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Macro Insights Weekly

Singapore's brightening semiconductor outlook

Group Research

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- *Singapore is the world's third largest exporter of computer chips, while facing several constraints in the sector's further expansion. Yet, the outlook for semiconductor production may be brightening.*
- *Land, water, and labour are key constraints toward building large, leading edge fabs.*
- *But investment in the semiconductor sector has more than doubled since 2017.*
- *Singapore world class logistics and supplier ecosystem remain attractive to chip producers.*
- *Land and water constraints could be resolved by the Special Economic Zone with neighbouring Johor.*
- *Singapore's semiconductor footprint may be about to expand.*

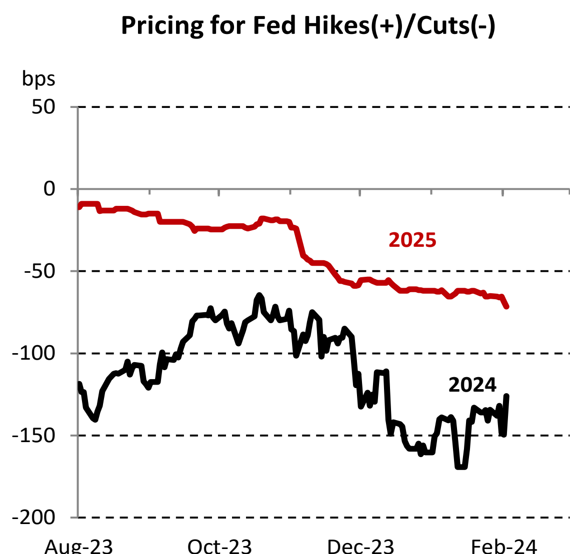
Key data release and events this week:

- *Indonesia 4Q23 growth to print at 5.0% YoY.*
- *The RBI and BOT are likely to stay on hold.*
- *Inflation to cool in the Philippines and Taiwan, and stay negative in China and Thailand.*

Chart of the Week: Easing expectations fading

With US GDP Nowcasting running at 4%+ for 1Q24 and January payrolls surging by 353k, markets have gone from pricing in a 90% chance of a March rate cut to about 20% in the span of a month. Despite favourable inflation numbers, there is growing recognition that the Fed is in no hurry to cut, especially with stock markets setting records, long-term rates declining sharply, and credit spreads compressing to historic lows. We stay with our forecast that rate cuts are not coming before mid-year.

Pricing for Fed Hikes(+)/Cuts(-)



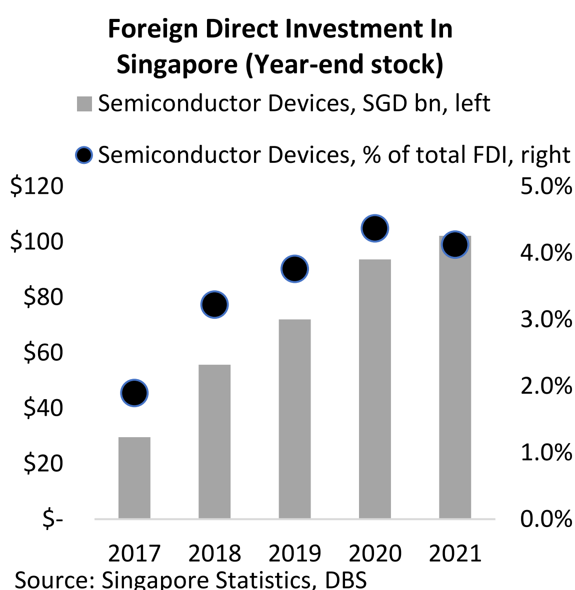
Source: Bloomberg, DBS

Refer to important disclosures at the end of this report.

Commentary: IC investment to the fore

Singapore is the world's third largest exporter of integrated circuits fabricated on semiconductor chips. Yet, there are reasons why semiconductor-related investments could be fading here. Capital requirements are enormous, with cutting edge large semiconductor fabrication plants or fabs costing tens of billions of dollars, with only a few tech giants dominating the production landscape. Singapore has considerable constraints of land and water, critical ingredients in the operations of fabs. It has tech talent, but they don't come cheap.

And yet, the magnitude of foreign direct investment (both actual and committed) in Singapore's computer-related manufacturing sector, termed in the balance of payments as "Computer, Electronic and Optical Product," has ballooned. Annual data, available through 2021, show that the stock of investment in the sector doubled during 2017-21. Within the sector, semiconductors make up over 85% of total investments, a sharp change since 2017, when the share was barely 50%.



