

Special Report

Shop Talk – China, ASEAN and the future



Highlights

- Rising wages remain a key challenge in China, according to our eighth annual survey of more than 200 manufacturers in the Pearl River Delta (PRD) region. Our respondents expect wages to rise by 7.2% on average in 2017. The business outlook is more positive in 2017 than in 2016 – 42% expect orders to increase, and margins are expected to drop only 0.1% on average, versus a 6.1% drop in 2016.
- High-end manufacturers are focusing on productivity gains through investment, while low-end manufacturers prefer to relocate operations to counter rising local wages. More respondents said they would prefer to relocate overseas versus moving inland, for the first time in our annual survey.
- ASEAN remains the preferred destination for manufacturers looking to relocate. FDI from Northeast Asia in ASEAN is increasing. In particular, Taiwanese producers based in the PRD expect a growing contribution from ASEAN to their production output over the next one to two years.
- The Big Bay Area regional development plan seeks to integrate Guangzhou, Shenzhen and Zhuhai with neighbouring Hong Kong and Macau by generating synergies that are expected to drive China's economy in the medium term.

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China – Moving up the value chain

The PRD offers us unique insights into China's cyclical slowdown and structural transformation

Our annual survey of Pearl River Delta (PRD) manufacturers enters its eighth year in 2017. With over 200 responses, the survey provides unique insights into China's manufacturing landscape and its transformation over the years. We believe our survey is no longer complete without including ASEAN as an important constituent. ASEAN continues to gain from the PRD's transformation and challenges, and the region has received increasing amounts of foreign direct investment (FDI) from Northeast Asia.

Rising wages remain a key challenge for PRD manufacturers, albeit less so than in previous years.

- Our respondents expect wages to rise by 7.2% on average in 2017, easing steadily from 7.7% in 2016 and 7.8% in 2015 (expectations based on our survey).
- However, almost half expect hikes of 10% or more, up from a third last year. We believe this is because the actual wage increase of 5.9% in 2016 undershot initial expectations, increasing pressure to raise wages this year.

The outlook for business growth and profitability appears to be improving

Despite persistent cost pressure, the business outlook for manufacturers appears to be improving. Respondents expect margins to drop only 0.1% on average this year, versus a 6.1% drop in 2016. Our respondents also expect orders to improve by 1.6% on average over the next six months, significantly better than the 7.6% decline expected last year.

This is likely driven more by the improving outlook for key overseas markets than by upbeat prospects for China. 42% of respondents hold a largely positive view on ASEAN economies, and they are more positive on the US but more neutral towards China. This mirrors our own expectations for China – we believe GDP growth peaked at 6.9% y/y in Q1-2017 and we expect slower growth for the rest of 2017, averaging 6.6% for the full year. We also believe that monetary tightness will persist as long as growth remains above 6.5% and deleveraging does not cause systemic risks.

Figure 1: High-end manufacturers prefer to boost investment while low-end manufacturers opt to move operations, in order to tackle labour challenges

Industry	Preferred response to labour shortage		Estimated wage rise (%)		Wages as a share of total costs (%)		Expected change in orders over next 6 months (%)		Expected change in margins in (%)	
	2016	2017	2016	2017	2016	2017	2016	2017	2016 vs 2015	2017 vs 2016
Semiconductor manufacturing equipment	Automation/ Move out of China	Automation/ More capex	6.0	8.8	20.8	19.7	-10.8	1.6	-7.9	1.9
Semiconductor fabrication	More capex/ Automation	More capex/ Move higher up value chain	9.2	10.3	21.7	19.0	-11.0	-1.3	-7.2	-7.1
Electronics packaging assembly	More capex/ Move inland	Automation/ More capex	7.6	7.1	24.2	26.1	-9.8	2.4	-8.9	1.2
Component manufacturing	Automation/ More capex/ Move inland	Automation/ Move out of China	9.4	7.1	22.7	21.6	-7.6	3.0	-5.5	-2.7
Non-electronics manufacturing	Automation/ Move out of China	Automation/ Move out of China	6.4	6.6	21.9	19.7	-4.0	2.6	-4.0	1.5
All manufacturers			7.7	7.2	22.5	21.5	-7.6	1.6	-6.1	-0.1

Note: Red is high, green is low and yellow is moderate; Source: Standard Chartered Research

Clients involved in semiconductor fabrication expect the highest wage increases this year among the sectors we surveyed. They are also best placed to absorb these wage increases given their corresponding productivity gains: over 85% said their per-worker output rose faster than wages in 2016. Higher-end manufacturers also favour capex as a way to address labour challenges. In contrast, component manufacturers and non-electronics manufacturers prefer to move out of China, heavily favouring ASEAN as an alternative production destination.

ASEAN remains the favoured destination for relocating production outside China

Manufacturers increasingly prefer to relocate production facilities outside of China rather than move further inland (a popular option in past years). This likely reflects the rapid rise in wages even in inland China cities. ASEAN has been the top choice for overseas relocation since we started our PRD survey. This trend still appears to be intact.

Rising costs in China continue to benefit ASEAN as manufacturers look for alternative production sites. In addition to cost-induced pressure, client requests to diversify production centres are also prompting PRD manufacturers to move to ASEAN. The Mekong region – specifically Vietnam and Cambodia and increasingly Myanmar – remains the preferred destination. This year, Cambodia took over the top spot from Vietnam.

ASEAN's growing domestic markets are a key pull factor for FDI

ASEAN's growing domestic market is another pull factor for FDI; this is in line with our positive long-term view on the region. Sustained FDI, favourable demographics, regional stability, governments' focus on growth policies and urbanisation are likely to boost the region's purchasing power. In addition to the manufacturing sector, the financial sector in ASEAN is attracting FDI, likely as banks follow their clients (such as manufacturers relocating to ASEAN) into the region.

Northeast Asia is the region's manufacturing powerhouse. The recent shift in manufacturing investment away from China has resulted in increased FDI flows from Northeast Asia into ASEAN. The latest data indicates that investment from Northeast Asia accounts for 32% of total FDI into ASEAN, up from 23% in 2010. Japan remains the largest investor in ASEAN, but South Korea, Taiwan and China are steadily increasing their shares. Vietnam in particular is attracting growing manufacturing FDI from Korea and Taiwan. We also expect increasing construction investment in ASEAN from China as China's 'Belt and Road' infrastructure projects progress.



Infographic

Figure 1: Wage growth, 2016 actual vs 2017 expectations

% of respondents; blue shading indicates faster expected wage growth this year versus 2016

		2017					
2016		Down	No change	Up 5%	Up 10%	Up 15%	Up 20%
	Down	0.9%	0.0%	0.0%	0.0%	0.5%	0.5%
	No change	1.4%	7.1%	5.7%	3.8%	0.5%	0.5%
	Up 5%	0.5%	5.7%	27.8%	10.4%	1.9%	0.0%
	Up 10%	0.0%	0.5%	2.4%	17.9%	4.2%	0.9%
	Up 15%	0.0%	0.0%	0.0%	1.9%	0.9%	1.4%
	Up 20%	0.0%	0.5%	0.0%	0.0%	0.9%	1.4%
Total		2.8%	13.8%	35.9%	34.0%	8.9%	4.7%

Source: Standard Chartered Research

Figure 2: Margin change, 2016 actual vs 2017 estimate

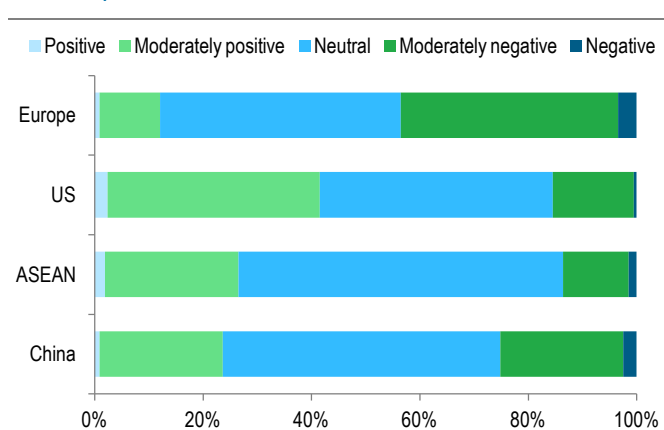
% of respondents; blue shading indicates those expecting better margin changes this year than last year

		2017						
2016		Down 30%	Down 20%	Down 10%	No change	Up 10%	Up 20%	Up 30%
	Down 30%	1.0%	1.4%	1.0%	0.5%	0.0%	0.0%	0.5%
	Down 20%	1.4%	2.4%	1.9%	0.5%	1.0%	0.0%	0.0%
	Down 10%	0.0%	2.4%	13.5%	4.8%	2.9%	1.0%	0.0%
	No change	0.0%	0.0%	3.9%	24.2%	6.3%	0.5%	0.0%
	Up 10%	0.0%	0.0%	1.4%	5.3%	16.9%	0.0%	0.0%
	Up 20%	0.0%	0.0%	0.0%	0.0%	1.9%	1.4%	0.0%
	Up 30%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	1.4%

Source: Standard Chartered Research

Figure 3: 2017 outlook for EU/US/ASEAN/China

% of respondents



Source: Standard Chartered Research

Figure 4: What is your biggest concern for 2017?

% of respondents



Source: Standard Chartered Research

Figure 5: Component manufacturing

		2017						
		Down 10%	Down 5%	No change	Up 5%	Up by 10%	Up by 15%	Up by 20%
2016	Down 10%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.1%
	Down 5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	No change	0.0%	6.3%	12.5%	9.4%	0.0%	0.0%	0.0%
	Up 5%	0.0%	3.1%	0.0%	12.5%	15.6%	0.0%	0.0%
	Up 10%	0.0%	0.0%	3.1%	3.1%	15.6%	6.3%	3.1%
	Up 15%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.3%
	Up 20%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: Standard Chartered Research

Figure 6: Electronics packaging assembly

		2017						
		Down 10%	Down 5%	No change	Up 5%	Up by 10%	Up by 15%	Up by 20%
2016	Down 10%	1.9%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%
	Down 5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	No change	0.0%	0.0%	9.6%	9.6%	5.8%	1.9%	1.9%
	Up 5%	0.0%	0.0%	5.8%	26.9%	3.8%	3.8%	0.0%
	Up 10%	0.0%	0.0%	0.0%	0.0%	15.4%	3.8%	1.9%
	Up 15%	0.0%	0.0%	0.0%	0.0%	1.9%	1.9%	0.0%
	Up 20%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%

Source: Standard Chartered Research

Figure 7: Semiconductor fabrication

		2017						
		Down 10%	Down 5%	No change	Up 5%	Up by 10%	Up by 15%	Up by 20%
2016	Down 10%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Down 5%	0.0%	0.0%	0.0%	0.0%	0.0%	6.7%	0.0%
	No change	0.0%	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%
	Up 5%	0.0%	0.0%	0.0%	13.3%	13.3%	0.0%	0.0%
	Up 10%	0.0%	0.0%	0.0%	0.0%	33.3%	6.7%	0.0%
	Up 15%	0.0%	0.0%	0.0%	0.0%	6.7%	0.0%	0.0%
	Up 20%	0.0%	0.0%	0.0%	0.0%	0.0%	6.7%	6.7%

Source: Standard Chartered Research

Figure 8: Semiconductor manufacturing equipment

		2017						
		Down 10%	Down 5%	No change	Up 5%	Up by 10%	Up by 15%	Up by 20%
2016	Down 10%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Down 5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	No change	0.0%	0.0%	6.3%	6.3%	6.3%	0.0%	0.0%
	Up 5%	0.0%	0.0%	0.0%	25.0%	6.3%	0.0%	0.0%
	Up 10%	0.0%	0.0%	0.0%	0.0%	18.8%	12.5%	0.0%
	Up 15%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Up 20%	0.0%	0.0%	0.0%	0.0%	0.0%	6.3%	6.3%

Source: Standard Chartered Research

Figure 9: Non-electronics

		2017						
		Down 10%	Down 5%	No change	Up 5%	Up by 10%	Up by 15%	Up by 20%
2016	Down 10%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Down 5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	No change	0.5%	2.1%	1.5%	2.1%	0.0%	0.0%	6.2%
	Up 5%	0.0%	4.6%	18.0%	6.2%	1.0%	0.0%	29.9%
	Up 10%	0.0%	0.0%	2.1%	8.8%	1.0%	0.0%	11.9%
	Up 15%	0.0%	0.0%	0.0%	1.0%	0.5%	0.5%	2.1%
	Up 20%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: Standard Chartered Research



PRD – The present and future

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PRD survey – Feeling the economic pulse

What doesn't kill you makes you stronger

Knowing how corporates upgrade and reinvent themselves helps us understand China's transformation

We conducted our eighth annual client survey of China's Pearl River Delta (PRD) manufacturers over February-March 2017, with over 200 responses. The firms are mostly headquartered in Hong Kong, Taiwan or mainland China with manufacturing operations in the PRD. Our survey clients are likely among the more successful firms in the region, having survived years of labour shortage and wage inflation, and they probably emerged stronger from last year's economic slowdown. Their strong profile may skew the results slightly, and the outlook could be bleaker than our sample suggests. Nevertheless, since our clients have largely successfully faced down challenges in the past, their responses give us a useful glimpse into how the manufacturing industry, and therefore China, is transforming.

There are four parts to our survey findings; we list the key takeaways below:

Labour and wages: Average wage growth of 5.9% in 2016 materially undershot our respondents' initial expectations, acting as a shock absorber amid the economic slowdown last year. They see a modest rebound in nominal wage growth this year, in line with China's stabilising economy. Compared with wages, the perception of a labour shortage appears to be much more inelastic, likely more influenced by structural supply constraints than by cyclical demand swings. We believe the more diverse workforce utilisation rates reflect the 'winners' standing apart from the 'losers' as nimbler firms get leaner and more competitive in challenging times, gaining market share at the expense of their competition.

Non-wage challenges: Our clients see margins stabilising and orders recovering. Borrowing money has become more difficult, and we see this continuing in 2017 amid tighter financial conditions. Many see a weaker Renminbi as positive for their business but are wary of higher Renminbi volatility. A potential US-China trade war tops the list of concerns in 2017, with 60% of respondents seeing a medium or high impact from this event.

Moving capacity elsewhere: The share of firms looking to move capacity overseas continued to rise and, for the first time, overtook firms looking to move inland. Cambodia and Vietnam remain the top destinations, and 'better labour supply' is still the top cited reason. Many clients are still considering moving or are in the early stages of relocation. A still-large wage gap with China, fewer infrastructure bottlenecks and strong economic fundamentals should help drive more ASEAN-bound investment over time.

Investing in the future: 68% of respondents plan to increase capex spending this year. Investing in automation and robotics not only explains and absorbs high wages, but can give the economy a much-needed productivity boost, in our view. All this echoes how the labour shortage and other challenges can be positive for an economy if they force the right behavioural changes at the micro level. We believe that what doesn't kill the PRD, and instead pushes the region's manufacturers to upgrade and reinvent themselves, will make China stronger.



Labour and wages

Multi-year downtrend to cap wage growth rebound in 2017

Wage growth slowed in 2016, acting as a shock absorber, but is expected to rebound in 2017

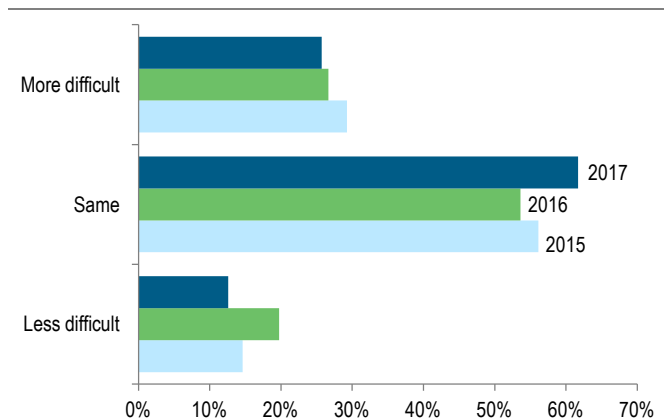
Our respondents expect to raise wages by 7.2% on average in 2017. Almost half (47%) expect hikes of 10% or more this year, up from 34% last year, as respondents shift up the brackets (Figure 2). This represents an acceleration from last year's actual hike of 5.9%, which significantly undershot (more so than prior years) initial expectations of 7.7% based on last year's survey (Figure 3); we believe this reflected slower economic growth in 2016.

On a same-company basis, just over 30% of respondents plan to raise wages more than they did last year, up from 22% in 2016 and 26% in 2015; those who expect to raise them less than last year fell below 14% from 18% prior (Figure 2). A significant number of respondents swung from expecting no hikes in 2016 to expecting a hike of 10% or more in 2017 – these could be catch-up moves after manufacturers held off wage hikes in 2016 due to tough business conditions.

While China's economy is off to a much better start this year, 6.9% y/y GDP growth in Q1 was likely the peak of the cycle (we forecast GDP growth of 6.6% in 2017); more importantly, our latest findings continue to show wage expectations on a multi-year downtrend. Chances are that 2017 actual wage growth will be closer to the 6.0-6.5%

Figure 1: Is the labour shortage better or worse than before?

% of respondents



Source: Standard Chartered Research

Figure 2: Wage growth, 2016 actual vs 2017 expectations

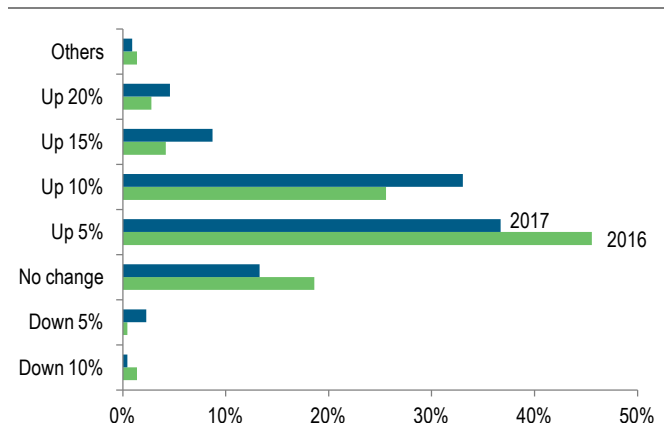
% of respondents; blue shading indicates faster expected wage growth this year versus 2016

		2017					
2016		Down	No change	Up 5%	Up 10%	Up 15%	Up 20%
	Down	0.9%	0.0%	0.0%	0.0%	0.5%	0.5%
	No change	1.4%	7.1%	5.7%	3.8%	0.5%	0.5%
	Up 5%	0.5%	5.7%	27.8%	10.4%	1.9%	0.0%
	Up 10%	0.0%	0.5%	2.4%	17.9%	4.2%	0.9%
	Up 15%	0.0%	0.0%	0.0%	1.9%	0.9%	1.4%
	Up 20%	0.0%	0.5%	0.0%	0.0%	0.9%	1.4%
Total		2.8%	13.8%	35.9%	34.0%	8.9%	4.7%

Source: Standard Chartered Research

Figure 3: Wages set to rise 7.2% in 2017 vs 5.9% in 2016

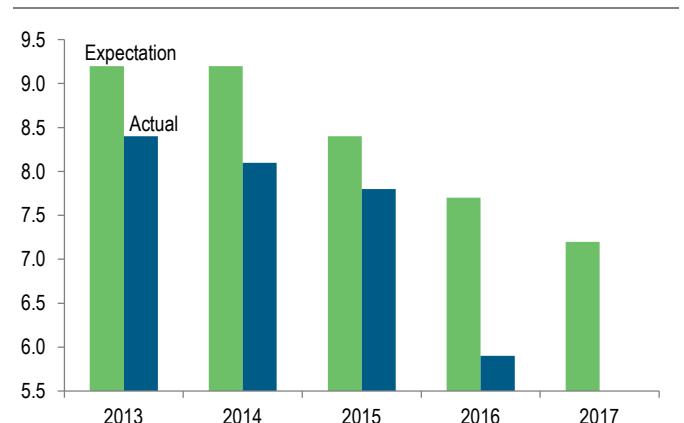
Actual and expected wage increase, % of respondents



Source: Standard Chartered Research

Figure 4: Falling short of expectations, 2016 in particular

Surveyed wage increase, expectation vs. actual



Source: Standard Chartered Research



range based on past trends. Real wage growth is likely to show a similar modest rebound given the steady inflation outlook – we forecast CPI inflation of 2.1% in 2017 versus 2.0% prior.

