

3. Sustaining Export Competitiveness in a Rapidly Changing Global Environment⁷¹

Various global trends—such as the transition to clean energy and rapid technological transformation—have cast a shadow over the long-term outlook for Thailand’s export competitiveness. Yet, while these ongoing shifts bring risks to Thai exporters, they also bring new opportunities—especially if the economy can rapidly upgrade its existing strengths in auto and electronics manufacturing, while simultaneously leveraging on its emerging renewables sector. Ultimately, Thailand’s future economic competitiveness will hinge on its ability to re-engineer its existing export strengths into these new emerging areas, through the help of well-designed investment policies and incentives.

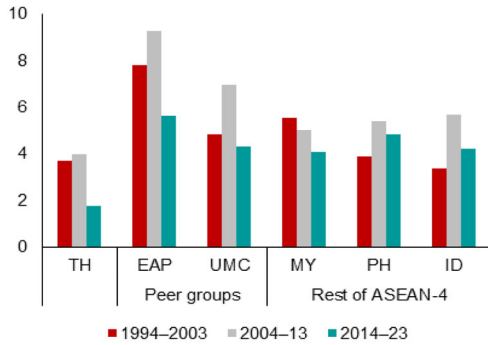
Background

1. In recent years, Thailand’s relative economic performance compared to its peers has raised concerns about its competitiveness. Since the mid-2000s, its economic growth has consistently underperformed its peers in Asia. In the last three decades, not only has its growth momentum lagged that of Indonesia, Malaysia, and the Philippines (collectively, the ASEAN-4, including Thailand), but it also appears to have been impacted more severely by the various shocks of the last 10 years (Figure A3.1). This persistent underperformance is also reflected in the steady downgrade of market expectations when it comes to Thailand’s long-term growth potential (See Selected Issue 2: Thailand’s Long-Term Growth Potential: The Case for Reform). An examination of net foreign direct investment inflows across ASEAN also appears consistent with the more subdued growth outlook for Thailand vis-à-vis those of its neighbors. In the last decade, FDI inflows have averaged around 1.5 percent of GDP, versus 6.4 percent for the BCLMV economies, and about 8.1 percent for the rest of the ASEAN. Exports of goods and services—a measure of how an economy competes successfully in world markets—illustrate a similar pattern, with Thailand’s export growth averaging at less than 1.0 percent in recent years, versus export growth rates of 2.4–10.9 percent elsewhere in the region (Figure A3.2).

2. One key concern is Thailand’s ability to pivot its existing export strengths to adapt to and benefit from the global shifts that are taking place. The ongoing global trade and investment configuration, transition to a low-carbon world, and rapid technological transformation are among the key structural shifts facing ASEAN+3 economies (Hinojales 2024). To a certain extent, Thailand has been able to benefit from global supply chain relocation activities, given its strong existing capabilities in the manufacture of products that have been affected by trade tensions—such as electronics and electrical equipment (AMRO 2024). However, the shift to clean energy across the world and swift advances in frontier technologies raise critical questions on the sustainability of Thailand’s traditional areas of export strength.

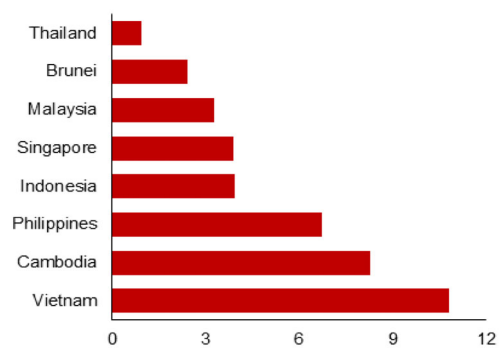
⁷¹ Prepared by Marthe M. Hinojales.

Figure A3.1. Thailand and Selected Economies: Growth Rates, by Period (Percent)



Source: World Bank; and AMRO staff calculations.
Note: EAP = East Asia and the Pacific; ID = Indonesia; MY = Malaysia; PH = the Philippines; TH = Thailand; UMC = upper middle-income countries (per World Bank definition).

Figure A3.2. Selected ASEAN: Annual Export Growth, 2014–23 (Percent)



Source: World Bank; and AMRO staff calculations.
Note: Figures refer to average growth over the period. Brunei Darussalam is referred to as "Brunei" for brevity.

