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COMMENTARY

The Shifting Sands of Malaysia Foreign Policy on the US-China Tech War

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The global semiconductor landscape is undergoing a significant shift, driven by intensifying geopolitical competition, particularly between the United States and China has made Malaysia is emerging as a key beneficiary of this conflict and attracting billions of dollars in investments from leading technology companies.

The Boom and Its Drivers

Malaysia is taking centre stage in the global semiconductor industry, attracting major investments from tech giants like NVIDIA, Intel, and Infineon. This surge is fuelled by two key factors. Firstly, the geopolitical landscape is undergoing a significant reshaping. The US-China trade war and intense competition in the tech sector are pushing companies to diversify their supply chains. They're looking to move away from a China-centric model and embrace a "China Plus One" strategy. This means establishing alternative production bases in Southeast Asia, offering greater security and resilience against potential disruptions caused by geopolitical tensions.

Secondly, Malaysia stands out as a prime candidate for these companies. Its long history in semiconductor isn’t just a coincidence. For the past 50 years, Malaysia has been a powerhouse in the back-end of semiconductor manufacturing, focusing on crucial steps like packaging, assembling, and testing chips. This strong foundation, supported by robust infrastructure, a nurtured skilled workforce, and attractive government incentives, along with its strategic location in Southeast Asia with proximity to key markets and a stable political environment, makes Malaysia a reliable and cost-effective production hub for tech giants seeking secure chip production.

This boom is not an isolated event. It reflects a global trend where geopolitical tensions and competition are reshaping investment decisions. The escalating rivalry between the US and China, particularly in cutting-edge technology, is driving companies to diversify their supply chains and production capabilities. As a result, a wave of American and European companies, including chip giants like Intel and Nvidia, are

setting up shop or expanding their operations in Malaysia, the "holy land" of electronic and electrical manufacturing.

Ecosystem and Long-Term Stability

Southeast Asia's strategic position in the South China Sea, coupled with its longstanding economic ties with both China and the US, makes it an attractive location for building factories. Countries like Thailand and Vietnam are also vying for a slice of the semiconductor pie, offering tax breaks and other incentives. However, Malaysia holds a distinct advantage: it has been a frontrunner in the semiconductor industry since the 1970s.

Back in the day, with a strategic approach, Malaysia established free trade zones, tax holidays, and robust infrastructure, successfully attracting industry giants like Intel and Litronix. This, combined with a readily available workforce boasting a high percentage of English-speaking graduates in technical fields and a stable political climate, solidified Malaysia's position as a thriving manufacturing hub.

For companies like AT&S, Malaysia's five-decade experience in the back end of semiconductor manufacturing was a key draw[1]. The country boasts a mature ecosystem of universities, skilled labour, and established supply chains, catering specifically to the needs of the industry. This existing infrastructure, honed over decades, is difficult to replicate elsewhere.

The US-China Tech Rivalry

The boiling tech war between the US and China is acting as a significant accelerant for the current economic boom in Malaysia. Both superpowers are actively engaged in building robust and secure domestic semiconductor supply chains to lessen their dependence on each other. This strategic shift has opened a window of opportunity for alternative manufacturing hubs like Malaysia.

The escalating trade tensions and geopolitical uncertainties surrounding China are prompting companies across the globe to reassess their production strategies. European firms, and even some Chinese companies themselves, are looking to

[1] AT&S' deal with AMD to help elevate Malaysia's E&E value chain - https://theedgemalaysia.com/node/699074

diversify their production bases beyond China. This diversification trend plays directly into Malaysia's strengths.

This trend is further amplified by the precarious situation in Taiwan, the world's leading chip producer. The rising friction between China and the US over Taiwan's status has heightened anxieties about potential disruptions to the global chip supply. In this context, Malaysia, already the world's sixth-largest exporter of semiconductors, emerges as a viable alternative.

This confluence of global events, the US-China tech war, and the need for diversification, has positioned Malaysia as a major beneficiary in the current economic climate. The country stands poised to further solidify its position as a leading player in the global semiconductor industry.

Multi-Billion Dollar NVIDIA Partnership

For decades, NVIDIA has been a leader in the world of graphics processing units (GPUs), the powerhouse chips that drive high-performance computing and artificial intelligence (AI). They're not exactly new to the game. However, their recent interest in Malaysia signals a potential turning point for the country's tech ambitions as an AI (Artificial Intelligence) hub.