Source: Singapore Statistics, DBS

We are sure that when data from 2022 and 2023 become available, we will see even more impressive figures. Recent newsflow is encouraging; last September, US chipmaker GlobalFoundries opened a $4bn manufacturing plant in Singapore. Meanwhile, Vanguard International Semiconductor, an affiliate of TSMC, is planning to build its most advanced manufacturing facility ever in Singapore. Its Taiwanese counterpart United Microelectronics Corporation, the world's third-largest chipmaker, is building a $5bn plant. Applied Materials has started construction of a new $450mn factory in the city-state, as part of its eight-year expansion plan named "Singapore 2030."

Despite the constraints mentioned earlier, it is clear that global manufacturing giants continue to find Singapore an attractive location for advanced manufacturing. It may well be that the absolute cutting edge of advanced semiconductors will be made elsewhere, but there is an exceptionally wide spectrum of semiconductors and adjacent products that are at the heart of global tech hardware ecosystem for which Singapore remains a fertile ground. Singapore's world class logistics base, and its sizable suppliers and partners appear to be ready to embrace the surging investment flows.

Intriguingly, land and water constraints that can get in the way of building large fabs could be addressed by the recently signed the memorandum of understanding on the Johor-Singapore Special Economic Zone. Last week's installation of the Sultan of Johor as Malaysia's new King could be a further catalyst toward this. Singapore's semiconductor footprint may be about to expand.

Taimur Baig

Key forecasts for the week

Event	DBS	Previous
Feb 5 (Mon)		
Indonesia: GDP (4Q)	5.0% y/y	4.9% y/y
Thailand: CPI inflation (Jan)	-0.9% y/y	-0.8% y/y
Feb 6 (Tue)		
Philippines: CPI inflation (Jan)	2.4% y/y	3.9% y/y
Taiwan: CPI inflation (Jan)	2.3% y/y	2.7% y/y
Feb 7 (Wed)		
Malaysia: Industrial production (Dec)	0.6% y/y	0.6% y/y
Thailand: BOT benchmark rate	2.50%	2.50%
Taiwan: exports (Jan)	7.0% y/y	11.8% y/y
- imports	-13.7% y/y	-6.5% y/y
- trade balance	USD8.5bn	USD11.1bn
Feb 8 (Thu)		
China: CPI inflation (Jan)	-0.1% y/y	-0.3% y/y
India: RBI repurchase rate	6.50%	6.50%

Central bank policy meetings

Reserve Bank of Australia (RBA) (February 6): The RBA can afford to keep the cash rate target unchanged at 4.35%. This decision comes after a surprising hike last November, prompted by a rise in CPI inflation to 5.4% YoY in September from 5.2% in August, alongside a drop in the unemployment rate to a three-month low of 3.6% in September. Since then, there has been a notable decrease in inflation to 3.4% YoY, with the unemployment rate adjusting upwards to 3.9% in December. Any decision to pause will factor in inflation approaching the RBA's 1-3% target range and a real interest rate that finally entered positive territory.

While the RBA has the leeway to dial down its hawkish stance, it will not lower its vigilance against inflation. Wage growth hit 4.1% YoY in 3Q23, its highest since 2008. In contrast to the early rate hikes markets expect for the Fed and the ECB in March and May, interest rate futures see the RBA reducing rates later in the third quarter.

Bank of Thailand (BOT) (February 7): We expect the Bank of Thailand to maintain its policy rate at 2.50% during its first decision of 2024. Central bank officials have said that the current policy rate is broadly neutral and appropriate, amid pressures to ease policy, as seen from news reports in Jan. The BOT governor Sethaput Suthiwartnarueput said that Thailand's economy is recovering, albeit slower than expected.

The negative headline inflation, which will likely extend into Jan 2024's print, is not a concern to the authorities, as it has been due to government energy subsidies. The BOT's view contrasts with the government's description that the Thai economy is in 'crisis', with the Ministry of Finance lowering its 2024 growth forecast to 2.8% from 3.2% previously, and vs 2023's reduced 1.8%. The BOT's 2024 growth and inflation assessment will therefore be keenly watched, alongside whether the decision is unanimous. A shift away from previous unanimous votes could be a sign of differing views within the Monetary Policy Committee (MPC), which could portend the next big shift in monetary policy stance towards easing.