Labour shortage unfazed by demand swings

Labour shortage appears much more inelastic than wages

The persistent labour shortage underpins our view of a modest rebound in wage growth this year. A year of economic headwinds has done little to changing the perceived tightness in worker supply. 26% of our respondents said the labour shortage has worsened in the past 12 months, only a tad lower than 27% a year ago (Figure 1). In fact, those foreseeing less labour-market tightness fell to 13% from almost 20% prior, indicating a quick dissipation of lingering slack expectations from last year. China's labour shortage has increasingly become a supply rather than demand story over the years. While this limits the emergence of excess supply during a downturn, longer-term challenges stemming from an ageing population continue to loom.

The shrinking middle ground of workforce utilisation

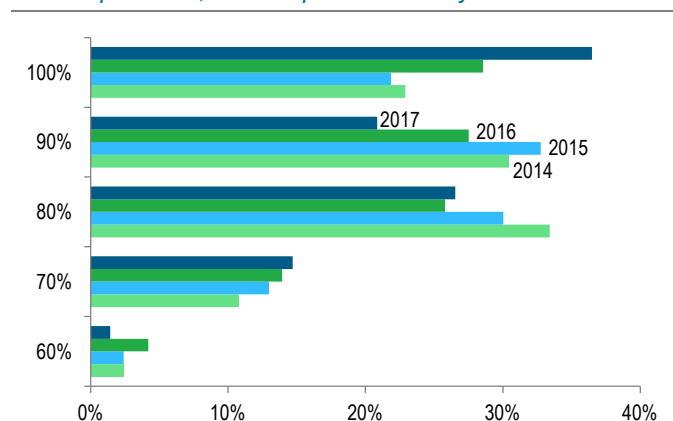
For the second straight year, respondents operating at 80-90% of their workforce shrank evidently to 47% from 53% in 2016 and 63% in 2015, while those reporting 100% utilisation jumped to 37% from 29% and 22%, respectively (Figure 5). This fits in with our longstanding view that China is transforming: more nimble manufacturers are getting leaner in challenging times, or more competitive manufacturers are gaining market share at the expense of others. Our view that the winners are increasingly standing apart from the losers matches the continued increase in manufacturers operating at a mere 70% to 15% of respondents from 11% in 2014. We note here that our surveyed clients are likely among the more successful PRD firms. This may have skewed the results slightly by understating underperformance; the outlook is probably bleaker beyond our sample.

Wage growth versus productivity growth

Wage increases can be justified and, importantly, absorbed by productivity growth. Despite evident easing in wage growth last year, fewer clients said their per-worker output rose more than their wages compared with 2016 – our way of gauging labour productivity in the absence of more reliable official data. A material and growing proportion of respondents (over 40%) said productivity growth lagged wage growth (Figure 6). This may be due to some manufacturers' hesitation or inability to boost productivity during challenging economic times, such as last year, even though they maintain their long-term intentions to do so (see '*Investment is the key to solving the PRD's problems*').

Figure 5: Workforce utilisation level

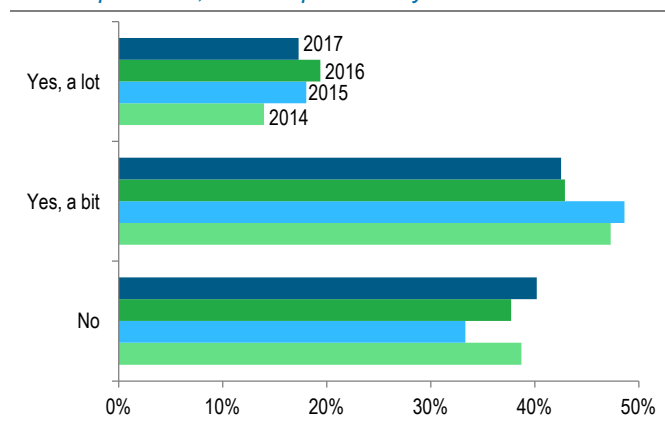
% of respondents, this and previous surveys



Source: Standard Chartered Research

Figure 6: Has per-worker output risen more than wages?

% of respondents, this and past surveys



Source: Standard Chartered Research

Only three provinces have hiked statutory minimum wages so far this year

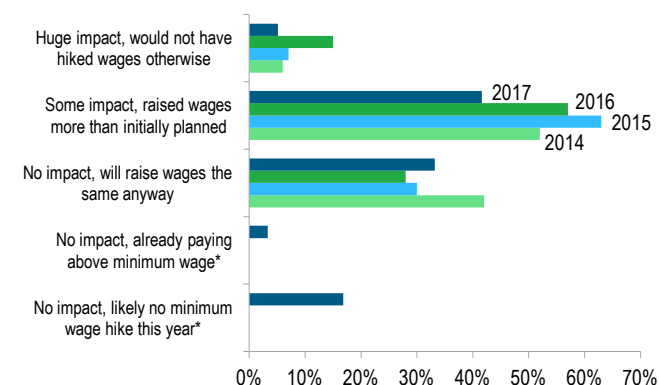
Less pressure from statutory minimum wage hikes

Provinces have been under less pressure to deliver statutory wage hikes. Since 2016, provinces have been allowed to hike minimum wages only once every two to three years (from at least once every two years). This is part of the 13th Five Year Plan (FYP, 2016-20) which called only for 'rationally determined minimum wage rates'. This also contrasts with targeted minimum wage increases of 'at least 13% a year on average' in the government's 12th FYP (2011-15), during which the actual average increase was 13.1%. So far this year, only three provinces have hiked minimum wages by an average of 7.8% (Figure 9). This is down from last year's total of nine provinces and their average wage hike of 10.7%, already materially lower than in prior years on both counts (Figure 10).

A less assertive Beijing on mandating wage increases is good news for PRD manufacturers. They have generally not been averse to statutory minimum wage hikes in 'good times', in our view. They already pay wages above the minimum level and would likely hike wages given a demand-driven shortage. In challenging times, however, manufacturers are more sensitive and vulnerable to wage hikes. It is therefore encouraging that only 5% of our surveyed clients saw a 'huge' impact on their wage levels this year, versus a high of 15% in 2016 (Figure 7). Another 42% (down from 57% last year) said regulatory wage hikes forced them to raise wages more than they had planned. 33% said they would have hiked wages anyway,

Figure 7: Impact of minimum wage hikes

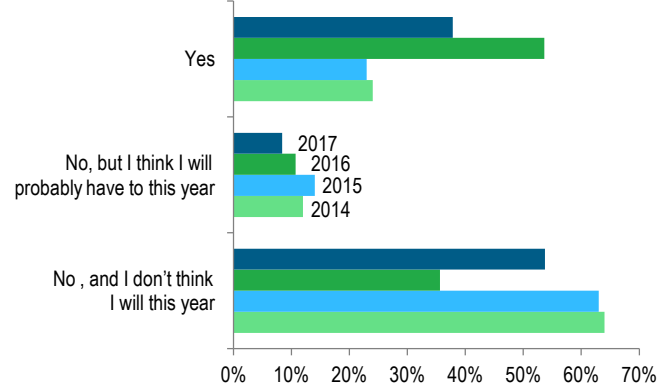
% of respondents



* New options this year; Source: Standard Chartered Research

Figure 8: Have you negotiated wages in past 6 months?

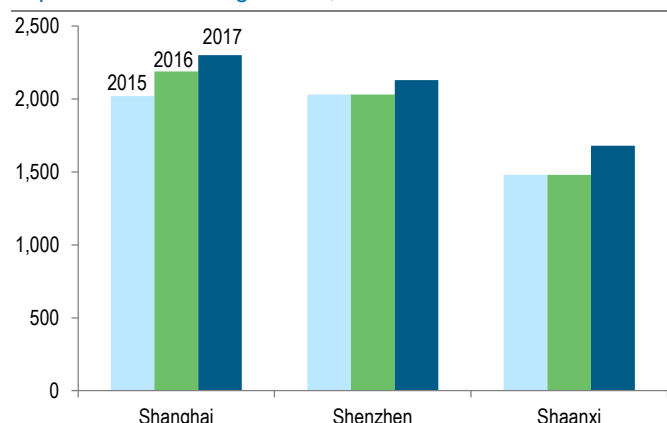
% of respondents



Source: Standard Chartered Research

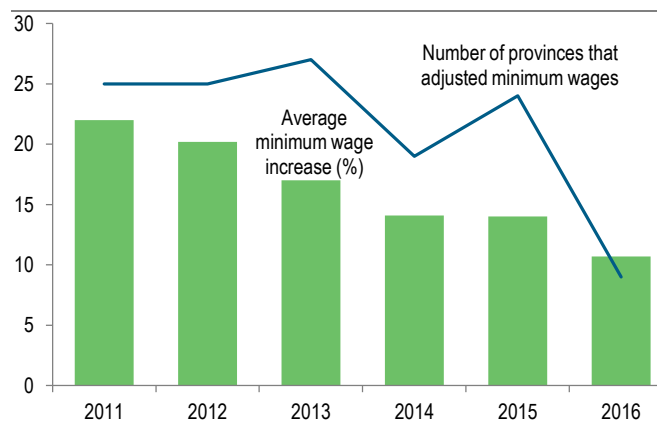
Figure 9: Minimum wages in selected provinces/cities

Top-tier minimum wage levels, CNY



Source: CEIC, Standard Chartered Research

Figure 10: Less urgency for provinces to hike minimum wages



Source: CEIC, Standard Chartered Research

regardless of minimum wage changes, beating 28% in 2016 and 30% in 2017 (even with the two new additional 'no change' options diverting some of the responses away this time). 17% expect no minimum wage hike and see no impact on their wage decision this year.

More stubborn pressure from wage negotiation

Collective wage bargaining remains crucial to keeping workers happy

Compared with mandatory wage hikes, the rise of collective wage bargaining is a trend harder to reverse. 38% of respondents said they have had formal wage negotiations with worker representatives in the past six months (Figure 8) – down from 54% last year but still materially higher than 23% in 2015 and 24% in 2014. Wage negotiations tend to lead to more sizeable wage adjustments: firms that negotiated wages hiked by an average of 12.3%, more than twice the 5.9% surveyed headline nominal wage growth in 2016.

We believe the pressure is on the authorities to continue to promote collective wage bargaining to improve worker protection and calm labour tensions; as such, additional policy relief for manufacturers will likely have to come from elsewhere.

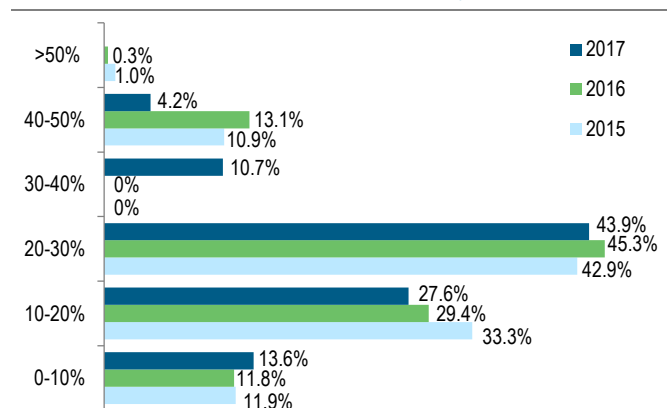
Our prior surveys showed a long-running trend of local governments putting more pressure on companies to enrol migrant workers in social insurance schemes. Nowadays, payments to the five insurance categories (endowment, medical, unemployment, employment injury and maternity) and the housing provident fund account for 40% of a company's wage bill if fully implemented. The authorities have been lowering corporate contribution rates for such payments in phases since 2015. The cumulative benefits of such social insurance concessions could provide material cost relief to PRD manufacturers in 2017.

The wage challenge, while less severe, cannot be ignored

Wages on average account for 21.5% of our respondents' total cost base (Figure 11), down from c.22% in 2015 and 2016. The biggest change has been the upward shift in responses to the 30-40% bucket from 20-30%, while the responses in the higher buckets (>40%) declined. However, despite persistent cost pressure from wages this year, margin expectations have improved from 2016, in line with the recent upswing in industrial profits.

Figure 11: What share of your total costs are wages?

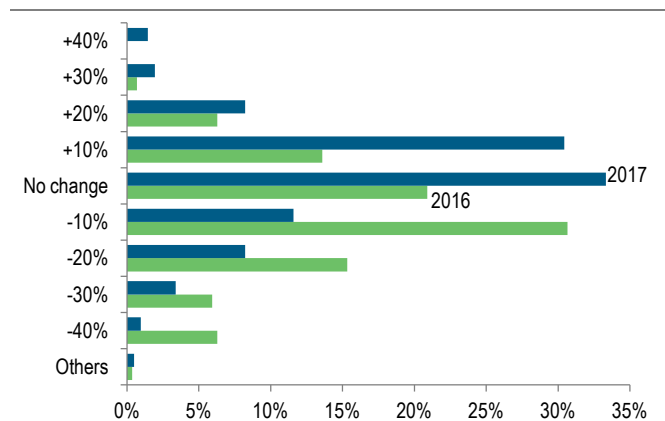
% of respondents, this and previous survey



Source: Standard Chartered Research

Figure 12: How do you see orders in the next six months?

% of respondents



Source: Standard Chartered Research



Gauging other challenges beyond wages

Manufacturers expect stable margins this year

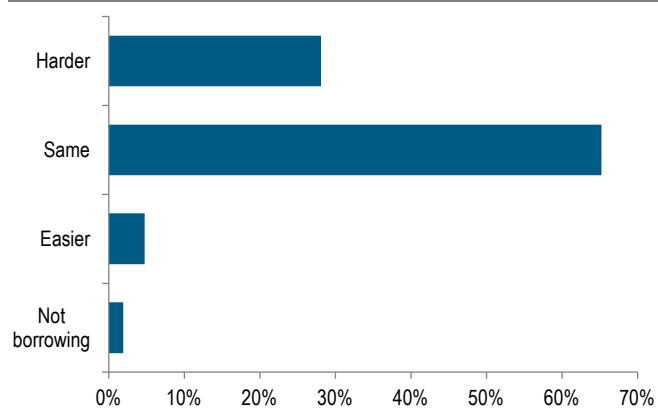
Margin expectations would likely have improved if not for tighter monetary conditions

Respondents expect margins to fall marginally by an average 0.1% this year, versus the 6.1% fall expected last year. The picture looks more positive on a same-company basis, where 22% of respondents expect the change in margins to improve this year, versus 17% expecting margin changes to be worse than in 2016 (Figure 15). We see rebounding commodity prices as a key driver of industrial profits of late, as they are highly correlated with PPI growth, which has seen a massive upswing YTD. We believe margin expectations would have been even more bullish if not for the persistent difficulty in borrowing money.

Monetary conditions have tightened

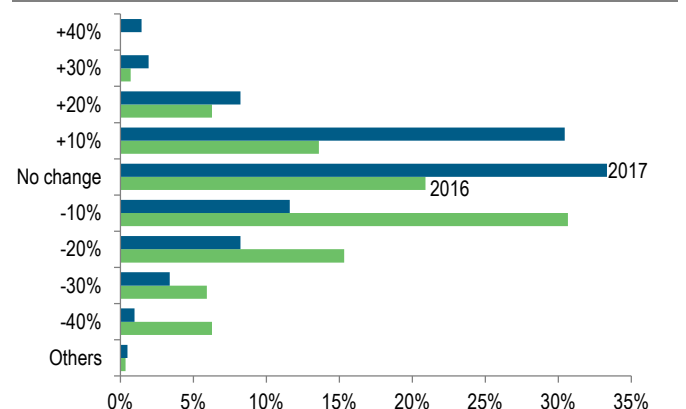
28% of respondents reported that it is more difficult to borrow money now than in 2016, while less than 5% said it has become easier (Figure 13). This is consistent with the authorities' ongoing call for better management of financial risks. Rising costs of borrowing YTD have been a result of monetary policy tightening by the People's Bank of China (PBoC), to promote deleveraging and support the Renminbi. Regulation on shadow banking has also increased.

Figure 13: How easy is it to borrow money now vs 2016?
% of respondents



Source: Standard Chartered Research

Figure 14: How do you see orders in the next six months?
% of responses



Source: Standard Chartered Research

Figure 15: Margin change, 2016 actual vs 2017 estimate

% of respondents; blue shading indicates those expecting better margin changes this year than last year

		2017						
2016		Down 30%	Down 20%	Down 10%	No change	Up 10%	Up 20%	Up 30%
	Down 30%	1.0%	1.4%	1.0%	0.5%	0.0%	0.0%	0.5%
	Down 20%	1.4%	2.4%	1.9%	0.5%	1.0%	0.0%	0.0%
	Down 10%	0.0%	2.4%	13.5%	4.8%	2.9%	1.0%	0.0%
	No change	0.0%	0.0%	3.9%	24.2%	6.3%	0.5%	0.0%
	Up 10%	0.0%	0.0%	1.4%	5.3%	16.9%	0.0%	0.0%
	Up 20%	0.0%	0.0%	0.0%	0.0%	1.9%	1.4%	0.0%
	Up 30%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	1.4%

Source: Standard Chartered Research

M2 has been running below its 12% target for 12 straight months as of April. This, together with our survey finding, echoes our monthly tracker, which shows that banks have been cautious in lending amid tighter liquidity and regulations, and funding costs have stayed high for SMEs. The recent drop in the sub-index reading for banks' attitude towards lending to SMEs indicates tougher credit access. The financing cost component of our proprietary *SME Confidence Index* has also been persistently below the neutral 50 mark.

We believe the tightening monetary policy bias is likely to remain as long as (1) growth stays above 6.5%, and (2) deleveraging does not cause systemic risks. While GDP growth probably peaked at 6.9% y/y in Q1, we do not expect a slowdown to derail the ongoing deleveraging process. We also take comfort from the authorities' commitment to handle the timing and pace of tightening regulatory measures carefully, to avoid creating new risks in the process of resolving existing risks. We expect the PBoC to guide credit growth toward the 12% target – new Chinese yuan (CNY) loans and monthly total social financing (TSF) increased by 12.9% y/y and 12.8%, respectively, in April, implying no relief from deleveraging pressure – while providing enough liquidity to pre-empt a liquidity crunch.

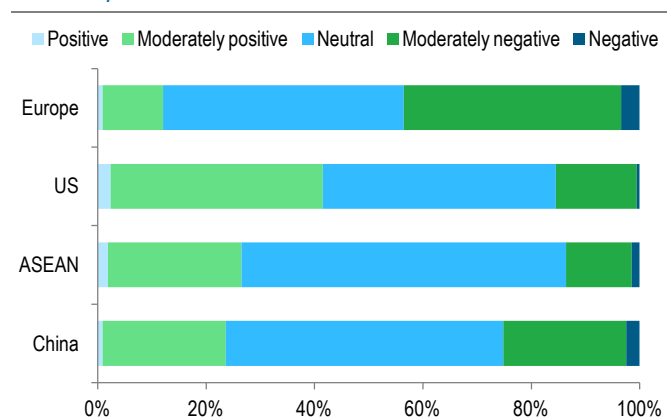
Orders, especially external orders, are looking up

On the demand side, respondents expect orders to improve by 1.6% on average in the next six months, versus expecting a 7.6% decline at the same time last year (Figure 14). Only 24% of respondents see weaker orders in the next six months, while 42% expect an improvement. The biggest migration versus 2016 is from the -10% and -20% buckets to the 'no change' and +10% ones.

