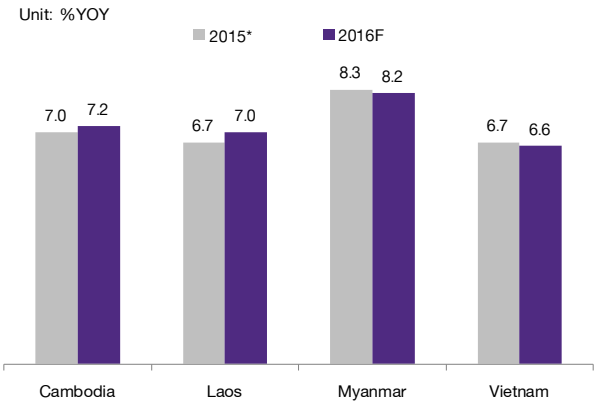
3. Currency fluctuation is the key risk to monitor

ASEAN currencies against US dollar



4. CLMV economies sustained rapid expansion

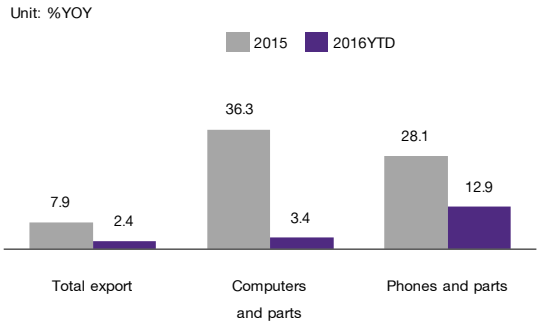
Real GDP growth- by country



* Data from IMF forecast except from Vietnam
2016F is based on IMF forecast

5. Vietnam's exports continued to climb

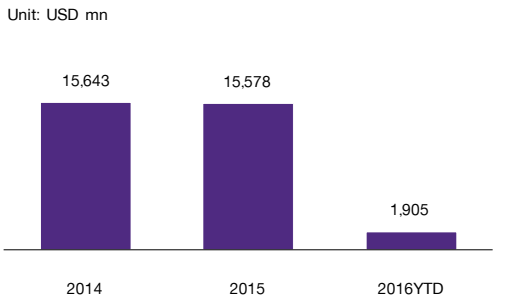
Vietnam total export and products growth



*2016YTD represent first 2 months of 2016

6. Approved foreign direct investments in Vietnam increased 164%YOY

Value of approved foreign direct investment (FDI)



*2016YTD represent first 2 months of 2016

Source: EIC analysis based on data from Bloomberg, CEIC and the IMF.

BOX: Key political situation in neighboring countries

Major political events have taken place earlier this year in CLMV countries. In January, the communist parties of Laos and Vietnam recently had their annual meetings that are held every 5 years to elect a new president, a general secretary, a prime minister, and other major political positions. Meeting agendas also include mapping out the country's economic and social development plans for the next 5 years (2016 – 2020). Meanwhile, Myanmar held the first general election and had their first elected president since 1962. Political turns in Laos, Myanmar, and Vietnam will give rise to a new series of economic and social policies; these will in turn offer new opportunities and challenges for Thailand.

In Vietnam, the National Congress re-elected Nguyen Phu Trong, the Communist Party's conservative leader, as the General Secretary for a second consecutive term. The reelection surprised analysts' prediction that Vietnam's Prime Minister Nguyen Tan Dung would assume the General Secretary position. Furthermore, the congress agreed to oust Nguyen Tan Dung from the position of Prime Minister. Over the past 10 years Dung has overseen reforms that powered the economy to grow and develop at a fast pace. Policies under his regime included the privatization of state enterprises, joining the TPP and signed various free trade agreements with countries. According to its 2016-2020 development plan, Vietnam sets a GDP growth target of 6-7% per year and aims to reform the nation into a modern industrialized country. However, there are concerns that recent political shifts could derail the ongoing reforms and economic development.

In Laos, Bounnhang Vorachith, Vice President and the former Prime Minister, was elected as the new

General Secretary for the party and President as predicted. However, the fact that the names of the latest President, the Prime Minister, and the two Deputy Prime Ministers were not on the list of Politburo party members may suggest their political exits. The four members were viewed as having close ties with China. Their absence on the list suggests the waning power of China over Laos' administration. Nonetheless, Laos still very much relies on foreign aid, especially from China, who has been sponsoring infrastructure, railway, and satellite projects in the country. Laos' economic plan targets economic growth at 7.5% per year and aims to raise the status of Laos to a middle income country by 2030. The government plans to drive the economy through public investment and foreign aid for infrastructure development.

As for Myanmar, the country's general election was held for the first time in November. Aung San Suu Kyi's party, the National League Democracy (NLD), won a landslide victory and secured the majority of seats in the congress. In early March, Myanmar's parliament, the Hluttaw, voted Htin Kyaw of the NLD as the country's new President, the first residential President of Myanmar since

1962. Major economic policies of the NLD consist of five pillars: 1) fiscal stability with targeted fiscal deficit at 5% of GDP, 2) corruption eradication in the government, 3) enhancing competitiveness of the agricultural sector, 4) financial and banking development, and 5) infrastructure development. Under the new leaders, Myanmar will likely to increase its degree of openness and this will attract more investors and foreign investment. Furthermore, Myanmar will likely to focus on industrial and international trade development. New business opportunities are opening up for Thai companies looking to expand their market or manufacturing base to these countries.

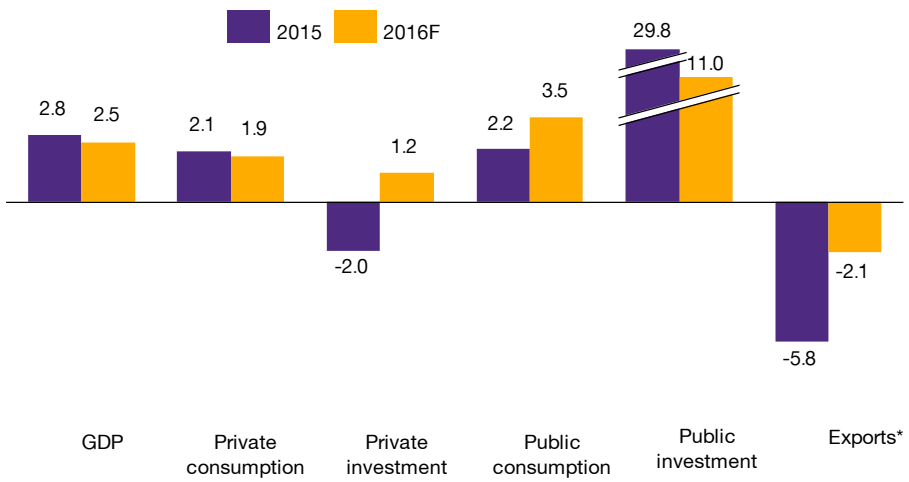
Thai economy in 2016: Keep an eyes on government's infrastucture investments

EIC forecasts that the Thai economy in 2016 will grow 2.5%. The pace slows from the previous year as the economy still faces downward pressures from both external and internal factors. The Thai economy will need to rely on the government's supports for economic stimulus measures and public investment. Economic measures, such as assistance programs for farmers, income tax reduction and investment incentives, will be the main supporting factor for the recovery of private domestic demand; while the outlook of household income remains suppressed, reflected by lower working hours in both farm and nonfarm sectors, as a result of shrinking exports, drought and the high level of household debts. Additionally, public investment is also another hope as an economic driver this year. Public investment registered a record-high growth last year and will likely expand further this year considering the 20% increase of the planned budget. The construction of the new metro lines in Bangkok and Motorways will also be key to bring back investor confidence and private investment going forward; while other infrastructure projects will need to be kept on a close watch for possible delays.

11 The Thai economy will mainly relies on support from the government.

Thai GDP Growth Forecast and Components in 2015 and 2016

Unit: %YOY



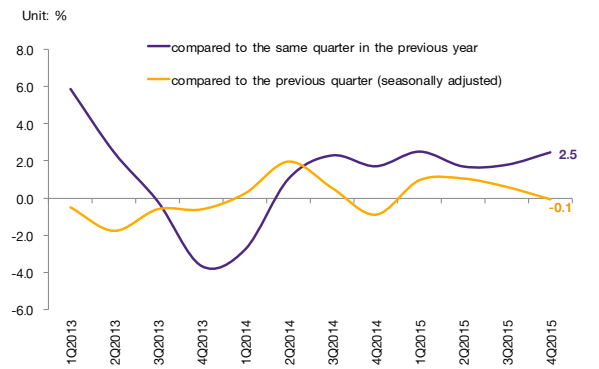
**Export value of goods in USD term.*
Source: Forecasts by EIC

Private consumption

Private consumption in the fourth quarter of 2015 improved from the previous year; yet signs of recovery are inconclusive. In the last quarter of 2015 private consumption expanded by 2.5%YOY (compared to the same period in the previous year), partly due to a comparison with a fairly low base. However, when compared with the preceding quarter, private consumption dropped 0.1%QOQSA (Figure 12), reflecting weak momentum for private consumption. The sluggishness was despite several recent supporting factors, such as a temporary boost in durable goods consumption. Households rushed to purchase cars before the excise tax hike was imposed in early 2016. Additionally, the government introduced a personal-income tax deduction incentive for spending on goods and services at the end of last year. Moreover, farmers usually harvested their crop towards the end of the year, so farm incomes would rise. These factors combined were still inadequate to uplift private consumption. The Bank of Thailand's Private Consumption Index in January signaled a slowdown in household spending, especially in vehicle purchases, which dropped dramatically following a surge at the end of last year. Only spending in the service sector is likely to expand this year (Figure 13).

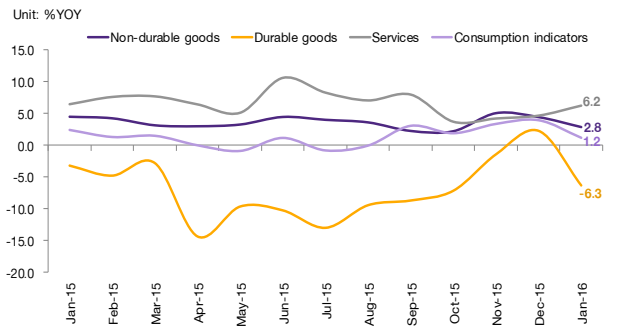
12 Private consumption contracted from the previous quarter.

Private consumption growth



13 Durable goods consumption dropped drastically following a surge in car purchases.

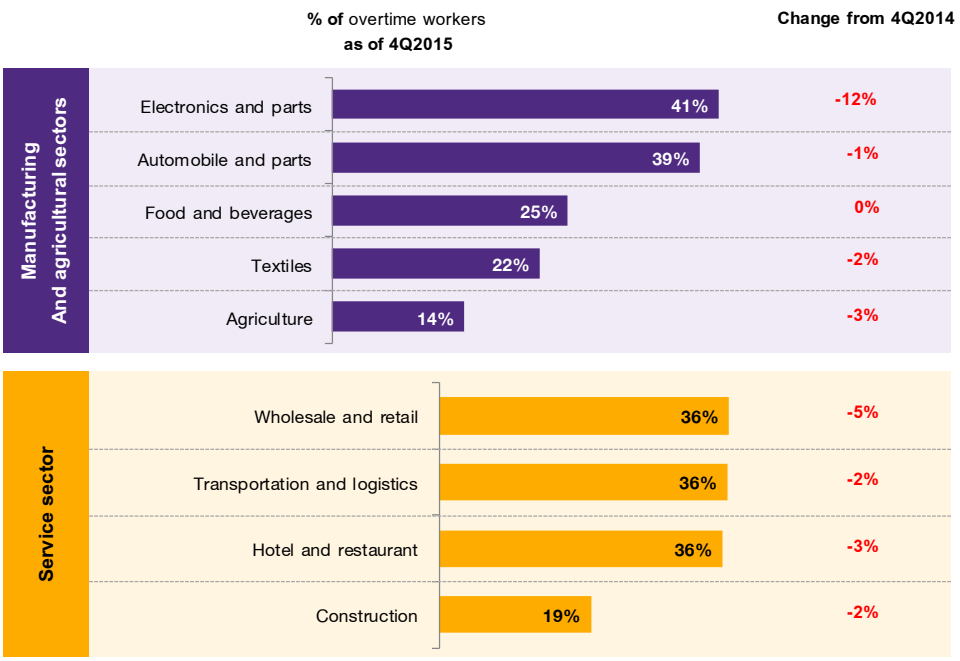
Consumption indicators



Source: EIC analysis based on data from NESDB and the Bank of Thailand

Household income is likely to dwindle, reflected by lower working hours in both farm and nonfarm sectors, resulting in weak purchasing power. Despite no significant hike in unemployment rate, average working hours of labor dropped in many sectors. According to the 2015 labor force survey, the working hours of labor in all sectors, including manufacturing, agriculture, and services, declined averagely by 2.9%YOY and 1.4%YOY in the third and the fourth quarter from the same period in the previous year. Moreover, the number of people who work overtime (more than 50 hours per week) dropped in many industries. The drop was particularly pronounced in the computer parts and electronics industries. The wholesale/retail sector also saw a decline in overtime workers as well (Figure 14). The lower working hours partially reflected the decline in employment, which would then result in weak purchasing power. Beside the sing of lower employment, farm income still faces various challenges from plummeting global commodity prices and weak domestic and external demand. Severe drought poses another risk for farm production this year. The risk of household income slowdown is crucial factor contributing to the subdued private consumption this year. It might additionally limit the ability of household to access consumption credits, which will be another obstacle for consumption as well.