Forthcoming data releases

China: CPI deflation is expected to improve from -0.3% to -0.1% YoY. Food remains the main drag, evidenced by the 22% YoY drop in average pork price in Jan 2023. Consumption sentiment remains subdued as a negative wealth effect takes hold. The job market adds to the somber economic picture, with a notable 1.3% decline in average hiring wages observed in 38 major cities during 4Q2023.

Taiwan: January trade and inflation data are scheduled for this week. Exports growth is expected to ease to 7% YoY from the previous month's 11.8%, due to the retreat in export

orders, the conclusion of year-end demand peak seasons, and some disruption from the recent Red Sea crisis on shipping. We continue to expect exports to undergo a gradual, U-shaped recovery this year, supported by inventory restocking in the electronics sector and demand for AI-related semiconductors. CPI inflation is likely to ease to 2.3% YoY in January from the previous month's 2.7%, considering the diminishing impact of typhoons on food prices and stability in global oil prices. The upcoming Chinese New Year is expected to keep inflation figures elevated in February.

Malaysia: Dec 23's industrial production (IP) likely extended its expansion for the third straight month at 0.6% YoY. Such growth indicated stabilisation, but conditions remained muted, given the still challenging global economic environment. That said, the global electronics cycle is turning around, which should bode well for Malaysia's industrial activity in 2024.

Economics Team

FX: USD has the upper hand in navigating monetary policy

Central banks have pushed back against the market's early rate cut bets at their first policy meetings for 2024. However, they also telegraphed the end of the hiking cycle with caveats to hike again on disruptive price shocks, e.g., the Red Seas crisis elevating shipping and air freight costs. All wanted more proof that inflation would keep falling to target before they were comfortable considering rate cuts. What sets the Fed apart from its counterparts is the relative strength of the US economy.

DXY has an upside bias after closing last week at 103.9, above its month-long 102.8-103.8 range. The Fed Governors and Presidents speaking this week will align with Fed Chair Jerome **Powell's stance that a March rate cut was not the base case**. Over the weekend, Fed Governor Michelle Bowman warned that reducing rates too soon could require future rate increases to return inflation to target in the longer run. Last Friday's significantly stronger US nonfarm payrolls in January suggested a higher employment index in today's ISM services PMI survey. Also, watch if its prices paid index increased like manufacturing, signaling a surprise in next week's CPI inflation.

Reporting its first weekly close below 1.08 since 8 December, **EUR/USD is vulnerable if it trades below 1.0785** or its 100-day moving average. European Central Bank President Christine **Lagarde stood by her comment at Davos for a rate cut in the summer.** She reckoned rate cut discussions could start after the ECB completed its review by the end of spring, which falls between March and May in Europe. ECB Chief Economist Philip Lane speaks this Thursday. He had provided guidance that rate cut discussions would commence at the June meeting, following the conclusion of Eurozone wage growth negotiations after the April meeting. Lane could become more confident about inflation hitting the 2% target if tomorrow's ECB 3-year inflation expectations slow again from 2.2% in December.

We cannot rule out GBP/USD breaking below the 1.26-1.28 range. The Bank of England wants to keep policy sufficiently restrictive for sufficiently long. BOE depicted its worry over persistent domestic inflationary pressures in its projection for CPI inflation to temporarily hit the 2% target in 2Q24 before increasing to 2.75% by the end of 2024. However, a BOE staff paper highlighted the risk of the UK economy entering a technical recession in 1H24 if rates were unchanged for too long.

USD/CAD could revisit January's high (1.3540) after failing to close below 1.34 last week. Bank of Canada Governor Tiff **Macklem signaled his rate bias via the projections for inflation** to hold close to 3% in 1H24 before falling to 2.5% by the end of 2024 and returning to the 2% target in 2025. Macklem told the House of Commons Standing Committee on Finance that underlying inflationary pressures remained from near-term inflation expectations and wage growth. He also told MPs that 4Q23 GDP due at the end of February will be weak.

AUD/USD is set for more declines if it fails to hold above 0.65; the currency pair closed below its 100-day average (0.6535) last week. In contrast to the early rate hikes markets expect for the Fed and the ECB in March and May, interest rate futures see the Reserve Bank of Australia reducing rates later in the third quarter. However, the RBA could dial down its hawkish stance at tomorrow's meeting. Since the surprise hike in November, CPI inflation has fallen to 3.9% YoY in December from 5.4% in September amid a rise in the unemployment rate to 3.9% from 3.6%.

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