

Positive on electronics and electrical sector

E&E sector is set for a comeback despite the recent setback in Malaysia’s export numbers
Positive global & regional trends; global PMI and semiconductor sales have improved
Inventory drawdown, capex spending, product replacement cycle supports our view

Glimpses of turnaround in E&E exports in the region

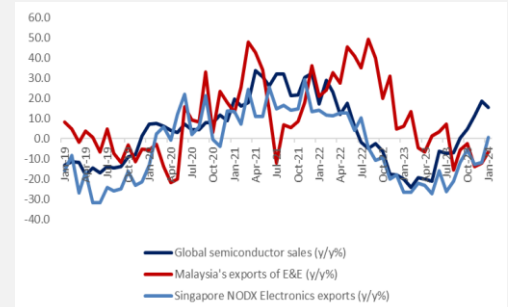
Despite the setback in Malaysia’s trade numbers for February, we maintain our view that export orders of electronics and electrical (E&E) goods have bottomed out and are set for a comeback. In fact, regional peers and major E&E exporting countries like Singapore, Taiwan and South Korea have shown signs of a turnaround, with Singapore’s NODX of E&E expanding for the second month and by a faster pace of 5.2% y/y (Jan: +0.6% y/y), South Korea’s exports of semiconductor registering strong growth of 66.7% y/y (Jan: +56.2% y/y), while Taiwan’s exports orders for E&E registered double digit growths in January.

Projections and forward-looking indicators suggest that Malaysia’s E&E exports should follow suit soon

Lending further support to our optimism that Malaysia’s E&E sector is riding on an upward trajectory are:

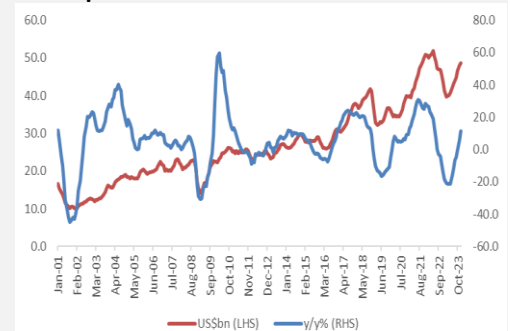
1. **The Semiconductor Industry Association (SIA) expects sales to grow by 13.1% y/y for 2024**, rebounding from -8.2% y/y in 2023. As it is, global sales recorded its fifth consecutive month of expansion and three consecutive months of double-digit growths since November 2023 (Nov: +11.4% y/y vs Dec: +18.7% y/y vs Jan: +15.2% y/y), led by strong double-digit y/y sales for China, Americas and Asia Pacific region. For Malaysia, E&E exports typically lagged global semiconductor sales by about 5 months with a correlation of 0.67, suggesting that it is due for a turnaround as soon as March (Please refer to Figure 1).
2. According to International Data Corporation’s (IDC) “Semiconductor Market Outlook: Investment and Innovation Accelerate Next Growth Cycle” report, **next-generation computing architectures and AI will accelerate a replacement cycle in smartphones and PCs in 2025**. Historically, our in-house estimates product replacement cycle of around 3.5-4.0 years for E&E (Please refer to Figure 2). With global semiconductor sales last peaked in mid-2022, this suggests that semiconductor will peak towards end-2025 for this cycle.
3. With a strong correlation of 0.87, global manufacturing PMI had broadly led global semi-conductor sales by 2-5 months since 2021. With PMI turning expansionary in January, we expect global semi-conductor sales to accelerate further towards mid-year (Please refer to Figure 3).
4. Although fab utilization has remained low, capital expenditures and fab utilization rates are expected to see a mild recovery starting in 1Q as automotive and industrial elevated inventory levels returns to normal, while electrification and AI drives long-term content growth. According to the Semiconductor Manufacturing Monitor (SMM) report, prepared by SIA and TechInsights, memory capex is projected to increase 9% q/q and 10% y/y in 1Q, while non-memory capex is expected to climb 16% during the quarter. Fab utilization rates also saw a modest improvement from 66% in 4Q of 2023 to 70% in 1Q, and fab

Figure 1: Malaysia’s E&E exports tend to lag global semiconductor sales by five months, suggesting a possible turnaround as soon as March



Source: Bloomberg

Figure 2: IDC projects a replacement cycle in smart phones and PCs in 2025



Source: Bloomberg

Figure 3: Global manufacturing PMI typically leads 2-5 months, turned expansionary in January

capacity grew 1.3% 4Q of 2023 and is projected to match those gains in 1Q. (Please refer to Figure 4)

Shift in market dynamics

More importantly, over a longer-term perspective, there has been a continuing shift in the dynamics, drivers and trends in the E&E sectors, which could benefit Malaysia, or not.