14 The number of overtime workers (more than 50 hours per week) dropped in many industries

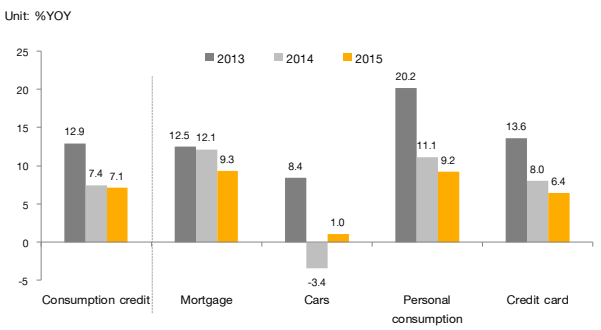


Source: EIC analysis based on data from the National Statistical Office

Slower household credit expansion signaled constraints on private consumption. Loans to households from commercial banks grew 7.1%YOY at the end of 2015, lower than the 7.4%YOY growth in the previous year (Figure 15). Except for car loans, all other loan types grew at a slower pace than the previous year. However, household credit demand in the fourth quarter of 2015 inched higher than the third quarter but still showing a decline from last year (Figure 16). Only credit card loans increased. The slowdown in loan growth suggests that financial institutions are tightening their lending standards. One contributing factor is the rise of non-performing loans in the household sector. The level of household debt also remained high at 80.8% of GDP. This means increasing difficulty in accessing new loans, limiting private consumption growth.

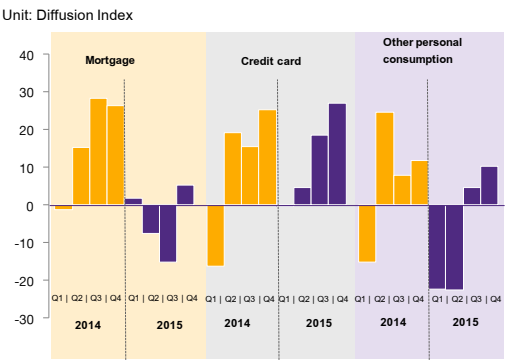
15 Growth in household credit slowed from last year

Growth of commercial banks' loan to households



16 Demand for household credit aside from credit cards grew only moderately.

Credit demand survey



Index >0 (<0) means the demand for credit increased (decreased) from the previous quarter

Source: EIC analysis based on data from the Bank of Thailand

New tax policies and additional stimulus packages will help support constrained private consumption this year. An important tax policy to be proposed to the cabinet includes a restructuring of the personal income tax scheme to relieve the tax burden for individual taxpayers. The plan will cut tax rates for all income brackets or increase the overall personal deduction amount that has been set at 60,000 baht for a long time. The adjustment will better reflect today's economic environment. The changes may include a larger deduction for child dependents by removing the maximum number of eligible children, or additional deductions with a set maximum of total deductions. At present, individuals with income less than 20,000 baht per month have no tax burden. After the new tax restructuring, those with incomes between 20,000 and 30,000 baht per month will have no tax burden. Details on the restructuring are yet to be announced. The reduction of personal income tax will free up disposable income for people to spend and circulate in the economy. Furthermore, the government will likely push forward additional measures to stimulate private consumption. The latest stimulus package was the Pracha Rat housing initiative to provide mortgage loans for low-income earners with an allocated budget of 70 billion baht. This will not only affect investment in the real estate sector, but also boost spending on durables and semi-durables goods. In particular, more homeowners will buy more furniture and electrical appliances after home purchases.

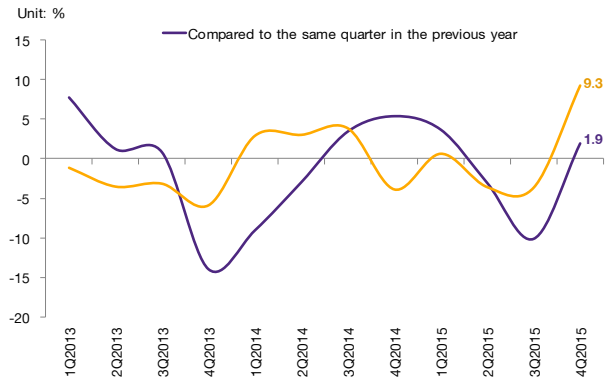
EIC forecasts that private consumption in 2016 will grow 1.9% YOY. In addition to stimulus measures from the government to boost spending and income, oil prices that remained low in the first half of this year are another supporting factor to gradual recovery of consumption. Moreover, consumer confidence will strengthen as many of the government's measures become clear and materialize. Nonetheless, important risk factors impeding private consumption growth this year are pressures on farm income and the high level of household debt. In addition to stimulus measures from the government to boost spending and income, oil prices that remained low in the first half of this year are another supporting factor to gradual recovery of consumption. Moreover, consumer confidence will strengthen as many of the government's measures become clear and materialize. Nonetheless, important risk factors impeding private consumption growth this year are pressures on farm income and the high level of household debt.

Private investment

Private investment rose slightly by 1.9%YOY in the fourth quarter of 2015, after a contraction in the preceding quarter (Figure 17). The expansion at the end of 2015 was partly supported by a temporary surge in the auto industry as households rushed to buy cars in anticipation of the new excise tax. However, investment in residential and office-building construction contracted by -3.9%YOY and -8.2%YOY respectively (Figure 18). In the beginning of 2016, private investment indicators remained stagnant. Capital goods imports and vehicle sales for domestic investment in January declined after a period of expansion at the end of 2015, reflecting slowing investment in the beginning of this year.

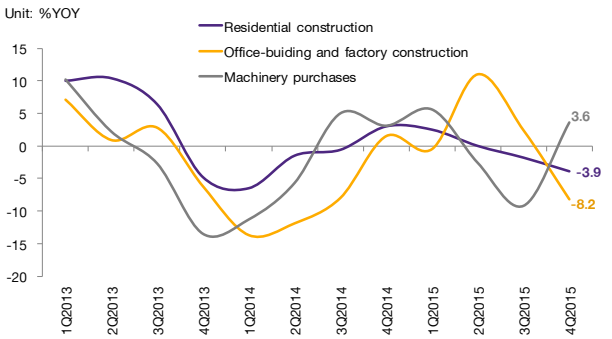
17 Private investment in the fourth quarter of 2015 increased slightly after a contraction in the preceding quarter.

Private investment growth



18 Machinery orders increased, while residential and office building construction continued to decelerate.

Growth of private investment components



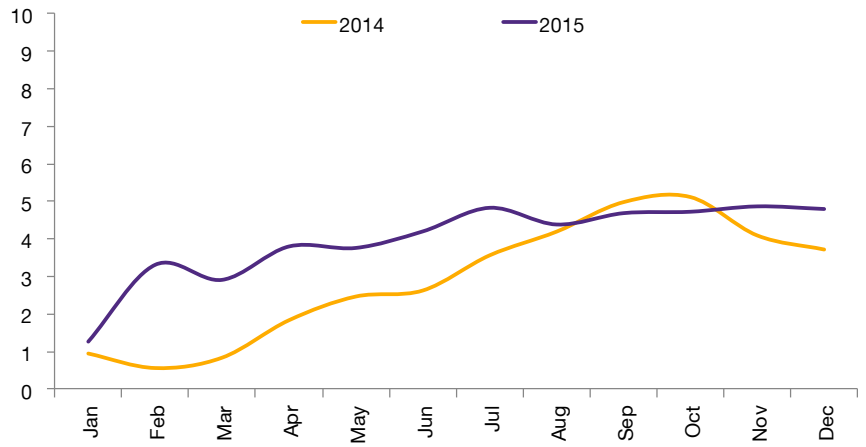
Source: EIC analysis based on data from NESDB.

The effectiveness of government policies to attract private investment have not been conclusive so far. Weakening domestic and external demand has been a drag on the recovery of Thailand's private investment despite expansionary fiscal and monetary policies. Fiscal measures included tax benefits from the Board of Investment (BOI) to attract foreign direct investment and other supporting measures for target industries. As for monetary policies, the BOT has kept the policy rate low to accommodate a recovery. However, both policy factors have been unable to boost private investment effectively, as seen in the drop in overall private investment last year. Moreover, foreign direct investments (FDI) in the last quarter of 2015 stagnated around the same level as in 2014 despite additional stimulus measures (Figure 19). Additional factor should be concerned regarding the lower FDI was Thailand's investment incentives in relative to its neighbors. Some foreign investors shifted their investment from Thailand to other ASEAN countries due to their more attractive incentives. For instance, home appliances production firm from Korea shifted its production line to Vietnam last year since it was offered almost 30 years for the preferential tax deduction on the investment. This posed another difficulty for Thailand to regain its private investment in the future.

19 Foreign direct investment barely expanded despite additional promotion measures.

Accumulated foreign direct investment

Unit: billion USD



Source: EIC analysis based on data from the Bank of Thailand.

The government's infrastructure projects are expected to crowd private investment this year. Oncoming projects have the potential to boost investor confidence and attract private investment this year. Such projects include several transport and IT infrastructure projects. Aside from their direct benefit to the construction industry, transport infrastructure megaprojects will also create spillovers to investment in other industries, such as real estate that flourishes along mass transit railways and provincial areas along newly connected motorways and railways. Urbanization will spread to other regions, triggering investment in other sectors such as logistics and retails for both SMEs and large corporates. In addition to transport infrastructure, IT megaprojects this year will invest in broadband internet development in more than 79,000 villages across Thailand. Also, the National e-Payment project will begin this year **(read more in Box: the government's National e-Payment plan)**. Both projects require technological equipment such as Wi-Fi routers, internet devices, or electronic payment machines. This will boost imports of capital goods as well as stimulate other tech-related businesses. However, the crowding in private investments will take place only after those government's megaprojects are implemented. The delays of the megaprojects hence become crucial risk to concern. Currently, the National e-Payment project and the sky train projects are in the planned pipelines, however, their benefit contribute to limited metropolitan areas. The explicit investments on the other projects that will benefit regional areas nationwide need to be encouraged, otherwise, it will result in further delays on the recovery of private investment as well as border trade and tourism.

Private investment recovered slowly, boosted by government stimulus measures and strengthening demand of 1.2% this year. Nonetheless, there are major risks from relying on public investment. For example, megaproject delays, especially in the initial phase due to environmental standard assessments and expropriation of land. Despite promising growth in public investment, attracting private investment might be difficult in the first half of this year as these projects have just started. The private sector will need time to evaluate if potential returns are worth investment in the public projects.

BOX: The government's National e-Payment plan and its benefits to the economy

The National e-Payment is an infrastructure development project to streamline the country's payment system onto an electronic platform (e-Payment). The system will support money transfer functions among individuals, businesses, and government agencies, making these transactions more efficient. It will also consolidate the e-tax and government benefit payment systems. Additionally, the system is designed to enable transaction traceability and is user-friendly. The National e-Payment strategy comprises 5 sub-projects as follows.

1. Payment system for any ID: A money transfer and payment system enabled by one of five identifications (ID), including; national ID number, bank account number, mobile phone number, e-wallet ID, and e-mail address.

2. Expansion of card payment: A plan to replace cash payment with debit cards by expanding electronic payment points.

3. Tax system and electronic filing: The system will record tax information from electronic transactions, making tax collection more comprehensive.

4. Government e-Payment: The system will be used to channel various government transfers to relevant beneficiaries identified by their national ID and to record citizen registrations more comprehensively.

5. Promoting the use of electronic transactions: All government agencies will help promote the e-Payment system and educate the general public. Additionally, the government may introduce incentive schemes to encourage usage.

The strategy's outcome and expected benefits to various sectors in the economy are as follows.

1) Individuals: As payment points expand and electronic cards replace the use of cash, convenient financial services will be more accessible to people. Under the new system, a user has an option of using national ID card, mobile phone number, or e-wallet ID as identification, in addition to the bank account number that was exclusively used in the old system. Furthermore, the system will facilitate registration and distribution of social benefits by transferring money onto electronic cash cards that can be used in stores and designated public services (e.g. public transport and health care).

2) Business: Businesses, especially SMEs, will have access to a wider range of financial services for their transfer and payment transactions. Ultimately, once e-Payment replaces cash and checks, substantial paperwork and procedures can be eliminated. This will in turn create competitiveness and new business opportunities going forward.

3) Government: The government will have a registration database that is more comprehensive, modern, and easily accessible. Furthermore, distribution of social benefits will be better targeted. More comprehensive tax data under the e-tax system will enhance the efficiency of government budget management.

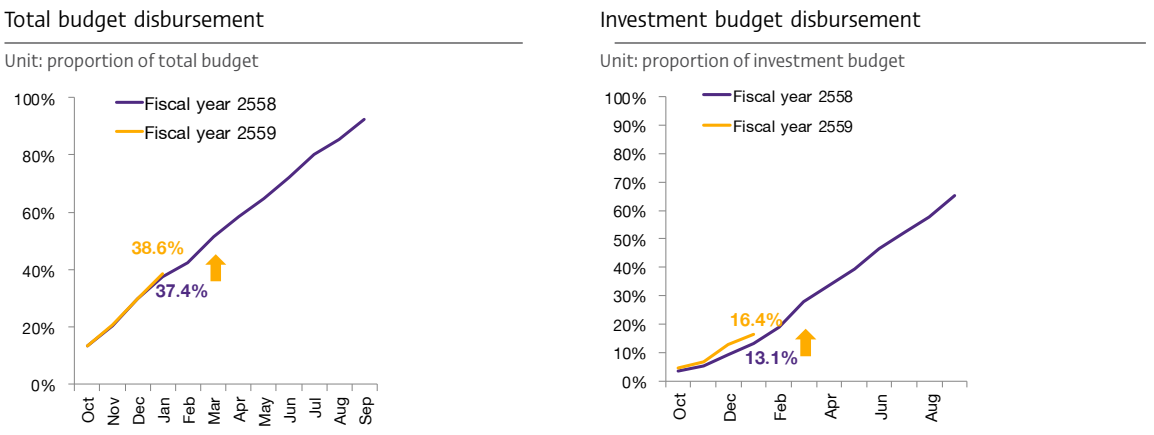
Additionally, the government expects that the strategy will reduce transaction costs to the economy as a whole by 75 billion baht annually. Such savings will derive from: 1) reduced transaction costs for individuals who opt for electronic cards rather than cash when making payments, 2) reduced burden on the banking sector in printing notes, managing cash and checks, as well as bearing opportunity costs for storing approximately 300 billion baht annually at cash management centers, and 3) reduced costs for businesses in cash and check management and printing and delivering tax documents that are worth approximately 45 billion baht per year.

