

# China vs. Asia

## Benchmarking Study



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## Preface

Rising labor costs and risk exposure have encouraged many foreign companies to withdraw from China or rethink their commitment to the Chinese market. This was accelerated by the US-China trade war and the COVID-19 pandemic, while growing political tensions are now adding another dimension to foreign companies considering investing in China. Danish companies are also affected by this development and share the concern held by the international business community over the political and economic trajectory of China. However, China has become a key trading partner to the Danish economy, and each year boast major trade between Denmark and China and investments in China by Danish companies. With divestments in China increasingly emerging as a realistic outcome for many Danish companies how will reducing activities in China impact the competitiveness of Danish companies and the Danish economy, and what can Danish companies do to reap the same benefits offered by China's monumental infrastructure. Is it at all possible to replace the buying power from 300 million Chinese consumers and a still largely untapped market, and can other markets offer the same favorable conditions for research as China.

This project will compare China's competitiveness with selected alternative markets in Asia that are pushing to establish themselves as attractive Plus One markets to investors looking to diversify away from China, namely Indonesia, India, Malaysia, the Philippines, Thailand, and Vietnam.

## Conceptualization of China Plus One

‘China Plus One’ is gaining momentum as part of a broader political debate on China, but the concept itself dates back to the early 2000s when both Chinese and foreign companies explored alternative manufacturing markets to combat rising labor costs and IPR in China.<sup>1</sup> While political efforts to push companies to divest from China greatly accelerated with the US-China trade war and the COVID-19 pandemic, supply chains were already changing driven by the market as companies moved low-cost production activities out of China or expanded local production to protect intellectual property.<sup>2</sup> Thus, while political tensions have exacerbated operational risks in China and the pandemic disrupted global supply chains, both are accelerators of a long-standing process of mitigating overdependence on the Chinese market by means of diversifying supply chains, or what a standard risk management strategy would characterize as ‘not putting all your eggs in one basket’. Rather, China Plus One captures two dimensions.

First, supply chain disruptions have highlighted the need to urgently build resilient supply chains, not just for companies to reduce risk exposure in China but also to prepare for potential disruptions in the future.<sup>3</sup> Indeed, the fragility of global supply chains and the need for risk management has been reinforced by the pandemic, Russia’s invasion of Ukraine, a lack of truck drivers in many markets, incidents such as the Suez Canal blockage, and attacks on ships in the Red Sea.<sup>4</sup> This indicate a structural shift to supply chains, whether it be ‘decoupling’, ‘derisking’, ‘diversification’, ‘local for local’, ‘dual sourcing’, ‘flexible architecture’, ‘reshoring’, ‘friendshoring’, ‘nearshoring’, or something else, where investors have to consider cost efficiency vs. long-term resilience.<sup>5</sup>

Second, while foreign companies and policymakers have different perspectives on China Plus One, one being a business strategy of efficiency and competitiveness and the other a political strategy reflecting managing growing concerns about economic and social resilience,<sup>6</sup> manufacturing activities in China increasingly cannot be detached from the political context. Consequently, companies that do not want to leave China are forced to reevaluate their commitment to the Chinese market, and companies with no manufacturing in China or little to no risk exposure may still abruptly be hit by restrictions of critical goods and export controls directly or through local suppliers in China.<sup>7</sup> This is further reinforced by changing consumer patterns more mindful of origin of product and its ethical and environmental impact.<sup>8</sup> Summarizing existing trends and research related to China Plus One strategies, the concept ‘China Plus One’ can be defined as follows:

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<sup>1</sup> In example, a 2007 article by The Economist discussed ‘China Plus One’ in the context of IPR, protectionism, social unrest, and rapidly increasing operational costs in China. Similarly, a 2008 article by Berlingske exploring Danish companies moving production to Vietnam also mentioned China Plus One.

<sup>2</sup> European Union Chamber of Commerce in China & Mercator Institute for China Studies (2021).

<sup>3</sup> Zhu, Chou and Tsai (2020).

<sup>4</sup> European Union Chamber of Commerce in China (2022).

<sup>5</sup> United Nations Conference on Trade and Development (2020).

<sup>6</sup> United Nations Conference on Trade and Development (2020).

<sup>7</sup> European Union Chamber of Commerce in China and Mercator Institute for China Studies (2021).

<sup>8</sup> Zhu, Chou and Tsai (2020).

*‘China Plus One’ is a deliberate strategy whereby companies with production activities in China are coupling future investments in China with investments in other markets or elevating existing supply chains outside China to mitigate economic and political risks to global supply chains posed by an overdependency on China.*

This definition captures six crucial rationales:

1. ‘China Plus One’ is a strategic company assessment of risks associated with current and future activities in China. Investing in another market by chance is not a ‘China Plus One’ strategy.
2. ‘China Plus One’ is linked to China’s role as a manufacturing base with the goal of developing global supply chains independent of China. Scaling down China as a market for final goods is not included in a ‘China Plus One’ strategy.
3. As per point 1, companies must have existing production activities in China to employ a ‘China Plus One’ strategy. However, this proposal recognize that companies looking to invest in China likely shares the same considerations when assessing China as a future market.
4. A company can both reduce and increase its production activities in China by means of suspending future investments in China, relocating current assets to alternative supply chains or couple future investments in China with other markets. What defines a ‘China Plus One’ strategy is the relative importance of China in the company’s global supply chain.
5. ‘China Plus One’ is an incremental approach of diversifying supply chains while maintaining activities in China. An immediate relocation of production activities is expected to greatly disrupt core activities and represents a process of decoupling from the Chinese market.
6. ‘China Plus One’ is employed as the term to describe the process of diversifying from China but a company can also have a +2, +3, +4 and so on.

## Overview of China and selected Plus One markets

### Introduction

In order to investigate the implications of China Plus One and offer recommendations to Danish companies exploring new manufacturing markets to support economic activities in China, this section will analyze and compare key Plus One markets. In doing so, this paper aspires to move beyond a snapshot to instead capture and break down important trends in China and the individual Plus One markets followed by a performance benchmark. The purpose of this analysis is to highlight and compare key indicators across China and Plus One markets to explore broader trends and implications for Danish companies operating in China. The purpose is not to analyze and identify market opportunities in Plus One countries on behalf of Danish companies.

The country profiles and subsequent benchmark will employ the period of 2008-2023, drawing on available comparative data from the World Bank and Trading Economics, using key comparative indicators related to business. The data will cover four elements, namely 1) demographics, 2) economy, 3) governance, and 4) business.

### Glossary

**Children:** Population ages 0-14.

**Working population:** Population ages 15-64.

**Manufacturing Purchasing Managers' Index (PMI):** An index of the prevailing direction of economic trends in the manufacturing sector as viewed by purchasing managers. A reading above 50 indicates an expansion of the manufacturing sector compared with the previous month; below 50 indicates a contraction and 50 indicates no change. The purpose of the PMI is to provide information about current and future business conditions to company decision-makers, analysts, and investors.<sup>9</sup>

**World Bank Logistics Performance Index (grouped ranking):** A benchmarking tool to identify challenges and opportunities to trade logistics performance, based on logistics information and survey feedback from international logistics operators.<sup>10</sup>

**Harvard Atlas of Economic Complexity Index (ECI):** A rank of economic complexity assessing the current state of a country's productive knowledge based on how diversified and complex their export basket is. A higher rank indicates higher capacity to sustain a diverse range of productive, sophisticated, and unique know-how that allows it to produce a wide diversity of goods, including complex products that few other countries can make. The complexity of a country's exports is found to highly predict current income levels, or where complexity exceed expectations for a country's income level, the country is predicted to experience more rapid growth in the future. ECI therefore also provides a useful measure of economic development.<sup>11</sup>

**Voice and Accountability (percentile rank):** A governance indicator that measures perceptions of the extent to which a country's citizens are able to participate in selection their government, as well as freedom of

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<sup>9</sup> <https://www.investopedia.com/terms/p/pmi.asp>

<sup>10</sup> <https://lpi.worldbank.org/about>

<sup>11</sup> <https://atlas.cid.harvard.edu/glossary>

expression, freedom of association, and a free media. Percentile rank indicates the country's rank among all countries covered, with 0 corresponding to lowest rank, and 100 to highest rank.<sup>12</sup>

**Rule of Law (percentile rank):** A governance indicator that measures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. Percentile rank indicates the country's rank among all countries covered, with 0 corresponding to lowest rank, and 100 to highest rank.<sup>13</sup>

**Regulatory Quality (percentile rank):** A governance indicator that measures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. Percentile rank indicates the country's rank among all countries covered, with 0 corresponding to lowest rank, and 100 to highest rank.<sup>14</sup>

**Political Stability and Absence of Violence/Terrorism (percentile rank):** A governance indicator that measures perceptions of the likelihood of political instability and/or politically motivated violence, including terrorism. Percentile rank indicates the country's rank among all countries covered, with 0 corresponding to lowest rank, and 100 to highest rank.<sup>15</sup>

**Government Effectiveness (percentile rank):** A governance indicator that measures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. Percentile rank indicates the country's rank among all countries covered, with 0 corresponding to lowest rank, and 100 to highest rank.<sup>16</sup>

**Control of Corruption (percentile rank):** A governance indicator that measures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests. Percentile rank indicates the country's rank among all countries covered, with 0 corresponding to lowest rank, and 100 to highest rank.<sup>17</sup>

**GDP per person employed:** An indicator of output per unit of labor input used to compare labor productivity levels across countries.

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<sup>12</sup> <https://www.worldbank.org/en/publication/worldwide-governance-indicators>

<sup>13</sup> <https://www.worldbank.org/en/publication/worldwide-governance-indicators>

<sup>14</sup> <https://www.worldbank.org/en/publication/worldwide-governance-indicators>

<sup>15</sup> <https://www.worldbank.org/en/publication/worldwide-governance-indicators>

<sup>16</sup> <https://www.worldbank.org/en/publication/worldwide-governance-indicators>

<sup>17</sup> <https://www.worldbank.org/en/publication/worldwide-governance-indicators>

## China

### **China's population is estimated to drop by more than 100 million in the future**

China's population dropped for the first time in 2022 and is estimated to further decline by more than 100 million by 2050, which corresponds to a population drop of almost 10% compared with China's current total population (see appendix A). This poses a large impact on aging in China, as illustrated by the median age which increased from 34,1 to 39 between 2010-2023 (see appendix B). More broadly, this marks a demographic shift in Chinese society with a significant impact on the estimated future proportion of children and the working population. In 2050, the proportion of children will only make up one tenth of the population, while the proportion of the working population will have dropped below three-fifths (see appendix C). Unemployment showed signs of improving in 2015 but has in recent years been hovering around 4,5% (see appendix D).

### **Economic growth is slowing down**

Annual GDP growth in China has steadily decreased in the last decade after a long period of explosive growth. The pandemic in particular has significantly weakened economic growth, with the exception of an enormous spike in 2021 (see appendix E). As an indicator of wealth, GDP per capita has more than doubled since 2008 (see appendix F).

### **Foreign investments have declined steeply after rigorous omicron lockdown in China**

Exports of goods and services have more than doubled between 2008-2022, while imports of goods and services have almost tripled in the same period (see appendix G). FDI net inflows surged dramatically during the onset of the pandemic but has since declined sharply to its lowest point since 2017 and show overall fluctuations (see appendix H). When measured as a percentage of GDP, foreign direct investments demonstrate a clear downward trend indicating that foreign investments contribute less and less to China's domestic economy (see appendix I).

### **Perceptions of regulatory quality and government effectiveness are deteriorating, but rule of law and control of corruption are improving**

China has seen gradual improvements to perceptions of rule of law and control of corruption since 2008. Perceptions of regulatory quality, however, has dropped dramatically during the pandemic after remaining relatively stable since 2010. Perceptions of government effectiveness also dropped significantly in 2022 despite peaking in the year before following a steady five-year climb. Perceptions of political stability and absence of violence and terrorism jumped in 2016 but later reversed and have largely been constant. Perceptions of voice and accountability shows signs of recovery in recent years, though it ranks decisively lower than the other indicators (see appendix J).

### **China is no longer a cheap manufacturing destination**

The unprecedented growth of the Chinese economy is changing the Chinese business landscape from being the world's factory to higher value-added manufacturing. In 2021, China ranked 18 on the economic complexity index although largely stagnant since 2011 (see appendix K). Labor productivity measured as GDP per person employed has also improved dramatically from 13256 to 34538 USD between 2008-2022 (see appendix L). However, reflecting China's economic development the monthly minimum wage has also

increased sharply by a little over 200% since 2008 (see appendix M). China has also significantly expanded its logistics performance since 2018 (see appendix N), and internet penetration has dramatically improved since 2008 to now cover more than 75% of the population (see appendix O). But manufacturing PMI has been fluctuating between expansion and contraction since the end of August 2021, showcasing a turbulent manufacturing environment in recent years (see appendix P).

## Indonesia

### **Young population is fueling population growth and replenishing work force**

Indonesia's population has steadily climbed since 2008 and is expected to continue to slowly grow by 2050 (see appendix Q). This is linked to a young population as indicated by the median age which has gradually increased from 26,7 to 29,9 between 2010-2023 (see appendix R). In particular, a large proportion of children means that the working population has consistently expanded and is estimated to remain stable as the population is slowly aging and children are replenishing the work force (see appendix S).

Unemployment has improved significantly since 2008 and has in recent years shown a positive trend again after fluctuating between 3,5% and 4,5% for a longer period (see appendix T).

### **Economic growth is surging after pandemic downturn**

Annual GDP growth in Indonesia has reached its highest level in nearly a decade, rebounding dramatically from a steep economic decline in 2020 during the pandemic. Before that, Indonesia maintained a stable growth rate of around 5% after an initial slowdown (see appendix U). GDP per capita has increased by more than half since 2008 (see appendix V).

### **Foreign investments show strong recovery after plunging in 2016**

Exports and imports of goods and services have both surged dramatically during the pandemic after a shaky period of rising and falling. Both exports and imports of goods and services have roughly doubled between 2008-2022 (see appendix W). FDI net inflows increased rapidly after the financial crisis before a steep reversal in 2016. However, foreign investments quickly rebounded the year after and has since largely stabilized at around \$20 billion (see appendix X). Foreign investments as a percentage of GDP initially followed the same pattern as FDI net inflows but deviated in 2019 indicating a downwards trend. This indicate that while inflows of foreign investments are stable or increasing, they have a decreasing impact on domestic growth (see appendix Y).

### **Perceptions of governance indicators show improvements across the board**

Perceptions of governance indicators in Indonesia all indicate overall improvements since 2008. While perceptions of voice and accountability have stagnated in recent years, perceptions of government effectiveness continue a dramatic improvement following a brief drop in 2015. Perceptions of control of corruption dropped significantly at the end of the last decade after an otherwise major growth but is showing signs of slowly recovering again. Perceptions of regulatory quality slightly dropped in 2022 but still suggest a positive trend in recent years. Perceptions of rule of law have improved significantly during the pandemic after stagnating for a longer period, while perceptions of political stability and absence of violence and terrorism remains largely unchanged since the latter part of last decade (see appendix Z).

### **Manufacturing is expanding but is characterized by less sophisticated production**

Manufacturing PMI in Indonesia has expanded for more than two consecutive years, suggesting favorable business conditions in the manufacturing sector (appendix AA). In line with a consistent expansion of the manufacturing sector, minimum wage in Indonesia have also increased and approximately tripled since 2012 (appendix BB). However, Indonesia has been slightly fluctuating in the economic complexity index and its ranking is overall down compared with 2008 due to a significant deterioration during the early part of the pandemic, but is showing signs of a rebound (appendix CC). Labor productivity indicate a gradual but slow increase from 17155 to 25826 between 2008-2022 (appendix DD). This suggests that the manufacturing sector in Indonesia is characterized by less sophisticated production. Indonesia has shown strong improvements to its logistics performance in earlier index rankings but dropped from rank 46 to rank 61 in 2023 (see appendix EE). Internet penetration started accelerating rapidly after 2013 and now covers two-thirds of the population (see appendix FF).

## India

### **India's already enormous population is still increasing**

India's population has increased by nearly one fifth since 2008 and recently overtook China as the country with the largest population in the world. While population growth is expected to slow down, India is estimated to maintain a significant increase and add another roughly 20% to its population by 2050 (see appendix GG). A young population has kept the working population in India steadily expanding, but the proportion of children has dropped significantly since 2008 and is estimated to decline to less than one fifth of the total population by 2050, with the working population also dropping slightly (see appendix HH). Moreover, the median age in India has also climbed from 24 to 28,2 between 2010-2023 (see appendix II). This indicate that India is gradually experiencing the growth of an elderly population. Unemployment deteriorated significantly at the beginning of the pandemic but quickly rebound and has otherwise slowly but consistently improved since 2008 (see appendix JJ).

### **Sluggish economy revives after collapsing during the pandemic**

India's economy crashed with the outbreak of the pandemic after a period of economic downturn, but annual GDP growth made an astounding recovery in 2021 to restore the economy back to impressive growth numbers (see appendix KK). GDP per capita has almost doubled since 2008 (see appendix LL).

### **Foreign investments in India have rebounded strongly after the financial crisis**

Exports and imports of goods and services more than doubled between 2008-2022, a large part of it attributed to a trade surge during the pandemic. Both exports and imports have grown at the same rate for the period, but India maintains a significantly higher level of imports than exports (see appendix MM). FDI net inflows more than doubled last decade from a decline after the financial crisis but dropped significantly again in 2021, though displaying some recovery (see appendix NN). Foreign investments as a percentage of GDP briefly increased at the end of last decade while India grappled with declining growth but dropped significantly again as the domestic economy recovered (see appendix OO).

### **Governance indicators show mixed results**

While perceptions of regulatory quality indicate a strong positive trend, perceptions of voice and accountability have deteriorated significantly. Perceptions of rule of law improved substantially in 2022 but overall remains stagnant compared with last decade. Perceptions of control of corruption rebounded

decisively between 2011-2018 but has since been dropping slightly. Perceptions of government effectiveness declined considerably during the first half of the last decade but has since improved significantly. Perceptions of political stability and absence of violence and terrorism ranks at the bottom of governance indicators in India but show strong improvements in recent years (see appendix PP).

### **India is a booming manufacturing hub**

Manufacturing PMI in India consistently show impressive performance and has since the end of August 2021 expanded at an average of 56. This indicate that purchasing managers are highly optimistic about economic trends in the manufacturing sector in India (see appendix QQ). Gradual improvements to economic complexity after the financial crisis also suggest that India is steadily embracing more complex manufacturing (see appendix RR). Moreover, labor productivity has nearly doubled between 2008-2022 (see appendix SS). Logistics performance has also increased significantly despite a major drop in 2018 (see appendix TT). At the same time, in contrast to an expansion of the manufacturing sector, minimum wage in India has surprisingly been stagnant since 2017 after more than doubling in the period before (see appendix UU). Together these trends suggest that India is setting itself up as a prime manufacturing market. However, digitalization is likely restricted to urban areas. While internet penetration accelerated tremendously in 2018, internet usage only includes half of the population (see appendix VV).

## Malaysia

### **Malaysia is undergoing a rapid demographic transition**

Malaysia's population has increased by more than one fifth since 2008 and is estimated to maintain a similar population growth rate for 2050 (see appendix WW). A large proportion of children has steadily expanded the working population in Malaysia, but the proportion of children has declined significantly since 2008. This decline is estimated to continue, dropping below one fifth of the population by 2050, with the working population also slowly beginning to decline in the near future due to an aging population (see appendix XX). This is highlighted by the median age which has increased considerably from 25,1 to 30,8 since 2010 (see appendix YY). Unemployment has been relatively stable in Malaysia hovering around 3% but jumped slightly at the beginning of the pandemic (see appendix ZZ).

### **Economic growth made a miraculous rebound from pandemic crash**

Malaysia has made a tremendous economic rebound from a steep crash at the start of the pandemic to its highest annual GDP growth rate recorded since 2000. Before dropping, annual economic growth fluctuated between 4% to 6% in the last decade (see appendix AAA). GDP per capita has increased by nearly half since 2008 (see appendix BBB).

### **Malaysia's economy has become less conditional on foreign investments**

FDI net inflows in Malaysia jumped fivefold after the initial shock of the pandemic. Prior to this, foreign investments indicated a gradual decline last decade, with the exception of a spike in 2016. While FDI net inflows recently display a drop, Malaysia still retains a high level of foreign investment compared with before the pandemic (see appendix CCC). FDI as a percentage of GDP display the same pattern as FDI net inflows (see appendix DDD). Notably, annual GDP growth follow a similar pattern to FDI net inflows and FDI as a percentage of GDP, namely dropping in 2009 and 2021 before strongly rebounding, possibly indicating that the Malaysian economic is highly sensitive to large swings to foreign investments. However, findings

also suggest that economic growth in Malaysia has become less conditional on foreign investments with annual GDP growth relatively unharmed by declining FDI net inflows after 2016.

Exports of goods and services have increased by one third between 2008-2022, while imports of goods and services have increased by half in the same period. However, this trend has been concentrated in recent years with trade surging since 2020 whereas exports and imports both showed no improvement throughout the last decade (see appendix EEE).

**Perceptions display significant drop around 2014 but governance indicators show strong overall performance**

Governance indicators in Malaysia show strong improvements since 2008 but display a particular pattern of peaking in 2014 before dropping significantly afterwards. This is the case for perceptions of rule of law and perceptions of regulatory quality, which both indicate major overall improvements but dropped considerably in 2015 and has fluctuated since then. Perceptions of political stability and absence of violence and terrorism also share the same pattern but display minor improvements after a period of decline. Perceptions of government effectiveness similarly peaked in 2014 before dropping but is overall down slightly for the period. Perceptions of control of corruption peaked in 2013 but otherwise display the same pattern and has overall improved significantly. Perceptions of voice and accountability display substantial improvement and diverge from the pattern of the other governance indicators by recording a peak in 2022 (see appendix FFF).

**Malaysia display a digital and capable market, but manufacturing sentiments are negative**

Labor productivity in Malaysia is high and has improved by another one fifth between 2008-2022 (see appendix GGG). While dropping significantly in 2021, Malaysia also ranks high in the economic complexity index (see appendix HHH). Moreover, internet penetration has historically been substantial and now covers practically the entire population (see appendix III). Together, these business indicators paint the picture of an efficient, digital, and capable economy. However, manufacturing sentiments in Malaysia have contracted for 14 consecutive months, while still indicating a downwards trend (see appendix JJJ). This signals that purchasing managers consistently perceive business conditions in the manufacturing sector to worsen. Logistics performance declined tremendously during the latter half of the last decade but suggest a significant recovery in recent years (see appendix KKK). Since 2013, monthly minimum wage has increased by two thirds (see appendix LLL).

**Philippines**

**The Philippines is experiencing a population boom**

Philippines' population has increased by more than a quarter since 2008 and is estimated to grow another staggering one third by 2050 (see appendix MMM). The working population is expected to maintain a slow expansion, while the proportion of children has steadily declined and will continue to drop significantly. This steady expansion of the working population is fueled by a population boom and a distinctly young Philippine population negating the impact of aging (see appendix NNN). This is further indicated by the median age which has increased relatively little from 21,8 to 25 between 2010-2023 (see appendix OOO). Unemployment deteriorated slightly during the pandemic but has otherwise consistently improved (see appendix PPP).

### **The Philippines record highest growth in more than four decades**

Annual GDP growth in the Philippines show strong and consistent performance. While the economy plunged greatly with the outbreak of the pandemic, economic growth recovered immediately and in 2022 recorded its highest growth rate in more than four decades (see appendix QQQ). GDP per capita dropped significantly at the beginning of the pandemic but has increased by more than half since 2008 (see appendix RRR).

### **Foreign investments increased nearly eightfold last decade**

Exports of goods and services have almost doubled between 2008-2022, while imports of goods and services have nearly tripled in the same period. In particular, imports accelerated significantly in the latter half of the last decade, and after another surge during the pandemic the Philippines now exhibit a considerable trade deficit (see appendix SSS). FDI net inflows to the Philippines increased nearly eightfold between 2008-2017 but fell significantly at the end of last decade. While foreign investment surged again after the initial shock of the pandemic, FDI has started to drop again (see appendix TTT). FDI as a percentage of GDP display a similar pattern to FDI net inflows, expanding significantly between 2008-2017 but afterwards indicating a downward trend, with the exception of a spike during the pandemic (see appendix UUU). This expansion is likely closely linked to the large increase of foreign investment to the Philippines, while the subsequent drop hints at a normalization of the relative contribution by FDI net inflows in the Philippine economy.

### **Perceptions of governance indicators show big swings**

Perceptions of governance indicators in the Philippines show mixed results and large swings across individual indicators. Rule of law and voice and accountability both displayed a positive trend but subsequently declined for seven consecutive years and remains down compared with 2008. Control of corruption also demonstrated rapid improvements before deteriorating significantly but indicate signs of stabilizing. Similarly, political stability and absence of violence and terrorism dropped substantially between 2014-2016 but has since gradually recovered. Perceptions of government effectiveness also declined dramatically after a period of significant improvement and remains slightly down from 2008 despite a steady recovery. Perceptions of regulatory quality showed gradual progress last decade but have declined in the last three years (see appendix VVV).

### **Expansion of the manufacturing sector in the Philippines is slowing down**

Manufacturing PMI has expanded at an average of 52,18 since the end of August 2021. Optimism about economic trends in the manufacturing sector in the Philippines indicated gradual deterioration in 2023 and contracted for the first in 23 months last August, but recently suggest a strong rebound (see appendix WWW). Economic complexity improved considerably last decade but show fluctuations since 2016 (see appendix XXX), while labor productivity has slowly increased by nearly half between 2008-2022 (see appendix YYY). This suggests that the development of sophisticated manufacturing in the Philippines has stagnated. Logistics performance declined significantly last decade but has since 2016 fully recovered (see appendix ZZZ). Monthly minimum wage show slow growth and stagnated in 2018 but has in recent years increased significantly (see appendix AAAA). Internet penetration has steadily increased after an initial surge and now covers the majority of the Philippine population (see appendix BBBB).

## Thailand

### **Nearly one third of Thailand's population will be elderly in the future**

Population growth in Thailand has slowed down tremendously and Thailand's population is estimated to drop by more than 5% by 2050 (see appendix CCCC). This is producing a rapidly aging society as displayed by the median age which has increased from 34,5 to 40,2 between 2010-2023 (see appendix DDDD). The demographic ramification this has on the future proportion of children and the working population is already prominent. The proportion of children has dropped significantly and is estimated to make up one tenth of the population in 2050. The working population is also already steadily decreasing and is estimated to represent just a little over half of the population in the future. In total, nearly one third of the population in Thailand is estimated to be aged 65 or older by 2050 (see appendix EEEE). Unemployment increased slightly during the pandemic, but Thailand has otherwise maintained a remarkably low unemployment rate of below 1% since the financial crisis (see appendix FFFF).

### **Volatile economic growth has stabilized at lower growth rate**

Annual GDP growth in Thailand fluctuated heavily after the financial crisis but showed signs of stabilizing in the latter part of last decade. Growth plunged with the outbreak of the pandemic, but the economy quickly recovered and has displayed a modest but positive trend in recent years (see appendix GGGG). GDP per capita has increased by nearly one third since 2008 (see appendix HHHH).

### **Foreign investments in Thailand fluctuate heavily and reported its first annual deficit in 2020**

Exports and imports of goods and services both increased by more than half between 2008-2022. Thailand previously recorded a significantly higher level of exports than imports, but a simultaneous steep decline to exports in 2020 and import surge during the pandemic means that Thailand now exhibit a slight trade deficit (see appendix IIII). Foreign investments have been turbulent since the financial crisis, and in 2020 Thailand reported its first negative annual FDI (see appendix JJJJ). FDI as a percentage of GDP also indicate fluctuations. Because of its negative FDI net inflow, FDI contributed negatively to the economy in 2020 (see appendix KKKK).

### **Weak perceptions of political stability in Thailand have improved**

Thailand has seen large improvements to perceptions of political stability and absence of violence and terrorism since 2008. After initially displaying a steady positive trend, perceptions of government effectiveness have declined in the last four years. In contrast, perceptions of voice and accountability declined dramatically in 2014 but show steady recovery in recent years. However, both indicators remain largely unchanged. Perceptions of regulatory quality have strongly recovered after dropping considerably between 2015-2018. Perceptions of rule of law indicate the opposite pattern, improving substantially in the latter half of last decade but recently display a minor downward trend. Perceptions of control of corruption show some recovery after declining for four consecutive years but is down significantly compared with a jump after the financial crisis (see appendix LLLL).

### **Optimism about Thailand's manufacturing sector has eroded**

Manufacturing PMI in Thailand jumped to a remarkable peak of 60,4 in April 2023. However, perceptions of manufacturing business conditions have declined sharply in the last six consecutive months and contracted

for the first time in almost two years in August 2023. Before this, manufacturing PMI had consistently expanded at an average of 53. This indicate that optimism in Thailand’s manufacturing sector have crashed after perceptions surged in April (see appendix MMMM). Thailand ranks high in the economic complexity index and show strong improvements but deteriorated slightly in 2017 (see appendix NNNN). Labor productivity is relatively high but indicate a slow increase of one third between 2008-2022 (see appendix OOOO). This suggests that the development of sophisticated manufacturing in Thailand has stalled. Minimum wages stagnated after a large jump in 2012 but has begun increasing again. Since 2008, minimum wage has expanded by three quarters (see appendix PPPP). Logistics performance briefly declined in 2016 but has otherwise been relatively stable (see appendix QQQQ). Digitalization has been rapid in Thailand and internet penetration now covers almost the entire population (see appendix RRRR).

## Vietnam

### **Working population is declining amid slowing population growth**

Vietnam’s population has increased moderately since 2008 and population growth is estimated to slow down significantly (see appendix SSSS). This trend is also illustrated by the median age which has jumped from 27,7 to 32,8 between 2010-2023 (see appendix TTTT). The effect of this is already evident in the proportion of children and the working population in Vietnam. In 2050, the proportion of children is estimated to drop below one fifth of the population, while the proportion of the working population began declining in 2014 (see appendix UUUU). Unemployment increased significantly after 2018 but remains low and recently show improvement again (see appendix VVVV).

### **Domestic economy display strong performance and escapes pandemic crash**

Vietnam’s economy show strong and consistent performance. While annual GDP growth dropped considerably during the pandemic, Vietnam escaped negative growth and rebound to its highest growth rate since 1997 (see appendix WWWW). GDP per capita has doubled since 2008 (see appendix XXXX).

