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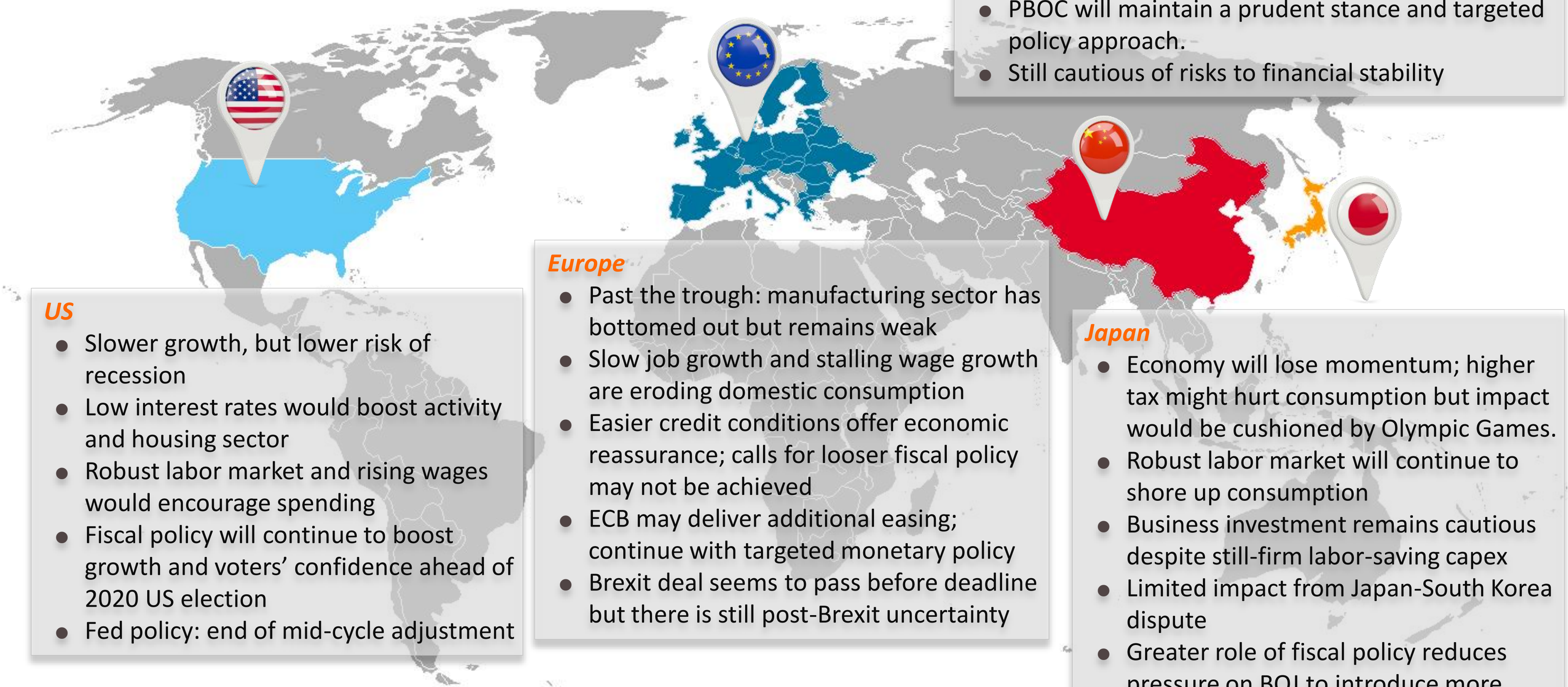
ECONOMIC OUTLOOK 2020

December 2019

Krungsri Research

Global: More stable growth, but still fragile



China

- Economic slowdown is manageable; trade surplus will narrow but domestic demand will rise slightly.
- Fiscal stimulus continues to shore up economy.
- PBOC will maintain a prudent stance and targeted policy approach.
- Still cautious of risks to financial stability

US

- Slower growth, but lower risk of recession
- Low interest rates would boost activity and housing sector
- Robust labor market and rising wages would encourage spending
- Fiscal policy will continue to boost growth and voters' confidence ahead of 2020 US election
- Fed policy: end of mid-cycle adjustment

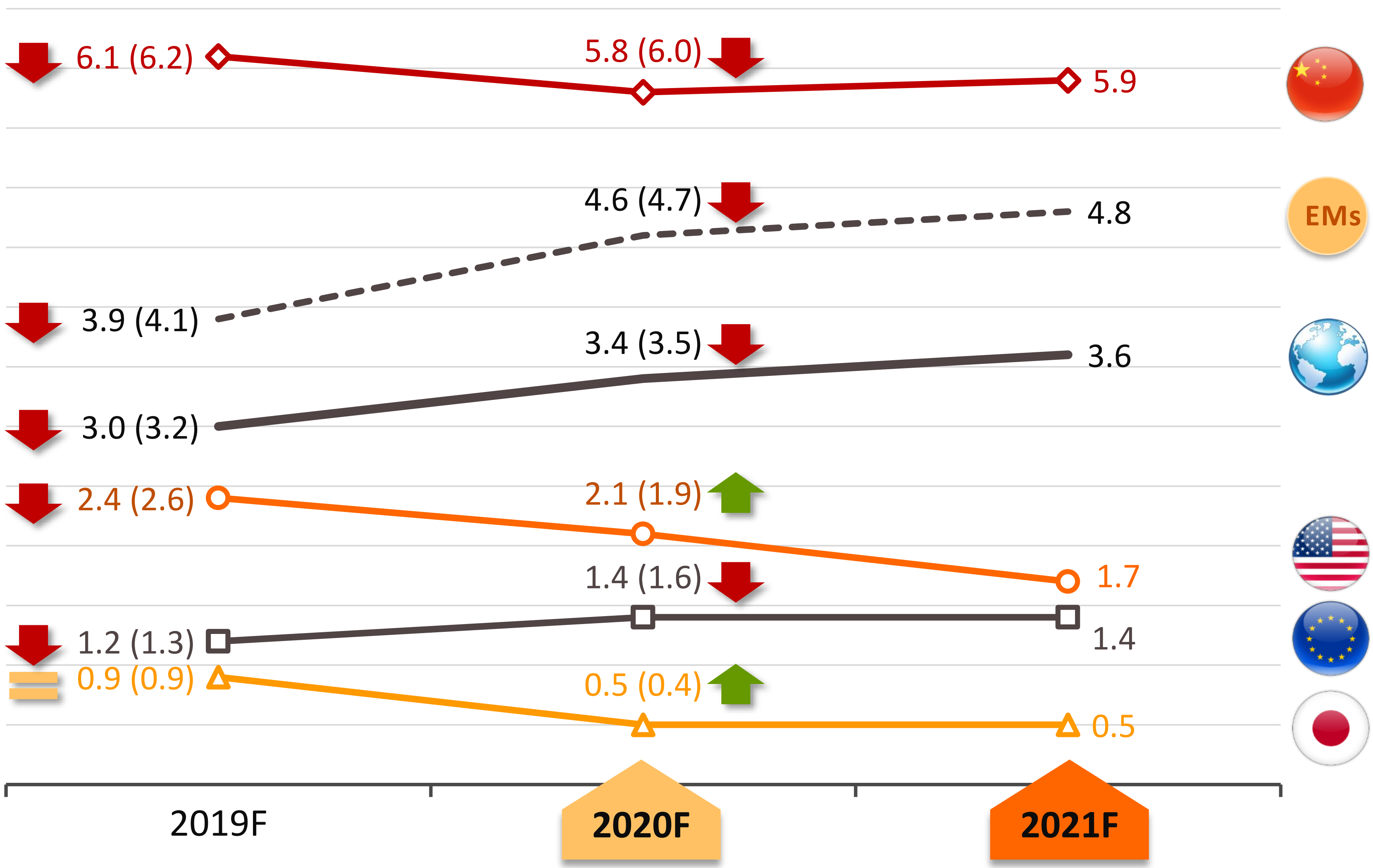
Europe

- Past the trough: manufacturing sector has bottomed out but remains weak
- Slow job growth and stalling wage growth are eroding domestic consumption
- Easier credit conditions offer economic reassurance; calls for looser fiscal policy may not be achieved
- ECB may deliver additional easing; continue with targeted monetary policy
- Brexit deal seems to pass before deadline but there is still post-Brexit uncertainty

Japan

- Economy will lose momentum; higher tax might hurt consumption but impact would be cushioned by Olympic Games.
- Robust labor market will continue to shore up consumption
- Business investment remains cautious despite still-firm labor-saving capex
- Limited impact from Japan-South Korea dispute
- Greater role of fiscal policy reduces pressure on BOJ to introduce more monetary stimulus

Global growth: Modest recovery amid headwinds after posting weakest growth since financial crisis

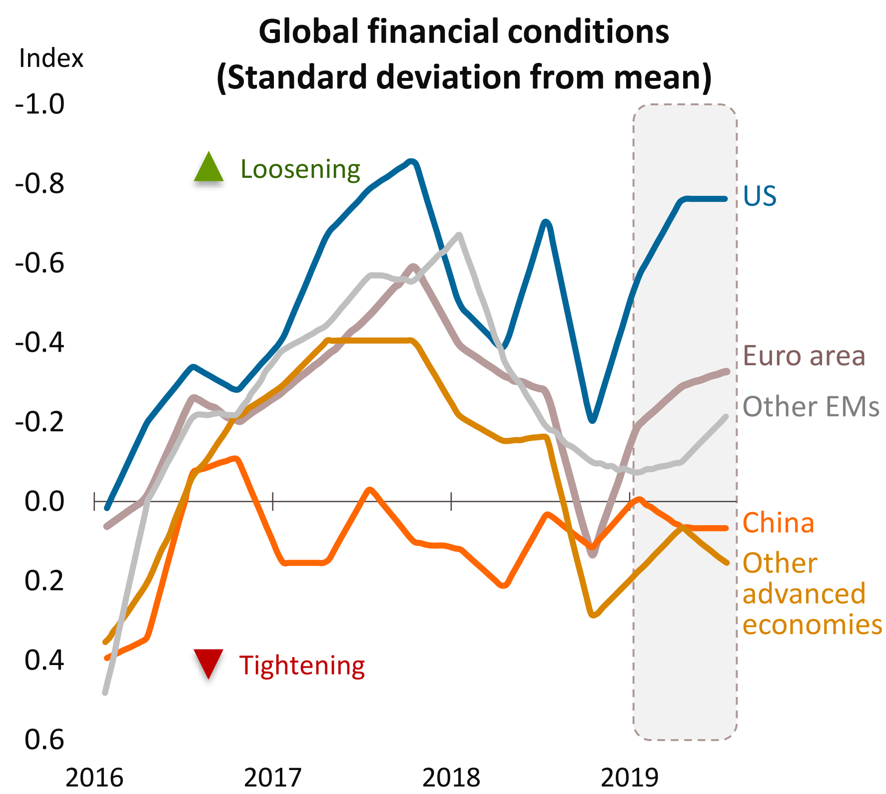


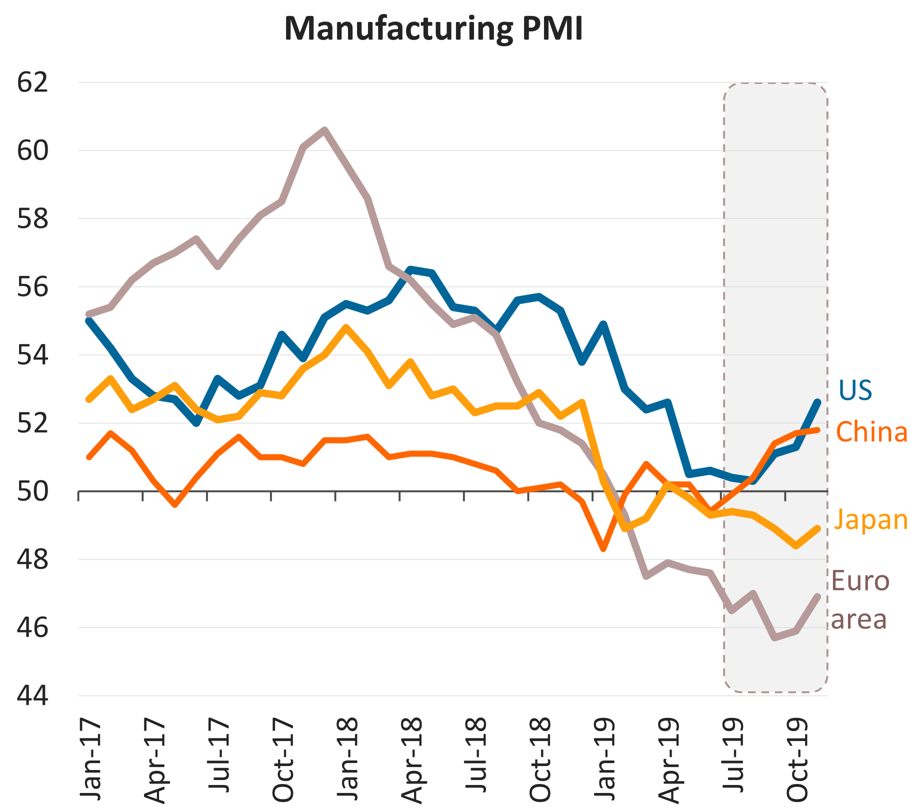
Note: ( ) July 2019 forecast Unit: %

Source: IMF World Economic Outlook (October 2019), Krungsri Research

Easing financial conditions will limit downside risks; global manufacturing is recovering

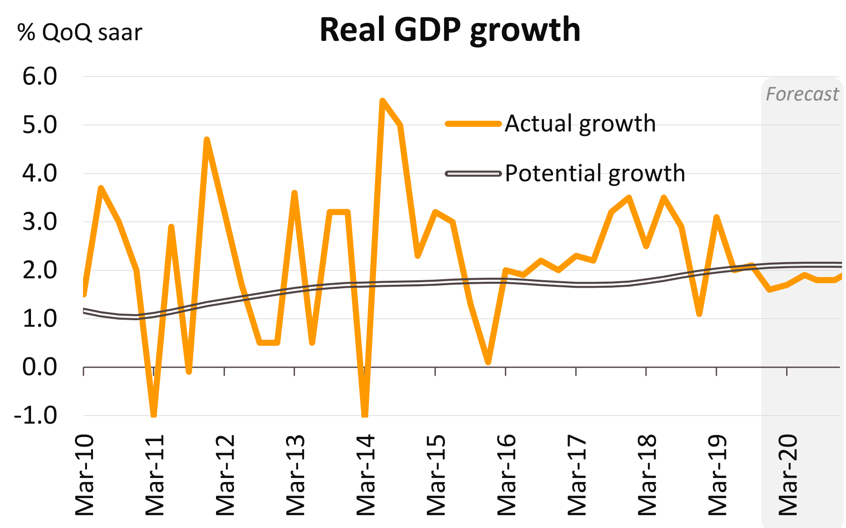
Falling interest rates have helped to ease financial conditions in advanced economies since mid-2019, according to the IMF. In the US, financial conditions remain more accommodative than before. Conditions are marginally tighter in China but have generally eased in major emerging markets (excluding China). Easing financial conditions will limit near-term downside risks. Against the backdrop of more relaxed monetary policies worldwide and easing trade tensions, cyclical headwinds are easing and there are signs of a recovery in the manufacturing sector.

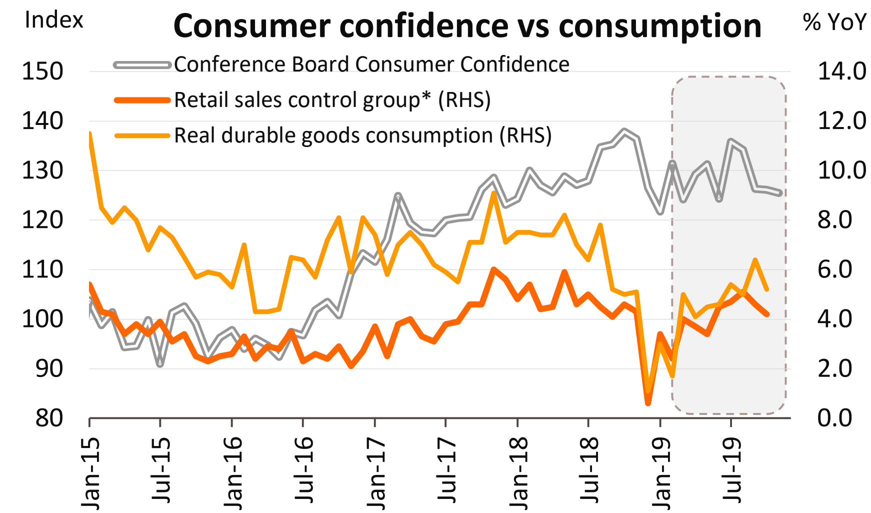




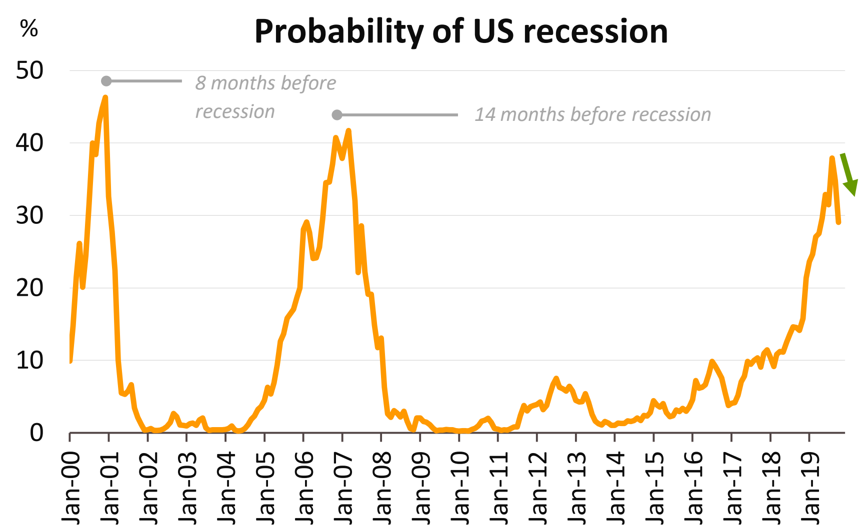
Source: IMF, Bloomberg, Markit, Krungsri Research

US: Slower growth, but lower risk of recession and consumption is recovering





* Retail sales control group (excluding automobiles, gasoline, building materials and food services) represents the total industry sales that are used to prepare the estimates of PCE for most goods.

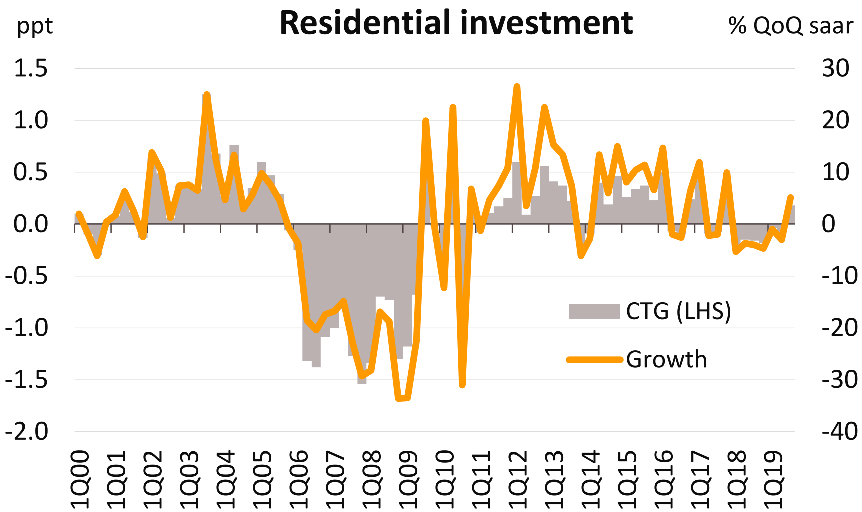


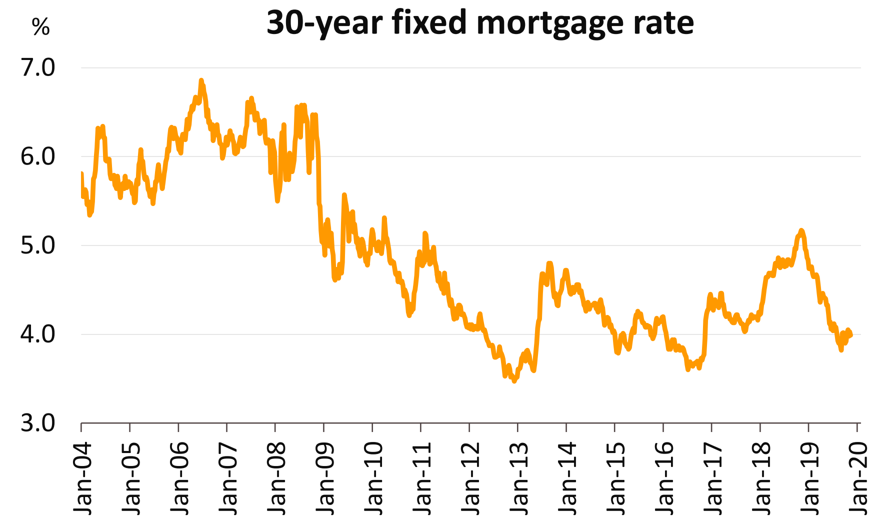
Source: Federal Reserve Bank of New York, Bloomberg, Krungsri Research

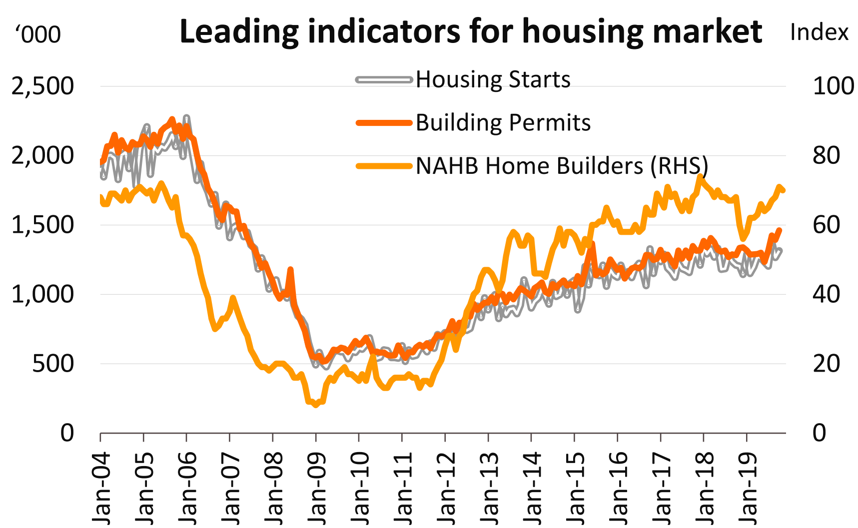
Krungsri Research's view

- The US economy is projected to moderate in 2020 and converge towards its 2% long-term growth potential. Looser financial conditions after relaxing monetary policy in 2019 would support growth and reduce risk of an economic recession. The probability of a recession has dropped to 29% in October from a peak of 37.9% in August.
- Consumption has recovered markedly. Retail sales in the control group rose 4.2% YoY in October (vs +0.9% in December 2018). Consumer confidence remained stronger than before. Looking ahead, private consumption – which accounts for up to 70% of US GDP - would continue to drive the economy, supported by a strong labor market and rising wages. The low-interest rate environment would also support the continued recovery of rate-sensitive sectors like housing and durables consumption.

Recovering housing market is a tailwind as low interest rates would boost activity and home builders' sentiment







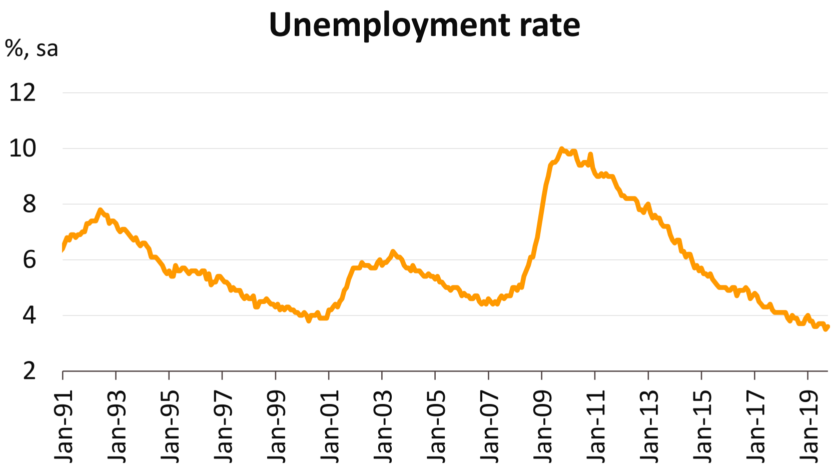
Krungsri Research's View

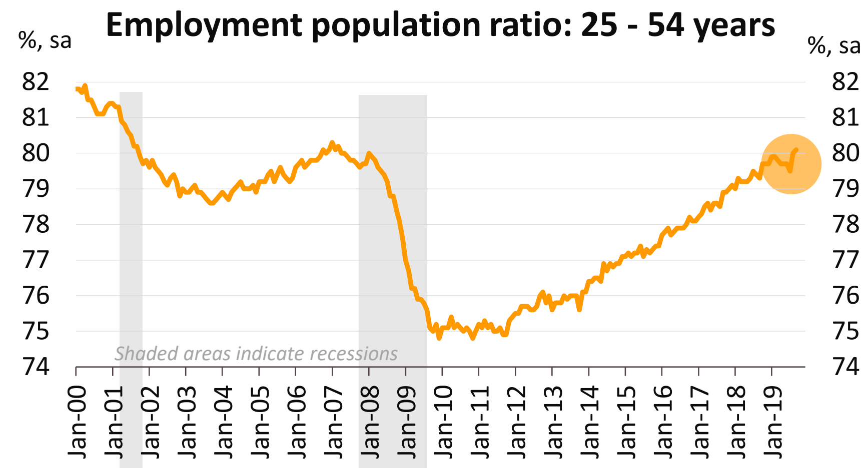
- Residential investment growth turned positive for the first time in six quarters, surging +5.1% in 3Q19. Mortgage rates have dropped below 4% (compared to post-2011 high of above 5% in late 2018), and triggered a recovery in the housing market.
- The low interest rates and leading indicators also suggest the the housing market should continue to recover in 2020. Housing starts continued to increase and building permits for home construction have risen to a 12-year high. Home builders sentiment remains close to the highest since February 2018.

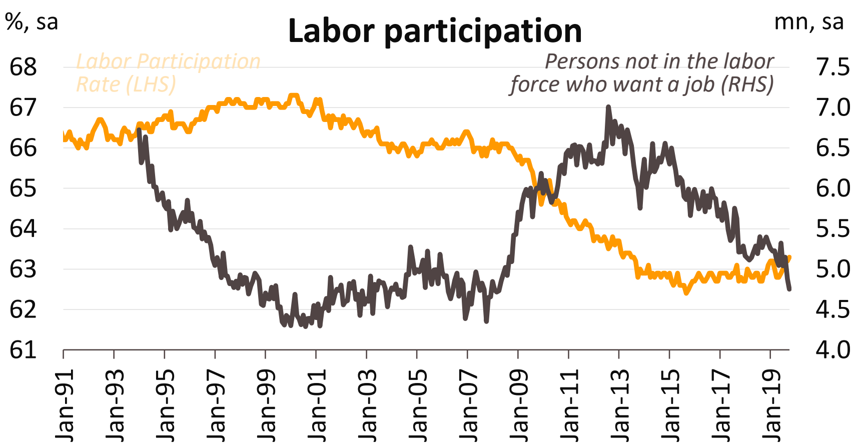
Source: Mortgage Bankers Association (MBA), National Association of Home Builders (NAHB), Bloomberg, Krungsri Research

Robust labor market and rising wages would encourage spending; room for labor market to strengthen further

Unemployment rate remains near a 50-year low and there is still room for the labor market to strengthen. The broader prime-age employment to population ratio suggests labor market conditions are not as tight as in the past decade. Labor participation rate remains low and there is no sign it will return to pre-crisis levels within the next few years. In addition, wage growth has accelerated gradually in recent years to close to 3%. The robust labor market coupled with rising wages will continue to encourage private consumption and drive overall growth.



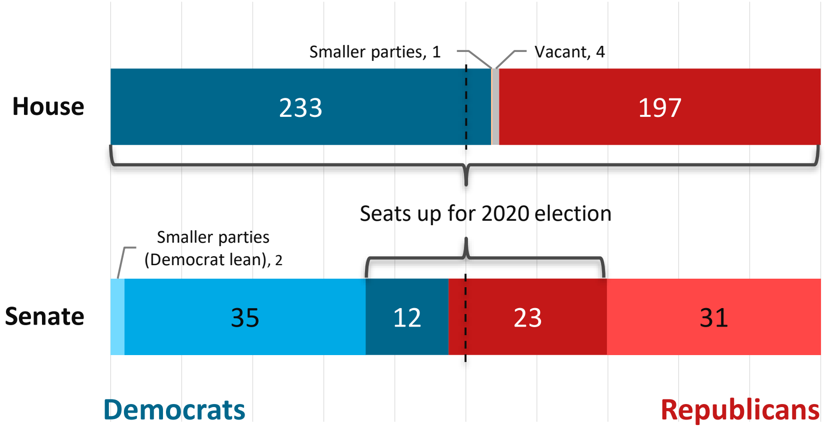




Source: Bureau of Labor Statistics (BLS), Bloomberg, Krungsri Research

Fiscal policy will continue to boost growth and voters' confidence ahead of 2020 US election

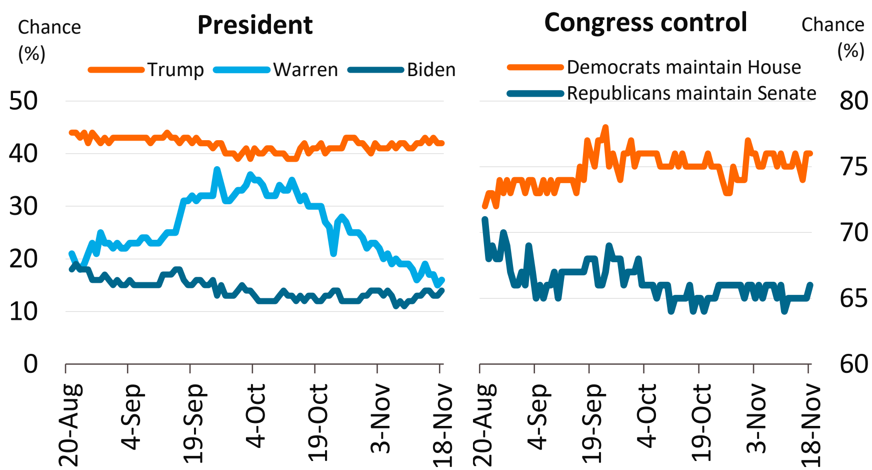
Congress seats up for election



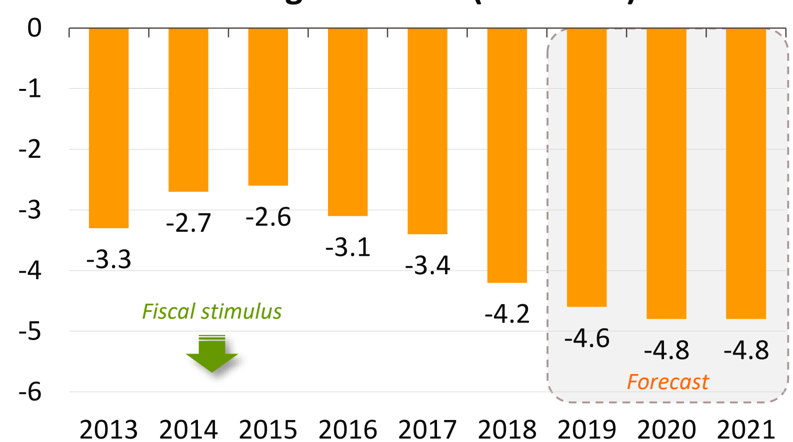
Krungsri Research's view

- The 2020 US election could prompt the government to push economic policies to play a greater role than monetary policy, as fiscal policy would not only boost overall economic growth but could raise voters' confidence. Key policies may cover tax relief and social security.
- Fiscal stimulus would be more crucial in the period of (i) a narrowly divided Senate; currently, it is controlled by Republicans with a slim 3 seat majority; and (ii) polls show a decline in the probability of a Republican majority in the Senate following the 2020 election. If the government's policy fails to boost voters' confidence, there could be a united Democratic government after the election. This could happen even if Trump gets voted into a second term.
- The budget deficit is expected to remain large in 2020 at 4.8% of GDP, close to the 8-year high in 2019.