Figure 1: NVIDIA (NVDA) Stock Performance

Source: NASDAQ Composite Index March 2024

Nvidia's stock performance since late 2022 has been nothing short of phenomenal. Over the past year and a half, the chipmaker's shares have skyrocketed more than 7 times, propelling its market cap to a staggering US$2.2 trillion. To put this astronomical rise in perspective, if Nvidia were to maintain this blistering pace, the company's valuation would surpass $16 trillion by the end of next year. If this unprecedented trajectory continues for another 18 months beyond that point, Nvidia's market cap would reach a mind-boggling $117 trillion. This figure dwarfs the GDP of every nation on Earth highlighting the sheer improbability of such sustained growth.

The recent announcement of a multi-billion-dollar partnership between NVIDIA and YTL Malaysia to develop a state-of-the-art AI cloud and supercomputer centre exemplifies the current boom in the Malaysian semiconductor industry. This collaboration transcends mere economic investment; it signifies a significant leap for Malaysia, propelling it towards the cutting edge of artificial intelligence technology.

The partnership between YTL and NVIDIA extends beyond just the physical infrastructure. YTL plans to leverage NVIDIA's expertise to create Malaysia's fastest supercomputers and aims to develop AI-specific applications and services for its customers. This includes using NVIDIA's NeMo platform to build a Malay language foundation model that celebrates the country's rich multicultural heritage[2].

Furthermore, the significance of this partnership is further amplified by the expansion of NVIDIA's existing Penang plant. This expansion signals not only NVIDIA's commitment to Malaysia but also the strategic importance the US government places on fostering a reliable and secure AI ecosystem in the region. This collaboration positions Malaysia as a key player in the global race for AI dominance, attracting not just leading tech giants but also potentially driving further foreign direct investment in the country's burgeoning AI sector.

In essence, the NVIDIA-Malaysia partnership is a microcosm of the larger trend unfolding in the region. As the US-China tech war disrupts established supply chains, Malaysia's established infrastructure, skilled workforce, and stable political environment are proving to be a magnet for major players seeking reliable and secure

[2] https://www.digitalnewsasia.com/business/ytl-advance-ai-development-malaysia-collaboration-nvidia

production facilities. This confluence of factors, along with strategic partnerships like the one with NVIDIA, paves the way for Malaysia to become a true leader in the global semiconductor and AI landscape.

Conclusion

The 21st century's steady march towards a multipolar world presents a fascinating opportunity for Malaysia to learn as we are witnessing the emergence of a world where successful non-Western societies thrive, holding both commonalities and distinct identities compared to the West.

This lesson in navigating complexity is particularly relevant for Malaysia, a key player in the global semiconductor industry. The ongoing "chip war" between the US and China cast down on the nation and even though current restrictions haven't directly impacted them, Malaysia finds itself caught in a precarious dance as the US-led initiative to curb China's access to advanced chip-making technology amplified. The recent trilateral agreement between the US, Japan, and the Netherlands throws a wrench into established supply chains, potentially impacting Malaysia's robust semiconductor sector.

Fortunately, the immediate impact seems minimal. However, the long-term remains shrouded in uncertainty. The new regulations demanding export permission for all destinations could disrupt established flows. In this scenario, Malaysia's options are limited and depends on its ability cultivating supple diplomacy. Hedging against disruptions necessitates collaboration with regional partners to prevent further escalation of the US-China tensions.

China, it seems, harbours no imperial ambitions. Unlike some Western powers of the past, there's no grand design to replace America as the world's sole leader. Their primary goal, one we can understand as a nation that has fought for its own independence, is to ensure they are never again subjected to the century of humiliation, that dark chapter between 1842 and 1949[3].

[3] https://www.oxfordbibliographies.com/display/document/obo-9780199920082/obo-9780199920082-0100.xml

Here's where the narrative gets interesting. China's resurgence is, in many ways, a product of the very global order America established after World War II. They have thrived within this framework, and Malaysia, a firm believer in multilateralism, sees no reason why this can't continue. China, has no interest in dismantling this system. In fact, a strong argument can be made for a future of cooperation between these two giants, both contributing to global prosperity within the existing rules.

Imagine a world where a powerful China and a prosperous America co-exist peacefully, each respecting the other's space. This, in our view, is a future worth striving for, and a testament to the power of diplomacy and mutual understanding. However, the future remains an intricate dance. The "chip war" continues to evolve, and as tensions rise, Malaysia's ability to maintain its neutrality might be tested as the nation's long-term economic prosperity hinges on its ability to navigate this complex geopolitical landscape.

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