### **Trade is soaring**

Foreign investments in Vietnam have steadily doubled since 2011. FDI net inflows briefly stalled during the pandemic but have recently accelerated significantly again (see appendix YYYYY). FDI as a percentage of GDP declined rapidly after the financial crisis but has since 2015 been relatively stable, though indicating a slight downwards trend in recent years (see appendix ZZZZ). Exports and imports of goods and services have surged uninterruptedly since the financial crisis. Between 2008-2022, exports grew more than fivefold while imports have more than quadrupled in the same period (see appendix AAAAA).

### **Perceptions of governance indicators display mixed results in recent years**

Perceptions of regulatory quality exhibited strong improvements in the latter half of last decade but has declined significantly again during the pandemic. In contrast, improvements to perceptions of control of corruption reversed in 2014 but have rebounded substantially in recent years. Perceptions of political stability and absence of violence and terrorism also suggested recovery from a major drop in 2014 but perceptions quickly deteriorated again and are down overall for the period. While perceptions of voice and accountability indicate an upwards trend in recent years, perceptions are isolated at the bottom compared with other governance indicators in Vietnam. Improvements to perceptions of government effectiveness stalled in the latter half of last decade but jumped again during the pandemic Perceptions of rule of law

suggested strong performance after the financial crisis and surged in 2016 but have dropped significantly since then (see appendix BBBBBB).

### **Vietnam's manufacturing sector is volatile**

Manufacturing PMI in Vietnam has been highly volatile in recent years. While manufacturing PMI expanded consecutively for over a year after September 2021, perceptions of manufacturing business conditions in Vietnam contracted in ten out of twelve months since October 2022 (see appendix CCCCC). Labor costs have also increased tremendously with minimum wages surging nearly fivefold between 2008-2023 (see appendix DDDDD). The economic complexity index suggested improvements to sophisticated production in the beginning of last decade, but Vietnam has fluctuated significantly in the rankings (see appendix EEEEE). However, labor productivity has doubled since 2008 (see appendix FFFFF). Logistics performance immediately rebounded from a decisive drop in 2016 and show significant improvements (see appendix GGGGG). Internet penetration has increased substantially and now covers four-fifths of the population (see appendix HHHHH).

## Benchmarking with Asian Plus One markets

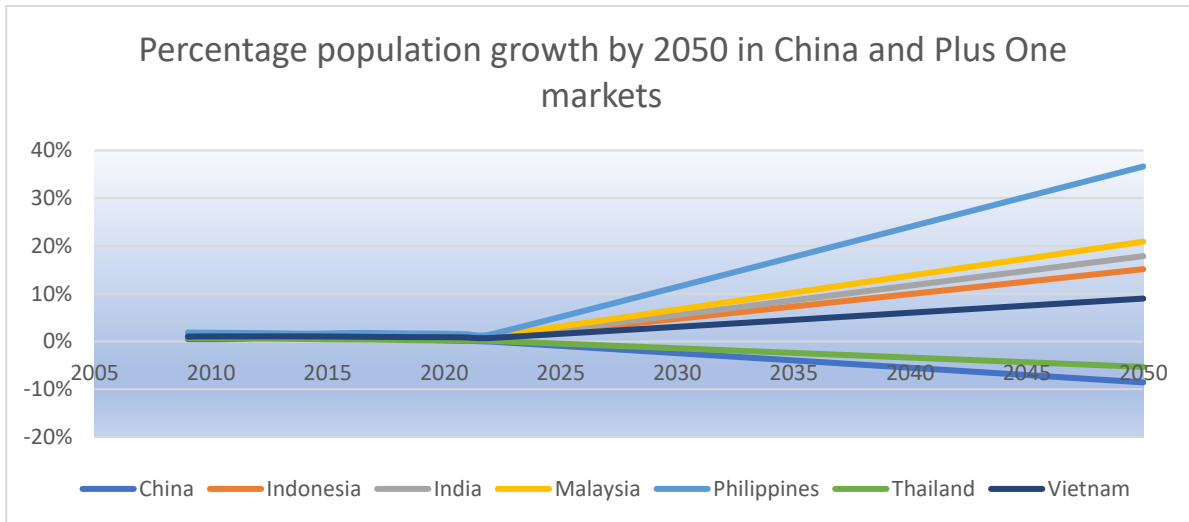
### Demographic indicators

Comparing China's estimated percentage population growth with selected Plus One markets greatly illustrate the magnitude of China's shrinking population. The data also identifies Thailand and the Philippines as two outliers. Thailand emerge as the only Plus One market with an estimated negative population growth, while the Philippines is expected to experience a massive population boom (see chart 19).

The ramifications of China's declining population on its proportion of children and working population are serious. The proportion of the working population is expected to decline by 2050 in most of the selected Plus One markets, but China's working population is already declining and is estimated to further drop enormously by 2050. In the near future, China's work force will make up a significantly smaller part of its population relative to selected Plus One markets. This will have unprecedented implications for China's labor market and its capacity to sustain its competitiveness, not to mention its demographic composition more broadly. The proportion of children in China will also make up a substantially smaller portion of its population than the Plus One markets. Thailand is the only Plus One market with an estimated working population of less than 60% in 2050. In contrast, the Philippines is the only selected Plus One market whose working population is expected to increase by 2050. Additionally, the Philippines report a significantly lower median age than other markets whereas Thailand exhibit a substantially higher median age than other Plus One markets. These trends are captured in appendix IIIII, JJJJJ, and KKKKK.

### **Chart 19**

#### **China's population is shrinking**

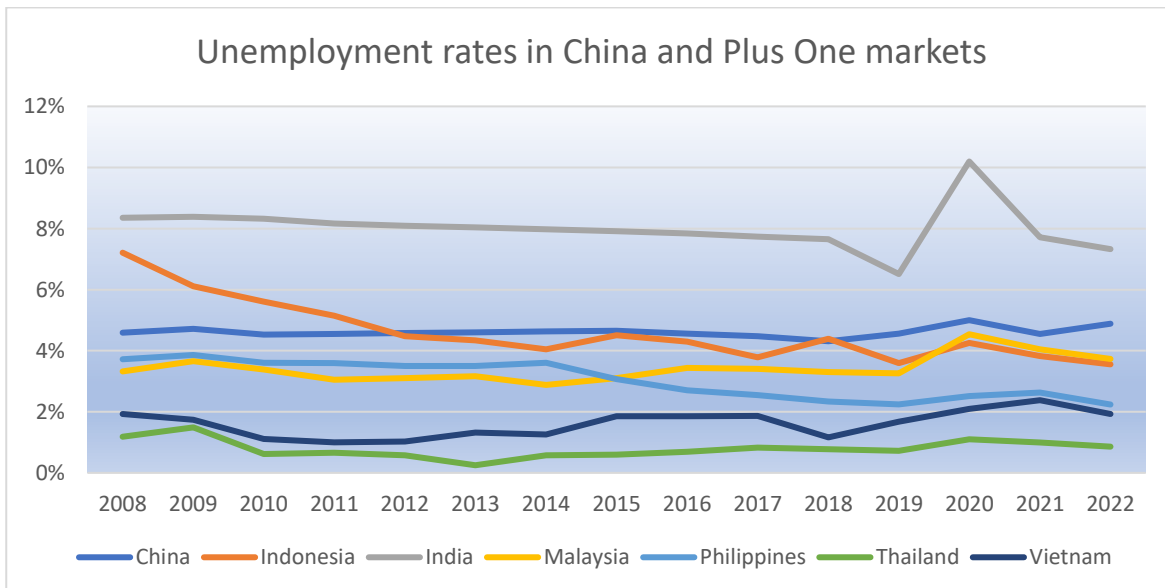


Source: World Bank.

All selected Plus One markets except India display lower unemployment rates than China, particularly Thailand which records remarkably low and stable unemployment. The Philippines and especially Indonesia show major improvements to unemployment, with the latter overtaking China in 2012 (see chart 20). However, the exceptional circumstances of the pandemic, including scarcity of relevant data, means that estimates and projections from 2020 onwards are subject to substantial uncertainty, and one should be cautious about concluding any recent patterns.

**Chart 20**

**Plus One markets display lower unemployment rates than China**



Note: Based on modeled estimates from the International Labor Organization to account for missing national data. Projections from 2020 onwards in particular are subject to substantial uncertainty due to scarcity of relevant data.

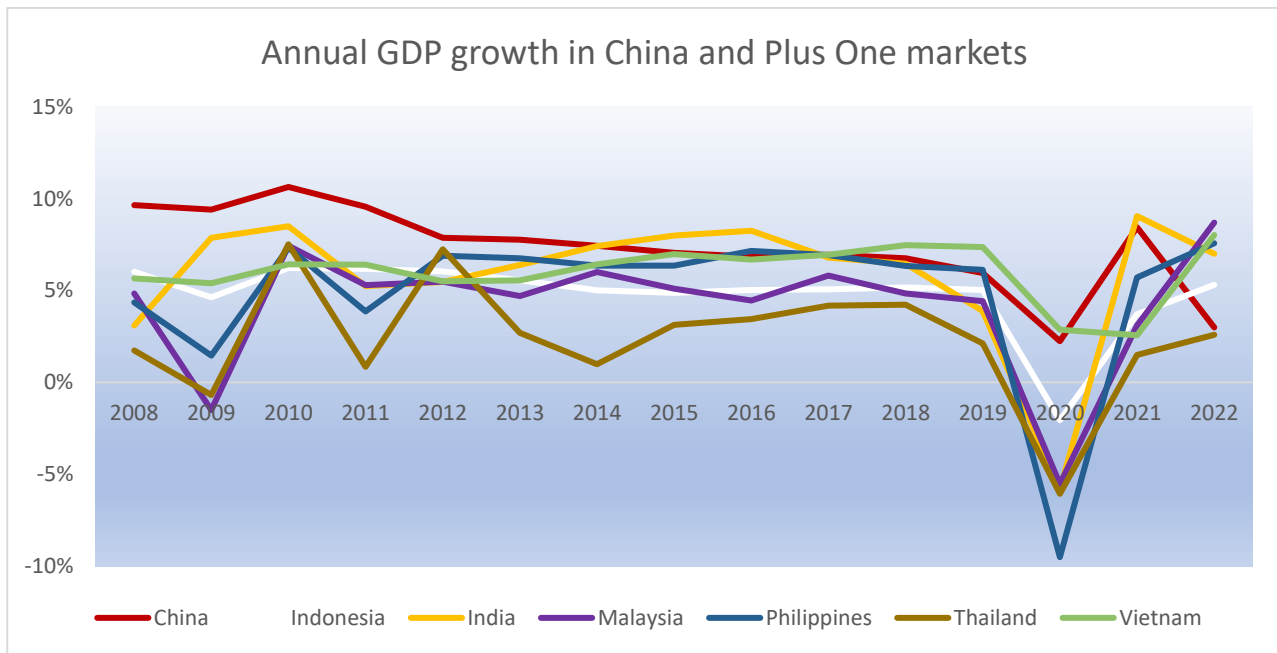
Source: World Bank

Economic indicators

Annual GDP growth rates across China and selected Plus One markets indicate several key trends. First, economic growth in China displayed a clear downward trend after 2010 before fluctuating during the pandemic. In 2022 China reported significantly lower economic growth than selected Plus One markets, with the exception of Thailand, but large swings during the pandemic makes it difficult to interpret the growth trajectory of the different markets. Second, all selected Plus One markets quickly recovered from the pandemic where Vietnam emerge as the only Plus One market to have escaped negative growth in 2020. Third, Thailand has since 2013 consistently reported lower economic growth than other markets. India initially showed strong performance, but after a sluggish period with economic downturn before the pandemic Vietnam has arguably come out on top as the only Plus One market indicating a relatively stable upwards trend and maintaining positive growth during the outbreak of pandemic. The Philippines also show strong performance and made an impressive recovery from the pandemic where it was hit significantly harder than other Plus One markets (see chart 21).

Chart 21

Economic growth in China is falling behind

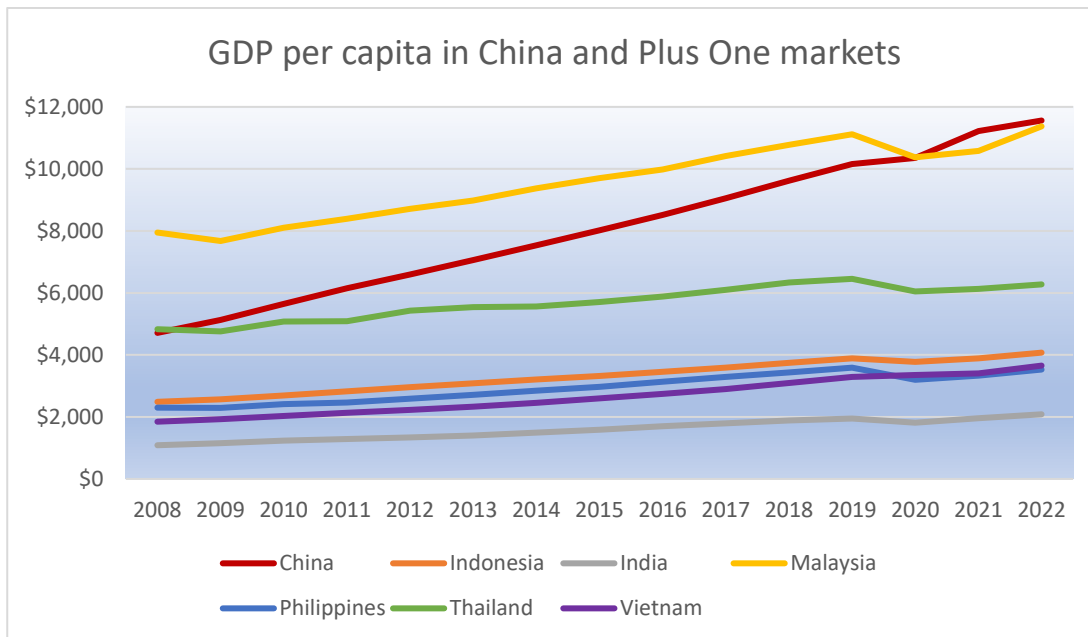


Source: World Bank

China’s GDP per capita has increased tremendously. While Vietnam and India display similar growth rates, the average prosperity of China’s population far exceeds both Plus One markets. GDP per capita in Malaysia is also substantially higher than other selected Plus One markets but was surpassed by China in 2021. Similarly, Vietnam overtook the Philippines in 2020 (see chart 22). This is explained by China and Vietnam escaping negative economic growth during the pandemic whereas the economies of other selected Plus One markets crashed.

**Chart 22**

**Chinese consumers have more purchasing power**



Note: GDP per capita is measured in constant 2015 USD

Source: World Bank

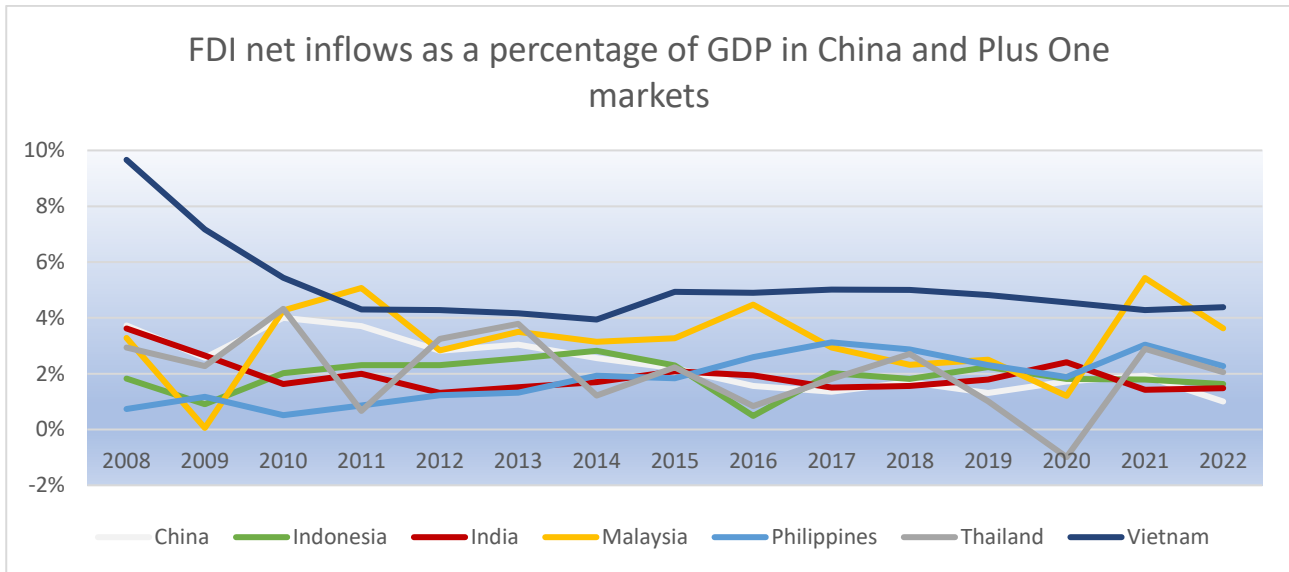
[Business indicators](#)

**China’s economy dwarfs Plus One markets**

FDI as a percentage of GDP in selected Plus One markets highlight a steady decrease to the relative contribution of foreign investments to domestic growth in China. Similar patterns can be identified in other markets, particularly Indonesia and India, but China demonstrate a highly consistent trend compared with other markets. The relative contribution of FDI net inflows to GDP is substantially higher in Vietnam than other selected Plus One markets, but foreign investments also contribute greatly to Malaysia’s economy. Thailand is the only market to record an annual FDI deficit among the selected countries (see chart 23).

**Chart 23**

**Economic growth in Plus One markets is more conditional on foreign investments**



Source: World Bank

Note: FDI net inflows are measured in BoP current USD

However, China is still a far bigger recipient of foreign investments than selected Plus One markets. Despite dropping to its lowest point since 2017, FDI net inflows to China was more than 3,5 times bigger than FDI net inflows to India in 2022, the second largest recipient among the selected Plus One markets. Compared with Indonesia, the third largest recipient, China’s FDI net inflows were over 8 times bigger in the same year. China’s exports and imports of goods and services also dwarfs the Plus One markets. In 2022, China’s exports of goods and services were nearly five times more than India, the largest Plus One market, while imports of goods and services were nearly three and a half times higher. Similarly, Vietnam is experiencing a trade surge, but both exports and imports of goods and services were only equal to approximately one tenth compared with China in 2022.<sup>18</sup>

Minimum wages in China have increased tremendously and by 2014 overtook the Philippines and Thailand as the market with the highest minimum wages across selected Plus One markets. Minimum wages in India are isolated far below the other markets. Minimum wages in Vietnam are also substantially lower than the other markets, but when measured as a percentage change, growth to minimum wages in Vietnam far eclipse China with a growth rate of 368% against 208%. Indonesia reports a slightly lower percentage change than China, but numbers are only available from 2012. Given the trajectory of Indonesia in the above figure, Indonesia is therefore very likely to report a larger growth rate than China and possibly Vietnam. Minimum wages in Malaysia have increased significantly, but missing data prior to 2013 makes it difficult to compare its growth rate with the other markets (see chart 24).

Regional variances to minimum wages in the selected markets makes it difficult to draw any conclusions related to labor costs in China and Plus One markets. In example, in Indonesia minimum wages in Jakarta are more than twice as high as minimum wages in the province of Java.<sup>19</sup> Moreover, some markets report

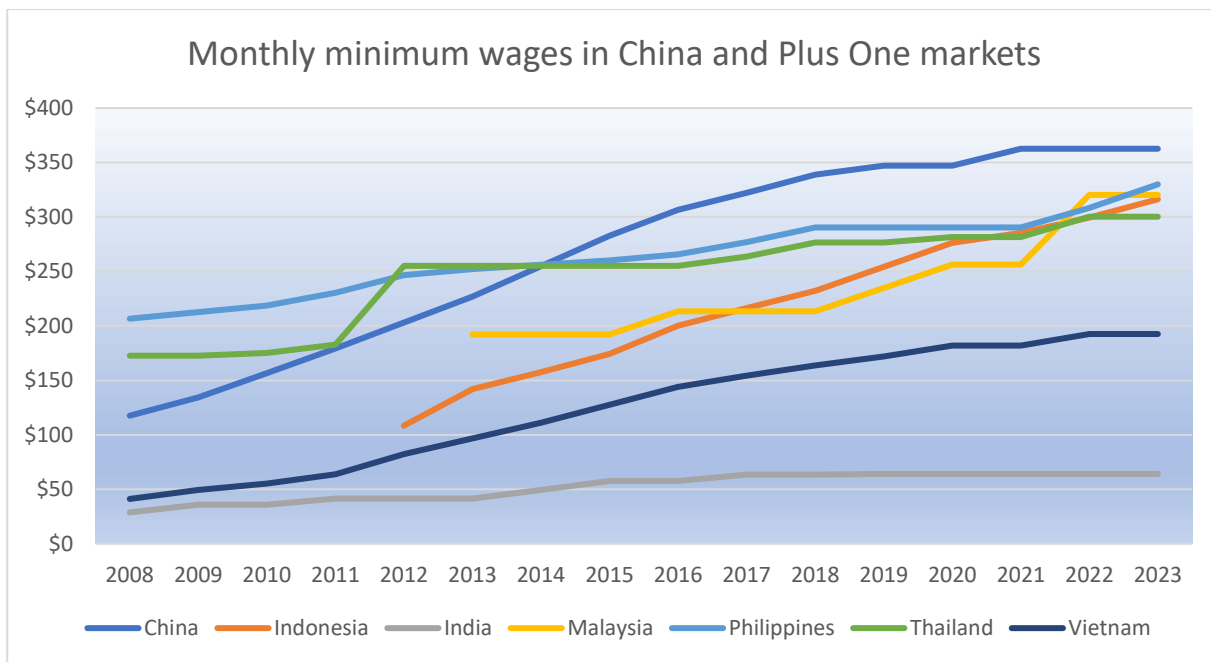
<sup>18</sup> A full overview of FDI net inflows and trade data across China and selected Plus One markets can be found in appendix OOOOO.

<sup>19</sup> ASEAN Briefing (n.d.).

minimum wages as daily wages which have been converted to monthly wages by multiplying with 30, but this fails to reflect time off such as during holidays and weekends. Data from Trading Economics also report minimum wages in local currencies which have been converted to dollars for the sake of comparison. Instead, this benchmark attempts to compare tendencies in each market related to minimum wages.

**Chart 24**

**Minimum wages in China have surged ahead of other markets**



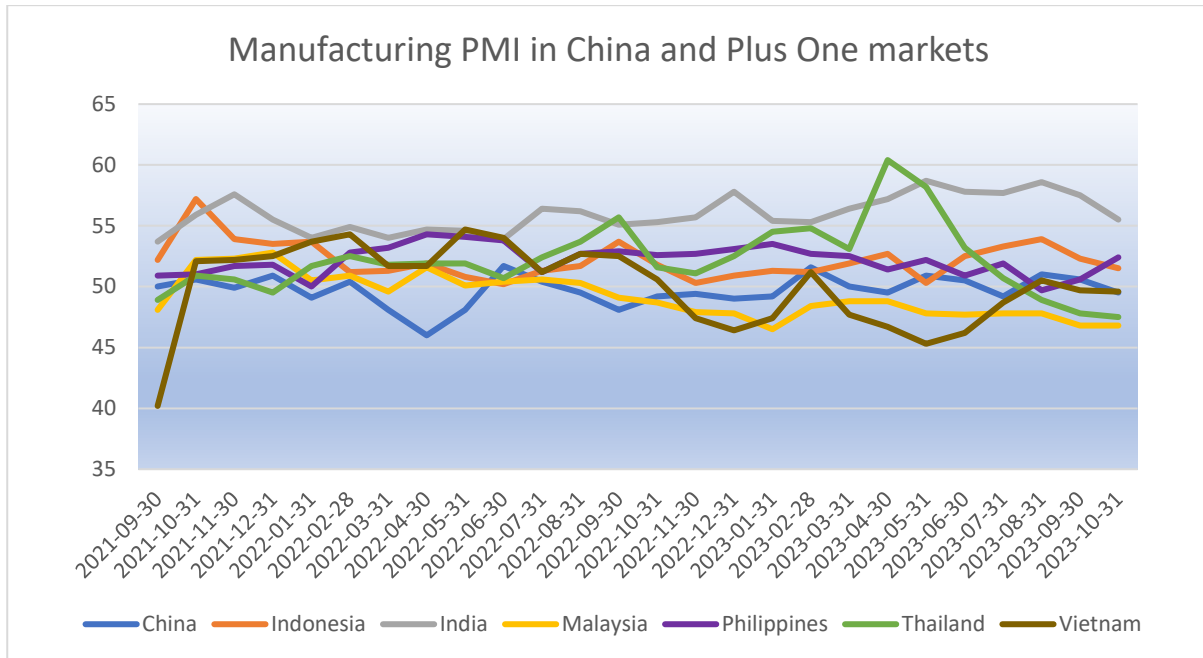
Note: Minimum wages are measured in current USD, based on currency data from November 30.

Source: World Bank

The turmoil of China’s manufacturing environment in recent years becomes clear when comparing China with the selected Plus One markets. While China’s manufacturing PMI stabilized above Vietnam and Malaysia after October 2022, sentiments about manufacturing conditions in China were worse than the other markets for a majority of the period since the end of August 2021. If not for the steep decline of manufacturing PMI in Thailand, manufacturing sentiments in China would likely have remained in the bottom half of the markets. The stellar performance of India compared with selected Plus One markets is also clear. In addition to manufacturing PMI not contracting a single time for the period, manufacturing sentiments in India have also over the last 16 months consistently scored significantly higher than manufacturing sentiments in other markets. This is particularly the case following the erosion of optimism about Thailand’s manufacturing sector, which emerge as the only market to ever record a manufacturing PMI of more than 60. The Philippines and Indonesia also both demonstrate consistent and solid performance since September 2021. In particular, Indonesia is the only other market than India where manufacturing PMI has expanded every month, while the Philippines contracted only once. Manufacturing sentiments in Vietnam previously exhibited strong performance on par with other Plus One markets, but starting in September 2022 optimism deteriorated heavily and has fluctuated since. Sentiments in Vietnam

suggest some recovery but is still found in the bottom half. Malaysia indicate a significantly consistent downwards trend compared with the other Plus One markets (see chart 25).

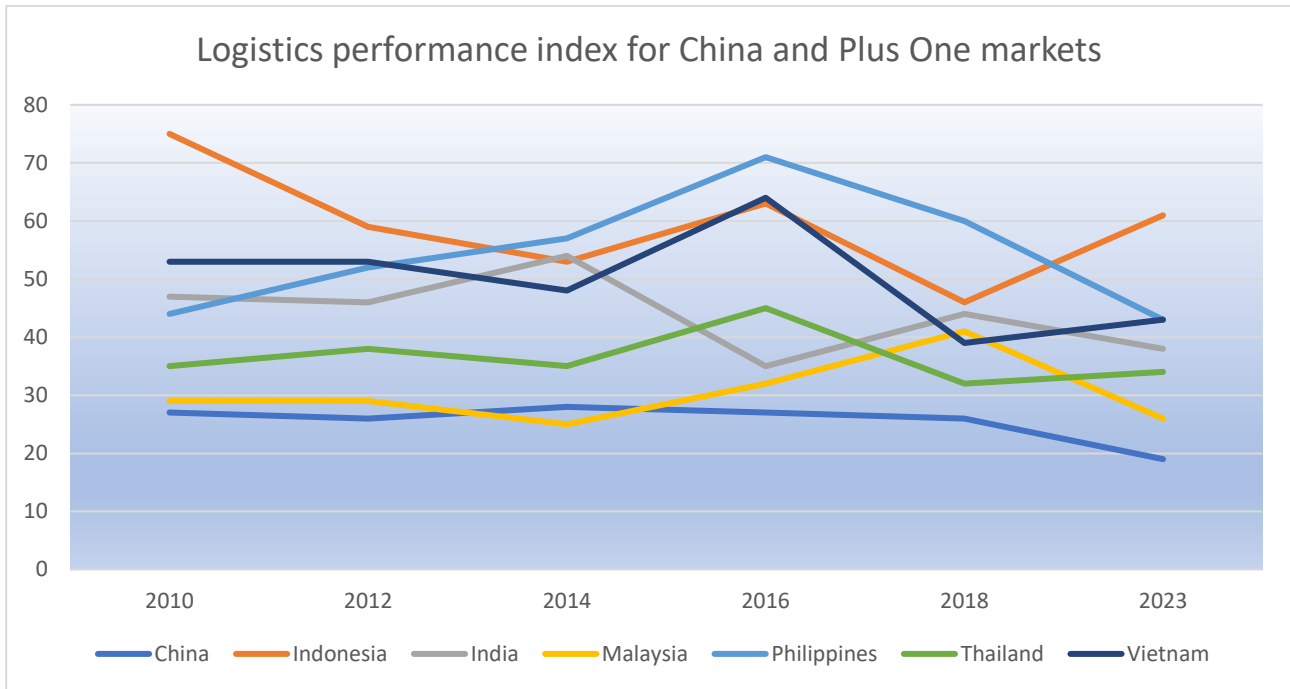
**Chart 25**



Source: Macrovar

China retains a significant advantage over the selected Plus One markets regarding trade logistics performance, both in terms of global ranking and stability. Malaysia was a strong contender, briefly overtaking China in 2014, but deteriorated considerably in the rankings until 2018. While Malaysia has since showed substantial recovery and again ranks higher than the other Plus One markets, a gap between China and Malaysia persists. Infrastructure in Thailand, Vietnam, Indonesia, and the Philippines all declined significantly between 2014-2016 before recovering again, whereas the opposite pattern is identified for India. With the exception of 2016, Thailand emerge relatively stable compared with other Plus One markets. Overall, infrastructure has improved the most for Indonesia, but logistics performance deteriorated significantly between 2018-2023. An opposite pattern is found for the Philippines which initially dropped dramatically in the rankings but has since fully rebound and show a strong development trajectory (see chart 26). However, large swings in the rankings from 2018 to 2023 can also be explained by the World Bank implementing a grouped ranking approach in its latest index which cause jumps between each group, such as from a grouped ranking of 88 to the next grouped ranking of 79.