Market prediction on 2020 general election*

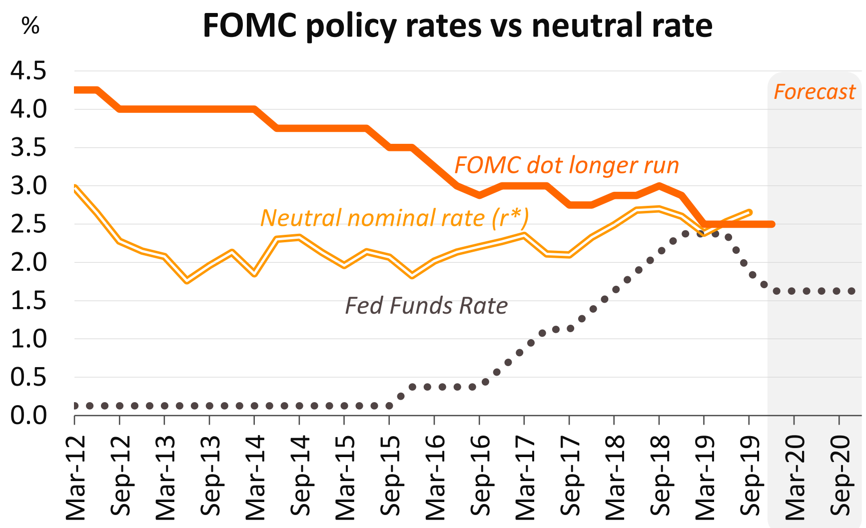


Budget balance (% of GDP)



Note: *The probability is implied by betting market in Predictit.org which is run by Victoria University of Wellington, New Zealand, a not-for-profit university, for educational purposes.
Source: US Congress, Predictit, IMF, Krungsri Research

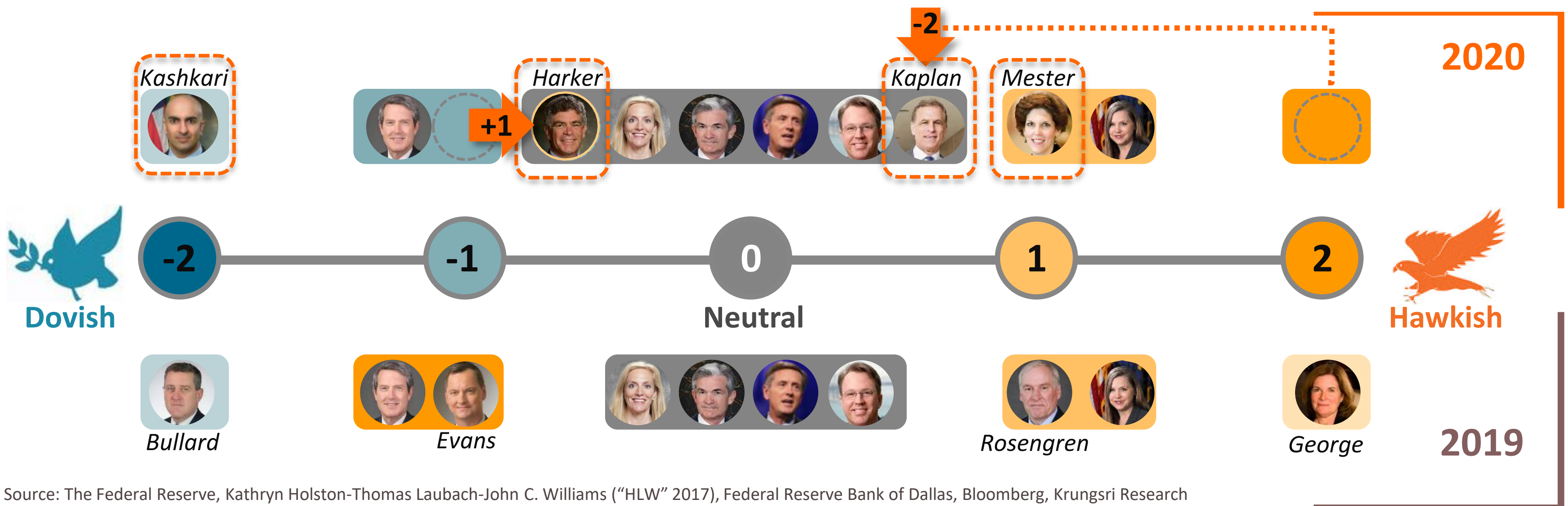
Fed policy: End of mid-cycle adjustment



Note: Nominal rate (r*) = The HLW real rate inflated by the Dallas Fed's trimmed-mean PCE inflation

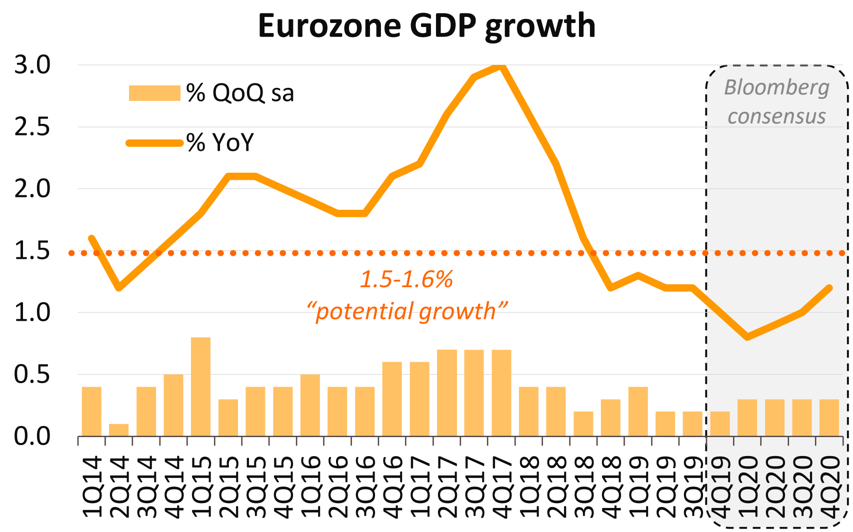
Krungsri Research's view

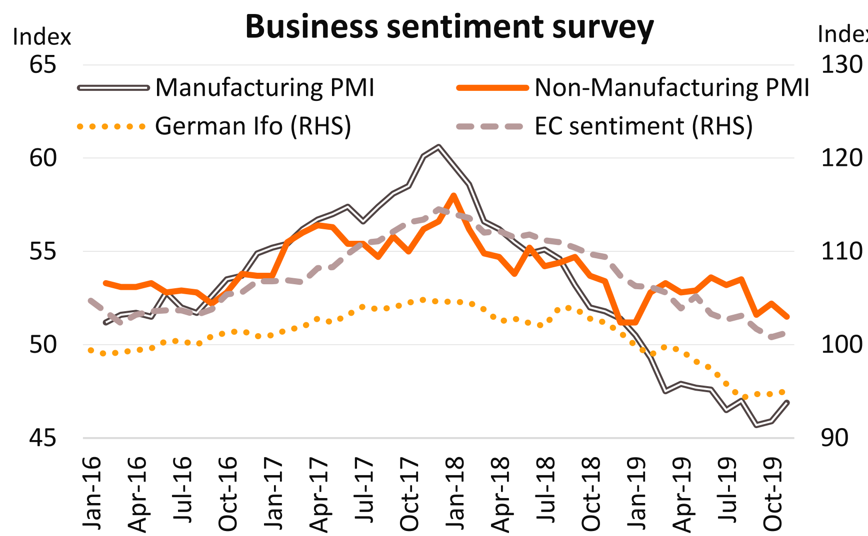
- After delivering three rate cuts from July-October, we expect the Fed to end the mid-cycle adjustment. Several factors suggest there is no need for more supportive monetary policy in 2020: (i) The US economy is showing signs of a continued recovery with a robust labor market and rising consumer spending. Rising wages would also lift inflation to near the Fed's target; (ii) The effects of the recent rate cuts will continue to be felt in 2020; and (iii) Fiscal policy will play an important role in driving growth and improve voters' sentiment ahead of the election in late 2020.
- The Fed funds rate has been reduced to below the long-run neutral rate but interest rate hikes are unlikely as FOMC members would be slightly more dovish in 2020, and reinforce their views to provide insurance against ongoing risks.

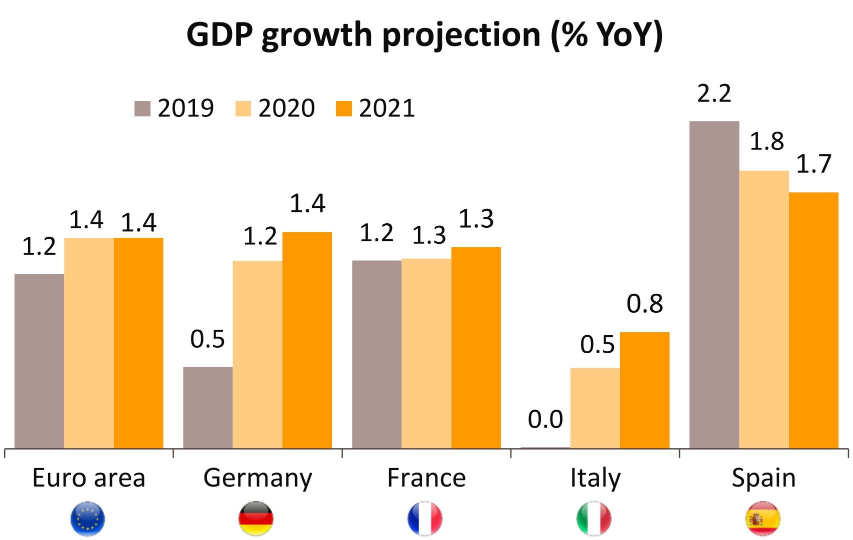


Source: The Federal Reserve, Kathryn Holston-Thomas Laubach-John C. Williams ("HLW" 2017), Federal Reserve Bank of Dallas, Bloomberg, Krungsri Research

Europe: Past the trough; manufacturing sector has bottomed out but remains weak







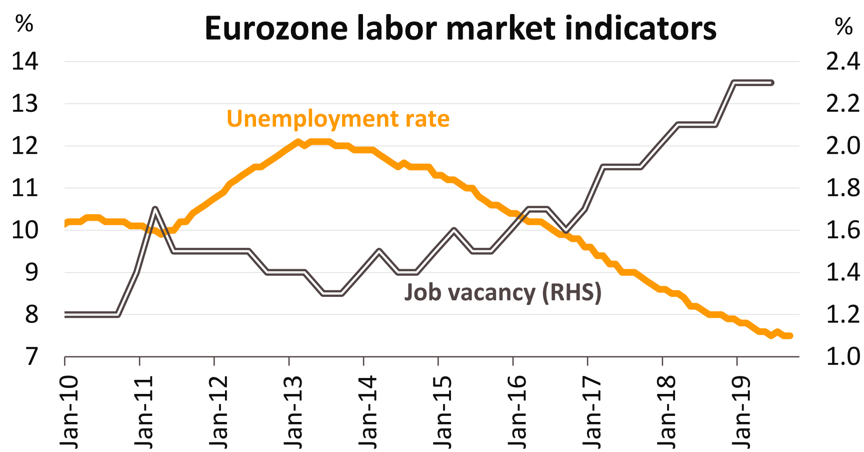
Source: Eurostat, IMF, Bloomberg, Krungsri Research

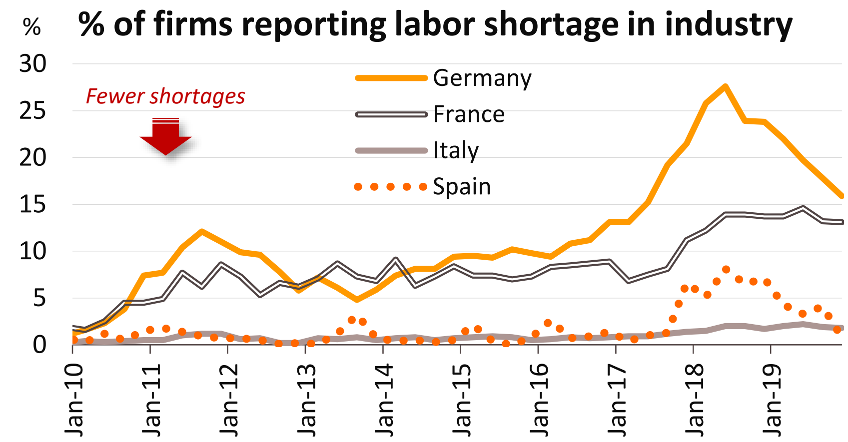
Krungsri Research's View

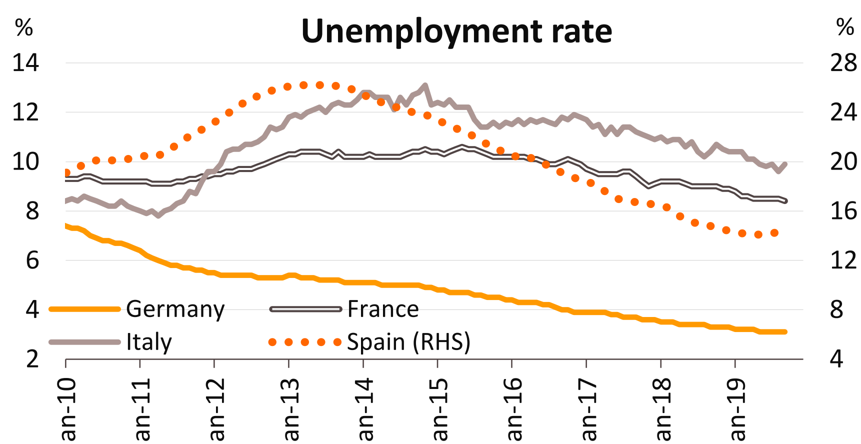
- Eurozone economy has escaped a recession but would still see sluggish growth (IMF sees +1.4% in 2020 vs +1.2% in 2019).
- The modest recovery in global growth would not benefit Eurozone immediately. Despite signs of a mild rebound, the Manufacturing PMI in Eurozone has stayed in contraction zone (below-50). Sentiment remained at close to multi-year low. The sluggish manufacturing sector has already undermined job and wage growth which could in turn pull back the pace of recovery.
- Germany's growth is expected to pick up in 2020, partly because the slump in its automobile sector might have bottomed out. Germany's new car sales rose 12% YoY in October. However, the rebound might be temporary because it came from a low base in October 2018 following a change in emissions rules.

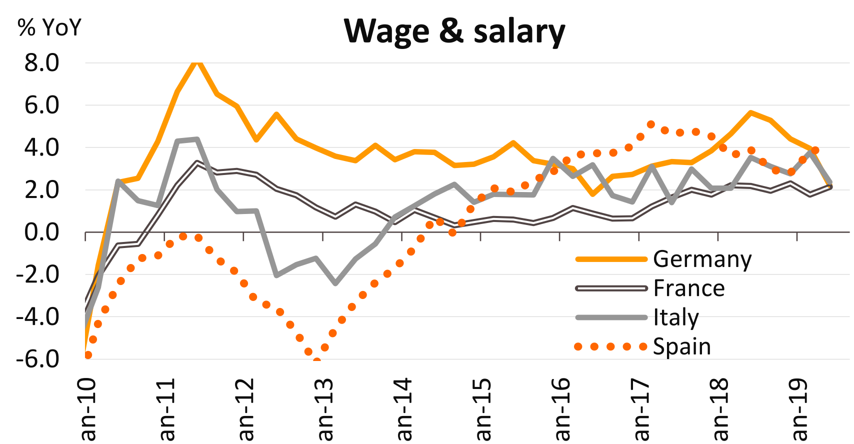
Slow job growth and stalling wage growth are eroding resilient domestic consumption

Although Eurozone's employment rate is at its highest since the survey began in 2004, the unemployment rate has hovered at 7.5-7.6% for more than six months (after falling for several years). This has raised doubts unemployment would continue to drop. In addition, surveys of firms' hiring intentions point to employment growth losing momentum in the periods ahead. The share of firms reporting labor shortage continued to fall in all core countries, most sharply in Germany. Given this, wage growth is likely to have peaked and could start to erode resilient domestic consumption.



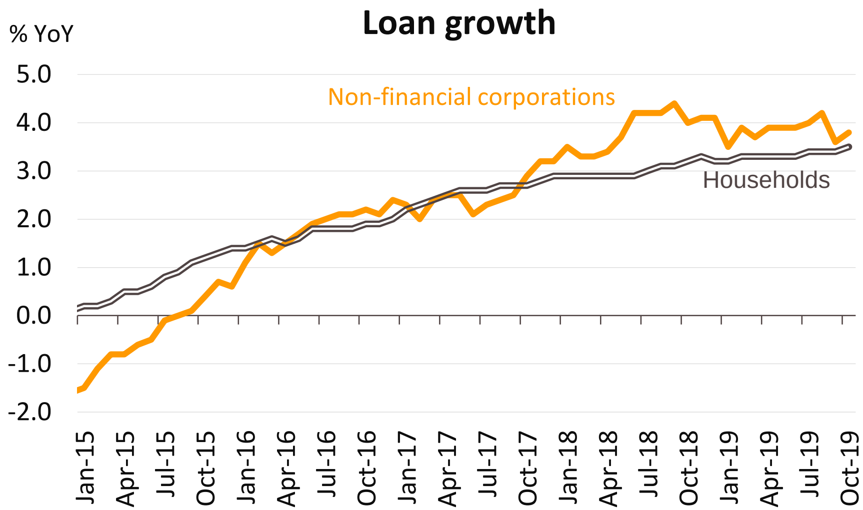


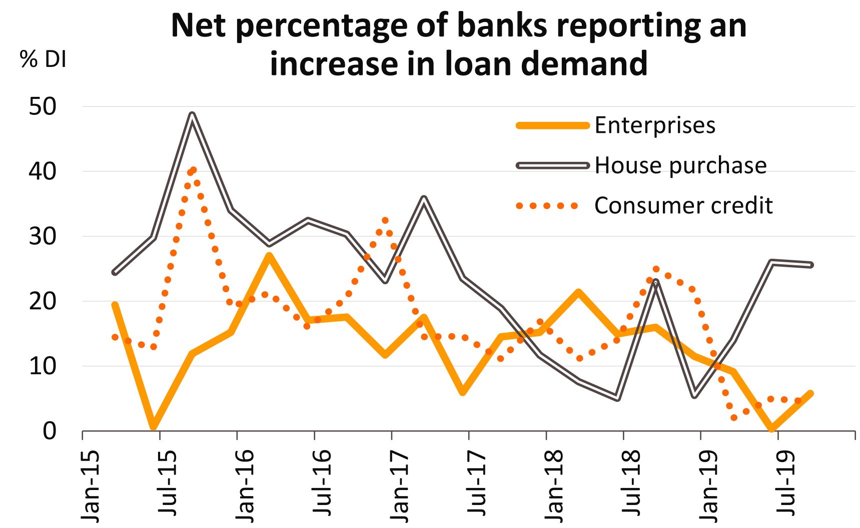


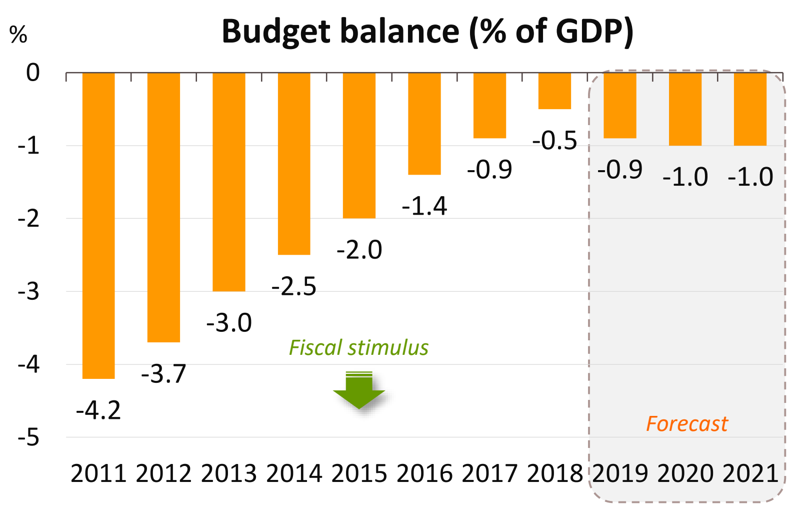


Source: Eurostat, European Commission (EC), Bloomberg, Krungsri Research

Easier credit conditions offer reassurance for the economy; calls for looser fiscal policy may not be achieved





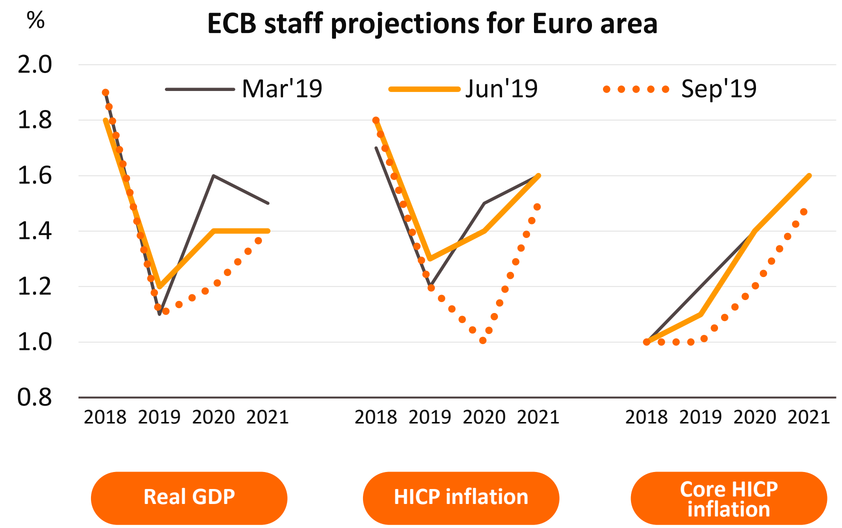


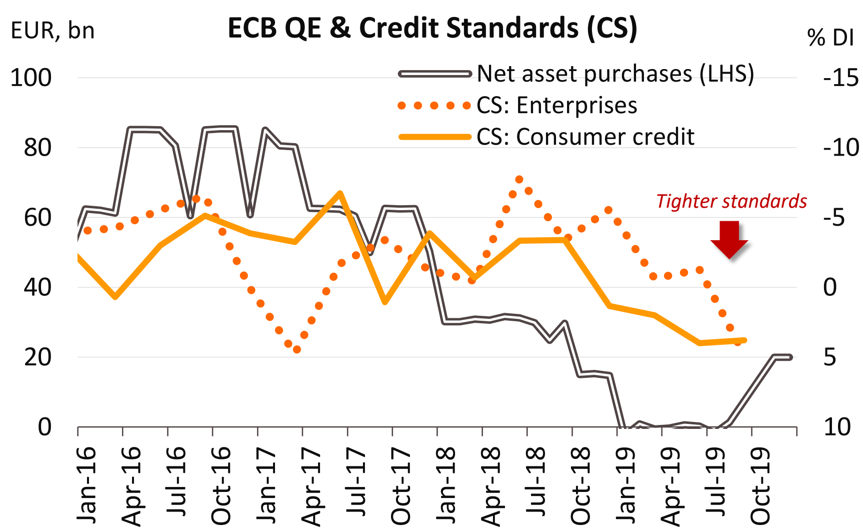
Source: IMF, European Central Bank (ECB), Bloomberg, Krungsri Research

Krungsri Research's view

- The ECB's comprehensive easing package in September would continue to support bank lending and rein in downside risk. Growth in lending to households has picked up to its cyclical high of 3.5% in October. Lending to firms also grew moderately. The net percentage of banks reporting an increase in demand for business loans picked up in September.
- Christine Lagarde said in her first speech as ECB President that *"it is clear that monetary policy could achieve its goal faster and with fewer side effects if other policies were supporting growth alongside it. One key element here is euro area fiscal policy."* Despite calls for more fiscal stimulus, there is limited room to widen the budget deficit further, and it is expected to be modest at 1% of GDP (much smaller than after the sovereign debt crisis in 2011).

ECB may deliver additional easing; effectiveness of targeted monetary policy will continue to improve





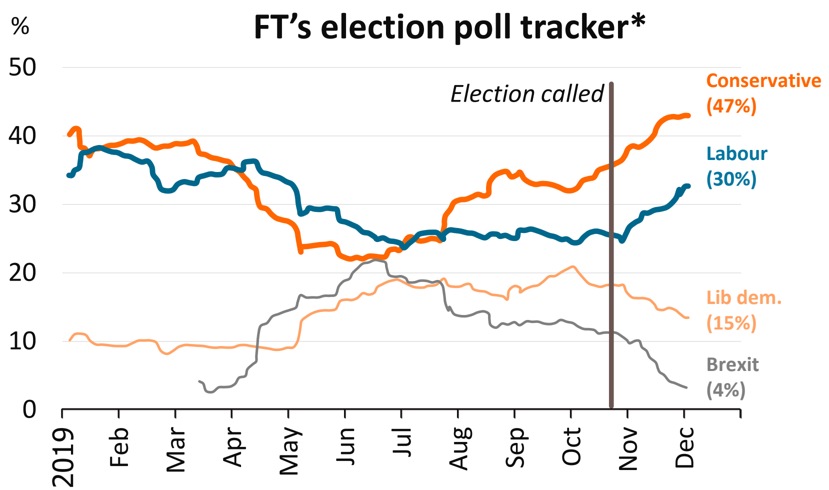
Source: ECB, Capital Economics, Bloomberg, Krungsri Research

Krungsri Research's view

- Following the comprehensive easing package in September with a 10bps rate cut, open-ended QE, more favourable TLTRO-III conditions, and stronger forward guidance, the ECB is expected to continue to relax monetary policy in 2020 as recent actions might be insufficient to revive growth. Overall growth remained low despite signs of a slight rebound. Weak global demand has spread to the domestic economy and employment. Stalling wages imply still-low inflation, allowing for more policy easing.
- In addition, tightening credit standards could exacerbate an economic slowdown. There is unlikely to be large fiscal impulse given concerns over high debt levels and fiscal discipline. The ECB would continue to implement a targeted monetary policy such as TLTRO, to increase the effectiveness of its actions. We still expect a 10bp cut in 1Q20, and QE running into 2H21. This could encourage bank lending.

Topics	ECB's action in September 2019
Policy rate	Cut deposit rate by 10bps to -0.50%.
Open-ended QE	Restarting net asset purchases at €20bn per month in November.
Tiered system	Introduced a two-tiered reserve system, with one tier charged at 0%, the other at the prevailing Deposit Facility Rate (DFR). This is estimated to reduce annual cost of negative rates by c.EUR1.5bn.
TLTRO-III	Improved terms for TLTROs, increase maturity from two to three years, and reduce minimum interest rate slightly to match deposit rate.
Forward guidance	Expects (i) policy rates to remain at present or lower levels *"until it has seen the inflation outlook robustly converge to a level sufficiently close to, but below, 2%"*; and (ii) asset purchases to end only *"shortly before it starts raising the key ECB interest rates"*.

Might push though *Brexit deal* before deadline, but there is also post-Brexit uncertainty



Topic	Johnson's Brexit deal
North Ireland (NI) customs/tariffs	• All UK (including NI) in own customs jurisdiction
Great Britain (GB) customs/tariffs	• UK in own customs jurisdiction
Agriculture and manufactured goods	• NI follows EU • UK flexibility
Labor/environmental standards	• UK gets more flexibility
Implications for third country free trade agreements	• UK gets more flexibility
Likely EU-UK free trade agreement	• Goods only ('Canada minus') • Minimal coverage of services • Significant non-tariff barriers
Irish border	• Checks away from the border

Possible scenario after the election

Scenario	Chance	Expected result
Conservative majority government	Likely	Pass Brexit deal but uncertain whether UK will sign FTA deal with EU by end-2020
Conservative minority government	Less Likely	Brexit gridlock remains
Labour majority government	Unlikely	Second referendum
Labour minority government	Unlikely	Brexit gridlock or second referendum

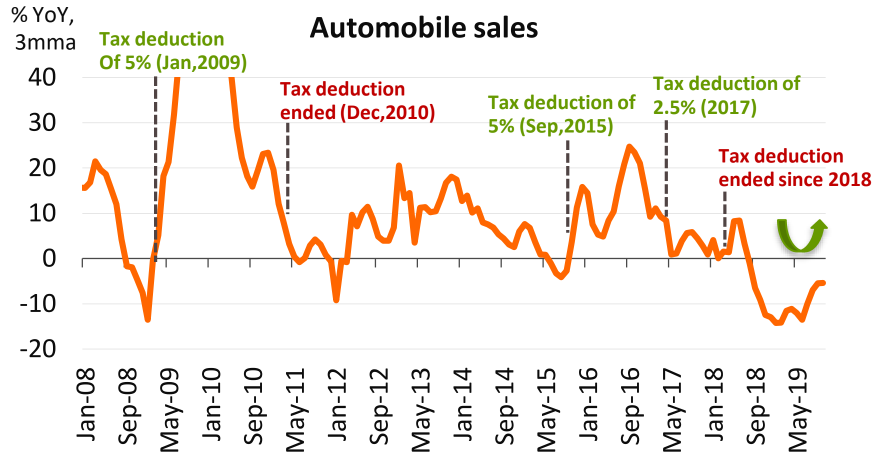
Note: *FT's UK polls tracker currently included YouGov, ICM, Kantar, Survation, Deltapoll, Opinium, BMG, Panelbase, ComRes and Ipsos Mori.
Source: Economic and Social Research Council, Financial Times, Bloomberg, BBC, Krungsri Research

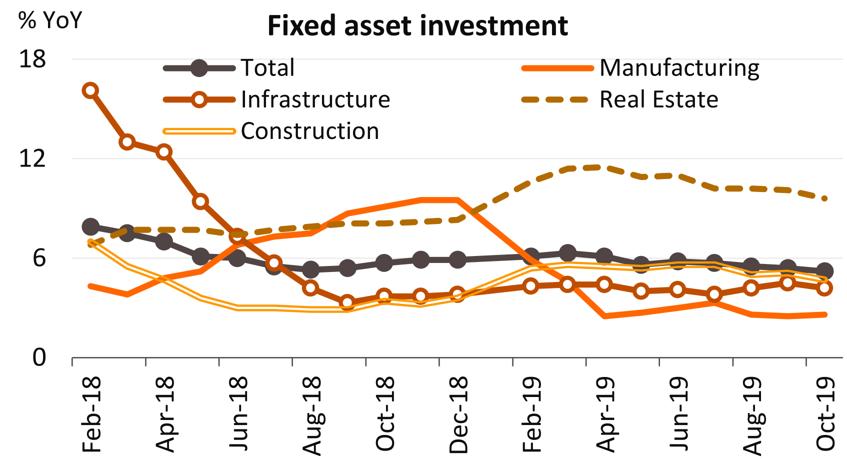
Krungsri Research's view

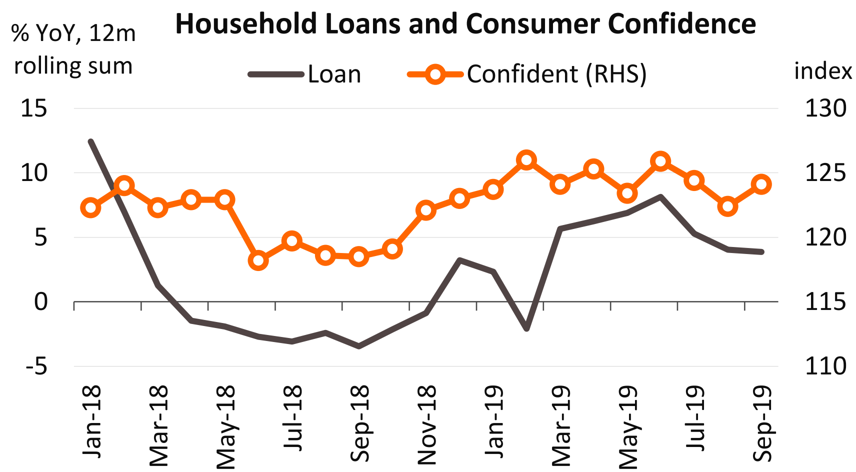
- The Conservative party is expected to form the majority government. This could resolve the gridlock and push the Brexit deal through parliament before the 31 January, 2020 deadline. However, there could be a new cliff edge ahead.
- Most polls reveal the Conservative party would win close to half the seats, and fill the gap with other parties to form the majority government. That means Boris Johnson would be re-elected as prime minister of UK and continue with his Brexit deal before the deadline. He has pledged post-Brexit policies such as tax cuts, spending on the National Health Service program, and large investment in infrastructure projects.
- Although the stimulus package would support growth and Brexit could happen on time, there will be only 11 months transition period. And unless the UK concludes an FTA deal with the EU by end-2020, the UK will face a situation similar to a no-deal Brexit. No country has concluded an FTA deal with the EU within one year (Japan and Canada took about 5 years).

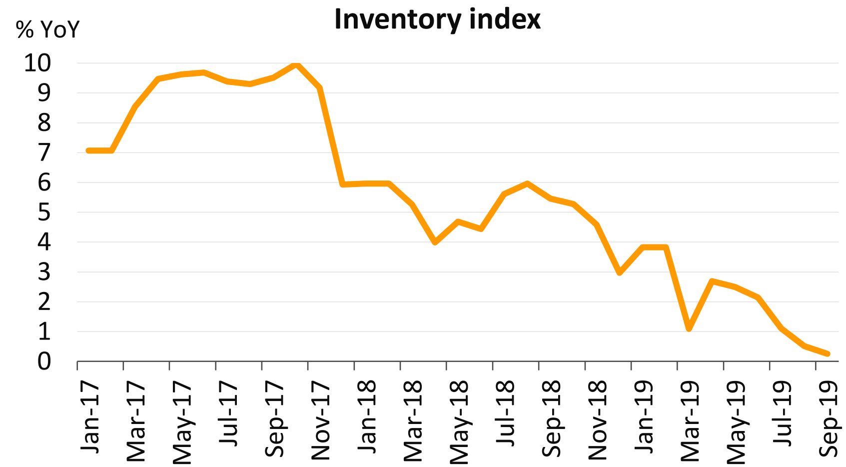
China: Slow economy is manageable; trade surplus will narrow but domestic demand will improve slightly

China's economic growth is expected to slow down to 5.8% in 2020 from 6.1% in 2019. Exports should improve with a gradual recovery in global growth, but higher imports following recovering domestic demand could narrow net export surplus. Consumption could pick up as headwinds are fading. Automobile sales have bottomed out, suggesting a waning of payback effect from the earlier tax cut. Consumer confidence improved because of looser monetary and fiscal policies as well as progress in China-US trade talks. Household loan growth has started to stabilize, an early sign of higher durable goods spending. Meanwhile, fixed asset investment would be led by improving manufacturing investment, infrastructure projects and possibly restocking of inventory (after destocking for years), but growth would be curbed by a slowdown in the real estate sector.