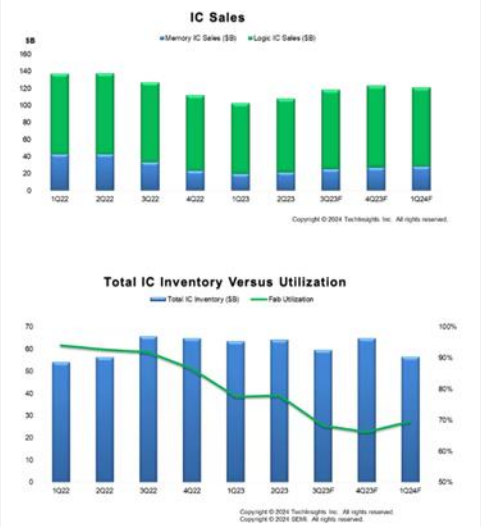
- 1) Early adoption of vehicle electrification and autonomous driving, as well as declining cost of EV vehicles have benefited corporates like BYD and the yuan.
- 2) Rising prevalence of chronic diseases and shifts to homecare settings, will drive demand for portable devices as well as increased investment in medical technology companies. According to Fortune Business Insights, while North America continued to dominate this industry (accounting for 38.3% of the global share and expected to expand at a 10-year CAGR of 5.9% by 2030), Latin America and the Middle East & Africa are expected to register a substantial CAGR going forward due to rapidly developing healthcare infrastructure in countries like Brazil and Saudi Arabia.
- 3) A geopolitical shift - **US and European tech companies have started to diversify its supply chains from China** after US added sanctions to curb the advancements of China's tech capabilities and after Washington's plans to lessen dependence on chipmaking hubs. This could potentially benefit countries like India and those in South East Asia. Already, US Commerce Secretary Gina Raimondo has already urged the doubling of chip plants in the Philippines, A&T will officially open its first plant in Kulim, Malaysia while TSMC opened its first chip plant in Japan as it diversifies supply chains away from Taiwan amid intensifying U.S.-China trade tensions.

The **CHIPS and Science Act was enacted in 2022 and is expected to provided \$52.7bn for American semiconductor research, development, manufacturing, and workforce development.** This includes \$39bn to bolster chip making in the US, with the latest being the \$8.5bn grant awarded to Intel. While this is positive for the US economy and Dollar, growing talent gap has emerged as a headwind recently, with TSMC saying that it is delaying production at its \$40bn plant due to lack of workers.

- 4) Nvidia and AI - Nvidia's blockbuster results have not only sent tech stocks and the broader US equity markets rallying, but also drove Stoxx Eur 600 and Nikkei 225 to their record highs recently. This is not surprising given that it is one of the "Magnificent Seven" and with a market cap of \$2.3tn, easily accounting for 5% of Nasdaq's market cap.

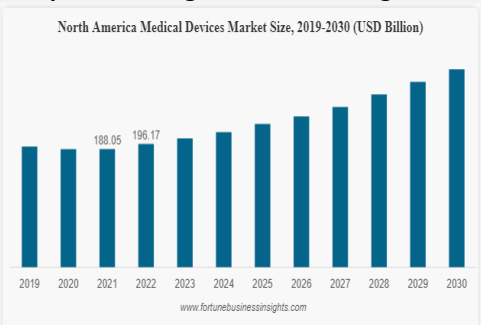
As such, it is only apt we use Nvidia as bell-weather for the industry. As widely known and reaffirmed by Nvidia's results, **the industry will be driven by accelerating demand for AI servers and AI-enabled end point devices.** SEC filing showed that Nvidia's result have been largely driven by data centres, doubling in revenue at least, accounting for approximately 80% of its revenue from say, 43% two years and more importantly, what caught our eye and the market by surprise, was the revenue breakdown by region which showed that revenue from Singapore quadrupled from \$0.5bn to \$2.7bn within the span of one year, probably explaining the strong SGD, and its share of revenue increased from 9% to 15%. This is compared to US, Taiwan and China (including Hong Kong) at 35%, 24% and 22% (Prior year: 36%, 19% and 19%).