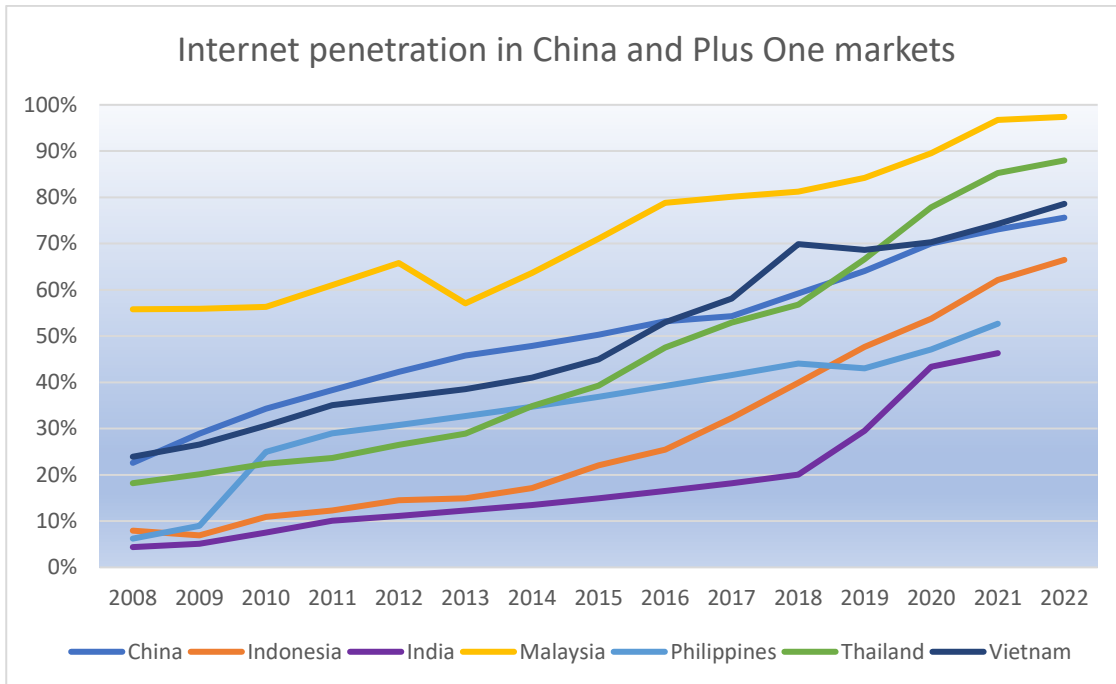
**Chart 26**



Source: World Bank

Internet penetration in China is higher than India, the Philippines and Indonesia, but significantly below Malaysia and Thailand. In particular, internet penetration in Malaysia indicate a highly digital economy with almost the entire population having access to the internet. Internet penetration also already far exceeded other markets in 2008. This suggest that a significant portion of the population in Malaysia are seasoned users whereas the internet is a more novel thing for many people in the other markets. Data is missing for India and the Philippines in 2022, but both markets would remain significantly below the other markets (see chart 27).

**Chart 27**

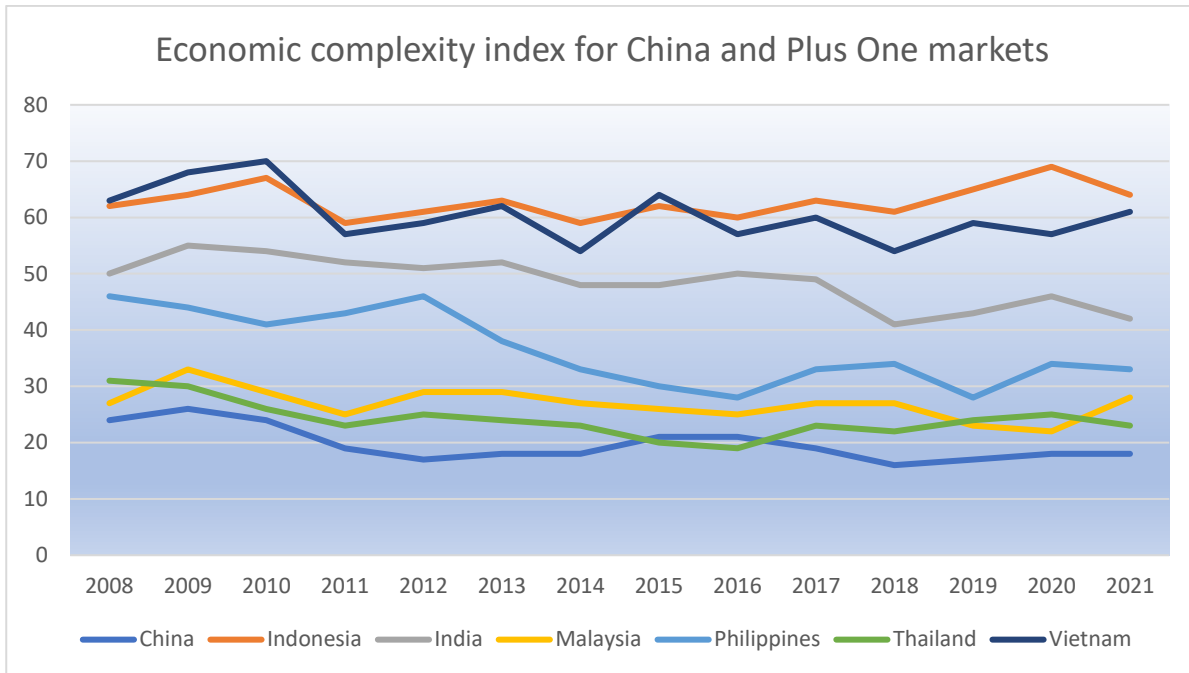


Note: While internet penetration is a potential indicator of digital infrastructure it may not reflect the degree that consumers utilize and interact with digital technologies.

Source: World Bank

China exhibit high capacity to sustain a diverse and sophisticated range of economic activities compared with the selected Plus One markets. Thailand and Malaysia also show high economic complexity, with Thailand briefly overtaking China in 2015-2016, but recent years display a clear gap between them. Production in China in particular distinguish itself from Vietnam and Indonesia which both rank significantly lower than the other markets and suggest no distinct improvements. This indicate that the development of infrastructure to sustain complex exports in Vietnam and Indonesia’s manufacturing sector is behind other Plus One markets. In contrast, improvements to economic complexity in the Philippines and India suggest that both markets are steadily embracing more complex manufacturing, even if China retains a significant advantage (see chart 28).

**Chart 28**

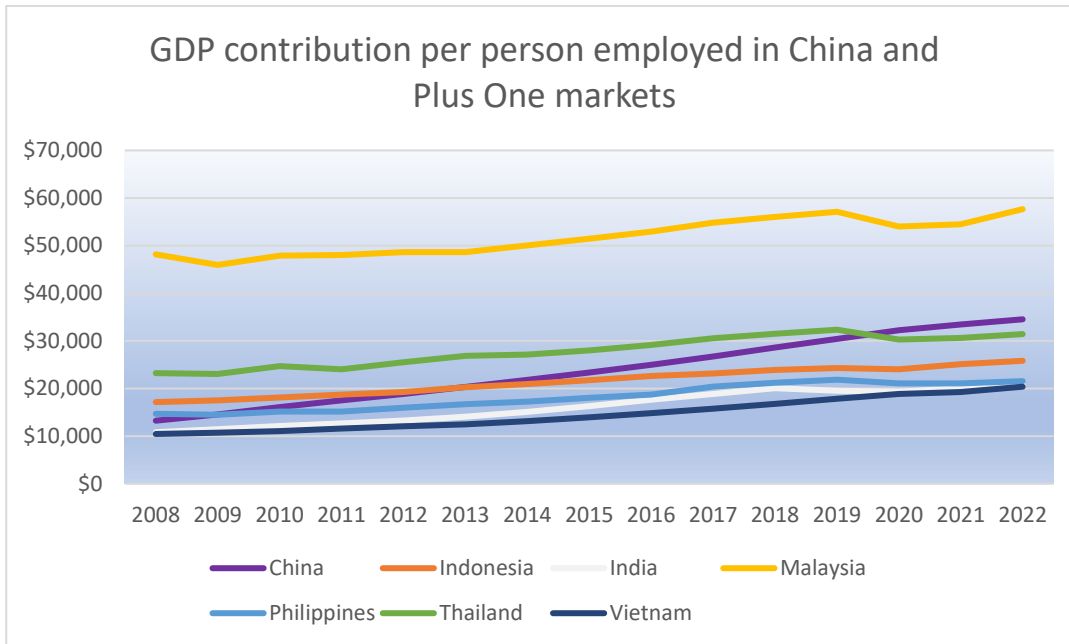


Source: Harvard Atlas of Economic Complexity

GDP contribution per person employed has increased dramatically in China since 2008, overtaking Thailand in 2020 as the market with the second highest labor productivity among the selected markets.

While labor productivity in China is significantly higher than in Indonesia, the Philippines, India, and Vietnam, there is a substantial gap between Malaysia in first place and China. Vietnam and India show strong growth relative to the other Plus One markets, but with the exception of China the order of the markets has otherwise been highly consistent for the period. However, based on current trajectories, Vietnam will likely overtake both the Philippines and India in 2023, which are both experiencing a slump regarding GDP contribution per person employed (see chart 29).

**Chart 29**

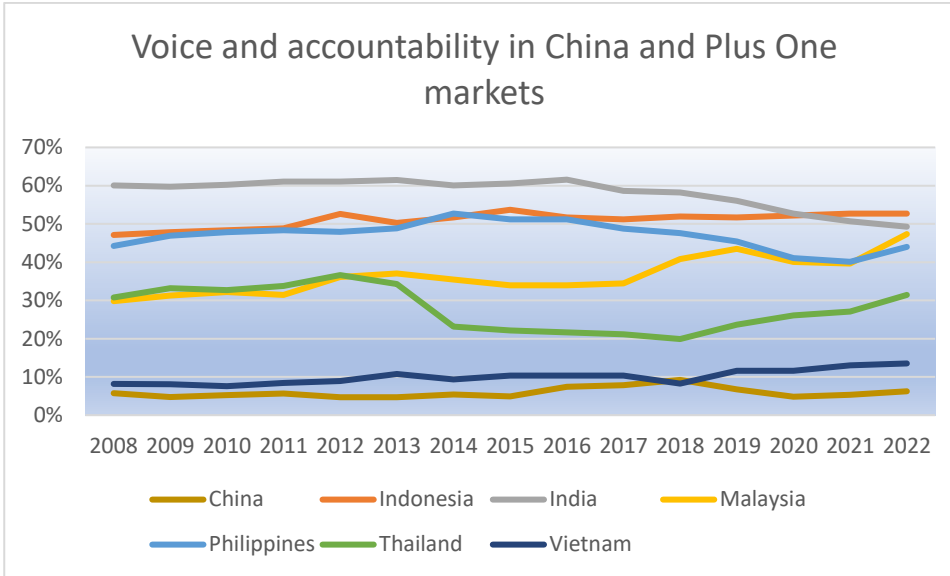


Source: World Bank

Governance indicators

Perceptions of voice and accountability in China are substantially worse than the selected Plus One markets. Vietnam also display poor perceptions of voice and accountability, but a simultaneous deterioration of perceptions in China from 2018 to 2022 and improvements in Vietnam means that there is now a clear gap between China and all of the selected Plus One markets. This indicate that stakeholders generally perceive China to have minimal freedom of expression, freedom of association, free media, and little opportunity for citizens to participate in selecting their government compared with the Plus One markets, ranking in the bottom 6% among more than 200 countries. Perceptions of voice and accountability were significantly higher in India than the other markets, but perceptions have consistently deteriorated since 2016 and India has recently been overtaken by Indonesia which shows slow but steady improvements (see chart 30).

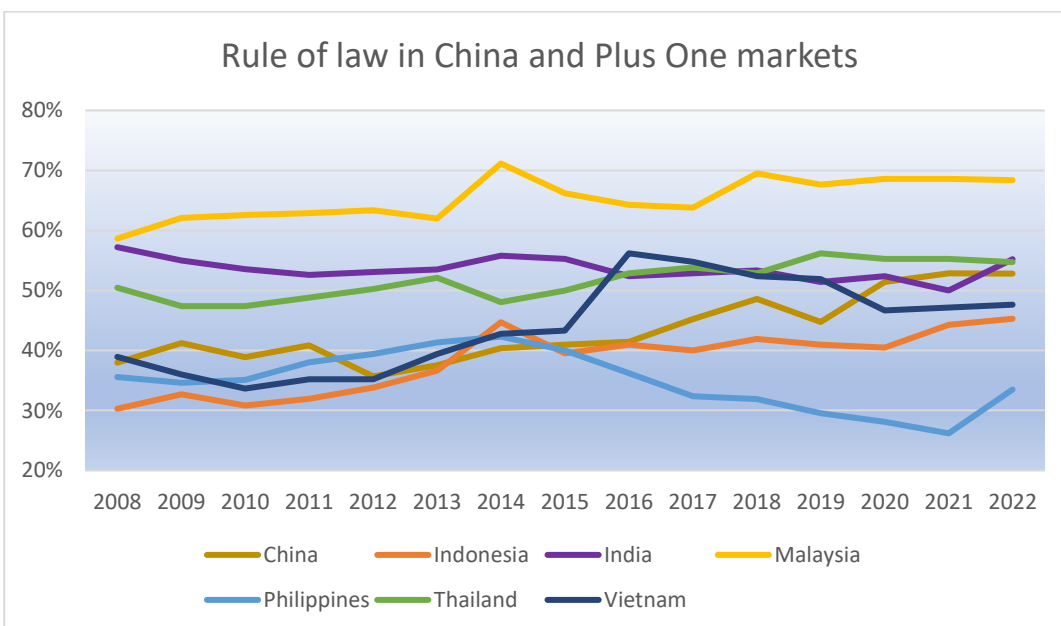
Chart 30



Source: World Bank

Perceptions of rule of law in China have improved considerably starting in 2012 compared with the selected Plus One markets. In 2012, China ranked substantially lower than Malaysia, India, and Thailand, while also ranking barely ahead of Vietnam and Indonesia. But perceptions of rule of law in China show strong gradual improvements since then relative to the other markets. By 2020, China have completely closed the gap with Thailand and India, and now ranks significantly higher than Vietnam, Indonesia, and the Philippines. Perceptions of rule of law in Malaysia are still substantially higher than the other markets, whereas perceptions of rule of law in the Philippines have deteriorated considerably below the other markets. Indonesia also show steady improvements in recent years compared with the other Plus One markets (see chart 31).

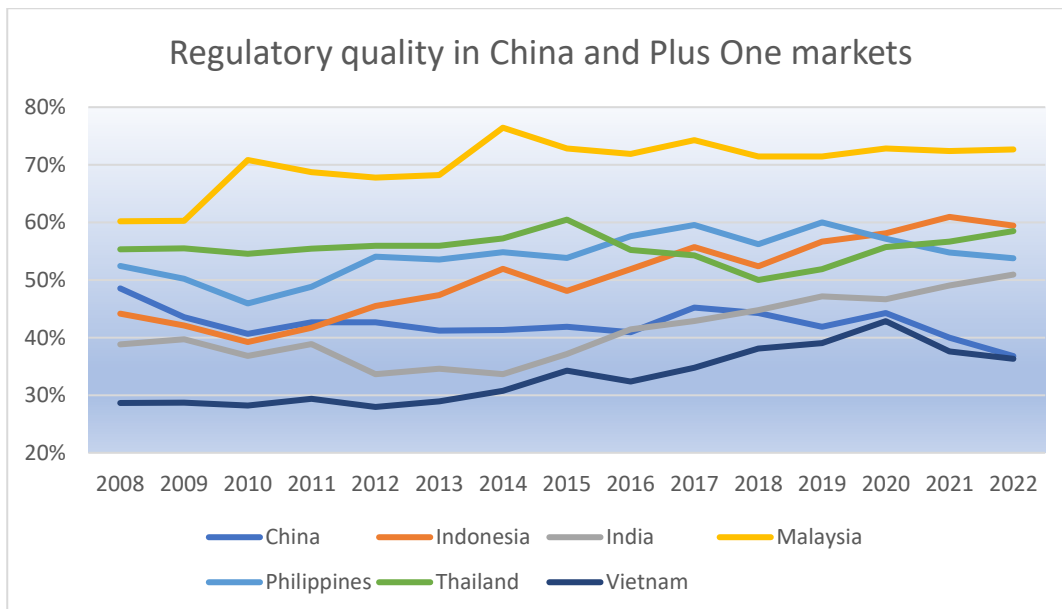
**Chart 31**



Source: World Bank

Perceptions of regulatory quality in China have deteriorated tremendously compared with the selected Plus One markets. In 2008, China ranked higher than Indonesia, India, and Vietnam, but significant improvements in these markets against an erosion of sentiments in China means that perceptions of regulatory quality in China now only scarcely outperform Vietnam. If not for a similar deterioration of perceptions of regulatory quality in Vietnam in recent years, China would rank considerably lower than all of the selected Plus One markets in 2022. As an indicator that captures perceptions related to the ability of the government to formulate and implement policies and regulations that permit and promote private sector development, this reflects eroding sentiments regarding the business environment in China. Perceptions of regulatory quality in Malaysia are substantially higher than the other selected Plus One markets (see chart 32).

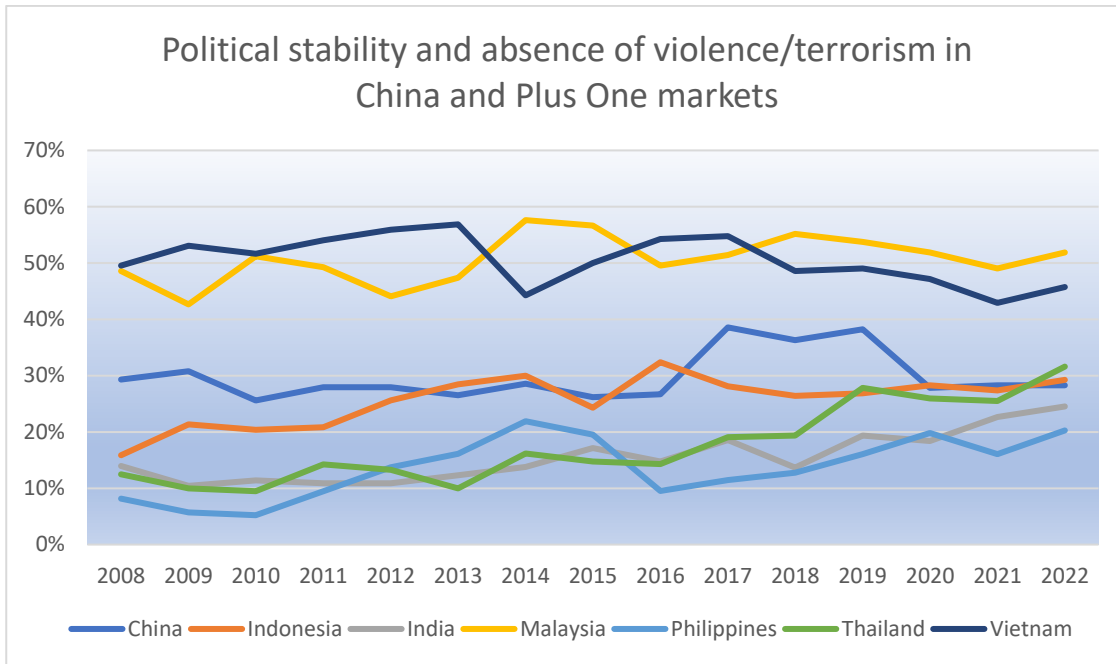
**Chart 32**



Source: World Bank

Perceptions of political stability and absence of violence and terrorism in China have stagnated compared with the selected Plus One markets. In 2008, stakeholders perceived the likelihood of political instability and/or politically motivated violence to be significantly lower in China than in Indonesia, India, Thailand, and the Philippines. Since then, perceptions in these markets have all improved considerably whereas perceptions in China have been largely constant, with the exception of a jump in 2017-2019. China still ranks higher than the Philippines and India, but the gap between the markets has narrowed considerably, while both Indonesia and Thailand have overtaken China in 2022. Perceptions of political stability and absence of violence and terrorism are again substantially higher in Malaysia than the other Plus One markets, but Vietnam also indicate exceptionally positive sentiments relative to the other markets (see chart 33).

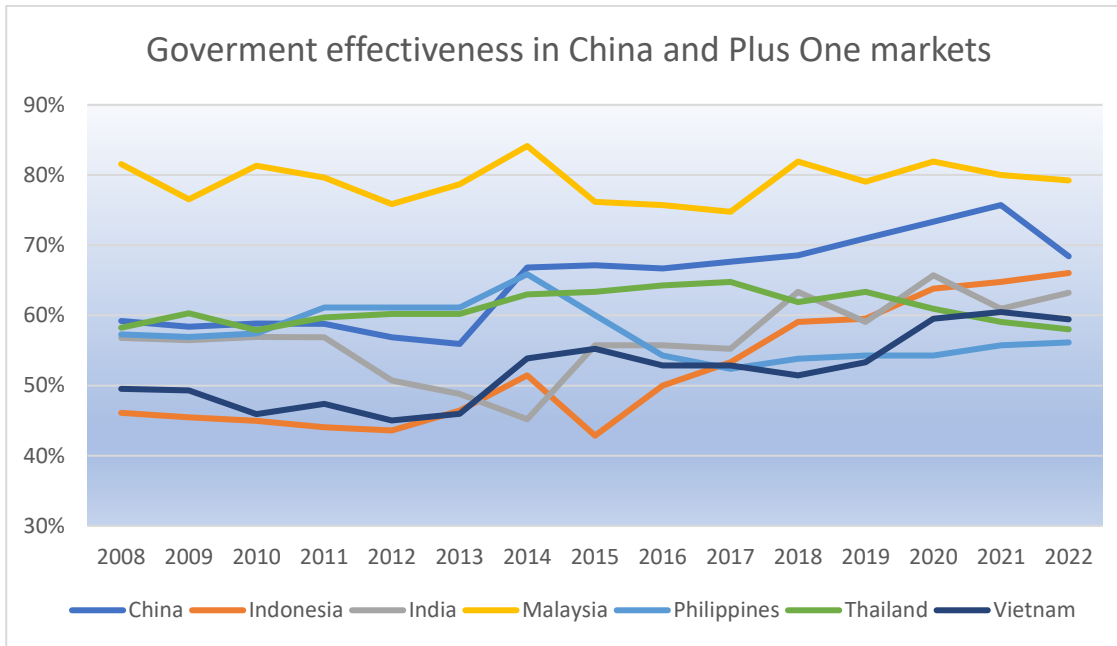
**Chart 33**



Source: World Bank

The gap between perceptions of government effectiveness in China and the selected Plus One markets has narrowed considerably after perceptions for China deteriorated in 2022. Prior to this drop, perceptions of government effectiveness in China ranked significantly higher than the Plus One markets except Malaysia which again substantially outperforms perceptions for the other Plus One markets. While sentiments in 2022 still indicate more confidence about government effectiveness in China compared with nearly all of the selected Plus One markets, the perceived advantage held by China has greatly diminished. This is facilitated by tremendous improvements to perceptions of government effectiveness in Indonesia, and to a lesser extent Vietnam, which has lifted the rankings of the lowest scoring markets (see chart 34).

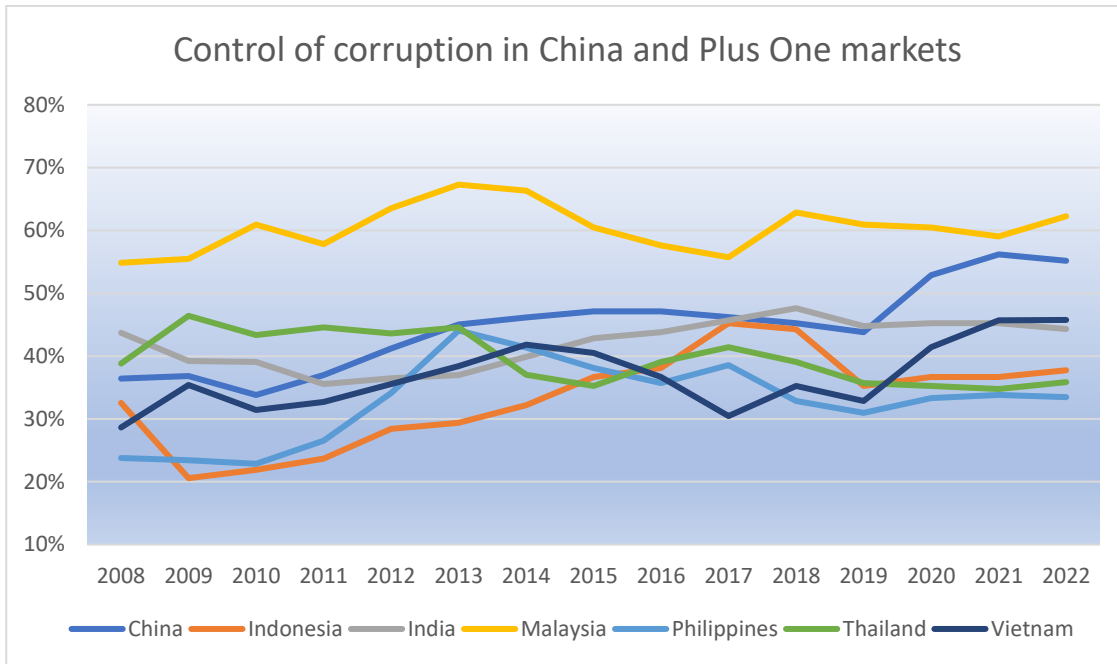
**Chart 34**



Source: World Bank

Sentiments regarding the exercise of public power for private gain and the commandeering of the state by elites and private interests are significantly more positive for China than the selected Plus One markets, again with the exception of Malaysia. China already ranked higher than Indonesia, Thailand, Vietnam, and the Philippines in 2019, but considerable improvement to perceptions of control of corruption during the pandemic has widened the gap and pushed sentiments in China ahead of India. Vietnam emerge as the only Plus One market to exhibit significant improvements to perceptions of control of corruption during the pandemic, overtaking the other Plus One markets minus Malaysia in 2022 (see chart 35).

**Chart 35**



Source: World Bank

## PERSPECTIVES

China's economic and political development is transforming business conditions for many Danish companies with activities in the country. C+1 is gaining ground as a strategic framework for mitigating risks. But moving existing functions to other markets presents opportunities as well as challenges. This section puts the findings into a broader perspective. We examine developments that either support or question considerations to reduce dependency on China by diversifying the countries Danish companies source from. We also compare China's competitive situation with Asian +1 markets mentioned in the study.

### Geopolitics is the new gamechanger

During the golden years of globalization, China was often praised by business executives as a haven of political stability. Whether they appreciated the government system or not, foreign investors could rely on a solid foundation, uninterrupted by changing domestic and foreign politics.

That is no longer the case. Geopolitical concerns now stand out as the primary risk consideration for investors. Companies are forced to factor in the potential impact of trade sanctions, export controls, and logistical disruptions. Some risks were always present, but the lessons learned after Russia's invasion of Ukraine have made them considerably more tangible. One scenario in particular is cause for concern. If China decides to take aggressive action towards Taiwan, the impact on trade and investment is bound to be immense.

As a consequence, the hot question in Danish and other international boardrooms is whether the financial reward outweighs the political risks of investing in China? Survey results suggest that many companies do not think this is the case anymore. Small and medium-sized enterprises are the most likely to consider geopolitics a gamechanger for investing in China, whereas large-scale corporations are susceptible to the threats, but less likely to disengage from China.

### The advantage of being "in China, for China"

The position of large companies coincides with a growing tendency to pursue a China-for-China strategy (also referred to as "in China, for China"). From a risk mitigation perspective, it offers the benefit of isolating the China operation from geopolitical interference and negative public opinion outside China.

Committing to a China-for-China strategy does not, however, mean decoupling the China subsidiary from global headquarters. Rather, the subsidiary is granted a certain level of autonomy to become integrated into the local market and capitalize on available resources. It streamlines the value chain to meet a specific objective instead of fulfilling a broad set of obligations.

China-for-China strategies are gathering momentum. A recent survey by the American Chamber of Commerce showed that 30% of over 300 respondent companies planned to invest more, not less in China. Almost all of them with the specific purpose of exploiting domestic business opportunities. Instead of building factories to produce goods that are ultimately sold elsewhere, these businesses aim to draw on research and development facilities in China to make products for a vast domestic audience.

### Does your value proposition fit China's priorities?

While the China-for-China approach have inherent advantages, it may not be sufficient to justify further investments. The Chinese government has clearly stated its ambition for the economy to be more self-reliant. This objective is becoming a central factor of operating in China, particularly for foreign investors with a production set-up targeting the domestic market.

According to the European Chamber of Commerce, companies can be divided into three classes based on the expected value they bring to national and local development plans.<sup>20</sup>

Business class covers solutions that are critical for China's next stage of development. Companies in this class are encouraged to grow their market share to solve bottlenecks and provide critical inputs. They are mainly found in strategically important industries highlighted in Five-Year Plans and industrial policies such as Made-in-China 2025. Danish companies in business class can be expected to receive very favorable treatment by industry supervisors. They are, however, also expected to demonstrate their commitment to the Chinese market by large investments.

Economy class covers solutions in politically neutral territory. Companies in this class are not prioritized by authorities but are accepted stakeholders in their industry. It has little impact on China's industrial ambitions if an economy class company exits the domestic market, as they are non-essential from a technological perspective. However, they contribute to other aspects of the economy, e.g. by creating jobs and stimulating competition. Danish companies in the economy class can be expected to receive relatively favorable treatment by industry supervisors.

The cargo class covers solutions with waning importance for China's economy. Danish companies in this class will find it difficult to stay competitive. The category mainly consists of businesses investing in low-margin sectors, where Chinese companies are dominant and the value-added effect on other industries is limited. Danish companies in the cargo class will not receive much attention from industry supervisors. If they pursue a China-for-China strategy, competition with local players will almost certainly push them out of the market.

### Size and sophistication matters

In addition to the value proposition, scale and sophistication play an increasingly important role for the success rate of foreign investments. Danish companies with a small presence in China are facing tougher competition as many sectors are seeing high levels of post-pandemic consolidation. In this sense, China is becoming a market for big players and for SMEs in certain market niches.