The expected improvement in orders is likely partly driven by a positive outlook on key overseas markets rather than on China's economy (Figure 16). 42% of respondents are generally upbeat on ASEAN economies, versus 16% being negative. Respondents view the US positively on a net basis (27% versus 14%, respectively); this contrasts with a more neutral view on China's economy.

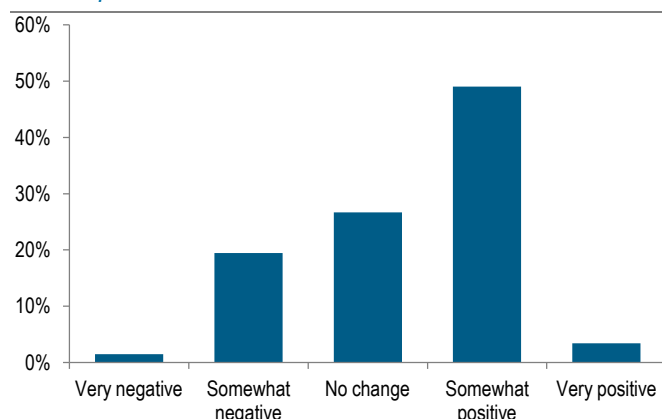
All this echoes our call that the recent softening in China's real activity, after a strong start to the year, could be an indicator of slower growth in the coming quarters. External trade could remain a bright spot barring an escalation in trade tensions, offsetting a likely slowdown in housing investment, tighter credit conditions, and fading support from the prior restocking process.

Figure 16: 2017 outlook for EU/US/ASEAN/China
% of respondents



Source: Standard Chartered Research

Figure 17: Impact of CNY depreciation on your business
% of responses



Source: Standard Chartered Research

Renminbi depreciation can offer relief to some, but too much volatility could prove disruptive

The good and bad of Renminbi depreciation

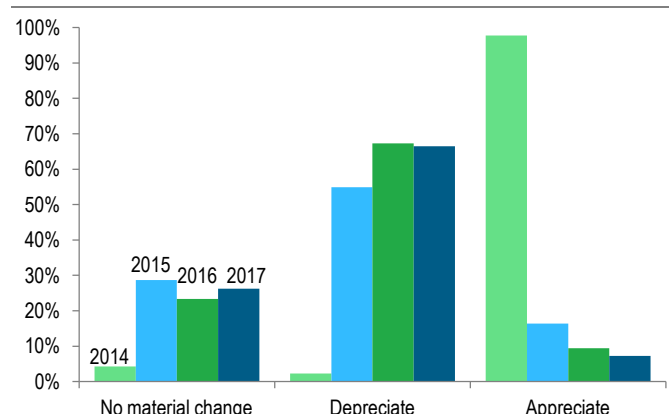
More than half (52%) of our clients see the weaker Renminbi as having a positive impact on their business, while just over 20% see a negative impact (Figure 17). This matches the common perception that China needs (or has to accept) a much weaker currency to help its struggling manufacturers and support growth. However, we would argue that stability is likely to trump outright depreciation.

For one, not all respondents are pure exporters that would benefit from a cheaper exchange rate; importers would probably see their purchasing power eroded by a weaker CNY, while those sourcing and/or selling domestically would be less exposed to the USD-CNY trend anyway. More importantly, manufacturers remain concerned about further Renminbi volatility or accelerated capital outflows, their second-biggest concern in 2017 after a potential US-China trade war or Trump-related shocks (Figure 20). Too much of a good thing (in this case, export competitiveness via currency depreciation) could prove disruptive.

Our latest '*Offshore Renminbi Review H1-2017 survey*' (commissioned by Standard Chartered Bank and conducted by Asset Benchmark Research between mid-March and mid-April) helps shed more light on corporates' concerns towards the Renminbi.

Figure 18: What is your outlook for the CNY against the USD until year-end?

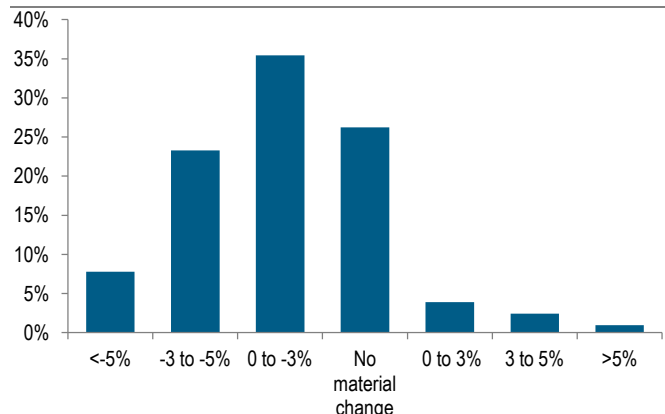
% of respondents, surveys from 2014-16



Source: Standard Chartered Research

Figure 19: Where do you see the CNY against the USD by year-end?

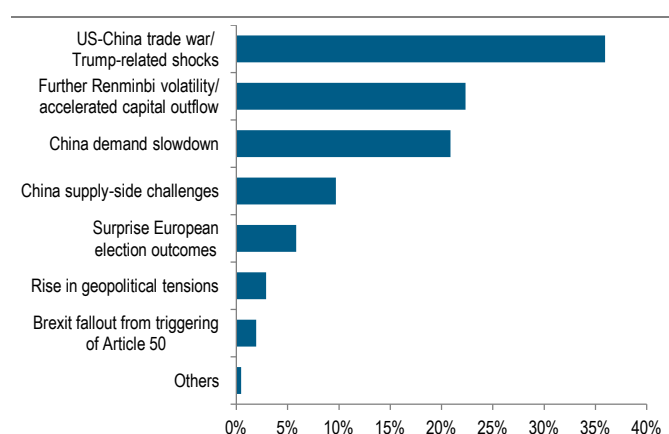
% of respondents



Source: Standard Chartered Research

Figure 20: What is your biggest concern for 2017?

% of respondents



Source: Standard Chartered Research

Figure 21: Corporates' concerns for their China business

Weighted % of top 3 responses, based on the '*Offshore Renminbi Review H1-2017*' survey



Source: Asset Benchmark Research; Standard Chartered Research

The sample here goes beyond the PRD, extending to the rest of China and overseas multinational corporates (MNCs) as well. The survey results confirm that corporates are not done worrying about Renminbi volatility, prompting them to manage their exposures more actively. Inability to move capital out of China was also a prominent concern, especially among overseas MNCs, possibly as they are more affected by the recent window guidance (Figure 21). We also see more corporates staying on the sidelines across main offshore Renminbi (CNH) products this year compared with 2016 – a reflection of weak confidence affecting actual usage.

The prevailing capital controls and window guidance are unlikely to be reversed near-term as long as depreciation expectations and capital outflow pressures remain. Two-thirds of our respondents see the CNY depreciating further against the USD before year-end, versus a mere 7% expecting appreciation, reflecting lingering pessimism compared with a year ago (Figure 18). Expectations of the extent of further depreciation are largely modest – only 8% of respondents see depreciation of more than 5% this year versus 15% a year ago.

Vulnerability to geopolitical risks

A potential US-China trade war tops the list of our clients' concerns for 2017 – rightly so, in our view – with 60% expecting a high or medium negative impact from this event (Figure 22). This is more material than the impact seen from an oil price shock (51%), a hard and messy Brexit (40%) and an escalation of the South China Sea conflict (36%). On average, 80% of respondents are exposed to some degree of such geopolitical shocks, prompting over 70% to put in place some form of mitigation or contingency plan for such risks (Figure 23).

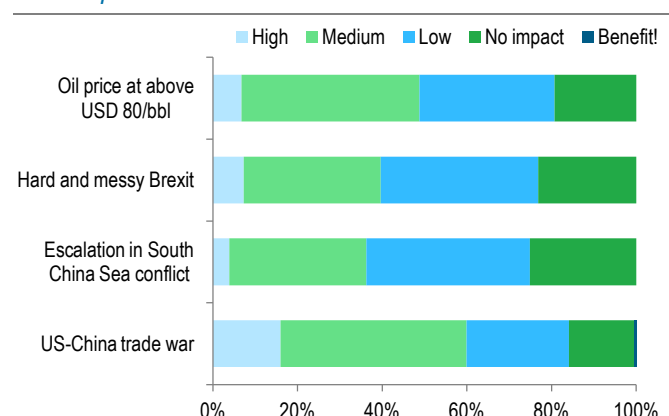
Among the most popular actions are (1) reorienting the sales market toward other countries, (2) diversifying suppliers/logistics arrangement and (3) diversifying the production base to other countries. All this involves expanding one's reach and/or operations overseas – a rising trend among PRD manufacturers ever since rising domestic wages became a prominent issue. We believe the new focus on geopolitical risks could add impetus to China's ongoing expansion in trade and investment ties with other emerging markets, especially ASEAN.

Rising awareness of geopolitical risks is giving firms pause to consider moving production overseas

PRD, present and future

Figure 22: How vulnerable is your business towards the following geopolitical risk scenarios?

% of responses



Source: Standard Chartered Research

Figure 23: Do you have mitigation or contingency plan in place for the geopolitical risk(s) you identified above

% of respondents



Source: Standard Chartered Research



Factory relocation is a growing option

Overseas relocation favoured over moving inland

ASEAN remains the top choice for overseas relocation

PRD manufacturers have long acknowledged relocating manufacturing operations as one of the ways to counter rising local wages. Interestingly, however, the share of those looking to relocate overseas has been rising while the share of those considering a move inland has been falling (Figure 24). This year is no exception; however, those choosing to relocate overseas (17%; 9% in 2013) have overtaken those moving inland (10%; 30% in 2013) for the first time.

This could be a reflection of more rapid wage increases in inland cities compared with (and as a catch-up to) coastal cities in recent years. Last year's nation-wide slowdown in economic activity might have also hurt inland cities' attractiveness from a demand perspective. In contrast, overseas destinations are preferred largely for their better labour supply and other reasons such as tax incentives (Figure 25). There is also growing recognition that some overseas destinations offer as promising an economic outlook (if not better) and proximity to new buyers and customers as most China provinces outside the PRD.

Cambodia overtakes Vietnam as top destination

Among those opting to move capacity overseas, Cambodia and Vietnam are the most favoured destinations, as in prior years (Figure 26). While Vietnam's share of the response (23%) is still high, it dropped materially from 2016 (42%) as firms have developed an interest in other ASEAN markets such as Myanmar and Bangladesh (cheaper labour). However, these firms have not yet moved operations out of China. Our respondents also think Cambodia, Myanmar and Indonesia are as attractive as Vietnam in terms of tax incentives and Free Trade Agreement (FTA)-related benefits.

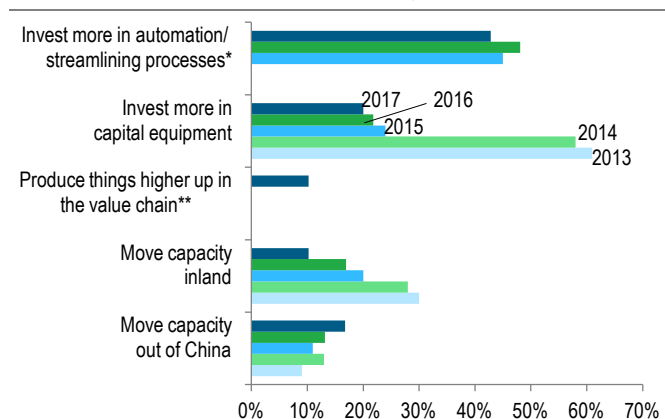
These choices may indicate that those considering relocating from China are mostly low-end producers in sectors such as textiles and garments. Vietnam, however, remains the top choice for those seeking a 'better economic outlook' – a factor that could become an increasing driver of FDI into ASEAN countries if they follow in the PRD's development footsteps.

Low impact from TPP's demise paves way for RCEP

We also asked our respondents about the main concerns over relocating factories overseas. Underdeveloped transport and infrastructure again topped the list this

Figure 24: How do you respond to labour shortages?

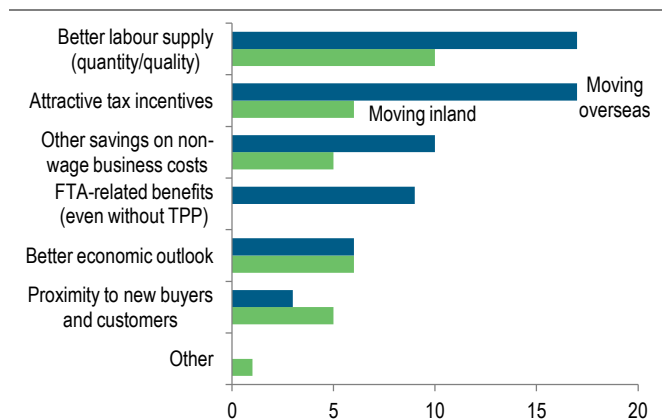
% of respondents, this and past surveys



* Not an option before 2015; ** new option this year; Source: Standard Chartered Research

Figure 25: Advantages of relocating

No. of respondents



Source: Standard Chartered Research

year, followed by underdeveloped legal systems and poor labour quality/productivity (Figure 28). The demise of the Trans-Pacific Partnership (TPP) agreement is not as big a concern as was initially feared. Less than 6% see a high impact whereas almost 50% expect a low impact because of their limited reliance on these countries and the availability of alternative FTAs (Figure 29). This bodes well for China as it was excluded from the TPP, but is now leading regional development with the Regional Comprehensive Economic Partnership (RCEP) programme.

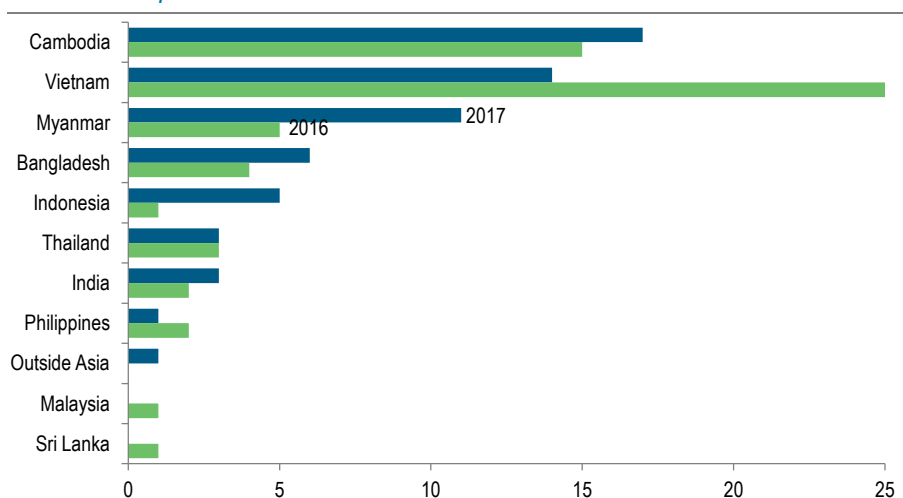
Those staying local may stay close to the PRD

Outer Guangdong again received the most votes as the choice destination for those preferring to move inland, reflecting respondents' preference to stay close to their existing PRD operations (Figure 27). Beyond that, however, the drop-off in responses for other provinces – especially Liaoning, Jilin and Heilongjiang – appears significant. It is unlikely to be a coincidence that these provinces are also suffering the most from last year's economic slowdown (and the slowest to recover). In terms of advantages, while 'better labour supply' remains the leading reason, its importance versus other options appears much less prominent than among those considering moving overseas.

Figure 26: If you plan to move capacity out of China, to where?

Number of respondents

Respondents are considering options besides Vietnam

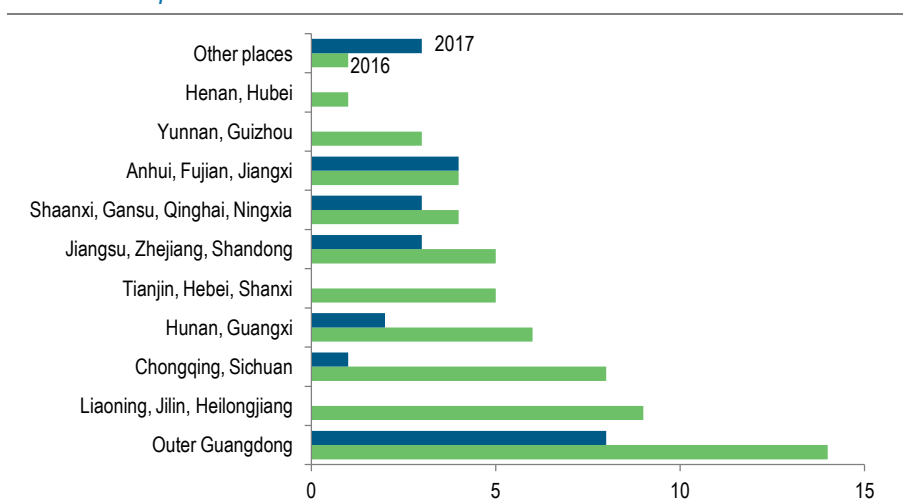


Source: Standard Chartered Research

Figure 27: If you plan to move capacity elsewhere in China, to where?

Number of respondents

Firms choosing to move inland are preferring to stay close to the PRD



Source: Standard Chartered Research

The majority of respondents who prefer to move capacity overseas are still in the 'consideration' stage

Factory relocation is a slow-burning narrative

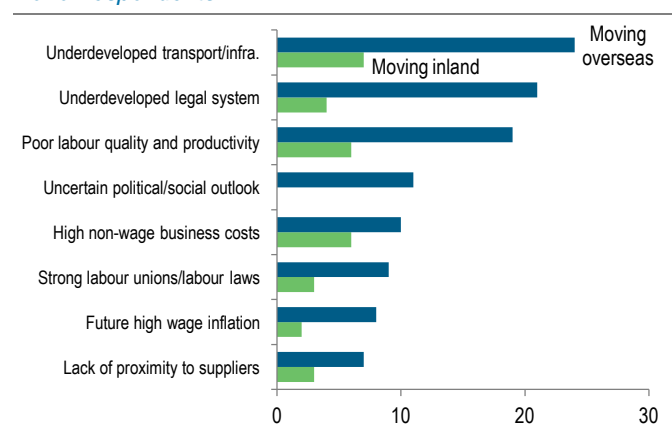
We talked about the shift in preferences and the underlying drivers for manufacturers moving capacity elsewhere. As factory relocations are multi-year projects that involve long planning times and heavy investment, it is not surprising that a majority (57%) who say they will move are still in the 'consideration' stage, and another 17% have only just started moving (Figure 30). Only 17% have already relocated and started operations, with another 9% more than half way through their move.

We see a glass half full – the survey shows the massive potential of ASEAN-bound investment from China, which should materialise over the coming years, or even decades. The short-term driver of this trend is the cost advantage (labour and more) the ASEAN region offers. The expected average cost savings from moving capacity overseas and inland are c.19% and 16%, respectively. These are higher than the 11% average savings from automation and streamlining, 13% from investing more on capital, and 12% from moving products up the value chain (Figure 31).