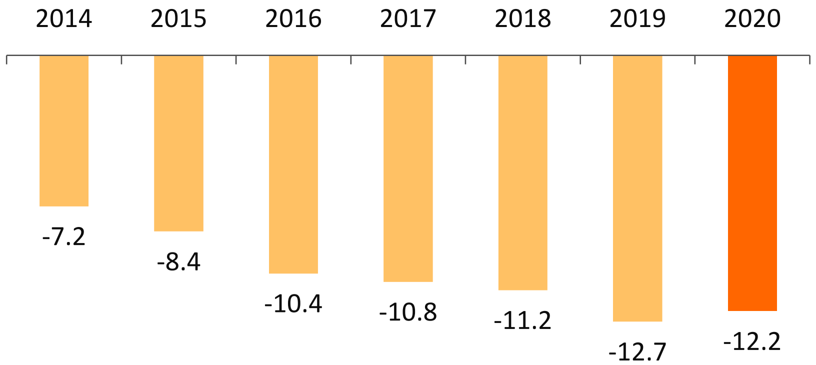


Source: National Bureau of Statistics, People's Bank of China (PBOC), China Association of Automobile Manufacturers, Bloomberg, Krungsri Research

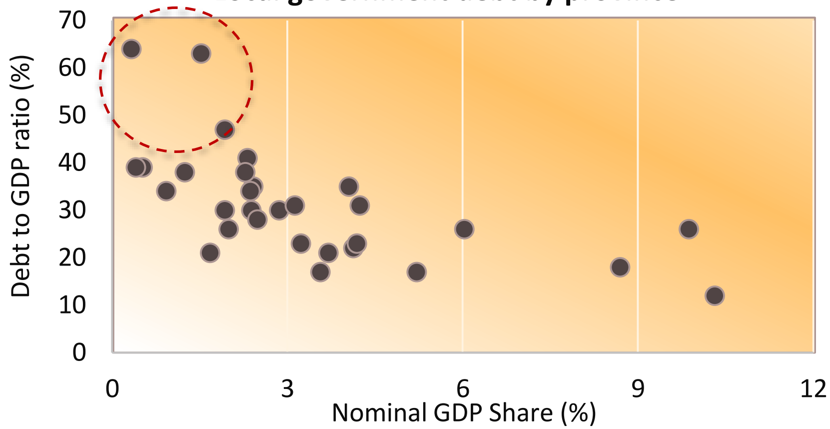
Fiscal stimulus continues to shore up economy, but lower government revenue could limit its effectiveness

According to IMF forecasts, augmented deficit (including off-budget investment spending) would stabilize at 12% of GDP due to the government's plan to continue with tax cuts and infrastructure spending. We believe the government will continue to ease fiscal policy to stimulate domestic demand amid lingering trade uncertainties. By area, local governments in most provinces registered low debt-to-GDP ratios, while provinces that registered high ratios are a small slice of the economy (less than 3% of GDP). However, effectiveness of policies would be moderate. Like 2019, despite a large issuance of special bonds and number of approved infrastructure projects, infrastructure investment growth only inched up to 4.2% in 2019 from 3.7% in 4Q18. This could be due to lower revenue of local governments following tax cuts and fee reductions, which could limit investment growth. Meanwhile, weak corporate profits could continue to depress the outlook for investment under public-private partnership (PPP) projects.

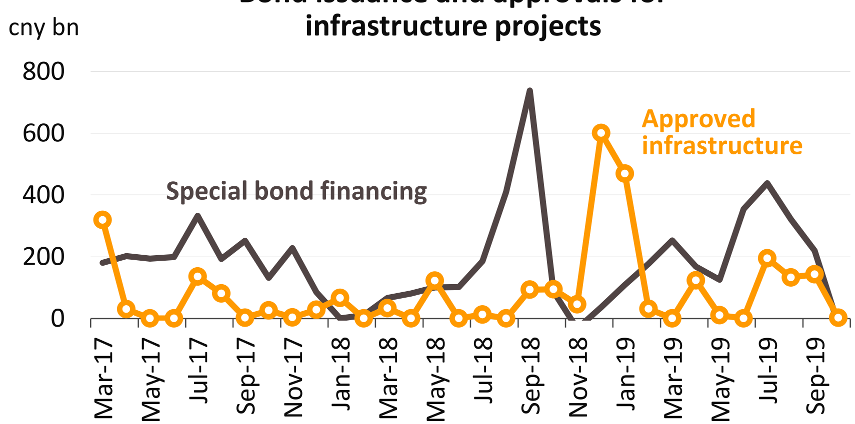
Augmented budget deficit forecast by IMF (% of GDP)



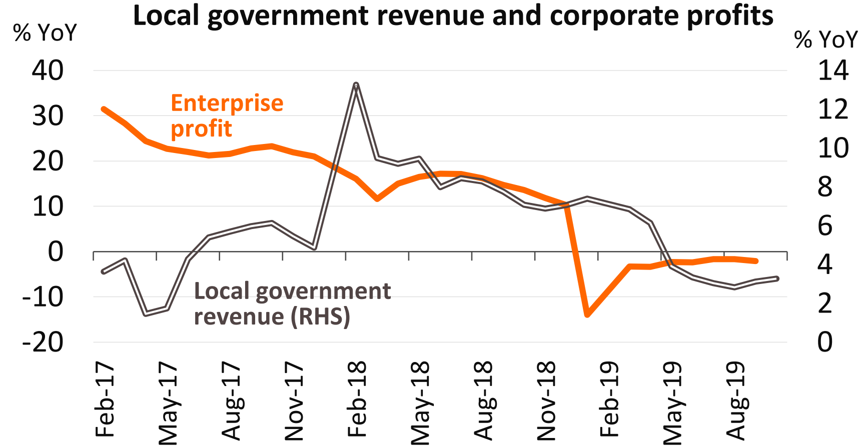
Local government debt by province



Bond issuance and approvals for infrastructure projects



Local government revenue and corporate profits



Source: IMF, National Bureau of Statistics, Bloomberg, Krungsri Research

Fiscal stimulus shift towards private sector participation and structural infrastructure

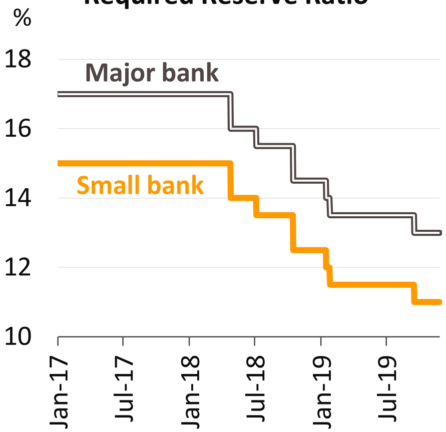
Policy	Details	Implication
Tax and fees	• **More cuts in corporate income tax and fees for manufacturing sector, and moderate measures for construction and transportation.** Beijing had cut its estimate for 2019 revenue growth to 4%, from 6.5% actual growth recorded last year. • **Extension of 50:50 spilt (vs 75:25 in 2016) of value-added tax revenue between central and local governments** to shift larger share of revenue to the latter.	Central government wants to help local governments to implement policy to cut taxes and fees, and ease fiscal issues
Infrastructure fund	• **To ensure projects are funded up to early 2020, Finance Ministry supports the early disbursement of spending budgets,** such as to Guangdong. The rest will be released from Jan 1, 2020. • **The minimum capital investment ratio for ports and shipping infrastructure projects will be reduced to 20% from 25%.** That for highways, railways, environmental protection and social services infrastructure projects would be decided on a case-to-case basis, with the reduction capped at 5%. • **Government-backed infrastructure projects will now be able to raise up to 50 per cent of registered capital for a project through debt and equity**. In the past, initial capital had to come from a government fund, state-owned enterprise or, more recently, proceeds from special purpose bonds.	Government wants to turn on the fiscal tap by easing funding constraints and encourage the private sector to invest in government projects rather than depend on central government funds or SOEs
Infrastructure	• Chengdu Tianfu International Airport is expected to start operations in 2021. The airport will have capacity to process 40 million passengers per year. • Pilot area is being renovated to reduce logistics costs and improve the efficiency of transportation in main provinces such as Shanxi, Jiangsu and Chongqing • Government has advanced spending for border areas amounting to 1.8 billion yuan	Government want to invest on structural infrastructure rather than property market. The new airport tend to boost the tourism.
Improving environment for foreign investment	• **Policy makers will implement new regulations from Jan 2020 to improve the business environment to attract foreign investors**. For example, foreign investment enterprises that do not engage in investment activities are allowed to make domestic equity investment with capital funds if they do not violate the current special administrative measures for foreign investment access, and small- and micro- cross-border e-commerce enterprises that handle collections or payments of foreign exchange for trading in goods up to US$200,000 per year (accumulated) are exempt from registering on the "list of enterprises engaged in foreign exchange trade receipt and expenditure	Higher foreign investment would help China in trade negotiations and mitigate the impact of trade tensions.

Source: Bloomberg, Krungsri Research

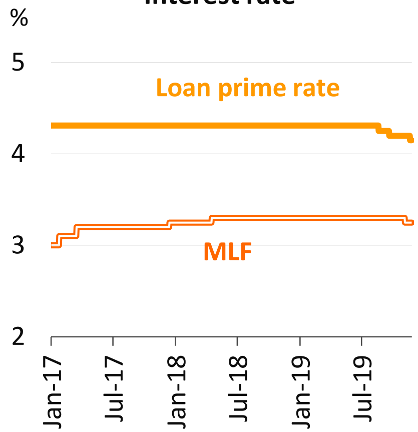
PBOC will maintain prudent stance and targeted policy approach, implying limited support for overall growth

China's central bank (PBOC) is expected to ease monetary policy by cutting RRR and loan prime rate to inject liquidity into targeted groups, especially small banks and enterprises. Although the targeted policy has reduced interbank rate (from 3.4% in 2Q18 to 2.4% in 4Q19), transmission to households and enterprises seem to be moderate, with lending rates falling by less than 0.20% from 2018. Moreover, loan growth has decelerated especially for small banks (-0.4% in 3Q19 vs +33% in 4Q18). Looking at borrowers, small enterprises usually face greater financial constraints than large and medium enterprises. Loan demand from small & micro enterprises has accelerated, compared to steady demand from other groups. This suggests a need for targeted monetary easing to help selected sectors/groups and to increase policy effectiveness.

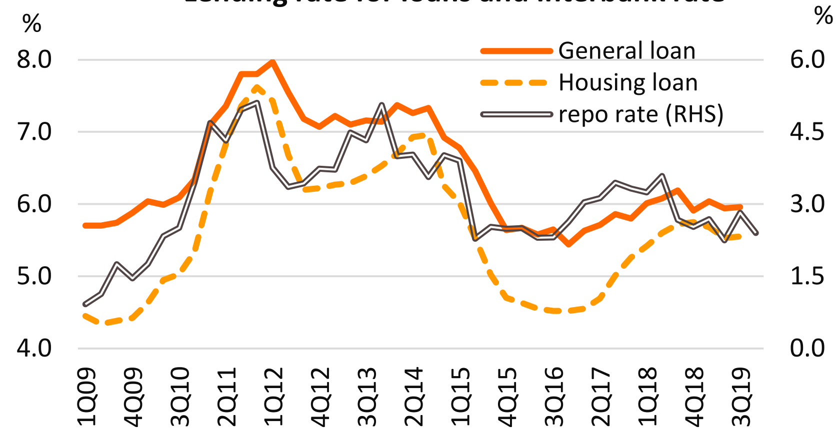
Required Reserve Ratio



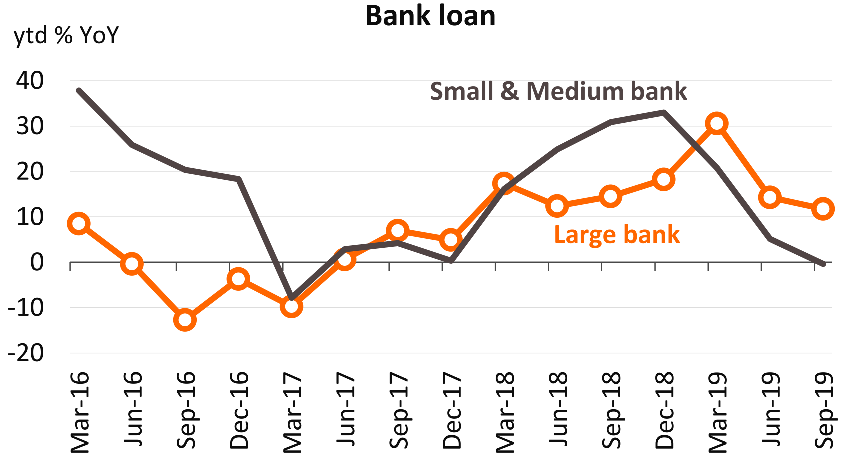
Interest rate



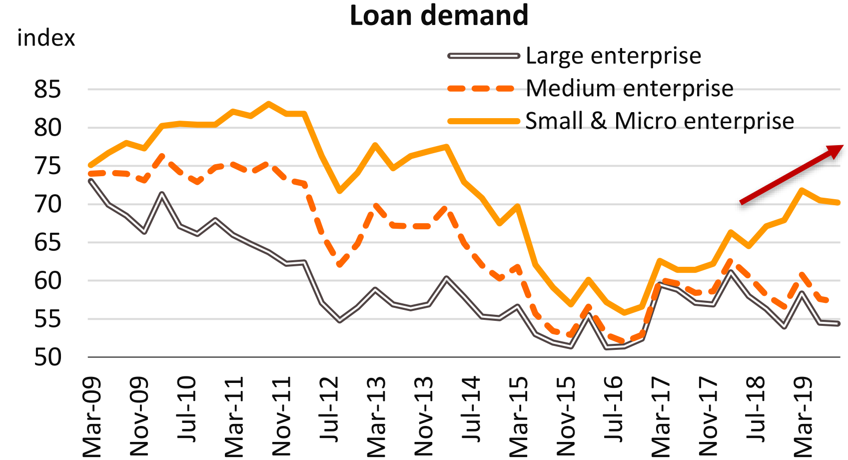
Lending rate for loans and interbank rate



Bank loan



Loan demand

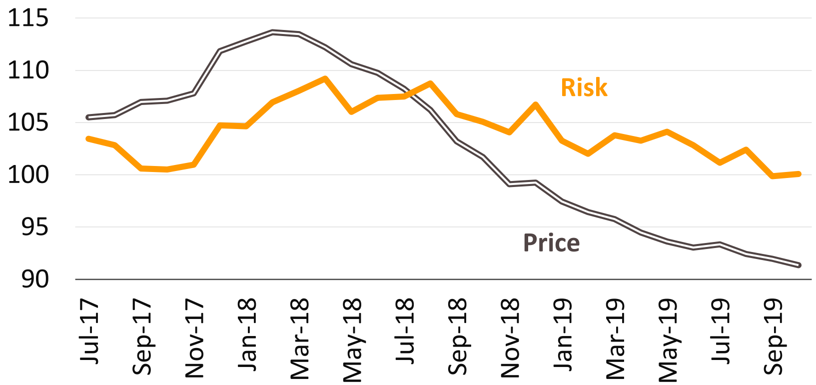


Source: Bloomberg, PBOC, National Bureau of Statistics, Krungsri Research

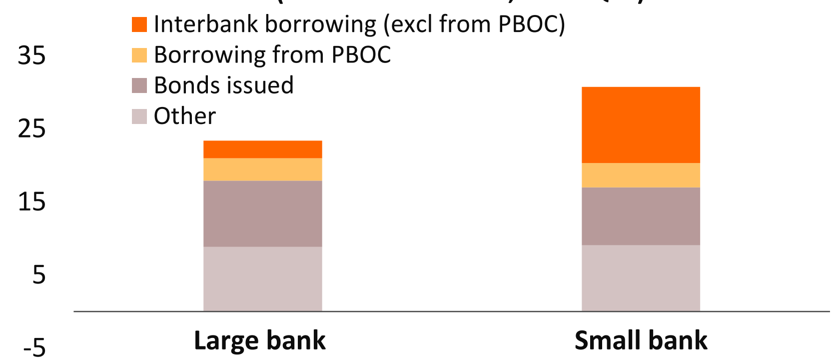
Remains cautious despite lower risk to financial stability; preventing PBOC from employing large stimulus

Rising risks to the financial sector have been contained in some sectors. Shadow financing has slowed to -7.4% in October 2019 from -0.7% in 2018. For wealth management products (WMPs), prices and risks have also decelerated with a decline in the number of WMP issuances (led by fewer guaranteed products). This suggests the PBOC's aim to standardize WMPs (by letting prices reflect returns and risks) is on track in its reform plan. However, there is a need to monitor vulnerabilities in small banks. Amid the slower economy and high uncertainties, some small banks -- which rely on non-deposit funding, especially short-term borrowings from the interbank market -- could struggle with tight financial conditions. Meanwhile, although the property market is expected to cool down with fewer transactions, the increase in vacant space and space under-construction could be headwinds for the sector. The PBOC is likely to (ii) stick to a prudent stimulus approach to prevent risks to the property sector, and (ii) implement targeted monetary policy via small financial institutions to ensure the effectiveness of monetary policy.

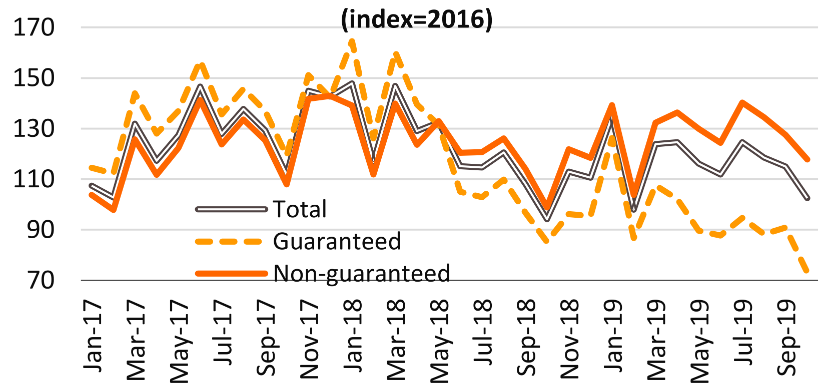
Wealth management products index (index=2016)



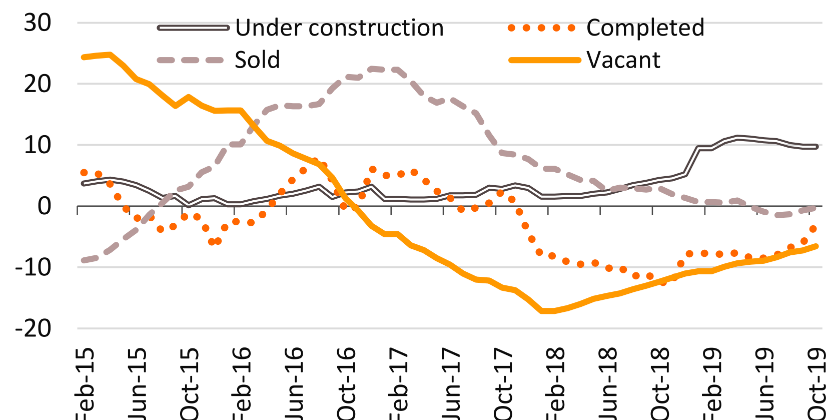
Commercial banks' non-deposit funding (% of total liabilities, end-3Q19)



Wealth management products issuance (index=2016)



Floor space (12-month rolling sum, %YoY)

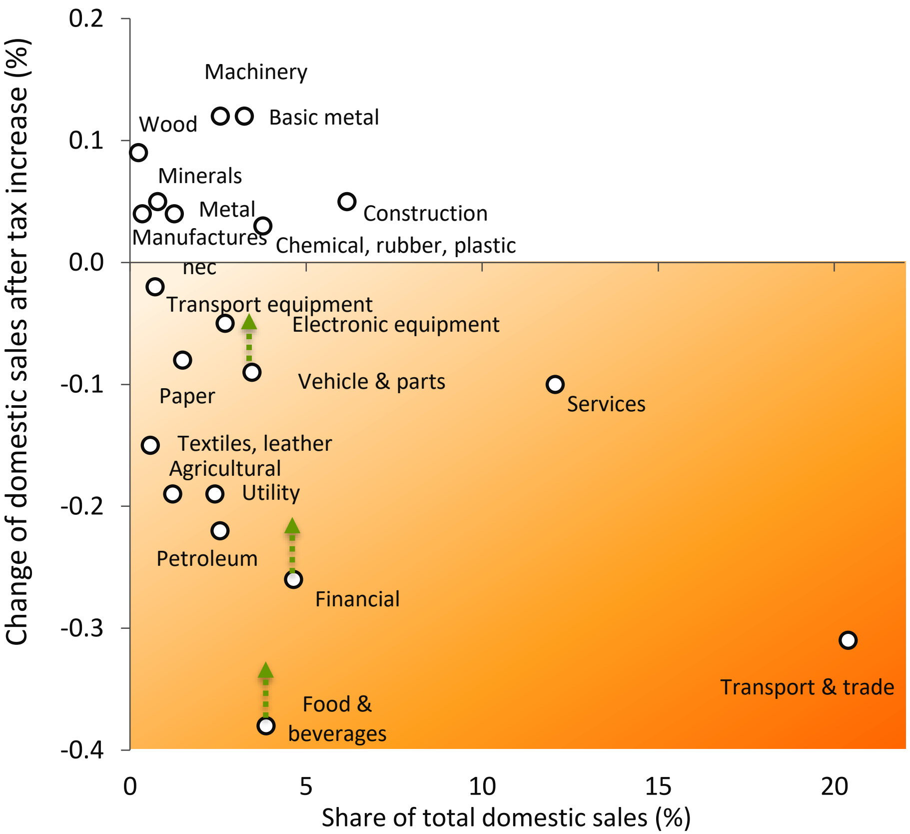


Source: Bloomberg, National Bureau of Statistics, PBOC, China Central Depository & Clearing, Krungsri Research

Japan: Economy will lose momentum; higher tax threatens consumption but Olympic Games will help

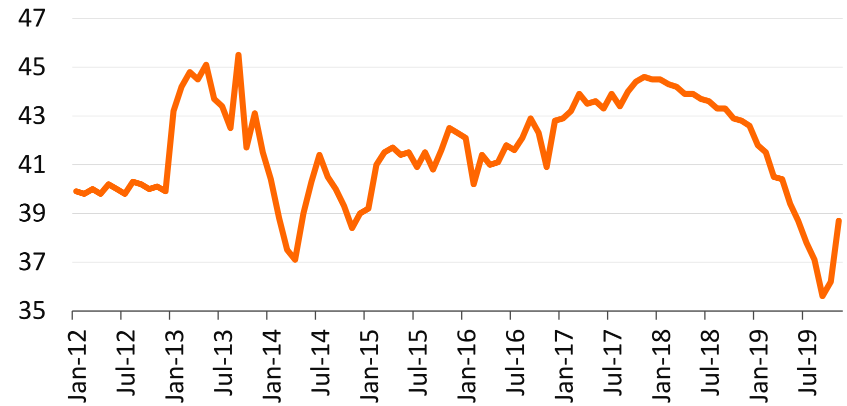
Japan's economic growth is expected to slow to +0.5% in 2020 from +0.9% in 2019, dragged by slow private consumption and residential investment. The slowdown in consumption reflects the impact of the consumption tax hike in October 2019 which had increased overall prices and dampened consumer purchasing power. Our study shows this tax hike could reduce total domestic sales by 0.04% from base line (5-year average of consumption is 0.6%). The weak consumer confidence could hurt consumption but the impact could be smaller in some sectors such as food, vehicle and insurance, thanks to government aid measures. In addition, the 2020 Olympic Games in Tokyo would increase inbound tourism spending and income from foreign visitors, although, gains from residential construction have waned.

Impact of higher VAT on domestic sales

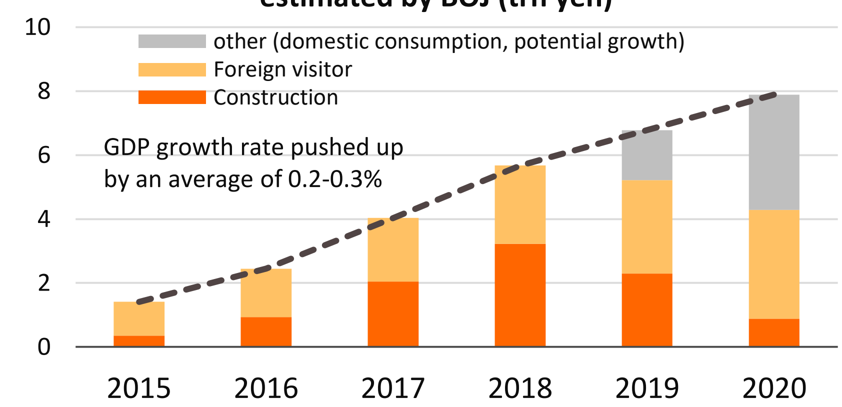


Source: Global Trade Analysis Project (GTAP), Bank of Japan (BOJ), Bloomberg, Krungsri Research

Consumer Confidence Index



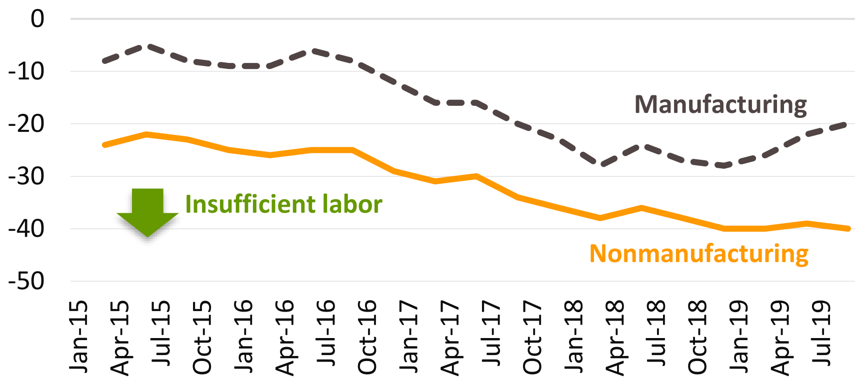
Economic impact of the Tokyo Olympics estimated by BOJ (trn yen)



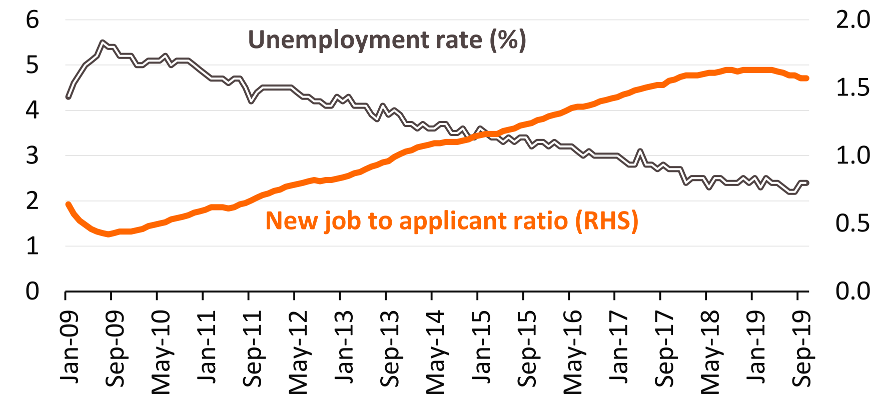
Robust labor market is propping up consumption and reduce risks of an economic recession

Despite slowing wage growth, the labor market remains robust across sectors. Demand for labors in the manufacturing sector remains strong, albeit slower, and remains high in the non-manufacturing sector. Full-time employment has also picked-up from lows at the start of 2019, and there is favorable growth in temporary employment. The record-low unemployment rate and high jobs-to-applicant ratio suggest a robust labor market. This should prop up consumption and reduce risks of an economic recession. For sectors that face severe labor shortage, manufacturers' costs could rise and hurt corporate profits. Although the government introduced a new immigration law on April 1 to attract foreign labor, the effectiveness of this policy is limited by strict qualification requirements. The immigration agency had expected to attract 40,000 foreign workers by March 2020, but as of November only 895 new work permits had been issued. This suggests those sectors will continue to invest in labor-saving facilities.

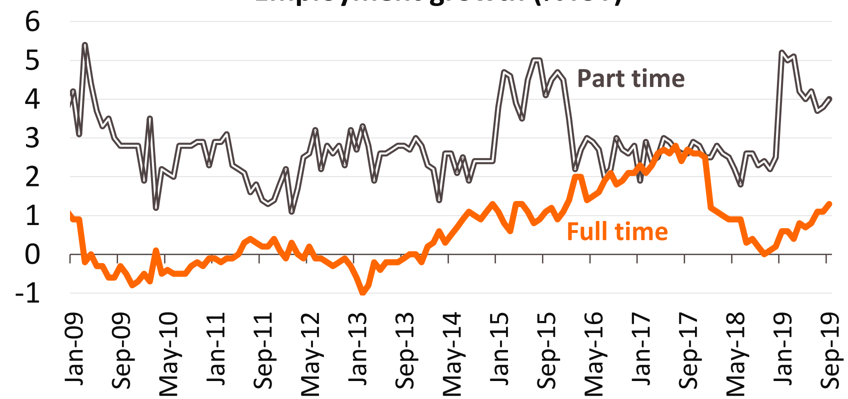
Employment Condition (Diffusion index)



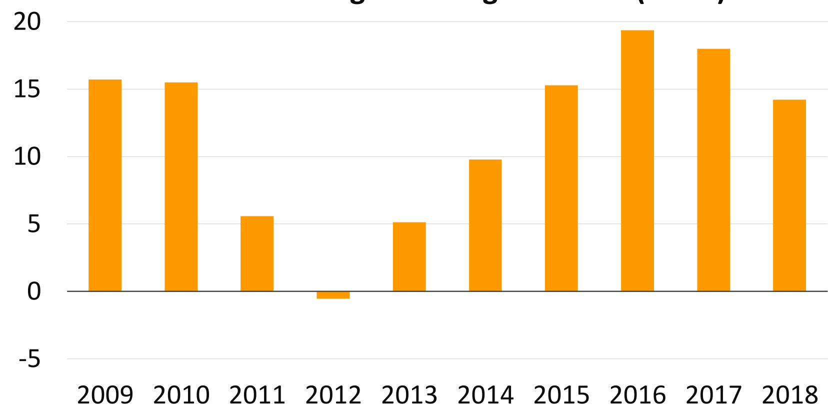
Labor index



Employment growth (%YoY)



Annual change in foreign workers (%YoY)

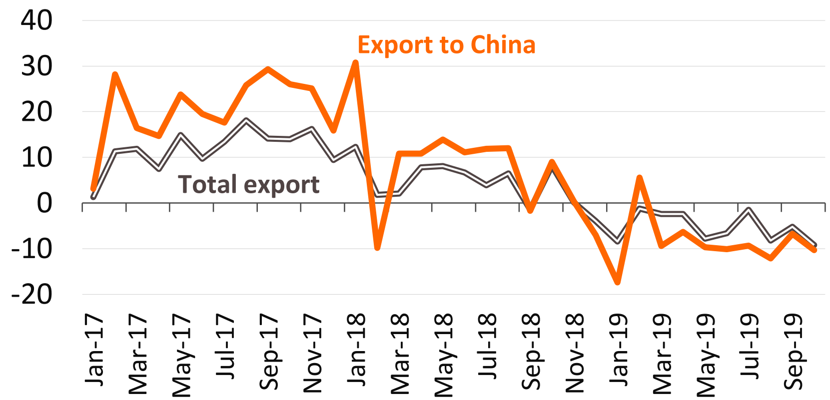


Source: BOJ, MHLW, Bloomberg, Krungsri Research

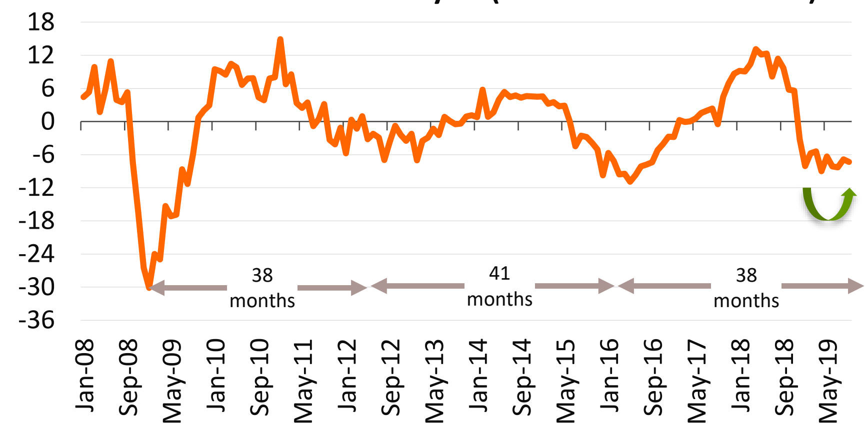
Business investment remains cautious despite improving exports and still-firm labor-saving Capex

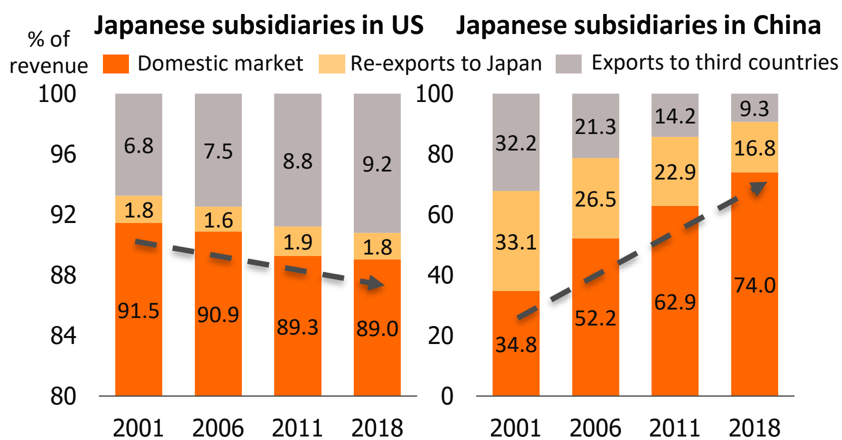
We see exports improving only slightly along with global demand. Japanese exports could be aided by tailwinds from relatively strong growth in domestic demand in China. For Japanese manufacturers, China has increasingly become an export destination rather than simply for offshore subsidiaries, reflected by a surge in the share of revenue from Japanese subsidiaries. Furthermore, the current cycle for IT-related exports has lasted 38 months, close to the recent completed cycles (38-41 months). Japanese electronics may gain from a possible upturn in the current cycle in 2020. This could increase capital-expenditure on labor-saving technologies (e.g. software). However, we expect overall investment growth to remain weak due to still-high uncertainty over global trade, a decline in construction activity for the Olympic Games, and softer domestic demand following the sales tax hike.

