

APAC Economic Perspectives

Thailand by the Numbers (March 2016)

Economics

Asia Pacific

Exports should be less bad by H2 2016

Weak Chinese and Korean trade data for February suggest the external environment remains difficult for Thai exporters. However, as our colleagues Duncan Wooldridge and Niall MacLeod argue [here](#) and [here](#), Asian export growth should be less bad in H2 2016. They assume that manufacturing weakness doesn't lead to a global recession and oil prices stabilise. UBS projects a higher oil price assuming the supply of oil responds to very low oil prices over time. The logic is that a recovery in the oil price would curtail destocking or delayed purchases due to price related reasons. Also, Global PMI 'orders less inventories' – a timely indicator of turning points in global trade – has improved and does not suggest a global recession (Figure 57). Thailand's position within the regional supply chain makes it likely Thai export growth will bottom out if Asian trade growth bottoms out (Figure 1).

Overcoming inventory indigestion

Consistent with our colleagues' work at the regional level, Thai data suggests some of the prior rise in inventories has been digested. Thai imports of intermediate goods and raw materials (excluding fuel) fell to their lowest level since early 2010 in January 2016. Part of this is a price effect, but volumes of raw material imports have also fallen – inventory volumes may have been managed lower in anticipation of price declines. Thai industrial data suggests a jump in the volume of manufacturing inventories in January 2016 (Figure 42), but the data is not seasonally adjusted and the level of the inventory index is down on the year (Figure 2). To the extent that both Thai and regional inventory data has improved there is scope for less downward pressure on Thai trade growth and by extension manufacturing activity.

Slower pace of decline in the baht

For Thailand this could mean imports accelerate relative to exports. Relative to the size of the economy, Thailand is one of the largest net importers of energy commodities in Asia. The balance of energy trade was -5% of GDP in H2 2015, down from -9% in 2013. Also, more stable Thai inventories could mean less negative raw material and intermediate goods imports. As such, while a supply driven rise in oil prices should be helpful for Thai nominal export growth through the indirect impact on regional export prices and inventories, it would likely be a drag on Thailand's balance of trade and domestic spending power. As it happens, Thailand has a substantial external surplus that could be eroded without necessarily crimping domestic spending power. Thailand's current account surplus was a record 13.4% of GDP in Q4 2015 – close to prior records of 14.4% in Q1 2009 and 15.8% in Q1 1998. What does this mean for the baht? In recent quarters the baht has depreciated as the current account surplus rose. Previously, there have been instances (e.g. post Q1 2009) when the baht appreciated as the current account surplus fell (Figure 3). The key is not simply whether the current account is more or less in surplus or deficit but whether Thailand's underlying growth dynamic looks attractive to investors. Duncan's work does not make the case at the regional level that exports or manufacturing should recover. The argument is that concerns about a manufacturing-led global recession should ease toward mid-year and Asian exports should look less bad. In Thailand, we continue to expect net exports to drag real GDP growth lower in 2016 – as imports recover relative to flat export volumes. This, the potential for Fed policy rate hikes later in 2016 plus concerns surrounding the mature credit cycle in Thailand should keep the baht depressed versus the US dollar into end 2016. However, a less bad export environment should allow the pace of decline in the baht to slow; our end-2016 projection of USDTHB 37 implies the year on year change slows to circa 3% from 9% in February 2016.

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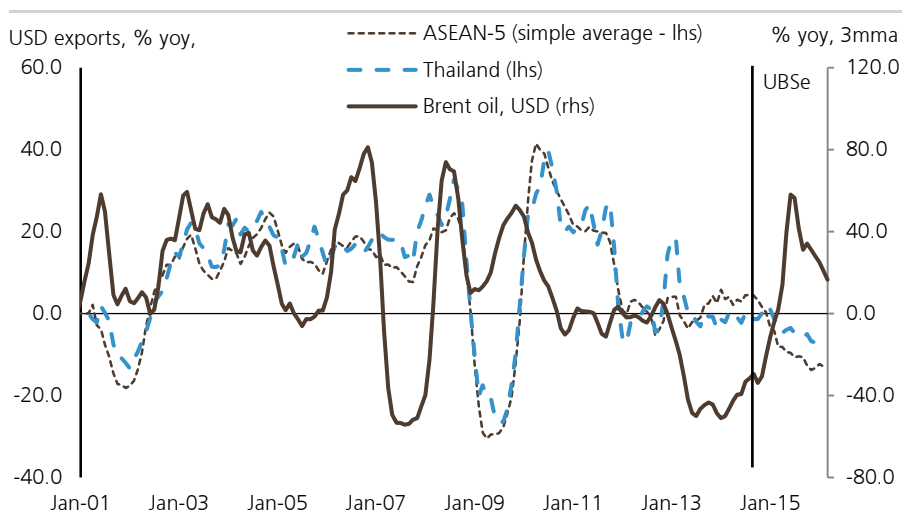
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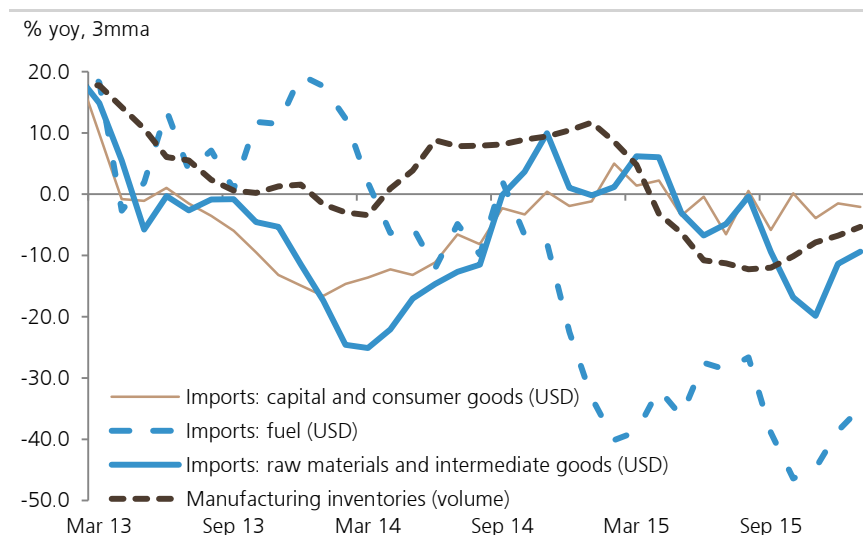
Figure 1: The worst is (probably) over for exports



Source: UBS Estimates, Haver, CEIC

Asian exports are highly correlated with the oil price. Thailand's exports are no exception. One reason for this is that oil prices impact the expected price of other goods and hence the inventory cycle.

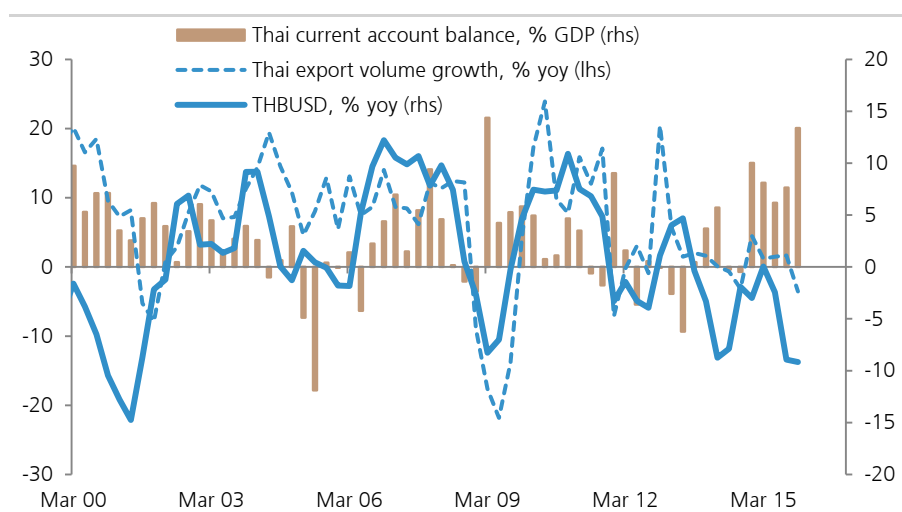
Figure 2: Thai trade data depressed by inventory correction



Source: UBS Estimates, Haver, CEIC

For Thailand, imports have been impacted more than exports by the lower oil price and inventory cycle. That's partly because of the direct effect of lower commodity prices and the (15%) weight of fuel in Thai imports. It's also because manufacturing sector inventory volumes have been falling.

Figure 3: A slower pace of decline in the baht



Source: UBS Estimates, Haver, CEIC

Higher oil prices and less of a correction in inventories could mean less bad export growth. It could also mean a lower current account surplus. We expect a lack of a recovery in exports and manufacturing – plus Fed rate hikes and a maturing credit cycle – to keep the pressure on the downside for the baht versus the US dollar. However, less bad export growth should slow the baht's pace of decline.

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Our guide to Thai monthly data – what the numbers are, what they mean, and our outlook going forward:

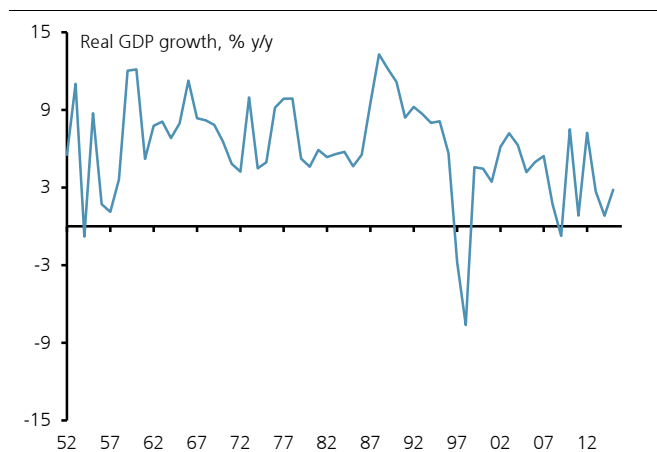
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We would like to thank Sreejith Balasubramanian, an employee of Cognizant, for his assistance in preparing this research report. Cognizant staff provides research support services to UBS.

Gross Domestic Product

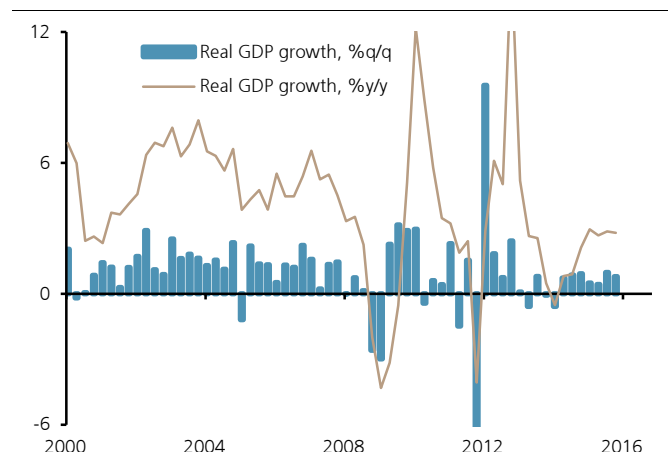
- ***What the numbers say:*** Sequential real GDP growth momentum may have peaked. Thailand's economy expanded 0.8% on the quarter seasonally adjusted in Q4 2015, after 1.0% in Q3 and around 0.4% in both Q1 and Q2. In year-on-year terms, GDP grew 2.8% in Q4, making an average of 2.8% for 2015, up from 0.8% in 2014. In nominal baht terms, GDP growth was 3.6% y/y in Q4. Real export growth was negative on the quarter in Q4 and net exports were a drag on growth. Government spending and public investment supported activity.
- ***What they mean:*** GDP is the broadest measure of economic activity. It is strongly correlated with the profit cycle and provides important clues about inflation and the direction of policy. Strong GDP often suggests policy will tighten; weak GDP implies a policy bias for pro-growth.
- ***12-month outlook:*** We project full-year real GDP growth of 2.6% in 2016 and 2.5% in 2017. Down from 2.8% in 2015. That is below NESDB estimates of 2.8-3.8% growth in real GDP in 2016. We expect net exports to drag real GDP growth lower as imports recover relative to depressed export volumes. External headwinds are now more likely to keep growth subdued as we have become less optimistic on US growth on top of already slowing Chinese growth prospects. Government infrastructure spending should support domestic demand, as should less drag from the credit cycle; but deleveraging pressures have probably only been delayed by lower interest rates.

Figure 4: Real GDP – long run



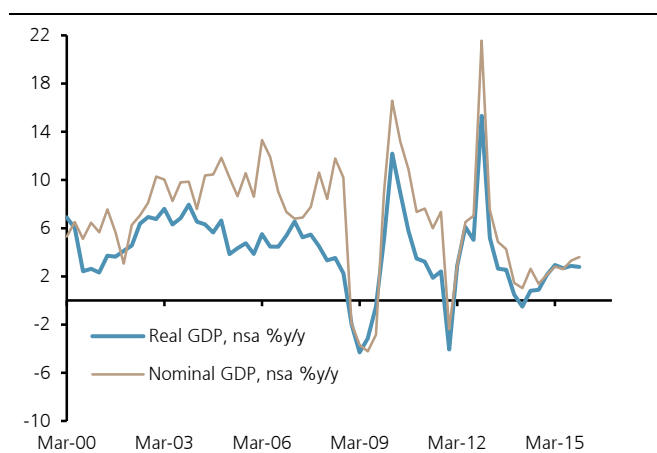
Source: CEIC, UBS

Figure 5: Real GDP – decade to date



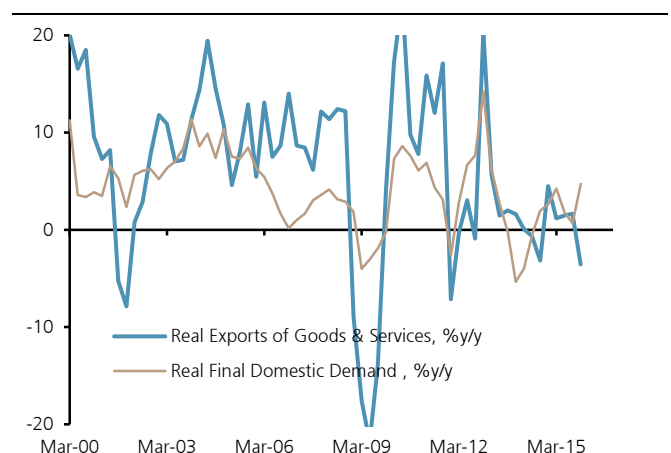
Source: CEIC, UBS

Figure 6: Real and nominal GDP growth



Source: CEIC, UBS

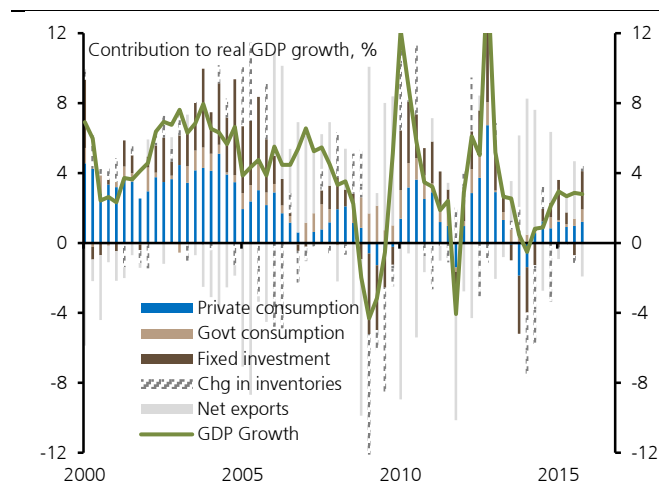
Figure 7: Real final domestic demand and export growth



Source: CEIC, UBS (Final Domestic Demand = Consumption + Fixed Investment)

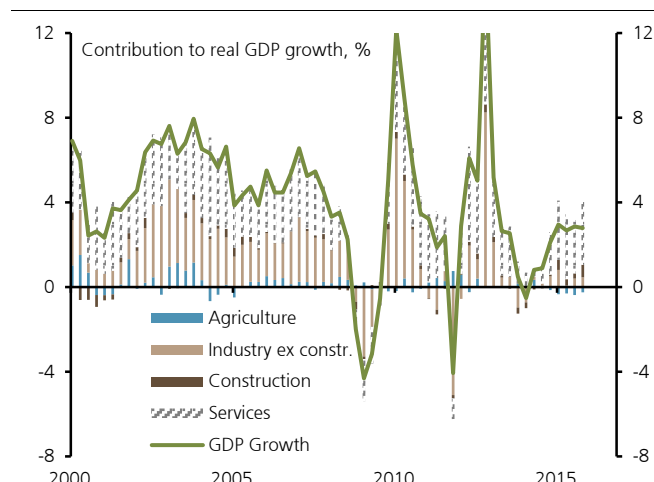
Gross Domestic Product, continued

Figure 8: Real GDP – expenditure contribution to growth



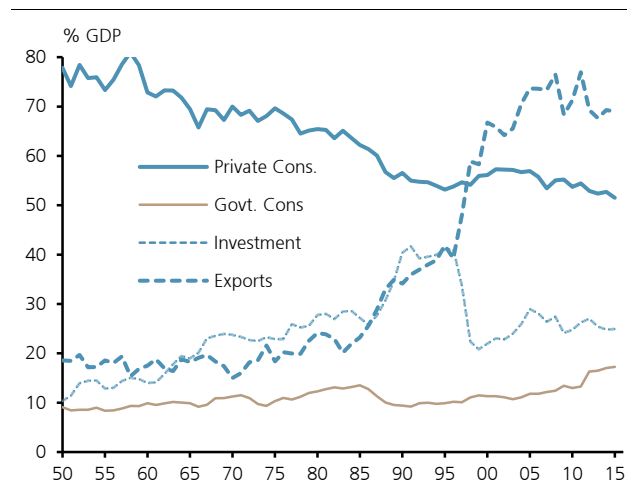
Source: CEIC, UBS

Figure 9: Real GDP – value added contribution to growth



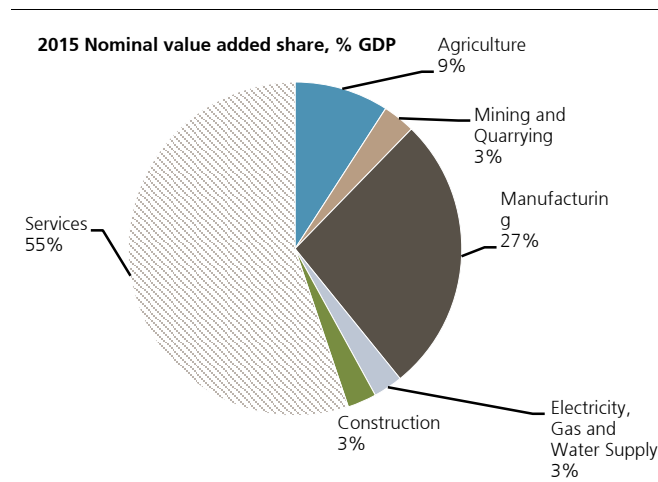
Source: CEIC, UBS

Figure 10: Nominal GDP – expenditure shares



Source: CEIC, UBS

Figure 11: Nominal GDP – value added shares

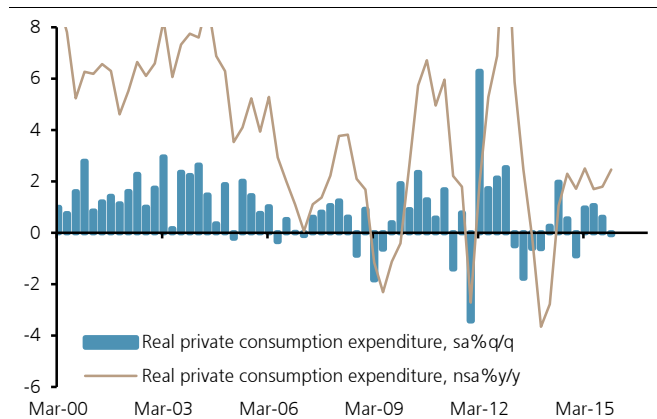


Source: CEIC, UBS

Private Consumption Expenditure

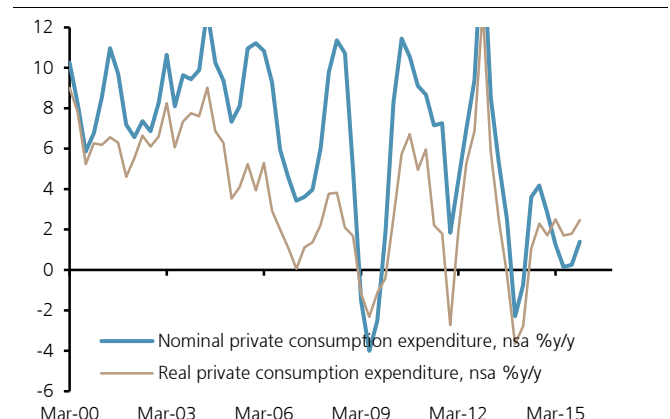
- ***What the numbers say:*** Sequential private spending stumbled in Q4 2015, contracting 0.1ppts on the quarter. On the year the 2.5% expansion was supported by low inflation and rising consumer loans. The Private Consumption Index continued to suggest improvement but was softer in January. Consumer confidence, improved in Q4 only to moderate again in January and February 2016. VAT revenue growth (page 26) and personal income tax receipts were also soft in January after picking up in December.
- ***What they mean:*** Consumption equates to 54% of Thai nominal GDP, a share above that of Singapore and Malaysia, but below Indonesia and the Philippines. It is a key determinant of trend headline GDP growth.
- ***12-month outlook:*** The level of consumption remains low relative to GDP. There is also evidence of pent up demand in the sense of a high current account surplus. Consumers are also benefiting from low inflation. However, although confidence has edged higher it is low and subjects to downward pressure from external growth fears. Households should also face de-levering pressures in the fullness of time. On balance we expect a slowdown in consumption following the 2.5% yoy growth in Q4 2015.