Over time, we also expect some transportation and infrastructure bottlenecks to clear, legal systems to mature and labour quality and productivity to improve in ASEAN, making it more attractive to China investors. Longer-term, we expect ASEAN's strong fundamental story to shine through (more on this in later sections).

Figure 28: Concerns over relocating

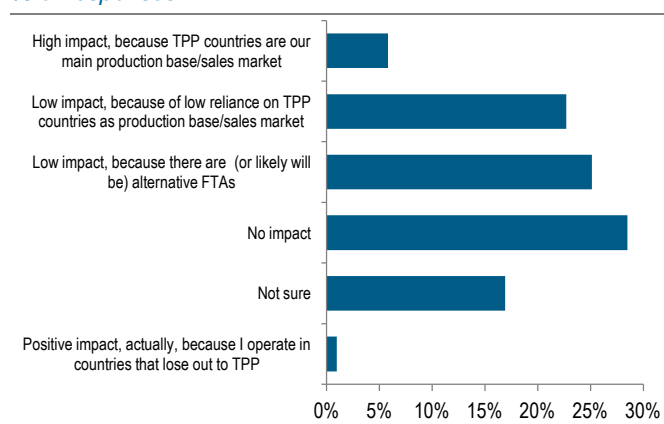
No. of respondents



Source: Standard Chartered Research

Figure 29: How impacted are you by TPP's demise?

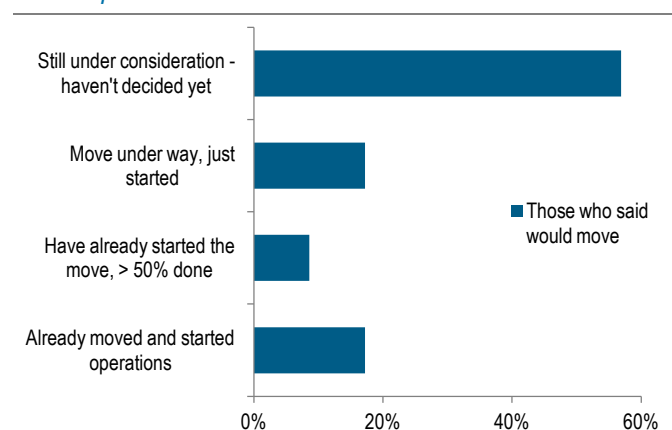
% of responses



Source: Standard Chartered Research

Figure 30: What stage of moving are you at?

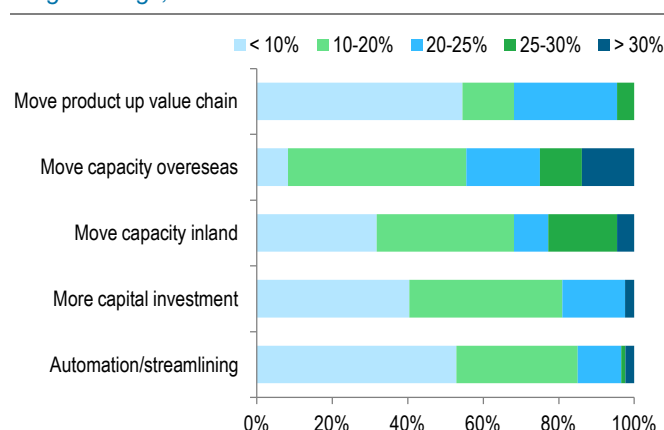
% of respondents



Source: Standard Chartered Research

Figure 31: How much would your response save you?

Wage savings, %



Source: Standard Chartered Research



Investment is the key to solving the PRD's problems

Automation and streamlining top list of responses

We see plenty of momentum in the PRD's pursuit of automation

As shown in Figure 24, while the relocation of production capacity is emerging as a long-term solution to the PRD manufacturers' macroeconomic challenges, their most prominent response remains investing more in automation and streamlining (43%) or capital equipment (20%). Both responses dropped slightly this year from last year's survey, but mostly because of the dilution from the introduction of the new category 'producing things higher up in the value chain' (10%). This makes sense, as not all industries see chasing cheaper labour as the only way to go; many instead see the prevailing challenges as catalysts to invest more in improving their cost structure, productivity and competitiveness.

Boosting productivity spurs long-term growth in the PRD

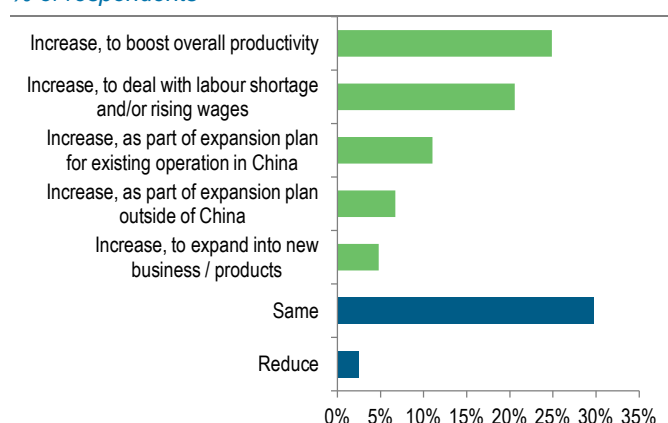
Perceived challenges such as labour shortage and wage pressure can be positive for an economy if they force the right behavioural changes at the micro level, in our view. The economy could get a much-needed productivity boost and the creation of high-end jobs could help absorb an increasingly educated workforce. In particular, by boosting productivity, automation both explains and absorbs high wages; it is also a reflection of the increasing complexity of goods produced. China could move up the manufacturing value chain by producing goods with greater accuracy and complexity, while maintaining high-volume output at affordable costs. All this could translate into sustainable margins as well as wage increases over time, which could support a continued rise in services activity and household consumption.

Rosy projections for industrial robot sales

China is both an emerging manufacturer and user of industrial robots. China has been the biggest market for robot sales every year since 2013 – with c.69,000 units sold in the country in 2015 (+20% y/y). This exceeded the volume of sales in all European markets combined, of c.50,000 units, according to the International Federation of Robotics (IFR). IFR states in its 2016 World Robotics Report that "in 2019 some 40% of the worldwide market volume of industrial robots will be sold [in China] alone". This should contribute to China's aim – under its 10-year plan entitled 'Made in China 2025' – to achieve a robot density of 150 units per 10,000 workers by 2020 (currently 49 units, as per the latest data from IFR). Putting this into perspective, China firms alone would have to install as many as 650,000 new industrial robots by 2020, versus global robot sales of c.250,000 as of 2015.

Figure 32: Actual capex spending plan for 2017

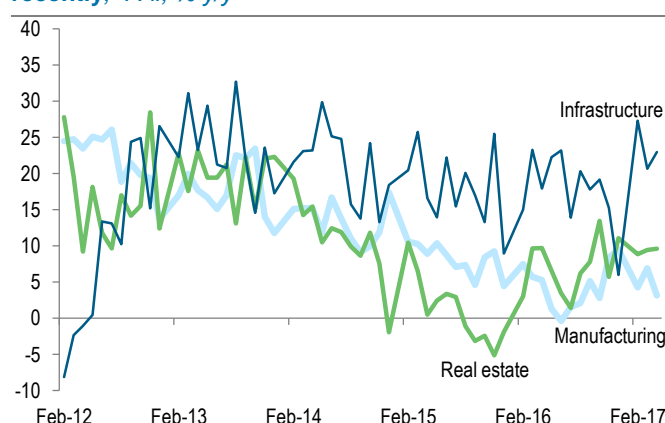
% of respondents



Source: Standard Chartered Research

Figure 33: Infrastructure investment has improved recently; FAI, % y/y

FAI, % y/y



Source: CEIC, Standard Chartered Research

The recent macro backdrop has not been conducive to manufacturing investment

Official data says manufacturing investment stays soft for now

While our respondents acknowledge the need for more manufacturing investment, the official data has been subdued YTD. Planned investment under newly started projects, a forward-looking indicator, saw negative growth of 5.9% y/y in January-April. And while the government's proactive fiscal stance has translated into strong infrastructure investment growth, private-sector investment weakened after a decent start to the year (Figure 33). This fuels the longstanding worry that SOEs' overbearing economic presence could be crowding out private investment, an issue that may only be resolved through SOE reforms and banking-sector reforms. The push for deleveraging is also posing headwinds to manufacturing investment, with respondents seeing lower credit access and higher funding costs (reflecting a tightening monetary policy bias).

The good news is that the majority (68%) of our PRD clients plan to increase capex spending in 2017 (Figure 32), so a catch-up in H2-2017 is possible, assuming a more constructive macro and monetary backdrop. The bulk of those planning to step up their investment this year are doing it to boost productivity (25%) or to deal with the labour shortage (21%). Lingering cautiousness over the macro outlook may explain the reduced urgency to expand existing/new operations and products.

All this is another timely reminder that while PRD manufacturers are far from resolving their structural and cyclical challenges, these could spur much-needed upgrades on a micro level and reforms on a macro level. We believe it is now down to the authorities to facilitate the relevant changes while balancing their various policy objectives, including sustaining growth and promoting deleverage.



How different Asian manufacturers stack up

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A deeper dive into manufacturers' preferences

Divergent preferences due to structural dissimilarities

Low-cost electronics clients are similar to non-electronics clients

We dig deeper into what drives our clients' preferences, analysing responses from an industry perspective (see the PRD – The present and the future section). Our respondents are almost equally split between electronics and non-electronics manufacturers, with around 53% in electronics manufacturing. Of these, 45% are involved in electronics packaging assembly, 29% in component manufacturing, and 13% each in semiconductor fabrication and semiconductor manufacturing equipment. Non-electronics manufacturers include those producing garments and apparel, plastic products, toys and furniture.

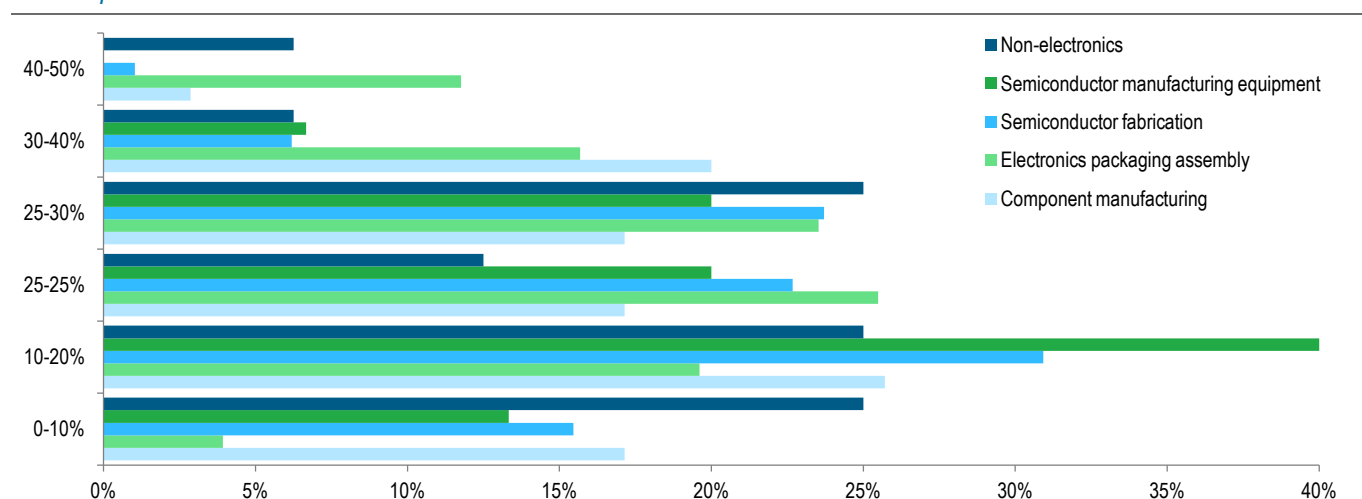
Figure 1: High-end manufacturers prefer to boost investment while low-end manufacturers opt to move operations, in order to tackle labour challenges

Industry	Preferred response to labour shortage		Estimated wage rise (%)		Wages as a share of total costs (%)		Expected change in orders over next 6 months (%)		Expected change in margins in (%)	
	2016	2017	2016	2017	2016	2017	2016	2017	2016 vs 2015	2017 vs 2016
Semiconductor manufacturing equipment	Automation/ Move out of China	Automation/ More capex	6.0	8.8	20.8	19.7	-10.8	1.6	-7.9	1.9
Semiconductor fabrication	More capex/ Automation	More capex/ Move higher up value chain	9.2	10.3	21.7	19.0	-11.0	-1.3	-7.2	-7.1
Electronics packaging assembly	More capex/ Move inland	Automation/ More capex	7.6	7.1	24.2	26.1	-9.8	2.4	-8.9	1.2
Component manufacturing	Automation/ More capex/ Move inland	Automation/ Move out of China	9.4	7.1	22.7	21.6	-7.6	3.0	-5.5	-2.7
Non-electronics manufacturing	Automation/ Move out of China	Automation/ Move out of China	6.4	6.6	21.9	19.7	-4.0	2.6	-4.0	1.5
All manufacturers			7.7	7.2	22.5	21.5	-7.6	1.6	-6.1	-0.1

Red is high, green is low and yellow is moderate; Source: Standard Chartered Research

Figure 2: What share of your total costs are wages?

% of respondents



Source: Standard Chartered Research

Wages make up an average of 21.5% of manufacturers' total costs

Wages still contribute a material share of total costs

While wages as a share of total costs have declined, they still constitute a material proportion of manufacturers' total costs. Our clients estimate that total wages account for an average of 21.5% of their total costs, down from 22.5% last year and 21.9% in 2015. The share of wages (of total costs) has fallen across the board in all industries, except in electronics packaging assembly. Wages make up over 26% of all costs for these firms, the highest among our survey respondents and up from 24% in 2016. At the other end of the spectrum, firms involved in semiconductor fabrication reported the smallest share of wages (of total cost) at 19%, having dropped the most from 2016 (21.7%). Non-electronics manufacturers said wages make up only 19.7% of their total costs, more than in value-added electronics manufacturing but less than in low-end electronics assembly.

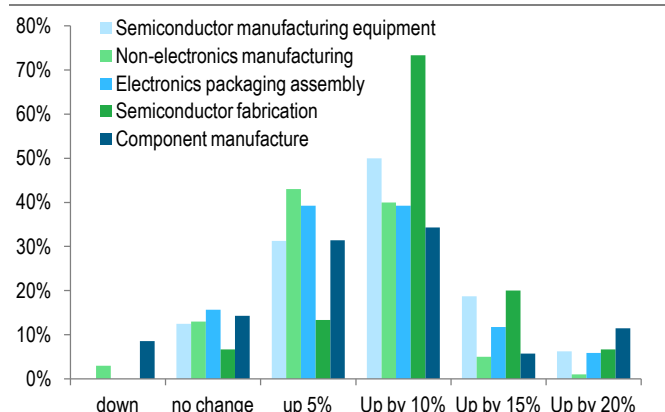
Semiconductor fabricators expect the highest wage increase this year, at 10.3% y/y, among the highest of all respondents; they anticipated an increase of 9.2% y/y in 2016. Semiconductor equipment manufacturers also estimated strong wage growth of 8.8% y/y this year, among the lowest of all respondents and well above the 6% y/y they expected last year. But this does not necessarily imply that firms reporting low wage increases now have lower cost pressure – they may simply have been ahead of the curve and increased wages in previous years in response to earlier pressure. Another potential reason semiconductor fabricators foresee more wage increases again this year is that wage pressure on them has been delayed as their labour force is more skilled and likely already at higher wage levels.

Across all industries, actual wage increases in 2016 were lower than expected at the beginning of the year, significantly so in component manufacturing and electronics packaging assembly. Packaging assembly firms raised wages by only 4.7%, despite expecting a 7.6% increase at the beginning of 2016 whereas component manufacturers had to raise wages by just 4.9%, much lower than their projection of 9.4% in Q1-2016. Lower-than-expected wage increases last year might explain the decline in expectations of wage increases this year, as actual wage increases tend to be lower.

Worker productivity also differed significantly between industries; an overwhelming majority of more than 85% of manufacturers in semiconductor fabrication said per-worker output had risen faster than wages in the previous year, either slightly or significantly, compared to 75% saying this in 2016. In contrast, only 53.6% of non-electronics manufacturers saw worker productivity increase faster than wages, an

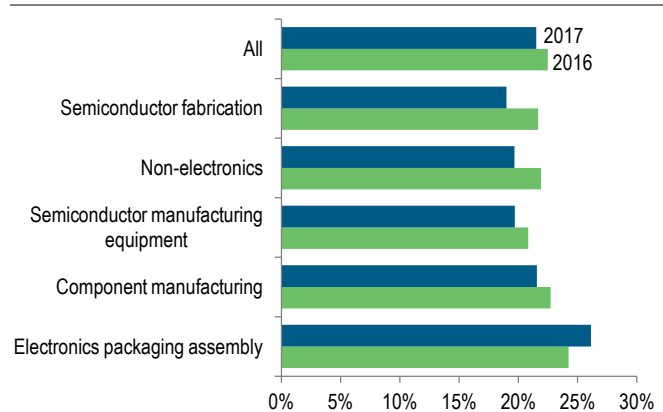
Figure 3: What is your expected wage increase?

% of respondents



Source: Standard Chartered Research

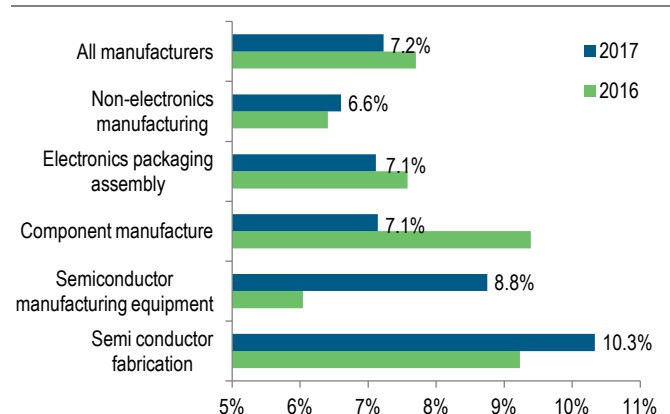
Figure 4: Wages, as a share of total costs, have fallen across the board, but remain high (% of total costs)



Source: Standard Chartered Research

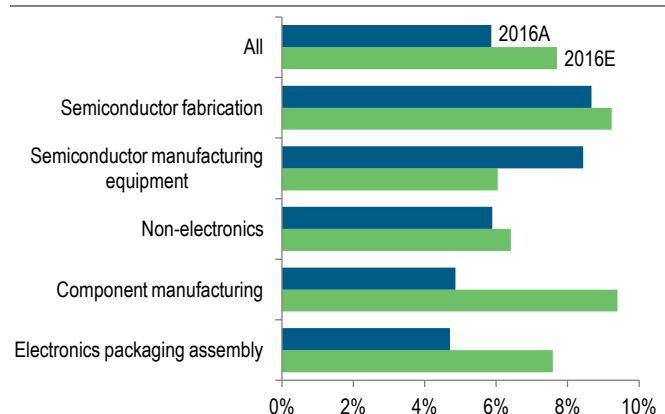
improvement from less than 50% saying this last year. Among manufacturers in electronics packaging assembly who increased wages much less than anticipated, only 55% said worker productivity increased faster than wages. A more productive workforce, combined with higher margins, would enable these manufacturers to better absorb cost pressure, contributing to higher wage increases.