From a pure supply chain perspective, rising labour costs have gradually eroded China's competitive advantages over the past 10-15 years. Interestingly, the survey finds that the cost factor does not play a major role in C+1 considerations. The explanation could be that the number of Danish companies in the cargo class is already small. In other words, investing in China to maximize savings is a thing of the past.

China's rapid improvements in labor productivity has been an efficient bulwark against losing competitiveness compared to Asian +1 markets. It is also the main catalyst for China's upgrade from being a low-end supplier base into a center for R&D activities and high-end manufacturing. Millions of blue-collar workers in China have learned to work with sophisticated production systems integrated with automation, whereas other Asian markets are still in the process of cultivating a skilled work force.

### Public opinion has modest impact so far

Criticism of Denmark's bilateral relationship with China is becoming more vocal in the public debate. The main point of controversy is whether Denmark can sustain close economic ties with authoritarian regimes such as China, while at the same time advocating for universal human rights and democracy.

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<sup>20</sup> See European Union Chamber of Commerce in China and Mercator Institute for China Studies (2021).

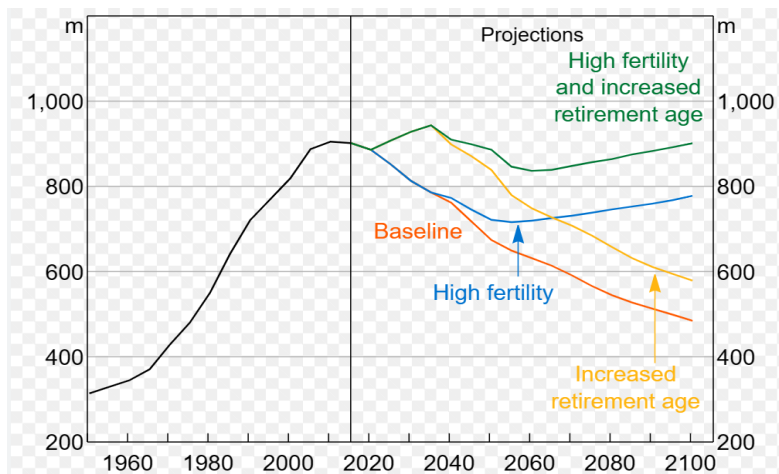
Survey findings suggests that Danish companies are not overwhelmingly affected by negative public opinion. This attitude reflects the official Danish policy of focusing on common interests between the two countries, rather than on differences in values.

Regardless, political pressure to ‘de-risk’ from China will persist. Opposition parties on both sides of the aisle in Denmark’s parliament sense a winning case targeting the government’s China policy. They point to China’s close cooperation with Russia as evidence that common values and interests are intertwined. In line with most other non-Western countries, China has declared a neutral stance in the Russia-Ukraine conflict. Its economic relationship with Russia has, however, deepened significantly since Western sanctions were imposed on Putin & Co. This is interpreted as a sign that Beijing’s economic interests ultimately go hand in hand with its political priorities and alliances.

### Demographic bottlenecks are lurking

China’s demographic challenges are not directly addressed in the C+1 survey. The development is not an imminent concern, but the projections for China’s labour force makes it an important long-term consideration. In 2019, the working population peaked at around 900 million people. By 2050, it is estimated to have declined by over 200 million people unless the country’s fertility rate improves, and the retirement age is increased. China already has a median age that is among the highest in Asia. As the proportion of children also continues to drop, nearly 1 out of 3 Chinese people will be aged 65 or older in 2050.

### Scenarios for China’s working age population



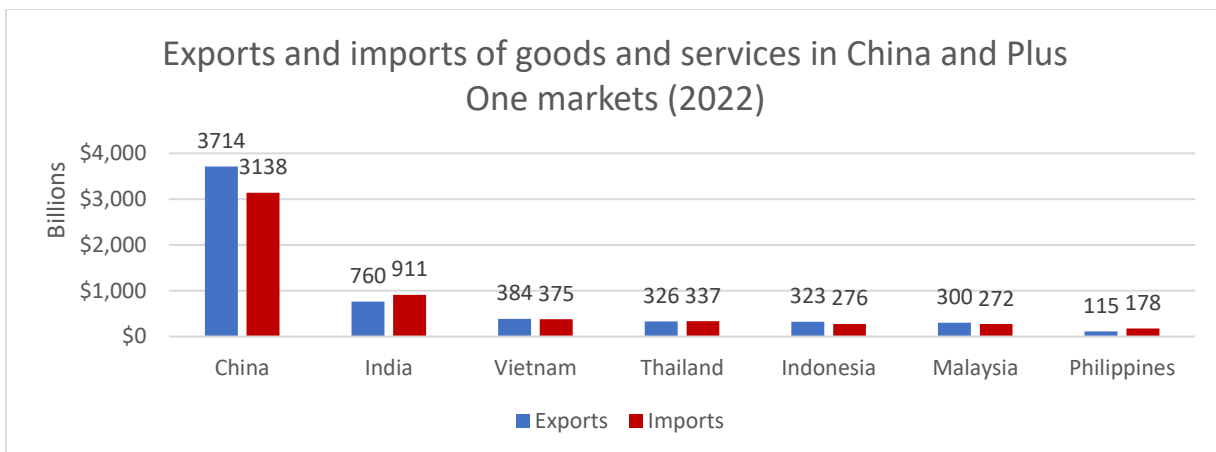
Source: Reserve Bank of Australia

The sheer volume of China will likely mitigate some of the impact caused by a shrinking and ageing population. The country will remain an attractive sales hub. And the Chinese labour force will still have a size and caliber that offers opportunities from a supply chain perspective. The biggest risk from China’s demographic development could be societal. Will China grow old before it gets rich? If so, who is going to take care of the millions and millions of old people that are insufficiently covered by pension schemes? The introduction of a public welfare system is not realistic. Local governments do not have the funds, and the central government has other priorities. The outcome could be civil unrest, which has always accompanied economic turmoil in China’s long history.

### China’s economy dwarfs other Asian +1 markets

C+1 strategies are preoccupied with supply chain considerations. As such, comparing China’s overall business potential with +1 markets is not always relevant. However, as the China-for-China trend suggests, companies are prone to invest in markets with a high degree of scalability.

Presently, China contributes substantially more to international trade than any other Asian country. In 2022, foreign trade of goods and services in China were over four times higher than India, the second largest Asian market. The collective exports of India and Southeast Asia were less than two-thirds of China, while the imports made up just below 75%.



Source: World Bank

Survey findings highlight India as a supply chain alternative to China. Several Danish companies have established production facilities in dynamic Indian business centers such as Mumbai and Bangalore. But there is still a long way to go. According to a recent Bernstein Research Report, India lags far behind China on most performance indicators – e.g. 20 years in FDIs, 17 years in export capacity, and 15 years in GDP per capita.<sup>21</sup>

China is also far ahead of its southern neighbors. Its GDP per capita is nearly double that of Thailand, and roughly three times as high as Indonesia, Vietnam, and the Philippines. In terms of capacity, most +1 markets cannot absorb large investment inflows anywhere close to the level in China. Partly because of weak industry cluster formations, but mainly due to the lack of skilled labour.

### China is not easily replaceable in Asia

Whereas a C+1 strategy offers a soft landing for companies looking to reduce China dependency, more aggressive strategic options entail a complete replacement of China as supply chain hub. This presents significant challenges. China is a major supplier for almost all +1 markets, in addition to being an important destination for finished goods. Breaking away from decades of economic integration and specialization will likely disrupt existing supply chains, particularly in Asia.

From an operational perspective, a full-on transfer from China to other Asia markets is laden with challenges. China has spent the past four decades building a world-class infrastructure in all corners of the vast country. Indeed, most +1 markets depend on Chinese equipment and knowhow to upgrade existing

<sup>21</sup> See Roy (2023).

infrastructure. Moreover, local Chinese authorities have rich experience in facilitating special economic zones, industrial clusters, and an attractive regulatory framework. Asian +1 markets are in an infant stage in terms of supervising foreign investors.

### Diversification is correct, but unfortunate

Besides geopolitical considerations, most survey respondents point to diversifying their supply chains as the main factor for reducing dependency in China. Diversification is becoming the new mantra in a less predictable world. On one hand it is a collective response to all the other considerations mentioned in the survey. But it is also a strategic choice in itself. As regionalization is gaining ground at the expense of globalization, it is becoming increasingly difficult for companies to benefit from specialization. Producing your inputs in country A, assembling them in country B, selling them in countries C and D, are no longer a viable option for many companies.

This is an unfortunate development. It clashes with the laws of comparative advantage, it makes it a more costly affair to be a global business, and it weakens the interdependence between nations. It is not a coincidence that China reached its peak as the world's factory during one of the most prosperous and peaceful eras in modern history. The immediate future could be a lot more challenging.

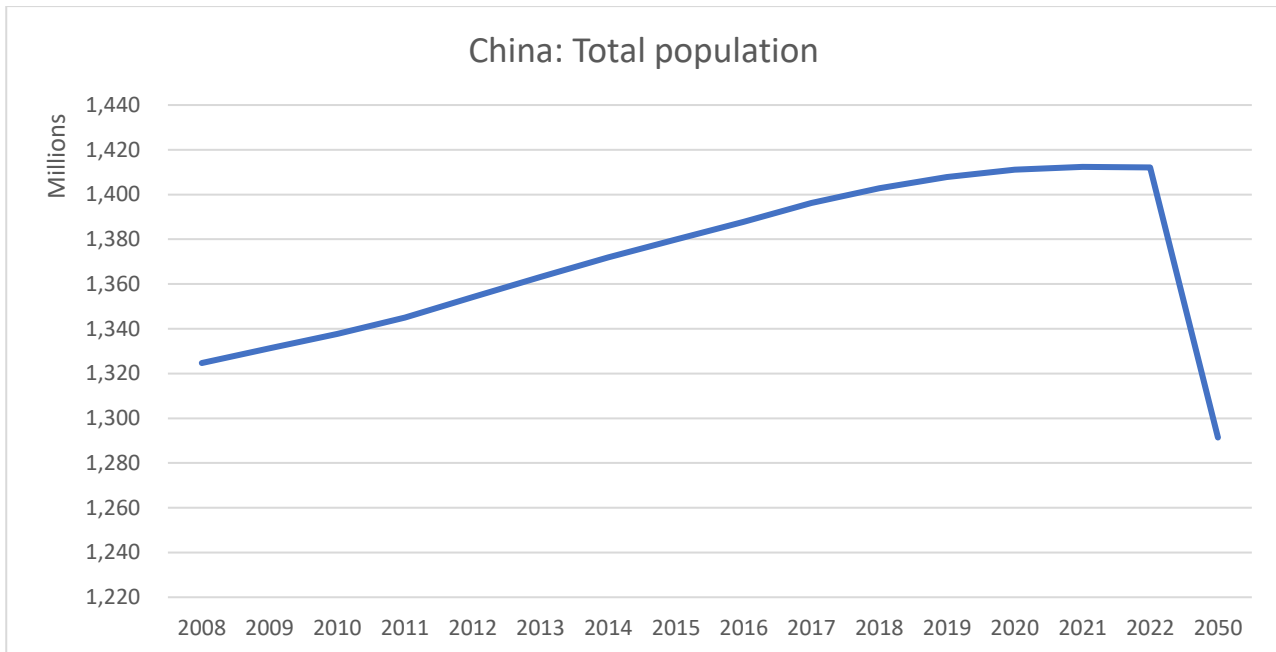
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Zhuang, A. Y., Jørgensen, C. W. N., & Bess, M. (2023). A downturn in China will reduce growth in Denmark significantly. *Danmarks Nationalbank*. <https://www.nationalbanken.dk/en/news-and-knowledge/publications-and-speeches/analysis/2023/a-downturn-in-china-will-reduce-growth-in-denmark-significantly>

## Appendices

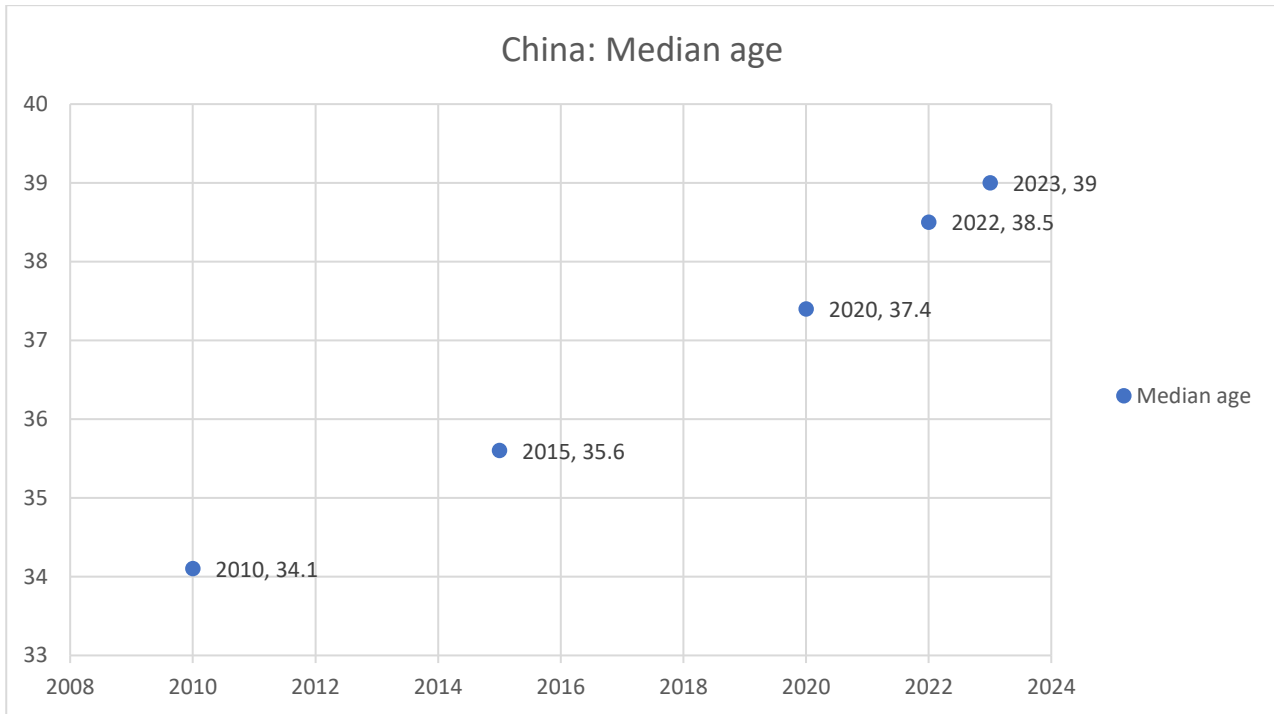
### Appendix A



**Breakdown:** China’s population has gradually expanded from 1.324.655.000 in 2008 to 1.412.175.000 in 2022, a minor increase of 6.61%. Furthermore, population growth has slowed down significantly since 2017, and in 2022 the total population dropped for the first time by 185.000 compared with 2021. The World Bank estimates that the Chinese population will continue its decline and drop to 1.291.395.968 by 2050, a drop of 8.55%.

**Source:** World Bank.

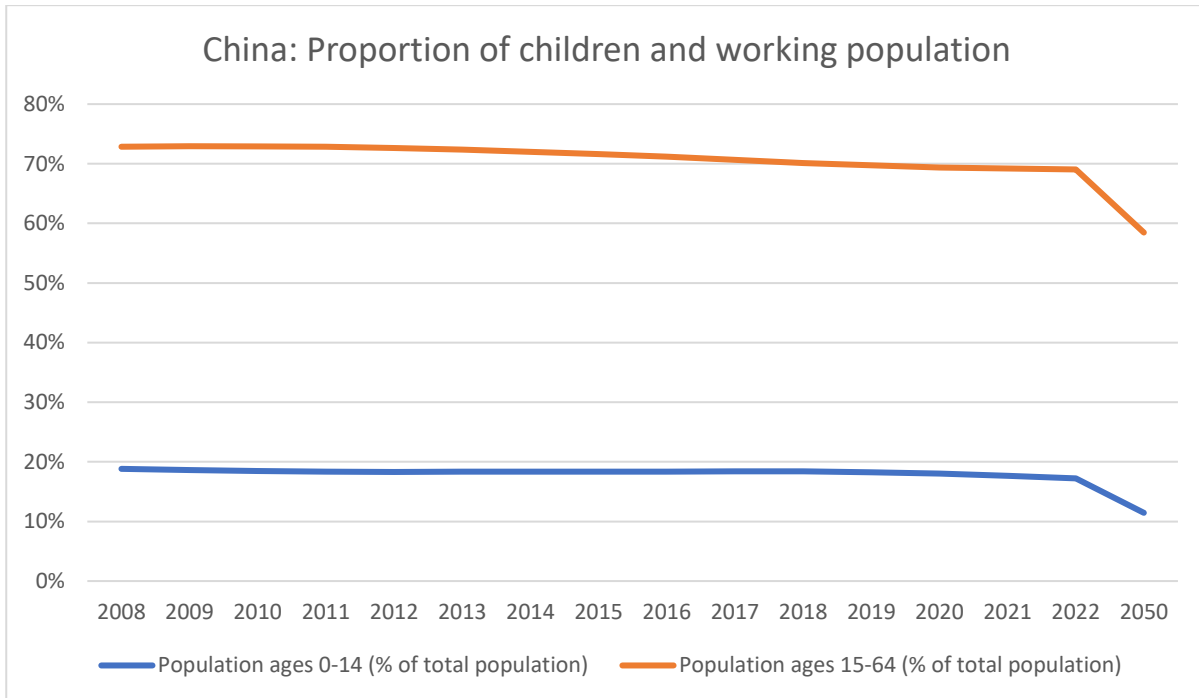
Appendix B



**Breakdown:** Between 2010-2023 the median age in China has increased by 4,9 years from 34,1 to 39. Moreover, the pace appears to increase, growing by 1,5 between 2010-2015, 1,8 between 2015-2020, and has increased by 1,6 between 2020-2023. This indicates that the Chinese population is rapidly aging, at a pace that has yet to slow down.

**Source:** Worldometer

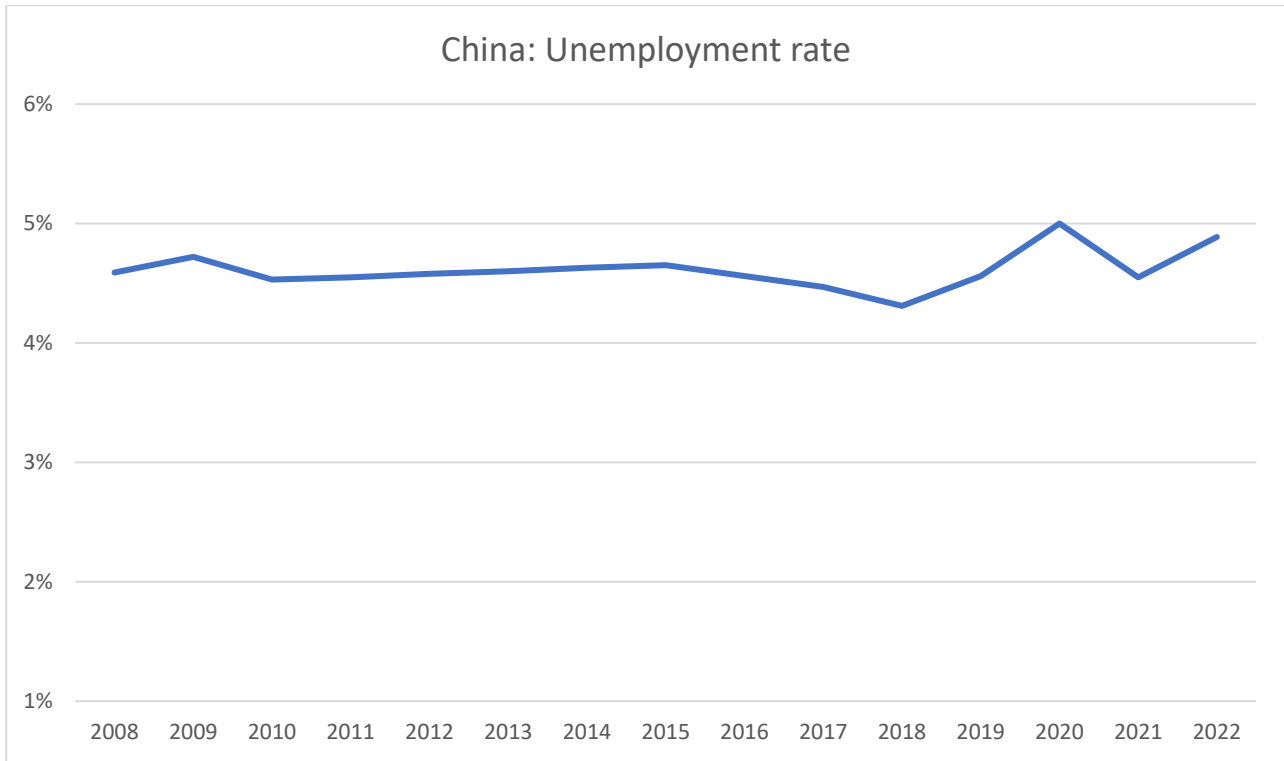
Appendix C



**Breakdown:** The proportion of the working population in China has steadily decreased each year since 2009, from 72,87% in 2008 to 69,03% in 2022. The World Bank estimates that by 2050, the working population will make up 58,46% of China’s population. Similarly, the proportion of children has declined each year starting in 2017 and is overall down from 18,82% in 2008 to 17,25% in 2022. According to World Bank estimates, the proportion of children will make up 11,45% of China’s population by 2050. This means that the estimated population aged 65 and above will correspond to 30% of the population in the future.

**Source:** World Bank

Appendix D



**Breakdown:** Unemployment in China showed signs of improving in 2015 but has since 2018 been fluctuating between 4,5% and 5%. Unemployment in China was estimated at 4,89% in 2022, but insufficient access to data during the pandemic means that unemployment estimates from 2020 onwards are uncertain.

**Source:** World Bank

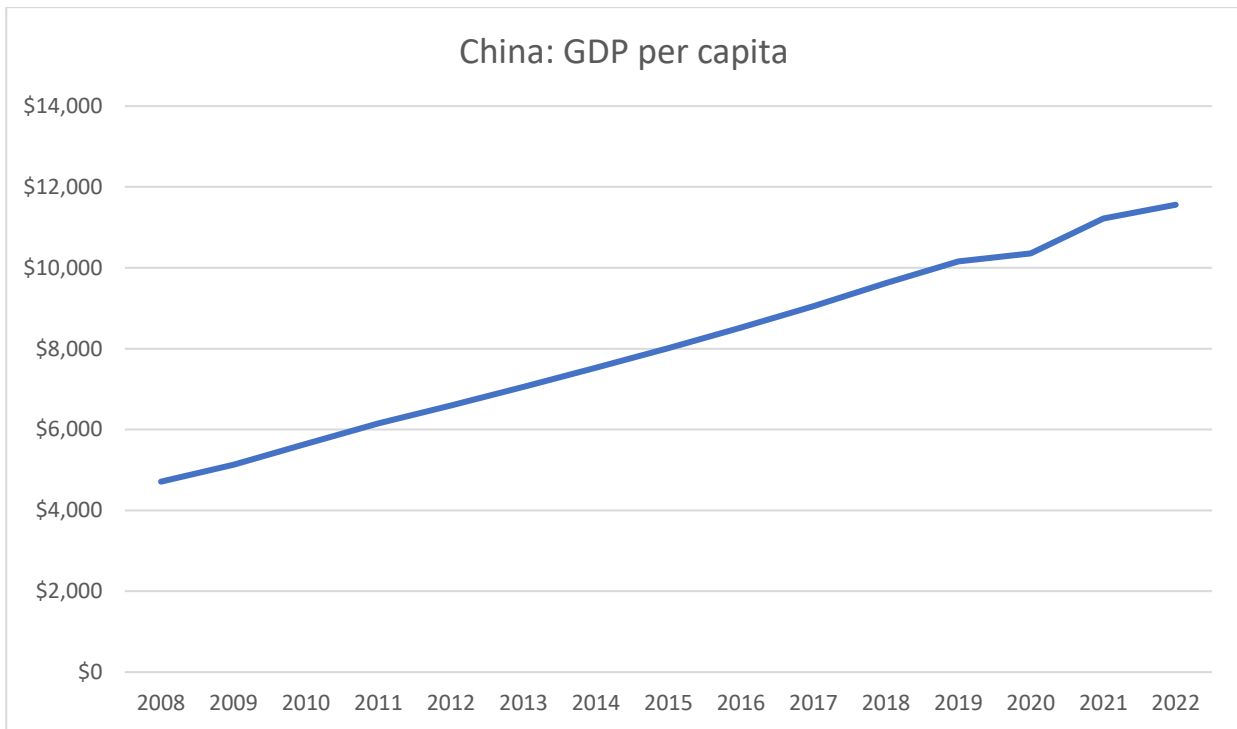
Appendix E



**Breakdown:** Economic growth in China has slowed down significantly since 2008, particularly during the pandemic with the notable exception of a tremendous spike in 2021. While annual GDP growth in China has expanded at an average rate of 7,30% between 2008-2022, economic growth has decreased decisively from 9,65% in 2008 to 2,99% in 2022.

**Source:** World Bank

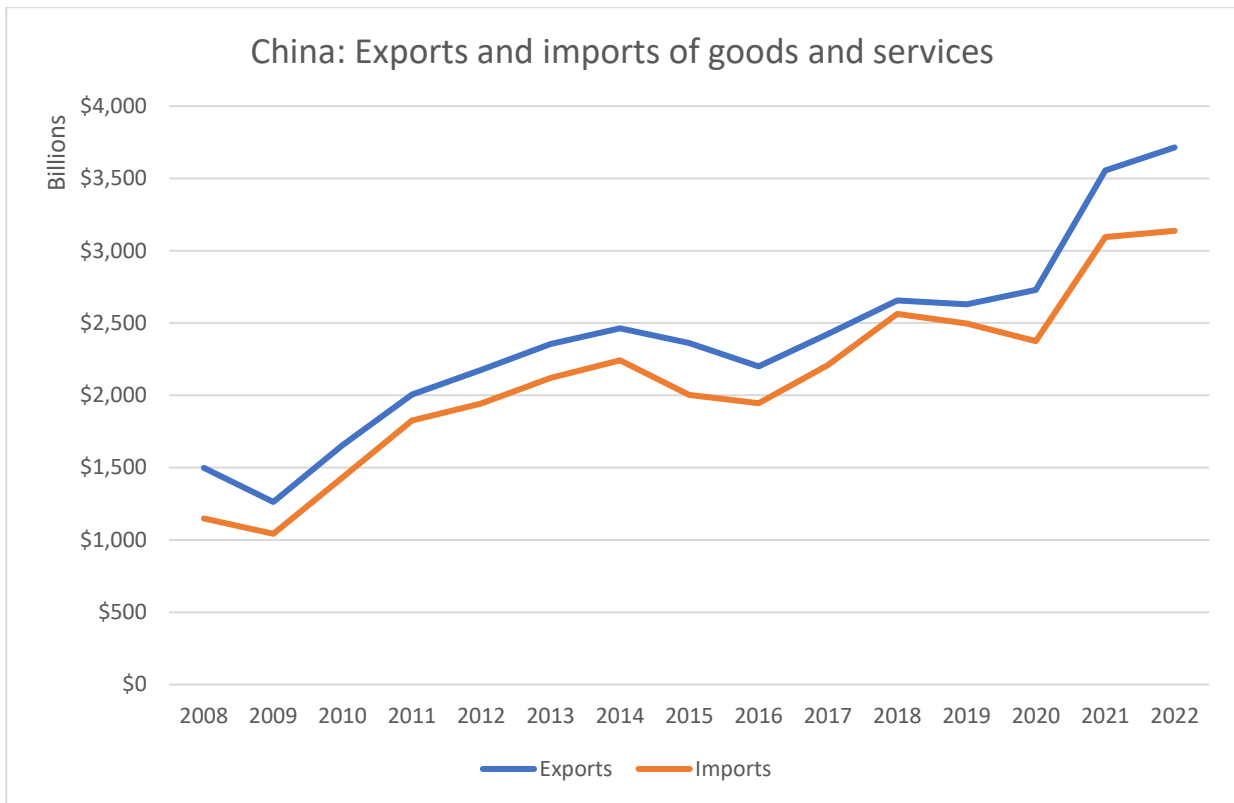
Appendix F



**Breakdown:** GDP per capita has steadily climbed by 145% between 2008-2022 from \$4712 to \$11560. As a commonly used measurement for prosperity, this increase indicates that personal wealth in China on average has more than doubled for the period. However, tied to economic growth GDP per capita growth has slowed significantly during the pandemic with the exception of 2021.