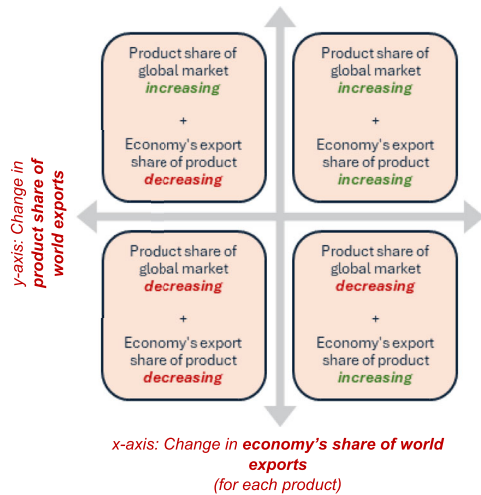
A Medium-Term Picture of Thai Exports

3. The consequences on economic growth, employment, and overall welfare would be especially severe if no transformation in Thailand’s export profile were to take place. To provide an initial view on how Thailand’s export competitiveness could evolve based on prevailing trends and in the absence of policy adjustments, a product export profile for Thailand from 2022 to 2030 was constructed. This forecast profile—which covers about 270 different commodities—builds on two variables: (1) the forecast *change in each commodity’s share* to global exports over the reference period, and (2) the forecast *change in Thailand’s share of global exports in that product*.⁷² For any product, the most ideal scenario is being located in the upper right-hand quadrant: this represents a situation where the economy is competing successfully in a product where global demand is growing (Figure A3.3). Conversely, a position in the upper left-hand quadrant suggests that an economy is losing competitiveness in sectors that are forecast to face higher demand. The lower right-hand quadrant represents potential export gains, but these gains are in traditional products which are unlikely to be sustainable in the long term. Lastly, the lower left-hand quadrant would consist of so-called “sunset” products where an economy could consider eventually diversifying away from.

4. Without significant adjustments, about 36.0 percent of Thailand’s exports could see their shares of global demand shrink by 2030—indicating potential loss in competitiveness. This group of products, in fact, includes those where the economy’s biggest export strengths are currently: motor vehicles and parts, semiconductors, as well as electronics (and related) goods (Figure A3.4). Demand for these is expected to increase globally, yet Thailand’s shares of the global market are projected to decrease—suggesting lower demand for Thai exports and that alternative markets will be meeting the forecast increase in consumption. For motor vehicles, in particular, the projected decline in Thailand’s share in the next five years most likely reflects a scenario where it continues to primarily export vehicles that run on internal combustion engines, which currently

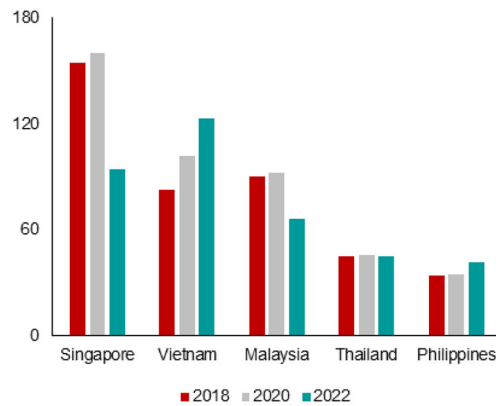
⁷² This analysis leverages on IHS Markit’s Global Trade Analytics Suite (GTAS) Forecasting database, including medium-term demand forecasts for 270 commodities at the country level. Forecasts are derived from a set of three statistical models, including a SARIMAX with principal components analysis ([IHS Markit 2024](#)).

Figure A3.3. Product Export Profile: A Diagram



Source: AMRO staff, building on an earlier work by KKP Research (2024).

Figure A3.5. Selected ASEAN: High-technology Exports (Billions of USD)