Figure 5: Equipment manufacturing and fabrication see biggest wage increases; expected wage increase for 2017



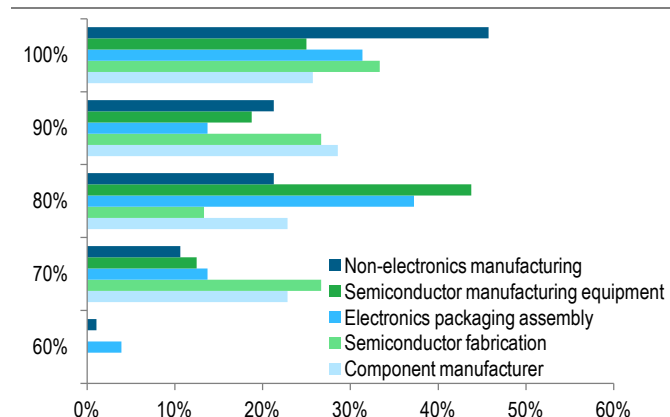
Source: Standard Chartered Research

Figure 6: Actual wage increases in 2016 were lower than expected increases across the board; wage increase, % y/y



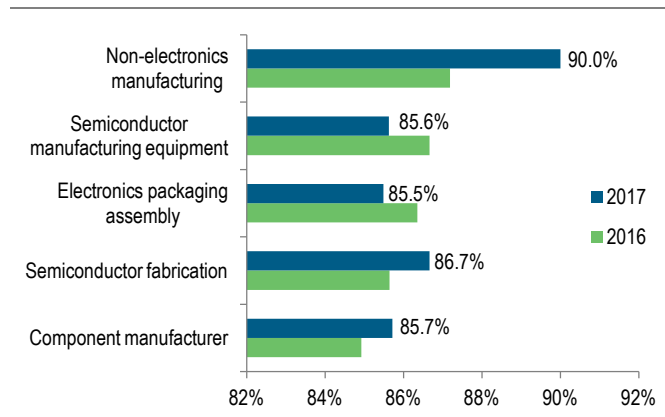
Source: Standard Chartered Research

Figure 7: Workforce utilisation level % of respondents



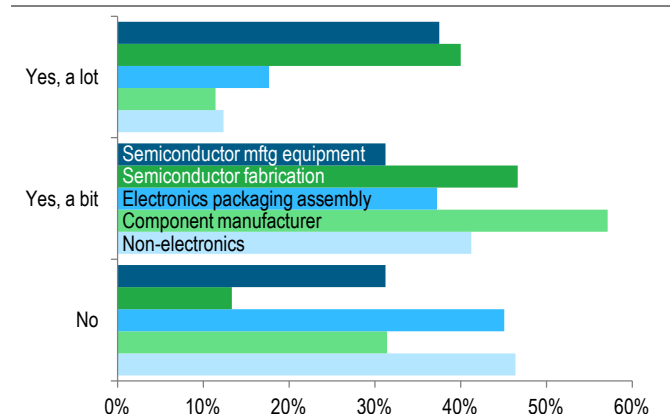
Source: Standard Chartered Research

Figure 8: Non-electronics manufacturers still have a fuller workforce, % of respondents



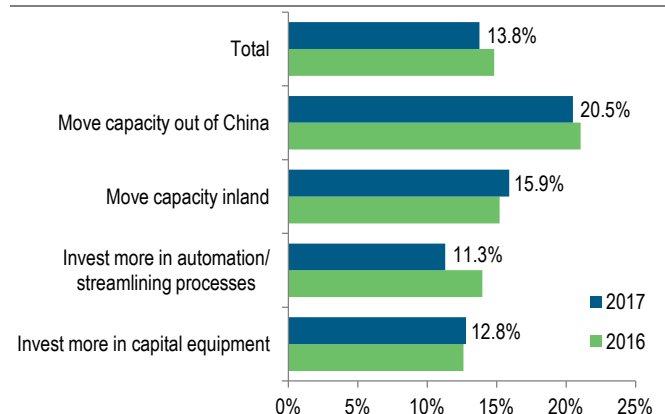
Source: Standard Chartered Research

Figure 9: Has per-worker output risen more than wages? % of respondents



Source: Standard Chartered Research

Figure 10: What cost savings do you expect? % of respondents



Source: Standard Chartered Research

Worker utilisation is similarly high among all industries

Average workforce utilisation among PRD manufacturers is over 86%, higher than in previous years. The variation in workforce utilisation between manufacturers in different industries is marginal; component manufacturers still reported among the lowest utilisation, at 85.7%, slightly higher than 85% last year. At the other end of the spectrum, non-electronics manufacturers reported the highest utilisation, at 90%, even higher than 87.2% reported in 2016.

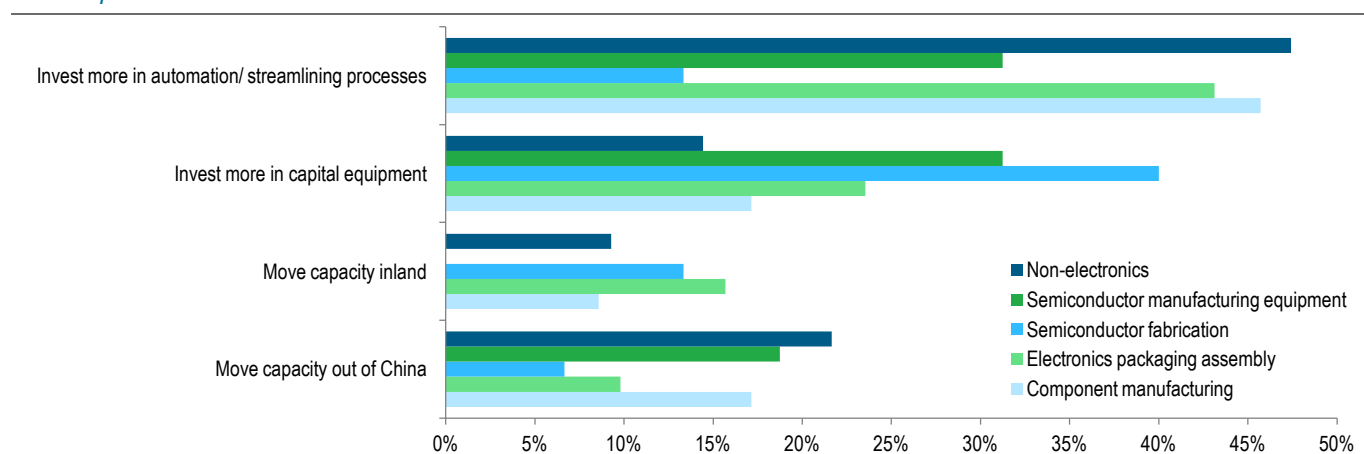
Streamlining/automation is the favoured workaround to tackle a labour shortage

More manufacturers prefer moving out of China than in previous years

Most respondents see streamlining their processes/investing in automation as a favoured workaround to tackle the rising labour shortage, with almost one in two respondents choosing that option. The rest are split between investing in capex and moving operations to a different location. Respondents involved in semiconductor fabrication prefer to invest in capex – 40% versus only 26% last year. Semiconductor equipment manufacturers opted for investing in capex and investing in automation equally. Other manufacturers prefer moving operations – either to other parts of China or overseas. Electronic component and non-electronics manufacturers both prefer to move operations overseas to tackle declining labour availability – 17% and 22%, respectively, versus 14% and 18% in 2016.

Figure 11: How do you respond to labour shortages?

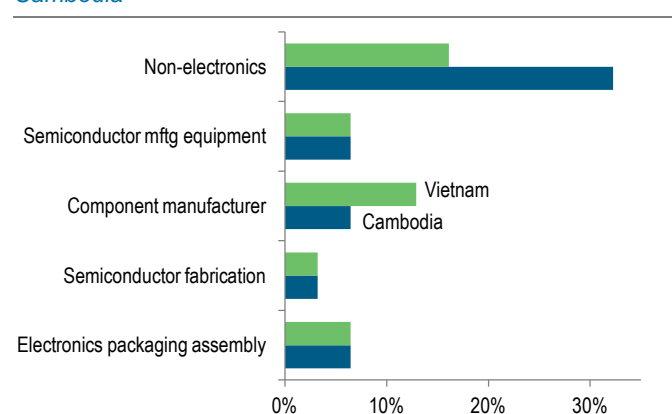
% of respondents



Source: Standard Chartered Research

Figure 12: Cambodia is emerging as a key competitor to Vietnam

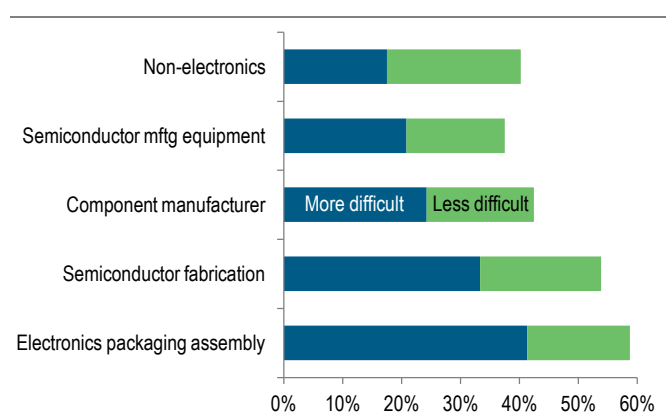
% of respondents, among those choosing Vietnam and Cambodia



Source: Standard Chartered Research

Figure 13: Is the labour shortage better or worse than before?

% of respondents



Source: Standard Chartered Research

Between Vietnam and Cambodia, Cambodia was favoured among non-electronics manufacturers (2 to 1), while component manufacturers preferred Vietnam; both locations were equally preferred by firms in other industries.

Moving overseas led to the largest cost savings, of over 21%

Our survey respondents said moving manufacturing capacity overseas led to the largest savings, of over 20% on average, marginally lower than the 21% estimated last year. Moving inland remained the next preferred option (in terms of cost saving), saving 15.9%, higher than the 15% expected in 2016. Investing in automation was expected to bring the least cost savings, of only an estimated 11.3%. Moving manufacturing appeared to be more attractive and feasible for low-cost manufacturers.



Wage growth, 2016 actual versus 2017 expectations

% of respondents; blue shading indicates faster expected wage growth vs 2016

Figure 14: Component manufacturing

		2017						
		Down 10%	Down 5%	No change	Up 5%	Up by 10%	Up by 15%	Up by 20%
2016	Down 10%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.1%
	Down 5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	No change	0.0%	6.3%	12.5%	9.4%	0.0%	0.0%	0.0%
	Up 5%	0.0%	3.1%	0.0%	12.5%	15.6%	0.0%	0.0%
	Up 10%	0.0%	0.0%	3.1%	3.1%	15.6%	6.3%	3.1%
	Up 15%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.3%
	Up 20%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: Standard Chartered Research

Figure 15: Electronics packaging assembly

		2017						
		Down 10%	Down 5%	No change	Up 5%	Up by 10%	Up by 15%	Up by 20%
2016	Down 10%	1.9%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%
	Down 5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	No change	0.0%	0.0%	9.6%	9.6%	5.8%	1.9%	1.9%
	Up 5%	0.0%	0.0%	5.8%	26.9%	3.8%	3.8%	0.0%
	Up 10%	0.0%	0.0%	0.0%	0.0%	15.4%	3.8%	1.9%
	Up 15%	0.0%	0.0%	0.0%	0.0%	1.9%	1.9%	0.0%
	Up 20%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%

Source: Standard Chartered Research

Figure 16: Semiconductor fabrication

		2017						
		Down 10%	Down 5%	No change	Up 5%	Up by 10%	Up by 15%	Up by 20%
2016	Down 10%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Down 5%	0.0%	0.0%	0.0%	0.0%	0.0%	6.7%	0.0%
	No change	0.0%	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%
	Up 5%	0.0%	0.0%	0.0%	13.3%	13.3%	0.0%	0.0%
	Up 10%	0.0%	0.0%	0.0%	0.0%	33.3%	6.7%	0.0%
	Up 15%	0.0%	0.0%	0.0%	0.0%	6.7%	0.0%	0.0%
	Up 20%	0.0%	0.0%	0.0%	0.0%	0.0%	6.7%	6.7%

Source: Standard Chartered Research

Figure 17: Semiconductor manufacturing equipment

		2017						
		Down 10%	Down 5%	No change	Up 5%	Up by 10%	Up by 15%	Up by 20%
2016	Down 10%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Down 5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	No change	0.0%	0.0%	6.3%	6.3%	6.3%	0.0%	0.0%
	Up 5%	0.0%	0.0%	0.0%	25.0%	6.3%	0.0%	0.0%
	Up 10%	0.0%	0.0%	0.0%	0.0%	18.8%	12.5%	0.0%
	Up 15%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Up 20%	0.0%	0.0%	0.0%	0.0%	0.0%	6.3%	6.3%

Source: Standard Chartered Research

Figure 18: Non-electronics

		2017						
		Down 10%	Down 5%	No change	Up 5%	Up by 10%	Up by 15%	Up by 20%
2016	Down 10%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Down 5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	No change	0.5%	2.1%	1.5%	2.1%	0.0%	0.0%	6.2%
	Up 5%	0.0%	4.6%	18.0%	6.2%	1.0%	0.0%	29.9%
	Up 10%	0.0%	0.0%	2.1%	8.8%	1.0%	0.0%	11.9%
	Up 15%	0.0%	0.0%	0.0%	1.0%	0.5%	0.5%	2.1%
	Up 20%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: Standard Chartered Research



Big Bay Area – Creating a PRD city cluster

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Big Bay Area – Creating a PRD city cluster

From assembling goods to assembling economies

The long search for a way to integrate

PRD cities can collectively achieve much more through integration

Our survey shows that PRD manufacturers plan to invest more in automation, which could boost their productivity and allow them to produce more sophisticated goods more efficiently. The long-term vision for the region, however, is not just about moving up the value chain and becoming more services-oriented; it is also about integrating PRD cities to create a competitive city cluster. The cities' clear division of economic functions makes a strong case for a complementary relationship, not just among themselves (for example, in the form of the three economic circles headed by Guangzhou, Shenzhen and Zhuhai, respectively) but also with neighbouring Hong Kong and Macau (Figure 1).

There has been a strong policy push to promote collaboration between Guangdong, Hong Kong and Macau in the past decades, ranging from the very broad '9+2 Pan-PRD' concept in the early 2000s that spanned across nine mainland provinces to the 'Liveable Bay Area' study proposed in 2009, which focused on the depth of cross-border integration, involving only four PRD cities on the mainland side. Although none of these initiatives have truly taken off, deepening Guangdong-Hong Kong-Macau cooperation remains a staple policy in the region.

The Big Bay Area's rise to fame

This brings us to the latest iteration of the region's cross-border integration grand plan – the 'Guangdong-Hong Kong-Macau Big Bay Area' (or 'Big Bay Area'). First mentioned in the main text of the action plan for the Belt and Road initiative in 2015, Big Bay Area was mentioned again in Premier Li Keqiang's annual work report at the start of the National People's Congress in March this year. The combination of

Figure 1: The economic circles and functional specialisation that the 'Big Bay Area' is grounded on
The nine Guangdong cities plus Hong Kong and Macau that make up the proposed 'Big Bay Area'



Source: Standard Chartered Research



Synergy comes from the clear division of economic functions

having a 'national strategy' status and being Belt and Road-compatible from the get-go has helped the plan generate plenty of attention and, more importantly, momentum. The National Development and Reform Commission (NDRC) is scheduled to make proposals on the plan to the State Council in Q4-2017.

Economic and policy synergies

The Big Bay Area spans across Hong Kong, Macau and nine cities in the Guangdong province – Guangzhou, Shenzhen, Zhuhai, Foshan, Zhongshan, Dongguan, Huizhou, Jiangmen and Zhaoqing. This gives the city cluster a mix of economies with complementary functions. Shenzhen is fast making a name for itself as China's hub of technology innovation, the nation's Silicon Valley for hardware makers. Meanwhile, Guangzhou, already a provincial leader in areas like culture, education and healthcare, is well positioned as a modern services centre. Both cities are set to benefit tremendously from Hong Kong's international reach and financial prowess. Their combined influence is expected to radiate to the rest of the Big Bay Area, which is being set up to move up the manufacturing value chain.

The authorities are not hiding the fact that the Big Bay Area is designed to mirror – and compete with – other successful bay areas in the world, such as those in San Francisco, New York and Tokyo. Domestically there is also growing comparison between the Big Bay Area and the Xiongan New Area project, with both projects seen as the two new growth poles for China's economy. Championed by President Xi Jinping, China announced in April a plan to build an international metropolis involving three counties of the Hebei province; this Xiongan New Area is set to integrate with Beijing and Tianjin to form another city cluster, and aims to curb urban sprawl and tackle other developmental challenges.

The Big Bay Area plan has synergies with other major national strategies such as the 'Made in China 2025' campaign and the Belt and Road initiative. Made in China 2015 calls for a similar manufacturing upgrade through innovation. A State Council policy paper in 2016 on deepening PRD cooperation also mentioned the strategic importance of the Big Bay Area's geographical location, placing it squarely on the 21st Century Maritime Silk Road, to allow the city cluster's economic influence to radiate out to the Southeast Asia and South Asia regions.

Plenty of challenges remain

Growing the PRD into a full-fledged Big Bay Area will not be without its challenges, however. Topping the list is the need for freer cross-border flows in terms of people, goods, services, capital and information. Much progress has already been made in the past 10-15 years due to China's conscious policy push – partly to support Hong Kong and Macau, but chiefly to facilitate the opening of the mainland economy and financial markets:

- The Closer Economic Partnership Arrangement (CEPA), launched in 2003, has eliminated tariffs and lowered non-tariff barriers in both goods and services trade between China and Hong Kong over the years.
- The Individual Visit Scheme, also launched in 2003, allows travellers from mainland China to visit Hong Kong and Macau on an individual basis. The surge in mainland visitors since then reshaped Hong Kong's retail sector and Macau's gaming business.

- Cross-border capital flows have also increased sharply since the start of Renminbi internationalisation at the turn of the decade; Guangdong now has its own new free trade zone (made up of three economic zones in Qianhai, Hengqin and Nansha, each located in a different city serving a different niche), which may mean more financial liberalisation going forward.
- Mega-infrastructure projects designed to link the entire PRD region are underway. The Hong Kong-Zhuhai-Macao Bridge is, for example, set to bring the western PRD into Hong Kong's 3-hour-commuting radius.

Plenty of policy coordination is needed to resolve potential legal, social and practical issues

Yet, many hurdles remain. The Guangdong authorities have, for example, called on Hong Kong and Macau to relax visa screening and allow on-arrival visas for mainlanders. This may not be welcomed by Hong Kong residents who have been chafing under the social strain of the influx of mainland visitors over the past years.

Ongoing controversies around joint-border crossing arrangements at the planned high-speed railway station in Hong Kong also illustrates the tough balancing act between opening up and preserving the valuable 'one country, two systems' principle. This is something bay area regions elsewhere do not face, as their cities/counties operate under the same system.

We have also seen China's recent window guidance on capital outflows prompting worries about a setback in Renminbi globalisation. Offshore market activity has been shrinking as genuine Renminbi users are deciding to stay on the sidelines for now. Simply having a more stable Renminbi YTD has not been enough to restore market confidence in the currency. Persistent capital outflow pressure means that capital controls are unlikely to be materially reversed in 2017.

There are also concerns over negative externalities, such as regional integration. Would people in the Big Bay Area be willing to share the many urban woes, including overcrowding, heavy pollution and congestion? What about the impact on jobs, businesses and housing as cities' economic profiles change?

All these legal, social and practical issues will need time to resolve, in our view. In the meantime, the absence of truly free cross-border flows may cap the Big Bay Area's potential, not least because the cities within will probably not be able or willing to commit to full spatial integration and functional specialisation.