Figure 12: Consumption cycle – real private consumption



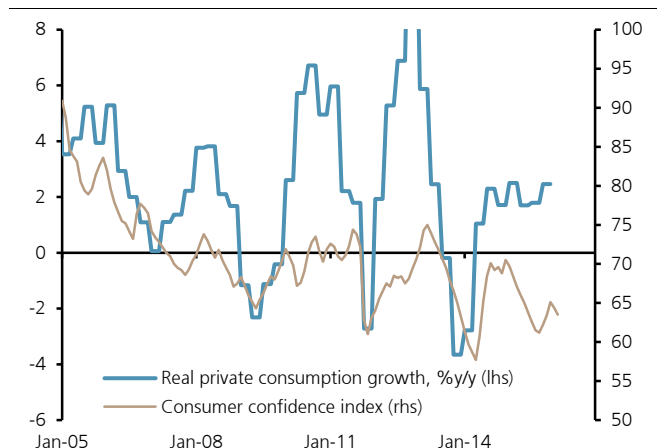
Source: CEIC, UBS

Figure 13: Real and nominal private consumption



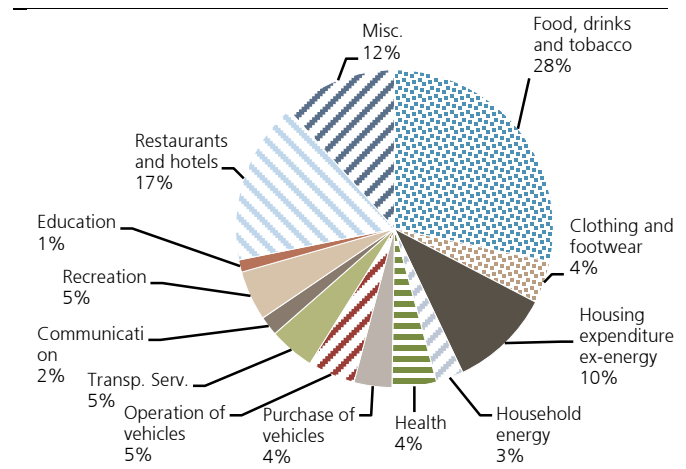
Source: CEIC, UBS

Figure 14: Real consumption and consumer confidence



Source: CEIC, UBS

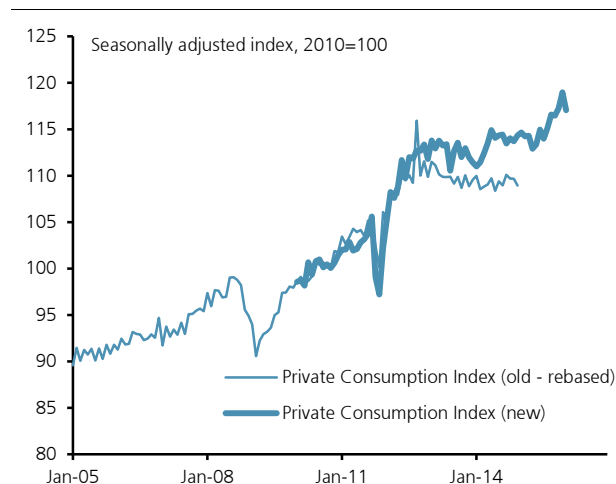
Figure 15: Composition of nominal consumption (2015)



Source: CEIC, UBS

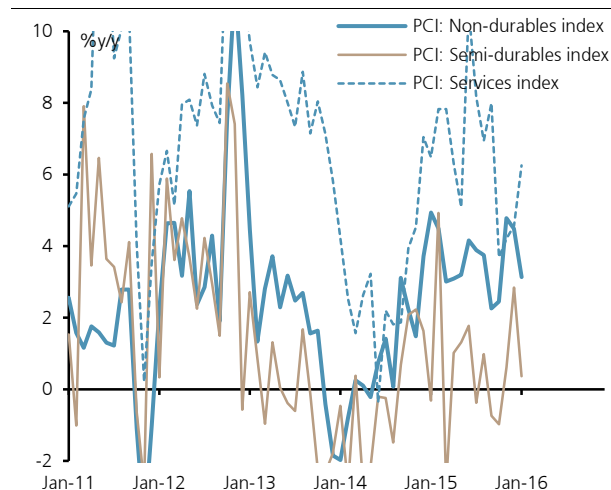
Private Consumption Expenditure, continued

Figure 16: Private Consumption Index (PCI)*



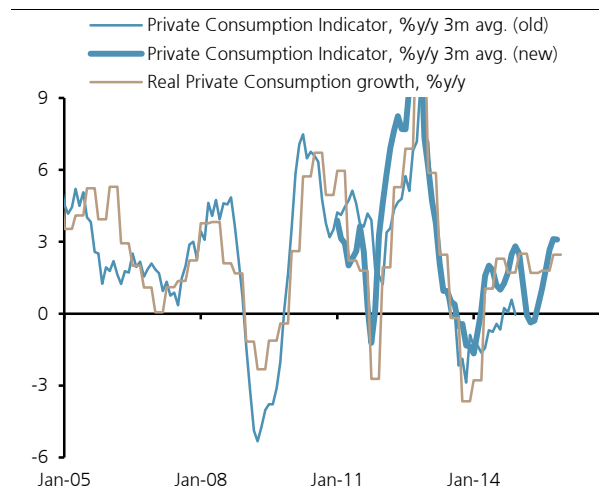
Source: CEIC, UBS * The PCI (old) has five main sub- indices: The Car Index; The Oil Index; Household electricity consumption; Imports of consumer goods; and real VAT receipts. The PCI (new) has five main sub-indices: Non-durables index; Semi-durable index; Durables index; Services index; Non-resident expenditure index.

Figure 18: Components of the PCI



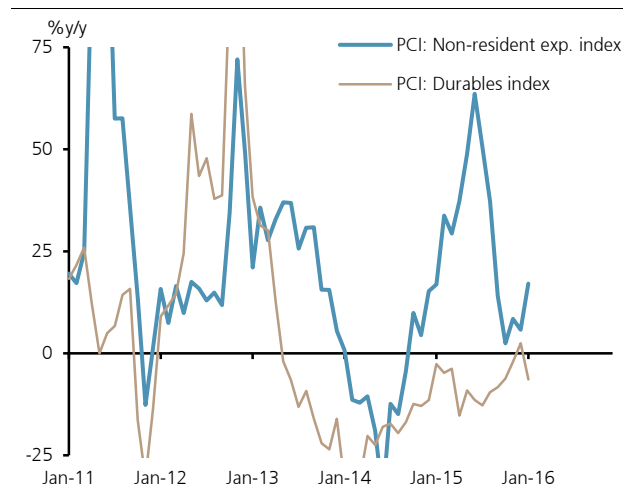
Source: CEIC, UBS Services index is combination of 1) hotel and restaurant VAT and 2) transportation sales

Figure 17: Private Consumption Index (PCI)* and National Accounts consumption growth



Source: CEIC, UBS * The PCI(old) has five main sub- indices: The Car Index; The Oil Index; Household electricity consumption; Imports of consumer goods; and real VAT receipts The PCI (new) has five main sub-indices: Non-durables index; Semi-durable index; Durables index; Services index; Non-resident expenditure index.

Figure 19: Components of the PCI

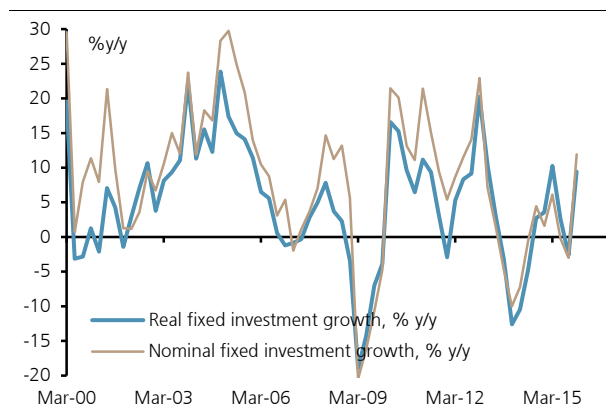


Source: CEIC, UBS Non-resident expenditure also referred to as tourist expenditure

Investment

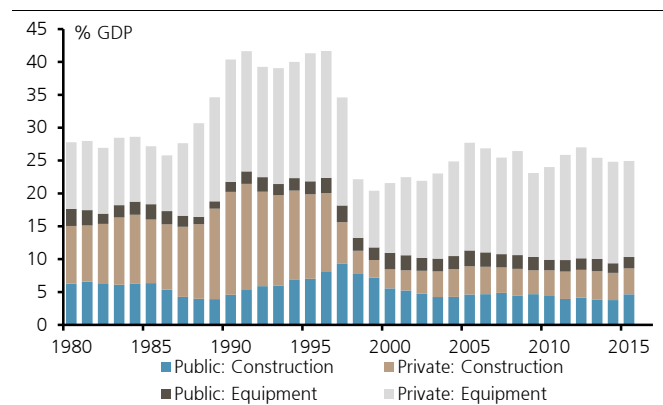
- **What the numbers say:** Government spending provided meaningful boost to investment activity. Real investment growth was 9.4% y/y driven by a 54.5% rise in public construction. Government construction expanded 67% from a previous 19% due to accelerating disbursement in water resource management and road transportation projects. State enterprise spending also rose. High frequency data – which typically reflects private activity – has been less positive than the headline investment aggregate.
- **What they mean:** High savings and investment ratios have long been the key ingredient to sustained high growth in Asia. Asia's investment to GDP ratio averages around 25% of GDP, which means Thailand is close to average. Investment is a key driver of employment and income growth. While not as large as private consumption, it can have a larger impact on the economic cycle due to higher volatility.
- **12-month outlook:** Investment has been depressed by a weak export outlook and the difficult political situation. While public spending was strong in recent quarters the private sector has seen a loss of momentum. Funding is less of a problem than confidence. Spending on infrastructure could be a catalyst for private sector spending, but this latter uptick could take time. Less drag from the credit cycle could also help.

Figure 20: Investment growth – real and nominal



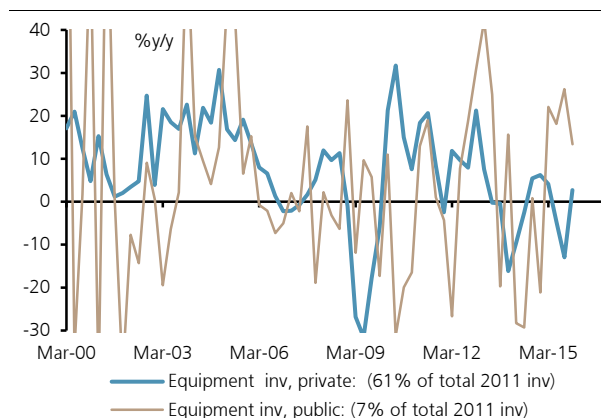
Source: CEIC, UBS

Figure 21: Investment share of GDP



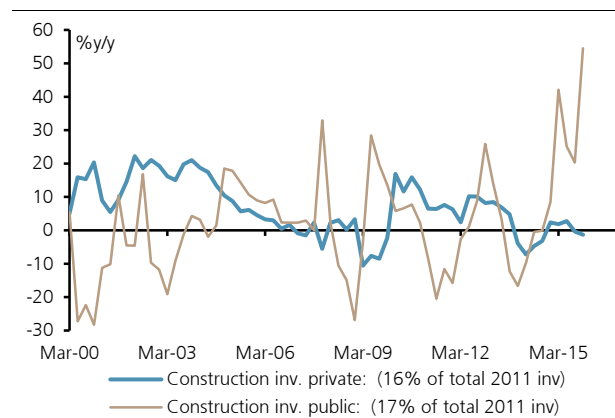
Source: CEIC, UBS

**Figure 22: Investment breakdown: Equipment
(Equipment investment was 70% of total in 2011)**



Source: CEIC, UBS

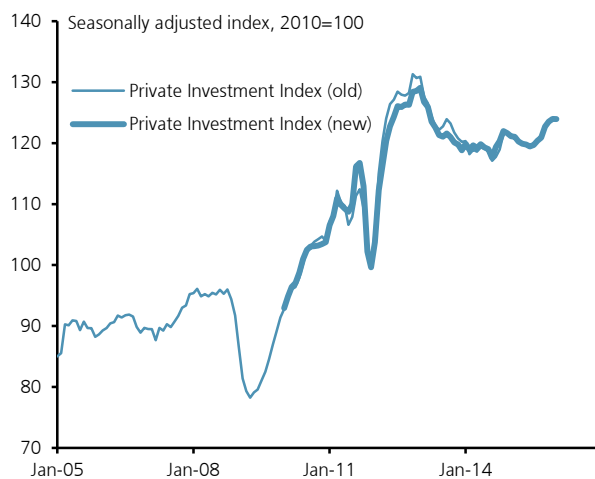
**Figure 23: Investment breakdown: Construction
(Construction investment was 30% of total in 2011)**



Source: CEIC, UBS

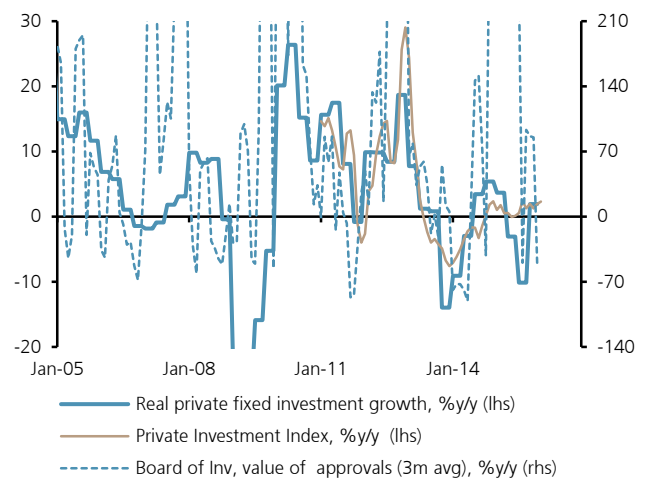
Investment, continued

Figure 24: Private Investment Index



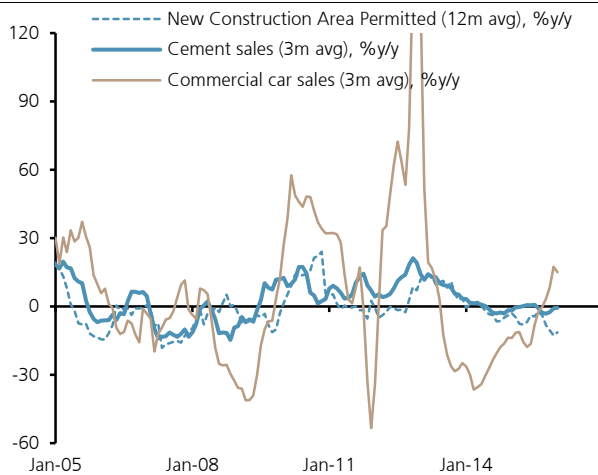
Source: CEIC, UBS

Figure 25: Fixed investment and Private Investment Index



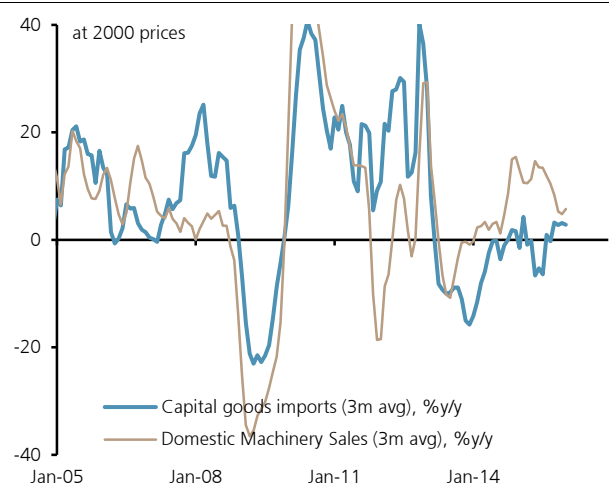
Source: CEIC, UBS

Figure 26: Construction investment indicators



Source: CEIC, UBS

Figure 27: Industrial investment indicators

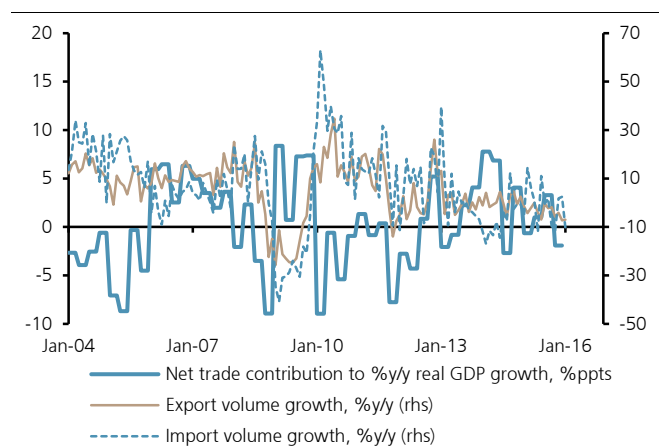


Source: CEIC, UBS

Trade

- ***What the numbers say:*** Trade remains weak. The value of exports on custom basis fell by 8.9% y/y in January while imports fell by 12.4% after falling 9.2% in December. Excluding commodities, imports fell by 7.8% y/y in January after a fall of 6.9% in December. The overall trade surplus in January was USD 238mn. The services balance – driven by tourist receipts – weakened in Q2 and Q3 of 2015 but improved in Q4, while the current account balance remains elevated on a historical basis.
- ***What they mean:*** Exports are a key source of income for Asia and are a primary determinant of the Asian business cycle. Trade links producers and consumers in one country with another, forming a channel through which income and confidence dynamics can be transmitted. The impact of these linkages on the broader economy depends both on the net trade position, but also on the share of the economy engaged in trade-related activities. The share of Thailand's economy exposed to trade is relatively high in an Asian context.
- ***12-month outlook:*** Hopes for even a modest recovery in external trade have been curtailed. We project negative export growth in 2016. This said nominal trade numbers could get a lift from higher oil prices going forwards on UBS oil team forecasts, although that will also likely trim the trade surplus. Exports could also be helped by currency weakness – something we expect to see a bit more of. Tourism and the extent of the decline in energy prices should help keep the current account balance relatively elevated on average in 2016 even given a moderate recovery in oil prices.

