

Tracking Asian exports



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Key points

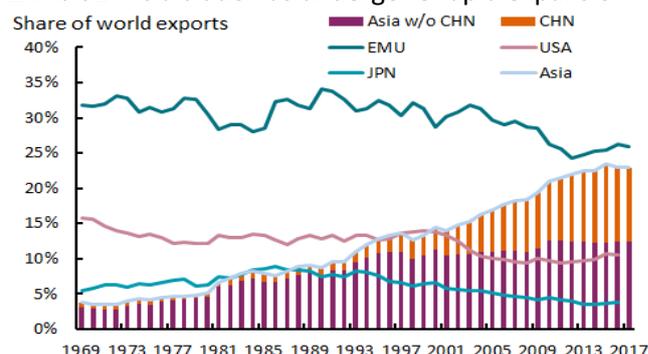
- Asia's exports have witnessed rapid expansion over the past decades. Its share in world exports went from below 5% to the current 23%, second only to the Eurozone.
- Asia's trade is not only important in a global context, but is also an important driver of economic growth, as reflected in the high trade-to-GDP ratio for many Asian economies.
- Asia's export structure went through fundamental changes before and after the global financial crisis (GFC) including: 1) a decline in trade elasticity, indicating that exports growth has been slower than domestic activities; 2) an apparent end to the convergence of Asia's trade with emerging (EMs) and developed markets (DMs), suggesting the export slowdown was driven by weaker demand in both EMs and DMs.
- We have built an export growth tracking model to capture the growth trend in Asia trade. It captures 87% of the movement in Asia export growth and provides a short-term forecast.
- Given the latest improvements in model inputs, our model suggests a gradual recovery in Asia's exports may be taking place.

Asia plays a vital role in global trade

International trade has undergone significant expansion in recent decades. According to the World Trade Organization (WTO), global trade volume has, on average, expanded twice as fast as real GDP since the 1980s. Even though trade growth has slowed since the global financial crisis (GFC), the average trade-to-GDP growth ratio has remained above one over the past decade.

As a region that relies on trade to power its economies, Asia has benefited tremendously from the acceleration of globalisation and the pursuit of free trade. The wide-spread adoption of an export-driven growth model has been the key to the successful rise of Japan in the 1950s, the "Asian Tigers" since the 1960s, and China since the 2000s after it joined the WTO¹. The share of Asia (ex-Japan) in global exports rose steadily, overtaking the US in early 2000s and is now second only to the Eurozone at 23% (Exhibit 1). While China has contributed the lion's share of this development, Asia ex-China has maintained its market share.

Exhibit 1: Asia trade has undergone rapid expansion



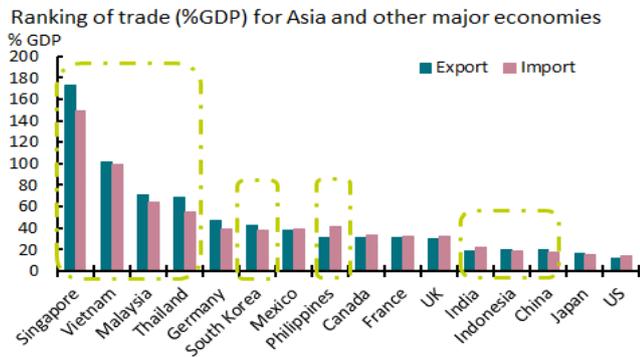
Source: World bank and AXA IM Macro Research

The importance of trade for Asia is also shown in the high trade-to-GDP ratios of several economies. This is particularly true for the small and open economies, such as Singapore, Vietnam, Malaysia and Thailand, where total export and import values have, in some cases, exceeded GDP (Exhibit 2). China, in absolute values, is the world's largest trading nation, but its trade is now a small part of the overall economy as its

¹ Yao, A., "China: continue the economic miracle – uncovering the growth drivers of the past" AXA IM Investment Research, 21 May 2014.

growth model has rebalanced towards consumption. India and Indonesia are also more domestically-oriented economies, although they remain major players in global export markets in areas, such as energy and agricultural goods.

Exhibit 2: Trade is important for Asian economies



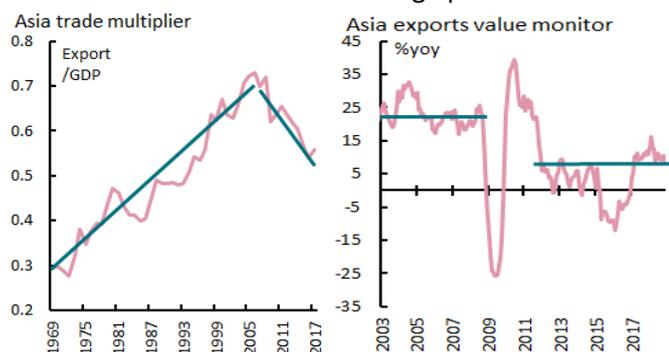
Source: World bank and AXA IM Macro Research

Export structure undergoes fundamental changes

During the 2008/09 financial crisis, the world economy endured a significant shock. Asia, which was already well integrated into the global supply chain, suffered from the economic fallout.