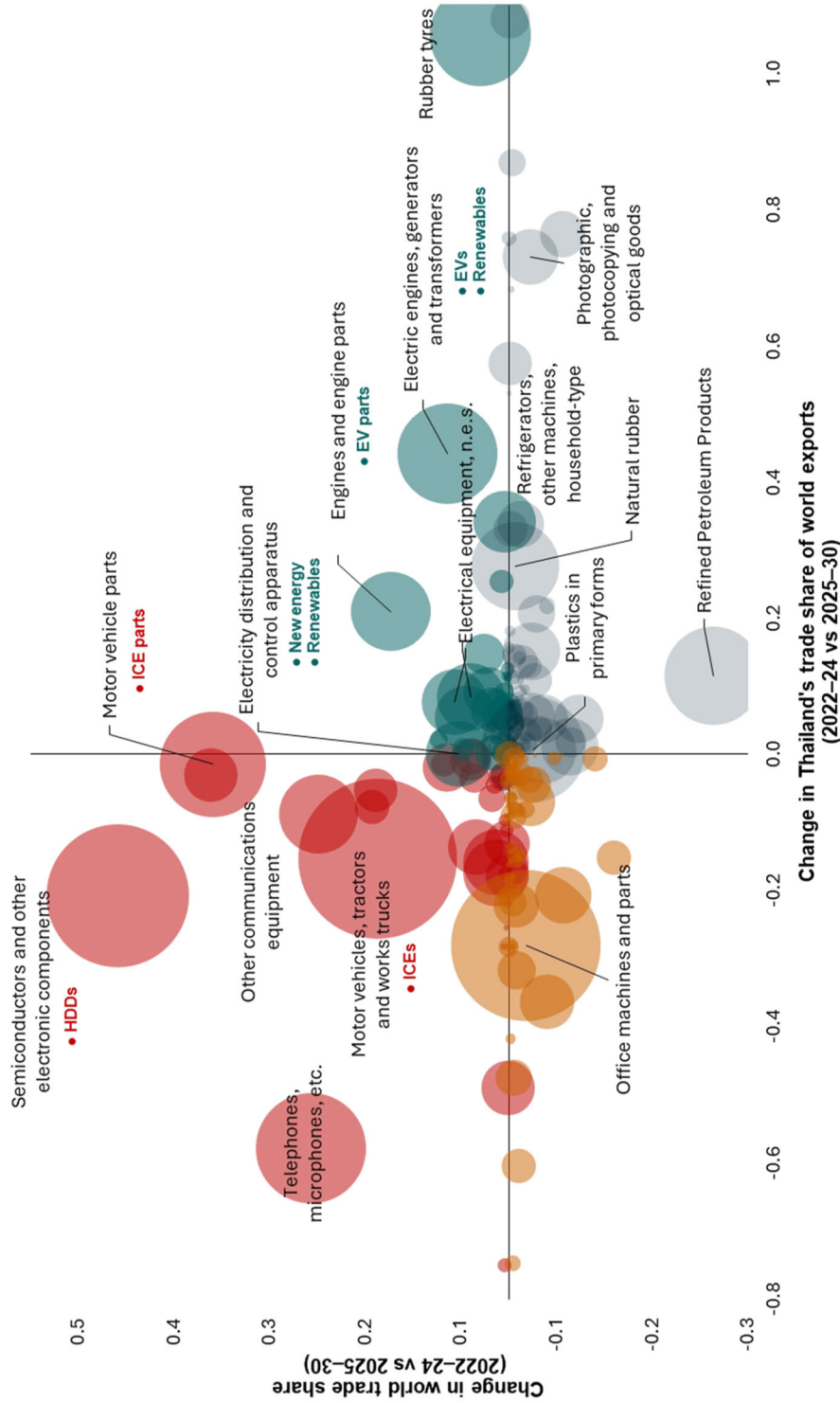


Source: World Bank; and AMRO staff calculations.
Note: As defined by World Bank, high-technology exports are "products with high research and development intensity, such as in aerospace, computers, pharmaceuticals, scientific instruments, and electrical machinery."

comprise 90.0 percent of its exports.⁷³ Similarly, the projected fall in the economy's share of the global electronics market is a reflection of prevailing trends, i.e., that Thailand will focus on hard disk drive manufacturing (especially for standard, personal consumption), or that there will be no substantial improvement in the complexity of its technology exports, which is already lower than its current peers (Figure A3.5). These results clearly suggest that without a re-engineering of affected industries to meet future demand for clean energy and frontier technologies, exports will unlikely remain a significant driver of Thailand's potential growth. Without policies such as industrial and labor upgrading, for example, a third of Thailand's exports could be trapped in sectors that are expected to grow by only zero to 2.0 percent by 2030, and another 6.0 percent in sectors where demand is likely to contract (Figure A3.6).

⁷³ In fact, some market estimates suggest that electric vehicles will overtake ICEs, in terms of share of the global market, as early as 2026 (Bond and Butler-Sloss 2023).