Figure 4: Capex and fab utilization rates to see mild recovery starting in 1Q



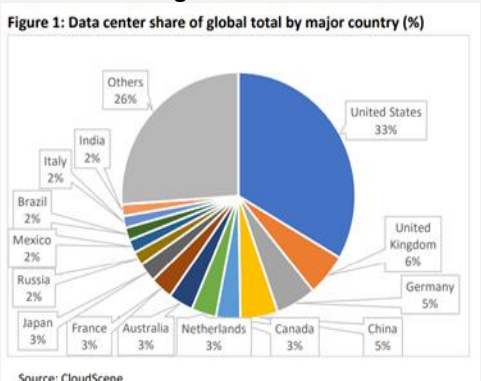
Source: <https://www.semi.org/en/news-media-press-releases/semi-press-releases/global-semiconductor-manufacturing-industry-poised-for-2024-expansion-semi-reports>

Figure 5: While North America continued to dominate, Middle East & Latin America is expected to register substantial growth



<https://www.fortunebusinessinsights.com/industry-reports/medical-devices-market-100085>

Figure 6: The US is way ahead in data center share of global trade



Source: United States International Trade Commission

Hong Leong Bank Berhad

Fixed Income & Economic Research, Global Markets
Level 8, Hong Leong Tower
6, Jalan Damanela
Bukit Damansara
50490 Kuala Lumpur
Tel: 603-2081 1221
Fax: 603-2081 8936
Email: HLMarkets@hlbb.hongleong.com.my

DISCLAIMER

This report is for information purposes only and does not take into account the investment objectives, financial situation or particular needs of any particular recipient. The information contained herein does not constitute the provision of investment advice and is not intended as an offer or solicitation with respect to the purchase or sale of any of the financial instruments mentioned in this report and will not form the basis or a part of any contract or commitment whatsoever.

The information contained in this publication is derived from data obtained from sources believed by Hong Leong Bank Berhad ("HLBB") to be reliable and in good faith, but no warranties or guarantees, representations are made by HLBB with regard to the accuracy, completeness or suitability of the data. Any opinions expressed reflect the current judgment of the authors of the report and do not necessarily represent the opinion of HLBB or any of the companies within the Hong Leong Bank Group ("HLB Group"). The opinions reflected herein may change without notice and the opinions do not necessarily correspond to the opinions of HLBB. HLBB does not have an obligation to amend, modify or update this report or to otherwise notify a reader or recipient thereof in the event that any matter stated herein, or any opinion, projection, forecast or estimate set forth herein, changes or subsequently becomes inaccurate.

HLB Group, their directors, employees and representatives do not have any responsibility or liability to any person or recipient (whether by reason of negligence, negligent misstatement or otherwise) arising from any statement, opinion or information, expressed or implied, arising out of, contained in or derived from or omission from the reports or matter.

Potential and actual conflict of interest may arise from the activities of HLB Group. HLB Group constitute a diversified financial services group. These entities engage in a wide range of commercial and investment banking, brokerage, funds management, hedging transactions and other activities for their own account or the account of others. In the ordinary course of their business, HLB Group may effect transactions for their own account or for the account of their customers and hold long or short positions in the financial instruments. HLB Group, in connection with its business activities, may possess or acquire material information about the financial instruments. Such activities and information may involve or have an effect on the financial instruments. HLB Group have no obligation to disclose such information about the financial instruments or their activities.

The past performance of financial instruments is not indicative of future results. Whilst every effort is made to ensure that statements of facts made in this report are accurate, all estimates, projections, forecasts, expressions of opinion and other subjective judgments contained in this report are based on assumptions considered to be reasonable as of the date of the document in which they are contained and must not be construed as a representation that the matters referred to therein will occur. Any projections or forecasts mentioned in this report may not be achieved due to multiple risk factors including without limitation market volatility, sector volatility, corporate actions, the unavailability of complete and accurate information. No assurance can be given that any opinion described herein would yield favorable investment results. Recipients who are not market professional or institutional investor customer of HLBB should seek the advice of their independent financial advisor prior to taking any investment decision based on the recommendations in this report.

HLBB may provide hyperlinks to websites of entities mentioned in this report, however the inclusion of a link does not imply that HLBB endorses, recommends or approves any material on the linked page or accessible from it. Such linked websites are accessed entirely at your own risk. HLBB does not accept responsibility whatsoever for any such material, nor for consequences of its use.

This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation. This report is for the use of the addressees only and may not be redistributed, reproduced or passed on to any other person or published, in part or in whole, for any purpose, without the prior, written consent of HLBB. The manner of distributing this report may be restricted by law or regulation in certain countries. Persons into whose possession this report may come are required to inform themselves about and to observe such restrictions. By accepting this report, a recipient hereof agrees to be bound by the foregoing limitations.