Fiscal Policy

Government budget disbursement continued momentum. The cumulative disbursement from the start of fiscal year 2016 up until January was 38.6%, slightly above last year's disbursement rate of 37.4% (Figure 20). In terms of investment budget, the disbursement rate was 16.4%, higher than last year's rate of 13.1%. Among projects that have already been disbursed were short-term stimulus measures, in particular, the sub-district (tambon) support fund, whose disbursement picked up from 4% in the previous month to 10.4% in January as a result of resolving disbursement problems during 2015 year end. In addition, small investment projects by government agencies and state-owned enterprises also received a faster disbursement of up to 64% of the total budget by January, a jump from 2% in the previous month.

The contingency budget for fiscal year 2016 has been raised by 34% from 2015. In March, the cabinet approved the transfer of two budget categories to the contingency fund for fiscal year 2016. The entries were: 1) revenue from the 4G spectrum license auction of 32 billion baht, and 2) the procurement budget of state agencies and state enterprises, which were unable to finalize a contract of 57 billion baht by 31st of March 2016,. As a result, the contingency fund for fiscal year 2016 rose to 510 billion baht or 19% of total budget, increasing from last year's share of 15%. The fund, which is intended for contingency purposes and use in strengthening policy measures, will likely inject money from the government into the economy this year.

20 Government budget disbursement continued momentum



Source: EIC analysis based on data from the Ministry of Finance

Robust growth in government investment spending will likely continue. During the last quarter of 2015 the value of the government investment increased by 41.1% YOY, owing primarily to the expansion of construction expenditure of 54.5% YOY that resulted from expedited disbursements of government projects. These projects were mostly small projects such as water management projects and road improvement projects, as well as those of state-owned enterprises such as the Metropolitan Electrical Authority's electrical substation and cable system project. Investment disbursement maintained its pace up until January, growing by 19.6% YOY. This year, the planned investment budget rose by 20% YOY. Moreover, the government is pushing for policies to accelerate disbursement

of infrastructure projects. In addition, rising public debts as a result of the investment acceleration should be particularly concerned. In order to keep the investment projects on plan, the government has to borrow so much that could extend the public debt level up to 50% of GDP in the few years ahead from the current level of 44% in January. Nevertheless, the government tries to lessen the public debt burden by setting up the Thailand Future Fund, to be used as an alternative fund raising method for Thailand's infrastructure projects.

Megaproject progress needs to be closely watched. At the end of last year the cabinet approved a total of 19 infrastructure investment megaprojects with a total value of 1.8 trillion baht. Among these projects, six were expected to be ready for tendering during the first half of 2016 and to begin construction during the latter half of the year. However, by the first quarter this year, only 1-2 projects proceeded with contract signing. Mass transit rail line projects and motorways are those most likely to progress as planned, while those remaining will need to be kept on a close watch for possible delays that will trim expected cash injection for the year. Nevertheless, the government is pushing to keep up with the plan. It recently adjusted environmental impact assessment (EIA) requirements under Section 47 of the Enhancement and Conservation of National Environment Quality Act to allow fast track projects to start tendering while awaiting EIA approval. This is because waiting for EIA approval as previously required may cause project delays of several months. The new procedure, however, is open to the risk of tendering projects that may later fail EIAs. All things considered, EIC expects that government investments in 2016 will grow by 11.0% YOY.

Exports and Imports

Thailand's exports excluding gold during the first 2 months of 2016 shrunk by 3.7%YOY due to the slowdown in China's economy and low commodity prices. In February, Thai export turned positive with a growth of 10%YOY from export of gold which jumped 10 times. However, this was a one-off factor that is unlikely to occur again. Even though total export including gold turned positive during the first 2 months, but export of major manufacturing products continue to contract especially electronics and appliances. Slowdown in China's economy and low commodity prices, which have been ongoing since 2015, dragged down Thailand's exports (Figure 21). China's stalling manufacturing sector has also affected Thailand's major trading partners like ASEAN-4 (Malaysia, Indonesia, the Philippines and Singapore) and Japan. The three- markets together accounted for 35% of Thailand's total exports. Meanwhile, low prices for agricultural products and oil have also weighed on Thai exports of agricultural products and oil-related products, which together account for 25% of total exports. Nonetheless, excluding oil-related products such as chemicals and plastics, Thailand's export of manufacturing products fell by only 2%YOY in 2015. This is a smaller contraction than neighbor countries' like Indonesia and Malaysia, which saw a decline of 5%YOY and 7%YOY, respectively. However, the contraction is much below Vietnam's expansion rate of 26%YOY (Figure 22)

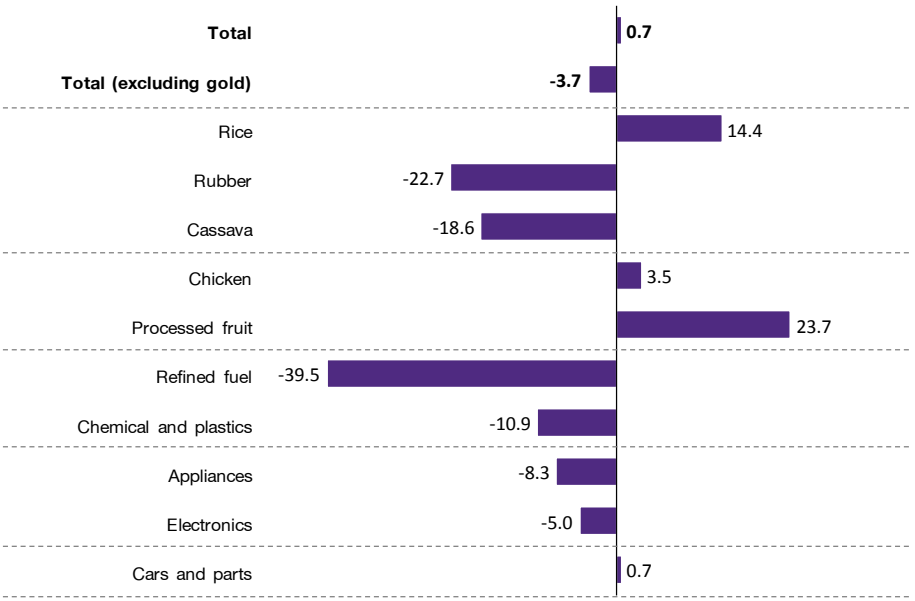
EIC expects Thailand's exports to continue to fall, dropping by 2.1%YOY, mainly from the manufacturing and agricultural sectors. Exports have fallen due to low commodity prices, weakening demand from China's stalling manufacturing sector, and fragile recovery in major developed economies such as the U.S., Eurozone, and Japan. Also, global economy has shifted the growth engine towards services sector and domestic drivers, reducing demand for exports. Moreover, structural changes towards shorter global supply chains led to a decline in global trade as well. For example, China is planning to build a full supply chain for the petrochemical industry domestically and therefore needs fewer imports for this industry.

In terms of Thailand's imports, EIC forecasts a contraction of 1.1%YOY in 2016. During the first 2 months of 2016 imports dropped by 14.5%YOY (Figure 23). Imports of capital goods excluding aircraft and ships dropped by 3.6%YOY as manufacturing sector slowed and private investment has not fully recovered. However, government infrastructure projects, particularly megaprojects like inter-city rail projects, will help lift confidence and attract private investment. This will in turn boost import demand for capital goods and machinery, which will help offset the declining global commodities prices.

21 Thailand's exports excluding gold during the first 2 months of 2016 shrunk by 3.7%YOY.

Thailand export growth- by products

Unit: %YOY

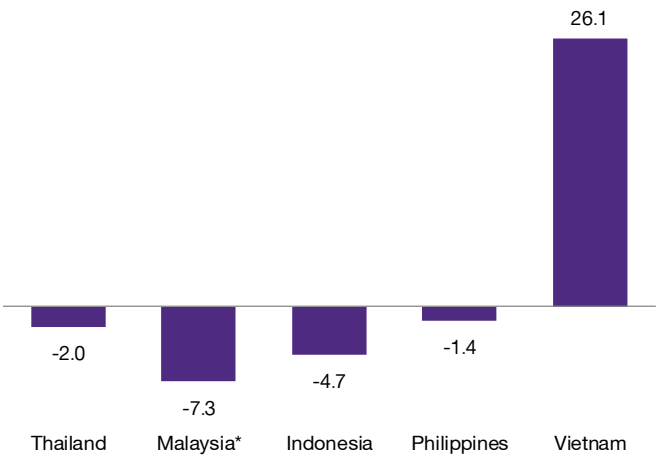


Source: EIC analysis based on data from MOC

22 Manufacturing exports excluding oil-related products shrank only by 2%YOY in 2015

Export of manufacturing products (excluding oil-related products)

Unit: %YOY



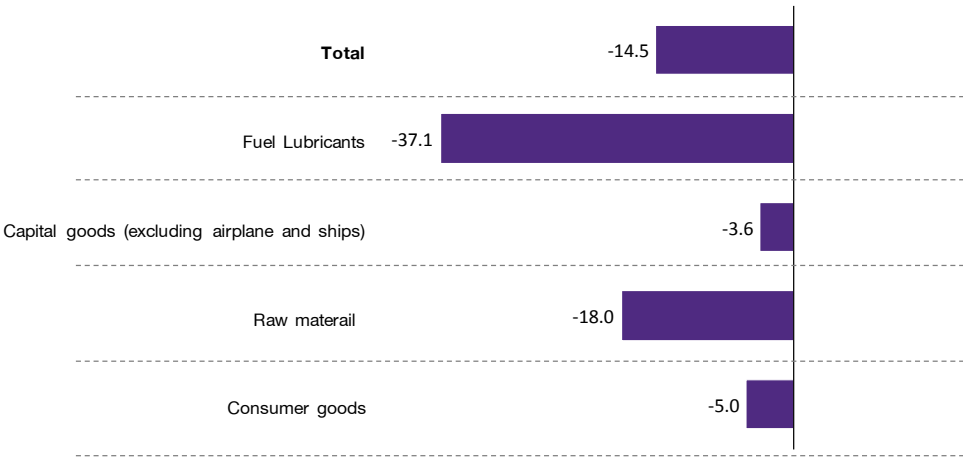
*Malaysia latest data is November 2015

Source: EIC analysis based on data from CEIC

23 During the first 2 months of 2016, imports fell by 14.5%YOY

Import value growth- by products

Unit: %YOY



Source: EIC analysis based on data from MOC

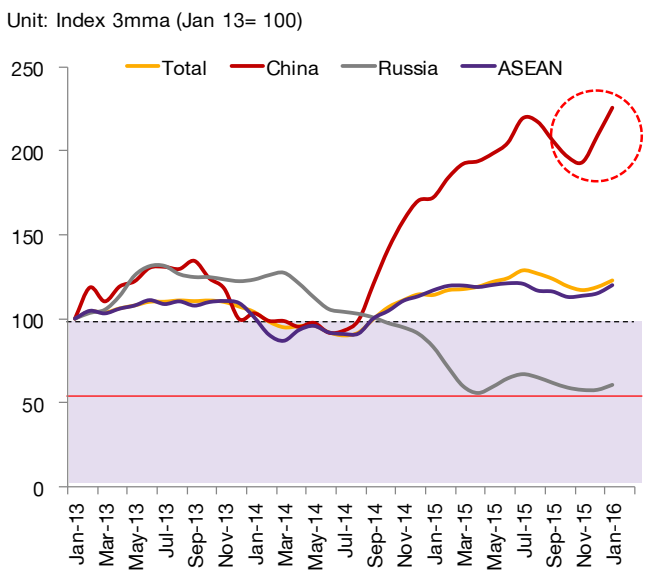
Tourism

Foreign tourist arrivals in Thailand during the first 2 months grew by 15.5%YOY. Tourist arrivals continued from the 2015 expansion rate of 20.4%YOY, the highest among ASEAN countries. Arrivals of Chinese and ASEAN tourists continue to grow at a high rate which helps support Thailand tourism sector. The numbers of tourist arrivals from China and ASEAN grew during the first 2 months grew by 32.2%YOY and 14.7%YOY, respectively. Growth in the number of Chinese tourists resumed quickly after a setback from the August bombing incident (Figure 24). Russian tourists are also returning as the numbers of Russia tourists increased 2.9%YOY during the first 2 months of 2016, after the number fell in 2015.

EIC expects that the number of international tourist arrivals in 2016 will reach 32.6 million, which is equivalent to an expansion of 9.1%YOY owing to a continuous inflow of Chinese tourists as China's overseas spending continue to grow. Chinese spending on tourism increase 66%YOY during the first 3 quarters of 2015. Other supporting factors for Thailand's tourism this year are the expansion of Utapao and Phuket international airports that is due to open in the second quarter. The expansion will accommodate an additional number of 7.4 million arrivals. Also, the opening of the second terminal at Don Mueang International airport in the fourth quarter of last yearis another factor supporting tourism, which is an important engine of growth for the Thai economy this year.