**Source:** World Bank

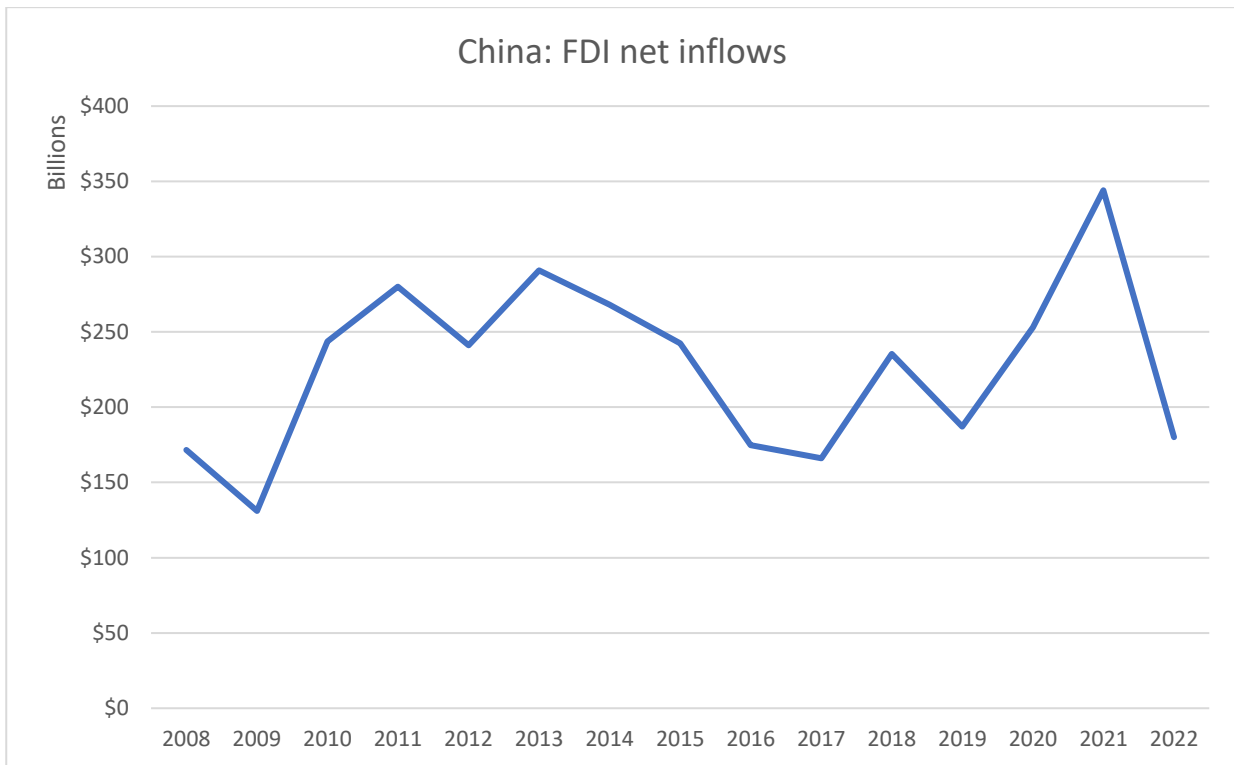
Appendix G



**Breakdown:** Exports of goods and services have increased by 148% between 2008-2022, more than doubling from \$1498 to \$3714 billion. In particular, exports jumped tremendously from 2020 to 2021 by \$824 billion corresponding to an increase of 30% year on year. Imports of goods and services have almost tripled in the same period from \$1149 to \$3138 billion, climbing by 173% from 2008 to 2022. Similar to exports of goods and services, imports also increased significantly by \$719 from 2020 to 2021, also an increase of 30% year on year. While exports overall show a clear upward trend starting in 2016 after a brief decline, imports have declined both from 2014-2016 and 2018-2020, and again show signs of flattening in 2020.

**Source:** World Bank

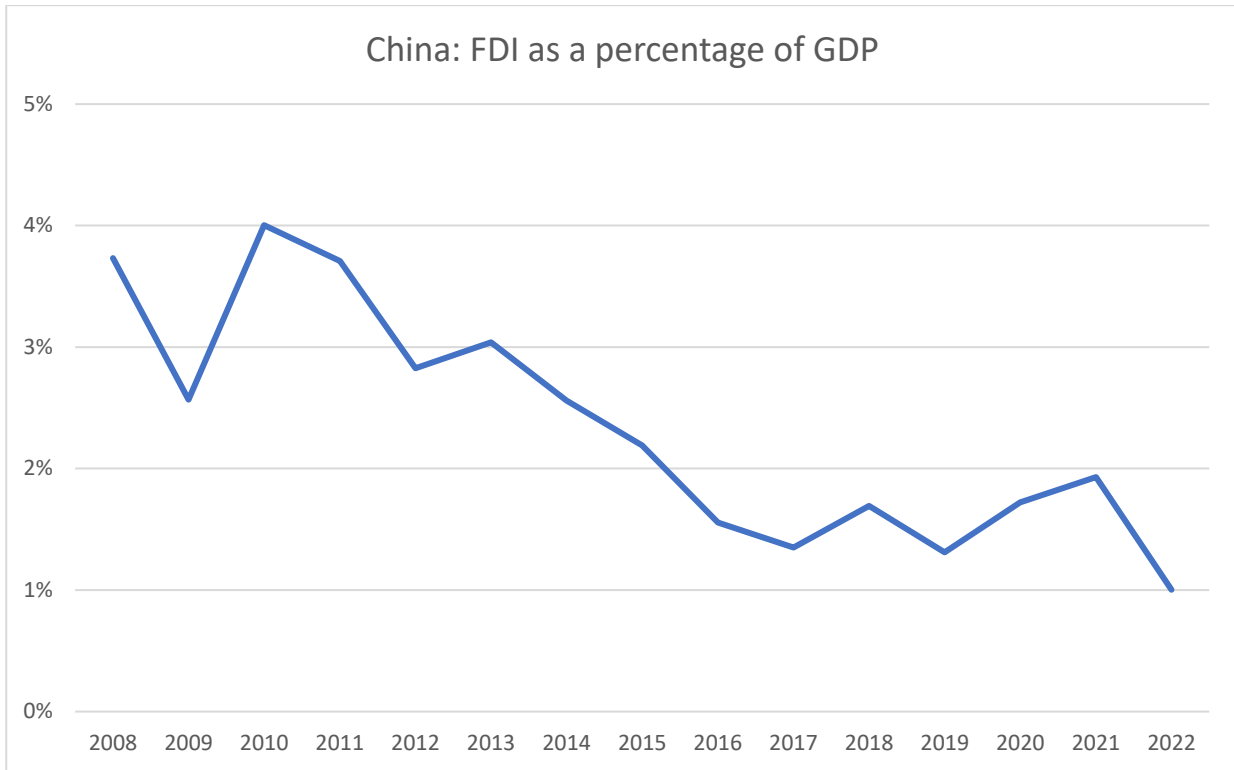
Appendix H



**Breakdown:** FDI net inflows have fluctuated greatly since 2008. While FDI net inflows initially showed strong performance more than doubling from \$131 to \$280 billion between 2009-2011, FDI net inflows dropped again dramatically from \$291 to \$166 billion between 2013-2017. Recent years have been particularly volatile. During the pandemic FDI net inflows surged tremendously by 84% from \$187 to \$344 billion between 2019-2021 but declined sharply again in 2022 to \$180 billion, its lowest point since 2017.

**Source:** World Bank

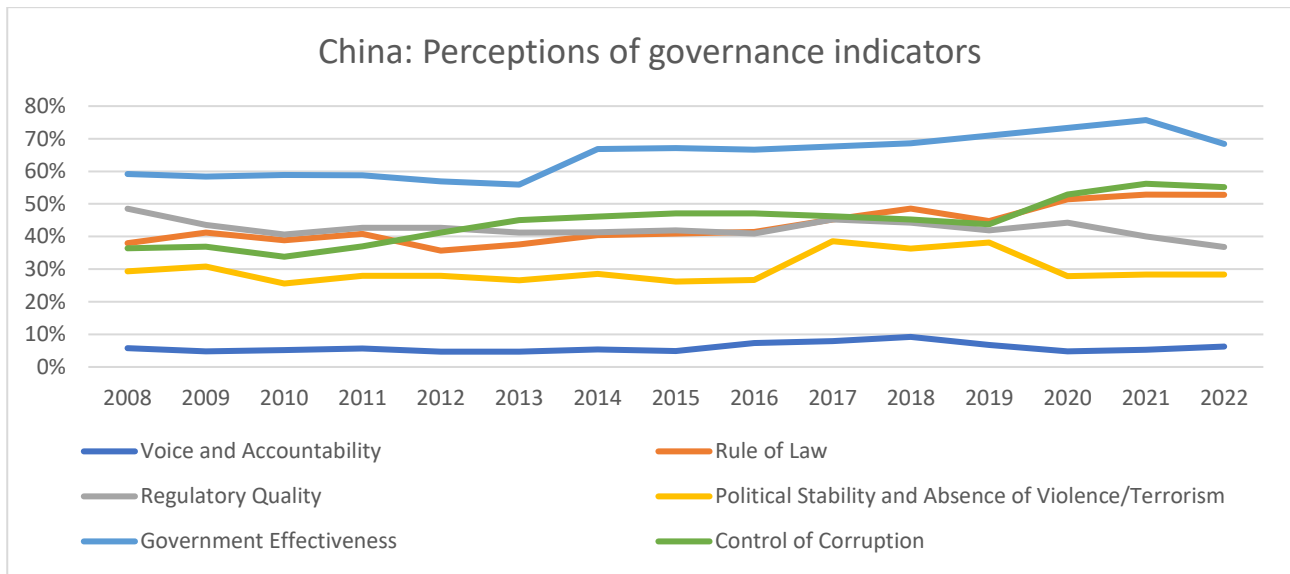
Appendix I



**Breakdown:** FDI as a percentage of GDP has significantly decreased between 2008-2022 from 3,73% to 1%. Moreover, the data indicate a relatively consistent decline with the exception of a large spike in 2010 and a brief climb from 1,31% in 2019 to 1,93% in 2021. The latter climb during the pandemic is likely connected to the tremendous surge of inwards investments from 2019 to 2021. The steady decline of FDI net inflows as a percentage of GDP indicate that foreign investments contribute less and less to the domestic economy.

**Source:** World Bank

Appendix J



**Breakdown:** China scores significantly higher on government effectiveness than other governance indicators but after a strong upwards trend between 2013-2021, perceptions have declined markedly in 2022 from ranking in the 76th percentile to the 68th percentile. Similarly, while perceptions of regulatory quality has fluctuated slightly since 2016 the data indicate a decisive downwards trend from 2020-2022 where perceptions has dropped from ranking in the 44th percentile to the 37th percentile. This drop is even more striking when compared with its overall peak at the 49th percentile in the beginning of the period in 2008. Perceptions of control of corruption show overall decisive improvements for the period from the 36th to the 55th percentile between 2008-2022. Most of this is concentrated in a major spike from the 44th percentile in 2019 to the 56th percentile in 2021 ending a three-year decline between 2016-2019. However, perceptions slightly dropped again in 2022 to the 55th percentile. Rule of law has steadily climbed from the 36th percentile to the 53rd percentile between 2012-2021, with the exception of a brief decline in 2019. Perceptions dropped 0,03 percentage points in 2022, still putting it in the 53th percentile but marking a drop nonetheless. Perceptions of political stability and absence of violence and terrorism initially climbed considerably from the 27th percentile to the 39th percentile in 2017 but quickly stagnated again before reversing from the 38th percentile to the 28th percentile in 2020. Voice and accountability is found isolated at the bottom below the 10th percentile for the entire period. While perceptions indicate overall fluctuations for the period, the data indicate an otherwise strong trend from the 5th percentile to the 9th percentile between 2015-2018 before reversing again in 2019-2020. The data indicate some recovery since 2020 from the 5th percentile to the 6th percentile in 2022 though still ranking remarkably lower than other governance indicators.

Source: World Bank

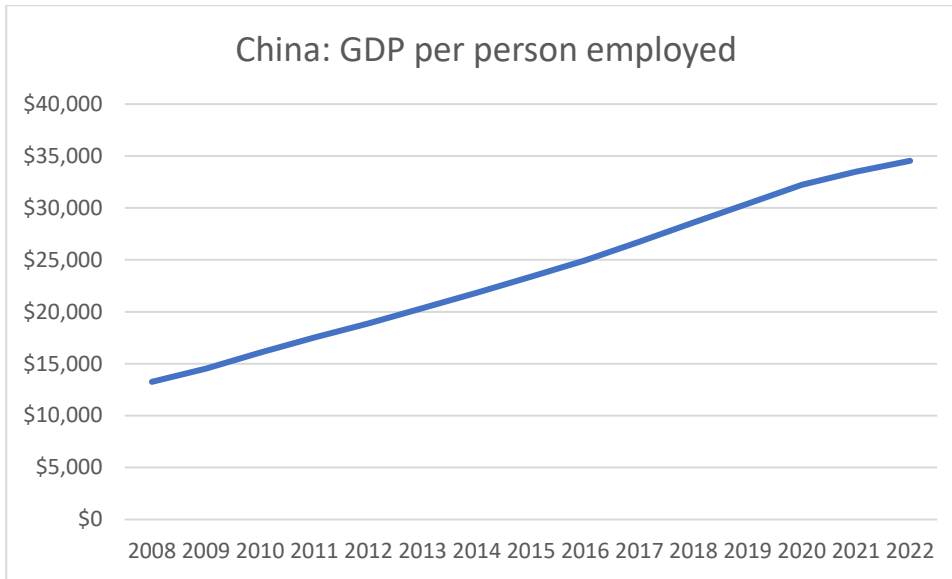
Appendix K



**Breakdown:** Following a strong climb from rank 26 to rank 17 between 2009-2012 in the economic complexity index China has slightly fluctuated in the rankings. While the data suggest a recovery from rank 21 to rank 16 between 2016-2018, China has dropped slightly to rank 18 in 2021. However, this still puts China among the top on the list counting 133 countries, ahead of industrialized countries such as the Netherlands, Denmark, and Israel.

**Source:** The Atlas of Economic Complexity

## Appendix L



**Breakdown:** Labor productivity in China measured as GDP per person employed has consistently improved between 2008-2022 from \$13256 to \$34538, corresponding to an increase of 161% for the period.

**Source:** World Bank

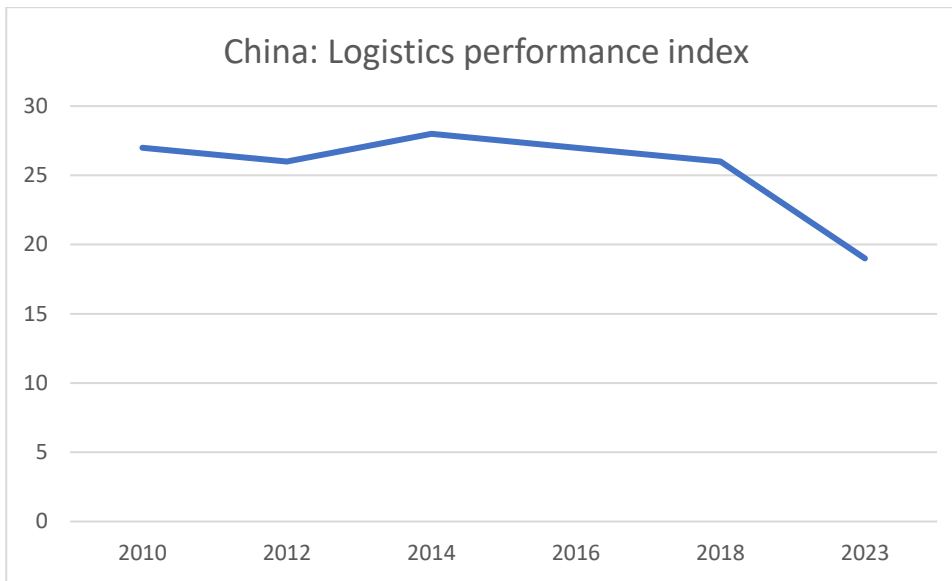
Appendix M



**Breakdown:** The monthly minimum wage in China has increased tremendously by 208% from \$117 to \$360 between 2008-2023. While the minimum wage increased consecutively from 2008 to 2019, the minimum wage remained unchanged from both 2019-2020 and again from 2021 onwards, indicating that the explosive growth to the minimum wage in China has flattened out.

**Source:** Trading Economics

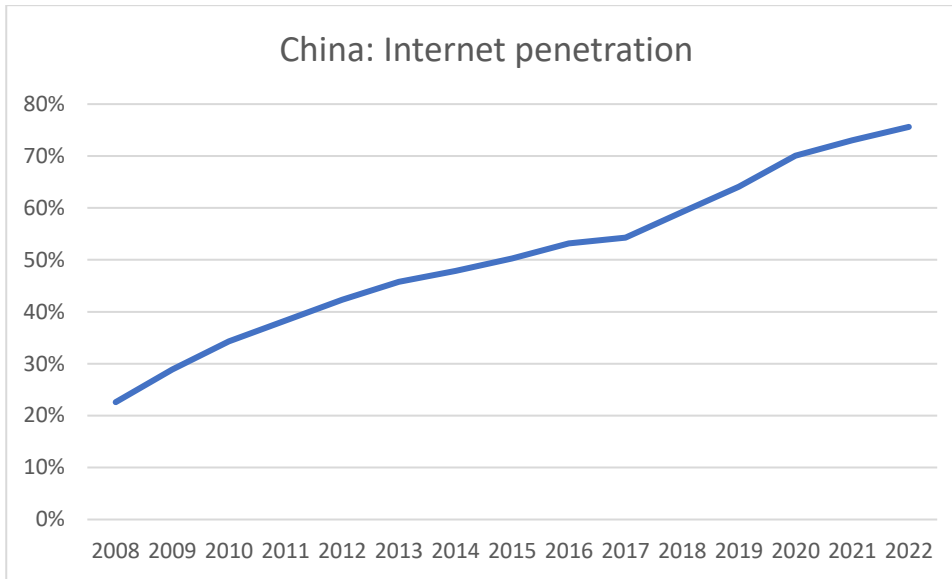
Appendix N



**Breakdown:** China’s logistics performance remained largely unchanged between benchmark measurements from 2010 to 2018, fluctuating between a grouped ranking of 28 and 26. In 2023 China significantly improved its performance in the first logistics performance index after the onset of the pandemic from rank 26 to a grouped ranking of 19. However, part of this jump is attributed from the logistics performance index implementing a grouped ranking approach.

**Source:** World Bank

## Appendix O



**Breakdown:** Internet penetration measured as the percentage of the population using the internet has improved dramatically from 22,6% in 2008 to now cover 75,61% of the Chinese population.

**Source:** World Bank

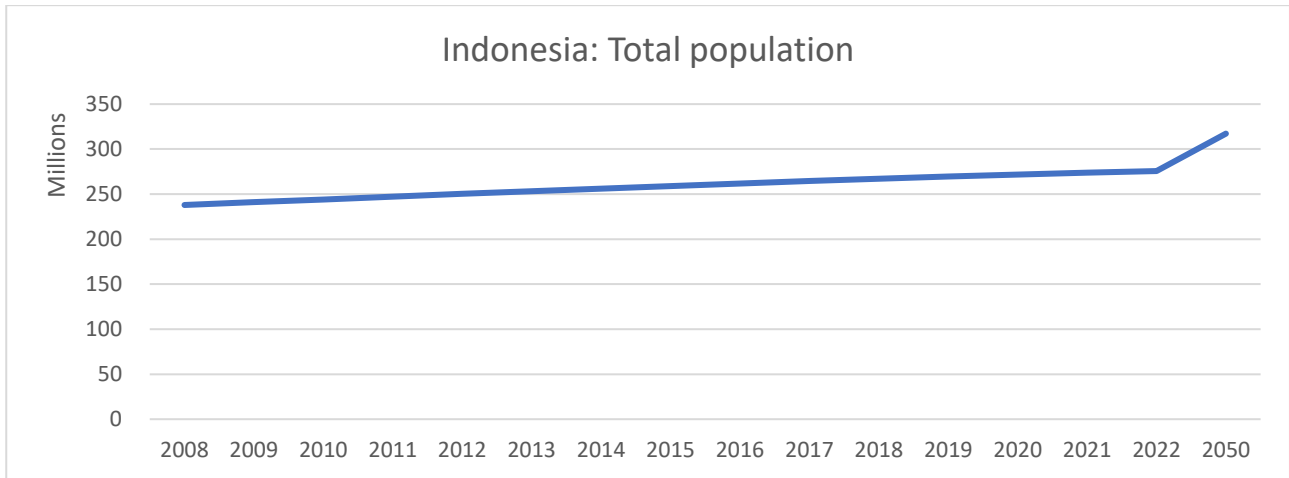
Appendix P



**Breakdown:** Manufacturing PMI in China has since the end of August 2021 fluctuated between expansion and contraction, averaging 49,71 for the period. Manufacturing PMI initially rebounded strongly from 46 to 51,70 between April and June in 2022 following a steep decline, but immediately dropped again to 48,10 by September 2022. Since then, manufacturing PMI has maintained a largely turbulent pattern of spiking below and above 50.

**Source:** Macrovar

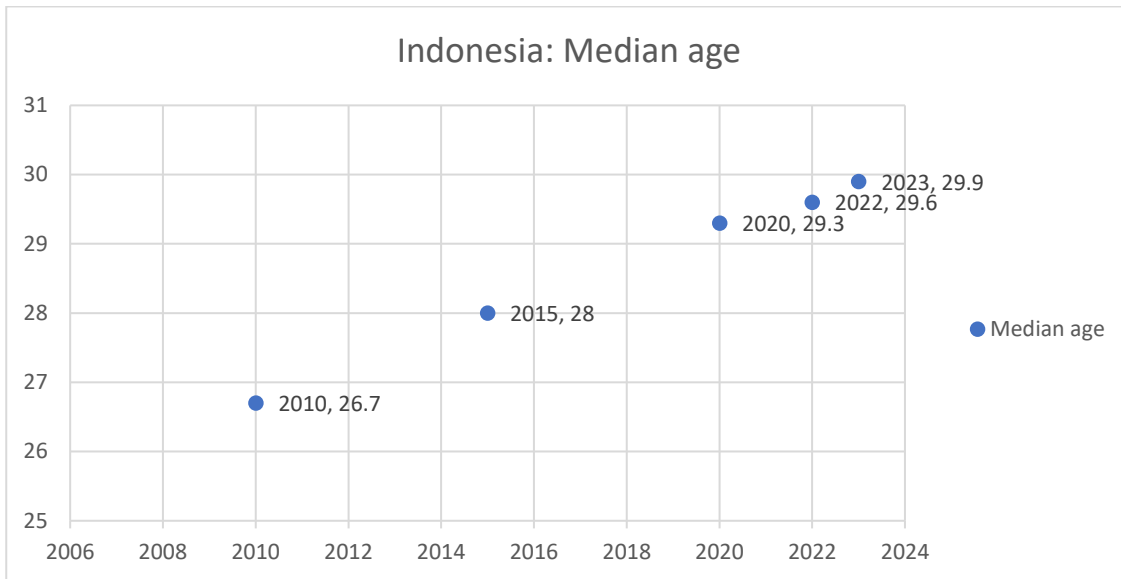
Appendix Q



**Breakdown:** Indonesia’s population has consistently increased from 237.936.543 to 275.501.339 between 2008-2022. However, while growth is estimated to continue and reach 317.225.213 by 2050, the growth pace is slowing down significantly. From 2008 to 2022, the population increased by 15,79% over 14 years, whereas the population is estimated to increase by 15,14% over the next 28 years from 2022-2050.

**Source:** World Bank

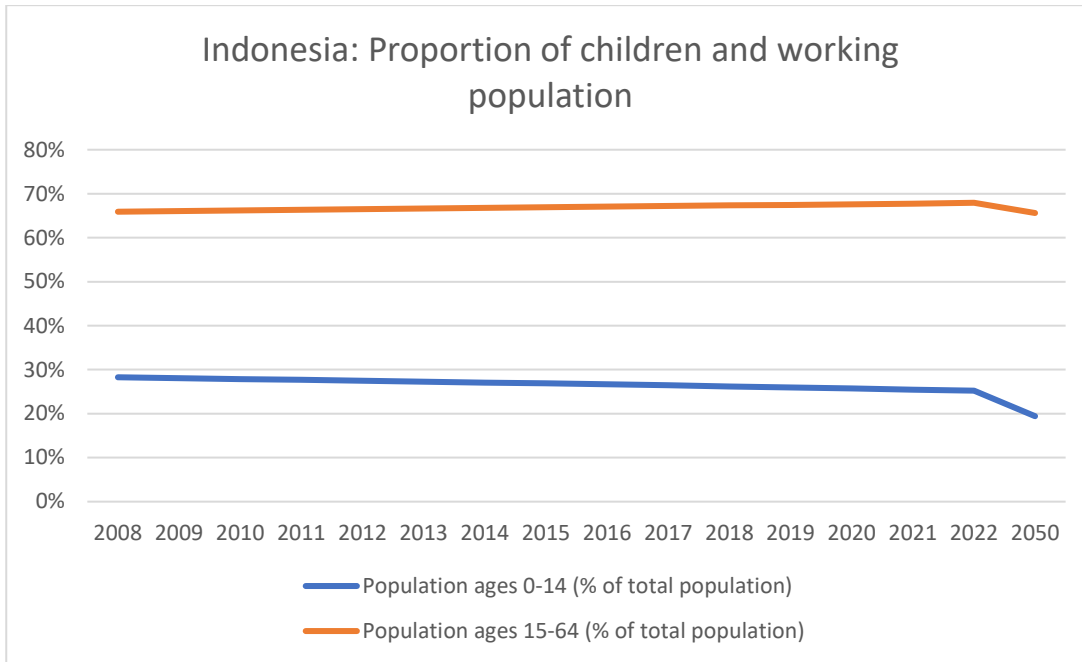
Appendix R



Breakdown: The median age in Indonesia has increased by 3,2 years from 26,7 in 2010 to 29,9 in 2023 at a stable rate of 1,3 every five years though the data indicate that aging has slowed down during the pandemic.

Source: Worldometer

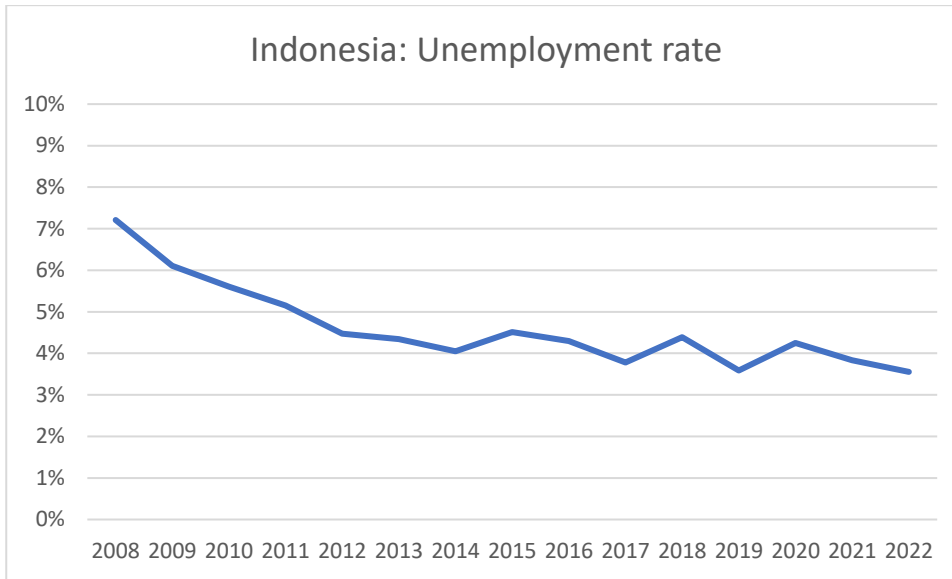
Appendix S



**Breakdown:** The proportion of the working population in Indonesia has slowly expanded each year between 2008-2022 from 65,93% to 67,94%. This expansion is fueled by a matching decline of the proportion of children from 28,27% in 2008 to 25,21% in 2022, indicating that a large proportion of children has replenished a slowly aging working population. However, by 2050 the proportion of the working population is estimated to drop slightly to 65,61%, while the proportion of children is showing a much larger drop to 19,42%. This suggest that the availability of labor will gradually decrease as a smaller proportion of children is no longer able to offset the aging of the work force.

**Source:** World Bank

## Appendix T



**Breakdown:** Unemployment in Indonesia has improved significantly from 7,21% in 2008 to 3,55% in 2022. While unemployment fluctuated between 3,5% and 4,5% for a longer period after 2014 recent years indicate a significant positive trend. However, insufficient access to data during the pandemic means that unemployment estimates from 2020 onwards are uncertain.

**Source:** World Bank

Appendix U



**Breakdown:** Economic growth in Indonesia dropped dramatically during the early part of the pandemic from 5,02% to negative -2,07% in 2020 but surged back to 5,31% by 2022, its highest annual GDP growth level since 2013. Before dropping in 2020, economic growth had stabilized at 5% after gradually declining from a peak of 6,22% to 5,01% between 2010-2014. Overall, economic growth expanded at an average of 4,78% for the period 2008-2022.

**Source:** World Bank

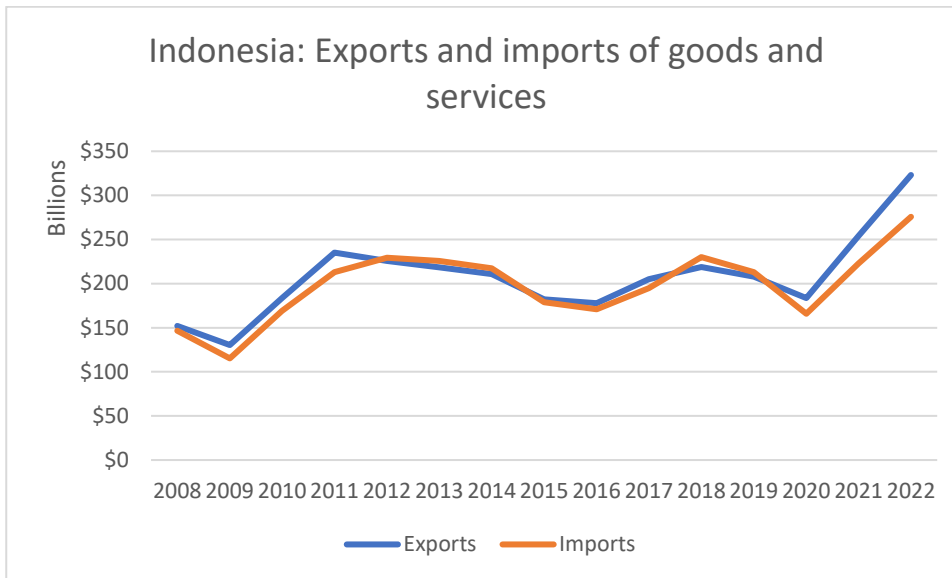
Appendix V



**Breakdown:** GDP per capita has steadily increased by 63,76% between 2008-2022 from \$2488 to \$4074 with the exception of a drop in 2020 when Indonesia recorded negative economic growth. This indicate that wealth on average has increased by more than a half for the period.

