

**Ma Tieying**

Economist

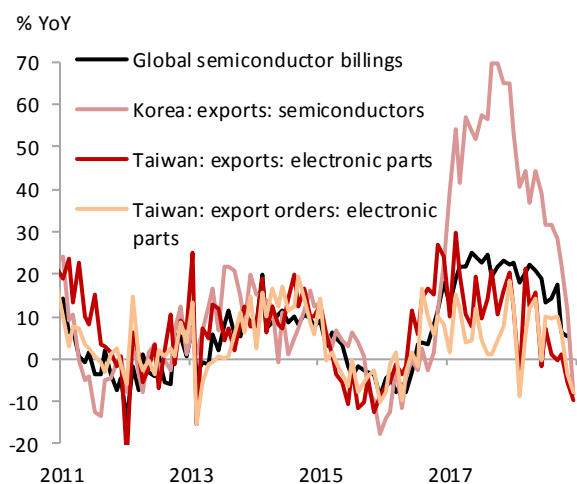


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- *The tech sectors in South Korea and Taiwan have been slowing rapidly since 4Q18.*
- *This was not due to the US-China trade war but other cyclical and structural reasons – market saturation, product maturity, and cross-brand competition in the smartphone sector, as well as the weakening of Chinese demand.*
- *Upcoming 5G network launches are expected to provide new catalysts for the smartphone market but comprehensive rollouts may only happen in 2020.*
- *A substantial recovery in Chinese demand, on the back of countercyclical policy stimulus, would also take time.*
- *Taiwan is more vulnerable than South Korea to the tech slowdown.*
- *We have lowered Taiwan's 2019 GDP forecast to 1.9% from 2.2% but maintained South Korea's growth at 2.6%.*

**The tech sector is slowing rapidly**

**The tech sectors in South Korea and Taiwan have been slowing rapidly since 4Q18.** The double-digit growth in South Korea's semiconductor exports over the past two years has ended with the 8.3% contraction in December. In Taiwan, the pace of contraction has picked up from November to December, from -5.7% to -9.9% in the exports of semiconductors and other electronic parts, and from -3.5% to -8% in electronics export orders. As a leading indicator, the latter has pointed to further weakness in export shipments in early-2019.

**Key indicators for electronics exports**

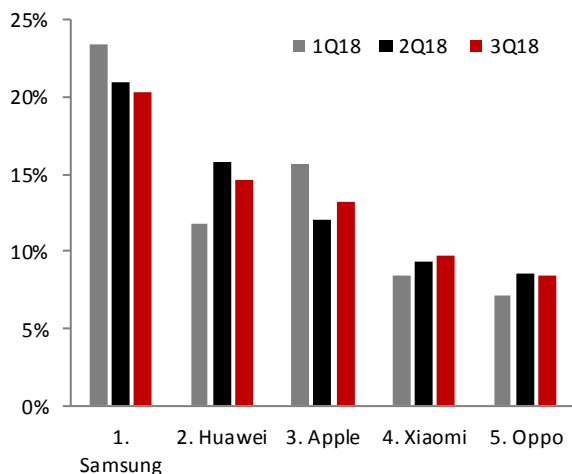
Sources: CEIC, WSTS, DBS

The ongoing tech slowdown cannot be solely blamed on the US-China trade war (electronics products have been largely spared from punitive tariffs so far). Other cyclical and structural factors were also responsible.

First, **growth in the global smartphone sector has been weighed by market saturation and product maturity.** The smartphone penetration rate in the key developed markets (e.g. the US, UK and Germany) has reached close to 80%. In China, it has exceeded 55% (Newzoo, 2018). As the phones get more durable, the product upgrade cycle has also been lengthened. According to BayStreet Research, most smartphone users, on average, take 31 months to upgrade to new phones compared to 23 months in 2014.

**Cross-brand competition in the global smartphone market has intensified.** China's Huawei has, since 2Q18, surpassed the US's Apple to become the world's second largest smartphone vendor based on market share. China's Xiaomi has also started to challenge the leading position of South Korea's Samsung in emerging markets like India and Indonesia. The displacement of Apple and Samsung bodes ill for their suppliers in Taiwan and South Korea respectively. The rise in Chinese smartphone brands could mean a rise in China's imports of chips and semiconductors from Taiwan and South Korea. But import substitution could happen in certain fields, where the Chinese local suppliers have strong capacity today (e.g., display panels, low-end chips).