24 Arrivals of Chinese tourist resumed quickly after a brief setback from the bombing incident.

Number of tourists arrivals



Source: EIC analysis based on data from Ministry of Tourisms and Sports

Current Account

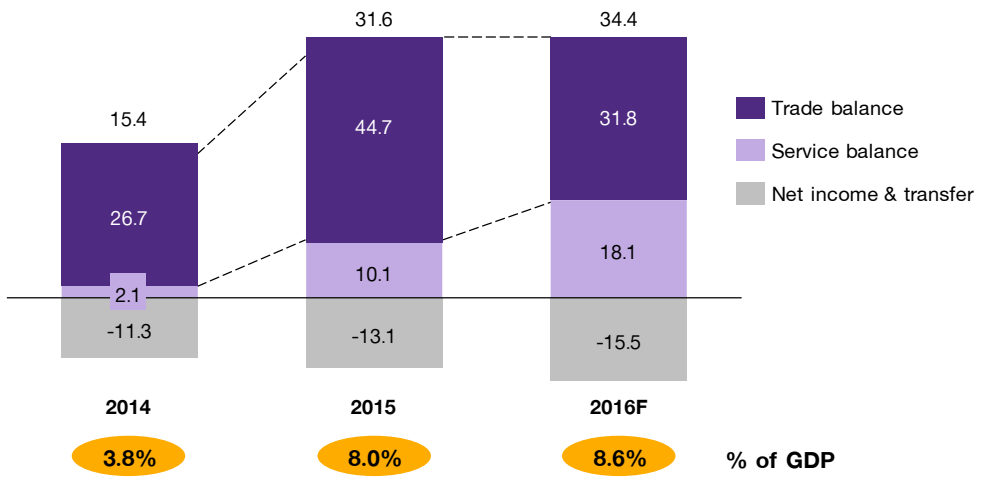
A large current account surplus continues from last year. Thailand's current account surplus is expected to reach 34.4 billion USD in 2016, increasing from 31.6 billion USD from the year before. The trade balance will decline slightly due to shrinking exports, while imports are expected to gain as public and private investments grow. Nevertheless, a rise in tourist arrivals will drive the service account surplus higher. (Figure 25)

Thailand can manage capital outflow risks better than other emerging markets. Thailand's current account surplus of 8% of GDP is the highest among emerging economies and neighboring countries. Indonesia, Brazil, and South Africa have current account deficits; while Malaysia and the Philippines have smaller surpluses of 3% and 4%, respectively. Given such factors, the Thai baht will likely maintain stability relative to other currencies.

25 Despite an expected drop in the trade surplus, a large current account surplus is expected due to an increase in tourist arrivals.

Current account balance

Unit: USD Bn



Source: EIC analysis based on data from Bank of Thailand

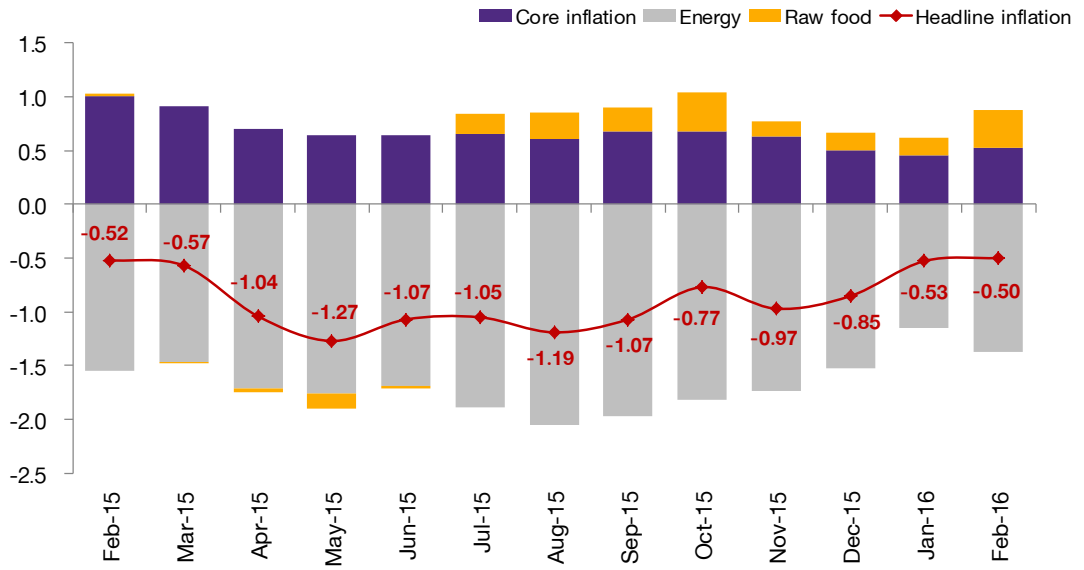
Inflation

Headline inflation remained in negative territory due to low oil prices. Headline inflation in February was -0.50% YOY owing mainly to falling oil prices, which dropped by 12.5% YOY in February. The same factor also suppressed the import price index (Figure 26). In addition, domestic demand showed weakening signs as short-term stimulus measures ended. These factors all together will keep inflation this year low.

26 Headline inflation remained negative due to low oil prices

Contribution of headline inflation

Unit: %



Source: EIC analysis based on data from the Ministry of Commerce

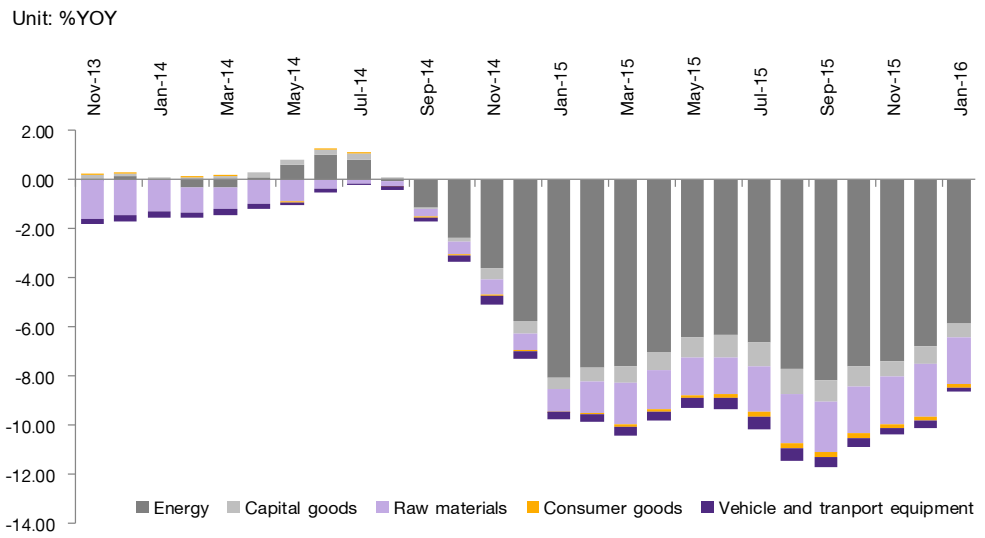
Low core inflation reflected an uneven recovery of domestic consumption. In February, core inflation rose to 0.68% YOY, up from 0.59% in the month earlier. A temporary factor that contributed to the rise was the tobacco tax hike, which increased prices of tobacco and alcohol products by 10.7% YOY. Given that prices of other goods remained mostly stable, signs of recovery in domestic demand are still unclear.

EIC forecast that headline inflation in 2016 will turn positive at 0.4% YOY. This is in line with global oil prices that are gradually rising as well as the removal of the high base effect. EIC believes the Brent crude oil price will climb from its first quarter level of 34 USD per barrel to a 40-USD-per-barrel average for the year. (Figure 27) The weakening baht will push inflation higher; while government measures will help support domestic demand, leading to higher headline inflation. In addition, EIC expects core inflation to rise to 0.8% in 2016.

27 A significant drop in oil prices caused the import price index to fall in tandem.

Contribution of import price index growth

Unit: %YOY



Source: EIC analysis based on data from the Ministry of Commerce

Policy Interest Rate

The Bank of Thailand's Monetary Policy Committee (MPC) held the policy rate at 1.50% at its March meeting. The MPC viewed that although the Thai economy expanded below expectation, the stance of monetary policy was adequately accommodative and the policy space should be reserved for urgent needs. Nevertheless, the MPC will closely monitor risks to financial market stability in the low interest rate environment, which may lead to a search for yield behavior.

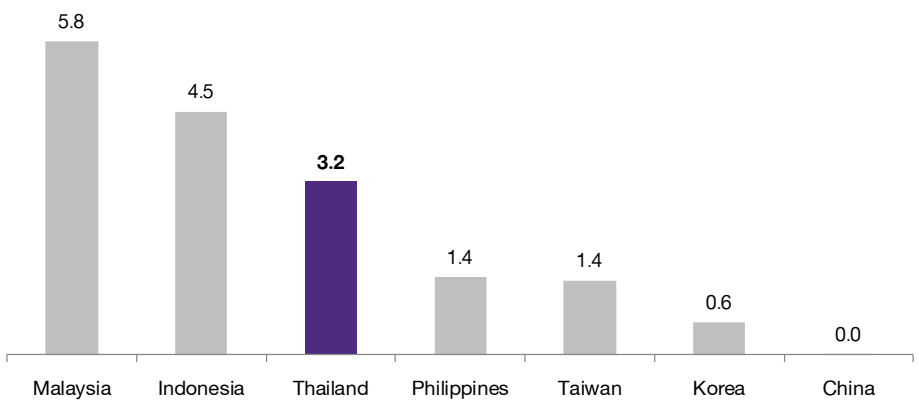
EIC maintains its policy rate forecast of 1.50% until the end of 2016. The MPC likely sees government spending taking a lead role in driving growth rather than to another rate cut. EIC views that the currently low interest rates do not pose a hurdle for private investment, while the lack of confidence in economic outlook domestically and globally limits the effectiveness of monetary policy tools. This is reflected in slow growth of private investment despite low interest rates.

However, there are still factors pressuring further rate cuts. A sharp appreciation of the baht in March following the Fed's announcement of a slower fed funds rate hike this year prompted some analysts to believe that the MPC may cut rates to slow down the appreciation. The cut may be used if exports are threatened by relative appreciation of the baht against regional currencies or if Thailand's economic growth falls below expectations. Also, negative inflation presents no obstacle for further easing, especially in the global environment of extremely low interest rates. (Figure 28)

28 The Thai baht's appreciation was not the highest in the region.

Regional currency appreciation against USD, year to date (as of 22 March)

Unit: % year-to-date



Source: EIC analysis based on data from Bloomberg

The Thai Baht

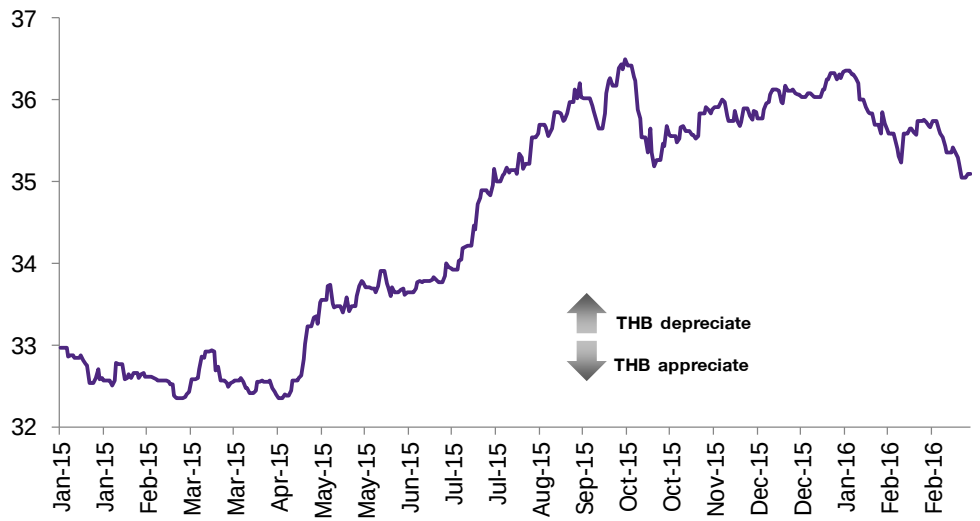
At the beginning of 2016 the Thai baht fluctuated with rising volatility in the global financial markets. The baht weakened slightly following the PBOC's decision to devalue the yuan sharply earlier this year. However, after the markets lowered expectations of further rate hikes by the Fed the baht bounced back.

EIC expects the baht to weaken slightly but remain volatile. EIC predicts that the baht will depreciate to approximately 37 THB/USD at the end of 2016 as the Fed gradually normalizes its policy rate. Furthermore, volatility in financial markets will follow divergence of monetary policies among major economies, causing more frequent and volatile capital movements than last year. (Figure 29)

29 The Thai baht fluctuated with the rising volatility of global financial markets at the start of 2016.

Thai Baht

Unit: Baht/USD



Source: EIC analysis based on data from Bloomberg

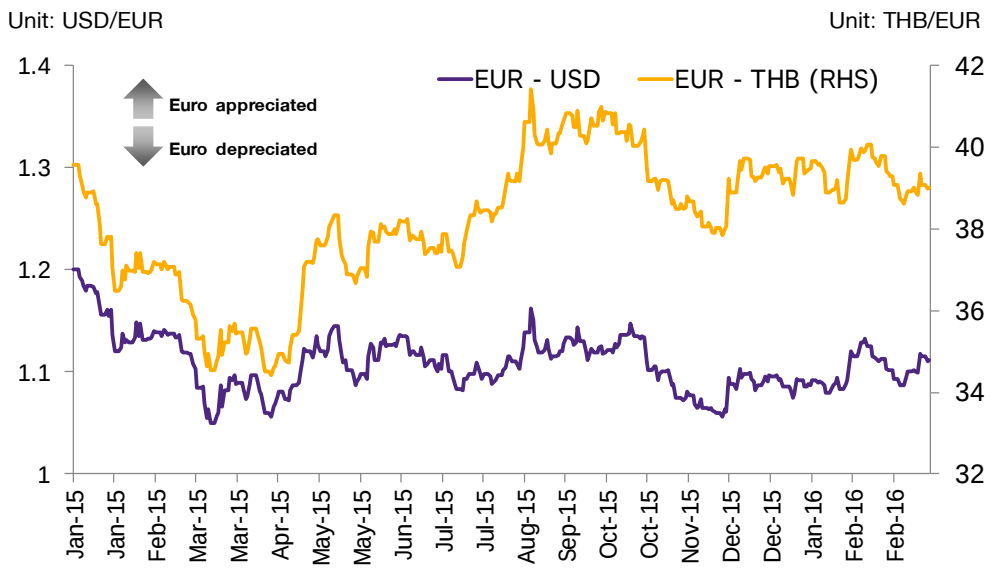
The Euro

The Euro continued to strengthen due to the depreciation of the USD. Lower expectations of a Fed rate hike contributed to the euro's appreciation. Although, the currency began to weaken in February as the markets anticipated further monetary easing from the ECB, the EUR/USD is still relatively strong compared tothe end of last year.