**Source:** World Bank

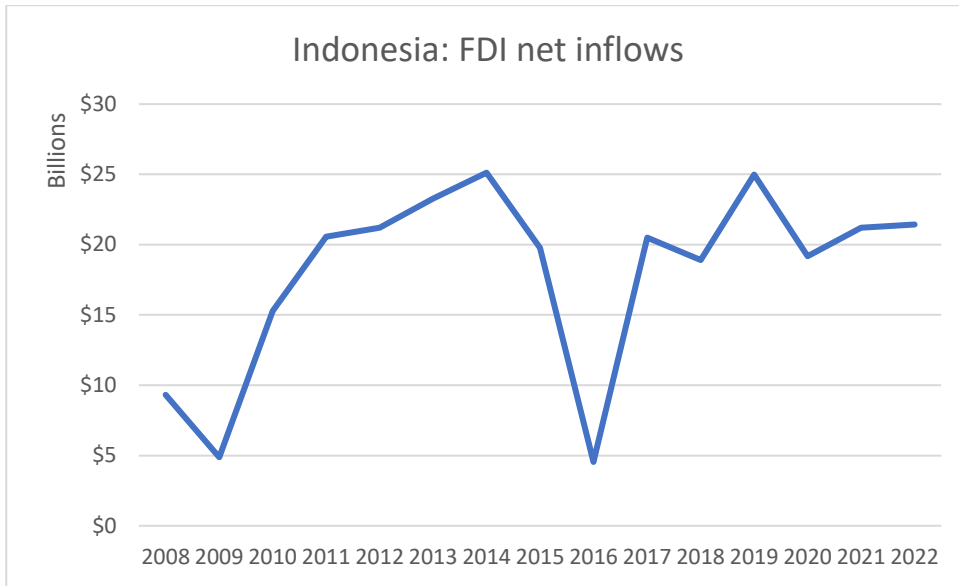
Appendix W



**Breakdown:** Exports of goods and services have increased by 112,43% between 2008-2022, more than doubling from \$152 billion to \$323 billion, while imports of goods and services have increased by 87,93% from \$147 billion to \$276 billion in the same period. Expansion of both exports and imports was initially concentrated in the years of 2009-2011 but has since 2020 surged again during the pandemic after a shaky period of rising and falling.

**Source:** World Bank

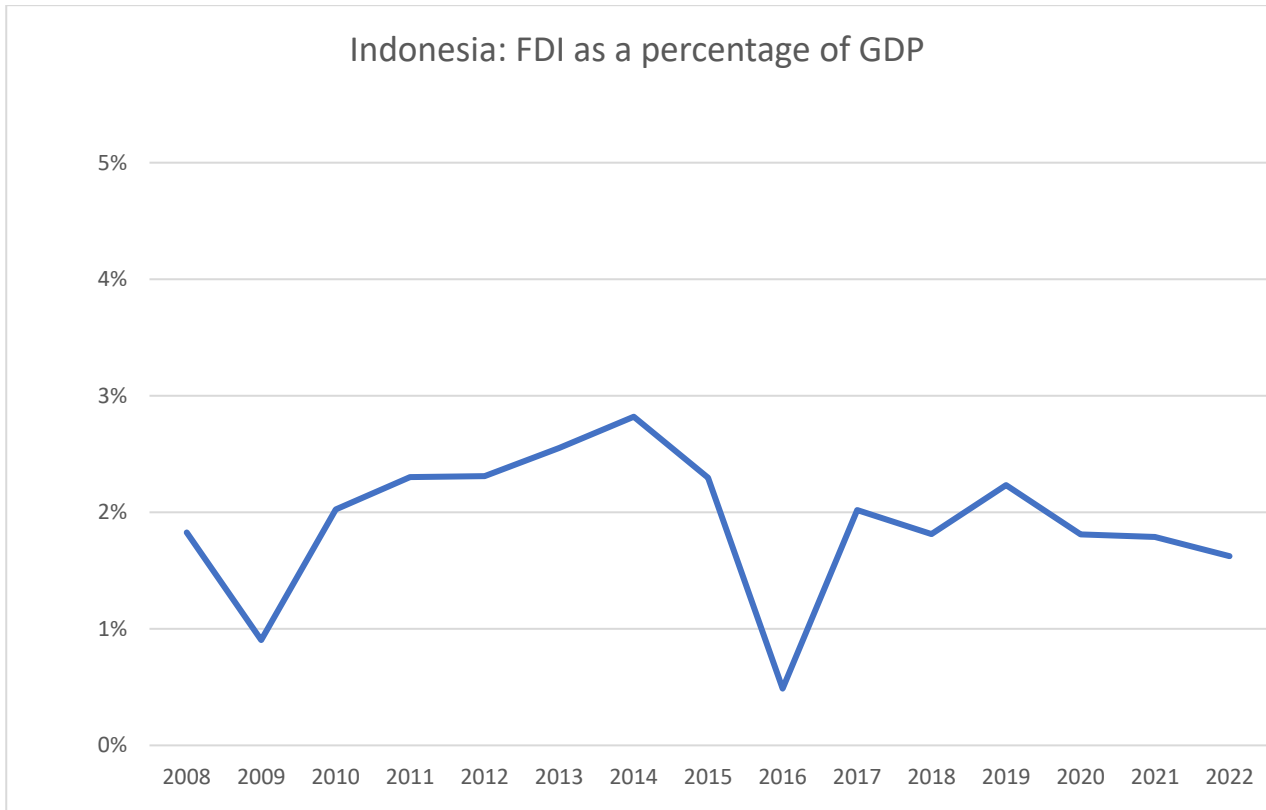
Appendix X



**Breakdown:** FDI net inflows in Indonesia increased rapidly after the financial crisis from \$4,88 billion to \$25,12 billion between 2009-2014 before a steep reversal in 2015-2016. However, FDI net inflows quickly rebounded again in 2017 and has since stabilized at around \$20 billion, with the exception of a brief spike in 2019.

**Source:** World Bank

Appendix Y



**Breakdown:** FDI as a percentage of GDP indicate a similar pattern to FDI net inflows of climbing significantly after the financial crisis from 0,9% to 2,82% between 2009-2014 before reversing in 2015-2016 and increasing again in 2017. However, while FDI net inflows indicate an upwards trend, foreign investment as a percentage of GDP has steadily declined since 2017 except for a brief spike in 2019. This suggest that while foreign investments are increasing, they have less and less impact on domestic growth.

**Source:** World Bank

Appendix Z



**Breakdown:** Perceptions of governance indicators in Indonesia all show overall improvements between 2008-2022. In particular, perceptions of government effectiveness have climbed consistently from the 43th percentile in 2015 to the 66th percentile in 2022 after a significant drop. Perceptions of regulatory quality show some fluctuations for the period but has overall improved from the 44th percentile to the 59th percentile between 2008-2022. Recent years suggest a positive trend for regulatory quality although perceptions dropped slightly in 2022. Perceptions of voice and accountability indicate smaller improvements from the 47th percentile to the 53th percentile for the period and has largely stagnated in recent years. Perceptions of control of corruption indicated major improvements from the 21th percentile to the 45th percentile between 2009-2017 before dropping significantly in 2019. Since then, perceptions have stabilized and is showing signs of slowly recovering again. Perceptions of rule of law have also improved decisively from the 30th percentile to the 45th percentile from 2008 to 2022. This improvement was initially concentrated between 2010-2014 and dropped in 2015 before stabilizing, but during the pandemic perceptions have improved significantly again. Similarly, perceptions of political stability and absence of violence and terrorism suggest major improvements from the 16th percentile to the 29th percentile for the period but is concentrated between 2011-2014. With the exception of an upwards spike in 2016, perceptions have emerged largely unchanged since the latter part of last decade.

**Source:** World Bank

Appendix AA



**Breakdown:** Manufacturing PMI in Indonesia has expanded for 26 consecutive months since the end of August 2021, at an average of 52,18 for the period. This suggest favorable business conditions in the manufacturing sector despite a turbulent pattern of expansion. In recent months manufacturing PMI has declined from 53,9 to 51,5 but fluctuations makes it difficult to conclude any negative trend.

**Source:** Macrovar

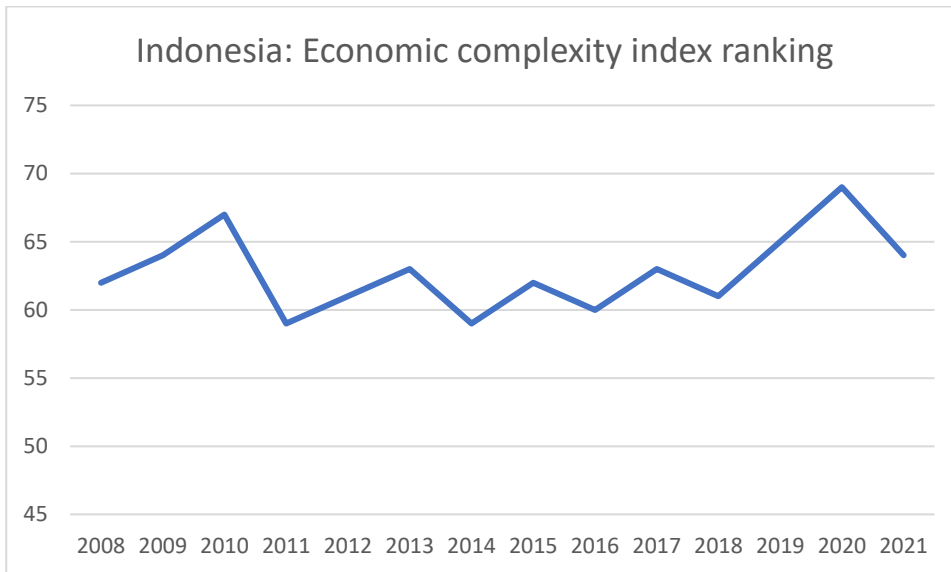
## Appendix BB



**Breakdown:** The monthly minimum wage in Indonesia has increased rapidly by 192% from \$106 to \$310 between 2012-2023, almost tripling in just over 10 years, with no suggestion of slowing down.

**Source:** Trading Economics.

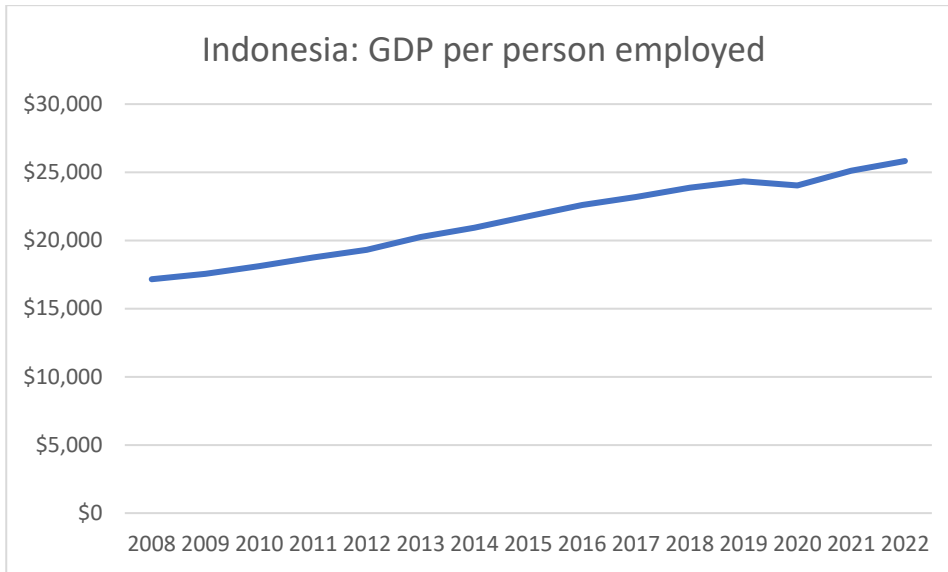
Appendix CC



**Breakdown:** Indonesia has been slightly fluctuating in the economic complexity index ranking after improving significantly from rank 67 to rank 59 in 2011. However, Indonesia deteriorated significantly in the index from rank 61 in 2018 to rank 69 in 2020 and is overall down compared with 2008 despite recovering slightly in 2021.

**Source:** The Atlas of Economic Complexity

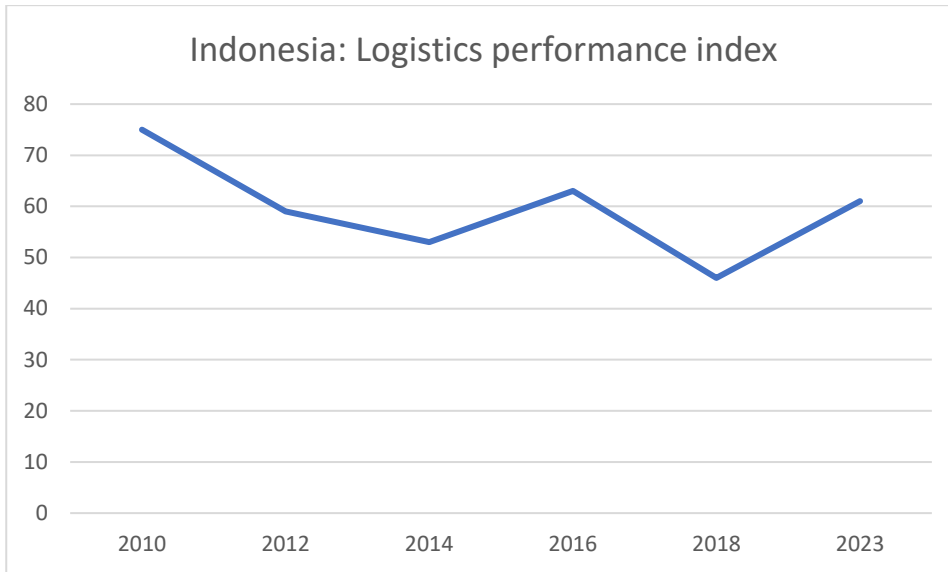
## Appendix DD



**Breakdown:** GDP contribution per person employed has gradually increased by 50,55% from \$17155 to \$25826 between 2008-2022. This suggest that average labor productivity in Indonesia has increased by a half for the period.

**Source:** World Bank

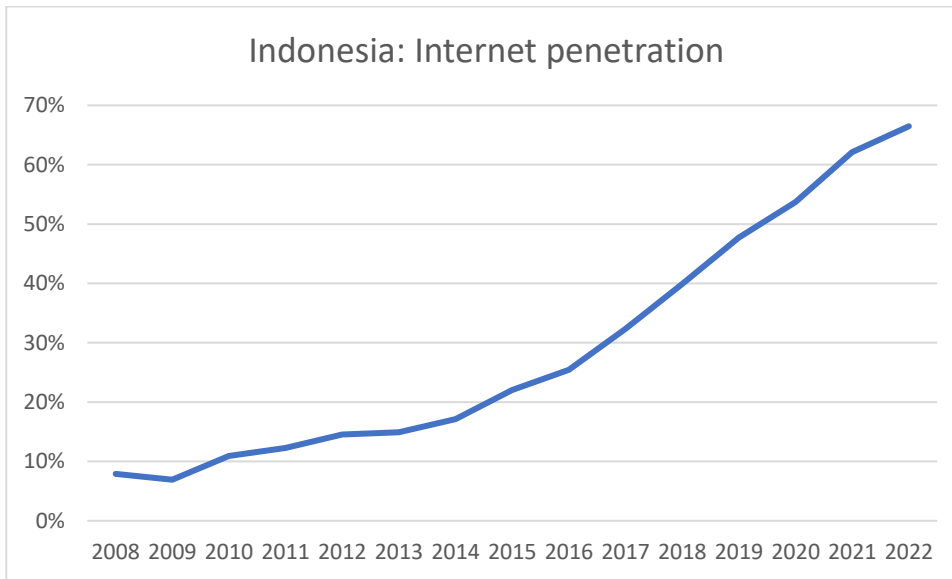
Appendix EE



**Breakdown:** Indonesia displayed major improvements to logistics performance from 2010 to 2014, jumping from rank 75 to rank 53, and continued its climb to rank 46 in 2018 despite a decline in 2016. However, Indonesia dropped significantly to rank 61 in the logistics performance index ranking for 2023, possibly influenced by the World Bank switching to a grouped ranking approach.

**Source:** World Bank.

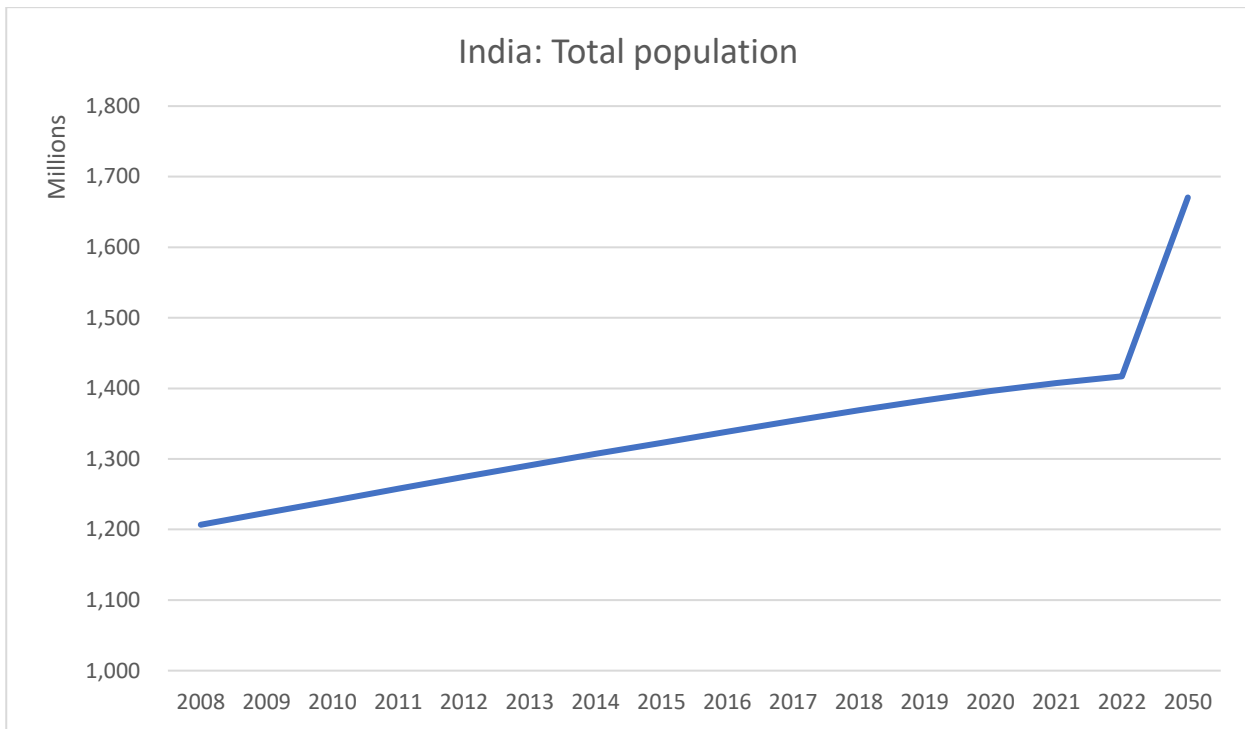
## Appendix FF



**Breakdown:** Internet penetration in Indonesia slowly increased from 7,92% to 14,94% between 2008-2013 but has since accelerated tremendously to cover 66,48% of the population by 2022.

**Source:** World Bank

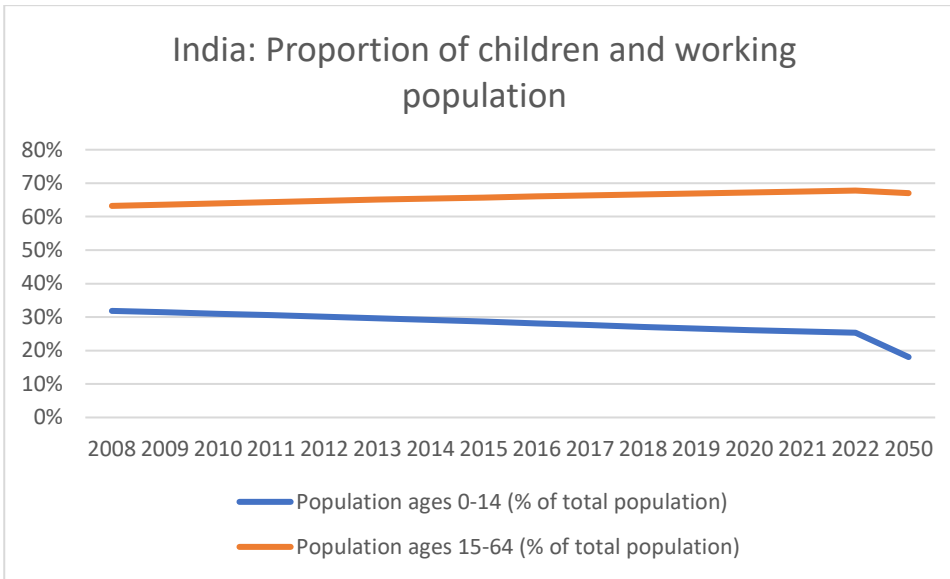
Appendix GG



**Breakdown:** India's population has increased from 1.206.734.806 to 1.417.173.173 between 2008-2022, corresponding to a population growth of 17,44%. While the growth rate is slowing down, India's population is estimated to grow another 17,87% and reach 1.670.490.596 by 2050, making it the most populous country in the world by far.

**Source:** World Bank

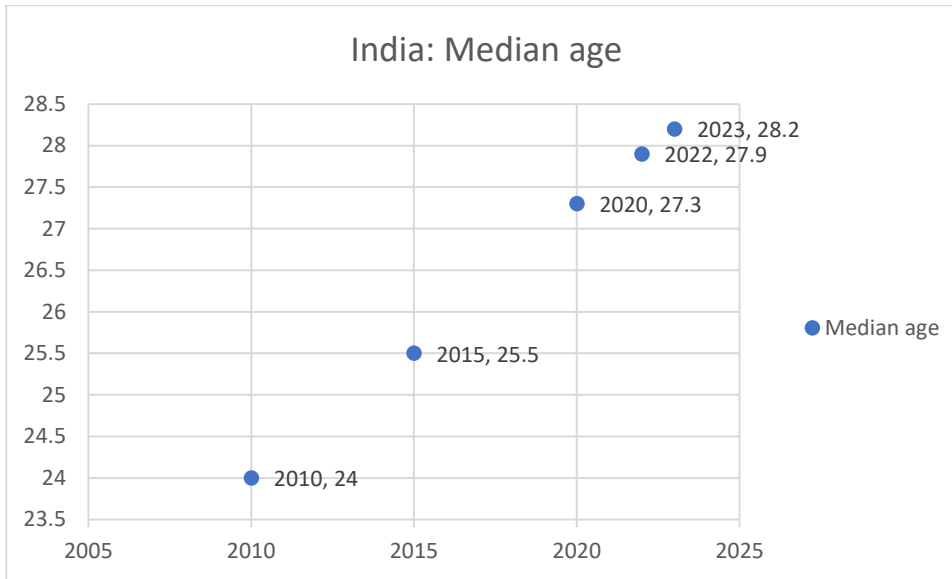
Appendix HH



**Breakdown:** The proportion of the working population in India has steadily increased from 63,21% in 2008 to 67,80% in 2022, whereas the proportion of children has declined from 31,84% to 25,31% in the same period. However, by 2050 the proportion of the working population is estimated to start decreasing to 66,97%, while the proportion of children is estimated to drop substantially to 18,04%. This indicate that a considerably young population will replenish the work force in India over the coming decades but that this expansion will eventually stop as the population is gradually aging.

**Source:** World Bank

## Appendix II



**Breakdown:** The median age in India has increased by 4,2 years from 24 in 2010 to 28,2 in 2023, at an average rate of approximately 0,3 per year.

**Source:** Worldometer

Appendix JJ



**Breakdown:** Unemployment in India jumped to 10,20% in 2020 during the pandemic, but quickly recovered in the year after and has otherwise slowly but consistently decreased from 8,35% in 2008 to 7,33% in 2022. However, insufficient access to data during the pandemic means that unemployment estimates from 2020 onwards are uncertain.

**Source:** World Bank

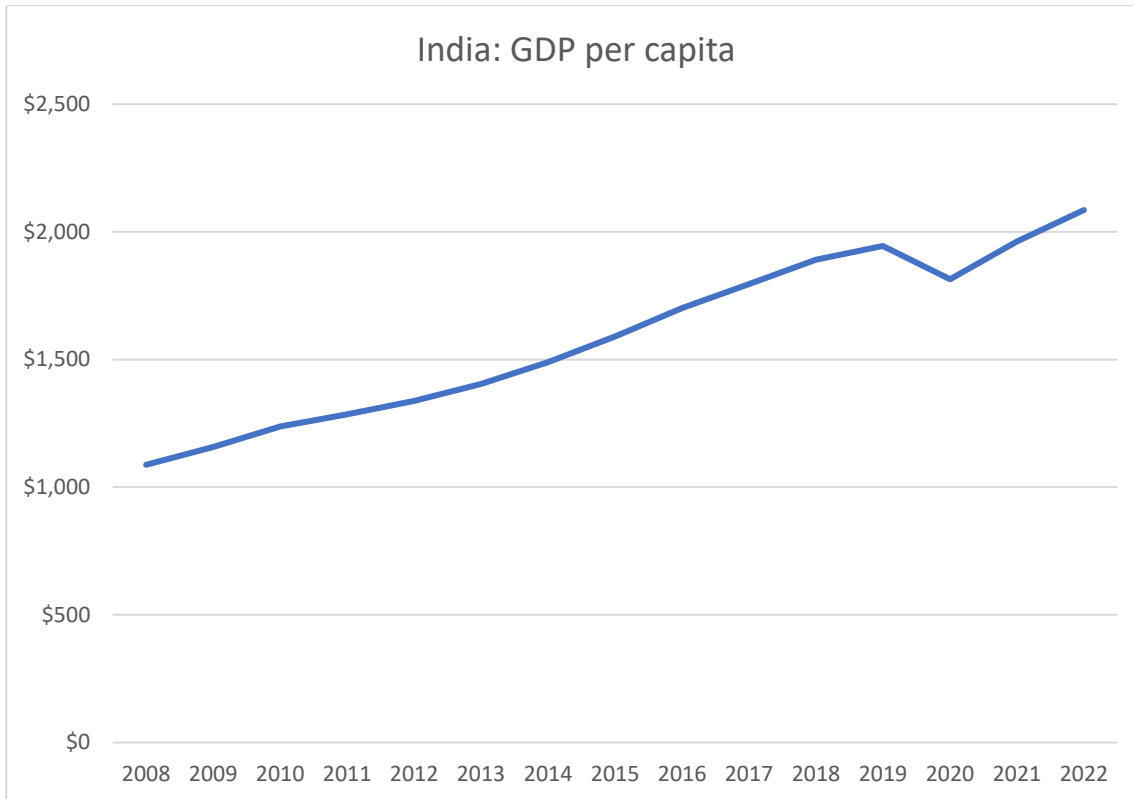
Appendix KK



**Breakdown:** Annual GDP growth in India displayed a strong upwards trend between 2011-2016, but subsequently declined steeply from 8,26% in 2016 to 3,87% in 2019, before economic growth crashed with the outbreak of the pandemic. However, India’s economy made an astounding recovery from negative -5.83% in 2020 to 9,05% in 2021, recording its highest annual GDP growth rate since 1988, but dropping slightly again in 2022 to 7%. Overall, economic growth expanded at an average of 5.84% per year between 2008-2022.

**Source:** World Bank

## Appendix LL



**Breakdown:** GDP per capita in India has increased by 92% between 2008-2022 from \$1088 to \$2085, though dropping in 2020 when annual GDP growth was negative. This indicate that wealth on average has nearly doubled for the period.

**Source:** World Bank

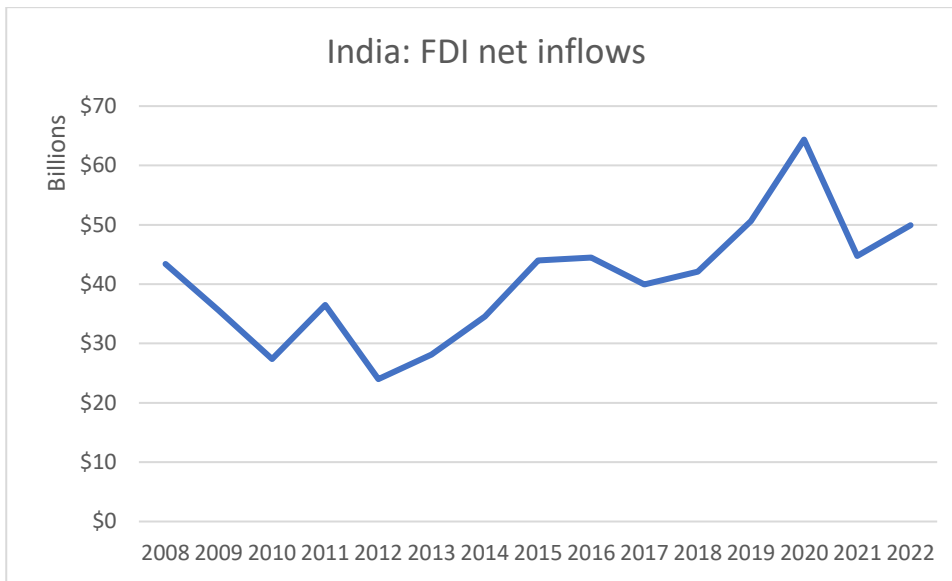
Appendix MM



**Breakdown:** Exports of goods and services have increased by 163% from \$289 to \$760 billion between 2008-2022. This increase has largely been concentrated in two surges, the first surge in the years of 2009-2011 and the second surge during the pandemic. Imports of goods and services have increased at a similar rate of 160% from \$351 to \$911 billion in the same period. Exports and imports indicate a similar pattern of increasing and decreasing, but changes in imports have been markedly greater, as highlighted by the increase and subsequent drop between 2016-2020. While exports and imports of goods and services almost equalized in 2020, India display a significantly higher level of imports than exports. In 2022, India recorded a trade deficit of \$151 billion following a substantial increase of imports relative to exports during the pandemic.