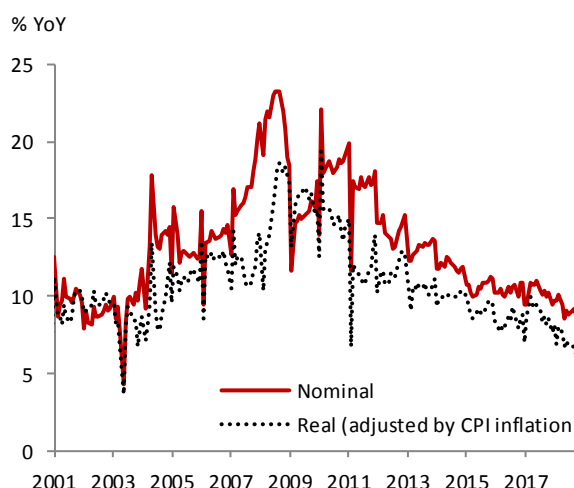
Worldwide smartphone market share



Sources: IDC, DBS

**It does not help that demand from China, the world's largest smartphone market, is weakening.** Retail sales in China grew 9% YoY in 2018, a slower pace than 10.2% in 2017, and the lowest rate over 15 years (ever since the 2003 SARS period). Sales of the big-ticket items clearly underperformed, including telecommunication equipment (7.1%) and automobiles (-2.4%). Cyclical headwinds come from the sluggish stock market, rising credit defaults, increase in household debt burdens, slowdown in household disposable incomes, among others.

China: Retail sales growth



Sources: CEIC, DBS

**The near-term outlook for the tech sector remains challenging.** Given the market saturation and product maturity in the smartphone sector, game-changing features are needed to prompt global consumers to upgrade to new phones. The upcoming launch of the 5G networks is likely to provide such a catalyst in 2H19, but comprehensive rollouts may only happen in 2020.

A substantial recovery in Chinese demand, on the back of countercyclical policy stimulus, would also take time. The scale of the country's fiscal stimulus program implemented so far is not large. And the transmission effect of monetary easing is being constrained, due to the elevated credit risks.

## Taiwan is more vulnerable than South Korea

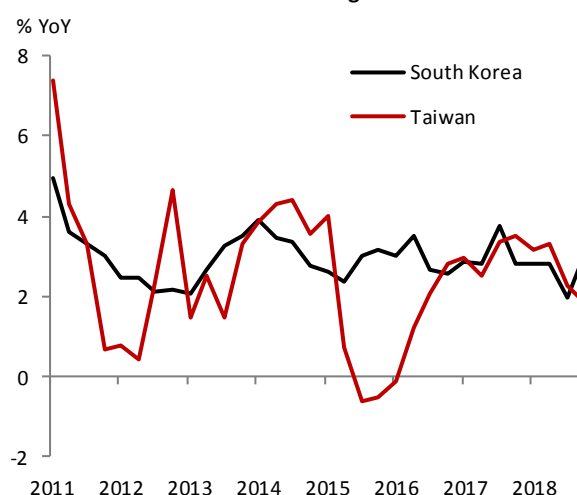
**Taiwan is more vulnerable than South Korea to the tech slowdown, given its higher exposure to the tech sector and higher reliance on external trade.**

Electronics account for more than 40% of Taiwan's total exports. And exports of overall goods and services account for 77% of Taiwan's GDP. In contrast, South Korea has a relatively diversified industrial structure, comprised of not only electronics (one third of total exports) but also automobiles, vessels and commodities. Exports-to-GDP ratio is relatively low at 55%.

**South Korea is better prepared than Taiwan in terms of domestic policy support.** Government spending will increase strongly by 8.5% this year and modestly widen the fiscal deficit ratio by 0.1ppt to 1.8% of GDP, according to the FY19 budget approved by the National Assembly. In Taiwan, fiscal consolidation remains on the government's policy agenda. The FY19 general budget plans a modest 1.6% increase in expenditures, which is aimed to bring the fiscal account to a roughly balanced position this year.

**Taiwan's economy has underperformed.** The economy grew only 1.8% YoY (1.6% QoQ saar) in 4Q18, below the 2.1% we expected. It was also the slowest growth reported over ten quarters. Net exports deducted a notable -1.4ppt from the headline growth. In contrast, South Korea's growth held steady at 3.1% YoY (3.9% QoQ saar) in 4Q18. Export contribution remained positive from non-tech exports which held up well from an earlier Chuseok festival (in September vs October) last year. Government consumption and investment also increased strongly to bolster South Korea's growth in 4Q18.

South Korea & Taiwan: Real GDP growth



Sources: CEIC, DBS

**We have lowered Taiwan's 2019 GDP growth forecast to 1.9% from 2.2%** on account of its high exposure to the tech sector (and its downside risks in the near-term) and lack of domestic policy stimulus. For the time being, we find no need to tweak our 2.6% growth forecast for South Korea in 2019.

Related reports:

[Taiwan faces more risks from weak PMIs than South Korea](#)  
[DBS 2019-20 outlook: Fading momentum](#)  
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**Sources:** Data for all charts and tables are from CEIC, Bloomberg and DBS Group Research (forecasts and transformations).

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