The ECB's easing monetary policy will support the euro weakening but by a limited extent. Monetary measures announced at the ECB's March meeting will substantially add liquidity to the economy, which in turn helps weaken the euro. However, a comment by Mario Draghi, the president of the ECB, that further rate cuts are not necessary, has led the market to limit expectations. As a result, the euro has not weakened significantly. EIC predicts that the euro will depreciate to approximately 1.08 USD/EUR. (Figure 30)

30 The euro depreciated slightly after markets lowered expectations of further monetary easing by the ECB.

EURO



Source: EIC analysis based on data from Bloomberg

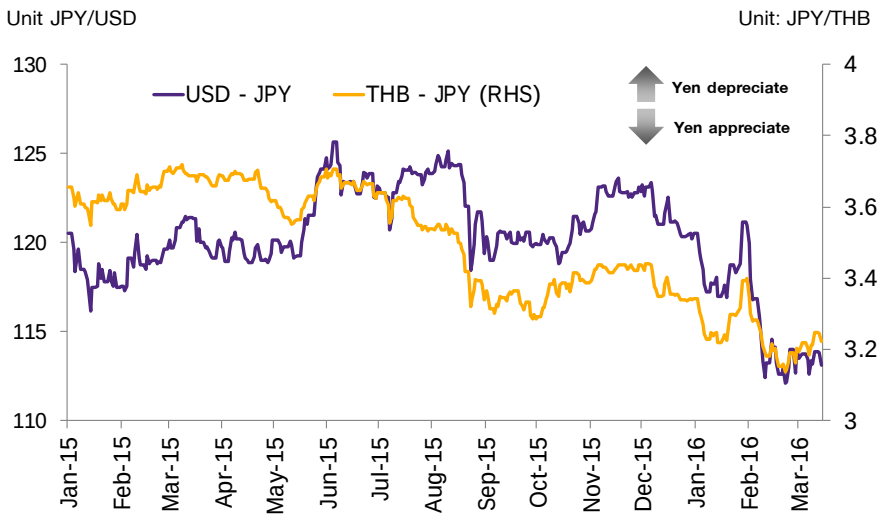
The Yen

The yen has recently been affected by volatile global financial markets, despite the use of easing monetary measures. The Bank of Japan (BOJ)'s surprisingly cut the commercial bank deposit rate at the central bank to -0.1% on January 29th. The policy announcement caused the yen to drop immediately by 2%. However, the yen has been strengthening as investors adjusted their portfolios to hold more safe-haven assets, such as Japanese government bonds in response to concerns over the global economic recovery.

EIC views that the yen will continue to depreciate. Japan's fragile economy, falling inflation rate, and easing monetary policy by the ECB are among factors that lead EIC to believe that the BOJ will likely ease their monetary policy further. This will put pressure on the yen to weaken. EIC expects the yen to depreciate to 120 JPY/USD at the end of 2016. Nevertheless, global financial risk sentiment is another influencing factor that may cause the yen to strengthen in the short run. (Figure 31)

31 The yen will depreciate once global financial risk sentiment relaxes.

Yen



Source: EIC analysis based on data from Bloomberg

Bull - Bear: Oil prices

BULL-BEAR: Oil Prices

Crude oil price (USD/Barrel)	2014	2015					2016F							2017F
(Average)	Average	Q1	Q2	Q3	Q4	Average	Q1	Q2F	Q3F	Q4F	Average	Max	Min	Average
WTI	93	48	58	46	42	49	33	38	40	42	38	49	30	50
Brent	99	54	62	50	43	52	35	40	42	45	40	51	30	52

Source: EIC analysis based on data from leading global houses (as of April 7, 2016)

BULLs

● US supply tends to decrease as the rig count declined to 516 in early 2016, compared to 1,421 in the same period of last year. Moreover, capital spending of oil companies in late 2015 dropped to about 400 million USD after having reached 900 million USD. Over 20 oil companies in the US filed for bankruptcy. This number is higher than that during the US Subprime Crisis in 2009. The US Energy Information Administration (EIA) expects the US supply in 2016 at 14.5 million barrels per day, a 3% fall from last year. This can push the prices upwards.

● Demand for oil in the US, the world's largest oil consumer, tends to rise according to their growing economy. The US labor market has shown strengths as reflected by the unemployment rate of lower than 5% since the beginning of 2016. This has benefited the expansion of domestic consumption. Indeed, EIA assessed that the US demand for oil in the second quarter of this year will reach 19.5 million barrels per day, rising by 1.2% as compared to the same period of last year.

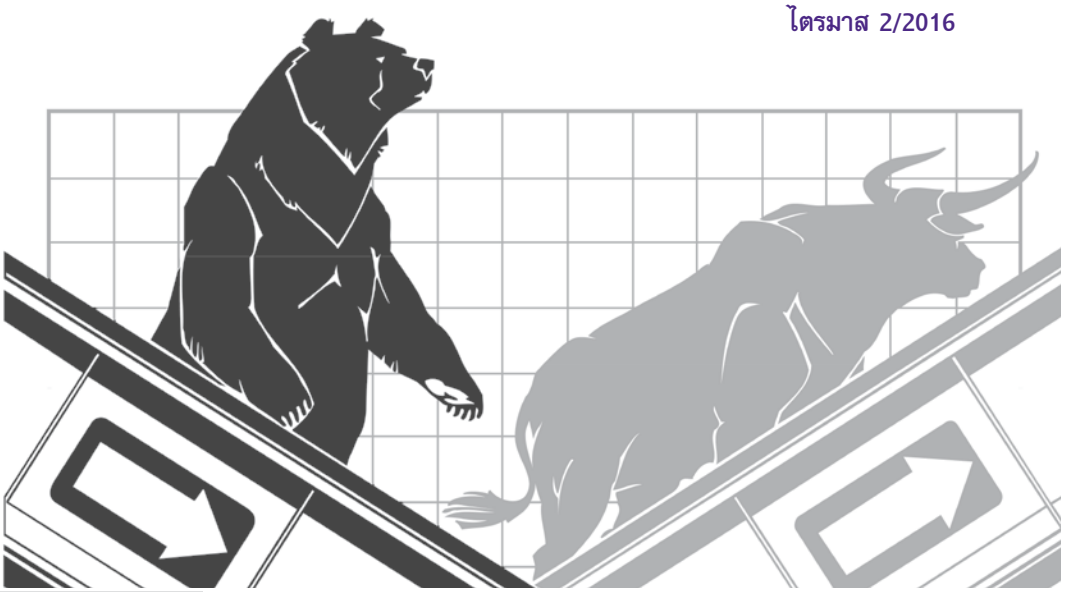
BEARs

● Supply of crude oil in the second quarter of 2016 remains in excess by around 1.4 million barrels per day, putting downward pressures on price. EIA assessed that global oil supply will increase in the second quarter to reach 96.1 million barrels per day while demand is only 94.6 million barrels per day. The majority of global supply, around 60%, come from Non-OPEC producers which increased 0.4% QOQ. However, excess supply will gradually fall in the second half of 2016 due to slowing US production and higher demand following global economic recovery.

● The nuclear sanctions on Iran were lifted by the US and EU on January 16, 2016. This has allowed Iran to increase supply by around 0.6-1 million barrel per day. Their exports will also go up by 1 million barrels per day, from the initial level of 1.2 million barrels per day. Moreover, before reaching 4 million barrels of production per day, Iran has insisted not to join OPEC to maintain the level of production in order to support price (Iran's production is currently 3 million barrels per day). This will increase the global supply glut and put downward pressures on price.

● The meeting between OPEC and Non-OPEC oil producers in Qatar on April 17, 2016 failed to reach an agreement on freezing production at the January 2016 production level. Saudi Arabia and Iran disagreed as the former insisted on freezing their supply only if other major OPEC members would also do so. However, representatives from Iran were absent at the meeting as they vowed to increase production to compete for a larger market share following the lifting of nuclear sanctions.

● The US Federal Reserve signaled to raise the interest rates twice in 2016, by around 50 basis points. This will strength the dollar and lower oil prices due to 2 factors: 1) in the oil market, prices are quoted and determined in USD, the so-called petrodollar. When the USD appreciates, oil consumers have to pay more in their local currencies, driving down some demand, and 2) investors tend to move their money out of the oil market to financial markets for better returns, resulting in a decline of oil prices.



EIC's view: BEAR

Crude oil prices in the second quarter of 2016 will likely remain at a low level due to the existing imbalance of demand and supply. The oil market is filled with 1.4 million barrels per day of excess supply. A number of rigs in the US have improved their production efficiency. As a result, supply from the US may not fall as much despite the decreasing rig count. Moreover, the meeting between OPEC and Russia in Qatar failed to agree on a production freeze as Iran wanted to raise their production and exports after the lifting of sanctions. This will continue to put downward pressures on oil prices.

In focus:

Accessing Financial Stability in the Thai household sector

The problem of household debt has received much attention because its effects are interlinked with many sectors in the economic system, including households, financial institutions, and businesses. These agents have concerns over the high ratio of household debt to GDP that is currently standing at 80%. This ratio has quickly climbed, and its current level is now higher than that of countries with similar income levels (see further in BOX: Current situation of Thailand's household debt). Low-income households are even more worrying because they have larger debt burdens than mid- and high-income households.

However, previous analyses have only looked at household debt without considering the overall financial positions of households, such as asset holdings and liquidity. Applying the balance sheet concept used by firms, this edition of In Focus presents an analysis of household balance sheets that considers a household's financial position through assets, liabilities, and equities. This information will improve our understanding of household financial stability in Thailand. Thailand's household balance sheets are compiled and calculated from data from the Socio Economic Survey (SES) collected by the National Statistics Office.

Accessing Financial Stability

in the Thai household sector

What is a household balance sheet?

Assets

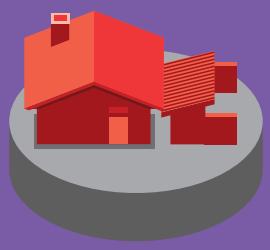
- Houses or land for dwelling
- Properties or land for businesses
- Vehicles
- Financial assets

Liabilities

- Mortgage
- Consumer (including auto leasing) loan
- Business loan
- Agrilcultural loan

Equity

- Net wealth



Current situation of the Thai household balance sheet

1 Assets are more than 5 times debt.

Liabilities 330K

Assets 1,780K

2 Low liquidity

Financial assets

10% of the total assets

3 36% of monthly income must be allocated to service debt

Debt service ratio

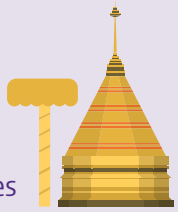
DSR = 36%

4 Slower income growth

Regional differences in household's strength and weakness

North

- Lower DSR than the country's average
- Weakness in assets due to low land for farming and businesses



North-East

- Large assets since it is equipped with large plains and has more farm households
- Ability to service existing debts must be worried, despite having lower debt levels.

Central

- Stronger financial stability than other regions
- Weakness in the high level of debt relative to assets for groups

East

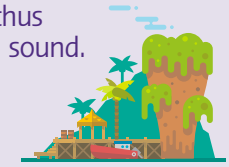
- Improvement of income prospect
- Farm households in this region have the highest DSR than all other groups

West

- Good income prospects and farm households have relatively good financial stability.
- Low liquidity and self-employed households pose a concern and low

South

- Average income is relative high, thus the debt servicing ability remains sound.
- Low liquidity and declining income growth



Source: EIC analysis as of 25 April 2016 based on data from the National Statistics Office

Thailand's household balance sheets consist of assets, which are financial assets such as deposits, investment capital, or cash, and non-financial assets such as houses, land, vehicles, or other buildings. The liability side consists of various kinds of loans, such as mortgage loans, vehicle leases, and consumption loans. Household net wealth is equivalent to total assets subtracted by total liabilities.

32 Household Balance Sheet as of 2013

Assets		Liabilities	
1) Non-financial assets	1,608,677	**10) Formal loans**	323,221
2) Houses or land for dwelling	696,054	11) Mortgage	116,660
3) Properties or land for professional purposes	597,597	12) Consumer (including auto leasing)	124,285
4) Vehicles	315,026	13) Business	39,922
		14) Agrilcultural	34,542
5) Financial assets	172,351	15) Other	7,813
6) Deposits	131,416	**16) Informal loans**	6,672
7) Investment capital	6,466	17) Mortgage	1,129
		18) Consumer (including auto leasing)	2,444
8) Others	34,469	19) Businesses	2,060
9) Total assets	**1,781,028**	20) Agricultural	584
		21) Others	454
		22) Total liabilities	**329,893**
		Equity	
		23) Net wealth	**1,451,135**

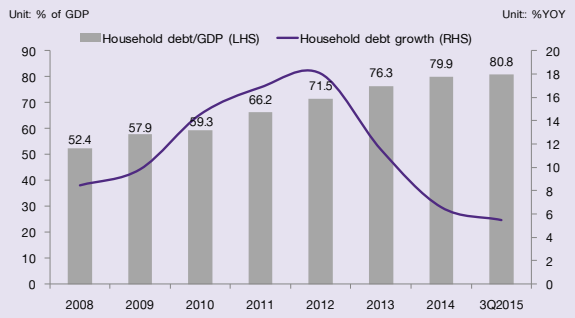
**Only indebted households, Unit: THB*
Source: EIC analysis based on data from the National Statistics Office

BOX: Current situation of Thailand's household debt

The level of household debt in Thailand has continuously increased during the past few years, now standing at over 80% of GDP. As of the latest data in the third quarter of 2015, total household debt reached 10.84 trillion baht, or 80.8% of GDP. Indeed, household debt accelerated just before 2013. Although the rate at which household debt is currently growing has slowed down since 2013 (Figure 33), the ratio of household debt to GDP is still high in comparison to other developing countries. Countries with over 80% household debt to GDP are mostly developed economies such as Japan, the U.S., New Zealand, the UK, etc (Figure 34). A level of household debt that corresponds to economic fundamentals can help support consumption and economic growth. However, growing household debt that is not aligned with economic fundamentals may occur. The debt servicing ability of households may be affected in the future when their debt rises and income declines, resulting in non-performing loans. This also affects other agents in the economy and may possibly trigger a crisis.