Japanese exports (%YoY)

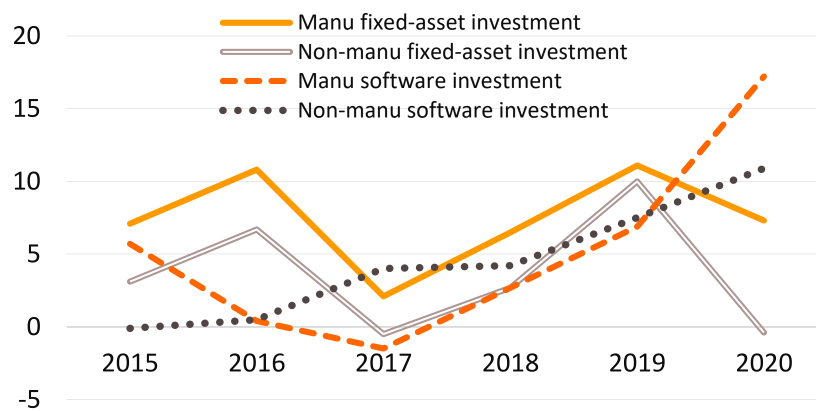


Semiconductor cycle (% deviation from trend)





Tankan investment forecast (%YoY)

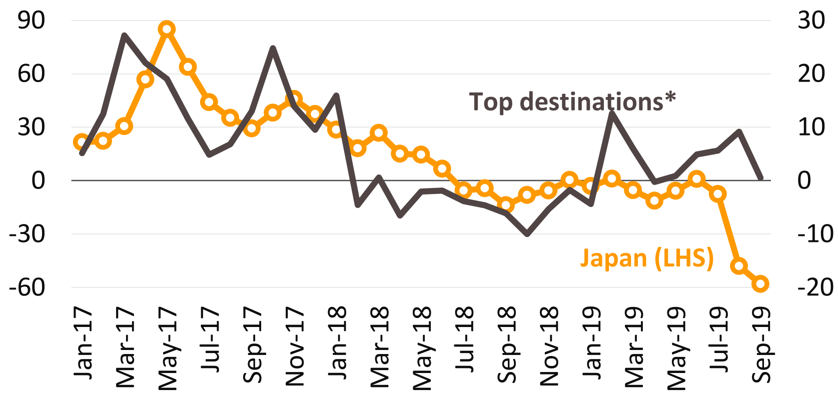


Source: METI, Statistical Bureau, WSTS, Bloomberg, Krungsri Research

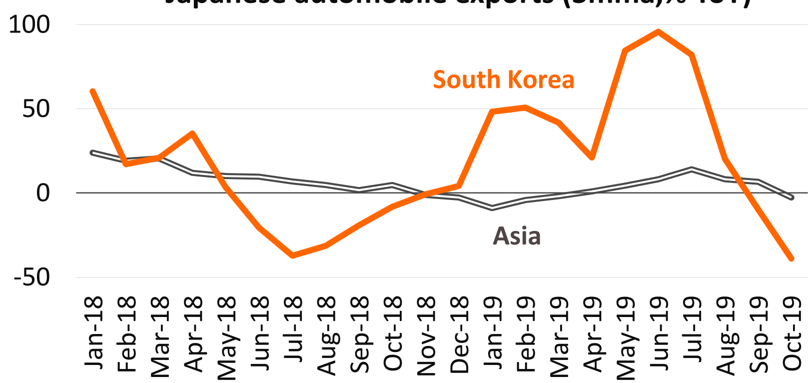
Japan-South Korea dispute hits tourism and automobile exports, but impact is limited

The spat could be headwinds in Japan's tourism industry. South Korean visitors to Japan had dropped by 58% YoY in September but the effects could be limited. Although Korean tourists are the second-largest share of arrivals at 24.2%, their spending is only 12.7% of total foreign tourist spending in Japan. This is much less than spending by Chinese tourists at 40.6%. Apart from the Services sector, Japanese automobile exports to South Korea continued to decline after Korean consumers started to boycott Japanese goods since July amid the escalating conflict, but the impact is moderate because automobile exports to Korea account for only 0.9% of Japan's total automobile exports. Nevertheless, because South Korea is the third largest export market for Japan at 7% of total Japanese exports, it cold get worse if the boycott spreads to other export items.

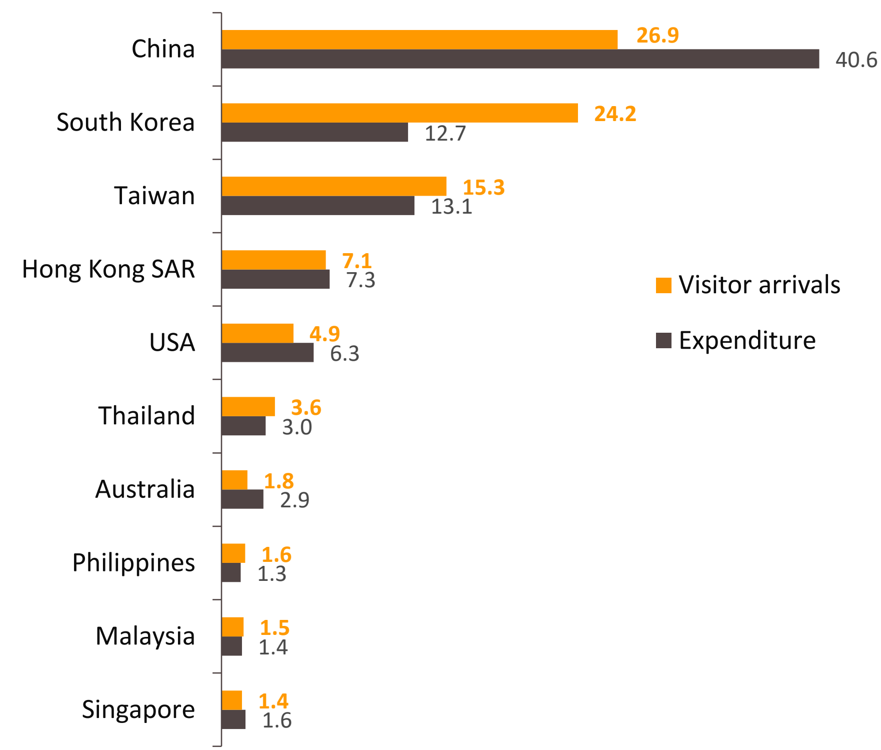
Number of Korean tourists (%YoY)



Japanese automobile exports (3mma,% YoY)



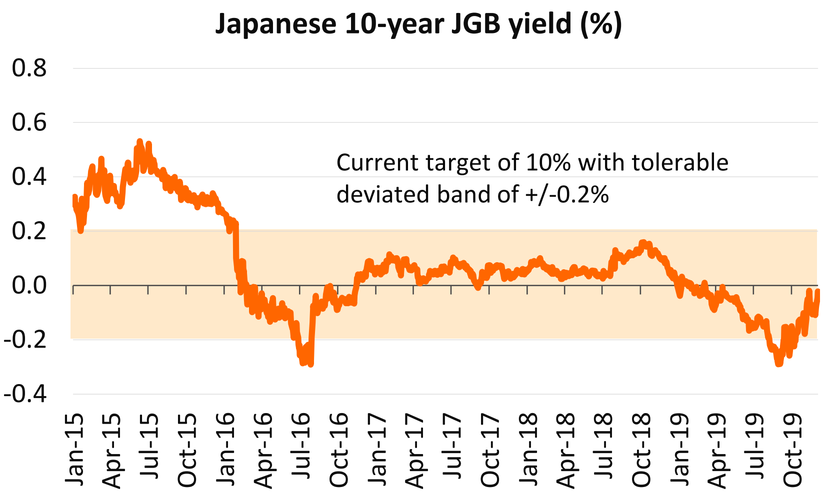
Share of visitor arrivals and expenditure in Japan in 2018 (%)

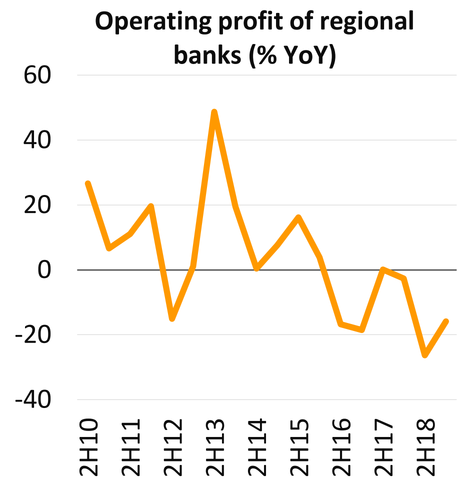


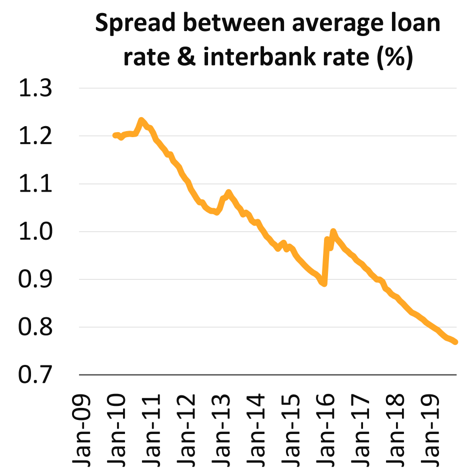
Note: Top destinations include Japan, USA, Thailand, Philippines, Hong Kong, Singapore, Australia, Taiwan, Germany and Canada

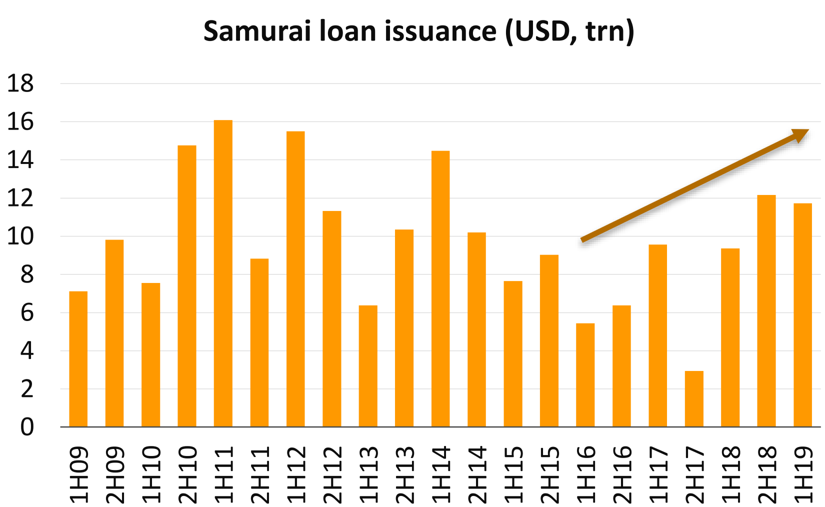
Source: Cabinet Office, CEIC, Statistical Bureau, Bloomberg, Krungsri Research

Greater role of fiscal policy reduces pressure on BOJ to introduce more monetary stimulus









Source: BOJ, Bloomberg, Krungsri Research

Krungsri Research's view

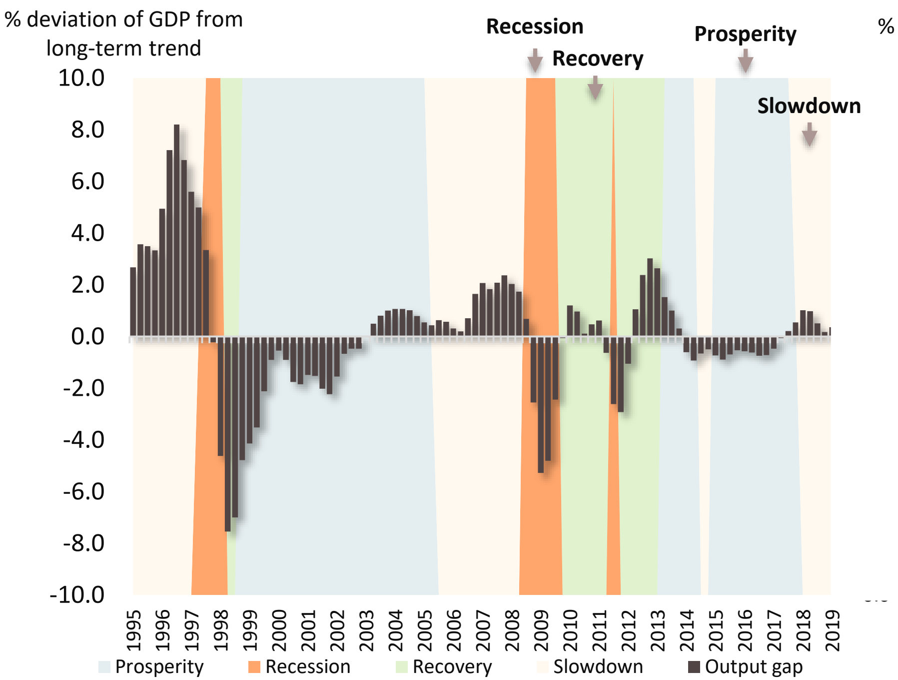
- Fiscal policy is playing a greater role in boosting Japan's economic growth. The cabinet has approved a surprise 13.2 trillion yen fiscal package to support economic growth in 2020. It covers the upgrade of disaster-prevention infrastructure and support for SMEs to invest to improve productivity. The size is similar to the last major package introduced in 2016, when the Brexit vote had dampened Japanese exports. Large fiscal spending should reduce pressure on the BOJ to introduce more monetary stimulus.
- Premised on new fiscal stimulus and higher risks to banks, the BOJ is unlikely to cut interest rates. Instead, it might add stimulus by extending forward guidance timeframe and expanding the band for 10-year JGB bonds while keeping target at 0%. Under ultra-low interest rates, banks – especially regional banks – are struggling to stay profitable due to falling margins. Operating profits of regional banks plunged 16% YoY in 1H19. This has encouraged regional banks to take bigger risks to compensate for the losses, by lending more to foreign companies via samurai loans with low ratings. This has been popular since Japan implemented the negative interest rate policy in 2016, which could make the financial system more fragile.


THAILAND
ECONOMIC OUTLOOK
2020

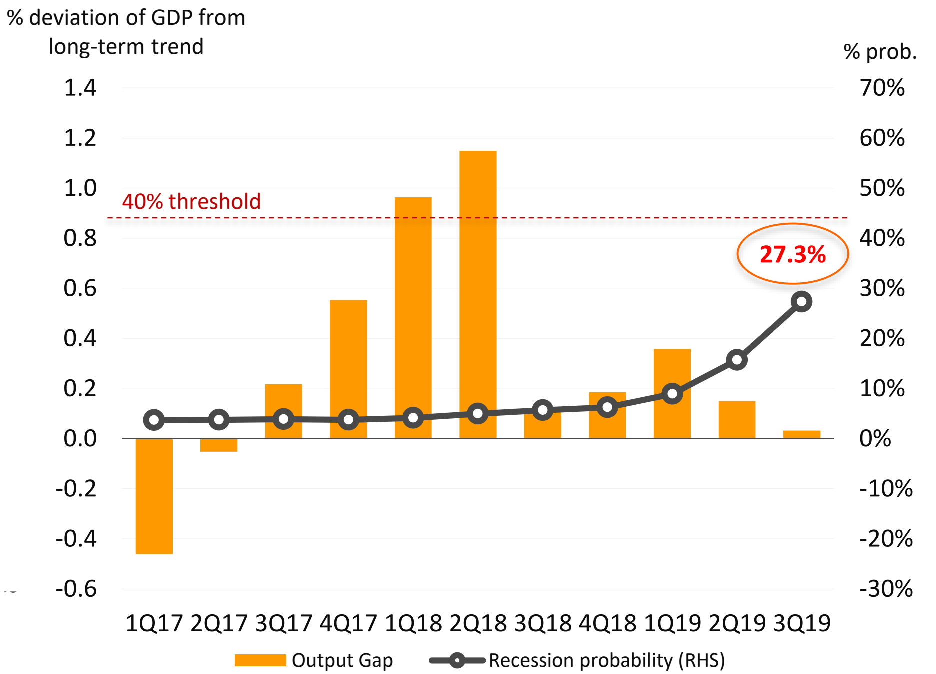
Thai economy: Slowing down amid rising recession risks

Krungsri Research developed the *Markov Regime-Switching Model* to estimate risks of an economic downturn. The model captures Thailand's economic recessions in 1997, 2008 and 2014. The model suggests the Thai economy is in a period of slowing growth. A probability above-40% indicates very high risk of a recession. The probability of an economic recession in Thailand has risen to 27.3% in 3Q19 from 4.1% in 1Q18, still below 40%.

Thailand's Business Cycle



Current probability of economic recession

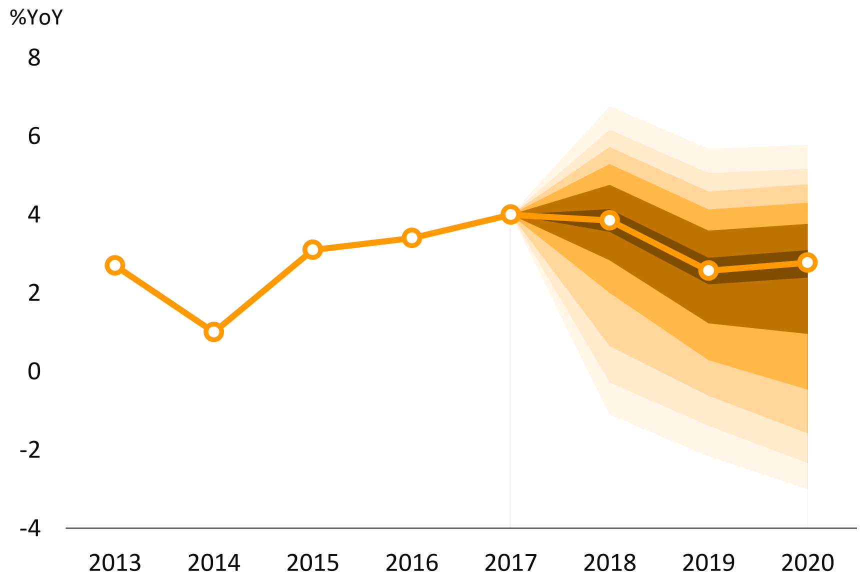


Source: Office of the National Economics and Social Development Council (NESDC), Krungsri Research

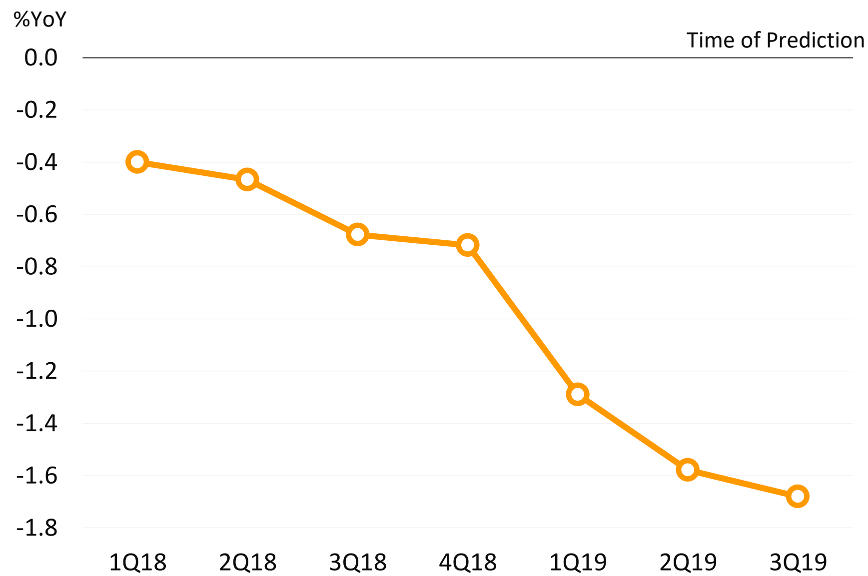
Greater uncertainty: Expect 2020 median growth forecast to inch up but risks are biased towards downside

Thailand's economic growth (median forecast) is expected to improve slightly in 2020. However, there will be rising uncertainties, reflected by the wider forecast band in the fan chart. The Growth-at-Risk (GaR) concept also suggests the macroeconomic scene would be worse than the previous year. There is 80% probability the range of one-year ahead growth forecasts would widen from 0.3% to 4.1% predicted in 2018 to -0.5% to 4.3% predicted in 2019. Also, the low-end of the forecast band has been dropping since early 2018, from -0.4% in 1Q18 to -1.7% in 3Q19. These reflect increasing uncertainty and risks to the Thai economy.

Distribution of one-year ahead economic growth prediction



2020 Growth-at-Risk (5% tail risk)



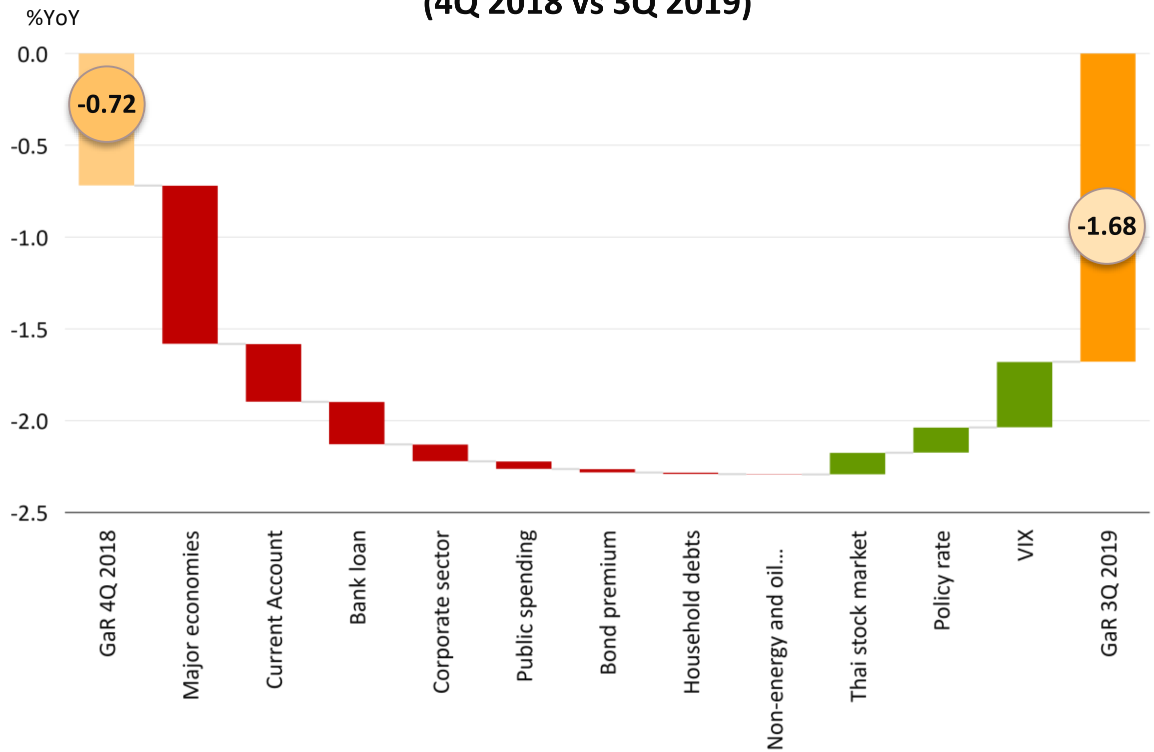
Note: Growth-at-Risk (GaR) gauges possible bad future macroeconomic outcomes from three components including financial conditions, financial vulnerabilities, and global economic growth.

Source: NESDC, Krungsri Research

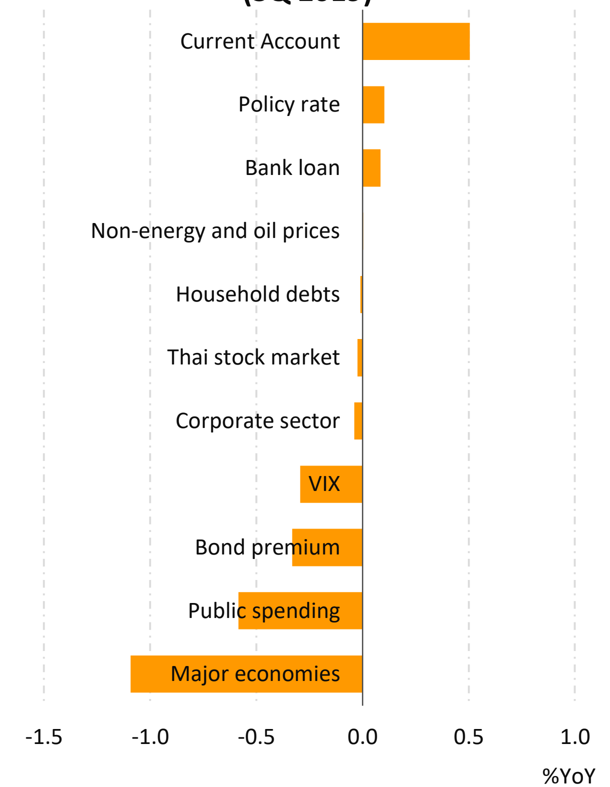
Economy will be more fragile as downside risks mount

Over the past year, the Thai economy has become more fragile due to slowing economic growth in major economies. Also, rising uncertainties in the bond market and lower-than-expected public spending continued to drag the economies. Meanwhile, the banking sector is also less supportive of growth in the Thai economy, with low policy rates having a small impact.

Development in contribution to GaR (at 5% tail risk) (4Q 2018 vs 3Q 2019)



Contribution to GaR (at 5% tail risk) (3Q 2019)



Note: Growth-at-Risk (GaR) gauges possible bad future macroeconomic outcomes from three components including financial conditions, financial vulnerabilities, and global economic growth.

Source: NESDC, Krungsri Research

Thailand Economic Outlook 2020

Krungsri Research Forecast		2018	2019 (Actual)	2019F Previous	2019F Latest	2020F
GDP growth	YoY (%)	4.1	2.5 (9M)	2.9	2.4 ▼	2.5
Private Consumption Expenditure	YoY (%)	4.6	4.5	3.9	4.0 ▲	3.5
Government Consumption Expenditure	YoY (%)	1.8	2.1	2.2	2.2 =	2.4
Private Investment	YoY (%)	3.9	3.0	3.4	2.3 ▼	3.3
Public Investment	YoY (%)	3.3	1.7	2.5	1.8 ▼	3.0
Nominal Exports in USD (f.o.b.) *	YoY (%)	7.5	-2.7	-2.8	-2.5 ▲	1.5
Nominal Imports in USD (f.o.b.)	YoY (%)	13.7	-4.4	-3.5	-4.0 ▼	3.0
Current Account Balance	USD, bn	28.5	26.4	31.9	33.3 ▲	30.3
Tourist Arrivals	Mn, persons	38.3	29.5	39.6	39.6 =	41.6
Headline Inflation	YoY (%)	1.1	0.74 (10M)	0.9	0.8 ▼	0.9
Core Inflation	YoY (%)	0.7	0.53	0.6	0.5 ▼	0.6
Exchange rate (end of period)	THB/USD	32.42	30.14(Oct)	30.63	30.45 ▼	30.00
Policy Interest rate (end of period)	(%)	1.75	1.25 (Nov)	1.25	1.25 =	1.00
Dubai crude price (period average)	USD/bbl	69.3	62.0(10M)	66.5	63.0 ▼	65.0

** Customs-based export growth forecast: -1.6% in 2019, +1.0% in 2020*

Source: NESDC, Bank of Thailand (BOT), Ministry of Commerce (MOC), Ministry of Tourism and Sports (MOTS), Krungsri Research

Thai economy in 2020: Some headwinds are easing but growth drivers remain fragile

	2019: External and domestic headwinds dragging growth	**2020: Vague signs of recovery despite fading headwinds**
External factors	− Weaker **external demand** − Escalating **trade tension**, disruption to trade and supply chains − High risk of no-deal **Brexit**	+ **Policy easing worldwide** would help to avoid a sharp economic slowdown − **Tariff and non-tariff barriers amid uncertainty in trade policies** continue to disrupt trade and supply chains despite progress in trade talks − Lingering Brexit uncertainty
Domestic factors	− **Weak exports** spillover to domestic demand − Delays in **fiscal spending** and infrastructure projects, delay in government formation − Political uncertainty − Drought and floods − Air pollution and safety concerns	+ **Relocation of production bases** would limit spillover effect of weak exports to local businesses & employment + **Approval of FY2020 budget**, more fiscal stimulus and progress in infrastructure & EEC projects + Fading headwinds and more tailwinds in tourism − Concerns over political stability − Risk of drought − Others: US to suspend GSP benefits, EU-Vietnam FTA
Structural problems	− Labor shortage − Weaker competitiveness in several industries	− Labor shortage − Weaker competitiveness in several industries

Source: Krungsri Research

Highlights for 2020: Another year of sluggish, below-potential growth

Economy is slowing down amid rising recession risks; more fragile as downside risks mount

Exports: Easing headwinds but divergence of global growth is capping recovery
- Limited gains from recovering global growth as Thai goods are unable to meet most of Asia's demand
- Large businesses feeling the effects of weak exports

Private investment: Precarious recovery
- Spare capacity suggests a murky outlook for the business investment
- Relocation of investment seems to be front-loaded; crowding-in effect from public spending still remote

Private consumption: A tale of two stories
- Surge in expenditure of residents abroad suggests purchasing power of middle-income earners remain firm
- Low farm income growth and dim job outlook are eroding purchasing power of lower-income consumers
- Several government measures to help low-income people only offer some reassurance

Public spending: Relentlessly disappointing
- Fiscal impetus may not be strong enough to restrain spillover effect of export plunge to domestic demand
- Public investment: Reality doesn't meet expectations

Tourism: A proven resilient-growth engine
- Short-term benefit from Hong Kong protests as tourist arrivals from China rise
- Among the biggest beneficiaries from strong prospects for China's outbound tourism industry
- Struggling to cope with the influx of travelers due to tight airport capacity

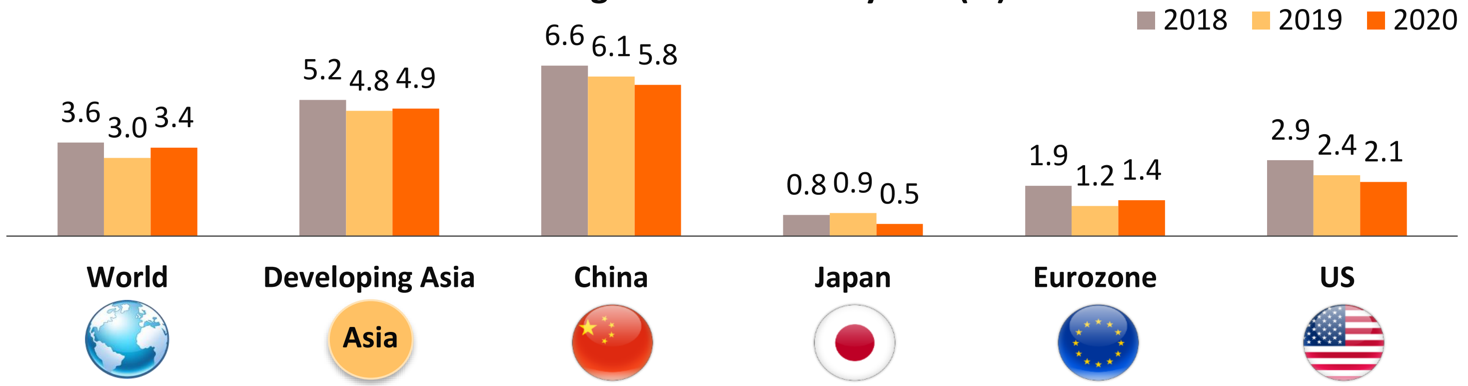
Monetary policy: Easing cycle still underway
- One more rate cut and less stringent macroprudential measures
- BOT likely explore alternative forms of easing to strengthen the effectiveness of the transmission mechanism

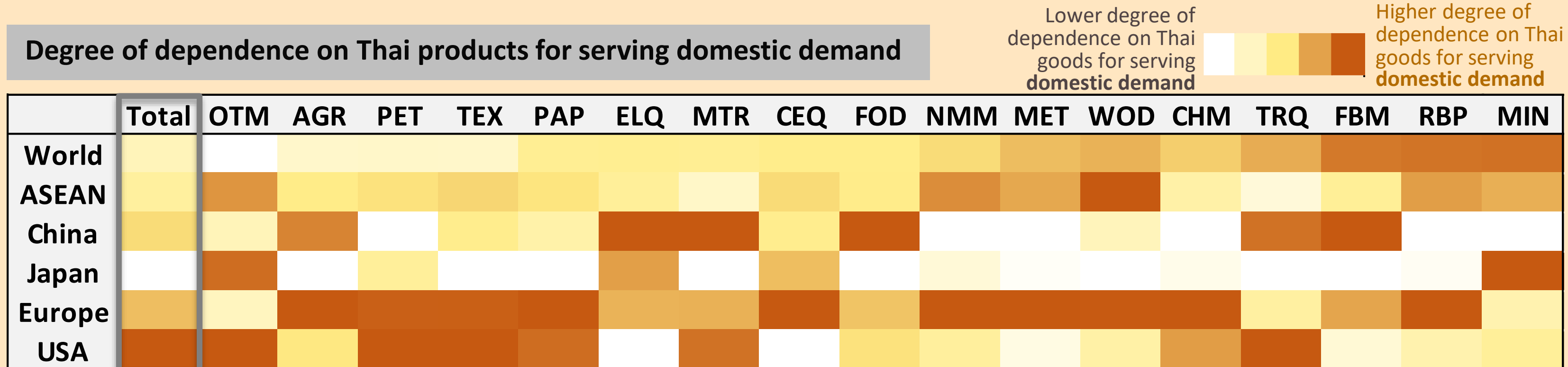
Source: Krungsri Research

Exports: Limited gains from improving global growth as Thai goods contribute little to Asia's domestic demand

Looking ahead, global GDP growth is expected to improve to +3.4% in 2020, compared to the post-financial crisis low of +3.0% in 2019. This would be driven by improving economic growth in developing countries rather than major countries. However, Thai exports would see limited gains from a more optimistic outlook for developing countries in Asia because these countries (including ASEAN countries), have relatively low dependence on Thai products to meet their domestic demand, unlike Europe and the US. Therefore, the weak growth outlook for major countries could mean downside risk for Thai exports.