Coming together

The Big Bay Area initiative appears to be the long-awaited and much-needed blueprint that the PRD's manufacturers have awaited, which is expected to fulfil policy-makers' promise to deepen coordination within the Guangdong province and with Hong Kong and Macau. The potential synergies could create a 'super city' cluster which could underpin China's economic growth and support its Belt and Road aspirations for decades to come. These potential gains should provide a solid incentive for all the parties involved – policy makers, residents, financial markets and manufacturers across the PRD – to come together and cooperate in achieving regional synergies.



ASEAN – Rising interest from Northeast Asia

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ASEAN – Rising interest from Northeast Asia

ASEAN continues to see strong FDI inflows, almost matching FDI into China and twice that of India in 2015

The manufacturing and financial sectors attract the most FDI

FDI flows into ASEAN remained strong at USD 126bn as of 2015, slightly above USD 124bn in 2014 and above USD 120bn reached in 2013, based on the latest available data from United Nations Conference on Trade and Development (UNCTAD).

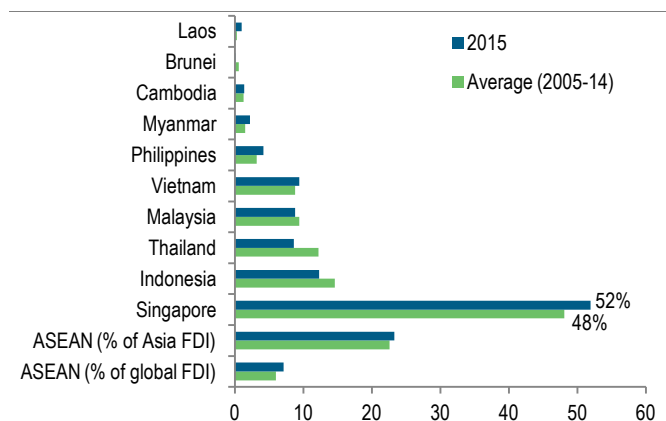
In 2015, FDI into ASEAN made up about 7% of global FDI. While this is lower than 9.8% in 2014, it is still above the average of 6% over 2005-14. ASEAN's share of global FDI may have been lowered on account of strong flows into developed markets due to a spike in M&A activity and corporate reconfiguration driving the 38% surge in global FDI in 2015, which lowered ASEAN's share of global FDI. We see ASEAN's share of global FDI rebounding from here, as it remains an attractive investment destination. Comparatively, China's share of global FDI was 7.7% and India's 2.5% in 2015.

Among ASEAN's many attractions are its ample and cost-efficient labour supply, improving infrastructure, multiple trade pacts, supportive investment policies, regional stability, increasing wealth and rapid economic growth. US' withdrawal from the Trans-Pacific Partnership (TPP) trade pact raised concerns about its effect on investment in ASEAN and Vietnam in particular, which would have been a key beneficiary. But according to our PRD survey, the TPP was just one of many reasons cited for investing in ASEAN, and it was not the most important reason.

Since 2015, FDI to ASEAN has grown at a CAGR of 12%. Comparatively, FDI has grown 6% globally and 10% in Asia. With rising labour costs becoming a persistent problem in China, ASEAN continues to receive investment from Northeast Asia as manufacturers look for cheaper production centres. The risk of US trade protectionism, which would affect China substantially, has also encouraged companies to diversify production sources away from China.

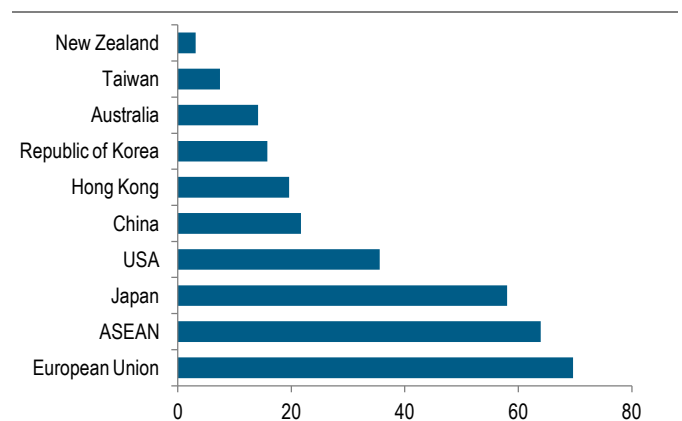
Based on 2013-15 aggregate data, the European Union (EU) remains ASEAN's largest investor, accounting for 19% of its total FDI in 2013-15. Intra-regional investment is second, accounting for 17%; with the CLMV region (Cambodia, Laos, Myanmar and Vietnam) receiving c.26% of FDI from other ASEAN countries. Comparatively, ASEAN ex-CLMV receives only about 16% of its investment from the region.

Figure 1: Steady FDI trend in ASEAN, despite the 2015 commodity price plunge
% of total FDI to ASEAN



Source: UNCTAD, Standard Chartered Research

Figure 2: Top 10 sources of FDI into ASEAN
USD bn; aggregate from 2013-15



Source: ASEAN Secretariat, Standard Chartered Research

Japan is ASEAN's third-largest source of FDI, with heavy investment in Thailand, Indonesia and Singapore. FDI from China, Korea and Taiwan is also steadily increasing in terms of share of total FDI. These three countries accounted for about 14% of total FDI in ASEAN in 2015, up from 10% in 2013. The top nine investors (excluding ASEAN) account for about 65% of the region's total FDI, five of which (Japan, China, Korea, Australia and India) have FTAs with ASEAN.

Finance and manufacturing are preferred sectors for FDI

By sector, FDI in ASEAN favours the financial and insurance sectors, followed by manufacturing. These sectors attracted close to 60% of total FDI into ASEAN in 2015. They are followed by wholesale and retail trade, real estate and primary industries.

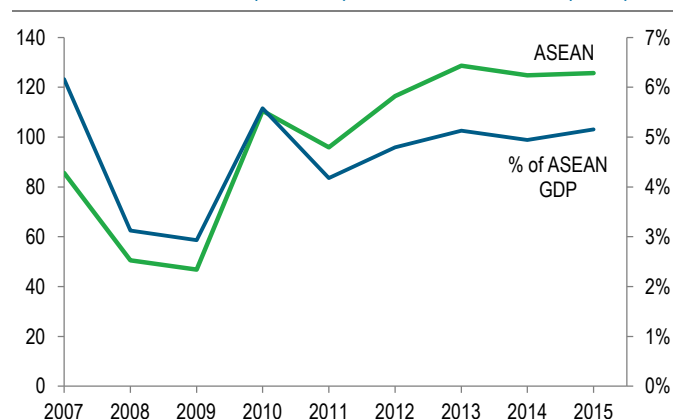
FDI into Singapore's financial and insurance sectors potentially accounts for a good share of this sector's FDI within ASEAN. Comparatively, manufacturing investment is more spatially distributed. Unsurprisingly, countries with lower wage costs attract a fair amount of manufacturing FDI interest. Vietnam has been a standout, and is cited as one of PRD manufacturers' lowest-cost destinations for production relocation. Electronics manufacturing investment in Vietnam has risen sharply in recent years for this reason.

Indonesia also sees a high amount of manufacturing FDI interest in the food, paper and printing, pharmaceutical, and machinery and electronics industries. Thailand's automobile industry continues to attract the bulk of its FDI (mainly from Japan), followed by computers and electronics.

ASEAN's financial and manufacturing sectors receive the largest share of FDI; countries with lower wage costs draw strong manufacturing FDI interest

Figure 3: Stable FDI trend in recent years

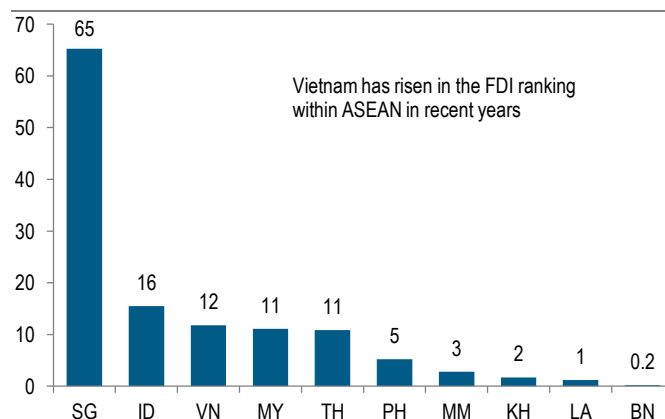
Total FDI into ASEAN (USD bn); % of ASEAN GDP (RHS)



Source: UNCTAD, Standard Chartered Research

Figure 4: ASEAN-6 attracts 95% of total FDI to ASEAN

USD bn, 2015



Source: UNCTAD, Standard Chartered Research

Figure 5: Manufacturing is favoured in less costly countries

% of FDI

	Agriculture	Mining	Manufacturing	Utilities	Construction	Services
Vietnam	Neg.	Neg.	65	5	Neg.	28
Indonesia	5	9	57	7	Neg.	19
Malaysia	Neg.	7	52	Neg.	Neg.	39
Thailand	Neg.	Neg.	45	Neg.	Neg.	52
Philippines	Neg.	Neg.	44	26	Neg.	27
Myanmar	Neg.	36	12	29	Neg.	22
Singapore	Neg.	Neg.	14	Neg.	Neg.	86

*Neg. – less than 5%; Source: Various official websites, Standard Chartered Research

Japan remains the largest FDI source from Northeast Asia

A closer look at investment from Northeast Asia

Rising labour costs in China have been a key driver of manufacturing FDI into ASEAN in the past few years. The shifting FDI trends indicate an increasing awareness of the region as an attractive investment destination – not merely from a production perspective but also for its growing domestic markets, backed by strong economic growth prospects and rising consumer wealth.

The Northeast Asian region has traditionally been a manufacturing powerhouse. However, FDI from Northeast Asia into ASEAN has increased in recent years, to account for 32% of ASEAN's global FDI, up from 23% in 2010.

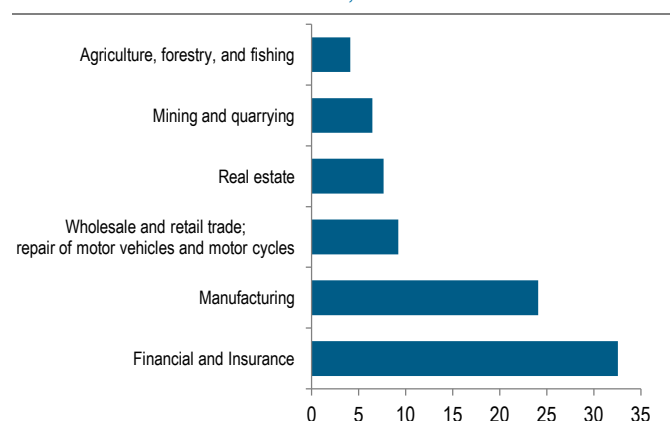
Japan remains Northeast Asia's largest FDI source in ASEAN. Japan has been a key investor in ASEAN for many years, making investing substantially in Thailand's automobile industry and increasingly in Indonesia. Japan's FDI in ASEAN is estimated at about USD 58bn over 2013-15, with Thailand and Indonesia absorbing almost 60%. Almost 50% of Japan's FDI in the region goes to the manufacturing sector and c.27% to the financial and insurance sectors (Figure 10).

China was the second-largest investor from Northeast Asia in ASEAN, with Singapore taking the lion's share of c.60% out of the total USD 22bn. China's FDI in other ASEAN countries is smaller, with Vietnam, Cambodia and Laos in the top five. China's FDI in ASEAN is primarily in the real estate and finance/insurance sectors (which together account for c.50% of its total FDI); manufacturing is third, at 14%. This may explain why Singapore takes the lion's share of China's FDI. Investment in construction is still relatively low; however, this could grow as China embarks on more infrastructure projects within the region through its Belt and Road initiative.

South Korea is also a large FDI source for ASEAN, investing about USD 16bn over 2013-15. The bulk of Korea's FDI goes to Vietnam (c.54%). This is in line with FDI data by sector, which shows that 50% of its FDI was in manufacturing. Meanwhile, the increase in Vietnam's electronic manufacturing capacity reflects the increased value-add of the country's manufacturing and exports. Korea also invests in wholesale and retail in ASEAN (c.19%). While no further data granularity is available, we think this could be attributable to Korean companies tapping rising consumer wealth in the region.

Figure 6: Finance and manufacturing are favourite FDI sectors

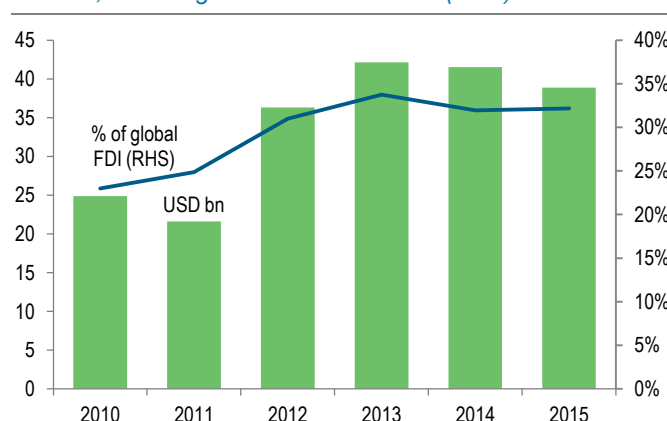
% of total investment in ASEAN, 2015



Source: UNCTAD, Standard Chartered Research

Figure 7: Northeast Asia has become a larger source of FDI in ASEAN

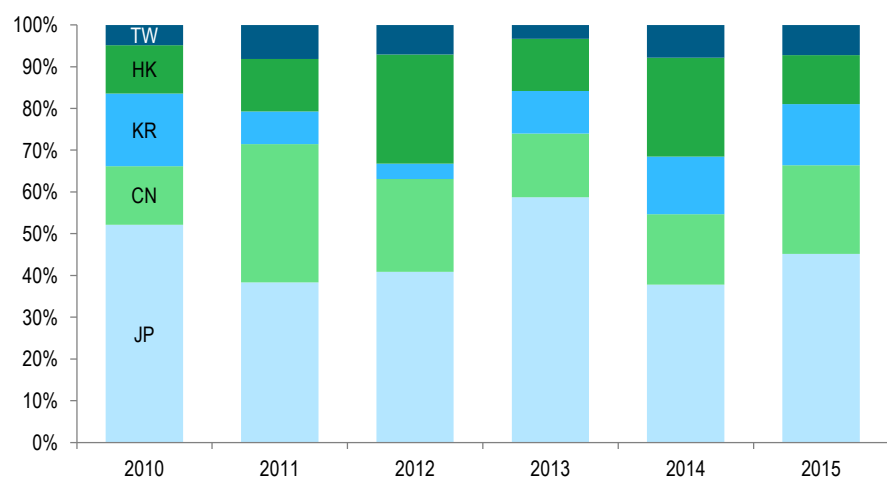
USD bn; as % of global FDI into ASEAN (RHS)



Source: ASEAN Secretariat, Standard Chartered Research

With production costs rising in China, Taiwan manufacturers have also progressively moved production to ASEAN in recent years. Interestingly, Taiwan invested heavily in Singapore over 2013-15, largely in the island-state's finance sector to tap increased interest in the region (i.e., following clients' strategy). This is reflected in Taiwan's heavy investment in Vietnam (c.20% of FDI), likely in manufacturing (c.30%). We expect Taiwan to continue investing in ASEAN in the manufacturing sector – it has invested heavily in textiles, garments and shoes (as shown by Cambodia placing third in the top five ASEAN investment destinations) and may invest more significantly in electronics as labour skills improve in the region.

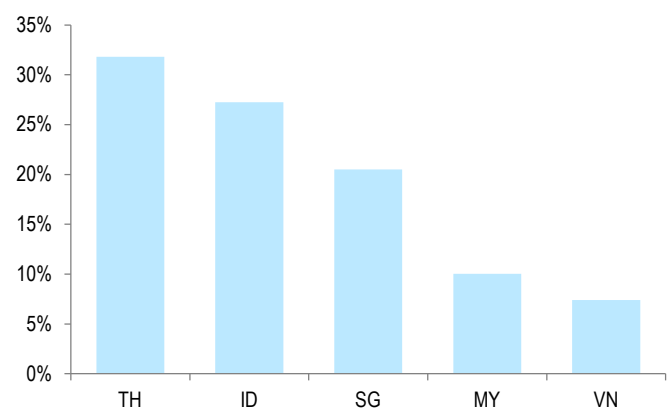
Figure 8: Korea and Taiwan have increased FDI into ASEAN in recent years
% of FDI from Northeast Asia



Source: ASEAN Secretariat, Standard Chartered Research

Figure 9: Thailand and Indonesia benefit from Japan's FDI in automobiles

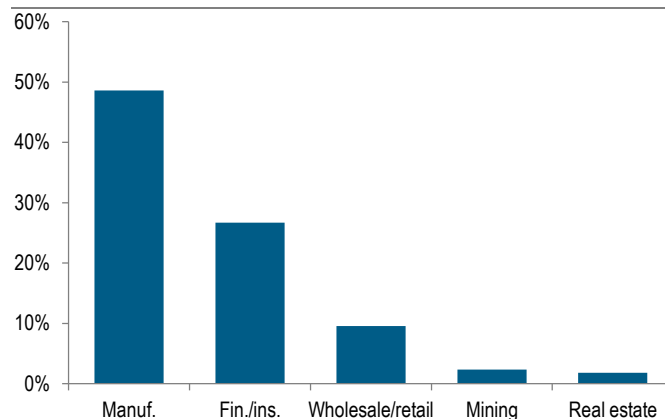
% of Japan ASEAN FDI (top 5 destinations); 2013-15



Source: ASEANstat, Standard Chartered Research

Figure 10: Japan's FDI goes mainly to the manufacturing sector in ASEAN

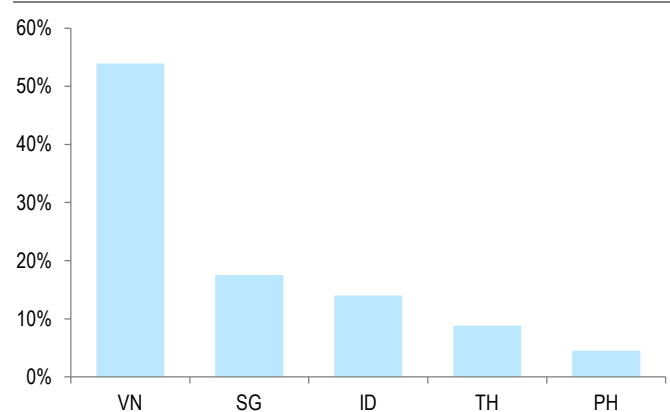
% of Japan ASEAN FDI (top 5 sectors); 2013-15



Source: ASEANstat, Standard Chartered Research

Figure 11: Korean FDI favours Vietnam

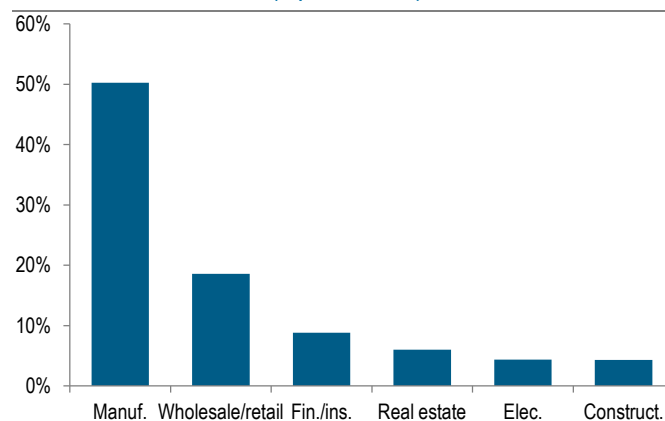
% of Korea ASEAN FDI (top 5 destinations); 2013-15