Figure 28: Real trade – merchandise exports & imports



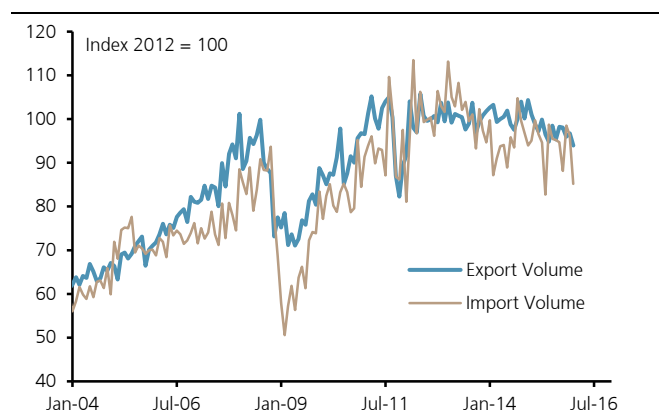
Source: CEIC, UBS

Figure 29: Exports and global leading indicators



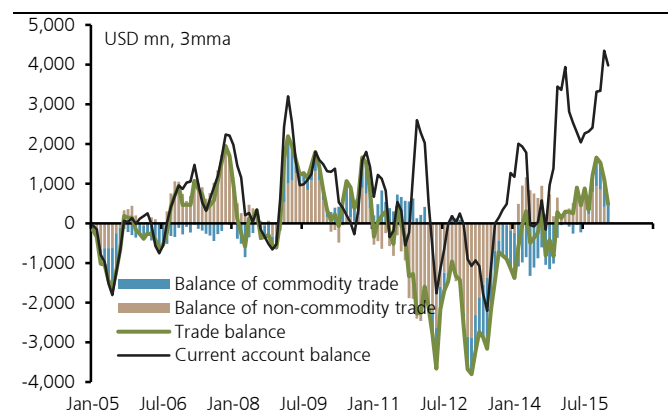
Source: CEIC, UBS

Figure 30: Export and import volumes



Source: CEIC, UBS

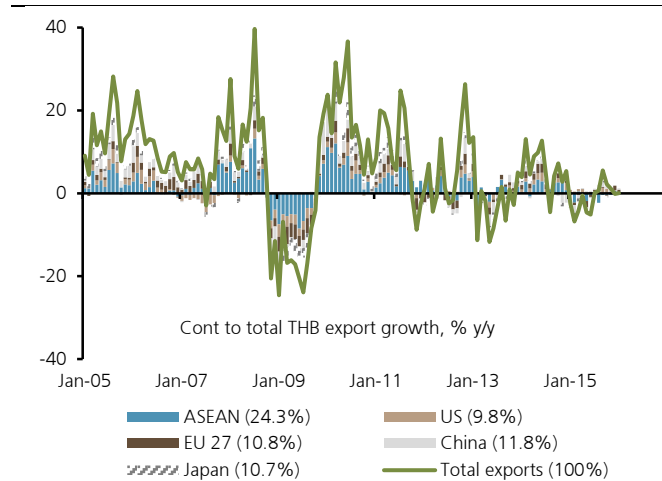
Figure 31: Trade and current account balance



Source: CEIC, UBS

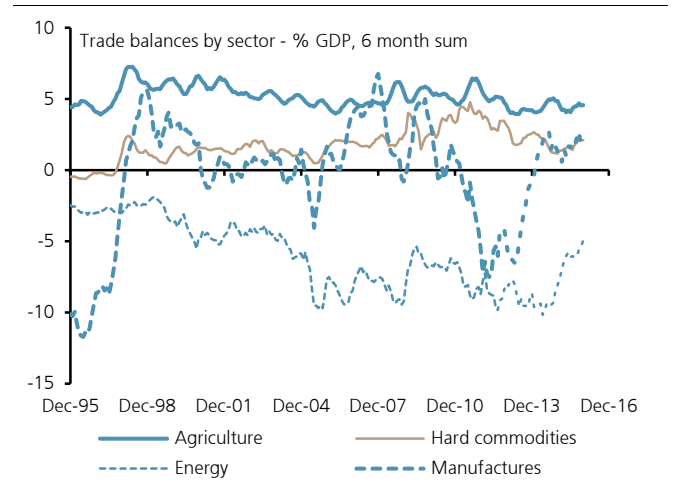
Trade, continued

Figure 32: Export growth to major markets



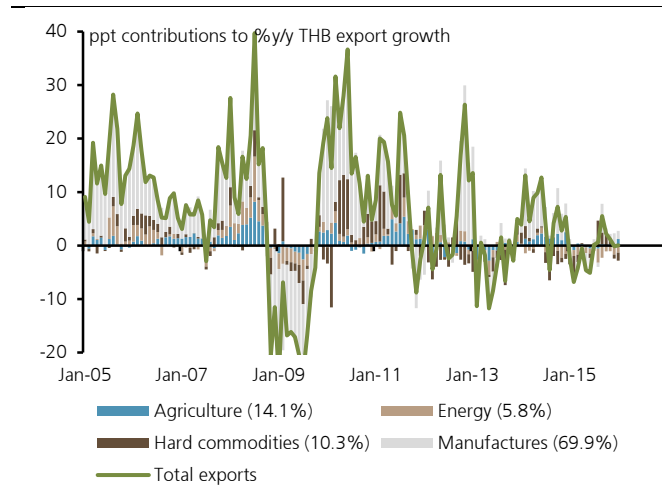
Source: CEIC, UBS (Data in brackets show export share in 2011)

Figure 33: Trade balances by product



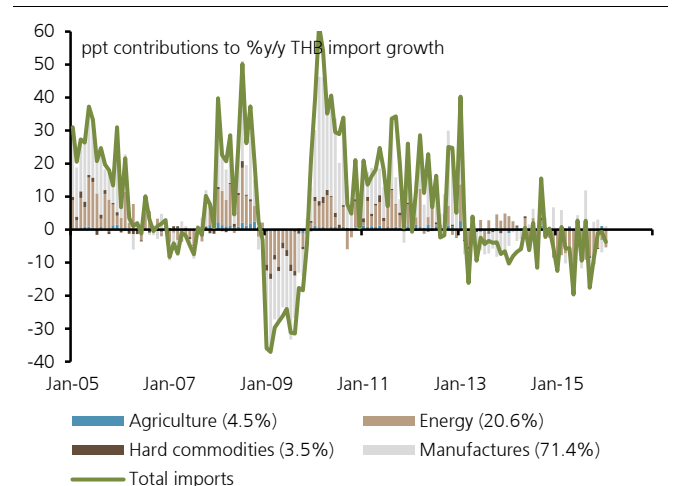
Source: CEIC, UBS

Figure 34: Export growth by product



Source: CEIC, UBS (Data in brackets show export share in 2011)

Figure 35: Import growth by product

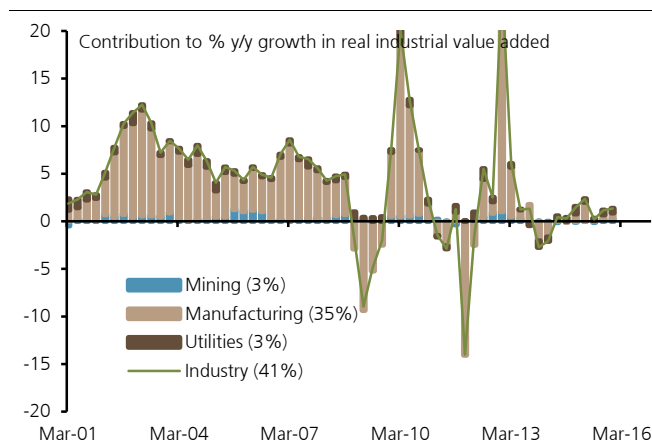


Source: CEIC, UBS (Data in brackets show import share in 2011)

Industrial sector

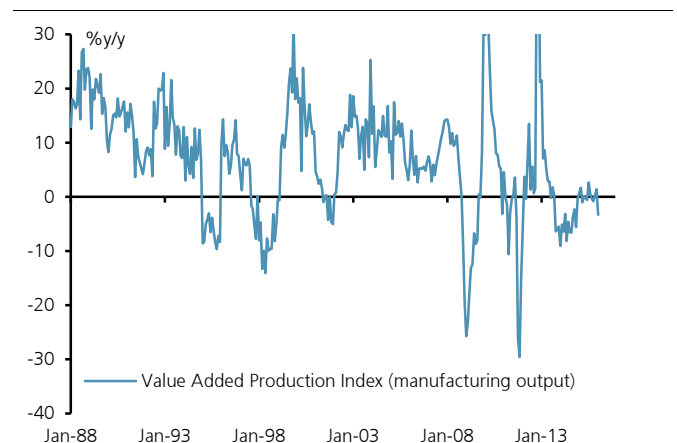
- ***What the numbers say:*** Manufacturing activity growth was weak in January – driven in large part by reduced motor vehicle production growth. Even so, Thailand's revised monthly manufacturing value added (production) series shows a much healthier trend than the prior series and is more closely aligned with national accounts manufacturing value added (than the previous series which was based on out of date weights).
- ***What they mean:*** Swings in manufacturing explain most of the employment cycle and the profit cycle. Hence, this should be tracked closely to assess if profits margins are rising or falling, employment is likely to turn up/down, and pressures on producer prices. In fact, you can generally assume that the manufacturing cycle reflects the profit cycle.
- ***12-month outlook:*** The decline in manufacturing activity in January reversed a suspiciously strong trend in prior months. We expect subdued momentum in manufacturing activity consistent with weak external demand.

Figure 36: Industrial sectors in the national accounts



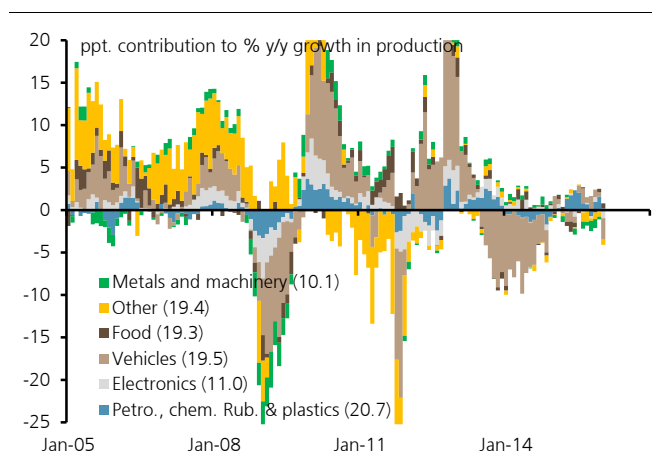
Source: CEIC, UBS (figures in brackets denote sector share of 2007 GDP)

Figure 37: Manufacturing production cycle



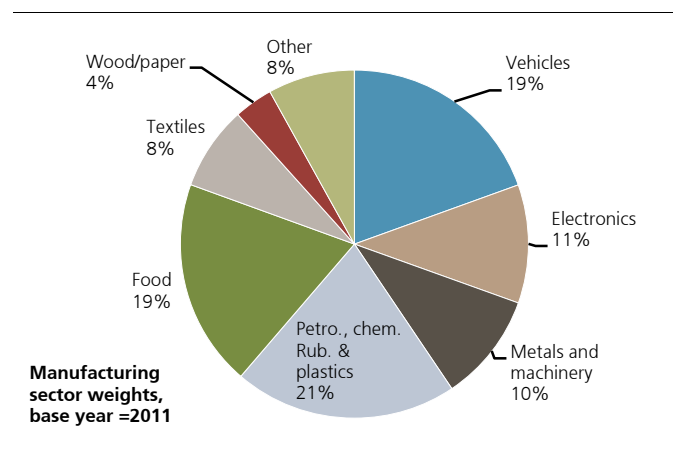
Source: CEIC, UBS

Figure 38: Industrial production in key sectors



Source: CEIC, UBS (Data in brackets denote sector weights in 2011)

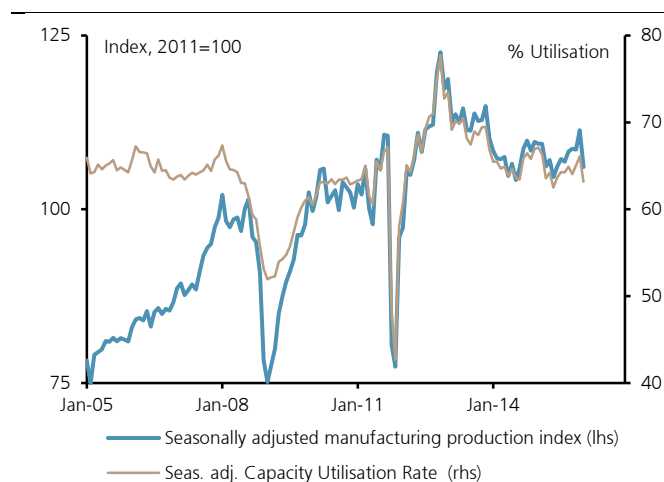
Figure 39: Production value added by sector



Source: CEIC, UBS

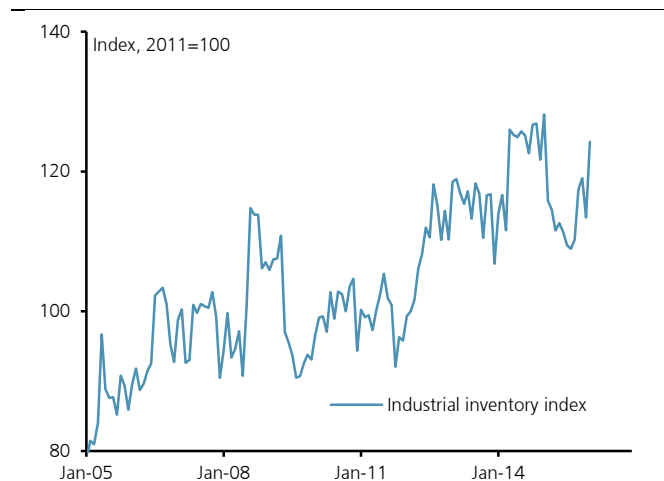
Industrial sector, continued

Figure 40: Production and capacity utilization



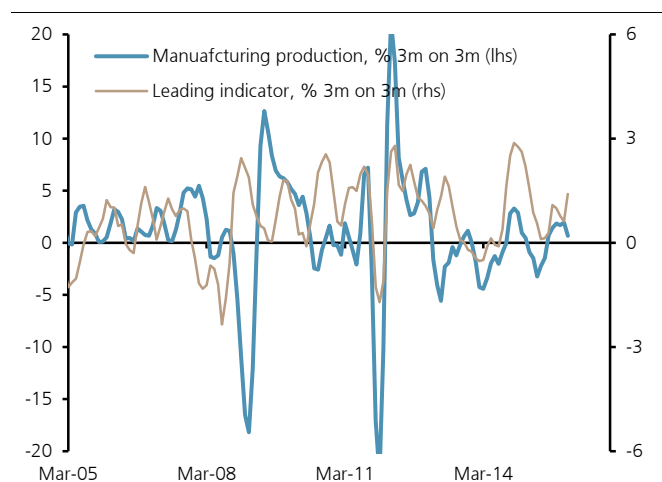
Source: CEIC, UBS

Figure 42: Inventory index



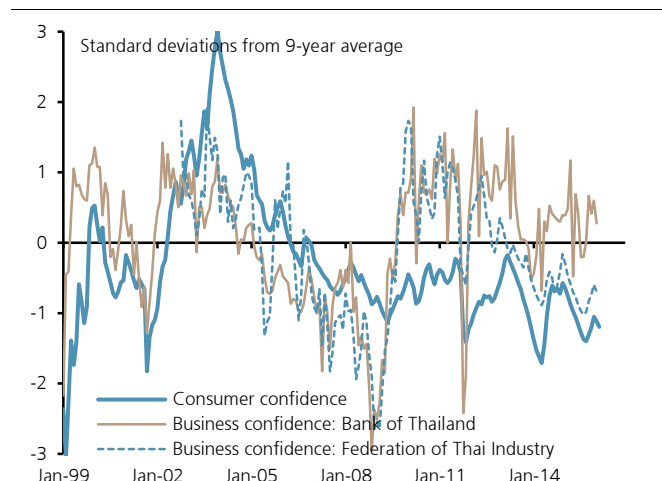
Source: CEIC, UBS

Figure 41: Manufacturing output and BoT lead indicator



Source: CEIC, UBS

Figure 43: Consumer and business confidence

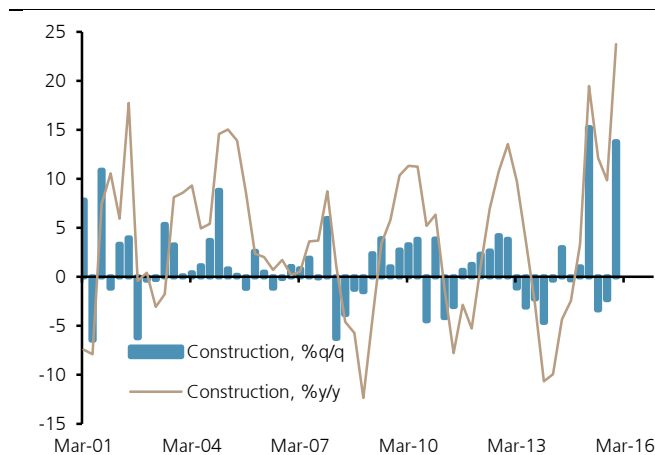


Source: CEIC, UBS

Construction Sector

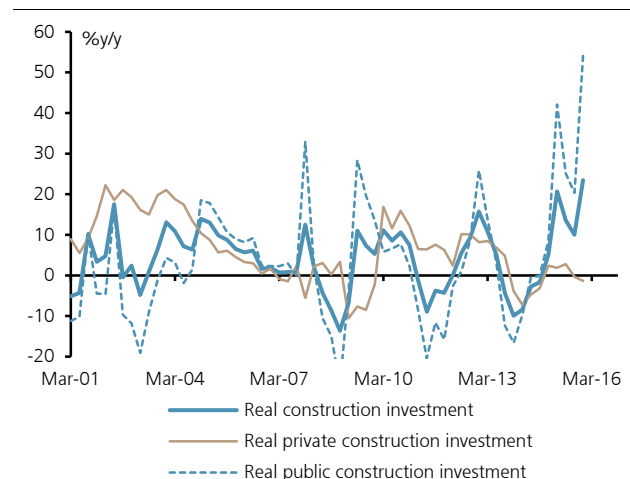
- ***What the numbers say:*** Seasonally adjusted real construction activity jumped 13.8% q/q, and 23.9% on the year. Public sector construction activity rose circa 66bn baht y/y as water management and road project execution accelerated. However, the improvement in investment was not reflected in cement sales. Cement consumption growth on the year has been negative although it now shows signs of stabilising.
- ***What they mean:*** As a sector of the economy, construction is small. However, construction spending by all sectors of the economy means that construction is an important part of investment expenditure.
- ***12-month outlook:*** Government infrastructure spending is making progress. This said, the rise in public construction outlays in Q4 2015 looks high relative to the circa 50bn baht increase we expected as a result of (delayed) project execution in FY 2015-16. Indeed, press reports suggest THB 40bn of the 77bn budget for fast track investment in road and water projects had already been drawn down with another 10bn to be disbursed in the March quarter. The pipeline of projects in coming years suggests construction activity could remain elevated during 2016, but probably at a lower level than in the first quarter of the fiscal year. The history of delays keeps us cautious on expecting too much too soon. A further near term impulse to growth may depend on the private sector reaction to ongoing public infrastructure outlays.