2020 GDP growth forecast by IMF (%)





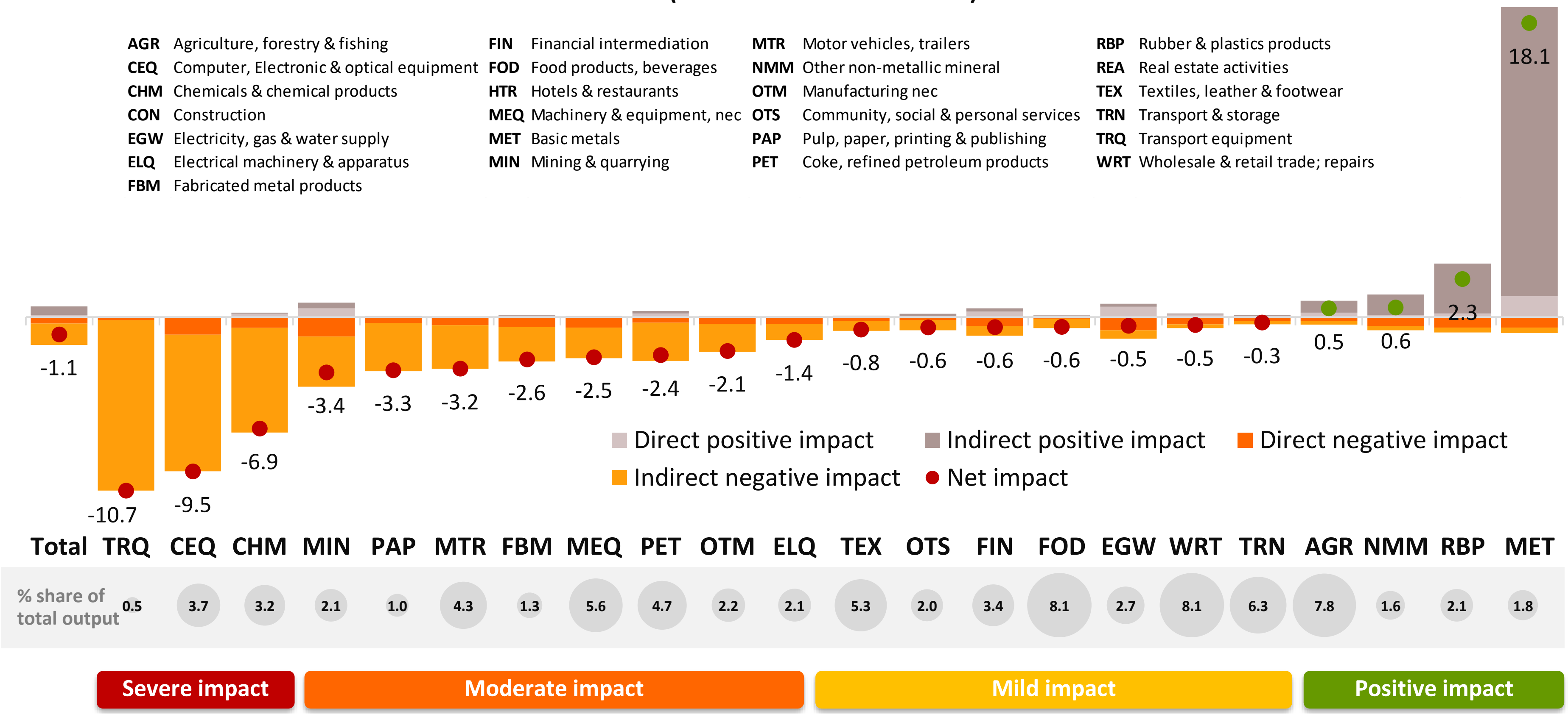
Note: Heat maps reflect each country's dependence on Thai exports (share of Thai products for consuming, investing and using as intermediated good for serving domestic demands). The degree of dependence on Thai goods is compared among countries in each industries. Green color indicates stronger dependence on Thai goods for serving domestic demand and red color indicates strong dependence on Thai goods for serving external demands. Note that ASEAN in this figure excludes Laos and Myanmar.

Source: IMF, Organization for Economic Co-operation and Development (OECD), Krungsri Research

Indirect impact of weak exports is much larger than direct impact, due to ripple effect on the supply chain

The weaker exports have hurt most Thai industries, led by indirect negative impact on transportation equipment, computer & electronics, chemicals & chemical products, mining, pulp & paper products, and motor vehicles. The weak exports also had knock-on (but mild) impact on non-exports and service sectors such as financial intermediaries, wholesale & retail trade, and transportation.

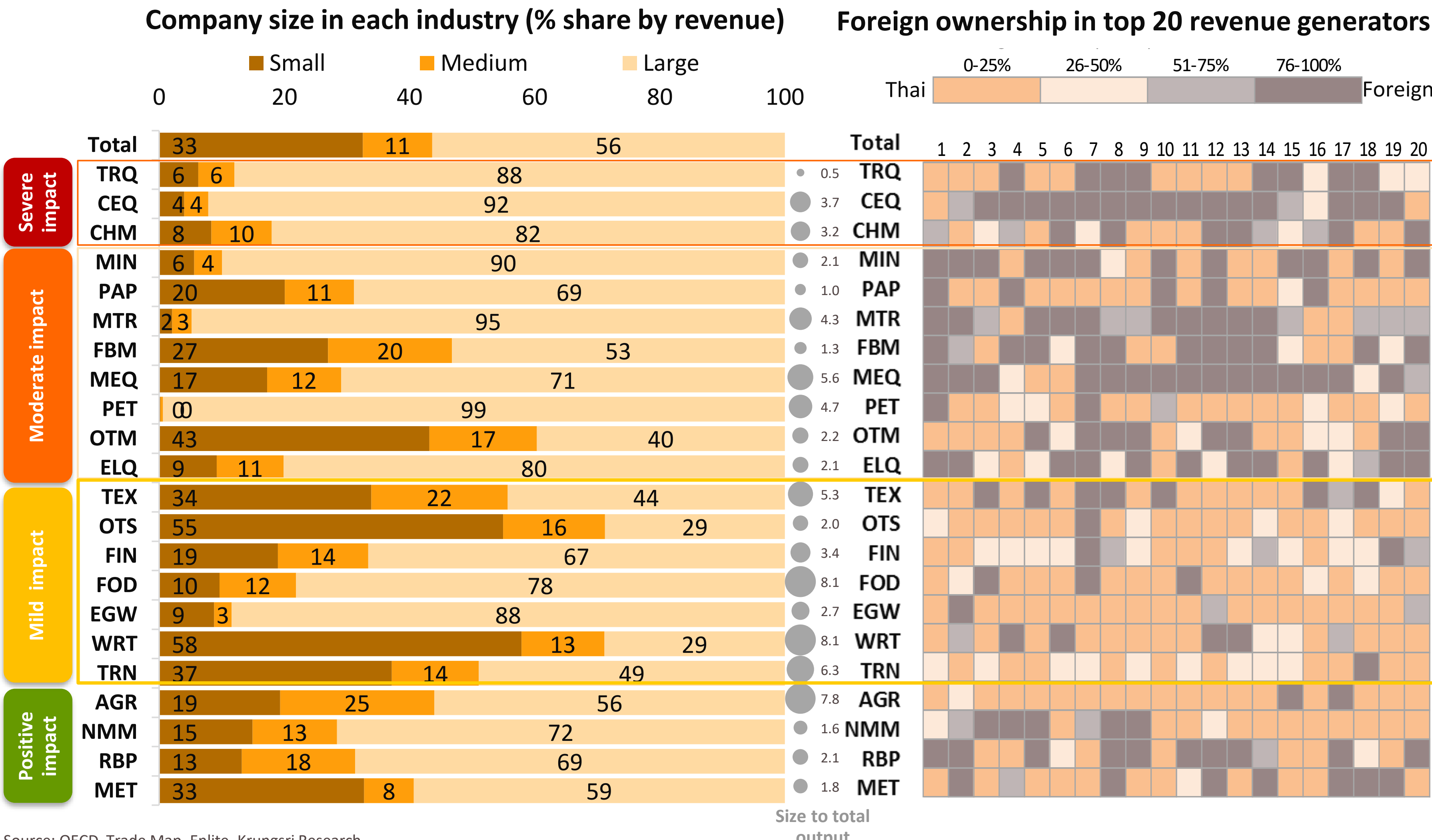
Direct and indirect impact of contraction in 1H19 exports: Impact on output of each industry
(% deviation from baseline)



Source: OECD, Trade Map, Krungsri Research

Moderate-to-severe impact on large foreign firms

Large-size firms account for 80-90% and 40-99% of firms in severely- and moderately-affected sectors, respectively, and 29-88% in mildly-affected sectors. Nationalities of firms in the first sectors are mixed but those in mildly-affected sectors were mostly owned by Thai and Thai majority shareholders.



Source: OECD, Trade Map, Enlite, Krungsri Research

Mild positive effects from trade diversion after US-China tariffs; some gains in Thai exports to the US

The spate of tariffs have hurt US-China trade, but Thai exports -- particularly to the US -- could benefit from trade diversion, led by electrical machinery, rubber and plastic products, and food products. In the China market, Thailand could gain from substitution effect but the magnitude would be mild and possibly only in a few sectors. Hence, Thailand could register smaller gains from trade diversion than some other countries. At the same time, many sectors in China that import Thai materials had shrunk after the supply chain was disrupted, especially chemical products and electrical machinery.

Exports to US (8M19; % YoY contribution)

Country/Sector	China	Thailand	Share 2018	Cambodia	Vietnam	SKorea	India	Philippines	Europe	Japan	Malaysia	Indonesia
Computer & Electronic	-7.2	-3.7	38.3	0.0	20.3	-0.1	0.2	3.1	0.0	-0.3	-2.1	0.3
Electrical machinery	-1.9	2.3	13.6	5.5	2.1	1.0	0.9	2.2	0.8	2.3	0.1	0.7
Chemical products	-0.7	0.1	2.6	0.1	0.3	0.4	3.2	0.2	1.9	1.4	-0.4	0.1
Motor vehicles, trailers	-0.4	0.9	2.7	0.0	0.3	4.7	0.3	0.2	-0.1	-0.1	0.0	0.2
Other manufacturing	-0.3	-0.2	7.2	3.3	4.4	0.0	-1.0	0.6	0.0	0.0	0.9	1.6
Food products	-0.3	0.6	11.1	-0.2	-0.4	0.1	0.3	-1.7	0.3	0.1	0.0	-2.5
Non-metallic mineral	-0.3	0.0	0.6	0.0	0.2	0.1	0.6	0.1	0.0	0.0	0.0	0.1
Fabricated metal products	-0.3	0.5	2.2	0.2	0.6	0.1	0.3	0.0	0.1	-0.1	0.3	0.4
Textiles	-0.2	0.4	4.0	23.7	5.2	0.1	1.0	1.0	0.1	0.0	0.0	1.2
Wood products	-0.2	0.1	0.3	-0.5	0.3	0.0	0.1	0.1	0.0	0.0	0.0	-0.7
Basic metals	-0.2	0.2	1.8	-0.1	-0.3	0.0	-0.2	0.0	-0.2	-0.1	0.0	-0.7
Rubber & plastics products	-0.2	2.3	11.1	1.9	0.7	0.7	0.4	0.5	0.1	0.1	0.3	0.0
Petroleum products	-0.1	-0.2	0.2	0.0	0.0	1.9	1.5	0.0	0.3	0.3	-0.1	0.2
Paper & printing	-0.1	0.2	0.3	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.1	0.8
Agriculture	-0.1	0.2	1.6	0.2	-0.3	0.0	-0.1	-0.3	0.0	0.0	0.0	-0.3
Transport equipment	-0.1	0.1	1.0	0.6	0.2	0.6	0.0	-0.2	1.2	-0.2	0.0	0.1
Mining	0.0	-0.1	0.1	0.0	-0.2	0.0	-0.4	0.0	0.1	0.0	0.0	-5.9
Other	0.3	0.1	1.4	0.3	0.2	0.1	0.4	0.2	1.3	0.6	-1.0	0.1
Total	-12.2	3.8	100	35.2	33.8	9.9	7.6	6.0	6.0	4.0	-1.5	-4.5

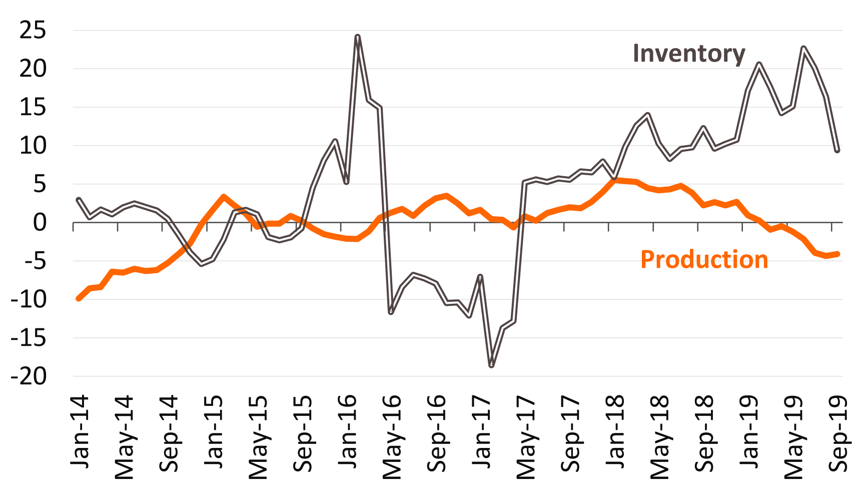
Exports to China (9M19; % YoY contribution)

Country/Sector	US	Thailand	Share 2018	Cambodia	Malaysia	Europe	Philippines	India	Indonesia	Japan	Vietnam	SKorea
Mining	-4.9	-0.1	0.9	0.6	1.8	1.0	1.8	4.9	-2.4	0.0	0.0	0.0
Agriculture	-3.5	1.5	11.0	4.2	0.1	0.0	0.5	3.6	0.0	0.0	-0.1	0.0
Basic metals	-3.3	0.0	1.2	0.1	2.7	-0.2	0.0	-8.4	-0.4	-1.1	0.3	-0.2
Transport equipment	-3.2	-0.2	0.5	-0.1	0.0	0.2	-0.1	0.0	-0.1	-0.2	0.0	-0.1
Motor vehicles, trailers	-2.7	-0.9	2.6	0.0	-0.1	-1.5	-0.1	-0.1	-0.1	-0.3	0.0	-0.3
Chemical products	-2.1	-3.2	21.4	1.2	-0.7	1.4	-0.8	2.4	-1.1	0.1	0.4	-1.9
Electrical machinery	-1.5	-0.9	6.9	1.4	0.4	-1.7	-1.0	1.6	0.2	-3.6	0.0	-1.4
Petroleum products	-1.2	0.3	0.8	0.0	0.5	0.1	-0.1	-3.4	-0.1	0.0	0.0	-0.6
Other	-1.2	0.0	0.0	-0.1	0.0	-0.1	0.0	0.0	0.0	-0.1	-16.9	-0.1
Wood products	-0.8	-0.9	3.6	-0.5	-0.1	0.2	0.0	0.0	-0.6	0.0	0.1	0.0
Food products	-0.6	1.1	6.4	2.1	0.1	0.5	0.0	4.2	1.1	0.1	0.1	0.0
Paper & printing	-0.6	-0.1	0.7	0.0	0.0	-0.2	0.0	-0.1	-1.3	-0.4	-0.1	0.0
Rubber & plastics products	-0.2	-0.2	2.0	0.2	0.0	-0.2	0.0	0.0	-0.1	-0.1	0.1	0.0
Fabricated metal products	-0.1	-0.1	0.4	-0.1	0.0	-0.3	0.0	0.1	0.0	-0.1	0.0	-0.1
Textiles	0.0	0.2	1.9	5.9	0.1	0.2	-0.1	-2.9	0.3	0.0	1.4	-0.1
Non-metallic mineral	0.0	0.0	0.6	0.0	-0.2	-0.1	0.0	0.0	0.0	0.0	0.3	0.0
Other manufacturing	0.1	0.2	1.7	0.1	0.0	0.2	0.0	-6.1	0.0	0.1	0.1	0.0
Computer & Electronic	0.1	3.5	37.4	-2.1	5.5	0.6	-4.1	0.1	-0.5	-1.7	-1.1	-12.8
Total	-26.1	0.3	100	13.0	10.2	0.3	-4.0	-4.2	-5.2	-7.4	-15.4	-17.6

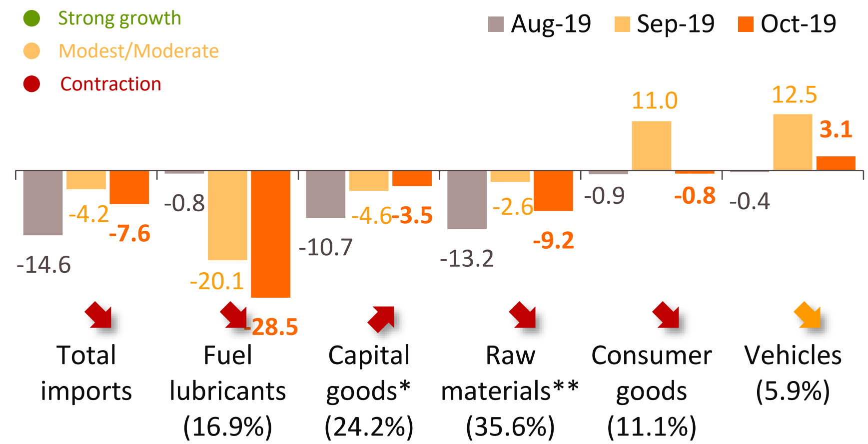
Source: Trade map, OECD, Krungsri Research

Private investment: Spare capacity suggests murky outlook for business investment

Manufacturing production and inventory indices (3mma, % YoY)



Imports by major product (% YoY)



Note: ( ) share in 2018 * Capital goods exclude aircraft, ship ** Raw materials exclude gold

Capacity utilization in key industries

		2018												2019								
Sector	Share	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
Total	100																					
Food & Beverages	19.9																					
Automotive	13.9																					
Petroleum	9.6																					
Rubbers & Plastics	8.9																					
Chemicals	8.0																					
Non ferrous material	5.5																					
IC & Semiconductors	5.5																					
Ferrous material	3.6																					
Textiles & Apparels	3.5																					
HDD	3.4																					
Electrical Appliances	3.0																					
Machinery	2.7																					

Green>60%, Red<60%/ Darker green (red) indicates stronger (weaker) momentum

Krungsri Research's view

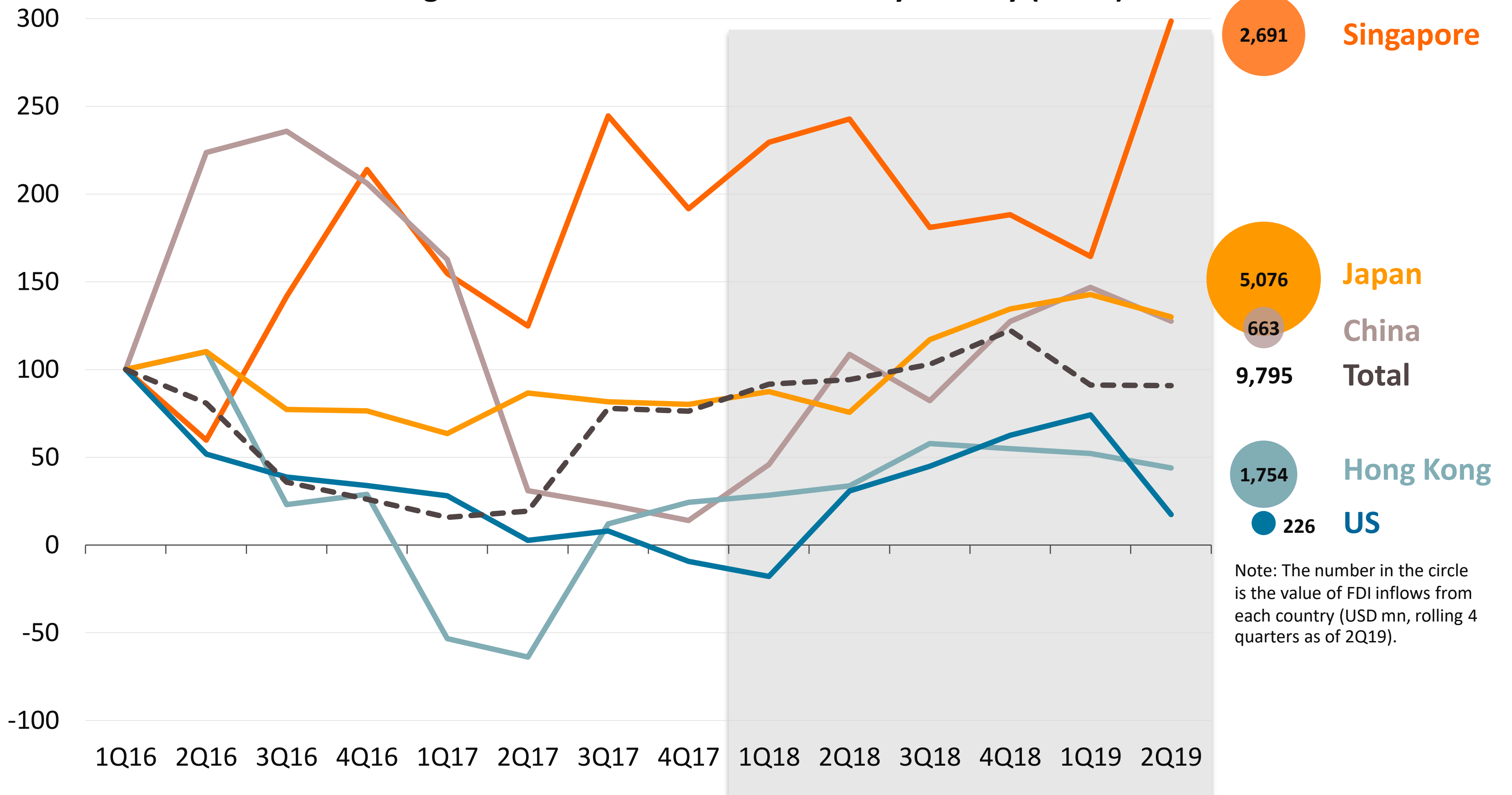
- Manufacturing Production Index has remained in negative territory since the first quarter of 2019. This reflects the effects of the global slowdown and trade war on output in export sectors, while domestic activities were insufficient to offset the slowdown.
- Looking ahead, there would be limited improvement in manufacturing and investment. On the positive side, inventory has started to drop in September and the gap between production and inventory has started to narrow. Raw material imports, an early indicator of future production, and capital goods imports, registered a smaller negative growth. However, capacity utilization remained low in most sectors and is a major headwind for investment.

Source: Office of Industrial Economics (OIE), MOC, Krungsri Research

Foreign direction investment: moderate signs of relocation of production bases to Thailand

Since the US-China trade war escalated in 2018, there have been signs of relocation of production bases to Thailand. This is reflected in the rebound in foreign direction investment (FDI) inflows from several countries, including the US and China. In 2019, those signs seem to be moderate with mixed data. Total FDI inflows to Thailand fell 3.6% YoY in 2Q19 (vs +60.5% in 4Q18) partly due to the slower global and Thai economies, as well as weaker sentiment of producers around the world amid uncertainties. However, recent FDI inflows from China and Japan remain well above the levels in early 2018, and inflows from Singapore, the major financial intermediary hub in this region, have surged.

Foreign direct investment to Thailand by country (Index)



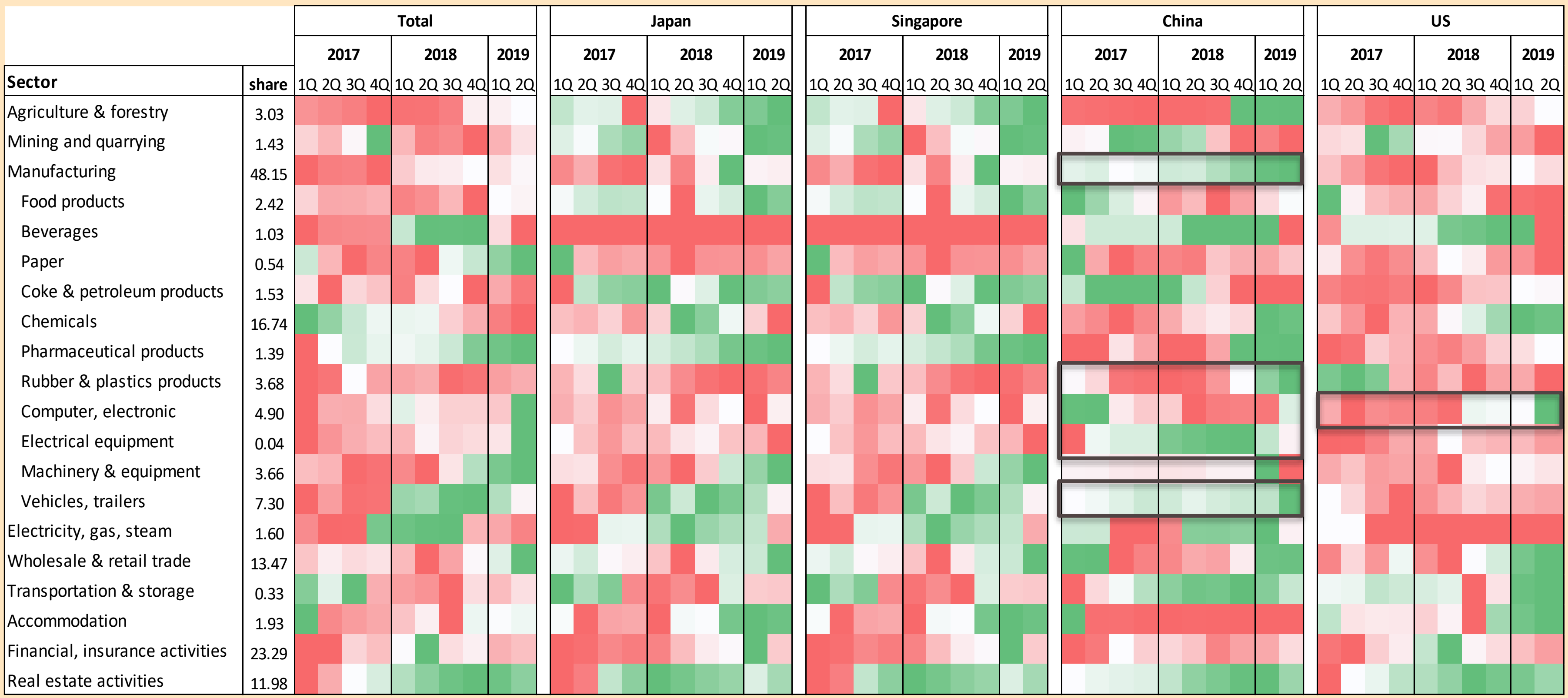
Note: The number in the circle is the value of FDI inflows from each country (USD mn, rolling 4 quarters as of 2Q19).

Source: BOT, Krungsri Research

Total FDI inflows rose in some sectors; China inflows are more broad-based than US inflows

Overall FDI inflows to some sectors have risen, led by computer, electronic & electrical machinery, and vehicles. Following rising trade tensions, there have been more FDI inflows from China especially in the manufacturing sector, such as rubber & plastics, motor vehicles, and electrical equipment. This suggests some Thai products could benefit from replacing Chinese exports to the US. Meanwhile, inflows from the US have been limited in sectors such as computer & electronics which saw relocation of production bases to Thailand.

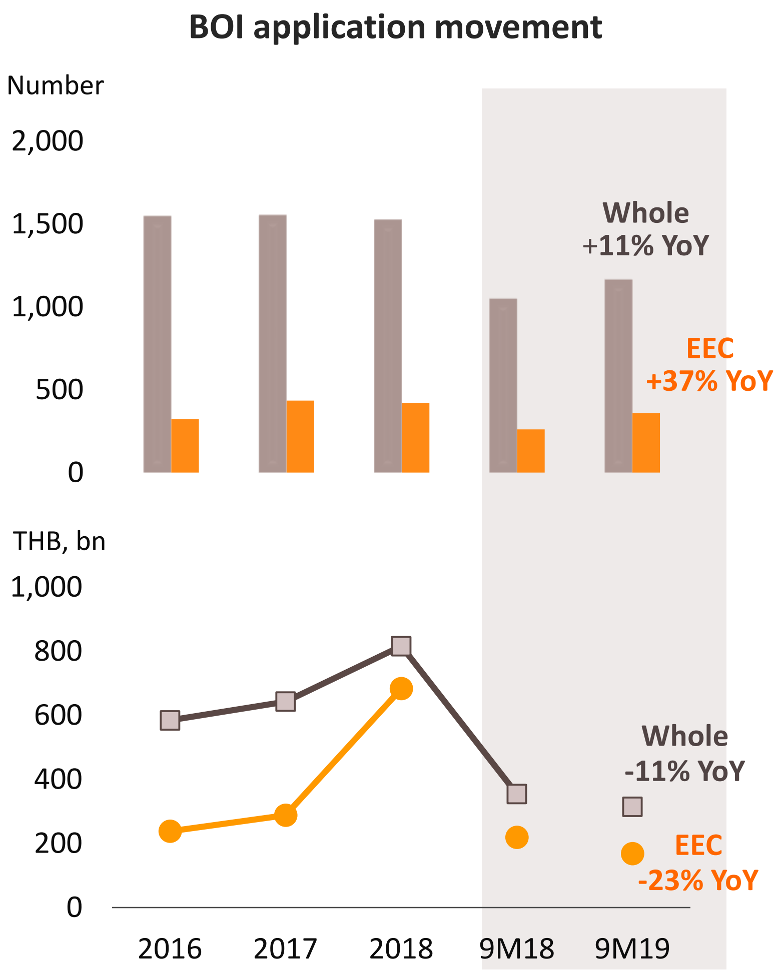
Foreign direct investment to Thailand by sector and country (Index)

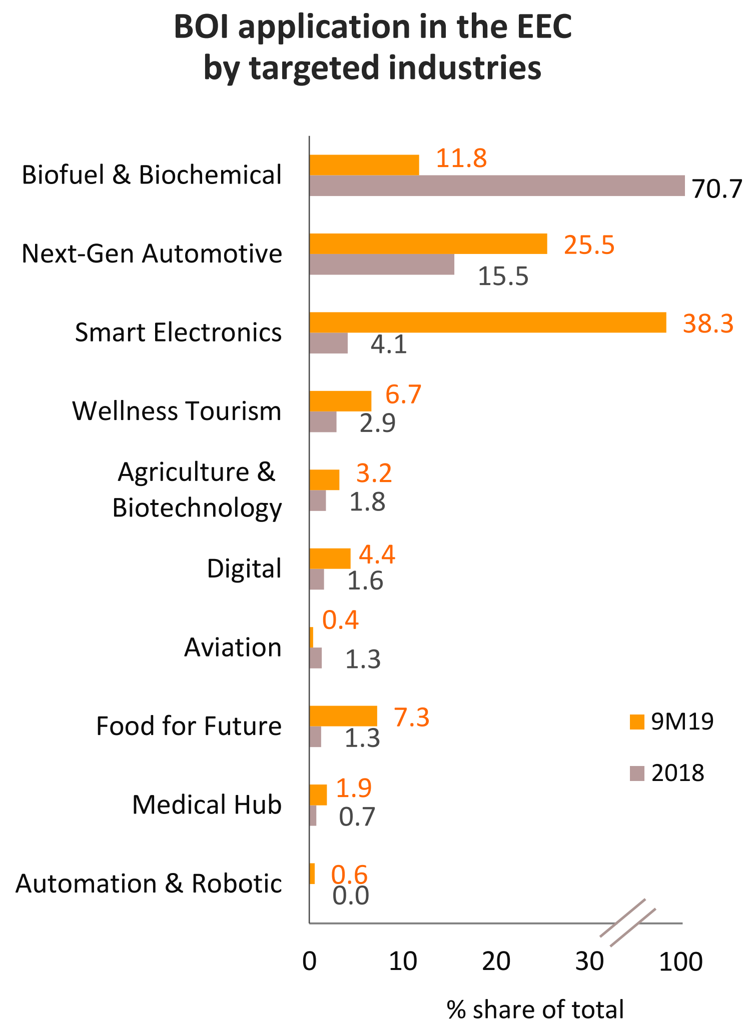


Note: Index based on medium term trends of FDI (average between 2013-2018) ;Green>100, Red<100/ Darker green (red) indicates stronger (weaker) momentum

Source: BOT, Krungsri Research

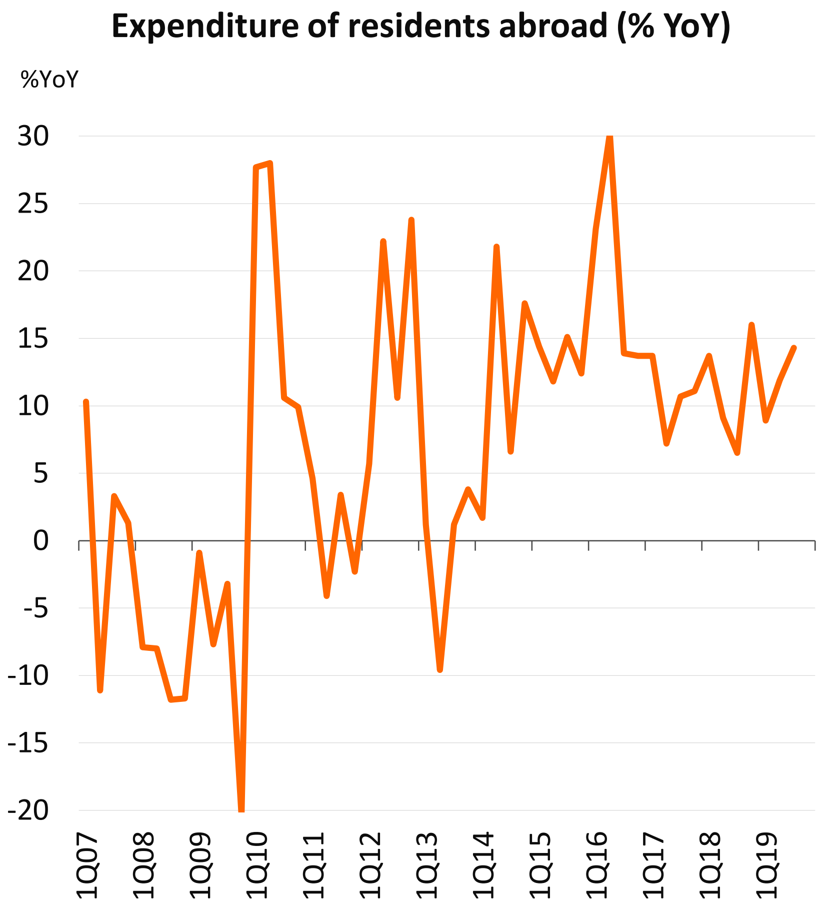
Investment in EEC: Applications rose but investment value dropped, implying limited growth ahead