Source: ASEANstat, Standard Chartered Research

Figure 12: Korean FDI is heavily skewed to manufacturing

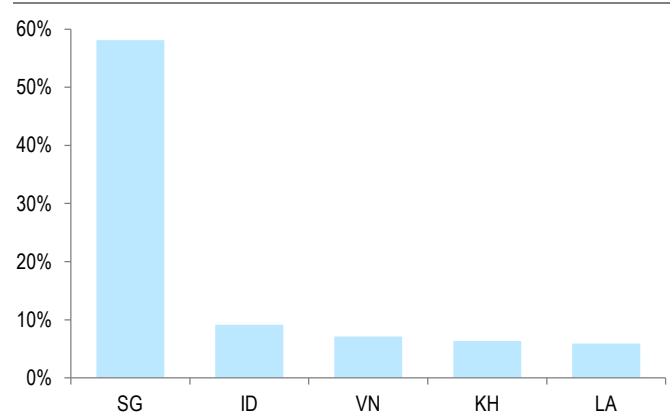
% of Korea ASEAN FDI (top 5 sectors); 2013-15



Source: ASEANstat, Standard Chartered Research

Figure 13: Singapore is China's favoured destination

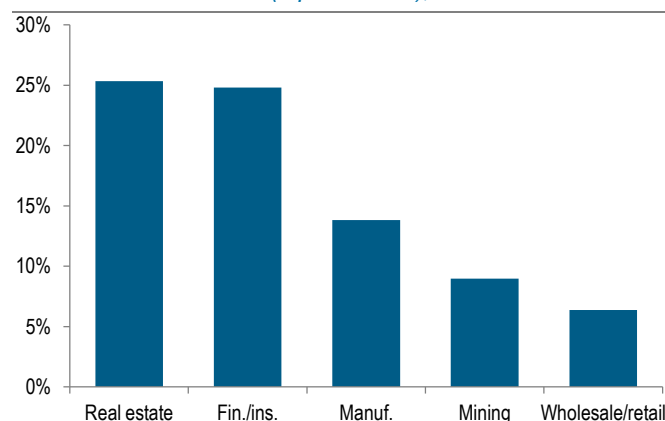
% of China ASEAN FDI (top 5 destinations); 2013-15



Source: ASEANstat, Standard Chartered Research

Figure 14: China FDI favours real estate and finance

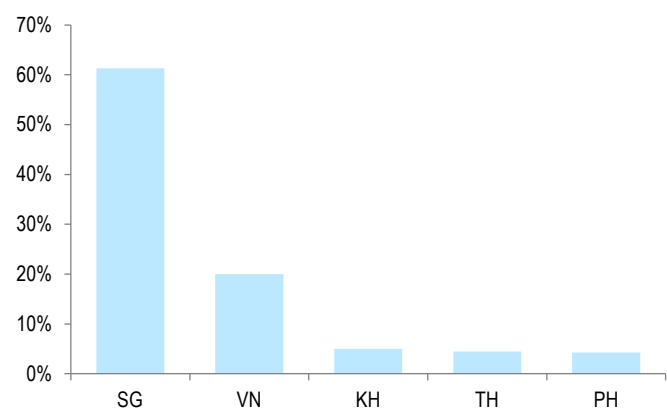
% of China ASEAN FDI (top 5 sectors); 2013-15



Source: ASEANstat, Standard Chartered Research

Figure 15: Singapore takes top spot as Taiwan banks follow their clients into ASEAN

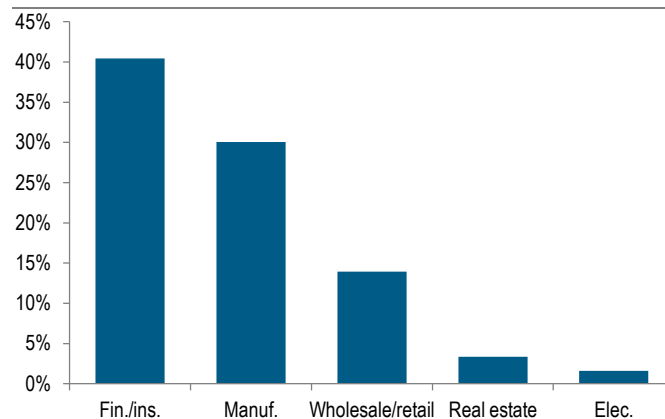
% of Taiwan ASEAN FDI (top 5 destinations); 2013-15



Source: ASEANstat, Standard Chartered Research

Figure 16: ASEAN should continue to see manufacturing FDI from Taiwan

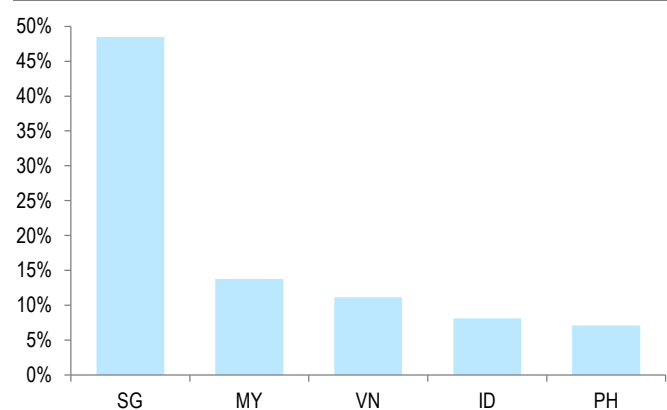
% of Taiwan ASEAN FDI (top 5 sectors); 2013-15



Source: ASEANstat, Standard Chartered Research

Figure 17: Hong Kong FDI goes largely to Singapore

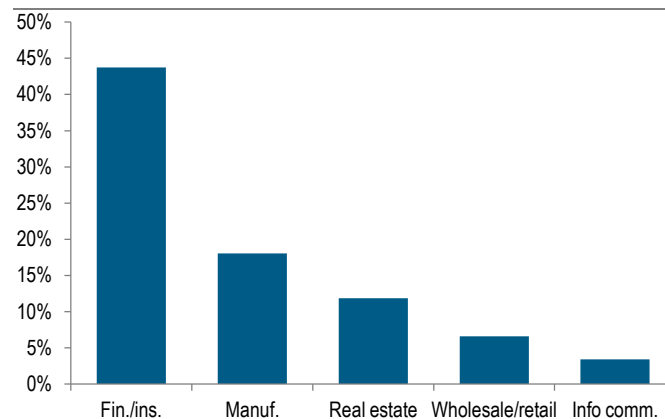
% of Hong Kong ASEAN FDI (top 5 destinations); 2013-15



Source: ASEANstat, Standard Chartered Research

Figure 18: Hong Kong FDI favours the finance sector

% of Hong Kong ASEAN FDI (top 5 sectors); 2013-15



Source: ASEANstat, Standard Chartered Research

Taiwan investors are upbeat on ASEAN

Taiwan manufacturers are generally upbeat about ASEAN; most will consider increasing capex in the region

Taiwan investors are positive about ASEAN's near-term prospects, in our view. 67% of the Taiwan clients who participated in our latest PRD survey are positive on the region's growth outlook, versus only 34% of all participants (excluding Taiwan).

The PRD survey results echo the findings in a separate survey that we conducted of Taiwan producers based in ASEAN, in which nine out of a total of 14 polled planned to boost investment in the region in 2017. They expect sales revenues in the region to pick up by about 10-20% this year, and see ASEAN contribution to their production output rising in the next 12-24 months. We think this supports the case for ASEAN as a preferred alternative production base for Taiwan manufacturers seeking to move out of China.

Taiwan investors are showing a greater preference to relocate due to rising production costs in China

Our PRD survey results show that 42% of Taiwan corporates that we polled prefer to shift capacity offshore rather than increase investment in capital equipment and/or automation – notably higher than 14% of all respondents ex-Taiwan. We think this reflects continued pressure on Taiwan's manufacturers to relocate away from China on account of the rapidly changing operating landscape, partly driven by rising production costs.

This is especially true for wage-cost savings, as more than half of the Taiwan manufacturers who participated in our PRD survey expect savings of 10% or more from relocating production outside China. This is also in line with the results from our separate survey, in which eight out of 14 Taiwan manufacturers indicated that labour costs amounted to 10-50% of their total factory production costs.

ASEAN is also preferred for its domestic market potential

Other than lower wage costs, Taiwanese producers have also chosen to relocate to ASEAN due to several other factors; including demand from global brand names to diversify production capacity elsewhere and on expectations of faster economic growth in the region which offers the opportunity to tap rising domestic-market demand. In our separate survey, only three out of 14 indicated that they picked ASEAN as a base primarily for FTA-related benefits. But more than half indicated they welcomed government policy and/or incentives enhancing business competitiveness in the region, including improved infrastructure, availability of talent, better rule of law and regulations, a benign tax policy and other incentives.

Spoilt for choice – Indonesia or Vietnam?

Vietnam and Indonesia are the most preferred FDI destinations

In our discussions with real-sector investors regarding FDI preferences, Vietnam and Indonesia typically came up as destinations of interest. Indeed, these two economies have received roughly similar levels of FDI. In 2015, Indonesia and Vietnam ranked second and third, respectively, in terms of FDI within ASEAN.

However, our survey showed that Northeast Asian manufacturers relocating production from China – notably Taiwan – heavily preferred Vietnam over Indonesia. We also found this to be true of Korean investors. Japan invests heavily in Indonesia's manufacturing sector, but we believe this is primarily in the automobile sector for domestic consumption. China is a growing investor in ASEAN, directing a similar amount of FDI to Vietnam and Indonesia. Given the strong FDI interest in these two countries and apparently different reception from Northeast Asian investors, we provide below a comparative analysis between Indonesia and Vietnam.

Indonesia has a larger domestic market and younger population but Vietnam has better growth potential

Our PRD surveys show that foreign investors typically consider factors such as labour supply, domestic market demand, operational cost and environment when making investment decisions. We highlight a few interesting comparisons between the two countries below.

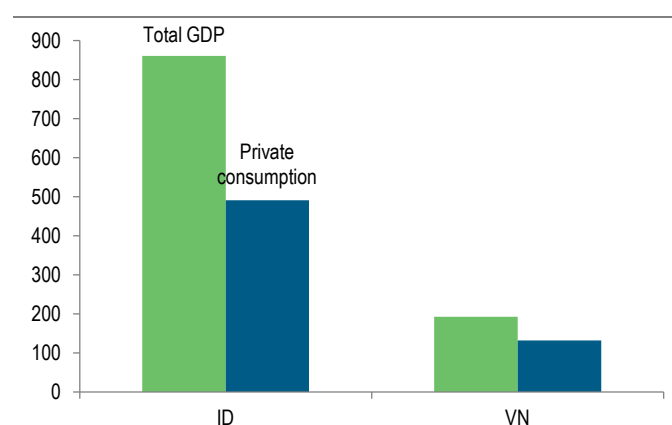
In terms of domestic market size, Indonesia is much larger. Its population of roughly 255mn is about 2.7x Vietnam's. Indonesia's population is also slightly younger and growing at a faster annual rate of about 1.3% versus 1.1% for Vietnam. Indonesia's household consumption amounted to USD 491bn worth of spending in 2015, about 3.7x Vietnam's.

However, Vietnam's household spending has been increasing at a much faster rate. Comparing the data over 2010-15, Vietnam households increased their spending by a CAGR of 11% versus 3% in Indonesia. This translates to an increase of USD 54bn, slightly lower than Indonesia's USD 67bn. Vietnam also has plenty of room to catch up in terms of urbanisation. Indonesia's urbanisation rate reached nearly 54% as of 2015, while Vietnam's was 34%. If Vietnam catches up on the urbanisation gap, this could boost its GDP per capita growth, which has been seen to correlate positively with the urbanisation rate.

In terms of labour market supply, Indonesia has the more favourable demographics. Its labour force, at about 127mn as of 2016, is roughly 2.3x Vietnam's, and with a slightly more youthful median age. Based on a survey by the Japan External Trade Organisation, however, the monthly wages of a manufacturing worker in Indonesia are about USD 298, significantly higher than USD 204 in Vietnam. Both countries saw an increase in wages of about 10-11% per annum in 2015-16.

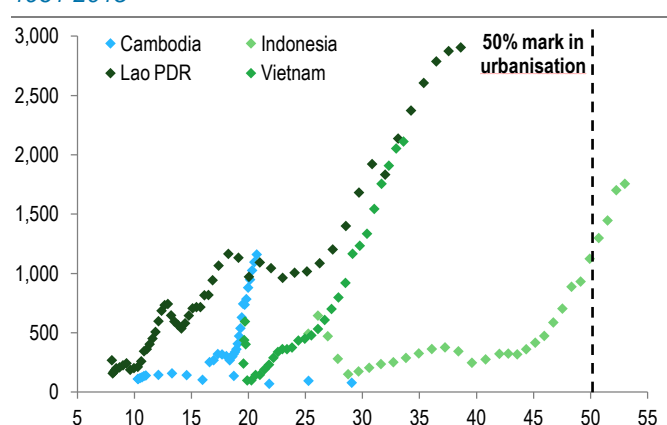
The two economies' export profiles may shed more light on the competitive advantages they offer. Vietnam is an export-oriented economy – despite its smaller size, it exports more than Indonesia in both absolute and percentage-of-GDP terms (Figure 21). Furthermore, electronics and textiles make up a considerable portion of Vietnam's total exports (Figures 22 and 23). Comparatively, Indonesia's exports are commodity-heavy. This may reflect the variation in the operating environments of these sectors and explain the differences in the countries' FDI patterns.

Figure 19: Indonesia dwarfs Vietnam in GDP terms
USD bn, 2015



Source: CEIC, Standard Chartered Research

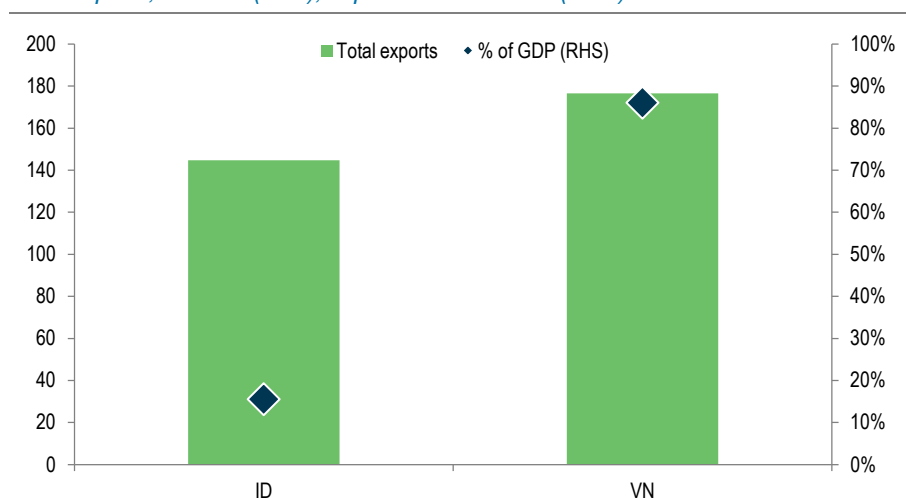
Figure 20: Vietnam has room to catch up
Urbanisation, % (x-axis) vs GDP per capita, USD (y-axis), 1961-2015



Source: IMF, World Bank, Standard Chartered Research

Figure 21: Vietnam is an export powerhouse

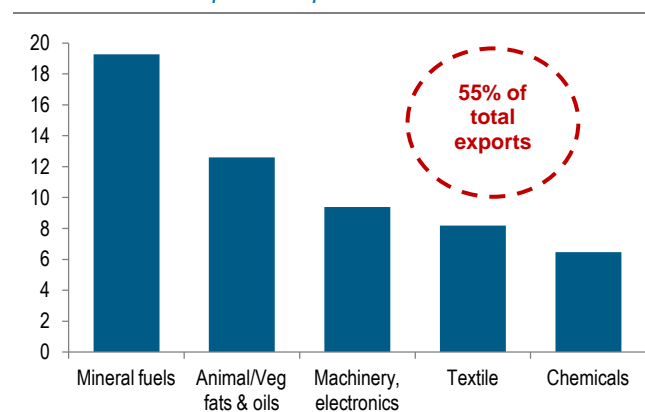
Total exports, USD bn (LHS); exports as % of GDP (RHS)



Source: CEIC, Standard Chartered Research

Figure 22: Commodities make up a large share of Indonesia's exports

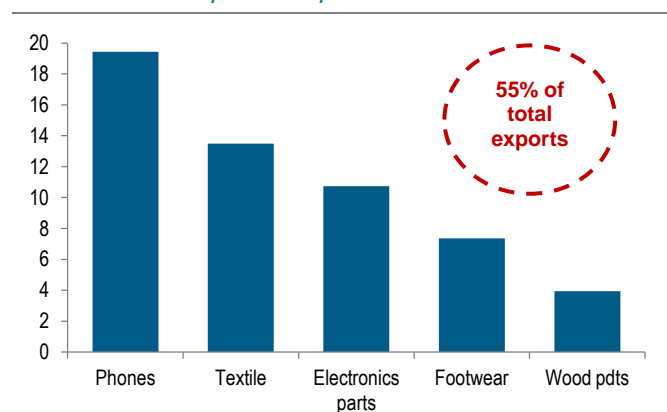
% share of total exports – top 5



Source: CEIC, Standard Chartered Research

Figure 23: Vietnam has the export advantage in electronics and textiles

% share of total exports – Top 5



Source: CEIC, Standard Chartered Research



Indonesia – Searching for a new growth engine

Competing for FDI flows

We believe FDI will be Indonesia's next growth catalyst. As the commodity boom cycle seems to have passed, and fiscal and monetary expansion nears the end of the road, the country needs a new growth engine. In light of this, Indonesia is transforming to a higher-value-added manufacturing profile. This will require financing, advanced technology, human capital and infrastructure – in which FDI will likely play a substantial part. Attracting FDI will be imperative to accelerate Indonesia's desired transformation. We discuss below Indonesia's FDI trends and its government's recent efforts to boost investment in the country.

FDI has rebounded, driven by investment in manufacturing

FDI into Indonesia rebounded in 2016, according to Bank Indonesia (BI) data, with net FDI flows up more than 60% y/y to IDR 16bn. In gross terms, however, FDI dropped to USD 3bn due to asset ownership transfers during the country's tax amnesty programme (Figure 1). Some residents reclaimed direct ownership of local asset that previously owned through an overseas special purpose vehicle. This was recorded both as a foreign outflow and inflow from overseas resident investment. Gross FDI flows slipped 1.9% y/y in Q1-2017.

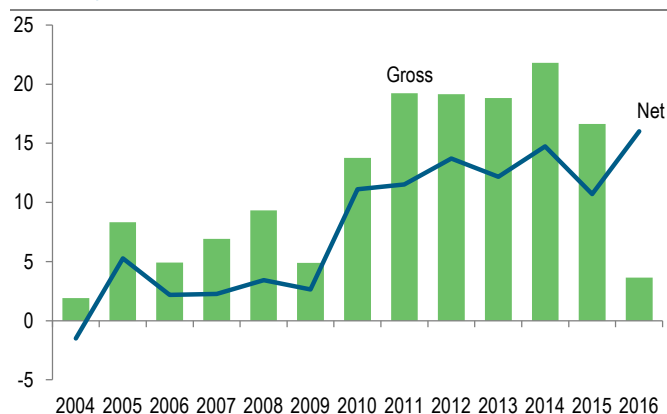
Indonesia's FDI flow trends have evolved in the past decade (Figure 25). Communications (tertiary sector) saw the biggest inflows at the beginning of 2000, when it accounted for around 50% of FDI in 2003, based on investment agency data. Mining (primary sector) attracted investment during the commodity boom in 2011, but has eased recently along with the cycle. Investment in manufacturing (secondary) has started to see more traction with the government recently addressing the investment climate and lack of connectivity. Metal, machinery, electronics, chemicals, pharmaceuticals and paper industries accounted for 33% of total FDI flows in 2016.