Figure 44: Construction sector output growth



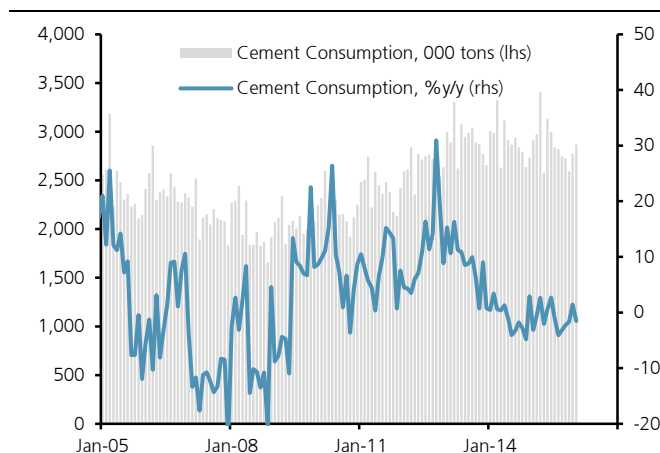
Source: CEIC, UBS

Figure 45: Public and private construction investment



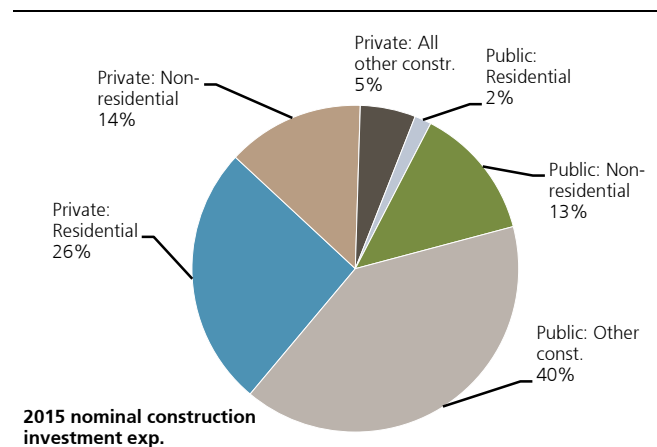
Source: CEIC, UBS

Figure 46: Cement consumption



Source: CEIC, UBS

Figure 47: Share of construction investment (2015)

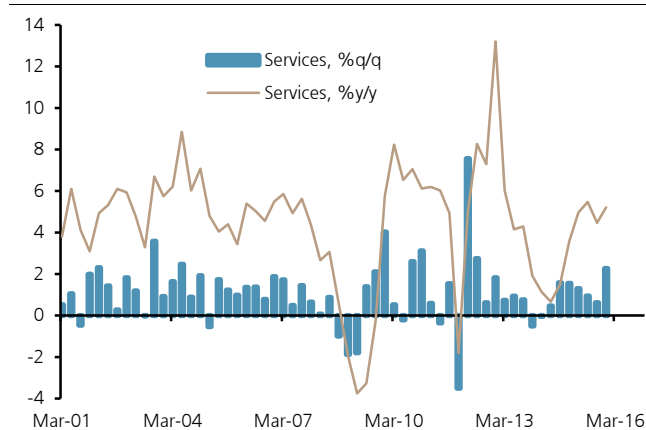


Source: CEIC, UBS (Construction investment equated to 8.6% of 2009 GDP)

Service Sector

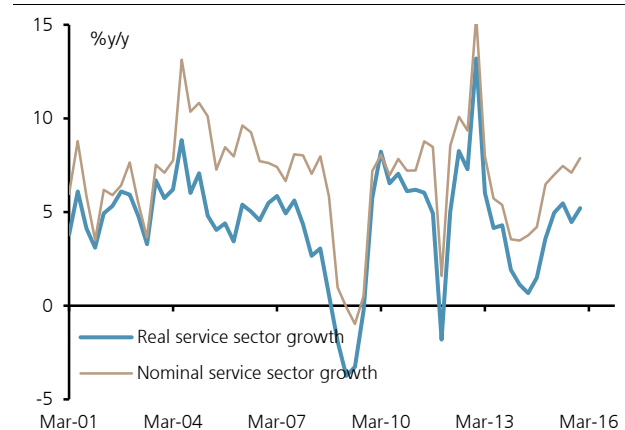
- ***What the numbers say:*** Tourism related services growth has come off the boil, but services overall remain reasonably healthy. On the year, service sector value added was at 5.2% in Q4 2015. It averaged 5% y/y for the whole of 2015 after a soft 1.7% in 2014. In nominal terms, service sector value added was up at 7.9% y/y in Q4, averaging 7.4% in 2015 after 4.5% in 2014. Media expenditure has accelerated and slowed in tune with tourist arrivals (except in December) while retail sales accelerated in November and December despite the slowdown in the latter.
- ***What they mean:*** The service sector is the largest sector in the economy. It includes logistics, finance, government and trade. Typically, because of limited inventory and capital investment needs, the service sector experiences relatively stable growth.
- ***12-month outlook:*** The growth in tourist arrivals appears to have normalised to mid-single digits. Services growth has slowed accordingly. Again the current account surplus (driven in part by tourism) suggests there is income to be spent. And low interest rates appear to be delaying deleveraging pressures. However, not least given external growth risks, an obvious catalyst for a further recovery in service sector spending is lacking.

Figure 48: Service sector volume growth (national accts)



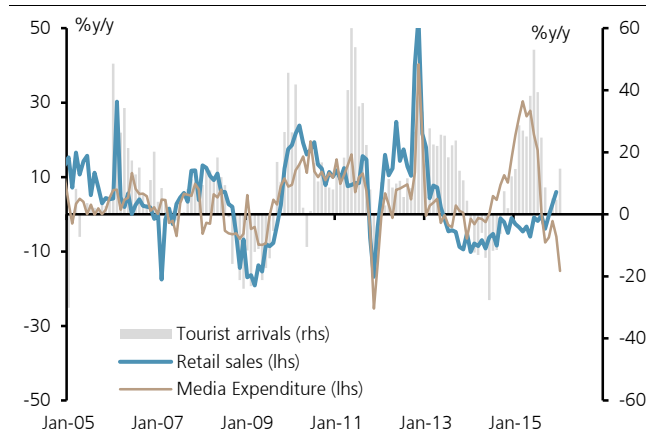
Source: CEIC, UBS

Figure 49: Nominal and real service sector growth



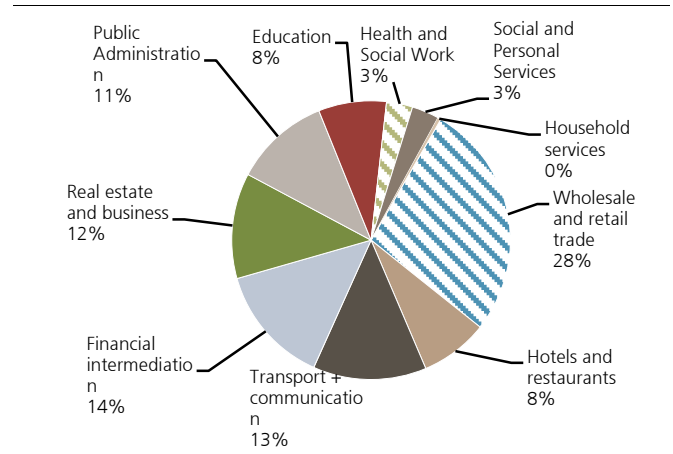
Source: CEIC, UBS

Figure 50: High frequency service sector indicators



Source: CEIC, UBS

Figure 51: Share of service sector activity (2015)

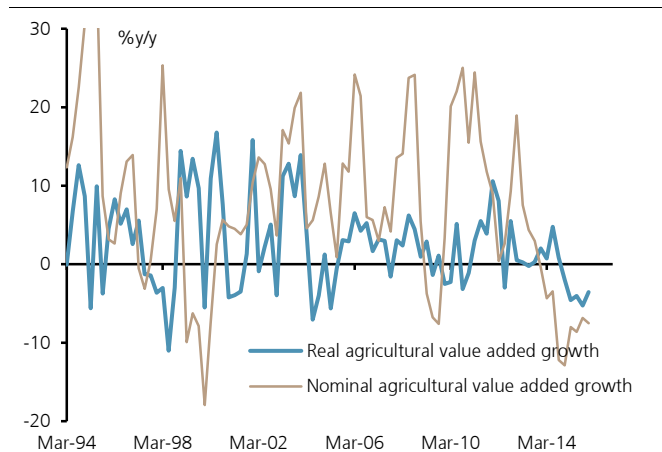


Source: CEIC, UBS (Services equated to 45% of GDP in 2013)

Upcountry Activity (Agriculture)

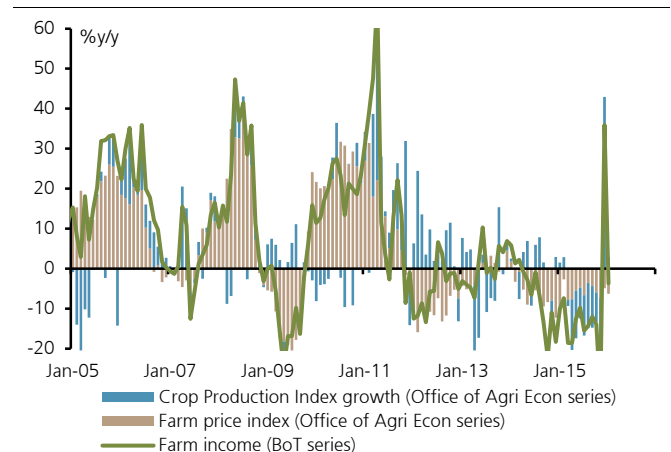
- ***What the numbers say:*** Farm prices fell by 6.3% y/y in January, continuing the fall since February 2014. The decline in agricultural prices continues in the light of adverse (dry) weather conditions which have not yet been sufficient to offset lower commodity prices generally. The volume of agricultural activity growth jumped in December 2015, but only due to a delay in the harvest, which resulted in unusual base effects. Activity has since corrected.
- ***What they mean:*** The rural sector employs two-fifths of the workforce but accounts for 12% of income generated in the economy. The rural sector is usually not a key determinant of profit growth in the economy unless incomes rise very quickly. If incomes rise because of price increases, the sector can also be a source of an inflation shock.
- ***12-month outlook:*** Unusually dry weather conditions (El Nino) may last into 2016. That presents a headwind to output growth and may put upward pressure on prices – especially if the dampening effect of lower oil prices wears off.

Figure 52: Agricultural sector value added



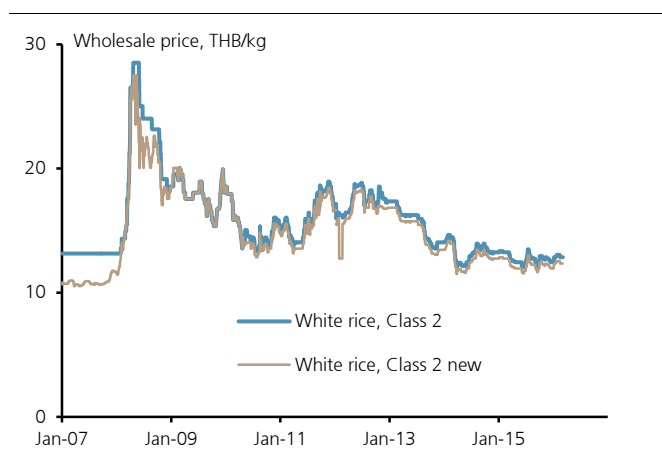
Source: CEIC, UBS

Figure 53: Farm income



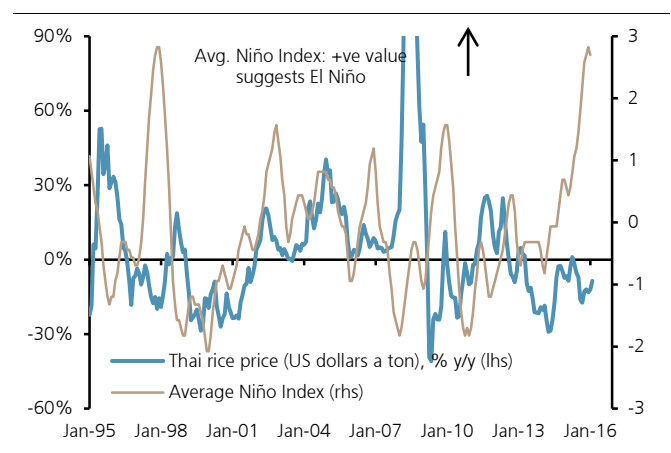
Source: CEIC, UBS

Figure 54: Rice prices



Source: CEIC, UBS

Figure 55: International rice price and weather patterns

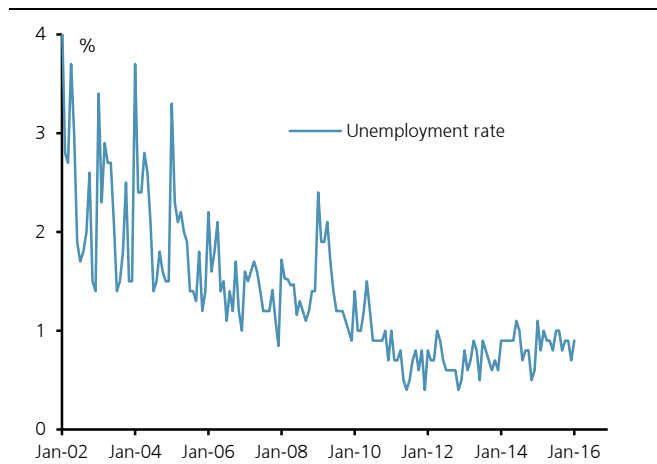


Source: CEIC, UBS, NOAA, ABOM. Index is average of SOI and ONI.

Labour Market

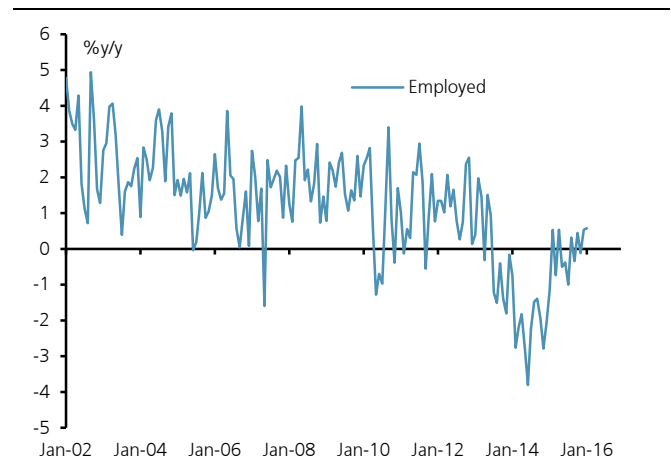
- ***What the numbers say:*** Employment growth has stabilised a little above zero. It was 0.6% on the year in January 2016. Gains in services employment, little growth in manufacturing and declines in agriculture are consistent with other indicators of tourism activity, exports and drought fears. The unemployment rate is at 0.9% in January 2016, and has averaged 0.9% in 2015 with a high of 1.1% in January 2015.
- ***What they mean:*** Strong employment growth usually coincides with strong consumption and investment. The unemployment rate is important to look at because it is a rough measure of slack in the economy and is watched closely by governments and central banks – although data shortcomings lessen the value of this indicator in Thailand. High unemployment is associated with a bias for pro-growth policies, in part for political reasons.
- ***12-month outlook:*** Weak employment numbers mean Thailand's labour market may prove to be less tight than the unemployment rate makes it appear.

Figure 56: Unemployment Rate



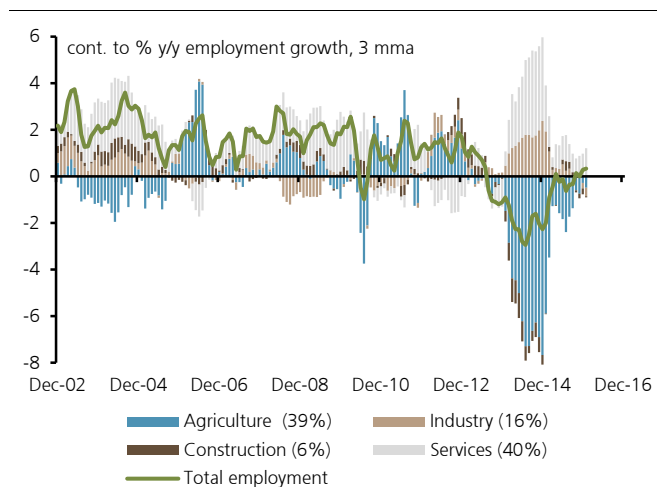
Source: CEIC, UBS

Figure 57: Employment growth



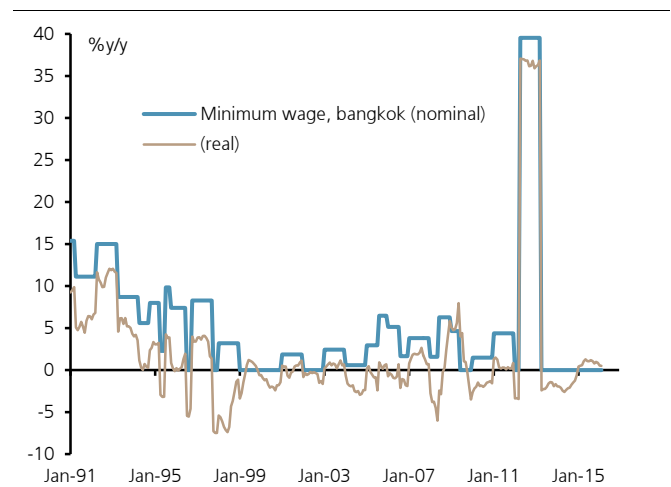
Source: CEIC, UBS

Figure 58: Employment Growth by Sector



Source: CEIC, UBS (figures in brackets show share of total employment in 2007)

Figure 59: Minimum wage growth

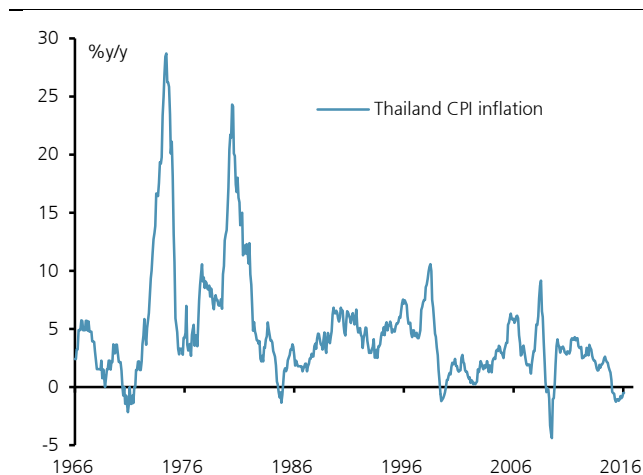


Source: CEIC, UBS

Inflation

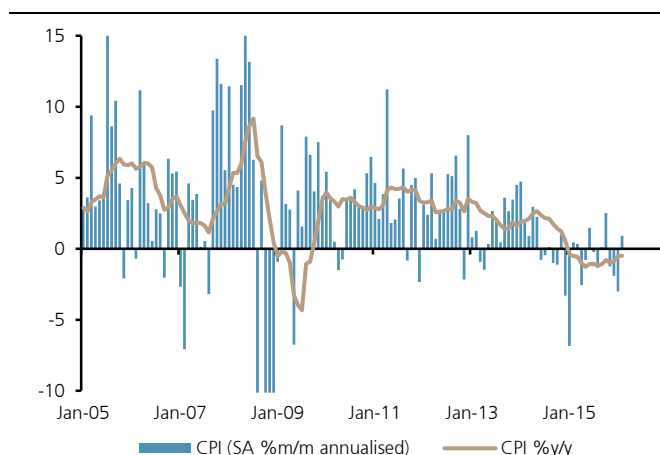
- ***What the numbers say:*** Lower energy prices are dragging headline inflation lower against a backdrop of low non-food and energy inflation. CPI inflation was at -0.5% y/y in January and February 2016, after -0.9% in December 2015. Core inflation is at 0.7% while inflation excluding all food and energy was marginally up at 0.8%. Headline inflation is below the central bank's target of 2.5% +/-1.5ppts for headline CPI inflation.
- ***What they mean:*** Inflation provides critical hints about the direction of monetary policy. High inflation, when combined with above-trend economic growth and low unemployment, typically provokes monetary tightening; whereas low inflation, when coupled with below-trend economic growth and high unemployment, tends to produce the opposite policy.
- ***12-month outlook:*** Despite the capacity lost because of the floods, the government's rice purchase policy and the minimum wage hike, pricing power has proven to be lacklustre in recent years. A recovery in growth along with a weaker baht could eventually help restore some pricing power more broadly – however neither of these drivers are proving terribly significant yet. We expect inflation to remain negative on average in H1 2016 before becoming positive on higher energy and food price inflation later in 2016 and 2017.