**Source:** World Bank

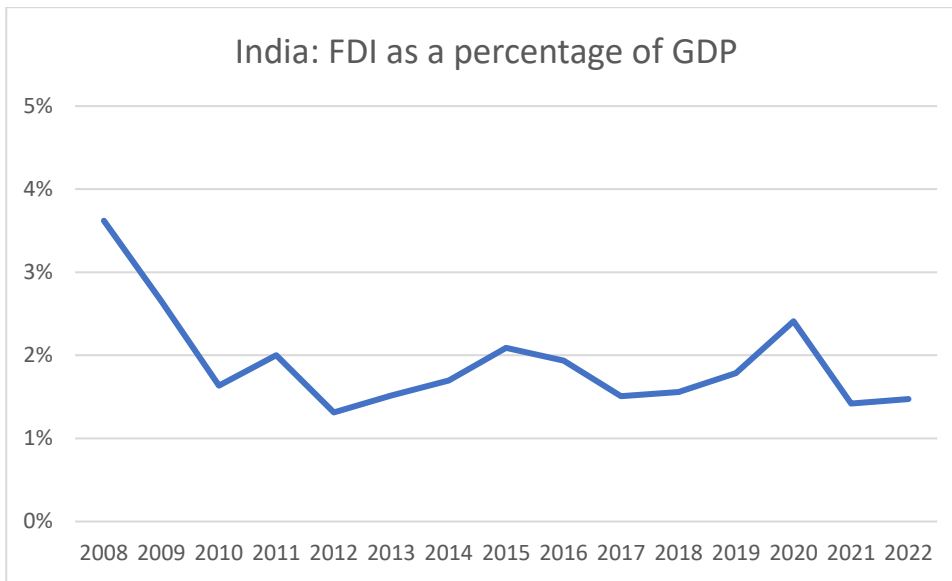
## Appendix NN



**Breakdown:** FDI net inflows in India declined significantly after the financial crisis but rebounded strongly from \$27 to \$64 billion between 2012-2020. However, FDI net inflows dropped significantly again in 2021, though displaying a slight increase from \$45 to \$50 billion in 2022.

**Source:** World Bank.

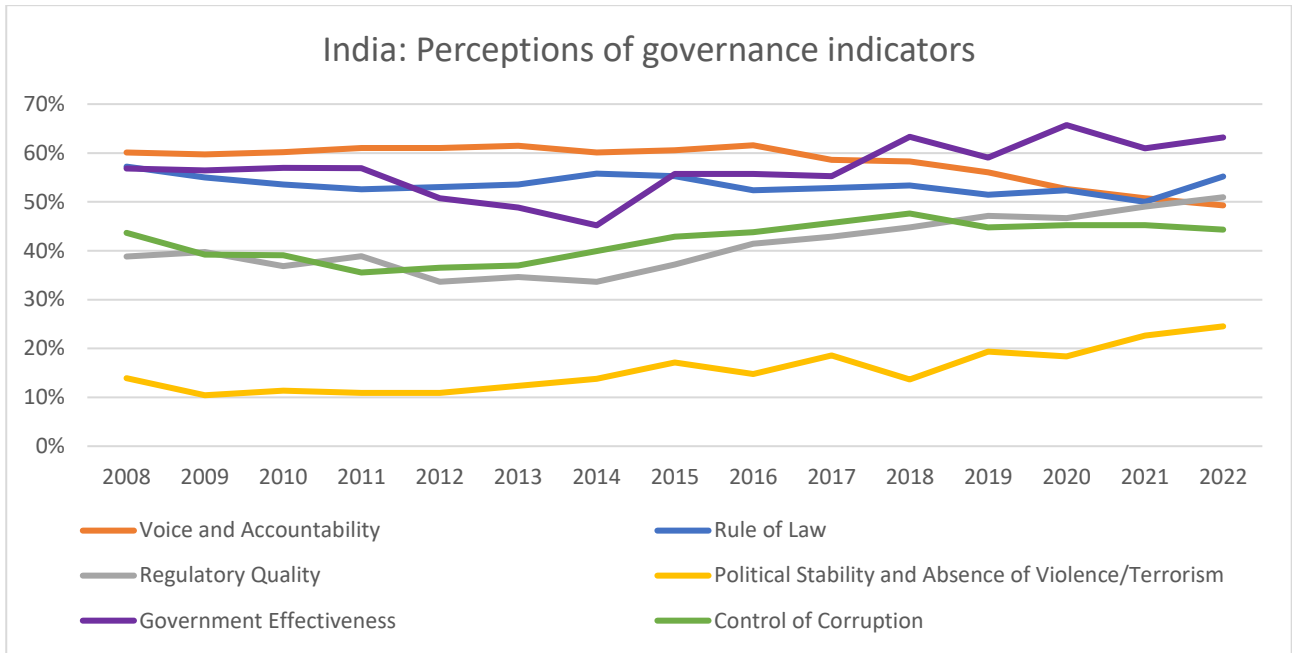
Appendix OO



**Breakdown:** FDI net inflows as a percentage of GDP declined steeply from 3,62% to 1,64% between 2008-2010 but has since fluctuated and show no obvious trend. Foreign investments as a percentage of GDP briefly increased from 1,51% in 2017 to 2,41% in 2020, the same period that India grappled with declining economic growth, but subsequently dropped significantly again as the domestic economy recovered.

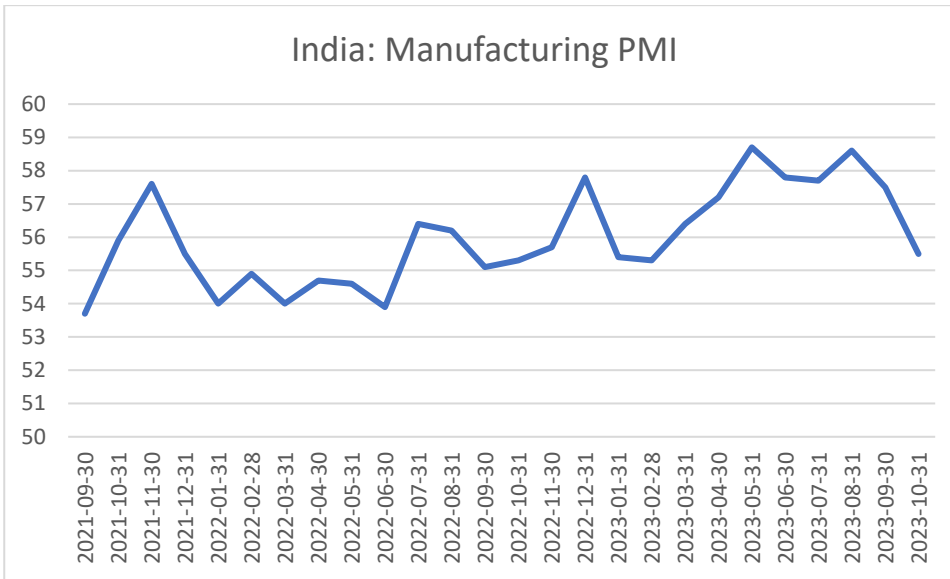
**Source:** World Bank.

Appendix PP



Breakdown: ...

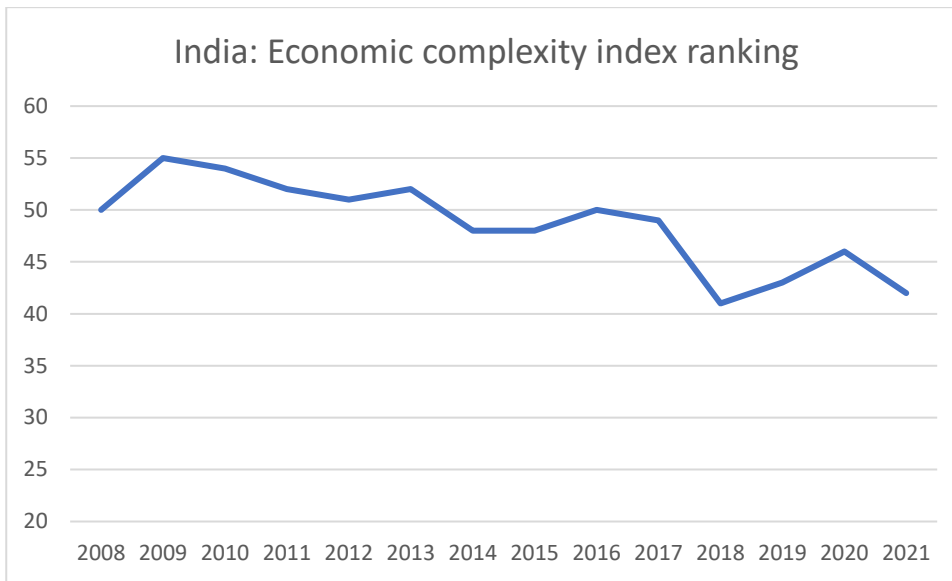
Appendix QQ



**Breakdown:** Manufacturing PMI in India has expanded for 26 consecutive months since the end of August 2021, at an average of 56. While displaying some fluctuations, this indicate that purchasing managers are highly optimistic about economic trends in the manufacturing sector in India. In particular, sentiments improved significantly starting in February 2023, but has since August 2023 dropped slightly again.

**Source:** Macrovar

## Appendix RR



**Breakdown:** India indicate significant improvements to economic complexity after the financial crisis, particularly in 2018 when India jumped from rank 49 to rank 41 in the economic complexity index. While India dropped slightly from rank 41 to rank 46 between 2018-2020, India rebounded again and demonstrate significant overall improvements from rank 50 in 2008 to rank 42 in 2021.

**Source:** The Atlas of Economic Complexity.

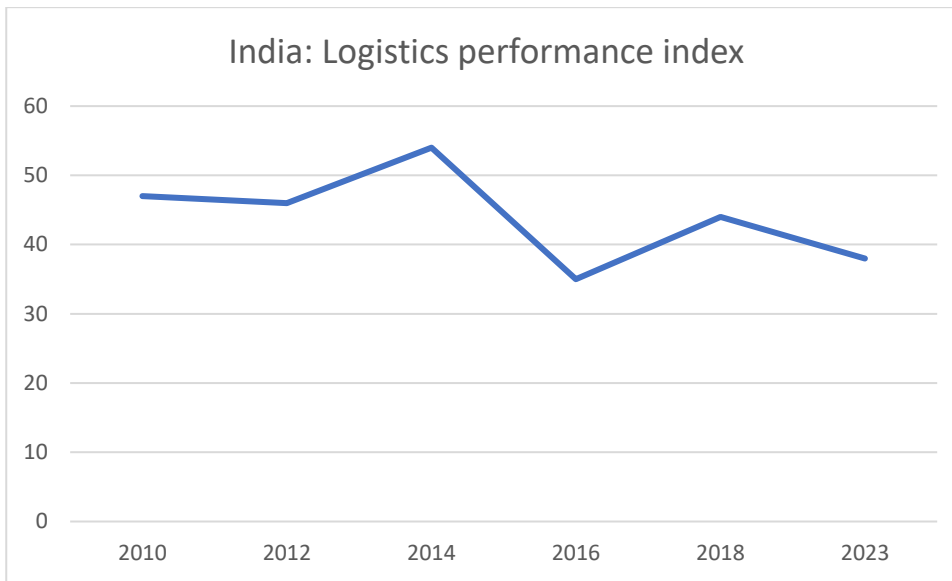
## Appendix SS



**Breakdown:** GDP per person employed in India has increased by 91,22% from \$10834 to \$20717 between 2008-2022, suggesting that labor productivity has nearly doubled in the period. Notably, GDP per person employed declined between 2018-2020 after a sluggish period before annual GDP growth crashed in 2020.

**Source:** World Bank

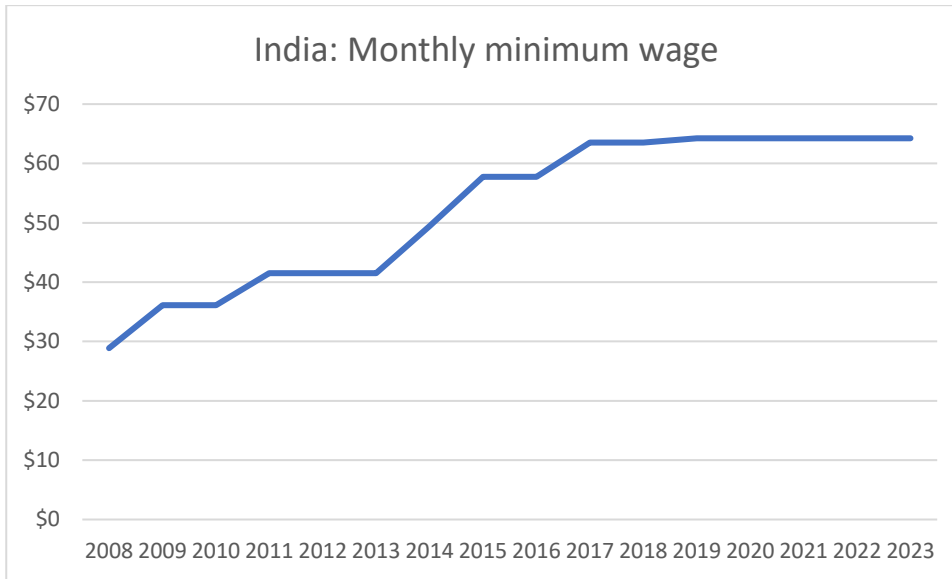
Appendix TT



**Breakdown:** India has improved significantly from rank 47 to rank 38 in the logistics performance index between 2010-2023 but display major fluctuations for the period. After a deterioration in 2014, logistics performance jumped decisively from rank 54 to rank 35 in 2016. While India dropped in the rankings again in 2018, logistics performance show some recovery in 2023 though it is unclear how much of this jump is attributed to the World Bank implementing a grouped ranking approach.

**Source:** World Bank

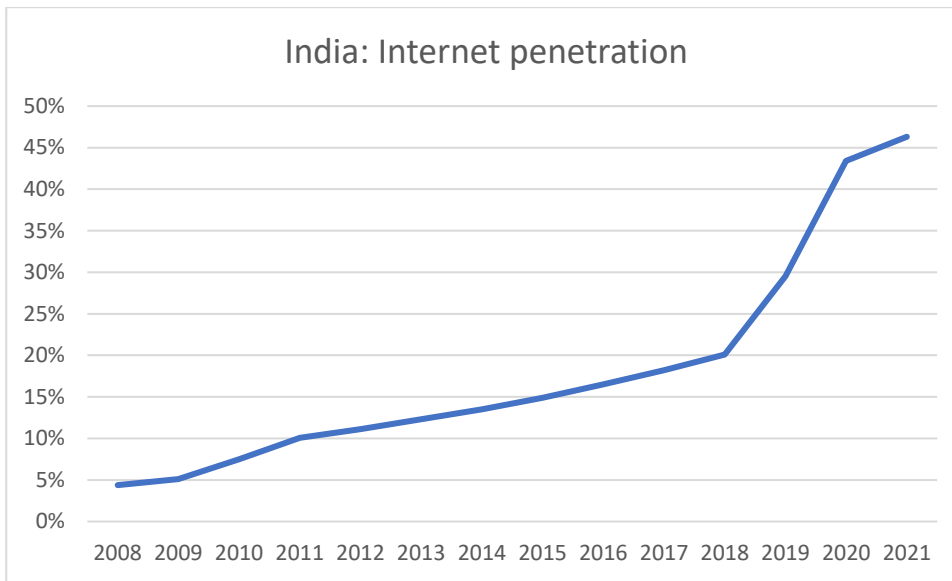
## Appendix UU



**Breakdown:** Monthly minimum wages in India have increased by 121% from \$29 to \$64 between 2008-2023. However, this increase is concentrated before 2017 and effectively remains unchanged in the years since. Notably, minimum wages have also increased in distinct intervals between 2008-2017.

**Source:** Trading Economics

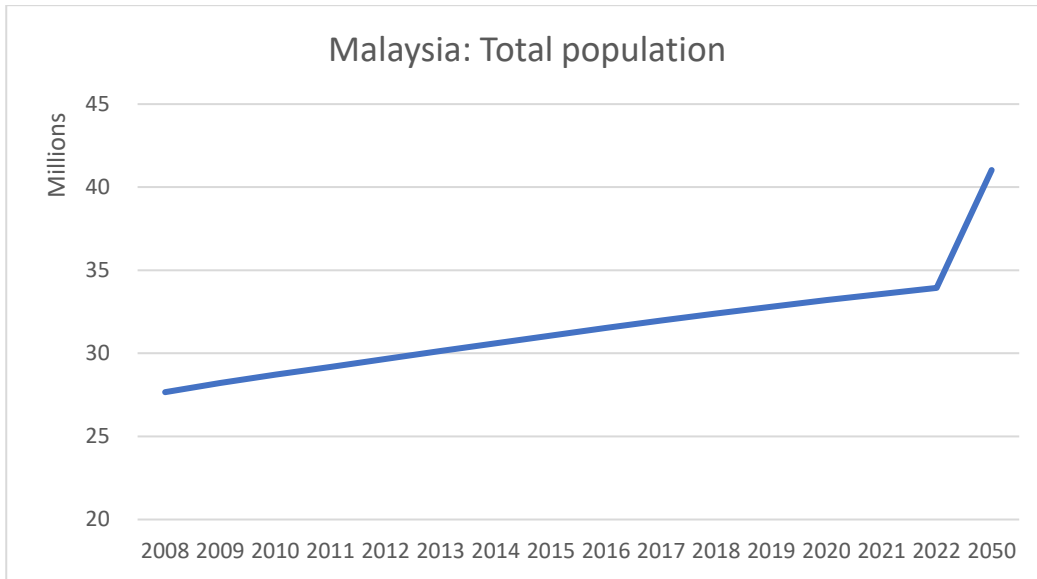
## Appendix VV



**Breakdown:** Internet penetration in India has increased from 4,38% to 46,31% between 2008-2021. While increasing gradually between 2008-2018, internet penetration briefly surged substantially from 20% to 43,41% from 2018 to 2020, but subsequently slowed down again and still covered less than half of the population in 2021.

**Source:** World Bank

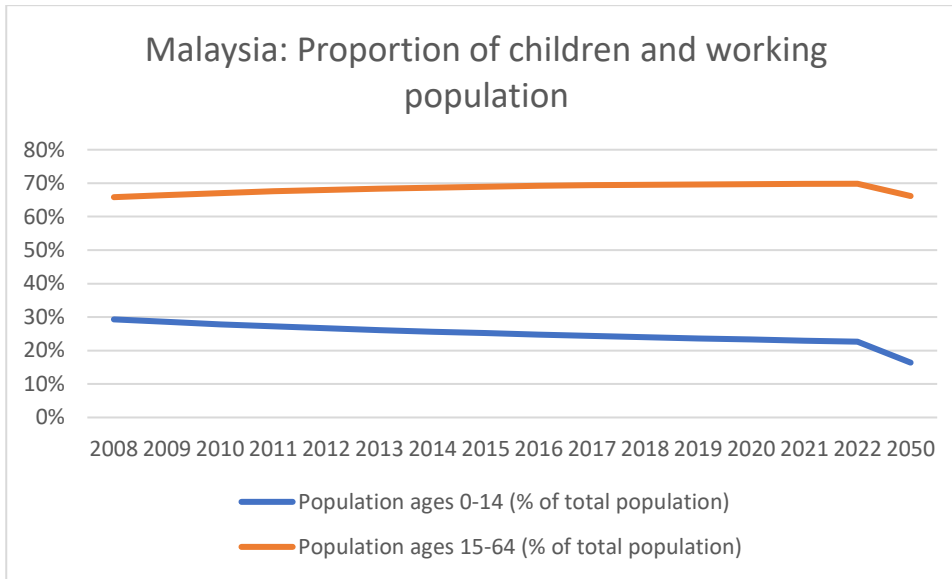
## Appendix WW



**Breakdown:** Malaysia's population has increased from 27.664.296 to 33.938.221 between 2008-2022, corresponding to an increase of 22,68%. While slowing down, Malaysia's population is estimated to reach 41.032.433 by 2050, adding another 20.9% to its population.

**Source:** World Bank

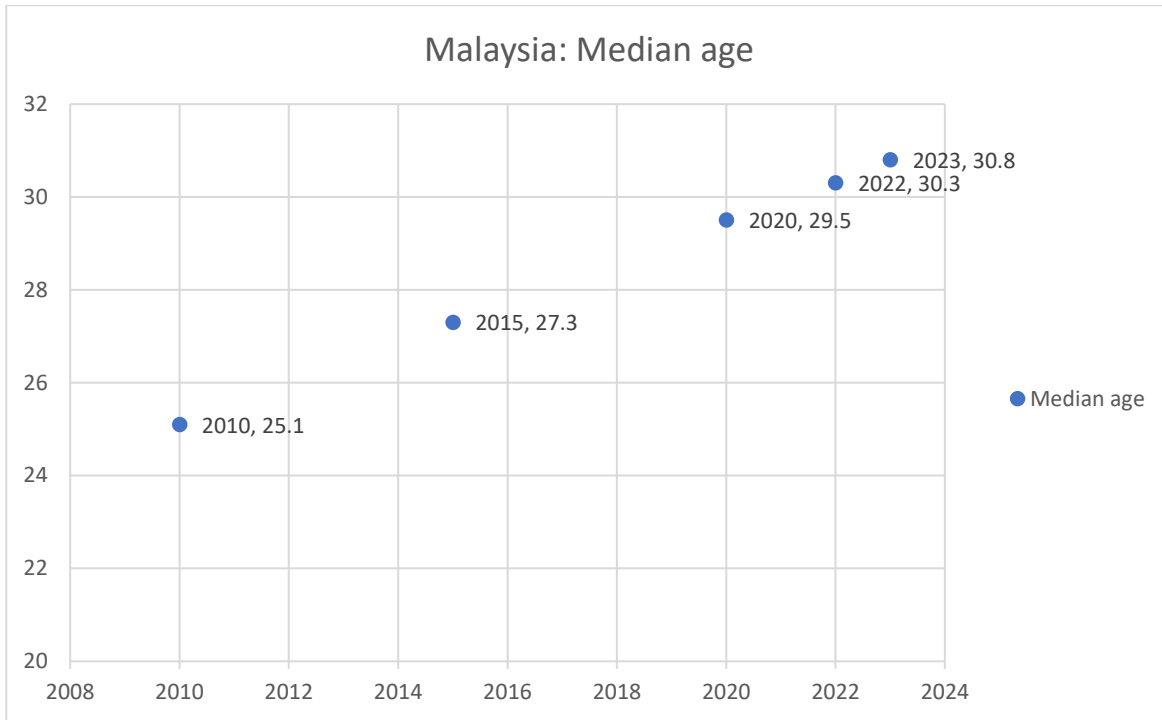
Appendix XX



**Breakdown:** The proportion of the working population in Malaysia has expanded from 65,82% to 69,82% between 2008-2022, but this expansion has slowed down significantly in recent years and is expected to drop to 66,20% by 2050. This expansion is connected to a large proportion of children replenishing the labor force, but the proportion of children has declined significantly from 29,31% in 2008 to 22,67% in 2022 and is estimated to further drop to 16,39% by 2050. Correspondingly, the availability of new potential labor has gradually decreased and can no longer offset the aging of the work force.

**Source:** World Bank

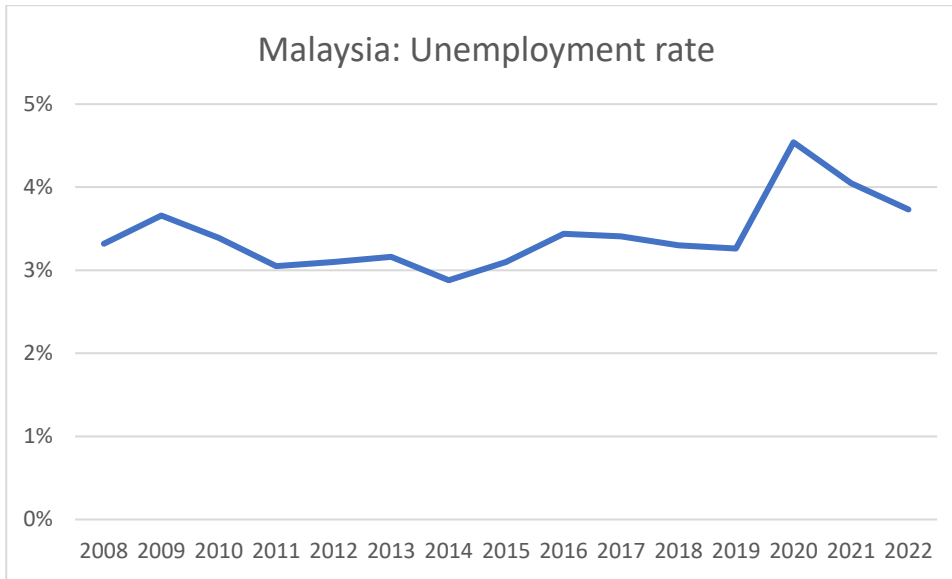
Appendix YY



Breakdown: Between 2010-2023, the median age in Malaysia has increased substantially by 5,7 years from 25,1 to 30,8.

Source: World Bank

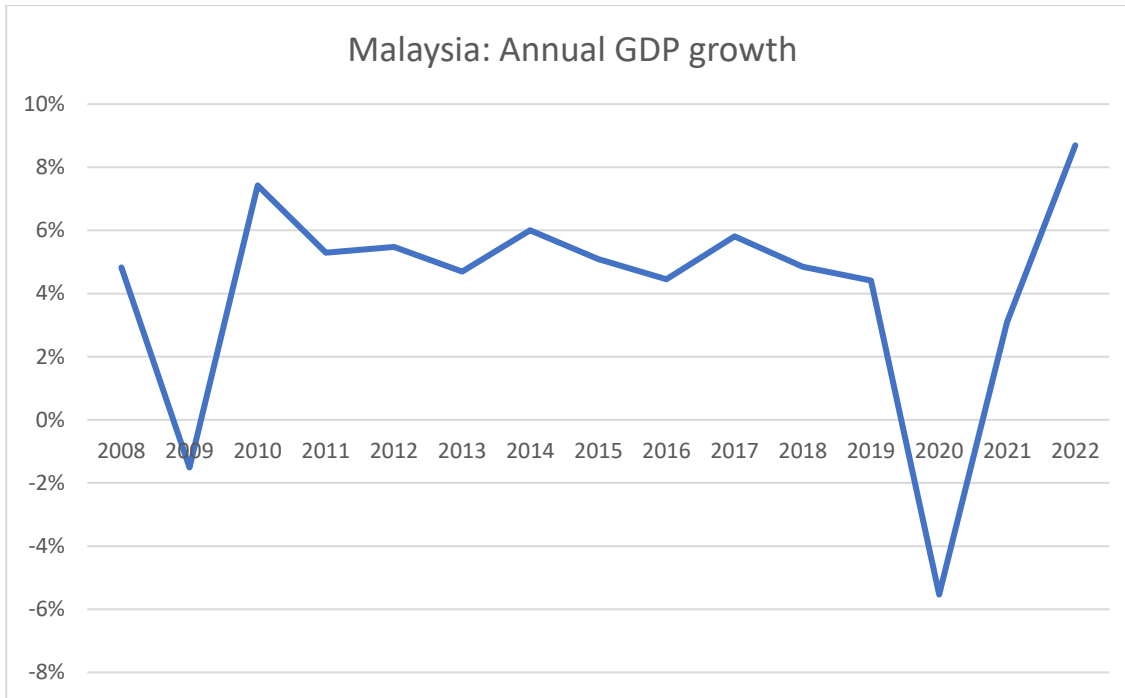
Appendix ZZ



**Breakdown:** Prior to deteriorating significantly from 3,26% to 4,54% in 2020, unemployment in Malaysia was relatively stable at around 3%. While indicating a rebound in recent years, the unemployment rate remains slightly down compared with 2008. However, unemployment estimates from 2020 onwards are uncertain due to insufficient access to data during the pandemic.

**Source:** World Bank

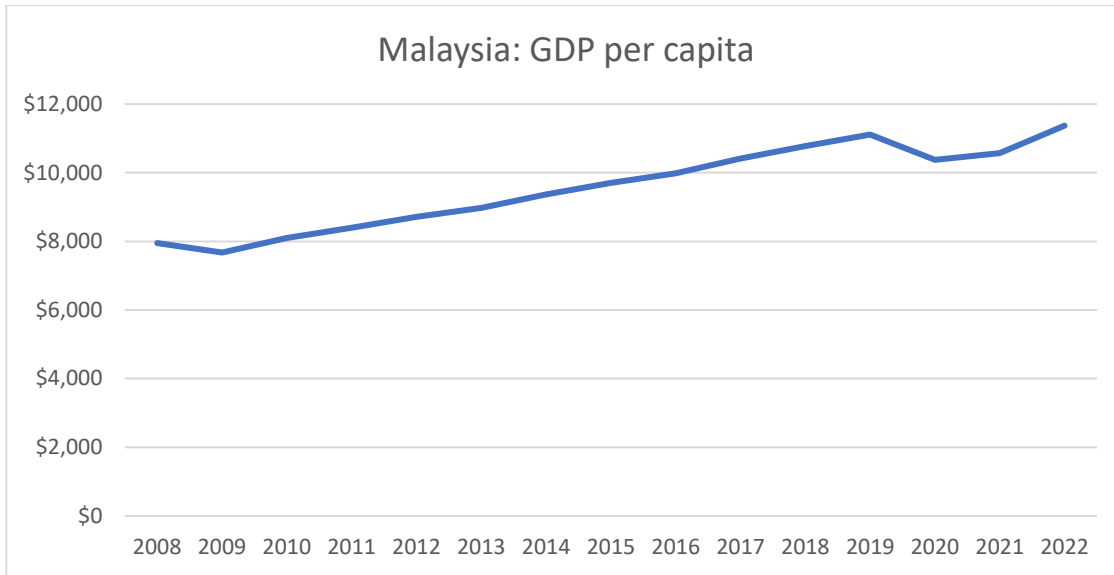
Appendix AAA



**Breakdown:** Economic growth in Malaysia crashed in 2009 and 2020 with the financial crisis and the pandemic but rebound substantially in both cases. While displaying some fluctuations, annual GDP growth in Malaysia showed relatively consistent performance in the period between both drops. In recent years, economic growth in Malaysia has made a tremendous rebound from a growth rate of negative -5.53% in 2020 to 8.69% in 2022, reporting its highest annual GDP growth rate since 2000. Overall, economic growth in Malaysia has expanded at an average of 4.20% between 2008-2022.