While trade flows have recovered somewhat from historic lows, there were two notable structural changes in Asia’s export activities. First, after decades of steady increase, Asia’s trade elasticity – the ratio of trade to GDP – declined, indicating that export growth post-crisis, has been slower than that of domestic activities. This is further demonstrated by the lower trend growth in Asia’s exports since the GFC, which has averaged 8%, below the 18% pre-GFC (Exhibit 3).

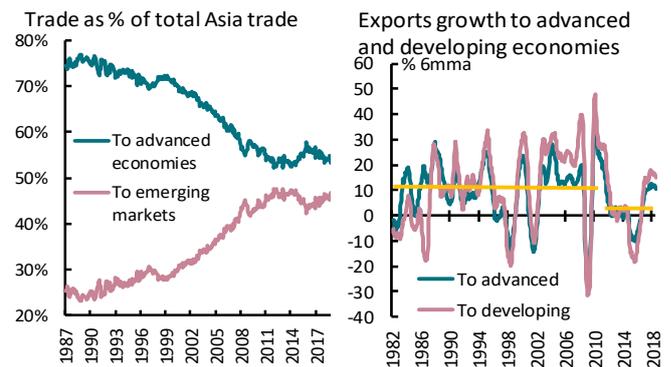
Exhibit 3: Obvious structural change post-crisis



Source: World bank, CEIC and AXA IM Macro Research

Furthermore, as Exhibit 4 shows, prior to the GFC, there had been an obvious convergence between Asia’s trade with emerging markets (EMs) and developed markets (DMs). After 2008, the convergence has stopped and the share of trade with both DMs and EMs has stayed roughly constant, suggesting that Asia’s export slowdown has been driven by lower demand from both regions.

Exhibit 4: The growth slowdown was broad-based

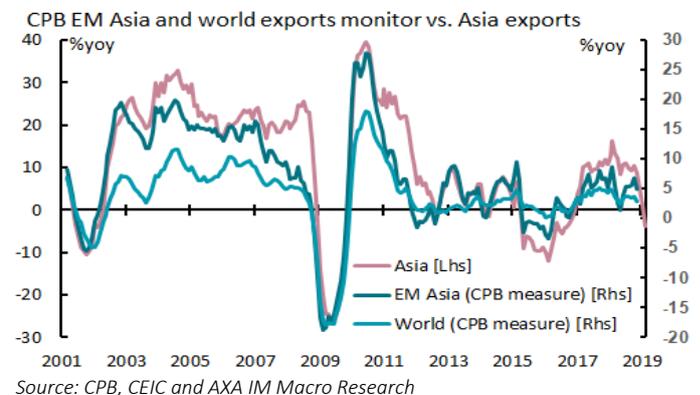


Source: CEIC and AXA IM Macro Research

Tracking Asia exports growth

The trade cycle is worth monitoring closely, given the importance of trade as a driver of Asia’s economic growth. The monthly trade indicator, which is a weighted average of export value growth of the nine largest Asian economies², has shown a close correlation with that of CPB³ trade volume (Exhibit 5). The latter is more comprehensive and expressed in real terms but is published with a considerable time lag. Hence, our measure provides a timelier monitoring of the trade cycle.