Figure 60: Inflation cycle



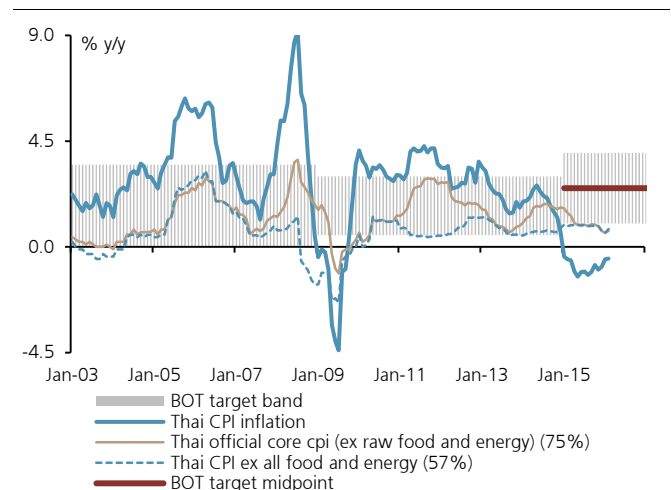
Source: CEIC, UBS

Figure 62: Seasonally adjusted inflation



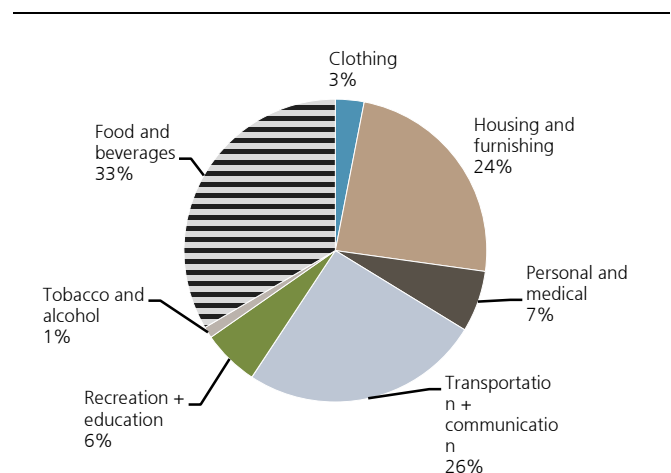
Source: CEIC, UBS

Figure 61: Inflation and the BoT policy target



Source: CEIC, UBS (figures in brackets denote weight in CPI)

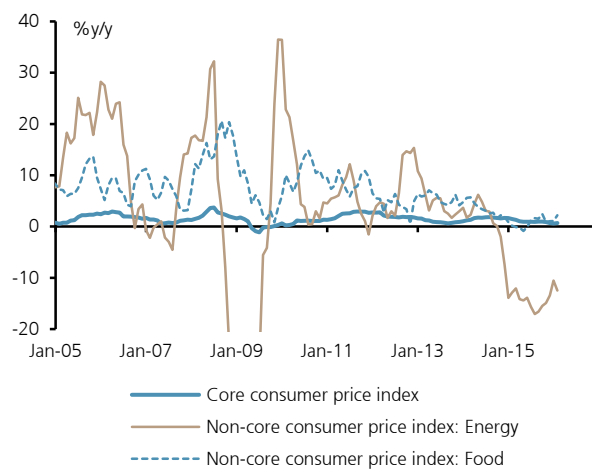
Figure 63: CPI index weights (2011 base year)



Source: CEIC, UBS

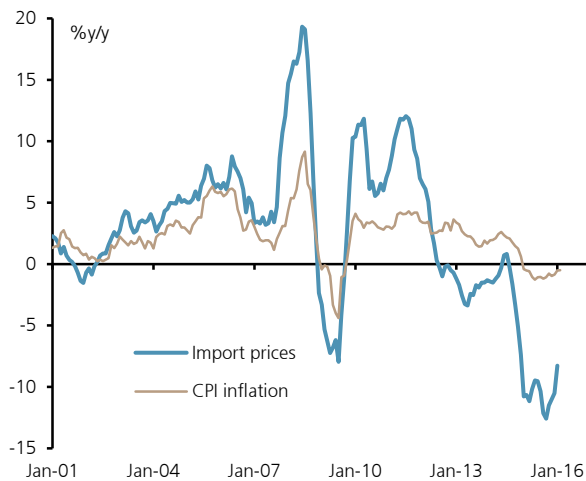
Inflation, continued

Figure 64: Key components of inflation



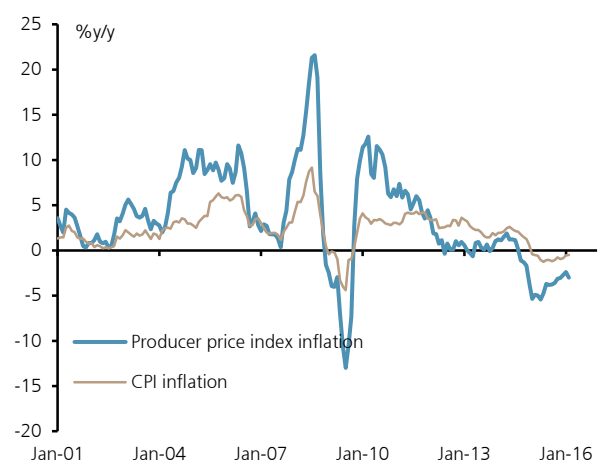
Source: CEIC, UBS

Figure 66: Import and CPI price inflation



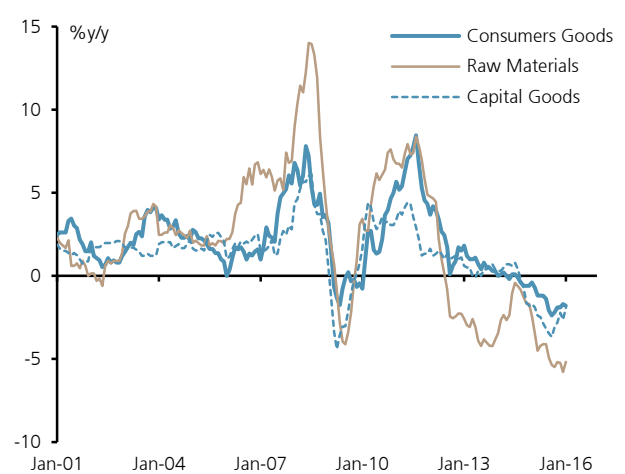
Source: CEIC, UBS

Figure 65: Producer Price Index (PPI)



Source: CEIC, UBS

Figure 67: Import price components

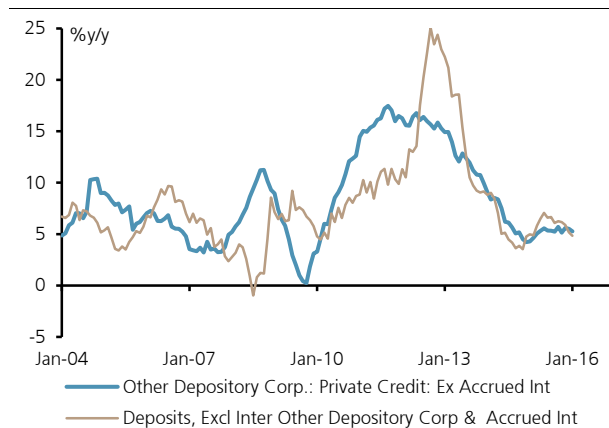


Source: CEIC, UBS

Money and Banking

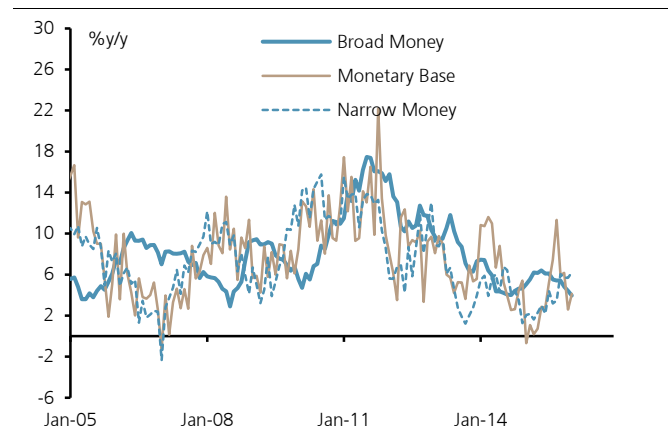
- ***What the numbers say:*** Credit growth appears to be stabilising at mid-single digit growth rates. Other depository corporation credit expanded 5.3% y/y in January after 5.5% in December. Deposit growth slowed to 4.8% y/y. Broad money growth, after moving up to 6.4% in May 2015, moderated to 4% in January. Banks continue to have the balance sheet strength to increase lending, although liquidity risks are rising. The loan to deposit ratio (including bills of exchange) rose to a new cyclical high of 97.9 in June 2014 before moving down to 97.0 in December 2015.
- ***What they mean:*** Money and credit are pro-cyclical and correlate strongly with inflation in the long term. Part of base money growth is driven by foreign reserve accumulation. Foreign reserves are also an important macro prudential indicator and in Asia a key source of changes in base money. Thus, rising foreign reserves necessarily means upward pressure on domestic liquidity conditions. Moreover, Thailand has an excess of foreign reserves relative to short- and long-term foreign liabilities. This provides a cushion against external financial shocks.
- ***12-month outlook:*** Relatively easy BoT monetary policy should help credit growth recover – subject to constraints from high household debt levels. The deceleration in credit has been a drag on the economy but could become less so. Incremental credit growth, if it returns to strength, is likely to increase concerns about indebtedness and deficit financing alongside the increase in spending power (in line with our "Debtopia" thesis). As such we do not project a rapid acceleration in credit growth in 2016 and look for a slowdown to below nominal GDP growth in 2017.

Figure 68: Bank credit growth



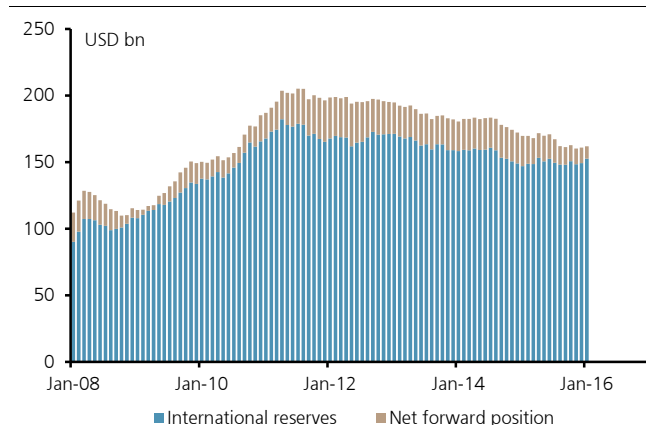
Source: CEIC, UBS

Figure 69: Money supply



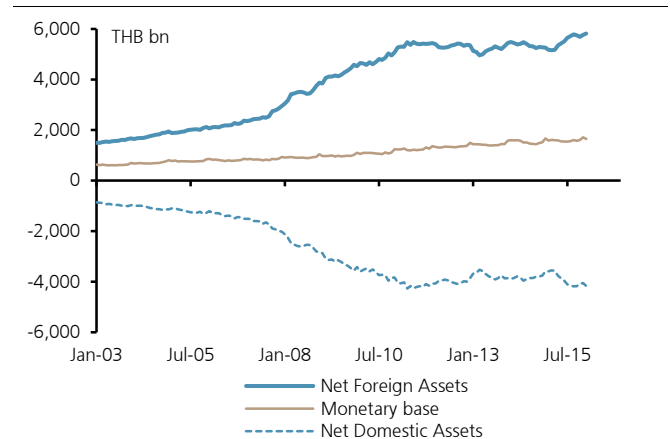
Source: CEIC, Central Bank, UBS

Figure 70: FX reserves



Source: CEIC, UBS

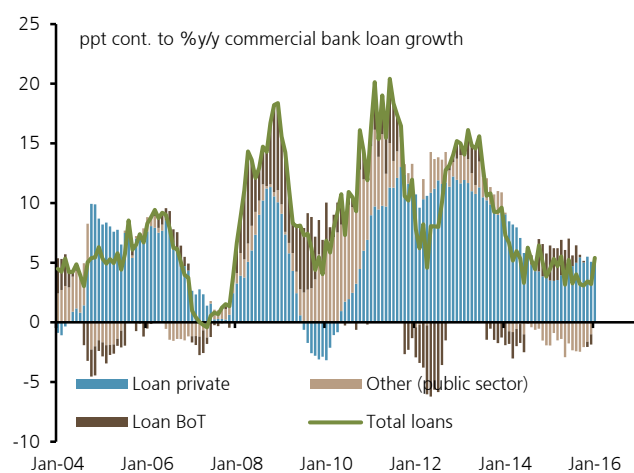
Figure 71: Central bank balance sheet



Source: CEIC, UBS

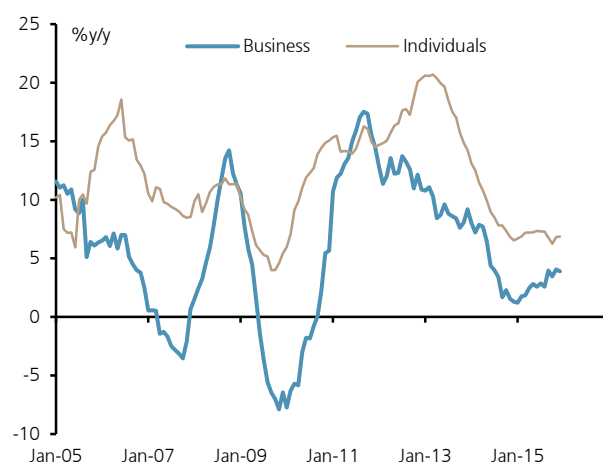
Money and Banking, continued

Figure 72: Commercial bank lending by type



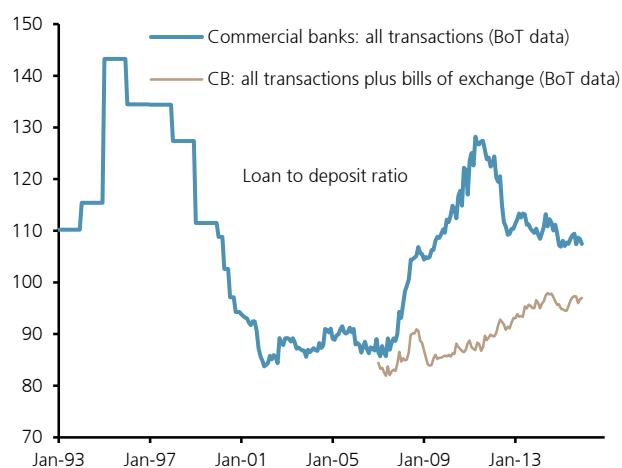
Source: CEIC, UBS

Figure 74: Commercial bank lending growth



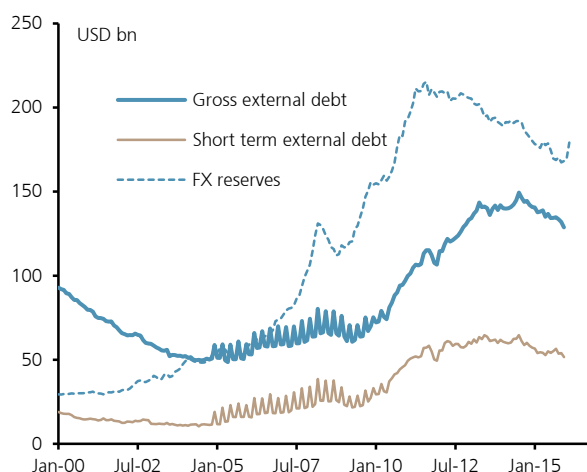
Source: CEIC, UBS

Figure 73: Loan to deposit ratio, commercial banks



Source: CEIC, UBS

Figure 75: External debt and reserves

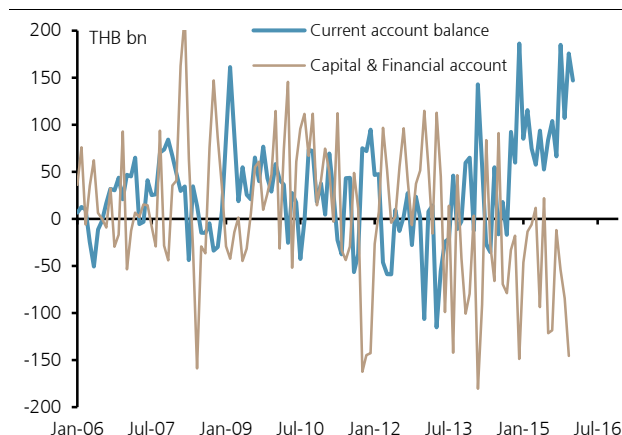


Source: CEIC, UBS

Balance of Payments

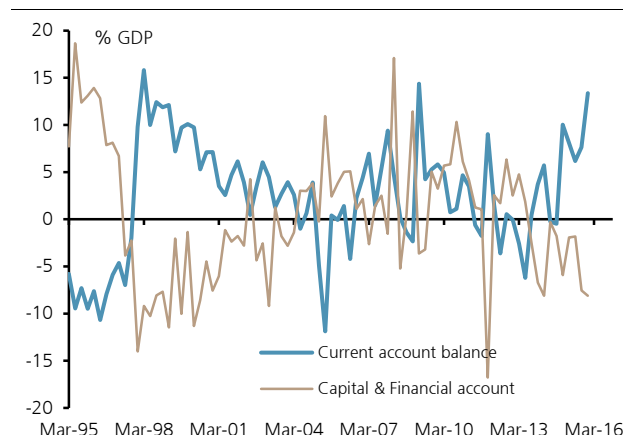
- ***What the numbers say:*** The current account surplus was at USD 4bn in January after USD 4.9bn in December 2015. This is below the USD 5.6bn in December 2014. Foreign direct investment inflow into Thailand held up in Q1 2015 despite the political angst and weak exports, but was down thereafter in 2015. A net FDI outflow of 1.7% of GDP was recorded in Q4 2015. The Bank of Thailand continues to have sizable foreign exchange reserves in excess of national external debt liabilities.
- ***What they mean:*** The balance of payments includes information on the real economy's competitive position – the current account. It also shows the capital flows into and out of the economy – signalling if the economy has excess or insufficient savings to fund investment. If a central bank is intervening to stabilise a currency, current account and capital flow data will signal the strength and direction of pressures on the currency.
- ***12-month outlook:*** The sizable current account surplus implies surplus savings in Thailand. A catalyst may be required for those surplus funds to be spent in Thailand; in the meantime, capital outflows are likely. FX reserves may continue to edge lower, but the central bank has considerable foreign exchange reserves, which guard against a crisis event.