33 The level of household debt in Thailand has continuously increased during the past few years, now standing at over 80% of GDP.

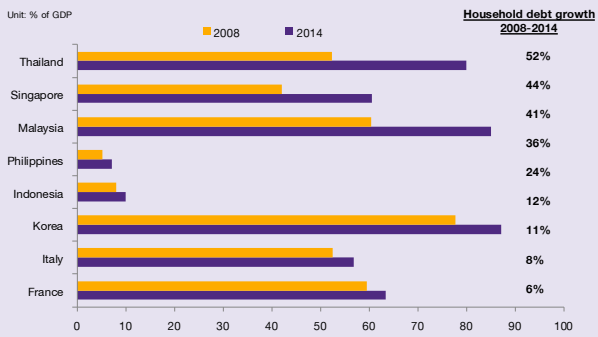
Thailand's household debt to GDP



Source: EIC analysis based on data from the Bank of Thailand

34 The ratio of household debt to GDP and the growth of debt are high in comparison to other developing countries

Household debt to GDP and growth of different countries



Source: EIC analysis based on data from CEIC

The financial stability of households depends on households' debt level and their debt service ability. This can be analyzed through four important variables based on information on assets and liabilities from the table above:

1. **Leveraging** displays household's borrowing behavior in relative to assets or net wealth accumulation.

2. **Liquidity** shows a household's ability to convert its assets to cash and to service debt at maturity.

3. **Debt burden** reflects a household's difficulty in servicing given their income.

4. **Income growth** indicates a household's income-generating ability that affects their decision on being in debt and on servicing their debt in the future.

1. Leveraging

Leveraging of Thai households is not considered very high when compared to their assets. The debt situation can be assessed by the ratio of debt to total assets held by households. A high ratio can pose financial instability because it reflects a large debt level relative to assets that are available to be used as collateral. A low ratio, on the other hand, shows that there are available assets to be used as collateral or exchanged into cash if they are liquidity constrained. Among all indebted households in Thailand, the ratio of debt to total assets stands at around 0.19[4]. Conversely, the assets of Thai households are more than 5 times their debt. Household balance sheets reflect that most of assets held by Thai households are houses or land for dwelling, which account for 40% of total assets[5]. The second largest asset holding is properties or land for businesses and agricultural activities, and the third largest asset holding consists of vehicles. Financial assets only account for 10% of total assets[6]. As for liabilities, Thai households have a large proportion of consumer debt (including auto leasing), which account for almost 40%[7] of total assets. This ratio is slightly higher than that for mortgage loans. Other than that, liabilities include loans for businesses or agricultural activities, which account for around 23%[8]

[4] From figure 33: 0.19 equals to (22) / (9)
[5] From figure 33: 40% equals to (2) / (9)
[6] From figure 33: 10% equals to (5) / (9)
[7] From figure 33: 40% equals to [(12+18) / (22)]
[8] From figure 33: 23% equals to [(14+15+20+21) / (22)]

2. Liquidity

Thai households have limited liquidity. To assess households' liquidity, we consider the ratio of financial assets to current liabilities. This is a similar concept to the assessment of a firm's liquidity where liquidity is defined as the ratio of current assets to current liabilities. High liquidity means that households have good debt servicing ability for near-term maturity. Liquidity also reflects how fast households are able to convert assets into cash for debt service. Despite large assets held by Thai households, financial assets or those with high liquidity only account for 10% of total assets. These include deposits, investment capital, and other cash. As a result, the ratio of financial assets to liabilities stands at 53%, meaning that if households have to service a 100-baht debt today, the value of assets available to be exchanged into cash for that debt payment is only 53 baht. The remaining 47 baht, or almost 50% of total debt, poses a risk that households cannot pay their debt on time and threatens their financial stability.

3. Debt burden

Debt burden is reflected by a debt service ratio (DSR). The ratio of household expenses on debt and interest payments to average income is around 36%. This means that households have to allocate 36% of their monthly income to service their debt, leaving only 64% for other expenses. At this level households have some difficulty in servicing their debt. A high level of DSR indicates that households are vulnerable and subject to default risks. In some countries there are measures to restrict loan issuance to borrowers with a high DSR such as Malaysia, borrowers are not permitted to take out more loans if their DSR exceeds 60%. However, the DSR measure considered is at an individual level rather than at a household level. In fact, the average individual DSR in Thailand is higher than 36%, but it is not so alarming that measures are needed to restrict loans.

4. Income growth

The income of indebted households faces slower growth. During 2011-2013 their income grew 8% compared to 10% growth in earlier periods. Lower income growth is an important driver for household indebtedness as it partly puts constraints on their consumption. Households then need to borrow more in order to maintain their level of consumption. If households cannot adjust their borrowing behaviors and their income growth is slower they are subject to a larger debt burden. This raises difficulties for households in servicing their debts and increases their vulnerability to possible future risks.

Taken all together, the four variables above have shown that the financial stability of Thai households still displays a strength based on asset holding. As households own houses or land for dwelling, their rising debt relative to assets is not yet a worry. Indeed, the debt burden has posed some difficulty for households. Both debt burden and future income must remain under close watch. Important risks include 1) the low ratio of financial assets, which results in low liquidity, and 2) uncertain income growth which may trigger future debt default. However, Thai households differ by various characteristics, making a balance sheet analysis by groups an interesting study as compared to analyzing their balance sheets as a whole. In the following analysis, we will assess the differences in households in two aspects: sources of income and regional differences.

Household differences by sources of income

Households of different occupations generally display different patterns in asset accumulation. For instance, the need to hold land for professional purposes by agricultural households is larger than that of salary-based households. On the other hand, salary-based households have more consumer debt than other households who partly borrow working capital for business purposes. Therefore, considering households by their source of income can better reveal the varying structures of their balance sheets, behaviors, and debt risks.

In analyzing households by sources of income, we classify households into 4 groups:

1. **Farm households** who receive income from agricultural activities, including aquaculture, fishery, and forestry.

2. **Self-employed households** who operate their own businesses with or without employees

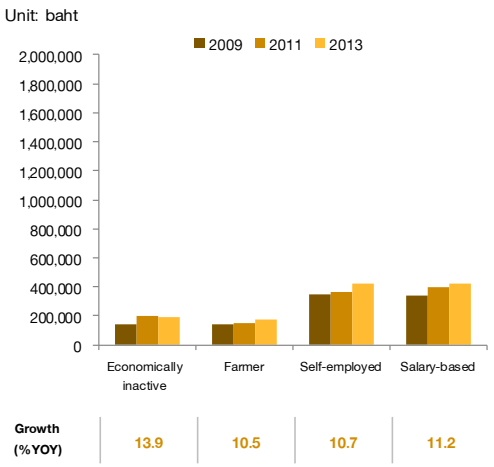
3. **Salary-based households**

4. **Economically inactive/retired households** whose income comes from pensions, welfare benefits, or returns from assets.

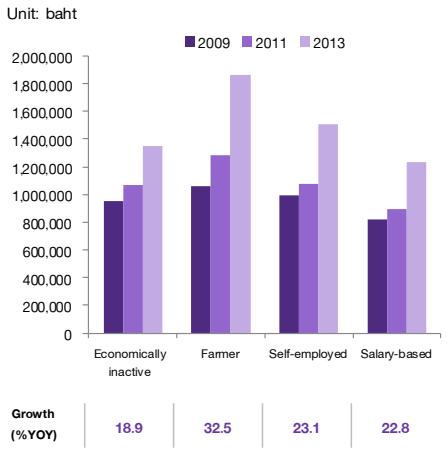
All groups of households generally have a strong asset holding position. According to data from the National Statistics Office, non-financial assets held by Thai households increased by 58% during 2009-2013. Most households continuously accumulated assets more quickly than they accumulated debt. For instance, the debt level of indebted farm households increased by 10% while their assets accumulated by over 32% (Figure 35). Most of the assets accumulated by Thai households were houses or land for dwelling. This has relieved some concerns over the ratio of debt to assets for all groups of households. However, characteristics of debt and assets held by households vastly differ.

35 Most Thai households have continuously accumulated assets more than they have accrued debt

Liabilities of different household groups



Assets of different household groups



Source: Analysis by EIC based on data from the National Statistics Office

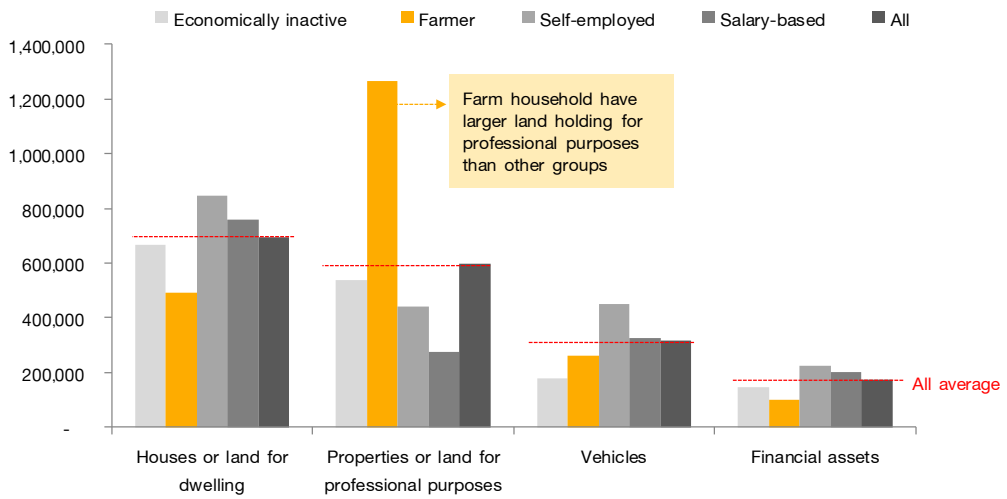
Farm households

A large proportion of farm households are indebted, yet their asset position is strong relatively to other groups. Indebted households account for 67% of total agricultural households. This proportion is higher than the country's average of around 51%. In addition, their ability to make debt payment is lower than households with other occupations, as reflected by a DSR of 48%. In other words, agricultural households have to allocate almost 50% of their income to pay back their debt. The high DSR and their gloomy income prospect make farm households a vulnerable group. However, their relatively large asset holding, especially land holdings, is stronger than other groups of households (Figure 36). As some of these are used for agricultural cultivation, the value of land and properties used for agricultural purposes is much higher than that held by other groups of households.

36 Farm households have larger land holding for professional purposes than other groups of households do.

Average asset holding of each group classified by asset types

Unit: THB



Source: EIC analysis based on data from the National Statistics Office

However, the distribution of various household characteristics must also be taken into consideration. For example, the large land holdings of farm households is for cultivation purposes, yet some farm households do not have land of their own. They are farmers who rent land for cultivation, making their asset holding lower than the average. Distribution of income among other groups of households may also yield different findings. Nevertheless, our analysis focuses on the overall characteristics of each group of households.

Asset holdings can partly prevent debt defaults by farm households, but household financial stability in the future remains a concern. The ability to make debt payments by farm households is lower than that of other households due to their high levels of debt and poor income prospects. But, their asset holding are 12 times their debt, allowing farm households to sell assets to service their debt. However, this behavior will yield adverse effects in the future as most assets are used to generate income. Selling these assets will create problems in the future as their strong asset holdings are undermined. The ability to accumulate assets further is also reduced and indicates worrying financial stability in the future. On the contrary, other households are endowed with assets for dwellings and vehicles. Selling these assets will not affect their ability to generate future income or consumption expenses as much as farmers.

Self-employed households

Self-employed households are subject to high growth of leveraging and income volatility. Household debt among the self-employed is more related to conducting businesses than other households (Figure 37). Moreover, mortgage and consumer loans are also at a high level. The growth rate of household debt among entrepreneurs was as high as 17% during 2011-2013, a big jump from 5% during 2009-2011 (Figure 38). Meanwhile, growth of household debt for the whole country declined from 10% to 8%. This shows that self-employed households have accrued debt much more quickly than the country's average. Most importantly, their high debt for business or professional purposes makes their financial stability highly sensitive to economic volatility. On the one hand, such debt helps generate larger revenue growth during economic booms compared to that held by other households. On the other hand, accumulation of debt to finance businesses during bust times will not raise revenue as much. Such debt is sometimes used to compensate for short-term losses faced by entrepreneurs while revenue can hardly grow. A prolonged economic downturn can also increase default risks for self-employed households.

37 Value of debt held by self-employed households for business purposes is evidently higher than that held by other groups of households

Average liability holding of each group classified by liability types

Unit: THB

Source: EIC analysis based on data from the National Statistics Office

38 Debt among self-employed households has grown more than the country's average.

Debt growth of each group

Unit: %

Source: EIC analysis based on data from the National Statistics Office

Salary-based households

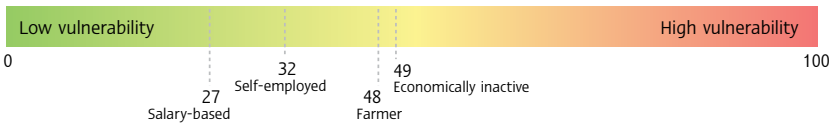
Salary-based households have a high growth rate of borrowing as well as a good debt servicing ability. According to the rate at which salary-based households accumulate debt, their ratio of liabilities to assets is 0.27, higher than other groups of households and the country's average of 0.19. Salary-based households can access sources of funds more easily than other groups of households due to their certain income stream, resulting in a low probability of default. This is consistent with the DSR of 27%, lower than that of other households (Figure 39). One indicator of salary-based households' financial strength is high liquidity in comparison to other households. The ratio of financial assets to total assets is around 13%, higher than that of other groups of households (Figure 40). Therefore, the ability to make debt payments is not a concern. However, there are concerns on the high proportion of consumer loans (Figure 41). As this type of liability does not generate income or accrue additional assets as much, it indicates a consumption level well above households' financial position. This poses further risks in the future if borrowing behaviors continue to increase.