Exhibit 5: In-house exports growth measure provides a timely update



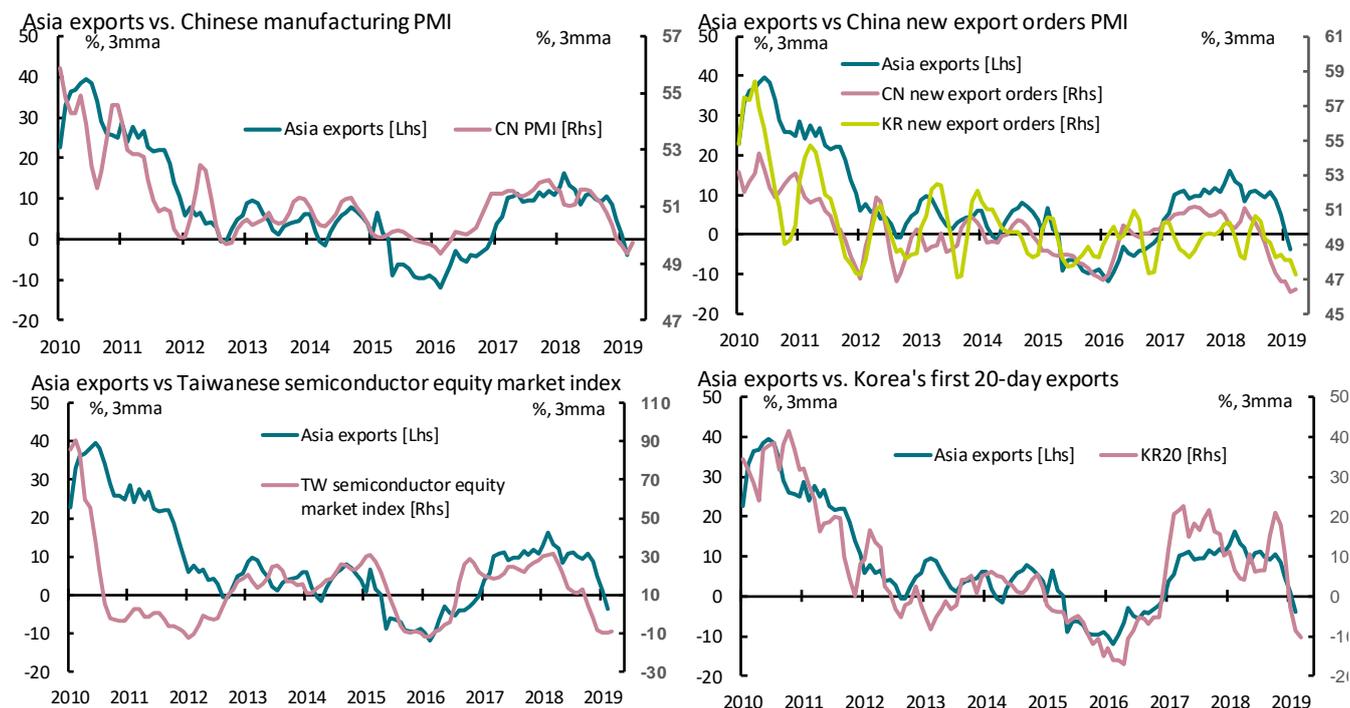
Source: CPB, CEIC and AXA IM Macro Research

We have also developed a model to forecast Asia’s export growth. On the demand side, headline Purchasing Managers Indices (PMIs) of China, the US and the Eurozone capture final demand from three of the world’s largest economies (G3). These three regions alone account for almost 40% of Asian exports in 2018. We have also looked at total export orders of China and Korea to account for demand from outside of G3. It is well known that Asian trade is strongly influenced by the global technology cycle, which we proxy by using the Taiwanese semiconductor equity index. Finally, we

² It consists of China, India, Indonesia, Malaysia, Singapore, Philippines, Korea, Thailand and Taiwan.

³ CPB Netherlands Bureau for Economic Policy Analysis is well-known for its monthly world trade monitor and is widely quoted by brokers for its broad coverage in volume terms.

Exhibit 6: Variables that historically showed tight correlation with Asia export growth



Source: Markit, CEIC and AXA IM R&IS calculations

have included Korea's "First 20-day Exports" to gain a publication lead over its full-month data. Our Granger Causality test shows that Korea's export growth has a statistically significant leading relationship over aggregate trade activities in Asia. Exhibit 6 shows the co-movements between these variables and our measure of Asia's export growth.

We then used these variables to construct a regression model to provide a short-run forecast for future trade variations in the region. Due to data limitations and the regime shift before and after the GFC, the model is estimated for the post-crisis period from 2010 to December 2018. We also smoothed the data by converting them to three-month moving averages (3mma). The best Asia exports monitor model (AEM) is demonstrated in Exhibit 7. This model explains 87% of the movement in Asian exports over the period and performs well against a number of statistical-back tests.⁴

At the time of writing, four (Korea, Taiwan, China and Indonesia) of nine Asian countries have released March exports figures, each showing an improvement from the previous month. China was the only one that returned to growth, while the rest remained in negative territory.

⁴ The model is $\text{Asia exports growth} = 0.43\text{Korea first 20-day exports} + 1.52\text{Chinese PMI} + 1.12\text{Korean new export orders PMI} + 0.04\text{Taiwanese semiconductor equity market index} + 1.05\text{Chinese new export orders PMI} - 181.67$. An out-of-sample forecast was carried out by running the model until December 2017, and AEM model estimation for whole of 2018 was compared with the actual Asia exports growth for 2018. The two-series produced close alignment.

According to Exhibit 7, the AEM suggests trade across the Asian region will continue to slow on a 3mma basis. However, with model inputs already showing signs of an upturn in March, we are likely to see a bottoming of trade growth on a single month basis.

Exhibit 7: Model suggests possible signs of recovery



Source: AXA IM Macro Research

Receding risks of a Sino-US trade war should further alleviate pressure on Asia's exports. However, external performance is unlikely to be the main driver of Asian growth in 2019 due to an ongoing weak global economic environment. Instead, stronger fiscal stimulus (increased government spending planned for many Asian economies including China, Korea, Taiwan, Thailand and Singapore) and accommodative monetary policies are likely to lift domestic demand growth in Asian economies, supporting overall growth in the region.

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