Figure 76: Current, Capital and Financial account: latest



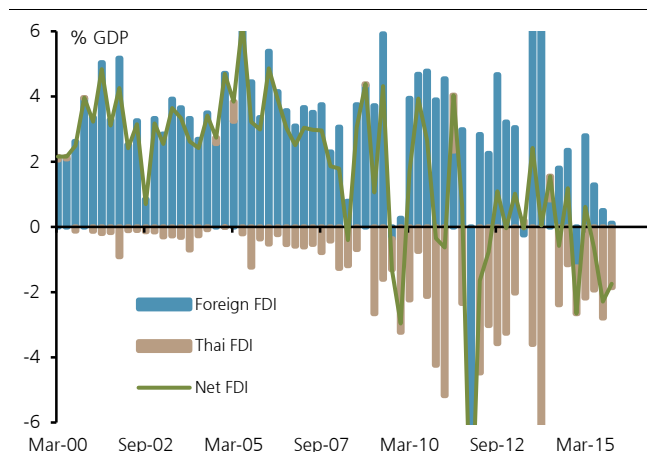
Source: CEIC, UBS

Figure 77: Current, Capital and Financial account: trends



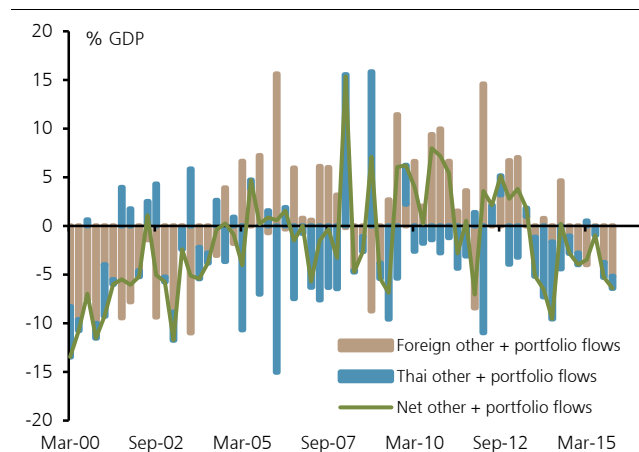
Source: CEIC, UBS

Figure 78: Foreign direct investment inflow



Source: CEIC, UBS

Figure 79: Portfolio and other investment Flow

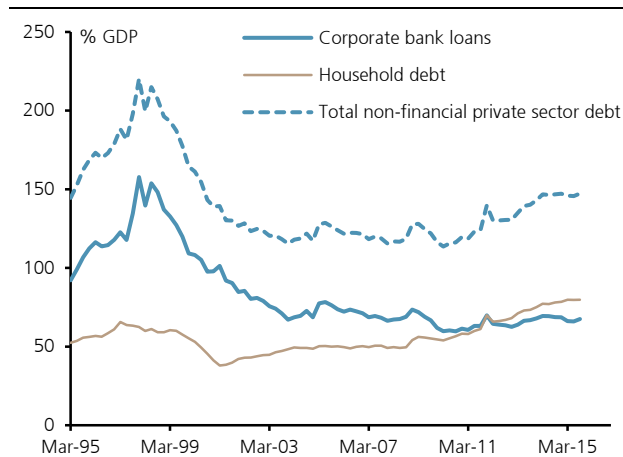


Source: CEIC, UBS

Household and Corporate Finances

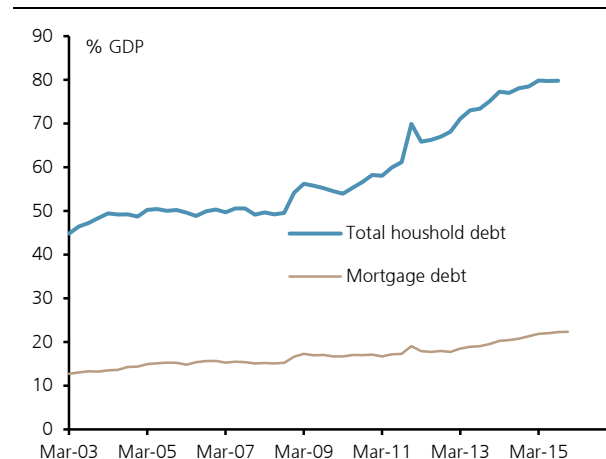
- ***What the numbers say:*** Corporates have been de-leveraging over the decade to 2009, but have since returned to leveraging up. Households have been leveraging up since 2003. Household leveraging includes SME and farm debt as well as consumer and mortgage debts. In recent years, credit extension by government banks (Specialised Financial Institutions) has been particularly significant. Leverage has continued to rise in 2014 and early 2015 because of lower GDP rather than strong credit growth.
- ***What they mean:*** The state of household and corporate balance sheets determines the ability of households and corporates to withstand financial and economic shocks. A high level of debt to GDP tends to imply higher risk than low credit to GDP levels.
- ***12-month outlook:*** The credit cycle is mature with unwelcome side-effects including concerns about indebtedness. This said, ongoing political angst has prompted a leap in the national savings rate, which has also shown up as weak domestic demand and a large current account surplus in 2014 and 2015.

Figure 80: Household and Corporate debt



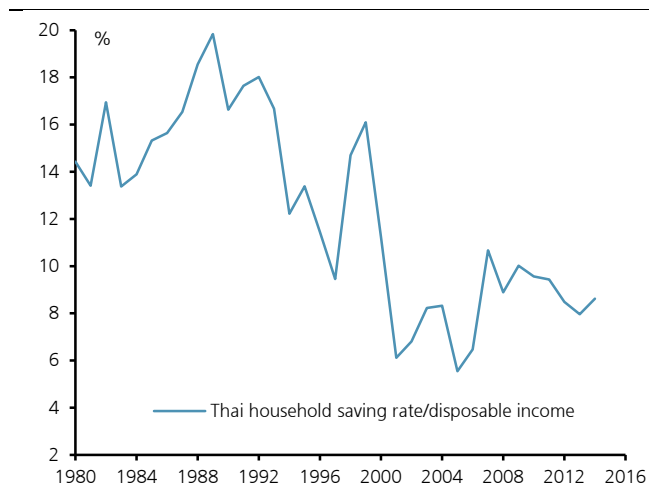
Source: CEIC, UBS Estimates

Figure 81: Household Debt



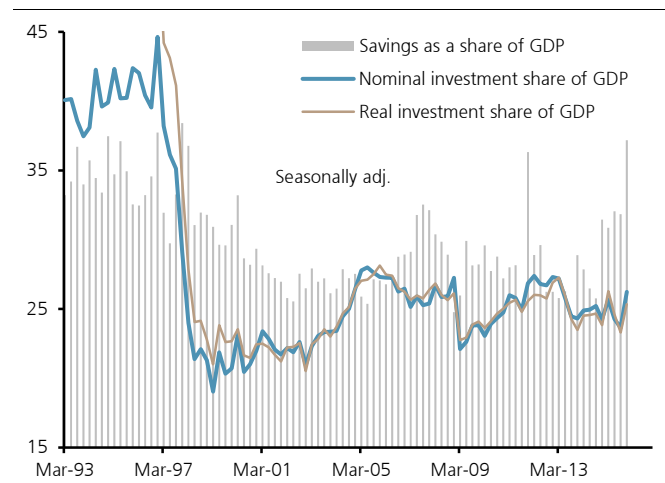
Source: CEIC, UBS Estimates

Figure 82: Household savings rate



Source: CEIC, UBS

Figure 83: National savings and investment

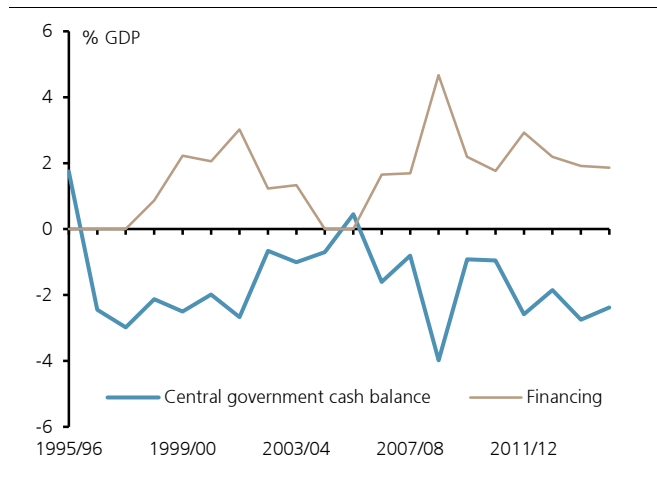


Source: CEIC, UBS

Fiscal Policy

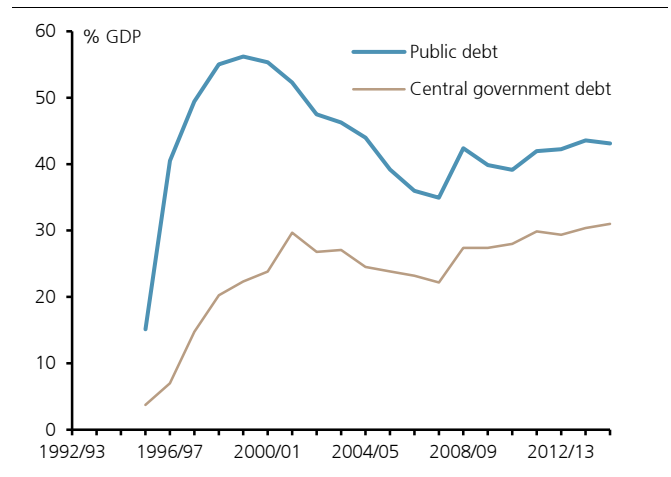
- ***What the numbers say:*** The level of public and central government debt is manageable relative to GDP. Tax data shows moderation in personal income tax in January while corporate tax revenue was better. Budget FY 2016 implies a fiscal deficit of 390bn baht after a deficit in FY 2015 of 394bn (higher than the budgeted 250bn baht due to weaker than expected revenues). Press reports suggest government borrowing has been frontloaded at 265bn baht, or 68% of total, in the first quarter of FY 2015-16 than the 31bn recorded in the first quarter of FY 2014-15. Looking forwards, the govt. has guided that the FY 2017 budget deficit will not exceed the projected 390bn baht in FY 2016.
- ***What they mean:*** Governments typically try to provide infrastructure and services where markets are unable or unwilling to participate appropriately. In doing so, governments may attempt to replace deficient private sector demand or may compete with the private sector for resources, bidding up the price of money or materials.
- ***12-month outlook:*** The FY 2016 budget no longer looks stimulatory after a wider than expected FY 2015 budget deficit. However, the spending mix could improve after lower than intended infrastructure spending during FY 2015.

Figure 84: General government budget balance



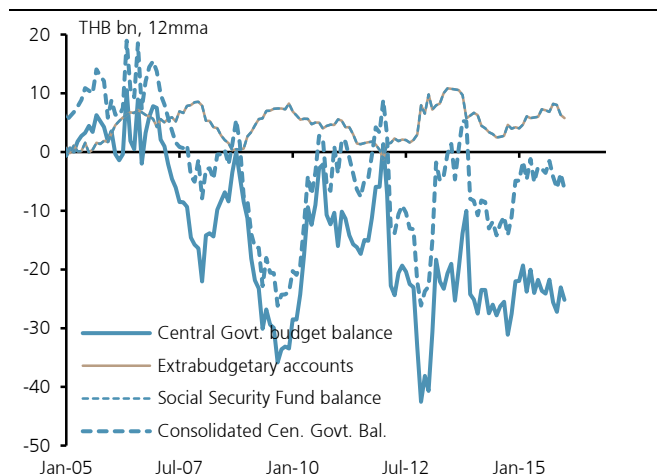
Source: CEIC, UBS (Fiscal year = 01 Oct to 30 Sep)

Figure 85: General government debt



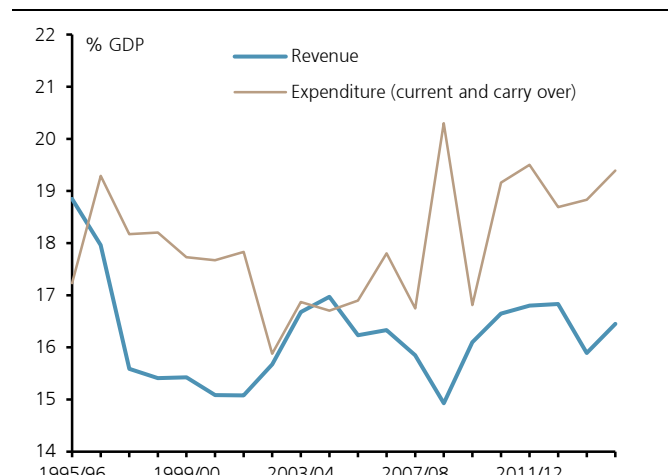
Source: CEIC, UBS (Fiscal year = 01 Oct to 30 Sep)

Figure 86: Monthly budget balances



Source: CEIC, UBS (Aggregate budget balance = Central government balance – Social security fund balance – extra-budgetary accounts balance)

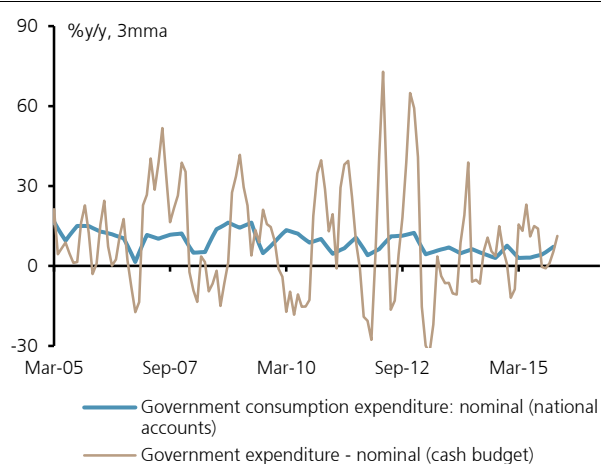
Figure 87: Govt. budgetary expenditure and revenue



Source: Bloomberg, UBS (Fiscal year = 01 Oct to 30 Sep)

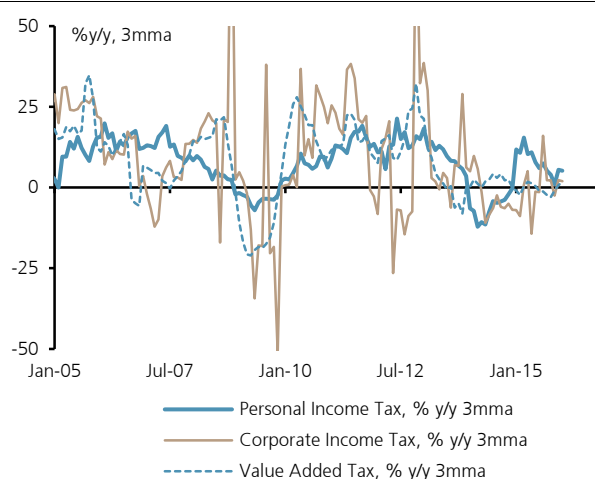
Fiscal Policy, continued

Figure 88: Expenditure growth



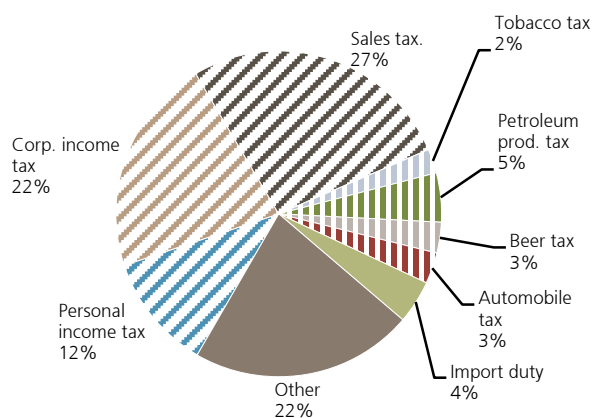
Source: CEIC, UBS

Figure 89: Tax revenue growth – selected items



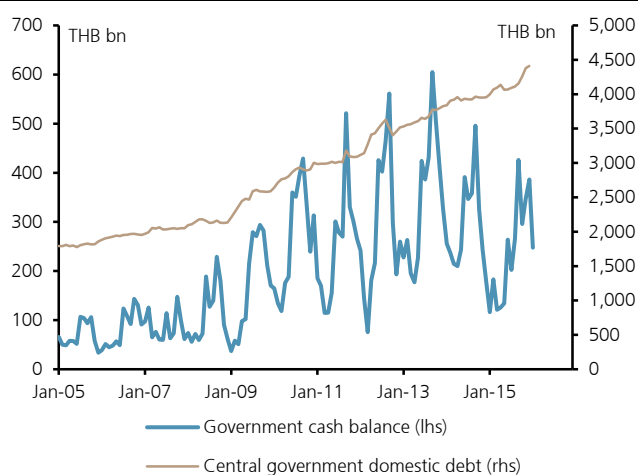
Source: CEIC, UBS

Figure 90: Government revenue by source (FY 2015)



Source: CEIC, UBS

Figure 91: Government cash balance and debt stock

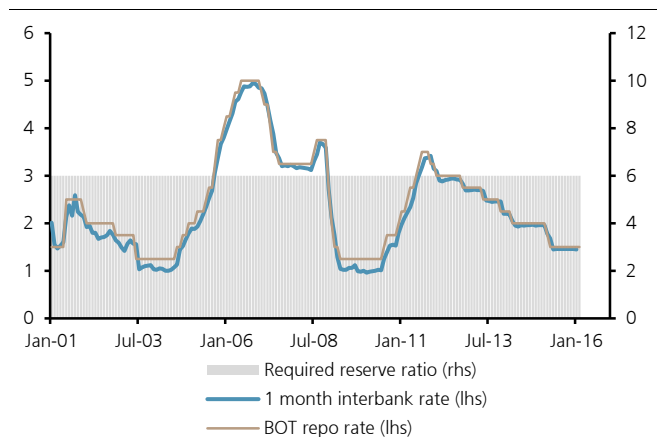


Source: CEIC, UBS

Monetary policy

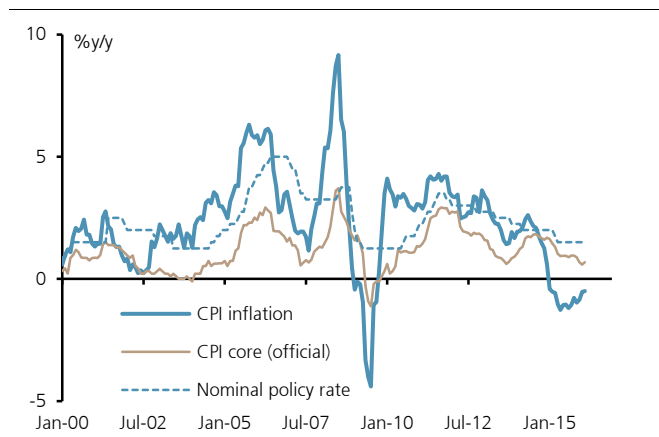
- ***What the numbers say:*** The BoT voted unanimously to leave policy rates unchanged at 1.5% at the 03 February 2016 meeting. It previously cut the repo rate by 25 bps each in March and April 2015. At the latest meeting, the central bank took the view that domestic growth was near expectations in Q4 2015 and monetary conditions were accommodative enough. In February 2015 the BoT wrote a letter to the government explaining the deviation of inflation from the target band of 2.5% +/-1.5ppts. Headline inflation is now forecast at 0.8% by the BoT (down from the earlier forecast of 1.2%) in 2016, after it averaged -0.9% y/y in 2015.
- ***What they mean:*** The Bank of Thailand has a headline inflation target of 2.5% +/-1.5ppts. Monetary policy settings are a critical determinant of money growth along with the internal and external value of the currency. Monetary policy can also provide relief from (or cause) tight liquidity conditions in financial markets.
- ***12-month outlook:*** We think the Bank of Thailand will leave policy rates unchanged through the end of the year. In 2017 policy rates may be increased given our view that oil prices rise and the US Federal Reserve raises the Fed Funds rate to 1.75-2.00% by end 2017. There is a risk further economic weakness presages further policy rate cuts, but equally Fed policy and the inflation environment may become less conducive to lower BoT policy rates.