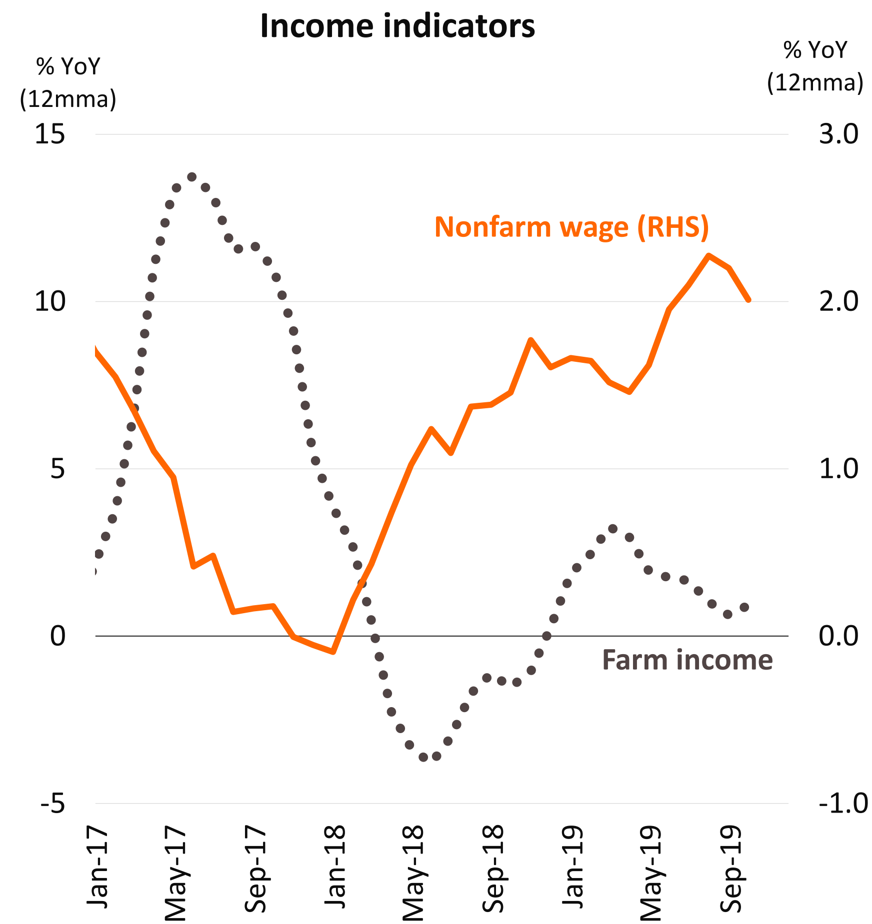




Source: Board of Investment of Thailand (BOI), Krungsri Research

Consumption: Surge in overseas expenditure suggests firm purchasing power of middle-income earners

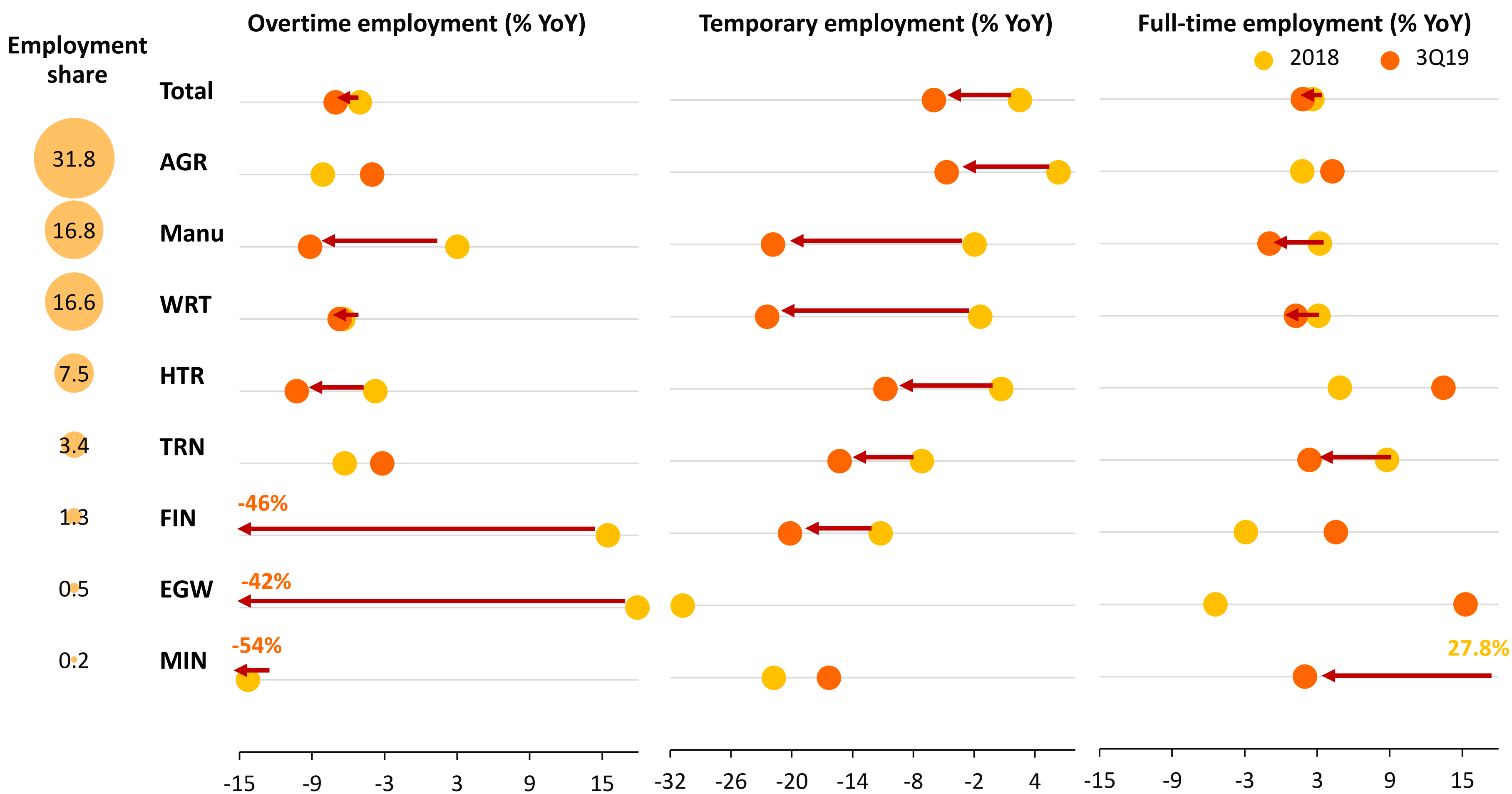




Source: NESDC, Krungsri Research

But weak exports will continue to hurt employment, as overtime & temporary jobs decline

The weaker exports will spread to domestic activities. There are more pronounced drops in overtime and temporary employment across industries. In manufacturing, overtime employment growth turned to -9.2% YoY in 3Q19 from +3% in 2018, while temporary employment fell deeper, by 21.9% in 3Q19 vs -1.9% YoY in 2018. For full-time employment, few industries have trimmed headcount; in manufacturing it fell to only -0.9% from 3.2%.



Note: Overtime employments are defined as workers having working hours above 50 hr/week, temporary employments are those having their working hours below 39 hr/week, others are full time workers

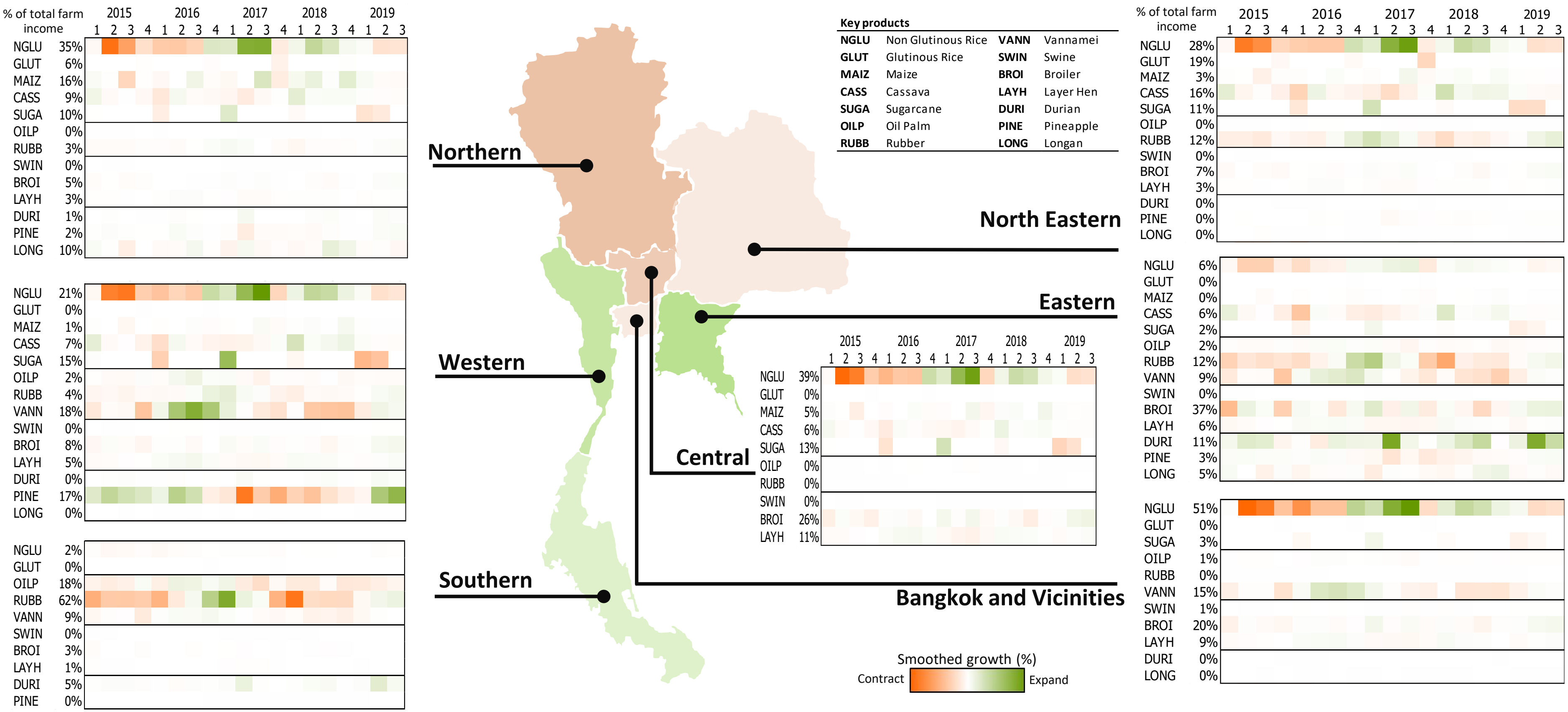
Source: OECD, National Statistical Office (NSO), Krungsri Research

Farm income inched up but output is flat; improvement in southern region due to low-base effect

Farm income growth (% YoY)

Regional Box: Color intensity indicates relevance of product, measured by share of total regional farm income.

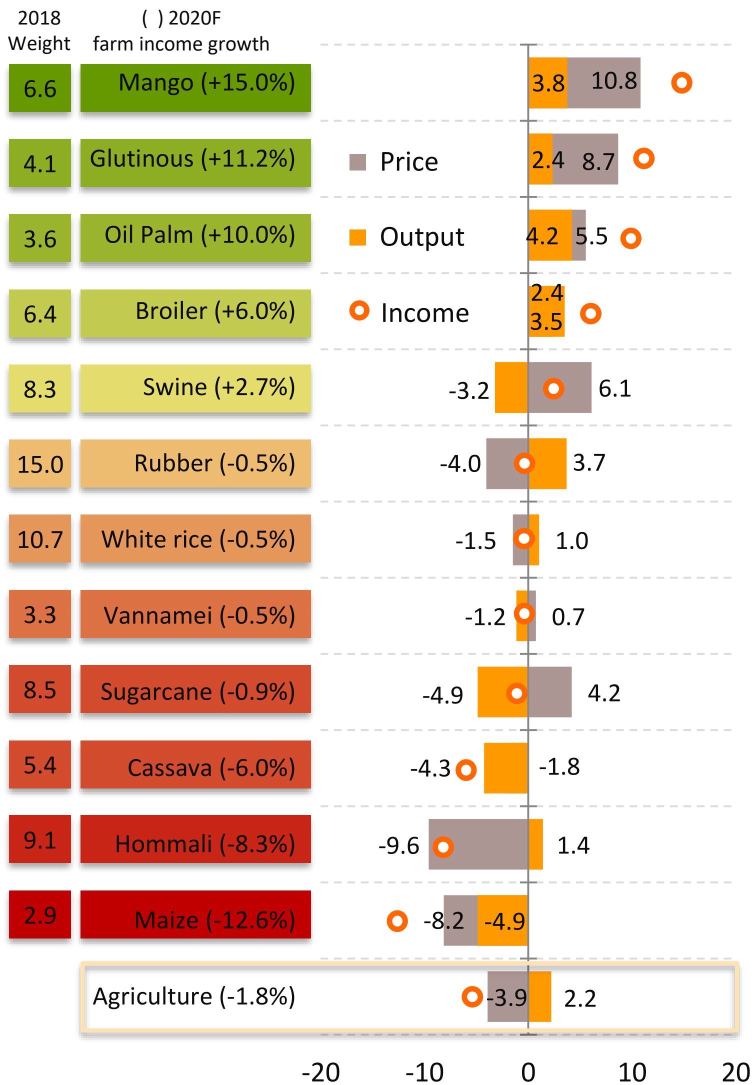
In the first 3 quarters of 2019, agricultural prices rose 1.3% YoY, output -0.1%, and income +1.2%.



Source: NSO, Office of Agricultural Economics (OAE), Krungsri Research

Outlook for farm income remains bleak as several major crops face unfavorable factors

2020F farm price and output growth (%)



Source: OAE, Krungsri Research

Production Outlook	Price Outlook
Increase: low base from drought in 2019 and improvement of agricultural management that would help farmers to boost higher yields	*Increase:* increasing demand from domestic and foreign markets, especially in Asian countries (such as South Korea, Japan, China, and Malaysia)
Increase: high prices in 2019 and favorable weather induce farmers to expand plantation areas	*Increase:* higher demand from domestic and foreign markets
Increase: an increase in both plantation areas and yield per area	*Increase:* effects of Thai government's policy such as plans to promote use of B10 and B20, and measures for supporting exports
Increase: reserves for rising global demand, especially from (i) EU's increase in export quota for Thailand, and (ii) Asia's imports led by China	*Increase:* an increase in domestic and foreign (Japan, EU) demand; overseas markets are looking for protein substitution instead of pork that suffer from ASF epidemic
Decrease: the government policy to keep surveillance and limit the ASF epidemic plague	*Increase:* higher demand because the supply shortage problem especially in the countries that suffer from ASF epidemic (such as China, Hong Kong)
Increase: an increase in both plantation areas and yield per area	*Decrease:* a strong increase in rubber output and weak demand in global markets, especially in China
Increase: high prices in 2019 and favorable weather induce farmers to expand plantation areas	*Decrease:* still-high global rice stocks and increasing global competition, especially from Vietnam, India, and China
Decrease: a decline in aquaculture farming areas as a result of low prices in 2018-2019	*Increase:* low-price base in 2019 and low output
Decrease: a decline in plantation areas as a result of low prices in 2018-2019	*Increase:* low-price base in 2019, low output, and increasing demand from domestic (energy, sugar) and foreign (China) markets
Decrease: farmers shifting to grow other crops that gain from higher prices due to low cassava prices and avoidance of severe epidemic.	*Decrease:* pressure from weaker demand, especially from China (large market)
Increase: high prices in 2019 and favorable weather induce farmers to expand planting area	*Decrease:* a higher rice-price base in 2018-2019, high outputs and increasing global competition
Decrease: farmers shift to grow other crops that gain from relatively higher prices	*Decrease:* Weak global demand, especially China which is the large consumers but reduce its import

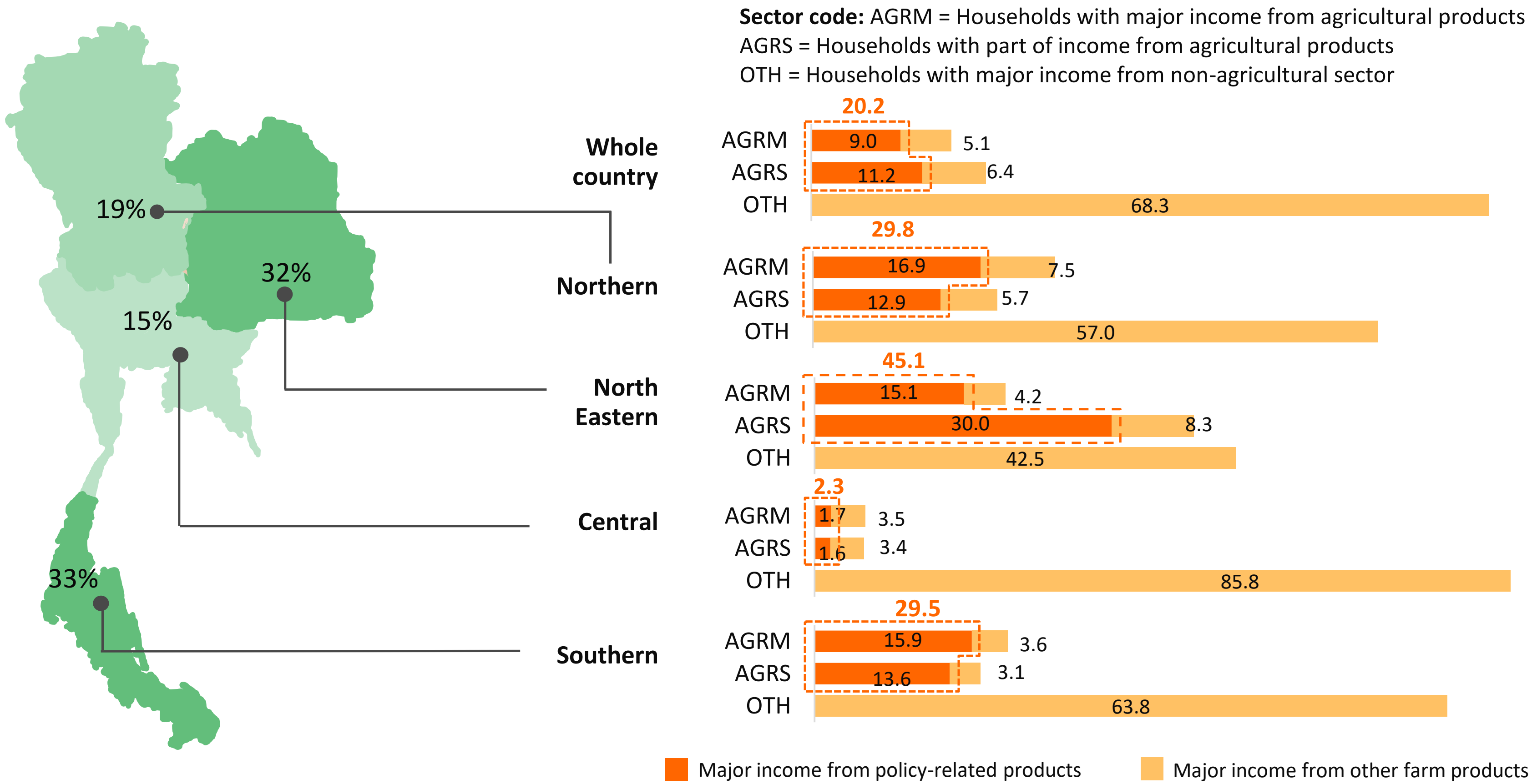
Krungsri Research expects farm income to decrease by 1.8% in 2020

20% of Thai households would benefit from income guarantee scheme for crop farmers

The Commerce Ministry's plan to guarantee income for crop farmers, including those cultivating rice, rubber, cassava, oil palm and corn, would benefit 20% of total households in Thailand (4.28m out of 21.4 m households). About 9% of households would be the biggest beneficiaries as most of their income are derived from the priority products. Northeastern and Southern regions will benefit the most, at 32% and 33% of total government spending under this scheme.

Share of households that would gain from priority products (% of total households nationwide)

Share of agricultural households in each region (%)



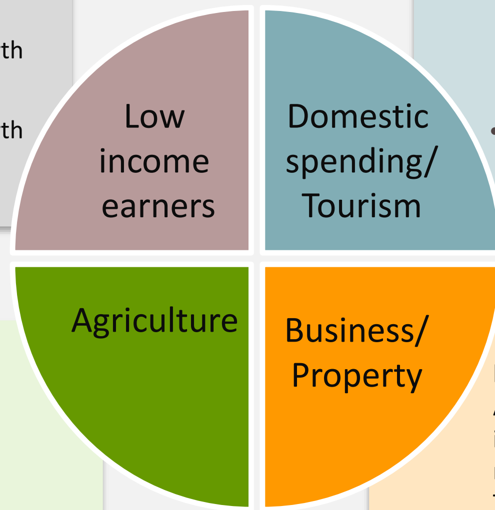
Source: NSO, OAE, Krungsri Research

Recent stimulus measures may not be enough to stop export weakness from spilling over to domestic demand

Government stimulus packages

Smartcard holders:

- Additional allowance for low-income households worth THB500/month (Aug-Sep)
- Additional allowance for seniors worth THB500/month (Aug-Sep)
- Additional allowance for Child Support Grant worth THB300/month (Aug-Sep)



Spending/Tourism:

- **THB13bn** package for G-Wallet for Thai travelers at THB1,000 per person to buy products or services from registered vendors and 15-20% cash back for up to THB50,000 spending (27 Sep'19 – 1 Jan'20)
- Extend fee waiver Visa-on-Arrivals for tourists from 21 nations, including China and India, until 30 Apr'20.

Farm income guarantee:

- Rice (Budget THB21.5bn; Oct'19-Oct'20)
- Rubber (THB30bn; Oct-19-Sep'20)
- Oil palm (THB13.4bn, Aug'19-Sep'20)
- Cassava and corn (awaiting approval)

Large corporates:

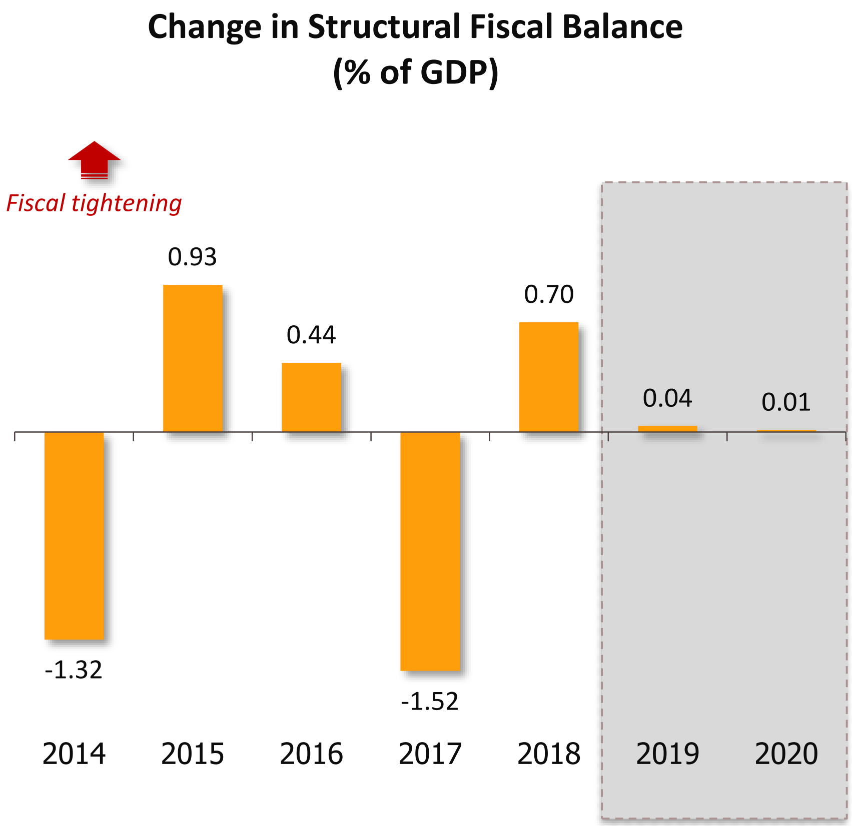
Additional 50% reduction in CIT for 5 years for investment in projects outside Bangkok. Applications must be submitted to BOI by end-2020 and at least THB1bn of investment must be realized by end- 2021.

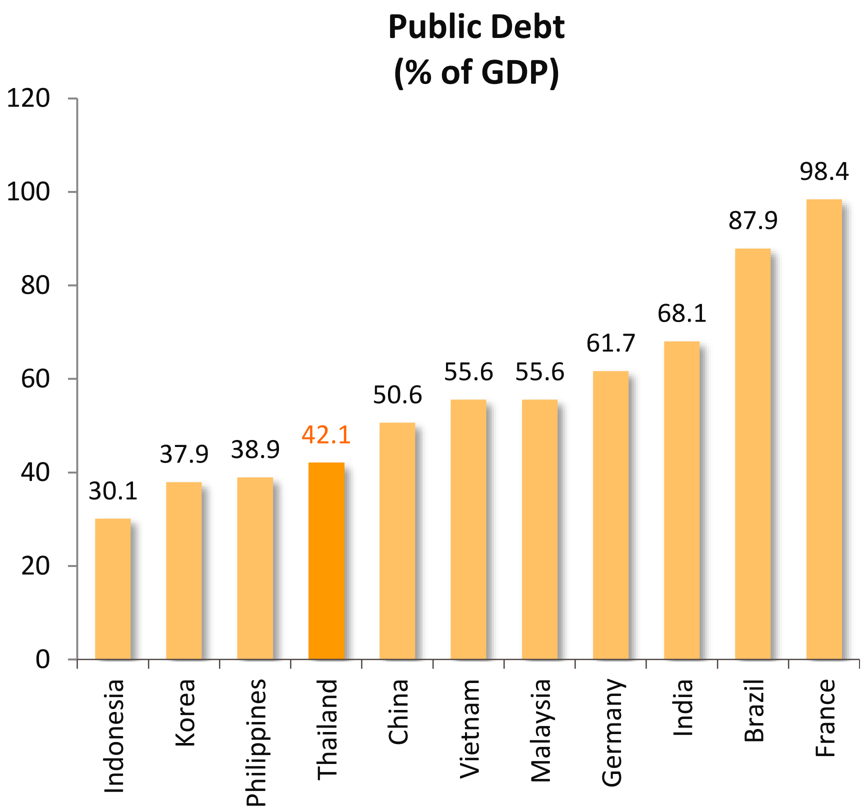
Property

- Reduce fees for property transfers and mortgage registrations to only 0.01% for homes priced up to THB3m (1 Nov'19 – 24 Dec'20)
- Low mortgage rates (provided by GHB) for homes priced up to THB3m

Source: Cabinet resolution, Krungsri Research

Public spending: Potential of fiscal policy could help nurture growth during an economic slowdown





Source: IMF, Krungsri Research

Public investment: Further progress in mega projects in 2H20, more projects to start in 2021-2022

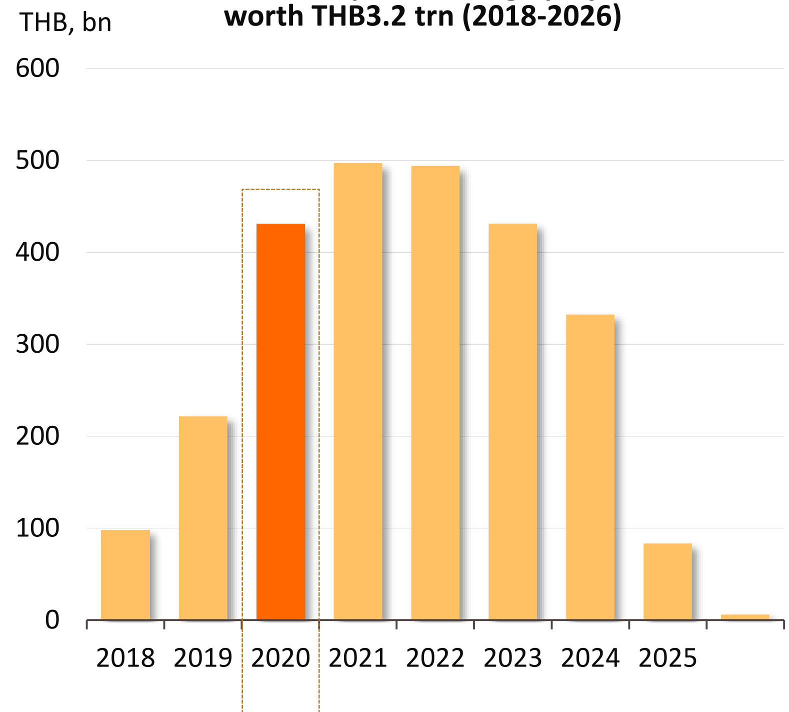
Progress of major investment projects under Transport Action Plan, including projects under EEC (as of June 2019)

Ongoing projects (under construction)	Value of Investment (THB, bn)	Progress (%)
Mass Transit System: Yellow Line (Lad Prao – Samrong)	51.8	
Mass Transit System: Pink Line (Khae Rai – Min Buri)	53.5	
Motorway (Bang Pa In – Nakhon Ratchasima)	29.2	
Motorway (Bang Yai – Kanchanaburi)	49.1	
Dual Track Railway (Nakhon Pathom – Chumporn)	47.4	
New projects (signed & preparing for construction)	**Value of Investment (THB, bn)**	**Expected to Start**
High-speed Rail Linked 3 Airport *	224.5	2020
Express Way (Rama 3 – Dao Kanong)	29.2	2020
New projects (in the bidding process)	**Value of Investment (THB, bn)**	**Expected to Start**
Motorway (Nakhon Pathom – Cha-am)	79.0	2020
Dual Track Railway (Phase ii)	376.5	2020
High-speed Rail (Bangkok – Nakhon Ratchasima) **	106.6	2020
Mass Transit System: Orange Line (Thai Cultural Center – Bang Khun Non)	128.0	2020
Mass Transit System: Purple Line (Tao Poon – Ratchaburana)	101.1	2020
Light Rail (Chiang Mai)	105.7	2020
Suvarnnabhumi Airport Terminal 2	42.0	2020
Lam Cha Bang Seaport (Phasee III) *	84.3	2020
U-Tapao Airport and Eastern Aviation City *	215.0	2021

● Disbursed ● Remaining amount

Note: * Mega Projects under EEC, ** Exclude Klang Dong-Pang Asok section
Source: Ministry of Transportation, Krungsri Research

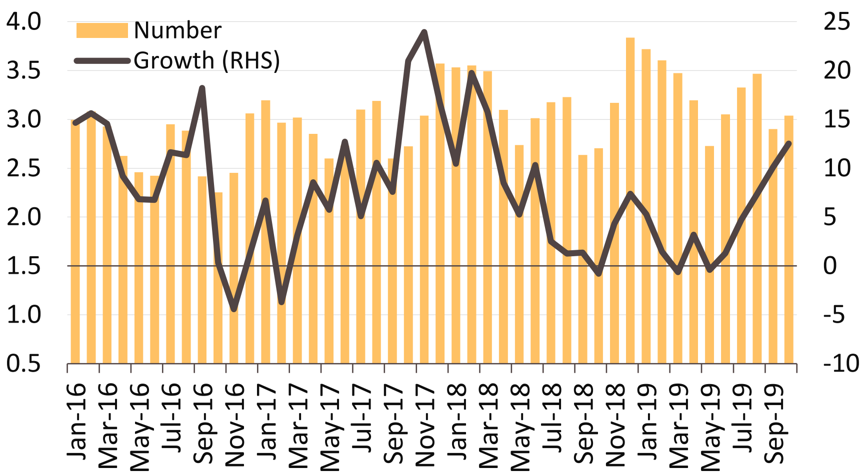
Investment plan for mega-projects worth THB3.2 trn (2018-2026)



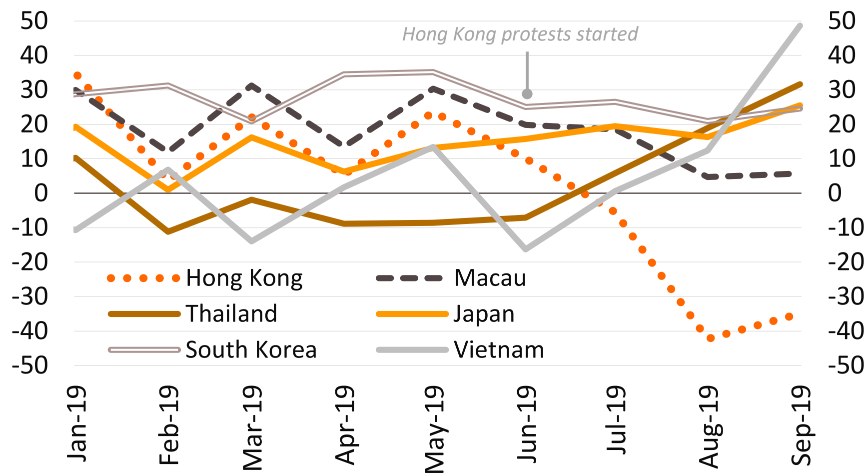
Krungsri Research's view: Infrastructure investment is expected to accelerate in 2H 2020 led by the high-speed rail project to link 3 airports and an expressway (Rama3-Dao Kanong). Several ongoing projects under construction would also support domestic investment; the approval for FY2020 budget means disbursements could start in February 2020.