Figure A3.4: Thailand: Forecast Export Profile to 2030
(Change in percentage points: 2022–24 versus 2025–30 forecast)



Source: IHS Markit; and AMRO staff calculations.
Note: Bubbles represent forecast size of that sector to Thailand's total exports for 2025-30. For axis readability, these sectors were excluded in the chart: canes, beet sugar and molasses (1.5%), heating and cooling equipment (2.0%), and rice (2.15%). Their size to future exports is indicated in parenthesis.

The Role of Transformative Policies

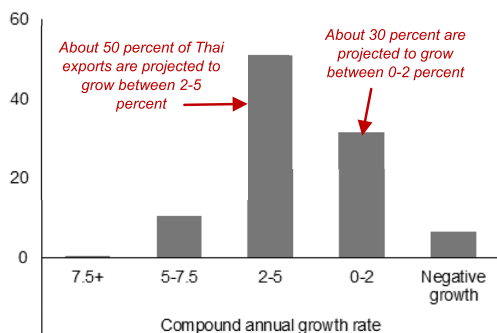
5. On a positive note, about 20.0 percent of Thai exports appear to be well-positioned to take advantage of the ongoing structural shifts. This set of export products, which corresponds to those in the upper right-hand quadrant of the forecast export profile, implies that expanding the renewables sector holds promise in driving Thailand's future competitiveness in the global market by 2030 (Figure A3.4). For example, the economy already has existing manufacturing capabilities in electric engines, generators, and transformers, which would successfully cater to the projected robust demand for cleaner energy. Its current strengths in exporting electricity distribution systems and in energy storage could be well-utilized as markets around the world upgrade their power grids to accommodate renewables. In fact, Thailand is already among the top 15 largest exporters of solar energy products, and was also the first-mover in ASEAN in the development of a wind-hydrogen hybrid power plant (AREO 2023). In other words, some of these exports could represent “low-hanging fruits.” Rapidly building on and leveraging on these existing assets could provide an upside that should help Thailand minimize the disruptions to economic growth that would arise from having to simultaneously re-engineer and re-tool its carbon emissions-intensive industries.⁷⁴

6. Aggressive investment promotion efforts by the authorities, especially catered to the targeted “S-Curve” industries, will be key to transforming Thailand’s competitive capabilities. These 12 industries—which include next-generation automotives (electric cars included), intelligent electronics, robotics, and advanced agriculture and biotechnology—are seen to drive innovation and economic transformation in Thailand (Eastern Economic Corridor 2024). These sectors will be crucial in reinvigorating the economy’s traditional areas of export strength—such as automotives—and in finding new sources of growth, such as advanced semiconductors (including those for clean energy) and AI products. The Board of Investments, along with the Eastern Economic Corridor, has put in place attractive incentives to facilitate both domestic and foreign investment.⁷⁵ Applications have continued to flow robustly into these priority areas, especially in electronics, electric automotives, digital industry, and chemicals (Figure A3.7). These four sectors tend to collectively account for nearly 60.0 percent of total applications; more importantly, they provide strong positive signals for Thailand’s much-needed industrial and exports transformation. Certificate issuances, which give the green-light for approved projects to break ground within three years, in the first quarter of 2024 suggest that nearly USD8.0 billion worth of projects—about 1.5 percent of GDP—are soon to be injected into the Thai economy. The positive impact on future growth and competitiveness—including in job creation—could be even larger, if certificate issuances remain at a steady and stable pace.

⁷⁴ Another 26.4 percent of Thai exports by 2030 fall under the lower right-hand quadrant (Figure A3.4). While the projected increase in Thailand's share to the global market for these products by 2030 seemingly represents an advantageous scenario, it is important to note that global demand for these products is forecast to *decline*—as in the case of refined petroleum products, for example. Thus, while short-term export gains could be had from Thailand continuing to rely on these sectors, these are unlikely to be sustainable, underscoring the need to diversify away from these products over time.

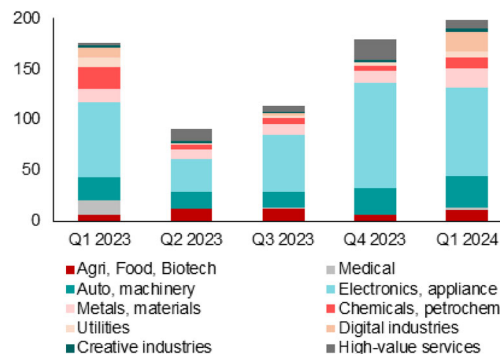
⁷⁵ These include 100-percent foreign ownership, no foreign employee quotas, tax exemptions, and corporate income tax reductions up to 13 years ([Birof 2024](#)).