39 DSR greatly differ by households occupation group.

Debt service ratio (DSR)

Unit: %

$$DSR = \frac{(\text{Principal} + \text{Interest payment})}{\text{Average monthly income}}$$



Source: EIC analysis based on data from the National Statistics Office

40 The ratio of financial assets to total assets is quite high among salary-based households.

The ratio of financial assets to total assets

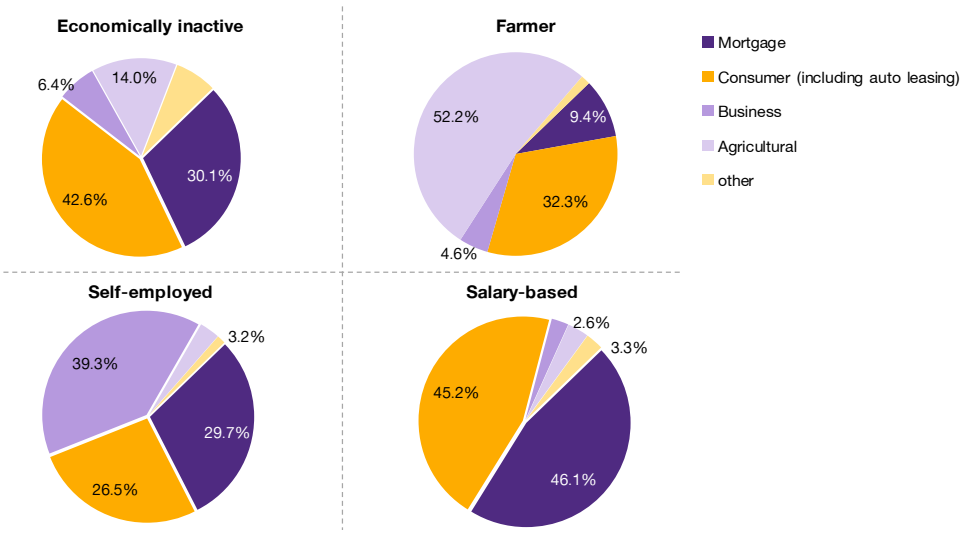
Unit: %

Source: EIC analysis based on data from the National Statistics Office

41 Structure of liabilities displays different purposes for borrowing by groups of household occupation.

Debt structure of each occupation group

Unit: proportion of total debt



Source: EIC analysis based on data from the National Statistics Office

Economically Inactive households

Debt among economically inactive households has not been on the rise but their debt burden is already at a high level. Their average DSR is higher than that of other household groups (Figure 39) partly because their average income is not as high as that earned by other households. However, expenses paid by economically inactive households, both daily and luxury expenses, are considerably lower. Therefore, portions of income can be used to make debt payments without significantly affecting their consumption. Moreover, income is subject to low volatility because income earned monthly from pensions, welfare transfers, or returns from assets is quite certain. So, these households can well plan and manage their future income and expenses. In addition, they are less likely to accrue debt for mortgages, vehicles, or business purposes because these are no longer relevant to them. This is consistent with their high ratio of financial assets to liabilities relative to other groups of households (Figure 42), maintaining the financial stability of these households.

42 The ratio of financial assets to liabilities of economically inactive households is higher than that of other households.

The ratio of financial assets to liabilities

Unit: %

Source: EIC analysis based on data from the National Statistics Office

Regional differences in household characteristics

Regional factors— economically, socially and geographically—have different effects on income, asset holding, and debt accumulation of households in different regions. For example, the strength of farm households is that their land holdings are larger than those of households in other groups. But, this may not be true in all regions. Agricultural land in some regions, such as the central region, is quite limited and land usage caters towards use for manufacturing purposes. In the Northern region many areas are mountainous and households have smaller land holdings when compared to households in the northeastern region with large plains. Different regional geographies and climates can affect agricultural production in various ways. And, the volatility of agricultural prices may influence households' borrowing behaviors differently by region. Therefore, regional analyses will shed some light on the strengths and weaknesses of household financial stability. The four important variables used to measure the financial stability of Thai households— leveraging, liquidity, debt burden, and income growth—can be applied to analyze households in different regions by comparing them to country averages. Household characteristics by region can be summarized as follows:

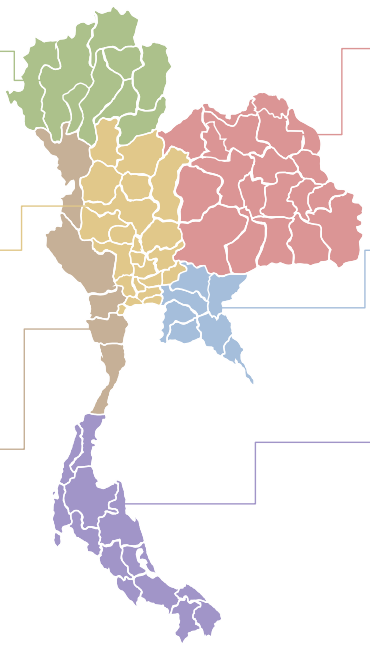
43 Various regional factors make households differ by region.

Financial stability of households in different regions

North	Leveraging	Liquidity	DSR	Income*
Economically inactive	●	●	●	●
Farmer	●	●	●	●
Self-employed	●	●	●	●
Salary-based	●	●	●	●

Central	Leveraging	Liquidity	DSR	Income*
Economically inactive	●	●	●	●
Farmer	●	●	●	●
Self-employed	●	●	●	●
Salary-based	●	●	●	●

West	Leveraging	Liquidity	DSR	Income*
Economically inactive	●	●	●	●
Farmer	●	●	●	●
Self-employed	●	●	●	●
Salary-based	●	●	●	●



Northeastern	Leveraging	Liquidity	DSR	Income*
Economically inactive	●	●	●	●
Farmer	●	●	●	●
Self-employed	●	●	●	●
Salary-based	●	●	●	●

East	Leveraging	Liquidity	DSR	Income*
Economically inactive	●	●	●	●
Farmer	●	●	●	●
Self-employed	●	●	●	●
Salary-based	●	●	●	●

South	Leveraging	Liquidity	DSR	Income*
Economically inactive	●	●	●	●
Farmer	●	●	●	●
Self-employed	●	●	●	●
Salary-based	●	●	●	●

● means better than the country's average
● means worse than the country's average

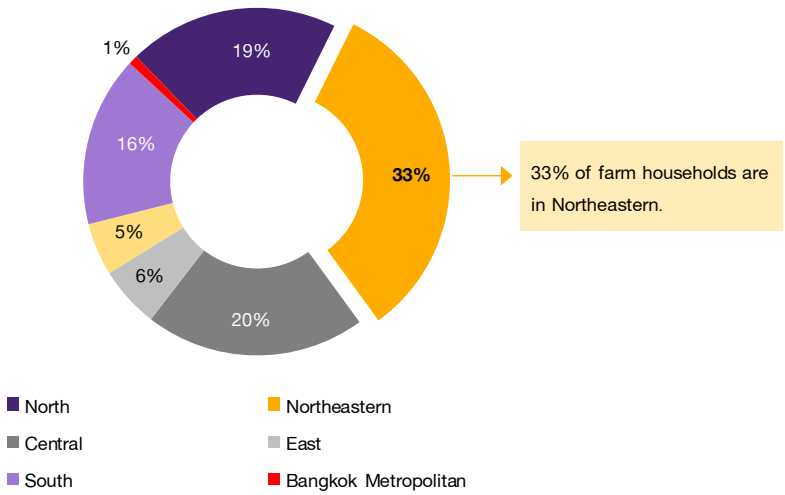
**income growth*
Source: Analysis by EIC based on data from the National Statistics Office

Households in the Northeastern region have a strength in their assets, which makes their debt burden relatively low. Partly because the Northeast is equipped with large plains and has more farm households (Figure 44), there are higher values of land asset used for agricultural purposes (Figure 45). Another reason is due to more difficult loan access, making their debt levels quite low when compared to their assets. However, their debt servicing ability and income growth display more pressing concerns than those of households in other regions. The DSR in the Northeast is higher than the country's average for all occupation groups and their income growth does not display good prospects. Therefore, the main worry for northeastern households is their ability to service existing debts, despite having lower total debt levels.

44 There is a larger portion of farm households in the Northeast than in other regions

Number of farm household in each region

Unit: proportion of total farm household

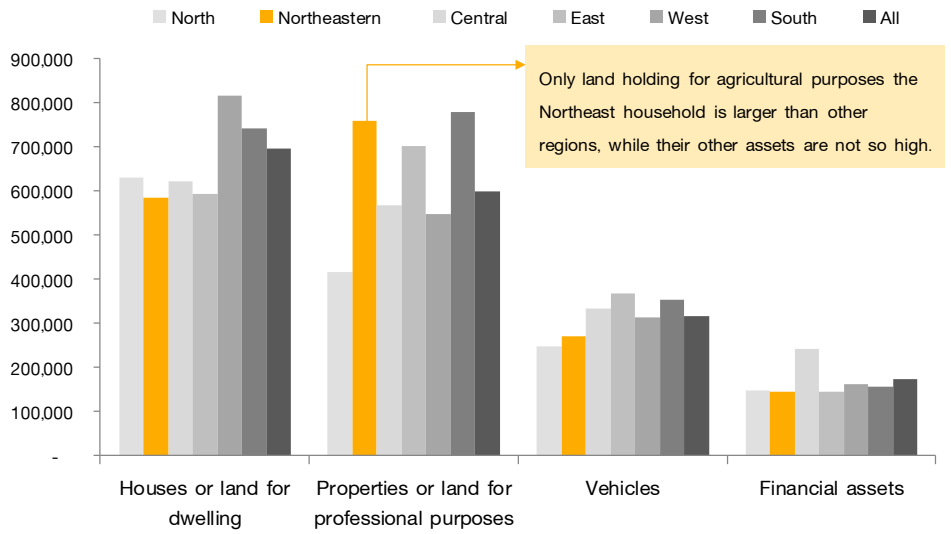


Source: EIC analysis based on data from the National Statistics Office

45 Land holding for agricultural purposes by households in the Northeast is larger than other regions.

Average asset holding in each region

Unit: THB



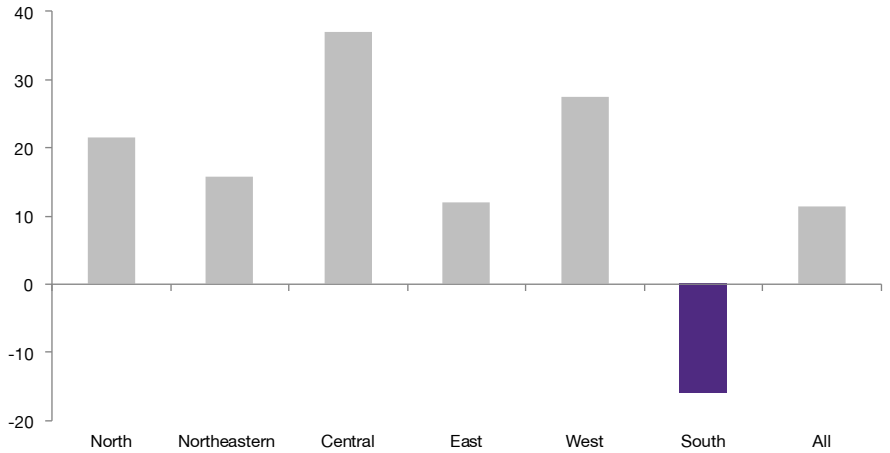
Source: EIC analysis based on data from the National Statistics Office

Households in the South have faced falling average incomes, but their debt servicing ability remains sound. During 2011-2013, income growth of southern households was more worrying than households in other regions, especially farm households whose income contracted (Figure 46). The decline of agricultural commodity prices partly explained the drop in income. As most farm households in the South are rubber tree growers, the continually lower rubber prices since 2011 exacted a drag on their income growth. Interestingly, the income of southern households had been quite high in the past and their decreased income is still on average higher than income in other regions (Figure 47). Therefore, the DSR of southern households is not as high. Moreover, the ratio of liabilities to total assets is lower than the country's average. As a result, southern households are not currently a concern regarding their financial stability. Nonetheless, if their income continues to decline for some time this will affect their ability to make debt payments in the future.

46 Farm households in the South experienced a drop in income despite increasing incomes of those in other regions.

Average asset holding in each region

Unit: %

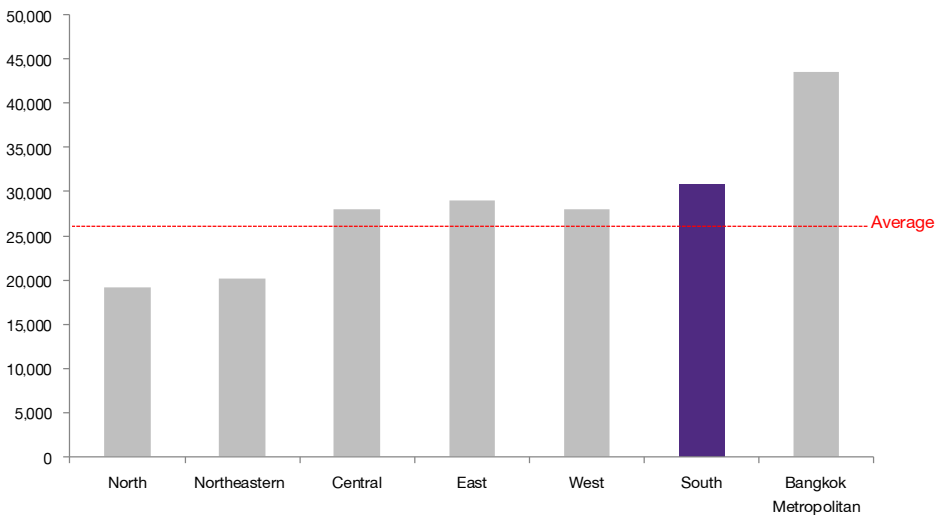


Source: EIC analysis based on data from the National Statistics Office

47 While the incomes of southern households contracted, the average income is not as low.

Average income of households in each region

Unit: THB



Source: EIC analysis based on data from the National Statistics Office

Self-employed households in the West pose a concern ,given their higher debt burden than the country's average, low debt servicing ability, and low liquidity. In particular, borrowing for business purposes in the West is considerably higher than in other regions (Figure 48), second only to households in the Central region. In contrast to other regions, farm households in the West have good financial stability.