Tourism is recovering, led by Chinese tourists and windfall from Hong Kong protests

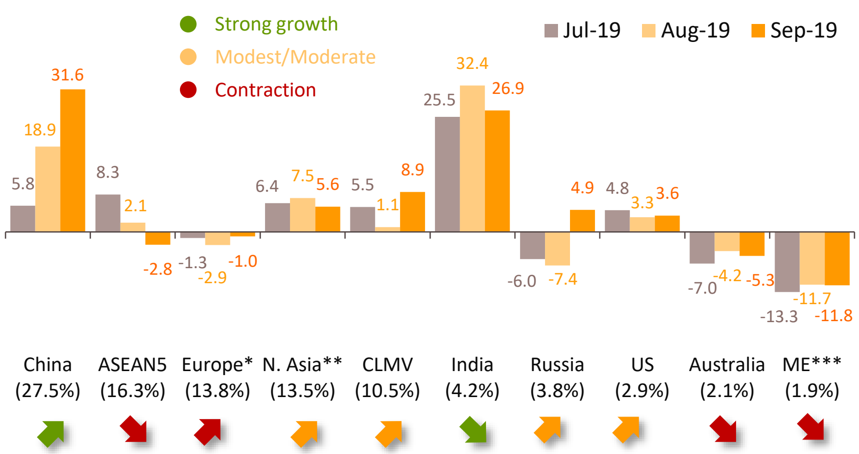
Foreign tourist arrivals



Chinese tourist numbers



Foreign tourist arrivals (% YoY)



Note: ( ) share in 2018 * Europe excludes Russia ** North Asia excludes China *** Middle East

Source: MOTS, Krungsri Research

Krungsri Research's view

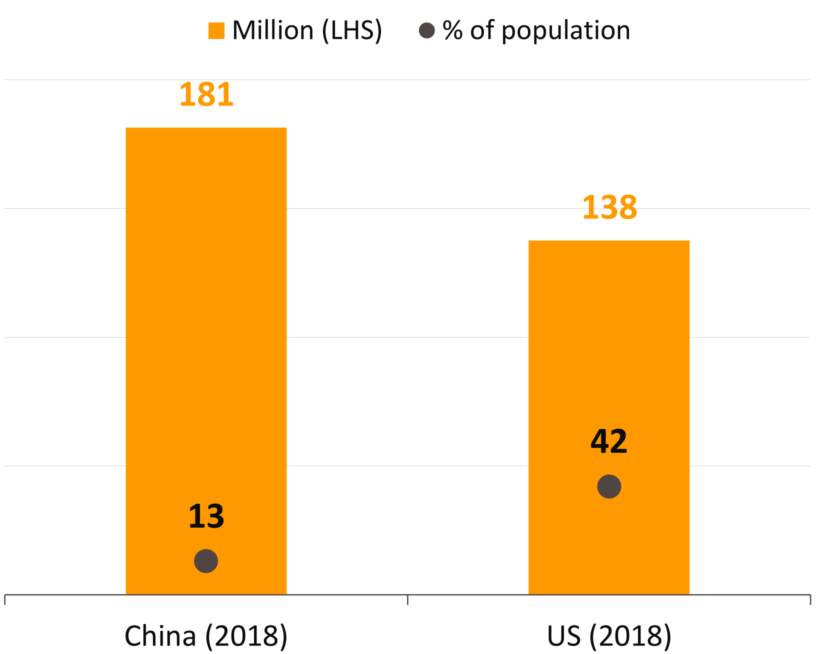
- Foreign tourist arrivals continued to rise by 10.1% YoY, the strongest in nine months, to 2.902 million in September. There was strong recovery in arrivals from China, which surged 31.6% YoY due to a low base in 2018 and the extended protests in Hong Kong deterring tourists. Chinese arrivals in Hong Kong tumbled 35.0% YoY in September, and will continue to drop as the protests escalate.
- Arrivals from India jumped 26.9% YoY, taking YTD growth to +25.6%, and Russian arrivals recovered to post positive growth. These offset the continued drop in tourist numbers from Australia, the Middle East, and Europe.

Strong prospects for China's outbound tourism industry; Thailand can benefit from offering easier visa policy

Only 13% of China's population currently hold a passport compared to 42% of the US population. By 2027, the number of passport holders in China is expected to reach 300 million or 20% of the population, according to the World Tourism Organization (UNWTO). In addition, the combined share of middle-income population in second- and third-tier cities will jump to 76% in 2022 from 58% in 2002, according to McKinsey. This segment will generate first-time travelers, and Thailand is a relatively cheap tourist destination.

Even though Chinese tourists tend to explore more luxurious destinations such as Europe and Americas, they are still subject to strict visa restrictions in many countries. But among the most popular tourist destinations for Chinese travellers, Thailand has the advantage of easier access. Specifically, South Korea and France offer visa-free access to nationals of more countries than Thailand, but Chinese tourists still require visas to travel there.

Valid passports in circulation



Visa policies for China nationals

Rank	Most popular destination (2018)*	Visa policies
1	**Thailand**	**e-Visa / 15 days**
2	Japan	visa required
3	Vietnam	e-Visa / 30 days
4	US	visa required
5	Malaysia	e-Visa / 30 days
6	Singapore	e-Visa
7	South Korea	visa required
8	Indonesia	visa-free / 30 days
9	Russia	visa required
10	France	visa required

* Surveyed by TalkingData; Tencent

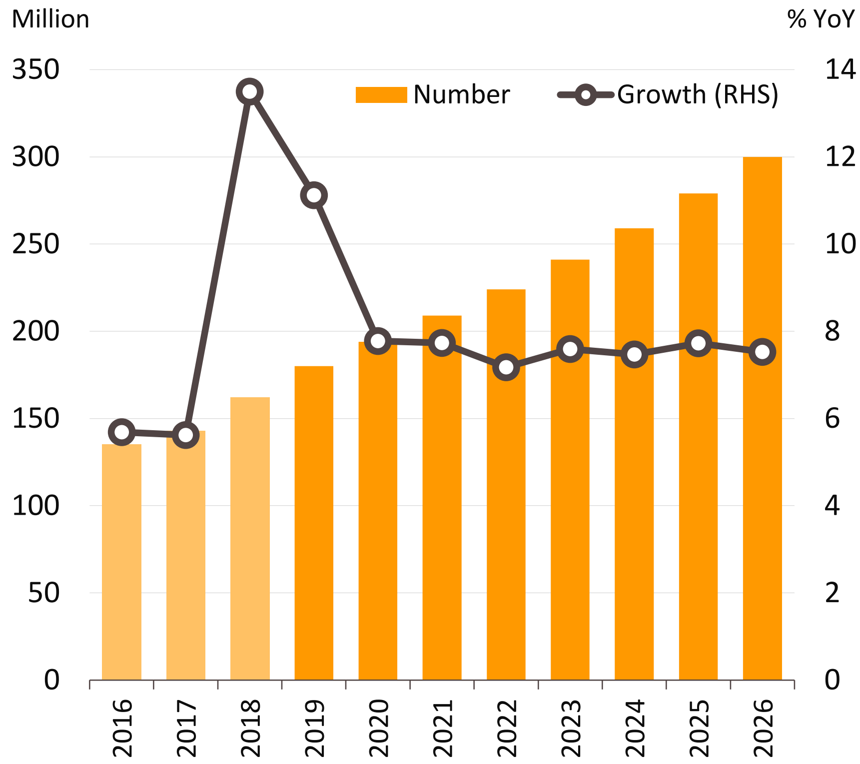
Source: China's National Immigration Administration (NIA), U.S. Department of State Bureau of Consular Affairs, Tencent, Krungsri Research

Strong prospects for China's outbound tourism industry; Thailand among the biggest beneficiaries

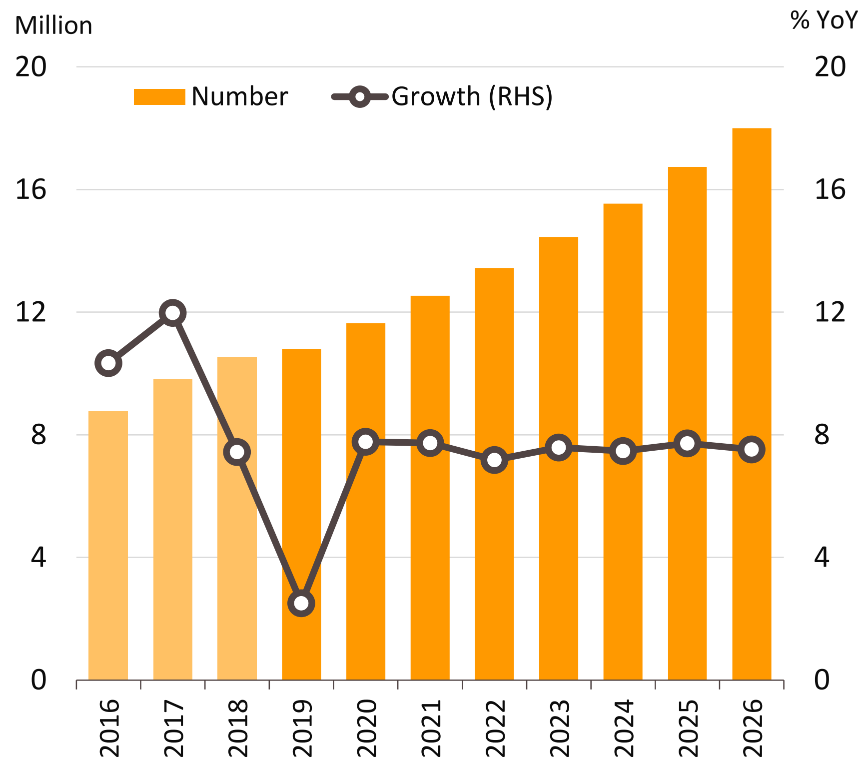
The China Outbound Tourism Research Institute (COTRI) forecasts the number of Chinese outbound tourists would reach 180 million in 2019 and 300 million by 2026.

Assuming Thailand continues to attract 6% of the total number of Chinese outbound tourists, the number of Chinese arrivals in Thailand could reach 18 million by 2026. The assumption is conservative compared to 6.6% p.a. average growth in 2016-2018.

Chinese outbound tourists



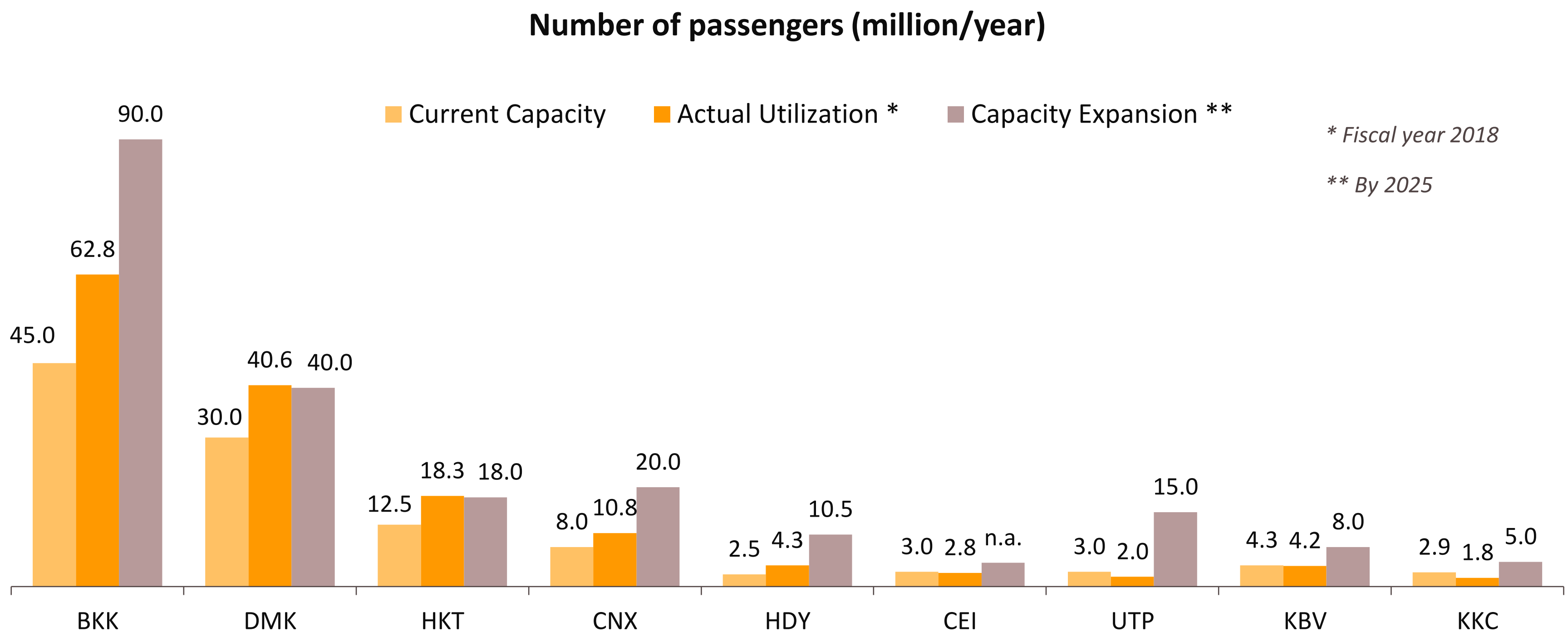
Chinese tourist arrivals to Thailand



Source: China Outbound Tourism Research Institute (COTRI), UNWTO, MOTS, Krungsri Research

Thailand is struggling to cope with the influx of travellers due to tight airport capacity

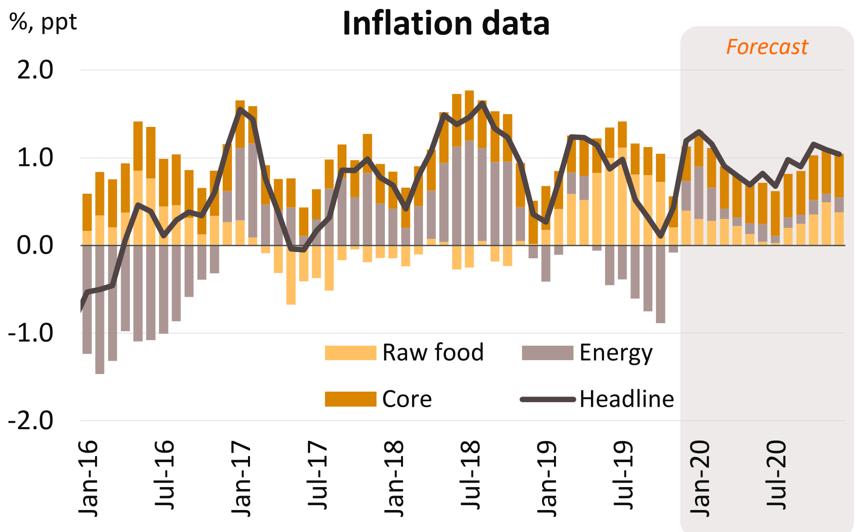
The nation's airports are processing more passengers than they are designed to handle. To address this, the government plans to upgrade infrastructure, including adding new terminals at the two international airports in Bangkok, as well as expand U-Tapao airport near Pattaya. That would increase combined capacity to about 145 million passengers per year by 2025, from 75 million currently.

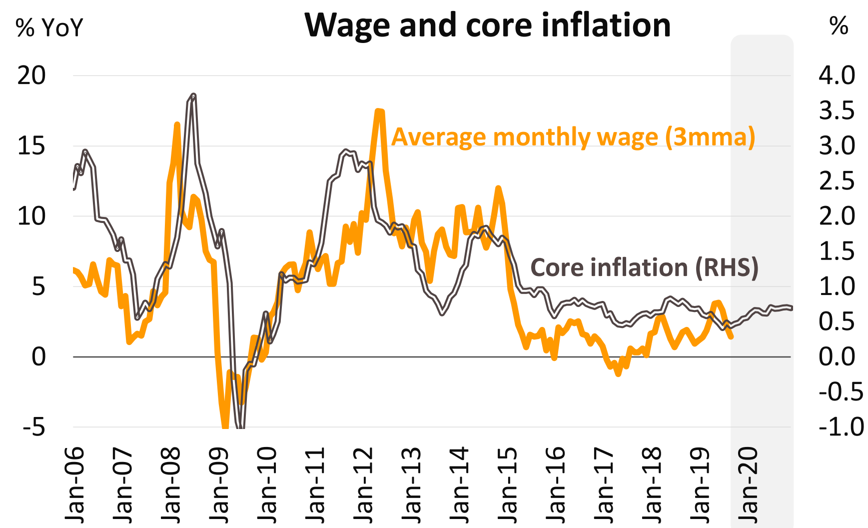


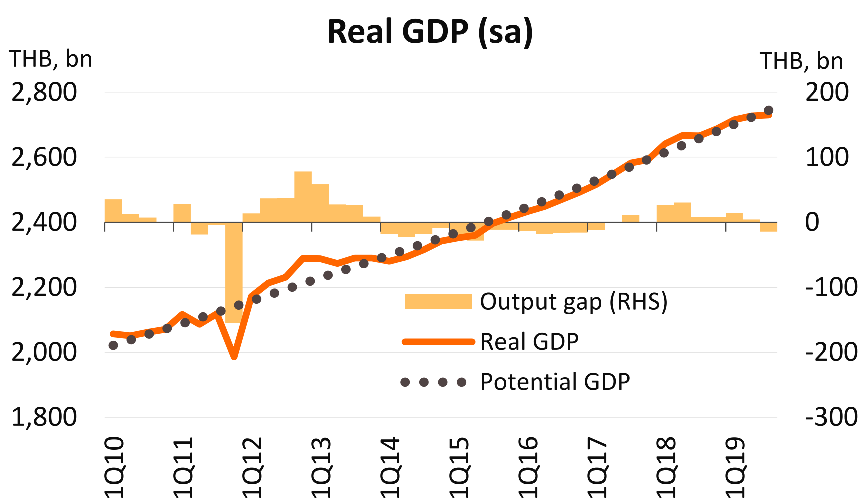
BKK: Suvarnabhumi International Airport
DMK: Don Mueang International Airport
HKT: Phuket International Airport
CNX: Chiang Mai International Airport
HDY: Hat Yai International Airport
CEI: Chiang Rai International Airport
UTP: U-Tapao International Airport
KBV: Krabi International Airport
KKC: Khon Kaen Airport

Source: Airports of Thailand (AOT), Krungsri Research

Inflation to remain at low end of BOT target given slow recovery in domestic demand and low energy prices





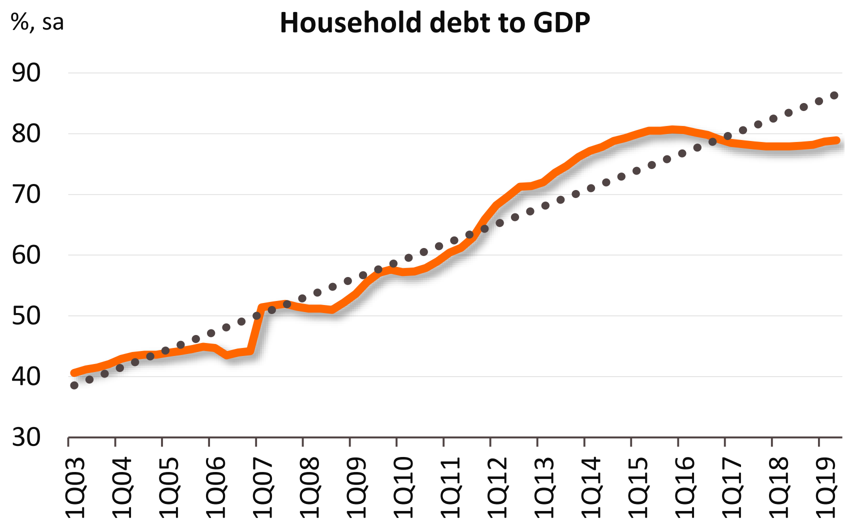


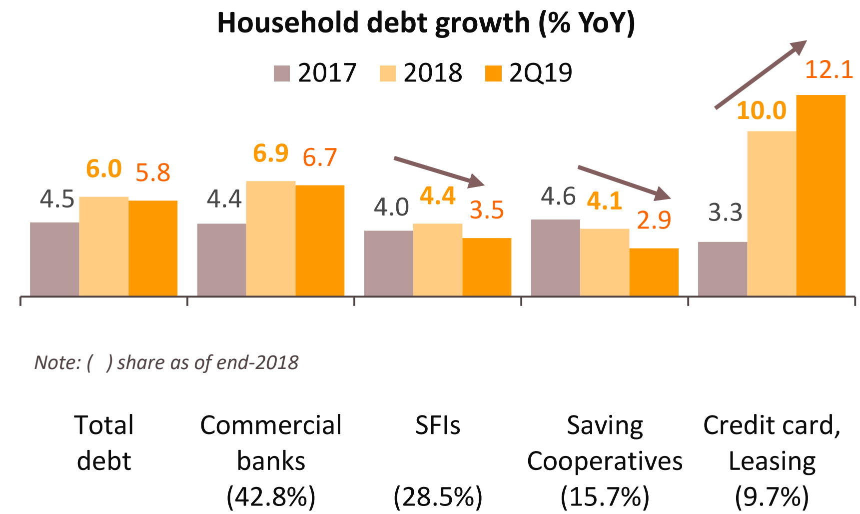
Source: BOT, MOC, NESDC, NSO, Krungsri Research

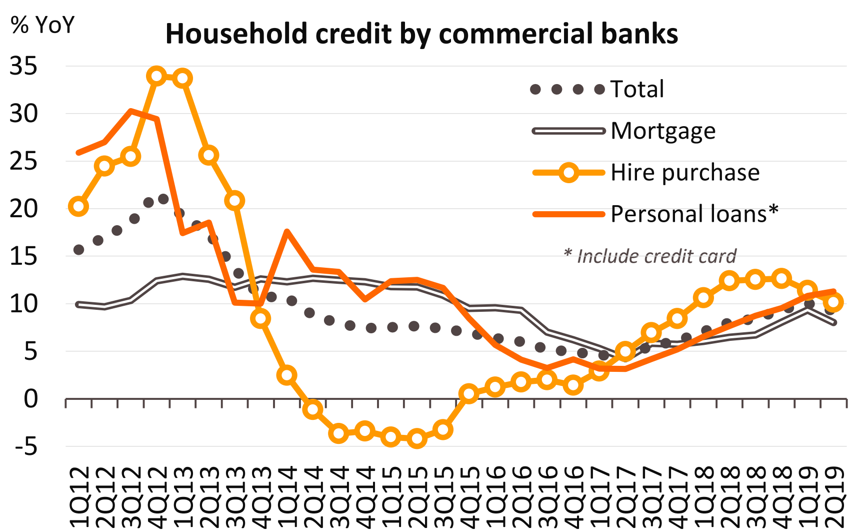
Krungsri Research's view

- Headline inflation and core inflation are expected to mark only 1.0% and 0.7% in 2020, compared to 0.8% and 0.5% in 2019, respectively. This would be supported by stable energy prices, which are expected to be close to 2018 average. Domestic purchasing power may be pressured by slow wage growth.
- Still-low inflation, which will be close to the low-end of BOT's target range, would encourage the BOT to stick to an accommodative monetary policy.

Still-high *household debt* and slower loan growth could curb liquidity to private sector







Source: BOT, Krungsri Research

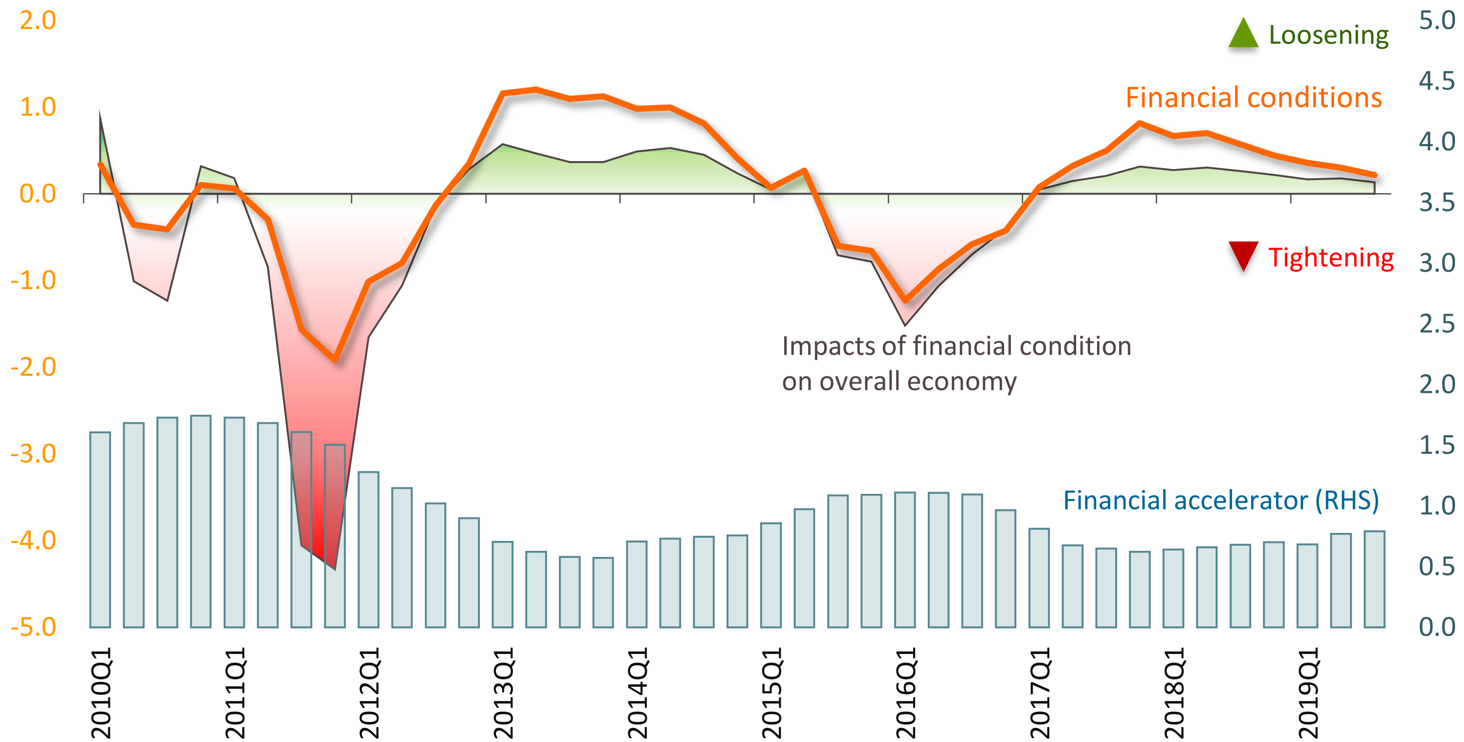
Krungsri Research's View

- In 2Q19, household debt-to-GDP (s.a.) ratio inched up to 78.9% from 78.7% in 1Q19, but loan growth decelerated to +5.8% YoY from +6.3% in 1Q19, partly because stricter LTV measures had capped mortgage loan growth. Loans extended by SFIs and cooperatives also grew at a slower pace.
- Still-high household debt and weaker loan growth could restrict liquidity to the private sector and curb domestic spending.

Financial conditions are much less supportive of economic growth

Financial conditions have been easing at a slower pace. Meanwhile, the financial accelerator has risen steadily over the past few quarters. Looking forward, financial conditions will tighten in the next few quarters. Together, these would increase risks to and undermine economic growth.

Financial Conditions and Financial Accelerator



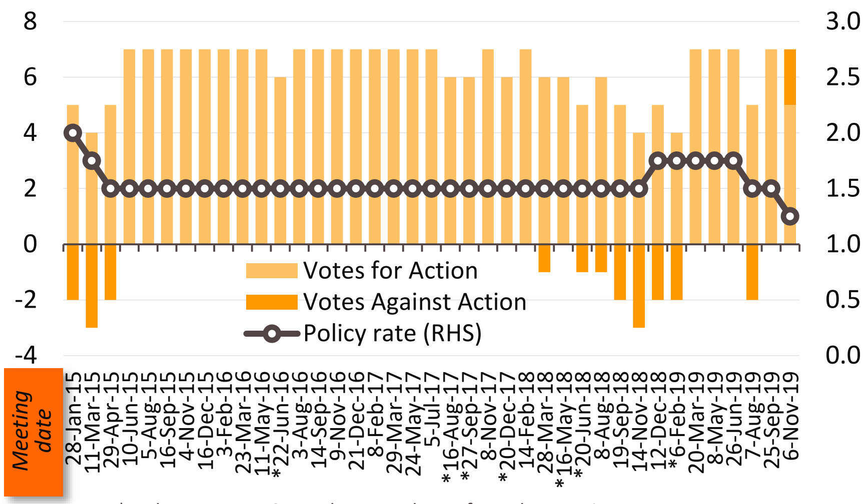
Note:

- **Positive financial condition** implies financial factors support economic growth while **negative financial condition** implies financial factors become headwinds for economic growth.
- **Financial accelerator** measures how financial factors could affect economic growth. **High** financial accelerator means any shocks to economic growth would be highly amplified by financial condition.
- The area indicates the impacts of financial factors on overall economy.

Source: BOT, Krungsri Research

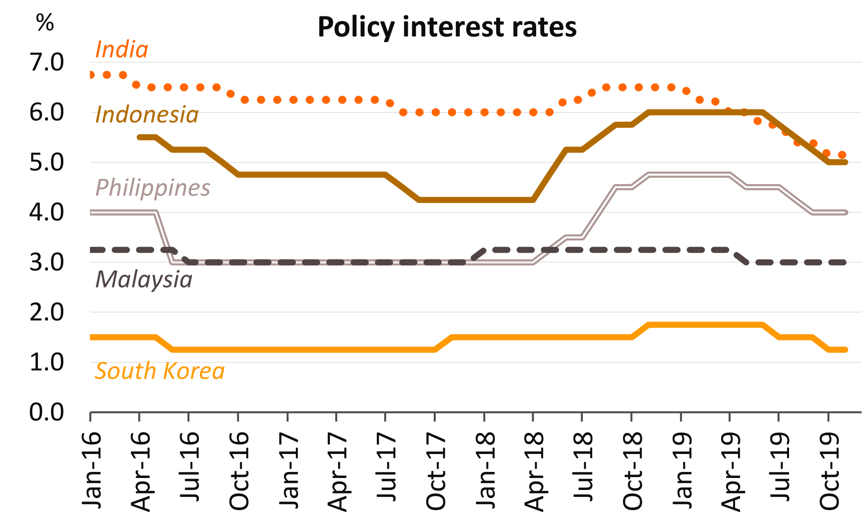
Monetary policy: Easing cycle still underway with one more rate cut and targeted policy

MPC policy rate decisions



Note: * At least one MPC member was absent from the meeting

Policy interest rates



Source: BOT, Bloomberg, Krungsri Research

Krungsri Research's view

MPC cut rate for the second time in three months

- The MPC had on 6 November voted 5-2 to cut policy rate by 25bps to 1.25%, the lowest level since June 2010, citing "*a more accommodative monetary policy would contribute to economic growth and support the rise of headline inflation toward the target*". 13 out of 21 economists in a Bloomberg survey had projected the rate cut.

MPC's more bearish on growth outlook

- The accompanying statement continued to tilt towards a more bearish tone, noting economic growth would expand at a slower rate than previously assessed and "*further below potential*".
- Descriptions for most economic activity variables and outlook were downgraded. Merchandise exports "*contracted more than previous assessment and were projected to recover more slowly than expected*". On domestic demand, household consumption would "*expand at a lower rate than previously assessed*". The statement also downgraded inflation assessment, noting the annual averages for headline inflation in 2019 and 2020 were projected to slip below the 1-4% target range.

Looking ahead, the MPC signaled a "wait-and-see" stance but we expect the easing cycle could be underway

- After two rate cuts since August, the MPC is adopting a "wait-and-see" stance, dropping the previous reference that "*the Committee would stand ready to use policy tools as appropriate*".
- **However, premised on less-supportive financial conditions coupled with a feedback loop of deteriorating confidence and economic growth -- in addition to sluggish, below-potential growth -- an easing monetary policy could be underway.**
- **We expect one more rate cut in the first quarter of 2020 with less stringent macroprudential measures in the foreseeable future. The BOT would likely explore alternative forms of easing -- including qualitative easing or targeted monetary policy -- to strengthen the effectiveness of the transmission mechanism.**

Key risk factors

External Risks

Uncertainty in Trade tension

US to suspend GSP benefits for Thai goods

EU-Vietnam FTA

Internal Risks

Downward spiral of confidence and economic activity

Policy risks

Oversupply of housing

Risk of drought

Source: Krungsri Research

Risks to trade: Despite trade talks, US and China tariff hikes since 2018 are hurting global trade

US-China tariff hikes since 2018

Round 1	Round 2	Round 3	Round 4
Affected	Affected	Affected	Affected & Planned
$34bn **6 Jul 18**; $16bn **23 Aug 18**	5-10% tariffs **24 Sept 18**	25% tariffs **US: 10 May 19** **China: 1 Jun 19**	**Additional tariffs Sept, Oct, Dec 19**

US tariffs on Chinese goods

- $34bn 25% tariff
- $16bn 25%

China tariffs on US goods

- $34bn 25% tariff
- $16bn 25%

Additional

- $200bn 10% tariff → **Tariff rates rise to 25%**
- $60bn 5-10% → **Tariff rates rise to 5-25%**

US:

- $112 bn (Chinese agricultural products, antiques, clothes, kitchenware, footwear) 1 Sep 19: 15% tariff
- $250 bn (suspended) raise tariffs to 30% from 25%
- $160 bn (planned; laptops, smartphones, children's toys) 15 Dec 19: 15% tariff

China:

- $75 bn (planned; US crude oil, soybean, pork, beef, chicken wheat, sorghum, cotton and other farm products) 15 Dec: 5% or 10% additional tariffs

	Round 1 ($34bn)	Round 1 ($16bn)	Round 2
Affected Chinese goods	aircraft, vehicle and part, industrial machinery, semiconductor, electrical motor & generator, medical equipment	Chemicals, plastics and rubbers, electronics (IC, semiconductor), metal product, electric motor	Agricultural products, industrial and intermediate goods (such as chemicals, minerals and textile materials), consumer goods (such as furniture, air conditioner and refrigerator)
Affected US products	agricultural products (soybean and beef, frozen meats and fish, seafood, vegetable& fruit), vehicles	Chemicals, fuel (oil, gas and coals), petroleum, plastic product, medical device	Food, chemicals, LNG, machinery, telecom, semiconductor devices, machinery, mechanical appliances, lasers, wood, optical and medical instruments

Source: USTR, FMPRC, MOFCOM, EU, Reuters, Bloomberg, Krungsri Research

Uncertainty in trade tension could increase risks to business expansion, relocation plans, and overall growth

Despite progress in trade talks, there is still high uncertainty over US-China trade tensions. It could head in several directions: rolling back all tariffs, drag trade talks (without deal), and tension could escalate (full-scale tariff hikes). There will continue to be trade barriers and conflicts, and further trade talks, because there are several delicate and complicated issues to be resolved. Thailand may be hurt by uncertainties over future changes in global supply chains, implying lingering risks to global trade, coupled with delays in investments (to expand businesses) and relocation activity. According to a Bloomberg report, "uncertainty created by the trade war could lower world GDP by 0.6% in 2021, relative to a scenario with no trade war. That's double the direct impact of the tariffs and is equivalent to USD585bn."