Figure A3.6. Thailand: Export Composition, by Forecast Speed of Growth over 2022–30
(Percent share to total exports)



Source: IHS Markit; and AMRO staff calculations.
Note: These forecasts assume that prevailing trends continue.

Figure A3.7. Thailand: Foreign Direct Investment Applications
(Billion Baht)



Source: National authorities via CEIC; and AMRO staff calculations.

7. The presence of supportive enablers will ensure that these investment efforts translate into actual value for Thailand’s long-term competitiveness. To some extent, strong investment application volumes underscore investors’ continued confidence in Thailand’s capabilities as an international production base. Strengthening this confidence, however, requires strong improvements in the local workforce, infrastructure, and in current technological capabilities—with positive spillover effects beyond exports, to the wider economy (Table A2.2).⁷⁶ Thailand’s aging population is often seen as a pressing impediment to its future competitiveness, but this need not be the case—especially if the potential of productive aging could be harnessed (AMRO 2024).⁷⁷ The quality of Thailand’s infrastructure has also been identified as a key factor weighing down its overall competitiveness, especially when it comes to scientific infrastructure, health and environment, and education (IMD 2024).⁷⁸ Thailand’s spending on research and development, for example, has only averaged at less than 1.0 percent of GDP in the last 10 years (World Bank 2024). More broadly, infrastructure spending priorities must increasingly focus beyond the provision of basic infrastructure to one that meets the demands of a global economy increasingly focusing on innovation and sustainability. Similarly, fiscal policy has a greater role to play in catalyzing innovation. Small- and medium-sized enterprises, which comprise a large part of the economy yet face large constraints in innovating, would need more targeted support in accessing finance and technology. Lastly, Thailand’s competition policies—and enforcement capabilities—must evolve alongside the emergence of promising new sources of growth.⁷⁹

⁷⁶ Economic performance is one of the many dimensions of competitiveness. In a scenario that incorporates bold structural reforms, Thailand could be growing around 3.6 percent in the next 20 years, higher than a 2.6 percent growth without reforms. See *Selected Issue 2: Thailand’s Long-Term Growth Potential: The Case for Reform*.

⁷⁷ See footnote 55 for AMRO analysis on productive aging.

⁷⁸ In the 2024 IMD World Competitiveness Rankings, Thailand ranks 43rd (out of 67 economies) in terms of infrastructure—scoring low especially in scientific infrastructure (40th), health and environment (55th), and education (54th). In the last five years of the IMD World Competitiveness Rankings, Thailand’s infrastructure score has hovered between 43rd or 44th, whereas it has managed to improve in other competitiveness dimensions like economic performance, as well as the efficiency of government and business.

⁷⁹ In the 2024 Bertelsmann Stiftung’s Transformation Index (BTI) Report, for example, Thailand’s score for “competition policy” has fallen from 7 in 2006 (10 = best) to 5 in 2024. The scores are based on survey responses to the question “To what extent do safeguards exist to protect competition, and to what extent are they enforced?” The BTI assesses the transformation toward democracy and a market economy as well as the quality of governance in 137 economies.

References

- ASEAN+3 Macroeconomic Research Office. 2024. "Navigating Tomorrow." Chapter 2. ASEAN+3 Regional Economic Outlook. Singapore, April.
- . 2023. "On the Road to Net Zero." Chapter 2. ASEAN+3 Regional Economic Outlook. Singapore, April.
- Biro, Vincent. 2024. "Thailand's S-Curve Industries: Driving Economic Growth & Innovation." Bangkok, 25 June.
- Bond, Kingsmill, and Butler-Sloss, Sam. 2023. "The EV Revolution in Five Charts and Not Too Many Numbers." *RMI Strategic Insights*, 21 September.
- Eastern Economic Corridor. 2024. *12 Target Industries*. Bangkok.
- Hinojales, Marthe. M. 2024. "ASEAN+3: Navigating Secular Trends and Uncertainties." AMRO Blog, Singapore, 8 April.
- IHS Markit. 2024. *GTAS Forecasting*. New York.
- International Institute for Management Development (IMD). 2024. "World Competitiveness Ranking 2024: Thailand." Lausanne, June.
- KKP Research. 2024. "Thailand Watch: A Tale of Two Halves." Bangkok, 22 February.