In terms of FDI sources, the picture has been relatively unchanged. Singapore remains the biggest source of FDI into Indonesia, accounting for almost a third of total FDI flows in 2016, followed by Japan (19%), US (10%) and China (9%). Interestingly, FDI from China grew fourfold in 2016 to c.USD 3bn.

FDI plays an important role in boosting economic growth

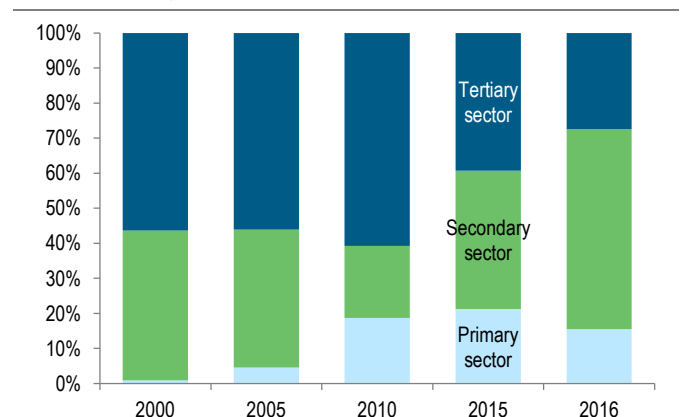
Besides providing more sustainable financing for a developing country, FDI is supportive to growth through the expansion of scale economies, tapping the global supply chain, promoting the transfer of technology, good governance, and job creation. A 2012 study by the Research Institute of Industrial Economics suggests

Figure 24: Gross FDI drop due to asset transfer during tax amnesty in 2016 (FDI, USD bn)



Source: CEIC, Standard Chartered Research

Figure 25: FDI flows have shifted to manufacturing sector
Share of FDI by sector, %



Source: CEIC, Standard Chartered Research

that productivity (measured by value added per worker) of foreign-owned corporations in Indonesia is six times that of domestic corporations. FDI has also been shown to help develop the upstream production chain in providing input components. Toyota Motor Manufacturing Indonesia, for instance, is estimated to increase the local content in its products to 65% by 2018 and to 75% by 2019 through using domestically produced raw material, such as plastics and steel.

Stronger growth momentum and structural reform to attract higher FDI flows in 2017

We expect gross FDI inflows to Indonesia to recover this year and approach the 2015 level of USD 15bn (or up 325% y/y) on a low base effect, but remaining below the USD 21bn high reached in 2014. Stronger growth momentum, progress in infrastructure development, and an improving investment climate are likely FDI drivers. UNCTAD projects that global FDI will grow 5% y/y to USD 1.8tn in 2017, with flows to developing Asia reaching USD 515bn, an increase of 15% y/y. The agency's latest business survey in 2017 ranks Indonesia the fourth-most favoured destination for FDI (from number 8 in 2016) after the US, China and India (Figure 31). We expect the country's manufacturing sector to continue to attract FDI, followed by utilities, mining and industrial estate.

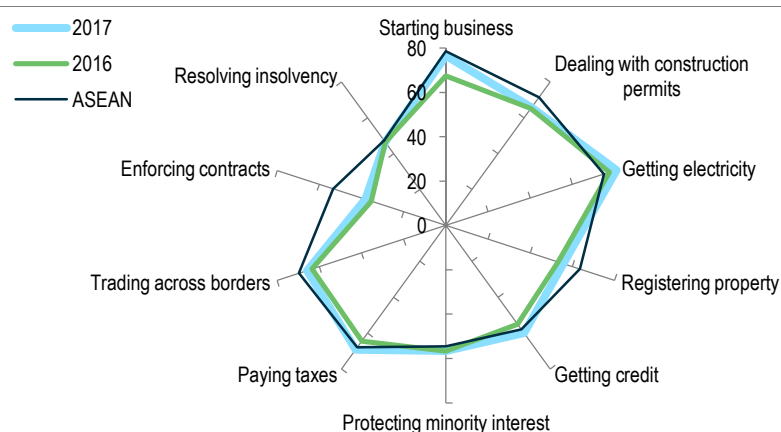
Indonesia's rank in World Bank's Ease of Doing Business jumped to 91 in 2017 from 106 prior

Economic reforms aim to improve investment climate

The government has released a series of economic reforms to address the investment climate; this has started to show results. Indonesia's rank in World Bank's Ease of Doing Business survey rose to 91 in 2017, from 106 previously. This was likely driven by an improvement in the ease of starting a business, getting electricity, paying taxes and obtaining credit in the country. Indonesia now ranks number 6 among 10 ASEAN countries, higher than the Philippines, Cambodia, Laos and Myanmar. Nevertheless, continued reforms are needed as Indonesia remains below the ASEAN average on most investment aspects, especially enforcing contracts (Figure 26). We list below the key reforms that could have significant impact on improving the investment climate.

- **Cutting red tape.** The investment coordinating board BKPM has launched unified investment licensing services in 22 government institutions which were previously run separately. It has introduced a three-hour service turnaround for business licences for a minimum investment of IDR 100bn and/or the hire of 1,000 workers; previously, the turnaround was around 23 days. The government has also revoked 3,143 local regulations that are seen to hamper investment and against higher hierarchy regulations by the central government.

Figure 26: Indonesia's Ease of Doing Business rank has improved, but needs to improve further to catch up with the ASEAN average (World Bank's Ease of doing business survey, 2017)



Source: World Bank, Standard Chartered Research

- **Revising the investment ‘negative list’** to allow more foreign investment in 84 sectors, such as cold storage, films and medical raw materials.
- **Simplifying minimum wage formulation.** The annual adjustment in the minimum wage calculation is now based on CPI inflation plus GDP growth. The increase in the monthly minimum wage was 7.3% y/y in 2017, lower than the 14% hike in 2016 before the introduction of the wage cap.
- **Tax incentive.** The government revised the tax-holiday regulation in 2015, allowing a tax holiday for corporates that invest a minimum of IDR 1tn in key industries, such as petrochemicals, machinery, agriculture, maritime transport and upstream oil and gas companies. The government awarded a tax holiday to four companies with an investment value of USD2.3bn in 2015.

Making progress on infrastructure projects

The government has launched ambitious infrastructure projects to boost competitiveness

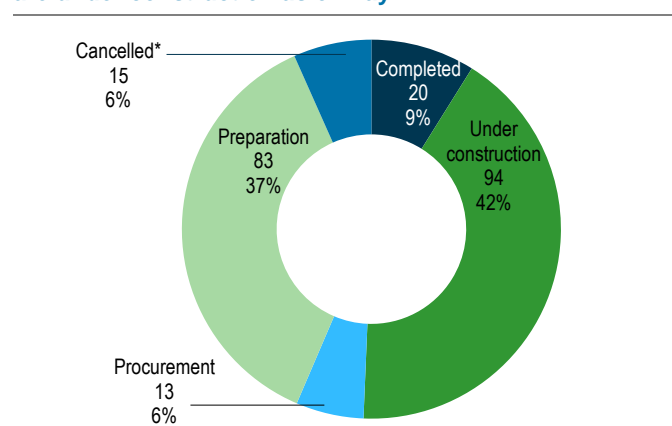
The government plans to boost infrastructure spending to USD 360bn over 2015-19 as part of its policy to improve connectivity and lowering logistics costs, which are needed to boost FDI. The new infrastructure plan comprises 245 projects and two programmes, including electricity and the development of small/medium aircraft. According to the government, 10 projects were completed in May, 120 projects are under construction, and 12 projects are in the procurement stage.

Measures have been implemented to promote private-sector participation

The government’s budget remains the main source of financing for the infrastructure projects, but it can finance only 40% of the total financing requirement. The biggest chunk of financing will likely come from the private sector and SOEs (Figure 30). We list below some selected policies to promote private-sector investment in infrastructure:

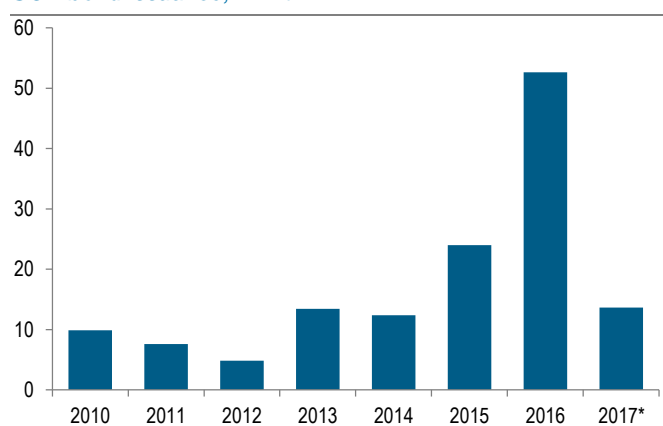
- **Expediting land acquisition.** The government’s law No. 2/2012 on land acquisition for public purposes lays out a stricter judicial process on land price disputes and requires the involvement of independent land appraisal. Per the law, the time to acquire land can be compressed to as little as 100 days without objection, or a maximum 518 days on objections from landowners. Furthermore, the government has formed a special public service agency (BLU LMAN) to manage the land fund. The agency has more flexibility in allocating the budget as it is excluded from the common budgeting process.
- **Facilitating Public Private Partnerships (PPPs).** The government is creating various facilities to provide support along a project’s life cycle (Figure 29). The latest facility to be introduced is availability payment (AP), which guarantees the

Figure 27: Around half of the national strategic projects are under construction as of May



*Projects cancelled because National Strategic Project criteria were not fulfilled;
Source: KPPIP, Standard Chartered Research

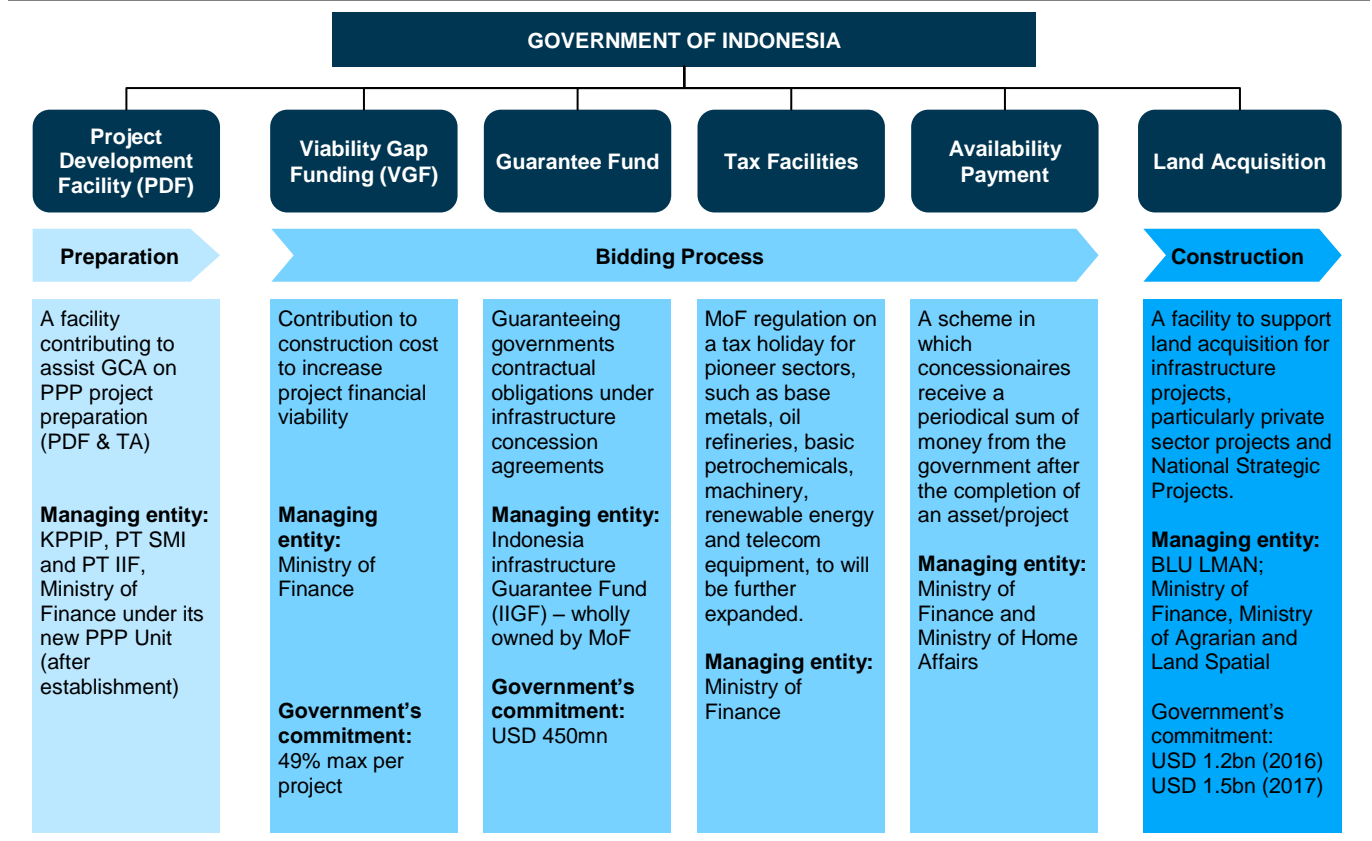
Figure 28: SOE bond issuance increases sharply
SOE bond issuance, IDR tn



*2017 is as of May; Source: KSEI, Standard Chartered Research

- sum of periodical payment after a project is completed. Palapa Ring Broadband is the most recent PPP project, signed in April, which is supported by the AP facility.
- **Promoting SOE financing.** The government has injected c.IDR 120tn of capital into SOEs to increase its financing capacity over 2015-17. SOEs raised IDR 53tn through bond issuance in 2016, double the amount in 2015. Some infrastructure SOEs construction company raised IDR 10tn from the public by offering a rights issue in the past two years. The government is also considering SOE asset securitisation as another alternative scheme to raise financing.

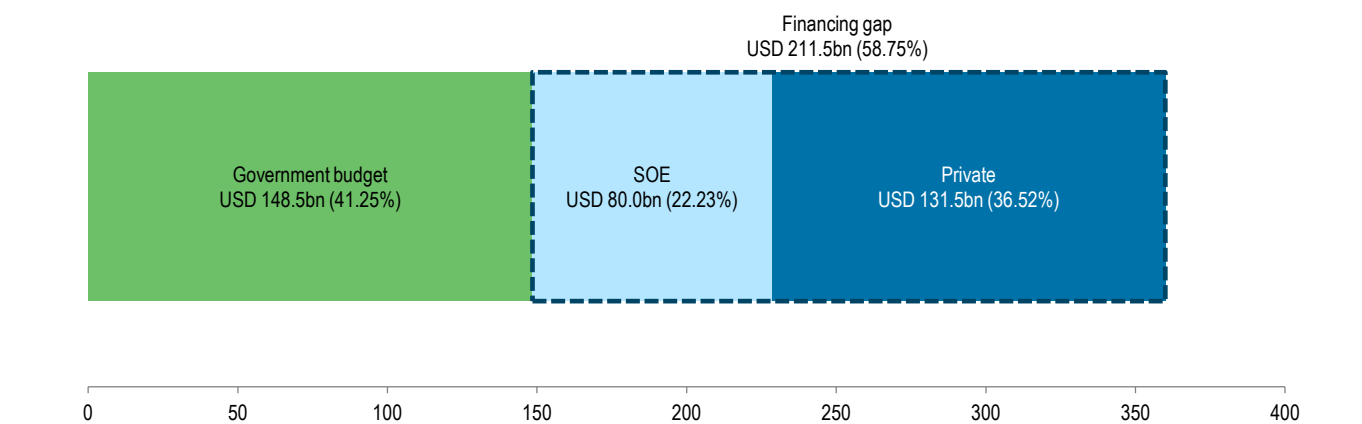
Figure 29: Fiscal facilities to support PPP



Source: KPPIP, Standard Chartered Research

Figure 30: Private-sector financing needed to close the financing gap

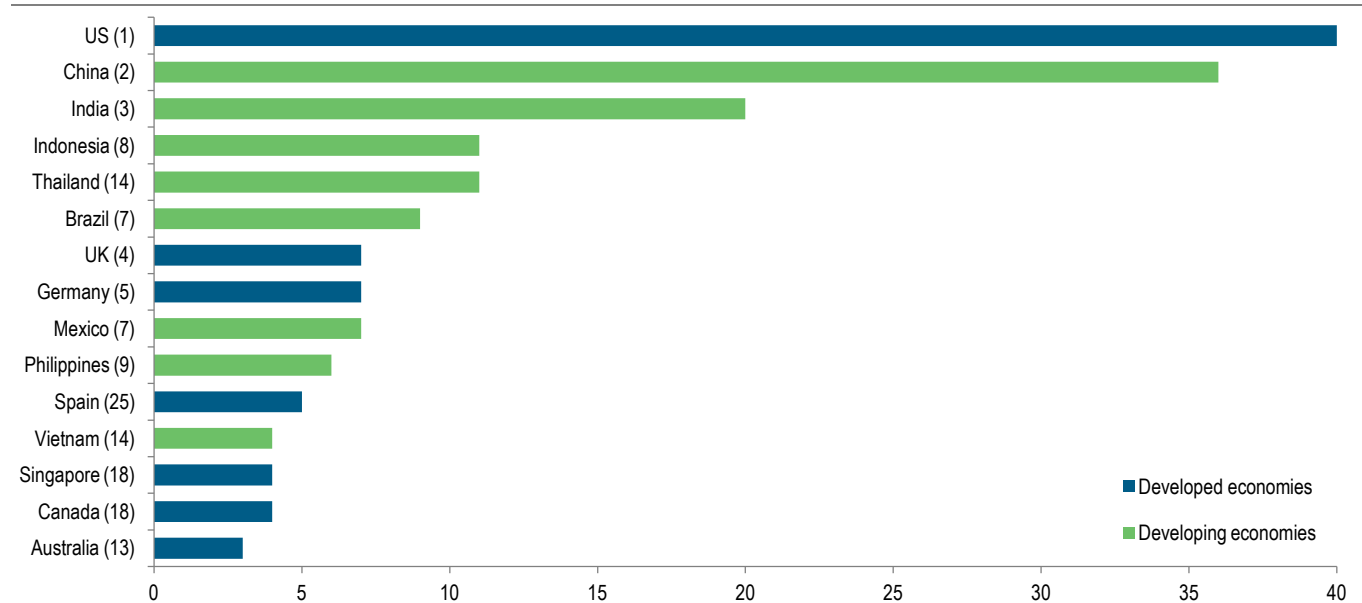
Infrastructure financing needs, 2015-19, USD bn



Source: MoF, Standard Chartered Research

Figure 31: Indonesia now ranks in the top 5 favoured FDI destinations, up from number 8 previously

UNCTAD business survey, (x) 2016 rank, % of executives responding



Source: UNCTAD, Standard Chartered Research



Special Report: Shop Talk – China, ASEAN and the future

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Document approved by
David Mann
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Document is released at
08:22 GMT 14 June 2017