Trade conflicts could vary ahead, implying high uncertainty over trade tensions

CURRENT STATUS

- **Free trade**
- Trade deal with **plan to roll back** previous tariff hikes
- **Partial trade deal** with suspension of tariff hike plan
- Maintaining tariffs with **further trade talks**
- Maintain tariffs with **threats of more trade barriers**
- **Higher tariff rates** or covering more items
- **Full-scale tariff hikes** or covering all import items

Delicate and complicated issues in making trade agreement

US expects to resolving unfair Chinese economic policies and trade-distorting practices

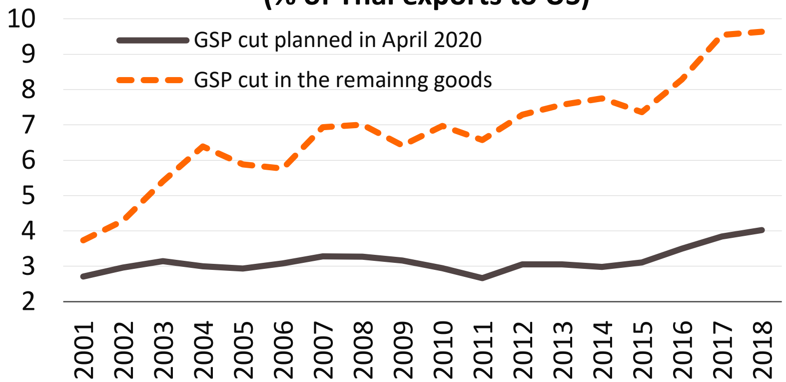
- **Strengthen intellectual property protection**
- **Prohibit forced technology transfer**
- **Remove industrial subsidies**
- **Change policy on market access**
- **China's purchases of US agricultural goods worth $50bn (more than twice the level before the conflict)**

Source: Bloomberg, Krungsri Research

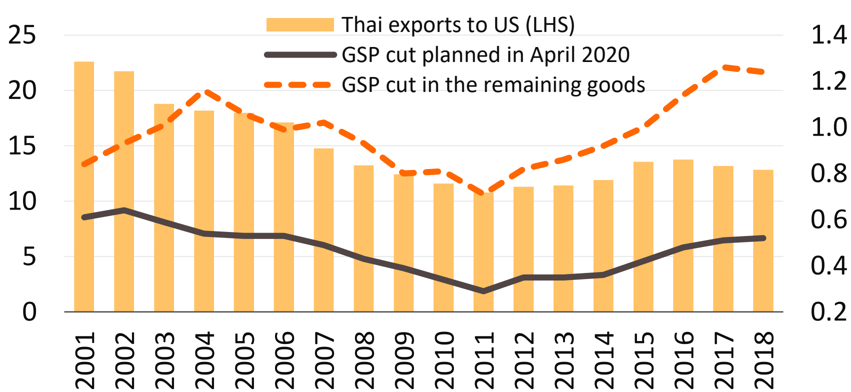
US plan to end GSP benefits for Thai goods in 2020 will hit 4% of Thai exports to the US, 13.6% in the worst case

The plan is set take effect on 25 April, 2020. It would cover 573 items (40% of 1,485 items eligible for GSP in 2018). Thailand exported 355 of the 573 products on the lists which accounted for 4.0% of Thai exports to the US in 2018, up from 2.7% in 2011. In the worst case, if the US cuts GSP benefits for all Thai goods, the incremental share of affected products would be 9.6%. Exports of these goods to the US and world markets have surged in the past few years, implying risks to Thai exports. If the US ends GSP benefits for all Thai goods, sectors that would see the biggest increase in tariffs would be mineral, motor vehicles & parts, metals, and textiles.

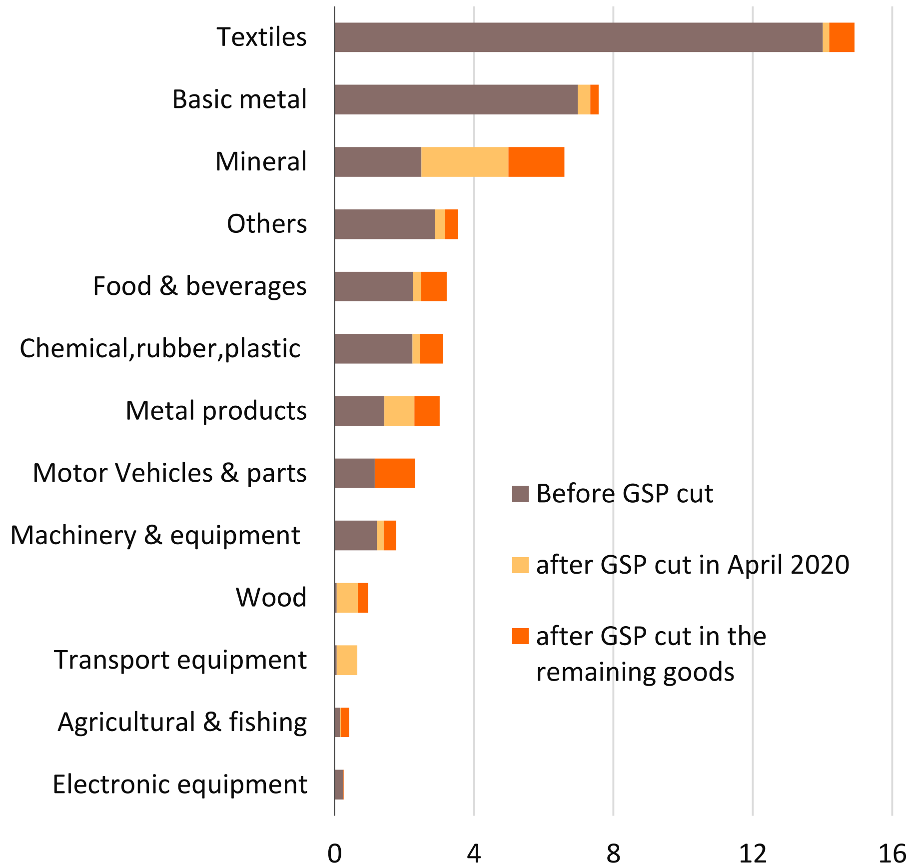
US market: share of Thai goods under US GSP (% of Thai exports to US)



World market: share of Thai goods under US GSP (% of total Thai exports)



Effective import tariffs by sectors (%)

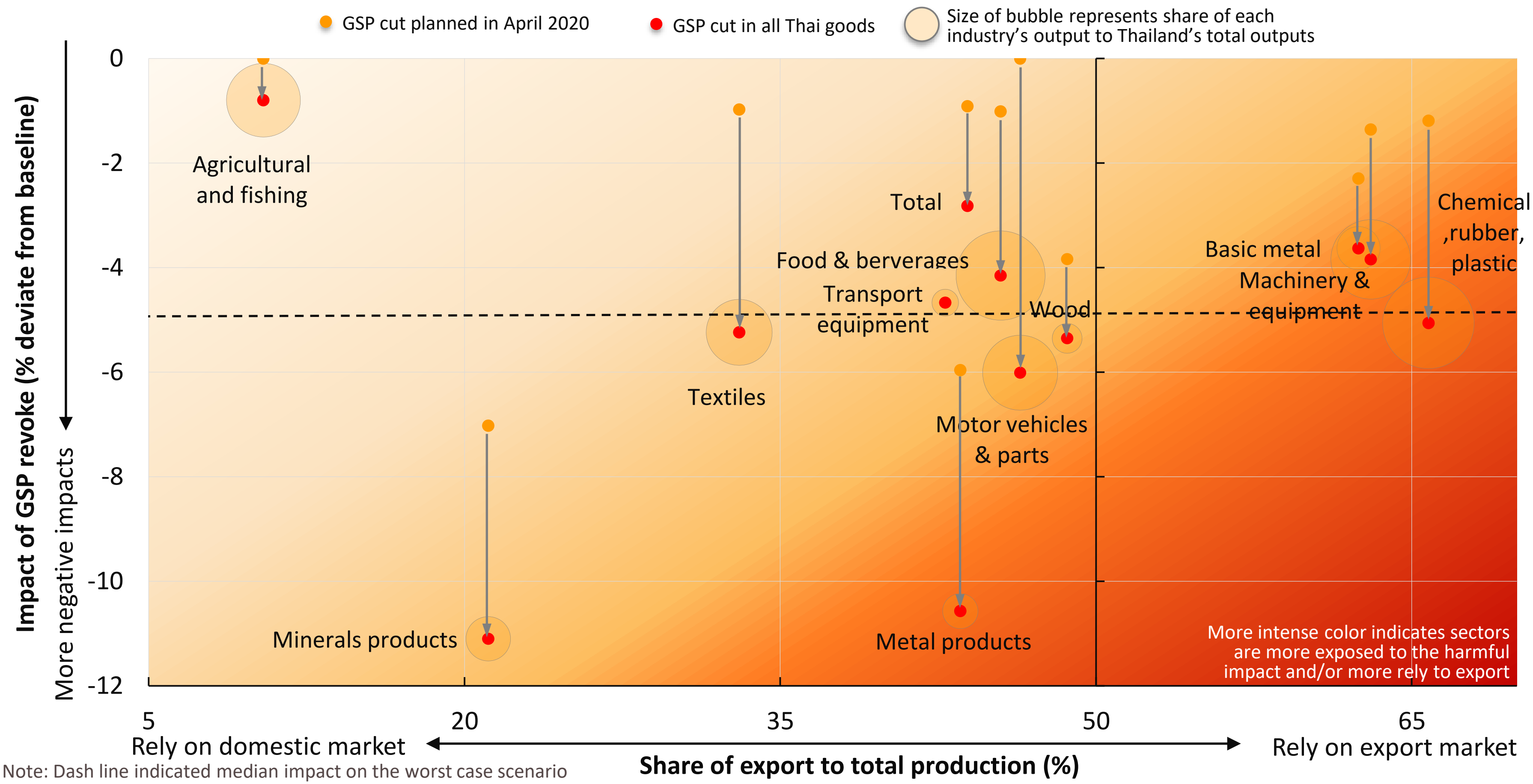


Source: Trade map, USITC, Krungsri Research

Limited impact on overall Thai exports, but high risk to exports to the US in the worst case scenario

The plan to suspend GSP on Thai goods would have minimal impact on overall Thai exports (less than 0.01%), but Thai exports to the US could shrink by 0.9% from the baseline. The largest impact (more than -5% from baseline) would be on mineral products (such as ceramic), metal products (such as iron and steel, screws and bolts), and transport equipment (such as motorcycles). In the worst case (i.e. end GSP benefits for all Thai goods), Thai exports to the US could shrink by up to 1.9%, led by motor vehicles & parts, mineral products, metal products, textiles, and chemicals & plastics.

Impact of US plan to cut GSP benefits on Thai goods



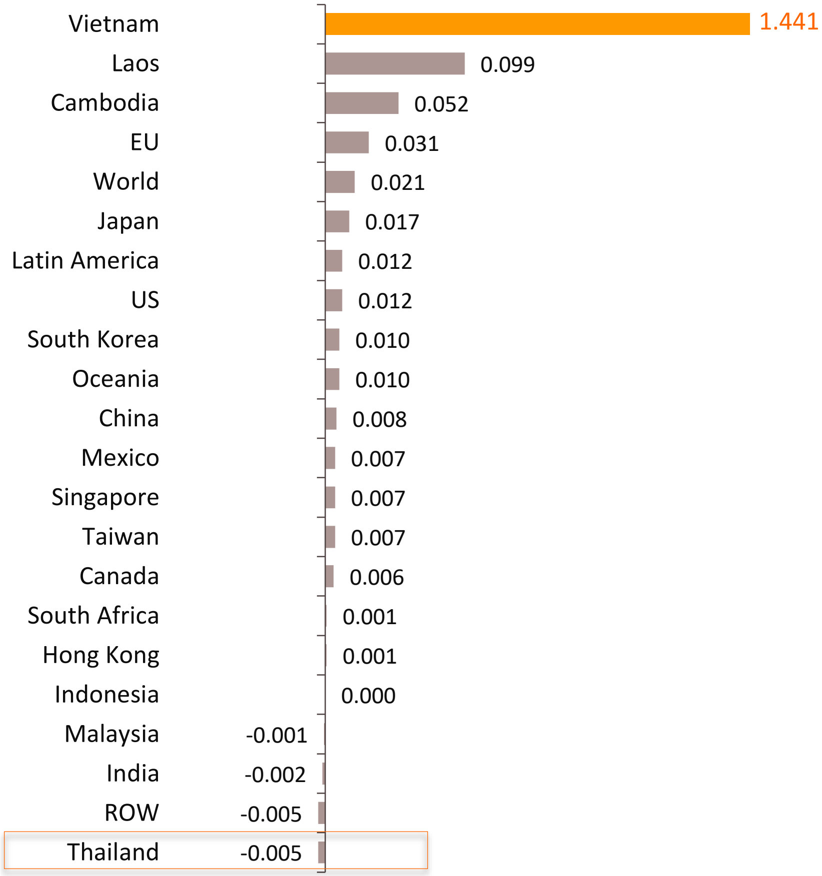
Note: Dash line indicated median impact on the worst case scenario

Source: GTAP, USITC Krungsri Research

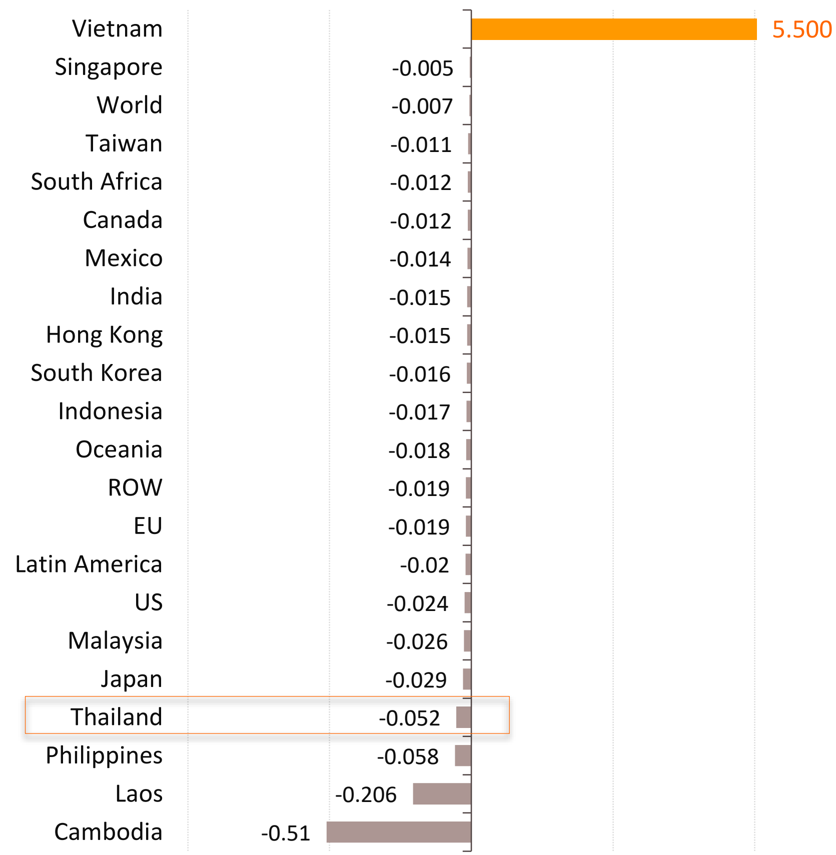
EU-Vietnam FTA: Thailand could be one of key countries to lose exports and investment

The Free Trade Agreement (FTA) between the European Union and Vietnam, set to take effect in 2020, includes near-complete removal of tariff barriers, reduction of non-tariff barriers, and improved access to Vietnam's services market. Due to close-to-zero tariffs between Vietnam and the EU, there is larger risk to Thailand's major export sectors to both countries and investment activity in the country. Our study suggests Thailand would be one of the biggest losers of this FTA. The risks could be even higher when Vietnam start to enhance its competitiveness.

Impact of EVFTA on exports by country
(% deviate from baseline)



Impact of EVFTA on investment by country
(% deviate from baseline)

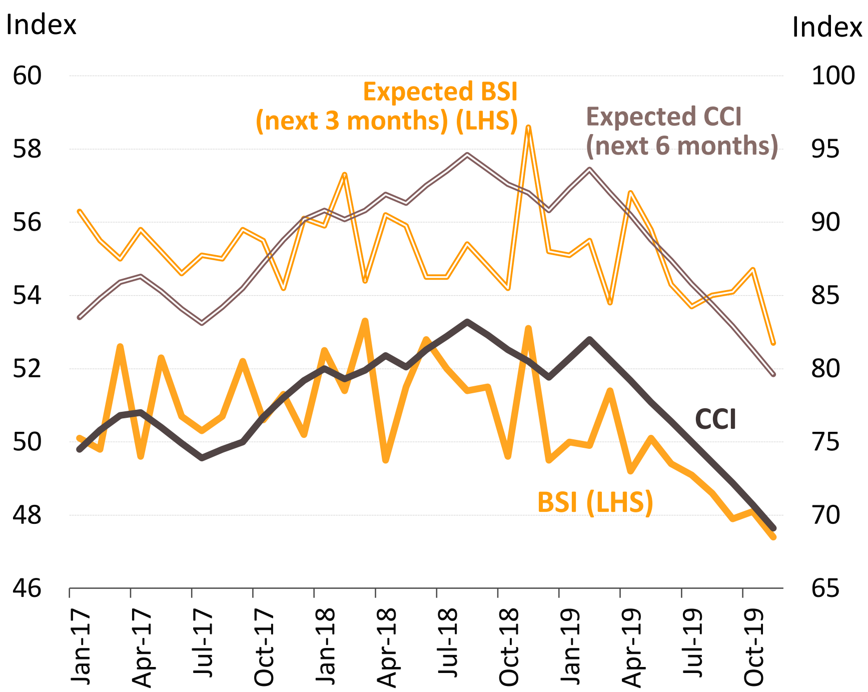


Source: GTAP, Trade Map, Krungsri Research

Weaker confidence could create a vicious cycle of slower spending, lower investment and weaker growth

The export weakness would not only adversely affect private investment and consumption but also hurt business sentiment and consumer confidence. If the recent spate of economic stimulus policies fail to revive confidence, Thailand could slip into a vicious cycle of slower consumer spending, lower business investment and weaker economic growth.

Business sentiment index (BSI) and consumer confidence index (CCI)



A vicious cycle of deteriorating confidence and lower growth

Source: University of Thai Chamber of Commerce (UTCC), BOT, Krungsri Research

Policy risks: several measures might become counter-cyclical economic policy during the recovery period

LTV measure

Macro-prudential measures for mortgage loans on a loan-to-value ratio (LTV), effective from April 2019 onwards

Type of Housing	LTV ratio (%)	
	(Previous)	(Current)
For homes priced below THB 10 m		
• First mortgage		
- High-rise housing	90*	90
- Low-rise housing	95*	95
• Second mortgage		
- if the first mortgage was borrowed for 3 years and longer		90
- if the first mortgage was borrowed less than 3 years (Note: In case that the first mortgage is not paid off yet)		80
• Third and subsequent mortgaged		70
For homes priced at THB 10 m and above	80	
• First or Second mortgage		80
• Third and subsequent mortgaged		70

Note: This has been enforced since April 1, 2019 and affects all loans agreed upon after October 15, 2018.
* Affects all home loans secured against collateral with a value of less than THB 10 m.

Land and building tax

- The Land and Building Tax Act B.E. 2562 was announced in the Royal Gazette on March 13, 2018.
- Payment for land and building tax under the new Act will be required from **January 1, 2020**, onwards.

- Fixed Maximum tax rates for Land and Buildings are classified by category as follows:

1) agricultural - 0.15%;
2) residential - 0.30%; (first home with appraisal price starting at THB50m)
3) others - 1.20%; and
4) vacant/unused - 0.30% (if the land or building is unused for more than three years, the rate will be increased by 0.30% every three years, until the rate reached 3.0%)

DSR Policy

- The BOT decided **not to enforce the debt-service ratio (DSR) policy in 2019.**

- However, the BOT has asked banks and financial institutions to set **"a standard for DSR calculation"** based on borrowers' debts and income, expected to be finalized **by end-2019.**

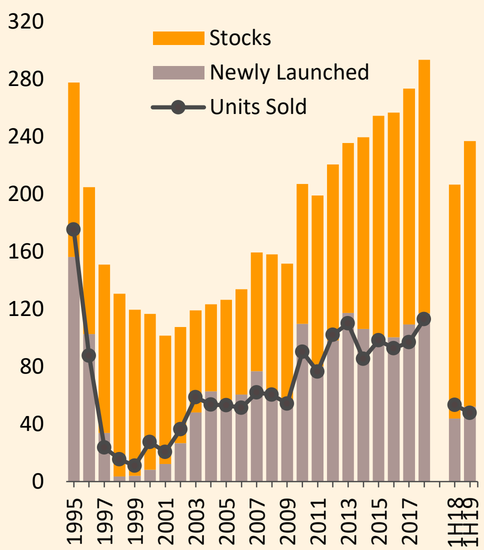
- The BOT also informed financial institutions to employ **"responsible lending principles"**, with an emphasis on ensuring borrowers still have sufficient money for daily expenses after repaying their debts **(affordability)**.

Source: BOT, Bangkok Post, The Nation, Krungsri Research

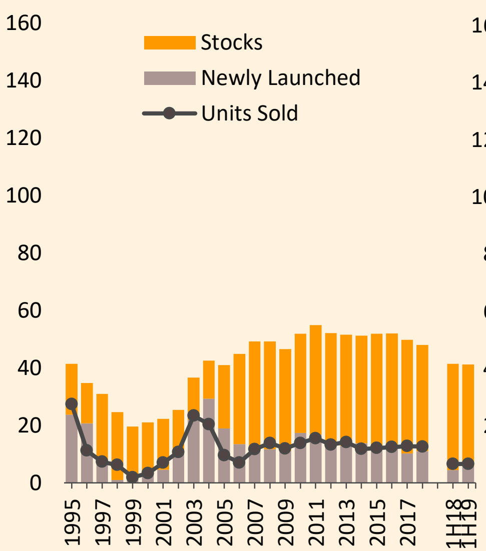
Excess housing supply remains a key concern

As private investment in dwellings account for up to 56% of private construction (as of 2018), it would have an impact on investment in machinery and equipment. Hence, the housing market has a large influence on the direction of domestic investment and resulting risks to the overall economy. However, total housing supply in BMR has continued to rise to a record high. Although demand reached a 5-year high in 2018, that was partly due to front-loaded effect of stricter LTV measures announced in October 2018. Future demand is likely to slow down and may not be able to absorb the cumulative supply. And given weak domestic purchasing power and uncertain foreign demand amid a slowing global economy, the excess supply -- especially in the condominium segment – would continue to be a major concern in the next few years.

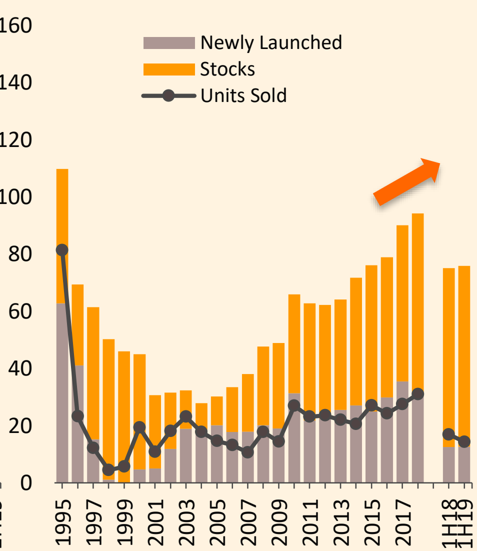
Total supply (unsold) of housing
(Thousand units)



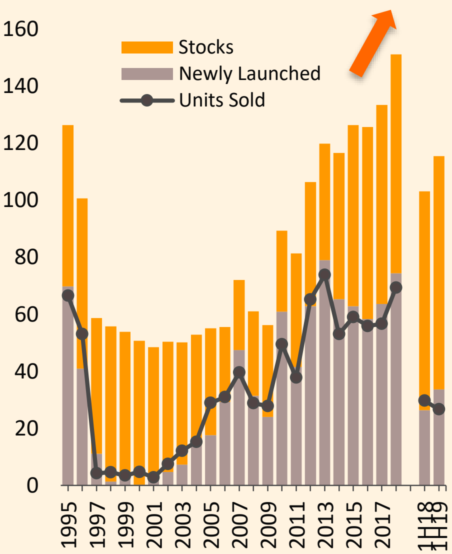
Detached houses
(Thousand units)



Townhouse
(Thousand units)



Condominium
(Thousand units)

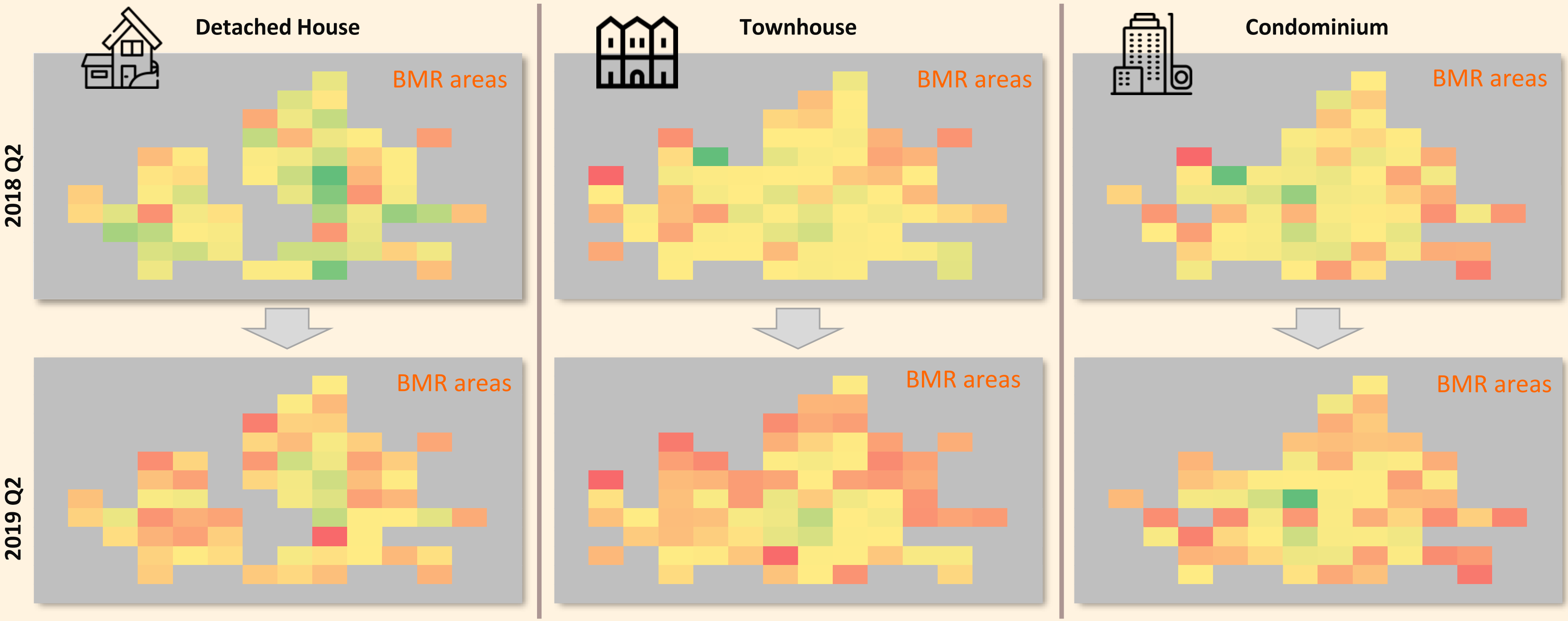


Source: Agency for Real Estate Affairs (AREA), Krungsri Research

Market Tightness Index indicates slower demand in all housing segments in BMR

Krungsri Research's *Market Tightness Index*, a proxy for potential housing demand, has declined since 2018. This has increased concerns over all residential segments in the BMR, that inventory could rise in the near future. The index has been declining for most of the 72 districts in the BMR. Red and orange colors indicate districts with low number of searches per housing units, implying lower potential demand in the future. Given the current weakness in economic activities, the housing market could see a larger oversupply.

Changes in Market Tightness Index for housing in BMR (2Q18-2Q19)



Note: The Market Tightness Index (MTI) is computed as the normalized number of searches on online properties listed on Baania website divided by the number of housing units. The MTI can be compared only across time within each housing segment

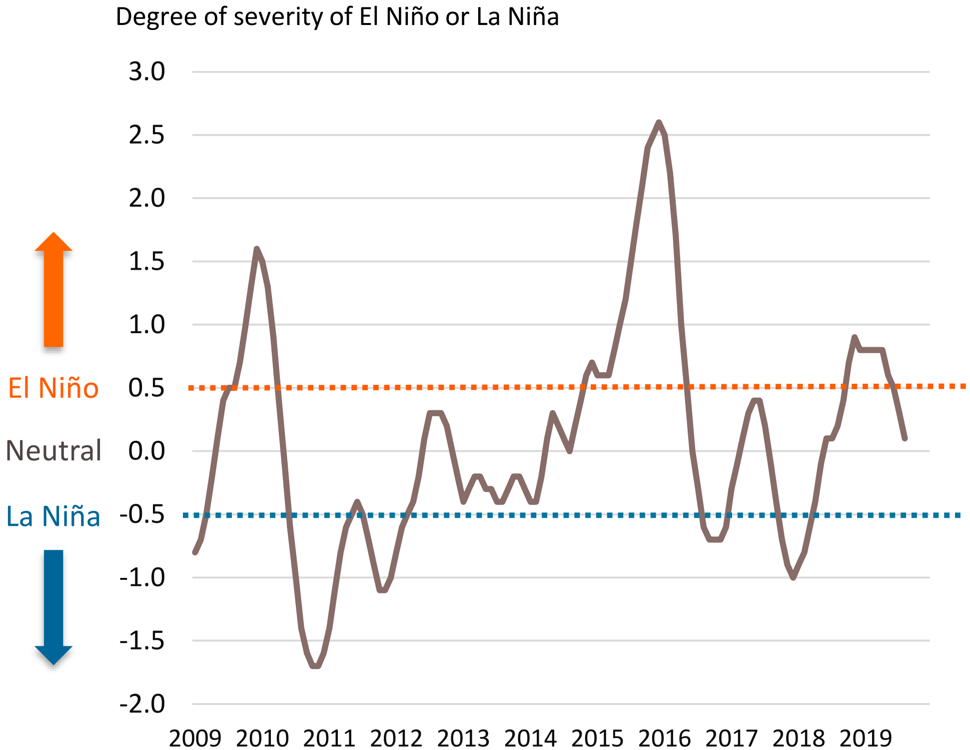
Low demand tightness — High demand tightness

Source: Baania, Krungsri Research

Drought risk as water levels in major dams drop to near 2016 crisis levels; might hurt purchasing power

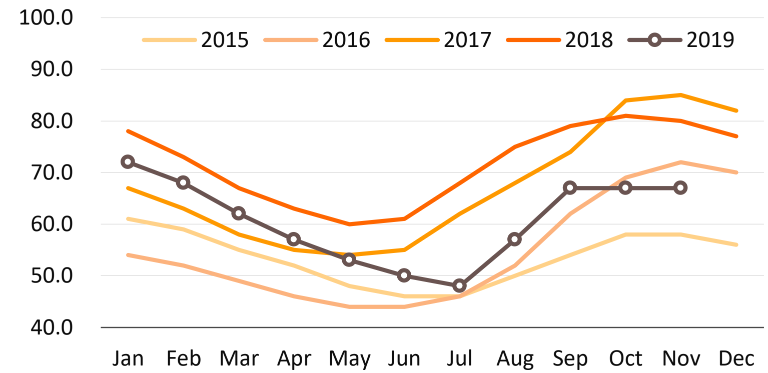
Compared to the 2016 drought, the situation in 2020 might be a great concern. Even though the National Oceanic and Atmospheric Administration (NOAA) sees no signs of El Nino (vs strong El Nino in 2016), water levels in most major dams – especially in the North, Northeast, and Central regions -- are currently lower than in 2016. In the central region, levels in major dams are far below 2016 levels and the irrigation department could have limited room to release water from dams in the North (currently close to 2016 levels). Farm output could be damaged in the first half of 2020 (or before the regular rainy season in the third quarter of the year). This could dampen purchasing power and consumer confidence.

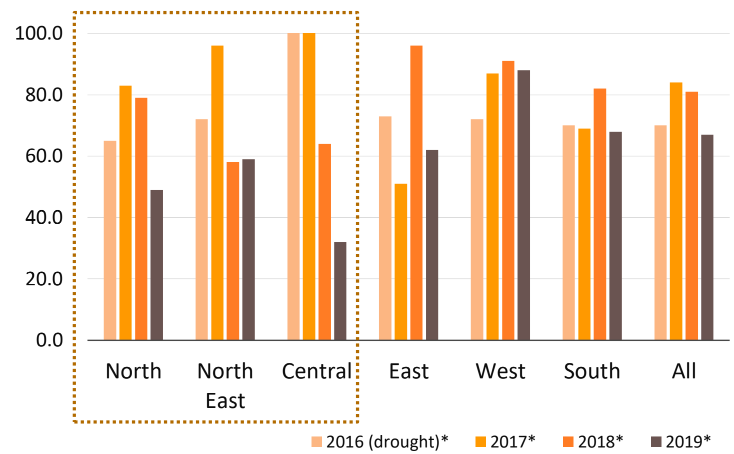
El Niño (Drought): Oceanic Nino Index (ONI)



Note: Index > +0.5, meaning the rain is less than normal level (El Niño);
Index < -0.5, meaning the rain is more than normal level (La Niña)

Water levels in major dams (% of total capacity)





*Data as of November 3, 2019

Source: National Oceanic and Atmospheric Administration (NOAA), ThaiWater, Krungsri Research

KRUNGSRI RESEARCH

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