Figure 92: Policy rate



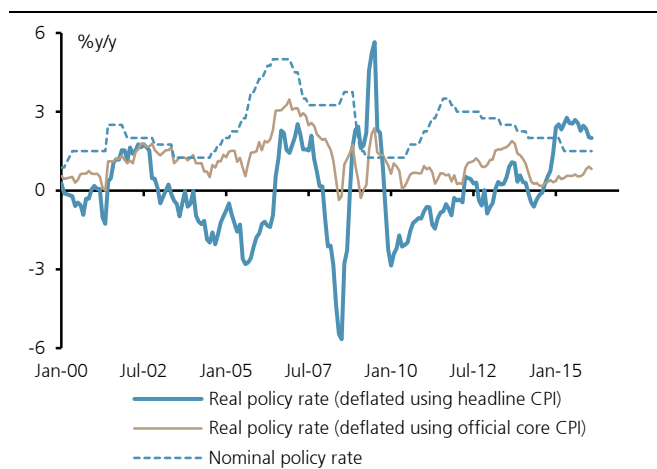
Source: CEIC, UBS

Figure 93: Policy Rate and Inflation



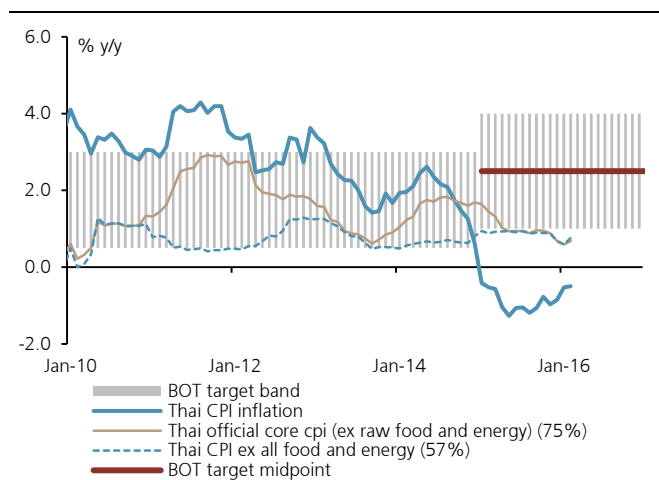
Source: CEIC, UBS

Figure 94: Real and nominal policy rate



Source: CEIC, UBS

Figure 95: BoT inflation target

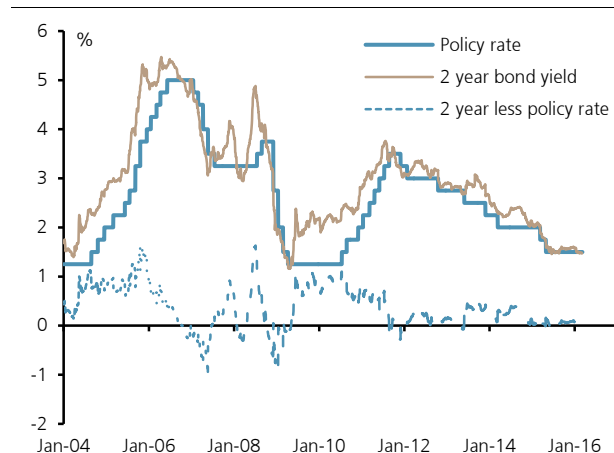


Source: Bloomberg, UBS, Consensus Economics

Interest Rates

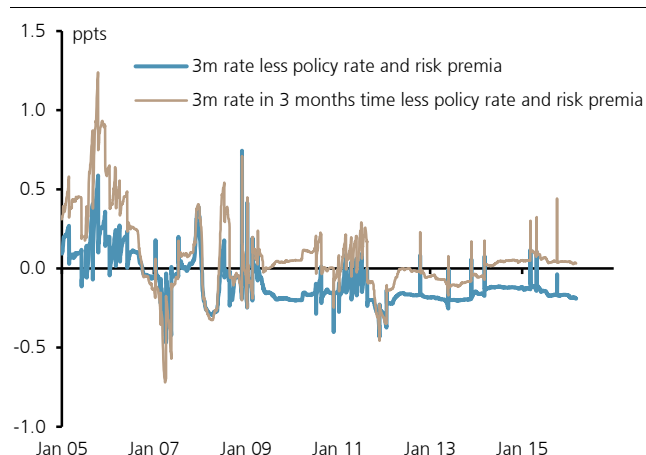
- ***What the numbers say:*** Low inflation and disappointing growth mean the debate is still focused on policy rate cuts. Consistent with this, long-term government bond yields have declined in sympathy with US rates. Credit spreads, which edged higher towards end of April and early October in 2015, moderated to more stable levels recently.
- ***What they mean:*** Low interest rates are often used to stimulate economic growth via different channels; e.g., portfolio shifts in assets, asset price appreciation, reduced debt-service burden, lowering the cost of finance for investment or durable consumption, etc.
- ***12-month outlook:*** US Treasury yields are low but volatile. Ultimately we believe more evidence of stronger growth will drive them higher again. Higher UST yields and the trend weakness in the baht we expect in 2015 may also put Thai bond yields under upward pressure going forward. For now low interest rates in Thailand are delaying pressure for the private (household) sector to deleverage.

Figure 96: Interest Rates



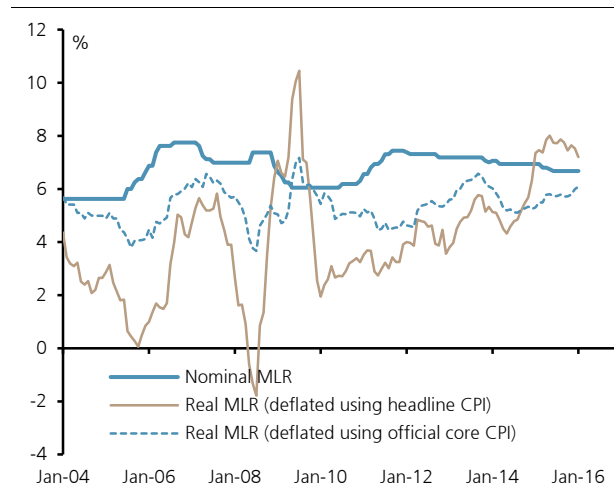
Source: CEIC, UBS

Figure 97: Policy rate increases priced into forward curve



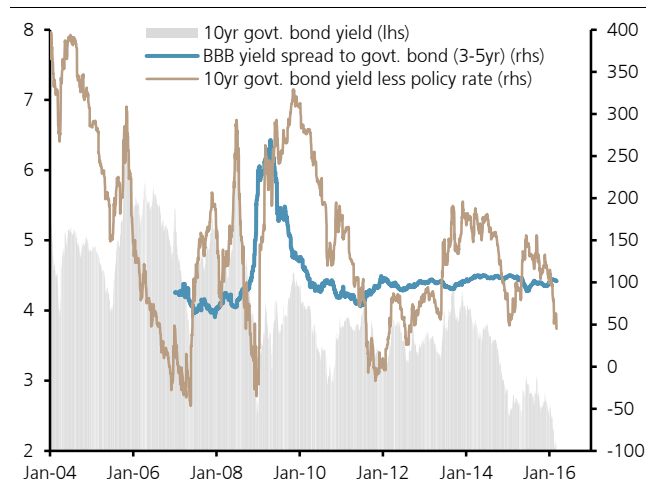
Source: CEIC, UBS (For methodology please see Southeast Asian Focus – ASEAN: Rate expectations; Ed Teather; 20 June 2008)

Figure 98: Real and Nominal Minimum Lending Rates



Source: CEIC, UBS

Figure 99: Govt bond yields, yield curve and credit spread

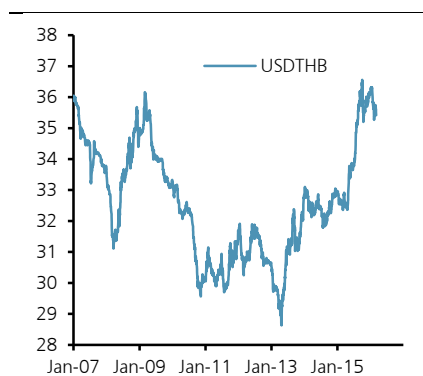


Source: Bloomberg, UBS

Exchange Rate

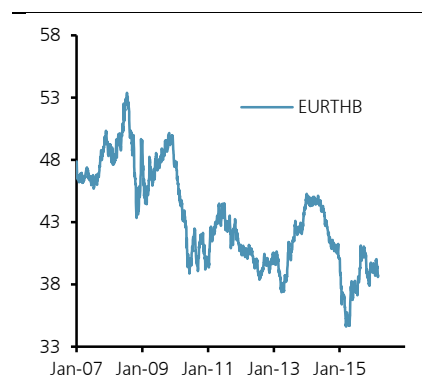
- ***What the numbers say:*** The baht has strengthened of late. Previously, the baht was remarkably stable against the US dollar until the April 2015 policy meeting. The surprise April policy rate cut and accompanying easing of controls to spur capital outflows let the baht to decline against the US dollar. However, the authorities have done little since to encourage baht weakness.
- ***What they mean:*** Obviously exchange rates affect inflation and trade. However, one of the reasons to look at exchange rates in Asia is because most central banks like to “lean against the wind” and in doing so affect domestic liquidity conditions. Many Asian central banks, BoT included, buy US dollars (increasing foreign reserves) when their currencies are under pressure to appreciate and this causes the domestic money supply to expand, which then must be sterilized, usually with central bank debt or by adjusting reserve requirement ratios on deposits. The process flows in the other direction when currencies are under pressure to depreciate.
- ***12-month outlook:*** The current account surplus that previously appeared while domestic demand was unusually depressed has now returned with buoyant tourism receipts and lower oil prices. That has improved support for the baht. Nonetheless, given low BoT policy rates and the potential for Fed policy tightening, a stronger US dollar and a maturing credit cycle, we expect the baht to fall modestly against the USD into year-end 2016.

Figure 100: USDTHB



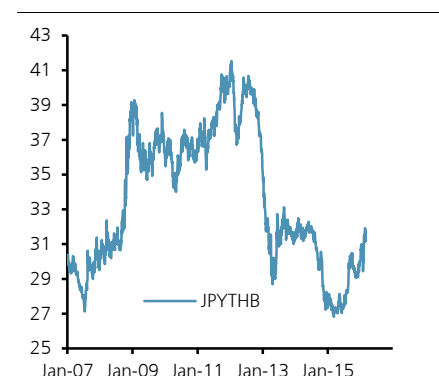
Source: CEIC, UBS

Figure 101: EURTHB



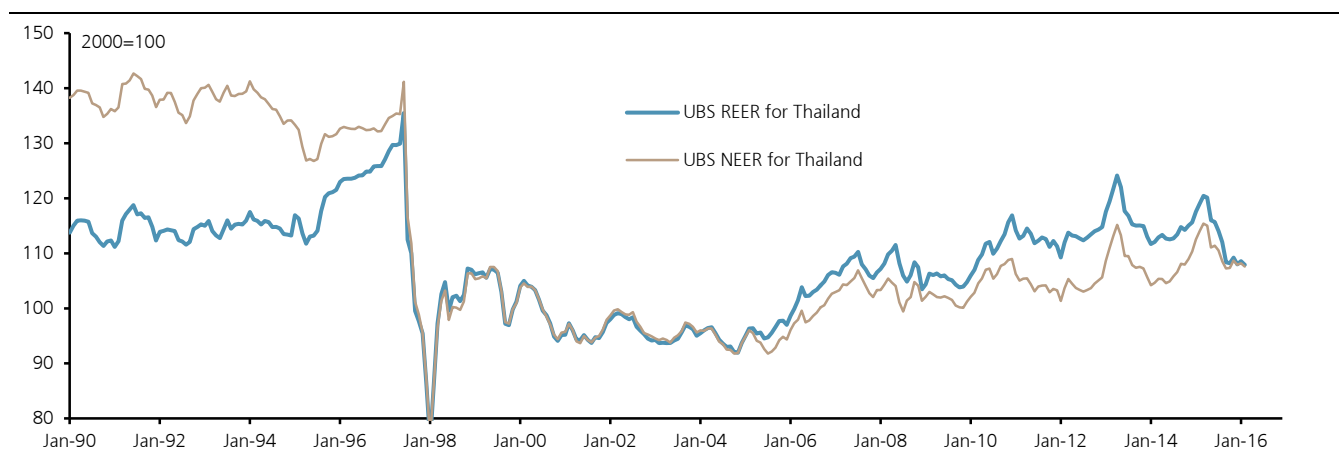
Source: CEIC, UBS

Figure 102: JPYTHB (THB per 100 yen)



Source: CEIC, UBS

Figure 103: Real and nominal effective exchange rates

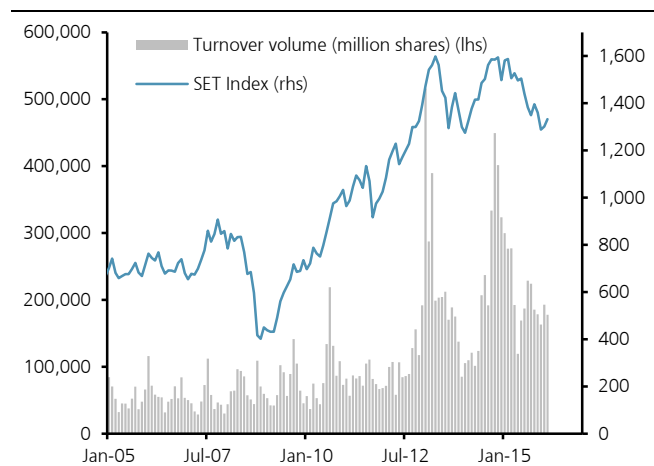


Source: UBS

Asset Markets

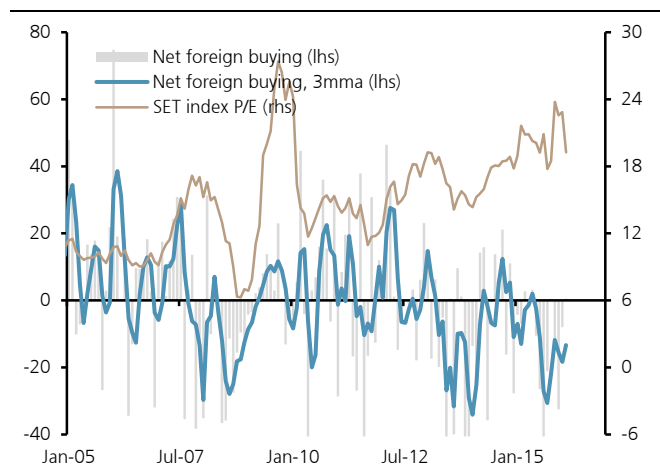
- ***What the numbers say:*** Thailand's 2014 equity market rally has made little headway, halting on the day that OPEC announced it was not going to cut production in November 2014. More recently market sentiment, impacted by Fed rate hike, a falling Chinese equity market and reduced petro dollar flows, has been soft. However, residential property prices continue to rise.
- ***What they mean:*** Stock markets and other asset prices are one of the best forward-looking indicators for economic growth and profits. A sustained rise in stock markets can also have significant effects on consumption and investment via wealth effects for consumers and lower cost of capital for firms. Property prices can have a similar effect, with residential property valuations particularly relevant for household balance sheets.
- ***12-month outlook:*** Lower confidence in growth was undermining asset prices. Even if the political issues facing Thailand become less acute, the maturing credit cycle has probably been a drag on asset prices. On the upside, activity growth has stabilised and there are some grounds a reduced drag on the economy from falling credit growth. Of course, external factors could upset this.