48 Households in the West have a large portion of debt for business purposes.

Average liability holding in each region

Unit: THB

Source: EIC analysis based on data from the National Statistics Office

Households in the Central region have stronger financial stability. Of all indicators of household financial stability, their only weakness is the level of debt relative to assets for self-employed and farm households, which is higher than the country's average. Other indicators remain at a healthy level. Although some households have a large debt burden relative to their assets, this is not a particular concern as households in the Central region are able to manage and service their debt.

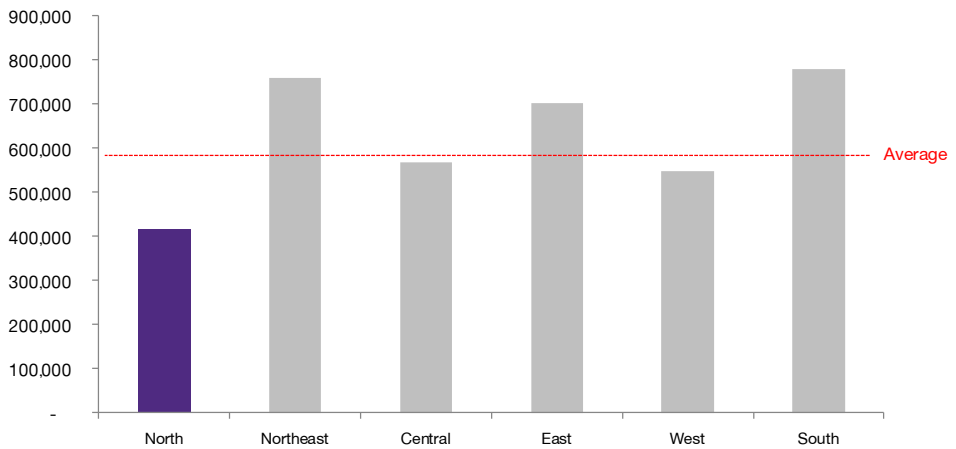
Farm households in the East have the highest DSR in the country. An overall survey of financial stability indicators does not pinpoint any groups of households in the East with particular concerns. Risk factors are diversified by occupations. But, if we look closely at each indicator, the main weakness of households in the East is the high DSR of agricultural households. The current DSR of 67% is higher than that of any household groups in the country, indicating greater vulnerability among these households. Therefore, the debt default risks of these households can be higher than those of other households if their income is not likely to improve.

Households in the North have a good level of debt servicing ability, despite their low asset holding. Although there are concerning factors for households of all occupations in the North, their shared strength is the lower-than-average DSR. However, the weakness of northern households is a smaller asset size relative to other regions, especially land or properties for professional use among farm households (Figure 49). This is consistent with the geography in the North with large high plains and limited agricultural land in comparison to other regions.

49 Northern households have lower land or properties for professional in relative to other regions.

Average value of land or properties for professional purpose

Unit: THB



Source: EIC analysis based on data from the National Statistics Office

Different risks and their impacts on households

The assessment of household financial stability by regions and sources of income illustrates that each group of households faces differing vulnerabilities. Future risks to the economy will only affect certain household groups, depending upon the types of risks. We consider three main risk factors that may affect Thailand's household debt in the future: falling income, larger interest payments, and depressed asset prices following economic downturns.

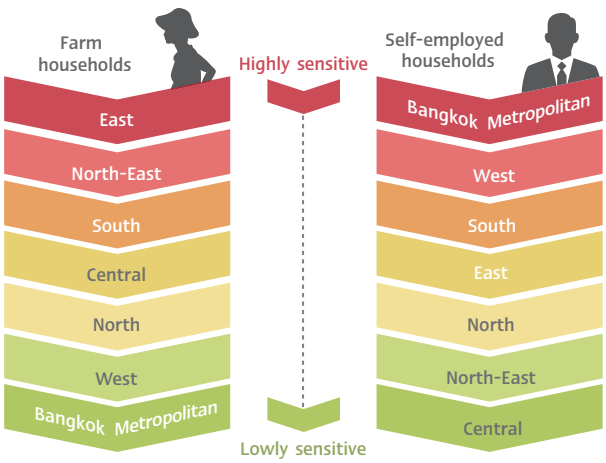
Risks from falling income or higher interest payments will affect households in the Northeast the most, followed by households in the South. Their monthly debt burden will rise as their debt servicing ability and liquidity are already quite low.

Risks from depressed asset prices will mostly affect households in the East and the West, due to their weaknesses in asset holding and low liquidity. Asset price risks may impact these households through both nonfinancial assets, such as falling house prices, and financial assets when returns to assets are minimal during economic downturns.

The most affected households in the present economic slowdown are farming and self-employed households. To illustrate, household's sensitivity to the mentioned risk factors can be ranked as follow:

50 Farming and self-employed households will be mostly effected in the present economic slowdown

Sensitivity of farm and self-employed households to future risks



Source: EIC analysis based on data from the National Statistics Office

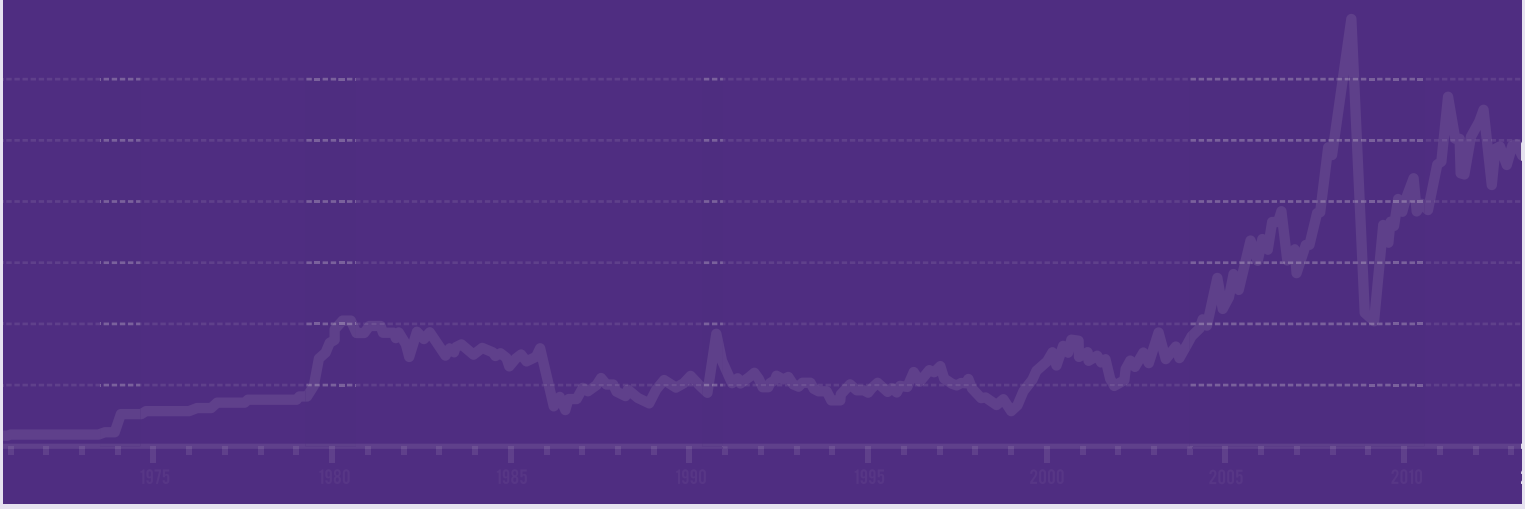
In summary, what do household balance sheets tell us about Thailand's household debt problems?

Rising debt does not necessarily mean household vulnerability The growing concerns for Thailand's rising household debt are predominantly related to borrowing for consumption that will not generate income in the future, such as mortgage loans, auto leasing, education, and other expenses. These types of debt are likely to increase, weaken household financial positions, and cause problems in the future. However, household balance sheets have shown that despite a high level of household debt households are supported by large asset holdings. Indebted households continue to accumulate assets worth much more than the debt they accrue. Moreover, asset proportions, for example houses and land, whose value grows over time, are quite large.

Income prospects, debt servicing ability, and liquidity must remain under a close watch. Analysis of Thai households' financial positions has shown that many household groups pose concerns regarding their ability to make debt payments, which are already quite weak. If future income does not improve, their debt servicing ability will worsen and pressure households to default on their debt. This will also limit their consumption and borrowing in the future. Low liquidity will put more constraints on households as it takes time to exchange assets, such as houses, land, or vehicles into cash. This factor is one constraint Thai households must be cautious about when faced with income volatility or urgent need to use money. A lack of liquidity will put additional pressures on households to take out more debt and increasingly default on their debt payments.

In the long term household income is the most important factor and therefore government measures should focus on raising incomes. Household leveraging, debt servicing ability, and the growth of domestic consumption in the future all are significantly effected by household income. Therefore, government measures should focus mainly on improving the jobs and income of households. These measures should encourage households to adjust themselves under changing economic circumstances and manage their expenses in accordance with their earned income. Households with secure jobs can therefore adapt to survive under different situations. Moreover, households should develop and adapt their professions and spending behaviors, which should be in line with their economic status. Nonetheless, household debt problems are an important issue that must be addressed. The correct identification of these problems will help provide better solutions in the future, rather than a one-size-fits-all solution that ignores the different household characteristics.

Summary of main forecasts



EIC summary of main forecasts

Key indicators	2015	Unit	Actual			EIC forecast					Consensus	BOT
	Share (%)		2015	15Q3	15Q4	16Q1	16Q2	16Q3	16Q4	2016	2016	2016
Real GDP growth		% YOY	2.8%	2.9%	2.8%	2.6%	2.4%	2.2%	2.8%	2.5%	3.0%	3.1%
Demand-side												
Private consumption	52%	% YOY	2.1%	1.8%	2.5%	1.4%	1.3%	2.1%	2.7%	1.9%	2.2%	1.8%
Public consumption	17%	% YOY	2.2%	2.3%	4.8%	4.6%	3.0%	3.3%	3.4%	3.5%		3.3%
Private investment	19%	% YOY	-2.0%	-10.1%	1.9%	-1.7%	1.4%	7.0%	-1.2%	1.2%		2.4%
Public investment	6%	% YOY	29.8%	21.9%	41.4%	13.4%	20.4%	13.8%	-4.0%	11.0%		10.7%
Supply-side												
Agriculture	9%	% YOY	-4.2%	-5.5%	-3.4%	-2.2%	-3.9%	-0.4%	0.5%	-1.3%		
Manufacturing and Services	91%	% YOY	3.6%	3.2%	4.2%	3.1%	3.0%	2.5%	3.0%	2.9%		
Of which Manufacturing		% YOY	0.9%							0.6%		
Of which Services		% YOY	4.5%							4.0%		
External sector												
Export of Goods (USD)		% YOY	-5.8%	-5.3%	-8.1%	-0.7%	-4.2%	-2.1%	-1.1%	-2.1%	-0.5%	-2.0%
Import of Goods (USD)		% YOY	-11.0%	-15.3%	-12.6%	-6.7%	-4.1%	2.0%	4.9%	-1.1%	3.0%	
Current account		USD bn	31.6	6.9	10.2	12.7	6.6	4.5	10.5	34.4	23.2	34.8
Key rates												
Headline inflation		% YOY	-0.9%	-1.1%	-0.9%	-0.5%	-0.1%	0.6%	1.6%	0.4%	0.6%	0.6%
Core inflation		% YOY	1.1%	0.9%	0.8%	0.7%	0.8%	0.8%	0.9%	0.8%		0.8%
Policy rate (RP-1D) (end period)		% p.a.	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%		
THB/USD (end period)		THB/USD	36.1	36.4	36.1	35.1	36.0	36.5	37.0	37.0		
Oil prices –Brent (period avg.)		USD/bbl	52.4	50.0	43.4	35	40	42	45	40	As of Mar-16	As of Mar-16

For 16Q1, actuals are reported for Key rates and Oil prices.
Sources: EIC forecasts, Asia Pacific Consensus Forecasts (March 2016), March 2016 Bank of Thailand's Monetary Policy Report, and Foreign research houses.

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Sutapa is Chief Economist and First Executive Vice President at Siam Commercial Bank (SCB), where she leads the Economic Intelligence Center (EIC). She previously served as Head of Credit Risk Analytics Division under Risk Management Group.

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Sutapa holds an undergraduate degree in Applied Mathematics from Harvard University and a doctorate degree in Economics, Management, and Policy from Massachusetts Institute of Technology (MIT). She was a recipient of Thailand's most prestigious King's Scholarship. In 2007, Sutapa was honored by the Asia Society as Asia 21 Young Leaders Fellow, selected among a diverse group of professionals under 40 from the Asia-Pacific region.

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Dr. Phacharaphot joined Siam Commercial Bank in the Credit Risk Analytics Division of the Risk Management Group. Previously, he was Assistant Professor of Economics at San Diego State University, USA and his research was published in the Journal of International Money and Finance. He was also an intern at the Board of Governors of the Federal Reserve System.

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Krasae has experience in the area of macroeconomic analysis and forecast. He specializes in using quantitative models as a tool. He formerly worked as a researcher in the macroeconomic program at the Thailand Development Research Institute (TDRI). After that, he worked for the Fiscal Policy Office (FPO) as an economist. At the FPO, he was responsible for producing quarterly macroeconomic forecasts as well as public policy analyses.

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