Figure 104: SET index



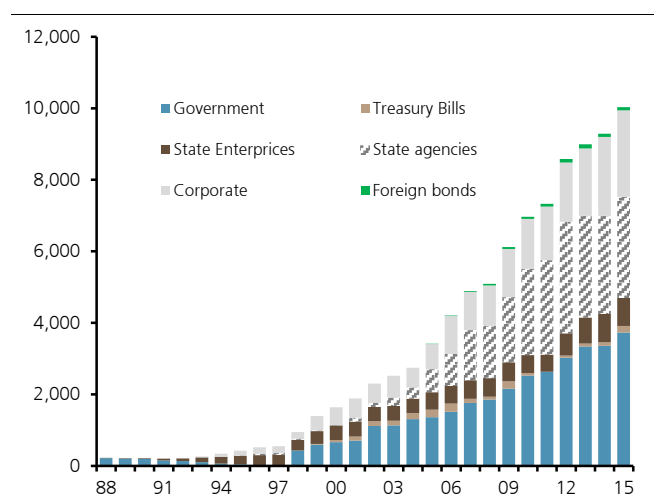
Source: Haver, UBS

Figure 105: P/E ratio and Net foreign buying



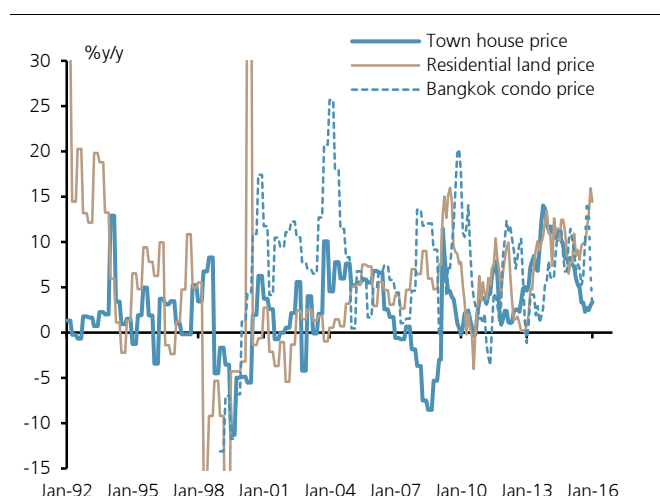
Source: CEIC, UBS (P/E is based on Stock Exchange of Thailand definition)

Figure 106: Bond market composition



Source: CEIC, UBS

Figure 107: Property prices

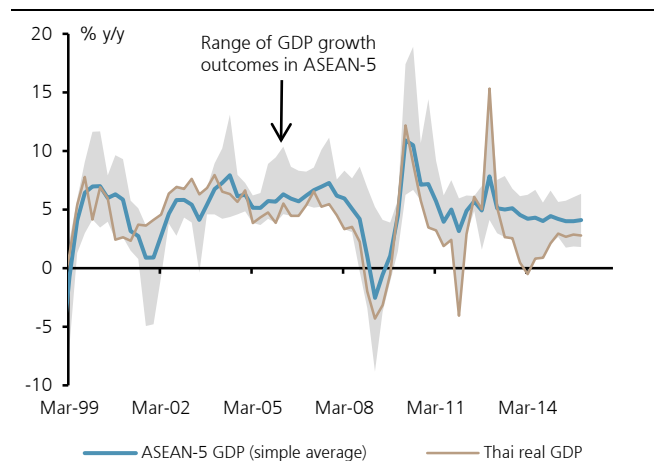


Source: CEIC, UBS

Thailand in Context

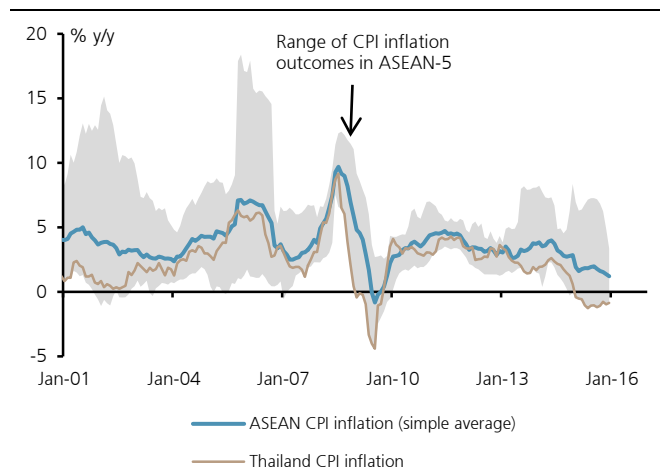
- ***What the numbers say:*** Thai real growth tends only to perform well in an ASEAN-5 context during growth recoveries. Through early 2014, Thai growth underperformed in 2013 and 2014 on export weakness and a loss of domestic confidence. In terms of inflation, Thailand has tended to be in the middle of the pack, but it has moved lower of late.
- ***What they mean:*** Thailand's relative performance in terms of inflation, growth and external exposure condition financial market expectations for future relative performance.
- ***12-month outlook:*** Going forward, we think Thailand is one of the more sensitive economies to a pick-up (or worsening) of global trade. There is also the idiosyncratic potential for domestic demand to continue to recover given the political pressures have simmered down and infrastructure plans have been rekindled. It is also possible high household debt levels will create deleveraging pressures – although these may be delayed by low interest rates.

Figure 108: Thai real GDP against ASEAN average



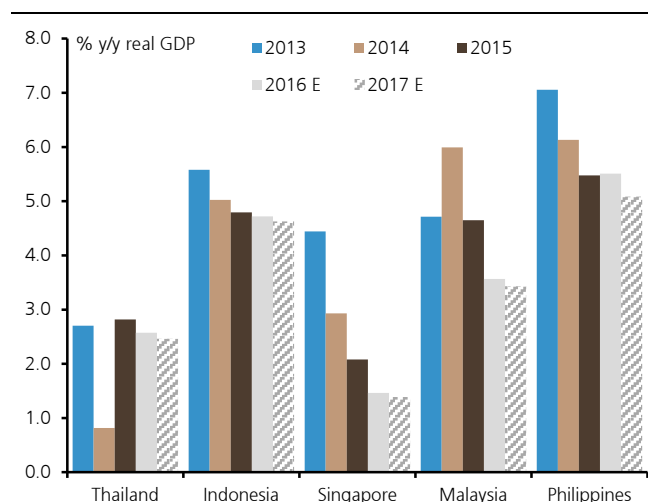
Source: Haver, UBS

Figure 109: Thai CPI inflation against ASEAN average



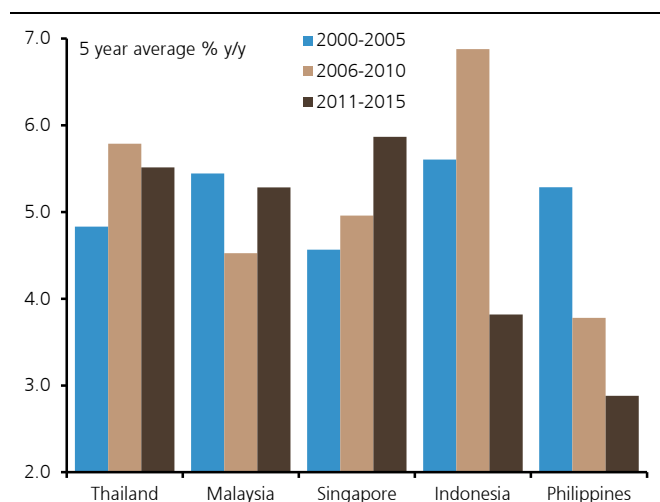
Source: CEIC, UBS

Figure 110: UBS growth forecasts



Source: CEIC, UBS estimates

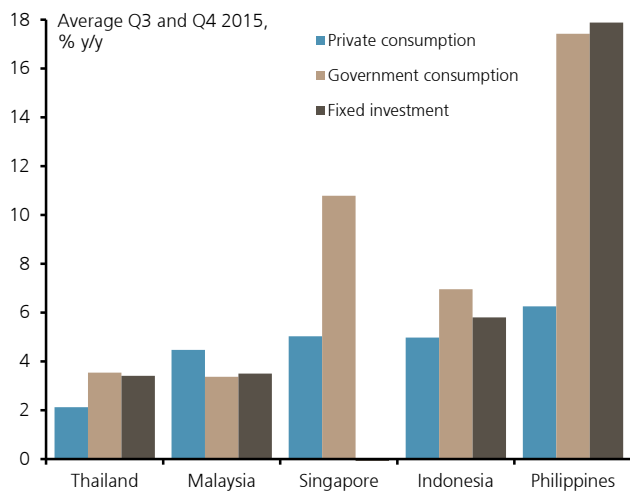
Figure 111: Historical average real GDP growth rates



Source: Haver, UBS

Thailand in Context, continued

Figure 112: Domestic growth across ASEAN



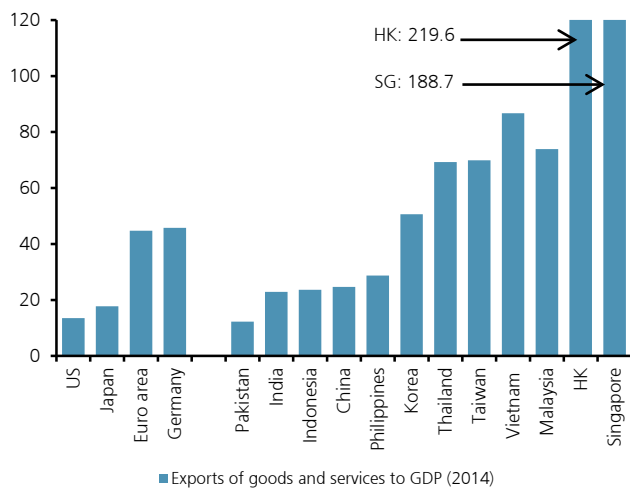
Source: CEIC, Haver, UBS

Figure 113: Thai export growth relative to ASEAN



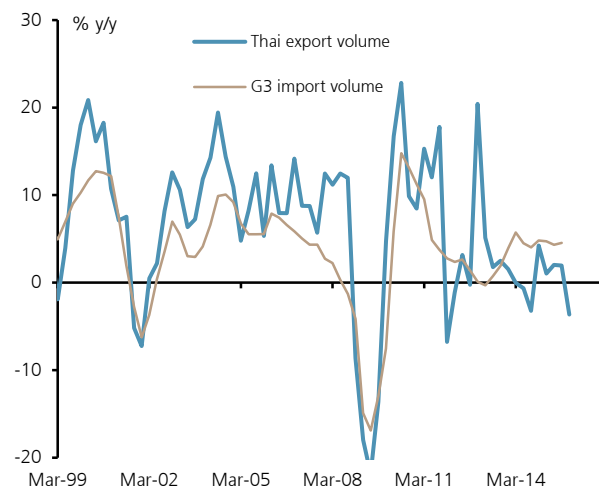
Source: CEIC, Haver, UBS

Figure 114: External exposure



Source: CEIC, Haver, UBS

Figure 115: Thai exports and G3 import demand



Source: CEIC, Haver, UBS

Macroeconomic data and forecast

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015E | 2016E | 2017E |
|---|---------|----------|----------|----------|----------|----------|----------|----------|----------|
| National Accounts (% y/y) | | | | | | | | | |
| Nominal GDP, THB bn | 9,654.0 | 10,802.4 | 11,300.5 | 12,349.0 | 12,901.5 | 13,132.2 | 13,537.5 | 14,021.4 | 14,634.9 |
| Nominal GDP, USD bn | 281.4 | 340.8 | 371.0 | 397.7 | 420.3 | 404.5 | 395.4 | 382.7 | 381.4 |
| GDP per capita, USD | 4,429.3 | 5,334.7 | 5,789.5 | 6,169.3 | 6,487.4 | 6,211.9 | 6,049.9 | 5,840.4 | 5,806.9 |
| Real GDP | -0.7 | 7.5 | 0.8 | 7.2 | 2.7 | 0.8 | 2.8 | 2.6 | 2.5 |
| Real Consumption: Private | -1.3 | 5.0 | 1.8 | 6.7 | 1.0 | 0.6 | 2.1 | 2.3 | 2.2 |
| Real Consumption: Government | 10.3 | 9.3 | 3.4 | 6.8 | 2.5 | 2.1 | 2.2 | 2.0 | 2.0 |
| Real Gross Fixed Capital Formation | -10.9 | 11.6 | 4.9 | 10.7 | -1.0 | -2.4 | 4.7 | 4.6 | 4.6 |
| Domestic Demand incl. Stock | -6.6 | 11.8 | 2.3 | 7.9 | 1.8 | -2.8 | 2.7 | 2.8 | 3.2 |
| Net Exports of Goods & Services* | 6.0 | -3.9 | -1.8 | -0.3 | 0.9 | 4.1 | 0.4 | 0.0 | -0.5 |
| Financial Markets | | | | | | | | | |
| Exchange Rate - THB/USD, year-end | 33.36 | 30.15 | 31.70 | 30.63 | 32.82 | 32.96 | 36.08 | 37.00 | 40.00 |
| Exchange Rate - THB/USD, year-average | 34.31 | 31.70 | 30.46 | 31.05 | 30.70 | 32.46 | 34.35 | 36.64 | 38.38 |
| Policy Rate (End of Period) | 1.25 | 2.00 | 3.25 | 2.75 | 2.25 | 2.00 | 1.50 | 1.50 | 2.25 |
| Balance of Payments (USD bn) | | | | | | | | | |
| Exports (USD Bn.) | 152.4 | 193.3 | 222.6 | 229.2 | 228.5 | 227.6 | 214.4 | 213.4 | 221.7 |
| Exports (USD % y/y) | -14.3 | 26.8 | 15.1 | 3.0 | -0.3 | -0.4 | -5.8 | -0.5 | 3.9 |
| Imports (USD bn) | 133.7 | 182.9 | 228.8 | 250.0 | 250.4 | 228.0 | 202.7 | 198.1 | 210.1 |
| Imports (USD, % y/y) | -25.4 | 36.8 | 25.1 | 9.3 | 0.2 | -9.0 | -11.0 | -2.3 | 6.0 |
| Trade Balance (USD bn) | 18.7 | 10.4 | -6.2 | -20.8 | -21.9 | -0.4 | 11.7 | 15.3 | 11.6 |
| Current Account (USD bn) | 20.7 | 10.0 | 8.9 | -1.5 | -5.2 | 15.4 | 34.8 | 32.2 | 28.0 |
| Current Account (% of GDP) | 7.3 | 2.9 | 2.4 | -0.4 | -1.2 | 3.8 | 8.8 | 8.4 | 7.3 |
| FDI | 0.4 | 6.6 | -4.7 | -1.4 | 3.8 | -0.6 | -2.0 | 4.0 | 4.0 |
| Other Capital Flows | -3.7 | 16.2 | -3.0 | 8.1 | -3.7 | -16.1 | -29.4 | -36.2 | -32.0 |
| Balance of Payments | 24.1 | 31.3 | 1.2 | 5.3 | -5.0 | -1.2 | 3.4 | 0.0 | 0.0 |
| FX Reserves | 138.4 | 172.1 | 175.1 | 181.6 | -6.0 | 157.1 | 156.5 | 156.5 | 156.5 |
| Prices and Money (% y/y) | | | | | | | | | |
| Consumer Prices, year-average | -0.9 | 3.3 | 3.8 | 3.0 | 2.2 | 1.9 | -0.9 | 0.5 | 1.9 |
| M1 (% y/y, Average of Period) | 7.1 | 12.6 | 12.7 | 8.0 | 4.9 | 4.8 | 3.5 | 8.8 | 9.0 |
| M2 (% y/y, Average of Period) | 8.1 | 8.0 | 15.2 | 11.8 | 8.8 | 5.1 | 5.6 | 9.0 | 9.0 |
| Credit, year-average | 3.6 | 8.6 | 16.0 | 15.9 | 12.3 | 6.5 | 5.2 | 7.5 | 4.0 |
| Fiscal Accounts (% of GDP), FY-basis (October - September) | | | | | | | | | |
| Revenue | 15.9 | 17.2 | 16.6 | 16.8 | 16.8 | 15.9 | 16.5 | 16.5 | 16.5 |
| Expenditure | 21.7 | 18.0 | 19.2 | 19.5 | 18.7 | 18.8 | 19.4 | 19.7 | 20.0 |
| Overall Balance | -5.7 | -0.8 | -2.5 | -2.7 | -1.9 | -2.9 | -2.9 | -3.2 | -3.5 |
| Public Debt (% of GDP) | | | | | | | | | |
| General government | 29.5 | 30.0 | 29.3 | 30.9 | 32.2 | 32.6 | 32.6 | 33.8 | 36.0 |
| External Debt | 0.6 | 0.5 | 0.4 | 0.4 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| Domestic Debt | 28.9 | 29.5 | 28.9 | 30.5 | 31.6 | 31.9 | 32.0 | 33.2 | 35.4 |
| Total public sector debt | 43.9 | 42.4 | 40.8 | 43.6 | 45.8 | 46.3 | 44.4 | 46.5 | 48.6 |
| External Debt (USD bn) | | | | | | | | | |
| Total external debt | 75.3 | 96.9 | 104.3 | 130.7 | 141.9 | 140.1 | 132.0 | 134.0 | 136.0 |
| Public | 15.4 | 23.0 | 16.2 | 26.2 | 25.2 | 25.3 | 19.0 | 19.0 | 19.0 |
| Private | 59.9 | 74.0 | 88.1 | 104.5 | 116.7 | 114.9 | 113.0 | 115.0 | 117.0 |
| Short-term | 33.1 | 46.7 | 47.3 | 58.2 | 61.9 | 56.1 | 53.0 | 53.0 | 53.0 |
| Medium- and Long-term | 42.2 | 50.2 | 57.0 | 72.6 | 80.0 | 84.1 | 79.0 | 81.0 | 83.0 |
| Credit Ratings | | | | | | | | | |
| Moody's | Baa1 | Baa1 | Baa1 | Baa1 | Baa1 | Baa1 | Baa1 | N/A | N/A |
| S&P | BBB+ | BBB+ | BBB+ | BBB+ | BBB+ | BBB+ | BBB+ | N/A | N/A |
| Fitch | BBB | BBB | BBB | BBB | BBB+ | BBB+ | BBB+ | N/A | N/A |

* Contribution to GDP growth. Source: CEIC, Bloomberg, UBS estimates

Quarterly: forecast profile

| | Q3 14 | Q4 14 | Q1 15 | Q2 15 | Q3 15 | Q4 15 | Q1 16E | Q2 16E | Q3 16E | Q4 16E |
|--------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|
| National accounts | | | | | | | | | | |
| Real GDP, % q/q sa | 0.9 | 0.9 | 0.5 | 0.4 | 1.0 | 0.8 | 0.4 | 0.6 | 0.8 | 0.7 |
| Real GDP, % y/y nsa | 0.9 | 2.1 | 3.0 | 2.7 | 2.9 | 2.8 | 2.6 | 2.8 | 2.6 | 2.4 |
| Real private consumption | 2.3 | 1.7 | 2.5 | 1.7 | 1.8 | 2.5 | 2.4 | 2.0 | 2.2 | 2.6 |
| Real govt. consumption | -0.2 | 4.3 | 0.7 | 1.0 | 2.3 | 4.8 | 2.0 | 2.0 | 2.0 | 2.0 |
| Real investment | 2.7 | 3.6 | 10.3 | 2.6 | -2.6 | 9.4 | 0.3 | 6.3 | 9.3 | 2.7 |
| Final domestic demand | 1.9 | 2.6 | 4.2 | 1.8 | 0.7 | 4.7 | 1.8 | 3.2 | 4.0 | 2.5 |
| Nominal GDP | 1.4 | 2.1 | 2.8 | 2.6 | 3.3 | 3.6 | 3.6 | 3.8 | 3.6 | 3.4 |
| Prices | | | | | | | | | | |
| CPI inflation | 2.0 | 1.1 | -0.5 | -1.1 | -1.1 | -0.9 | -0.5 | 0.2 | 0.7 | 1.4 |
| Monetary policy | | | | | | | | | | |
| BoT policy rate | 2.00 | 2.00 | 1.75 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 |

Source: UBS Estimates, CEIC, Haver

Thai policy calendar (2016)

| | BoT MPC policy meeting | Monetary Policy Reports | Fiscal policy calendar (Fiscal year is Oct 1 to Sep 30) |
|-----------|---------------------------|------------------------------|--|
| January | | | Detailed budget preparation begins |
| February | 03 rd | | |
| March | 23 rd | Monetary Policy Report: 31st | |
| April | | | Deliberation of budget in Cabinet |
| May | 11 th | | Cabinet approval of budget |
| June | 22 nd | Monetary Policy Report: 30th | First reading of budget in House of Representatives |
| July | | | |
| August | 03 rd | | Second and Third readings in House of Representatives |
| September | 14 th | Monetary Policy Report: 23rd | Budget enacted by the King |
| October | | | Start of new fiscal year ministerial budget plans submitted for following year |
| November | 09 th | | |
| December | 21st | Monetary Policy Report: 30th | Cabinet approves baseline expenditure and strategic direction of budget |

Source: IMF, BoT

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