**Source:** World Bank

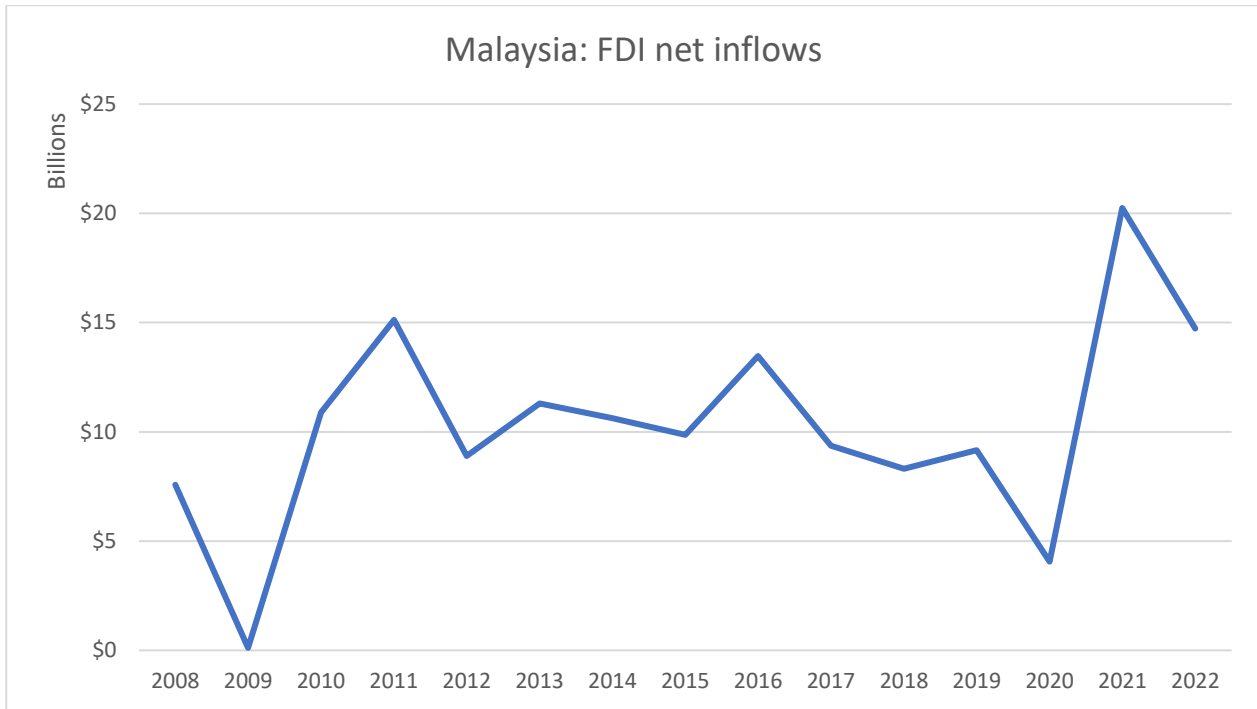
## Appendix BBB



**Breakdown:** GDP per capita in Malaysia has increased by 43,06% from \$7949 to \$11372 between 2008-2022 but dropped in both 2009 and 2020 when Malaysia reported a negative annual GDP growth rate.

**Source:** World Bank

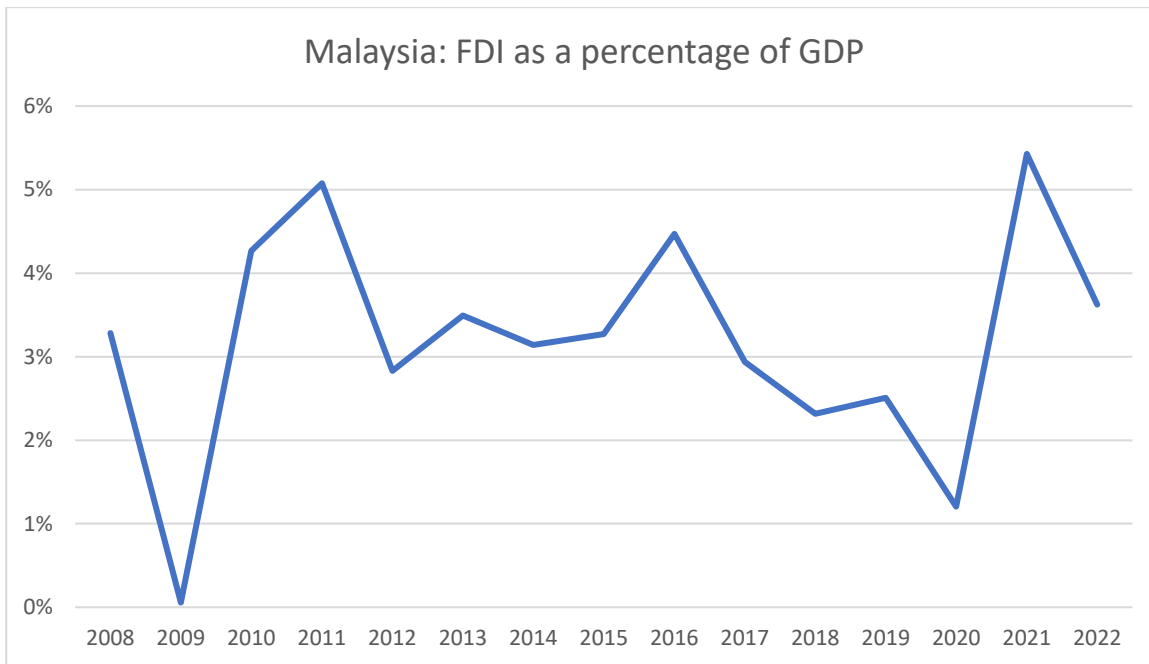
Appendix CCC



**Breakdown:** FDI net inflows in Malaysia display large swings since 2008. After the financial crisis, FDI net inflows surged from \$0,11 billion to \$15,12 billion, but dropped again in 2012, though Malaysia retained a higher level of foreign investments than before. More recently, FDI net inflows indicated a gradual decline last decade, with the exception of a spike in 2016, dropping to \$4,06 billion with the pandemic. However, after the initial shock of the pandemic, foreign investments jumped a tremendous 398,77% from \$4,06 billion to \$20,25 billion in 2021, but dropped significantly to \$14,73 billion in 2022.

**Source:** World Bank

Appendix DDD



**Breakdown:** FDI as a percentage of GDP indicate a similar pattern to FDI net inflows. After the financial crisis, FDI dropped from 3,28% to 0,06% of GDP in 2009, but subsequently surged to 5,07% in 2011 before dropping in the year after. After another spike in 2016, FDI as a percentage of GDP declined considerably from 4,47% to 1,20%. However, after the initial shock of the pandemic FDI net inflows jumped to 5,43% of GDP in 2021, but quickly dropped to 3,62% in 2022. This suggest FDI as a percentage of GDP is normalizing after the pandemic, and that Malaysia’s economy has become less conditional on foreign investments.

**Source:** World Bank

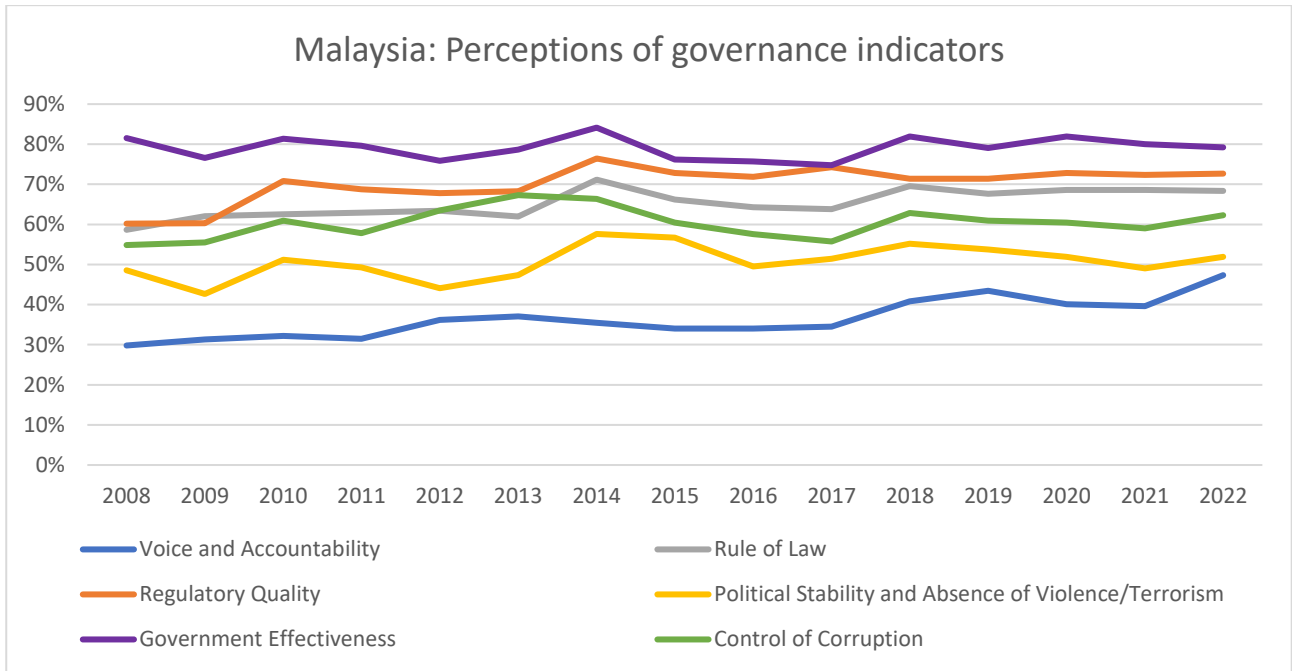
Appendix EEE



**Breakdown:** Exports of goods and services have increased by 30,63% from \$229,66 billion to \$300 billion between 2008-2022, while imports of goods and services have increased by 52,64% from \$178,11 billion to \$271,86 billion in the same period. However, exports and imports of goods and services both show no improvements after increasing in the years 2009-2011. Moreover, exports in 2020 dropped below exports in 2008, meaning that this increase is effectively concentrated in the last two years. Imports of goods and services remained up by \$8,20 billion in 2020 compared with 2008, but otherwise the same is also the case for imports.

**Source:** World Bank

Appendix FFF



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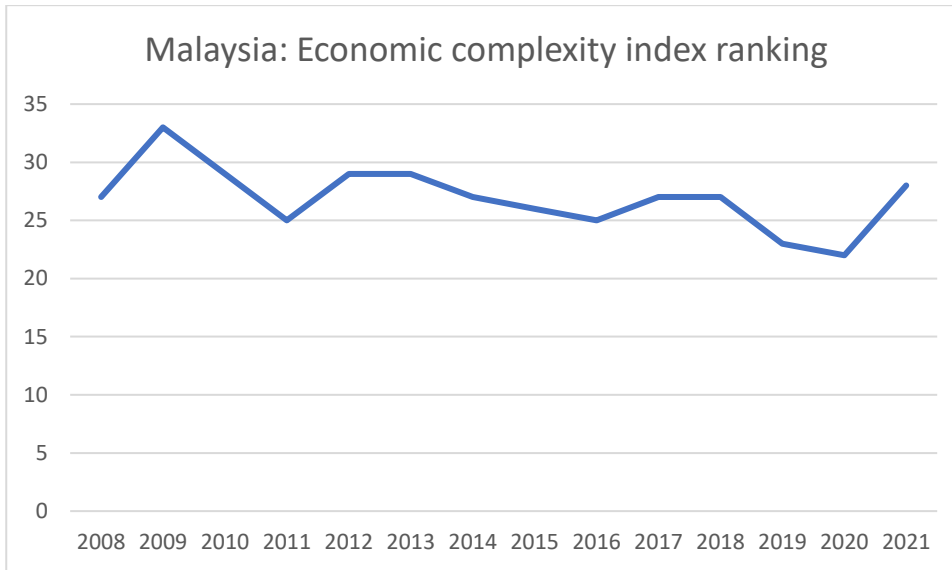
Appendix GGG



**Breakdown:** While dropping in 2009, 2013, and 2020, GDP per person employed in Malaysia has increased by 19,74% from \$48162 to \$57667 between 2008-2022. Interestingly, in addition to dropping in both 2009 and 2020 when Malaysia reported negative annual GDP growth, GDP per person employed also dropped slightly in 2013.

**Source:** World Bank

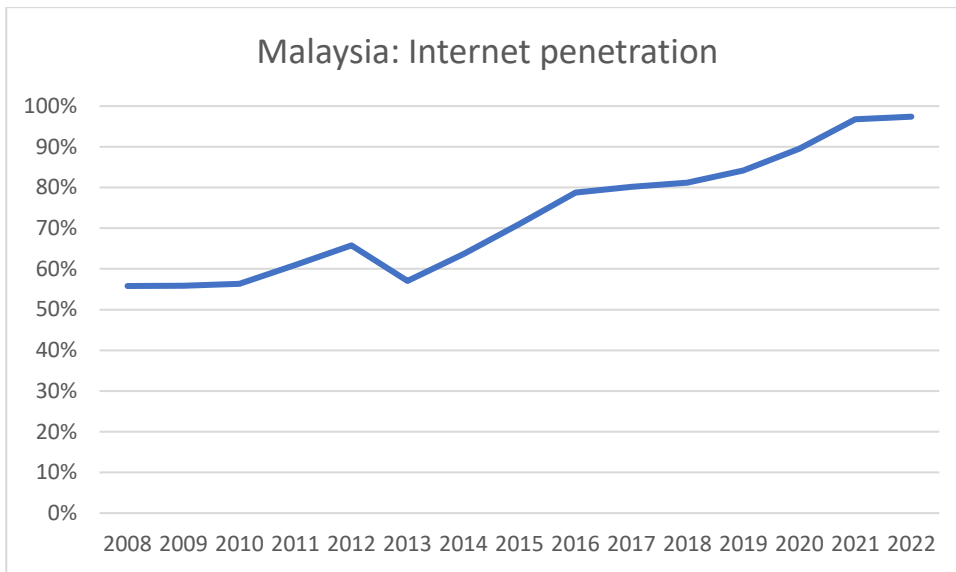
Appendix HHH



**Breakdown:** Malaysia indicated significant improvements to economic complexity after dropping in the economic complexity index rankings with the financial crisis. While economic complexity deteriorated again in 2012, Malaysia displayed gradual improvements in the rankings, peaking at rank 22 in 2020. However, after dropping again to rank 28 in 2021, Malaysia is slightly down in the economic complexity index compared with 2008, but still ranks high in the index.

**Source:** The Atlas of Economic Complexity

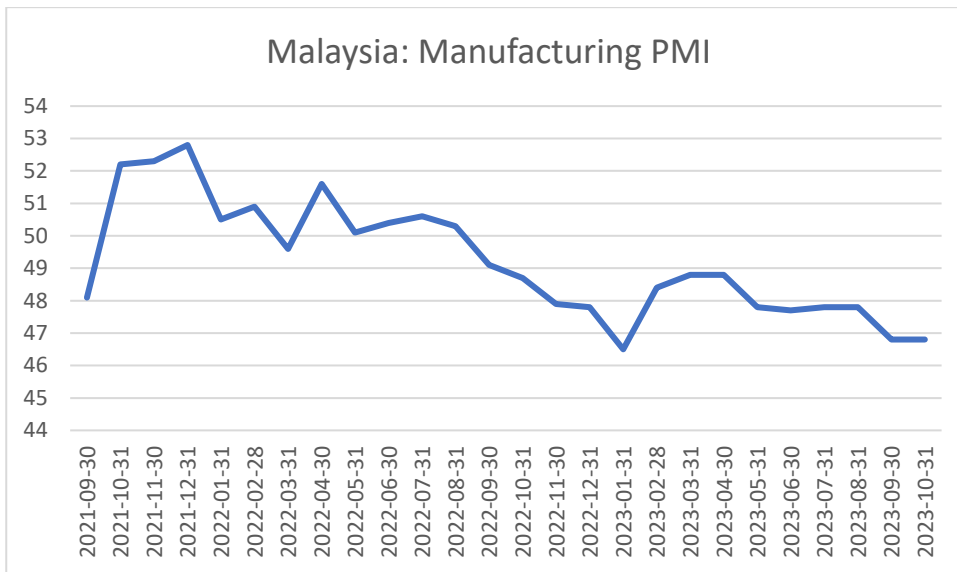
Appendix III



**Breakdown:** Internet penetration in Malaysia has historically been high and has further increased from 55,80% to 97,40% between 2008-2022, practically covering the entire population. This suggest that a large proportion of Malaysia’s population are seasoned internet users, and that the internet is highly integrated in its economy. Notably, internet penetration dropped significantly from 65,80% to 57,06% in 2013 but subsequently surged.

**Source:** World Bank

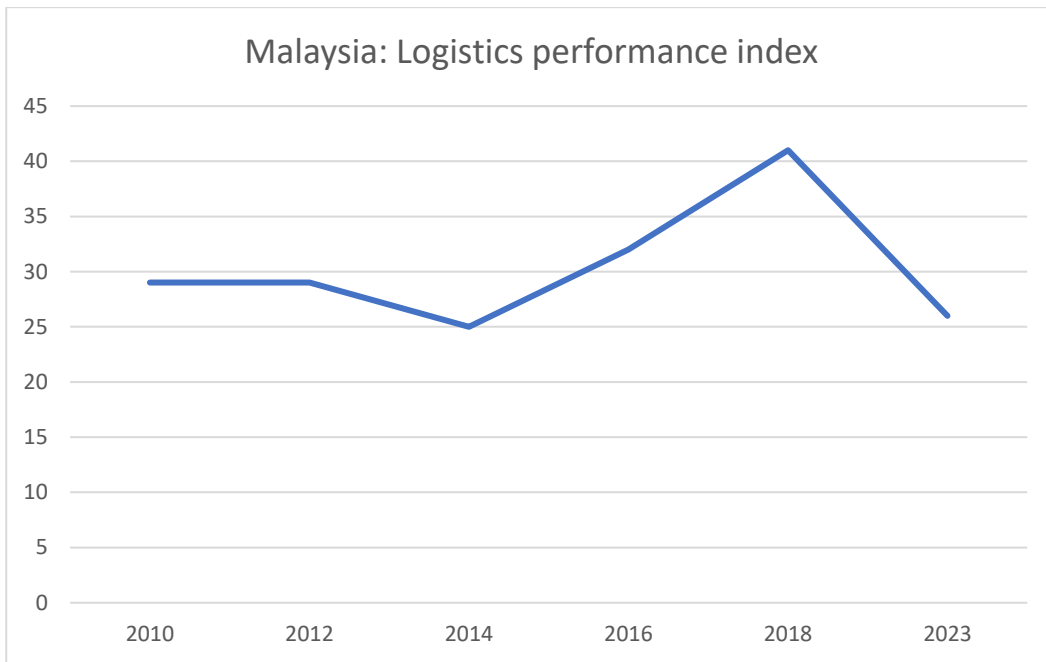
Appendix JJJ



**Breakdown:** Manufacturing PMI in Malaysia surged at the end of 2021 but has since deteriorated considerably. Manufacturing sentiments have contracted for 14 consecutive months, while still indicating a downwards trend despite suggesting some recovery in the beginning of 2023. This signals that purchasing managers have consistently perceived manufacturing business conditions in Malaysia to have deteriorated in the last year. Correspondingly, manufacturing PMI has contracted at an average of 49,23 since the end of August 2021.

**Source:** Macrovar

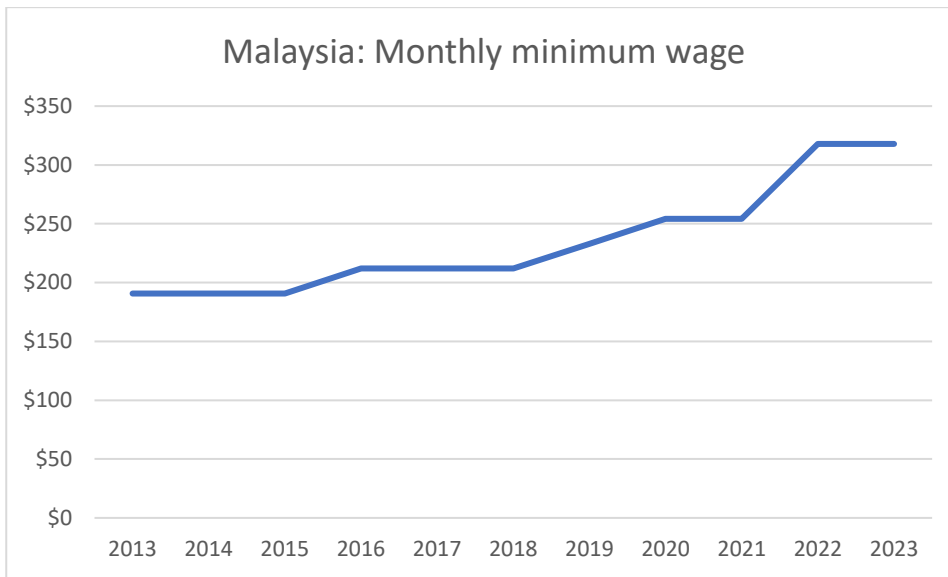
Appendix KKK



**Breakdown:** Malaysia initially improved from rank 29 to rank 25 in the logistics performance index in 2014, but subsequently declined substantially in the latter half of the last decade to rank 41 in 2018. Logistics performance in Malaysia suggest a significant recovery in recent years, ranking 26 in the index for 2023. However, part of this jump is attributed to the World Bank switching to a grouped ranking approach in its latest index.

**Source:** World Bank

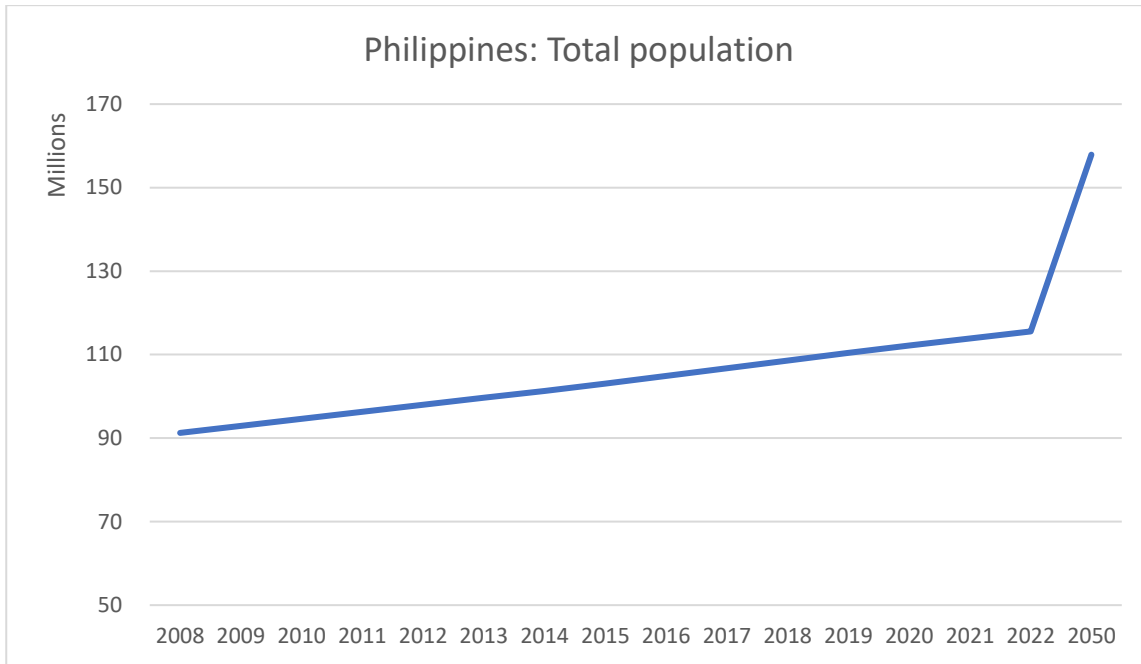
Appendix LLL



**Breakdown:** The monthly minimum wage in Malaysia has increased by 67,02% from \$188 to \$314 between 2013-2023. However, the monthly minimum wage was largely unchanged between 2013-2018, only increasing by 11,17% from \$188 to \$209, whereas the minimum wage has increased by 50% since. This means that the increase to the monthly minimum wage in Malaysia is largely concentrated in the last five years, albeit unchanged between 2020-2021 and 2022-2023.

**Source:** Trading Economics

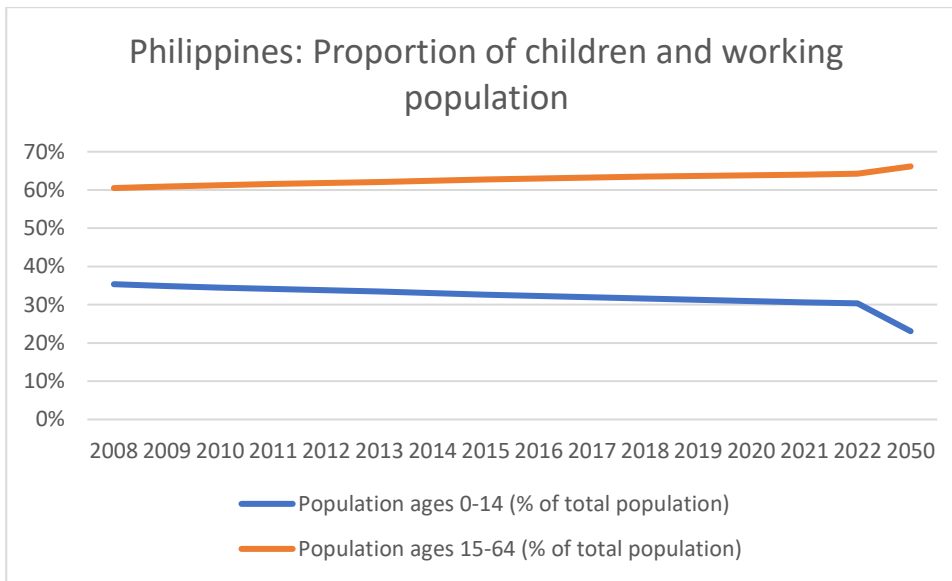
Appendix MMM



**Breakdown:** The Philippines' population has increased by 26,64% from 91.252.326 to 115.559.009 between 2008-2022. Furthermore, the population is estimated to increase to 157.891.622 by 2050, which would make population growth expand at a staggering rate of 36,63%. To illustrate the speed of this growth, this means that the Philippines' population has grown at an average rate of 1,90% per year between 2008-2022 and is estimated to continue growing at an average rate of 1,31% per year between 2022-2050.

**Source:** World Bank

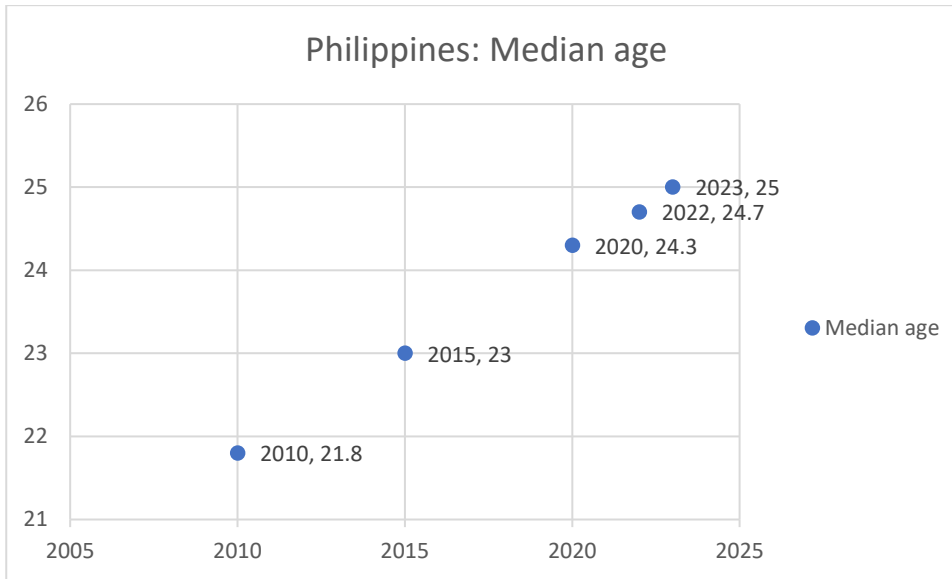
Appendix NNN



**Breakdown:** The proportion of the working population in the Philippines has steadily increased from 60,50% to 64,23% between 2008-2022, and is estimated to further increase to 66,15% by 2050. This expansion of the labor force is connected to the combination of a population boom and a distinctly young population ensuring the availability of new labor. However, the proportion of children in the Philippines has decreased from 35,37% to 30,34% between 2008-2022 and is estimated to drop to 23,07% by 2050. Consequently, the availability of new labor to maintain an expansion of the proportion of the working population is estimated to gradually decrease in the near future.

**Source:** World Bank.

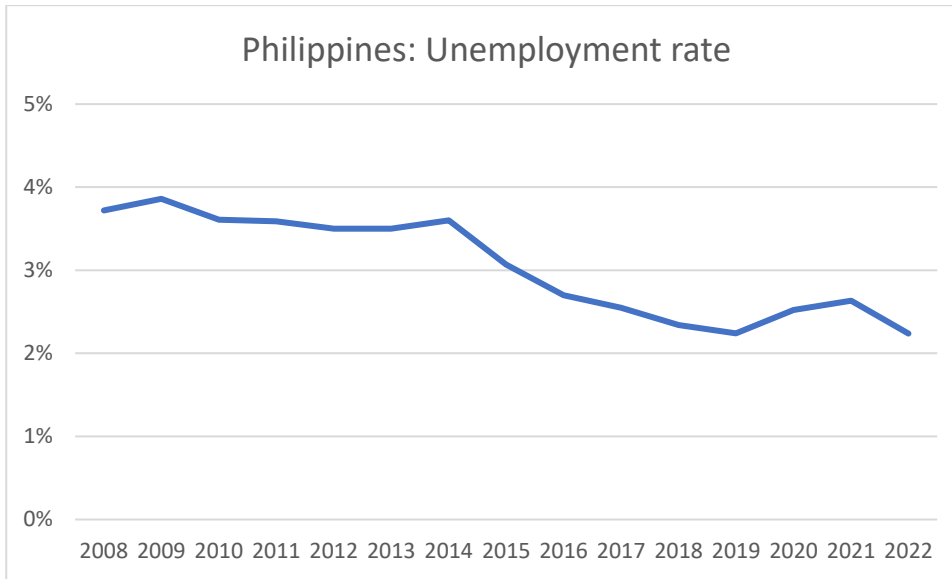
Appendix 000



Breakdown: The median age in the Philippines has increased by 3,2 years from 21,8 to 25 between 2010-2023 at an average rate of approximately 0,25 per year.

Source: Worldometer.

Appendix PPP



**Breakdown:** Unemployment in the Philippines improved significantly from 3,60% to 2,24% between 2014-2019, but deteriorated slightly again during the pandemic. However, unemployment quickly recovered and has overall improved from 3,72% to 2,24% between 2008-2022. Nonetheless, unemployment estimates from 2020 onwards are uncertain due to insufficient access to employment data during the pandemic.

**Source:** World Bank.

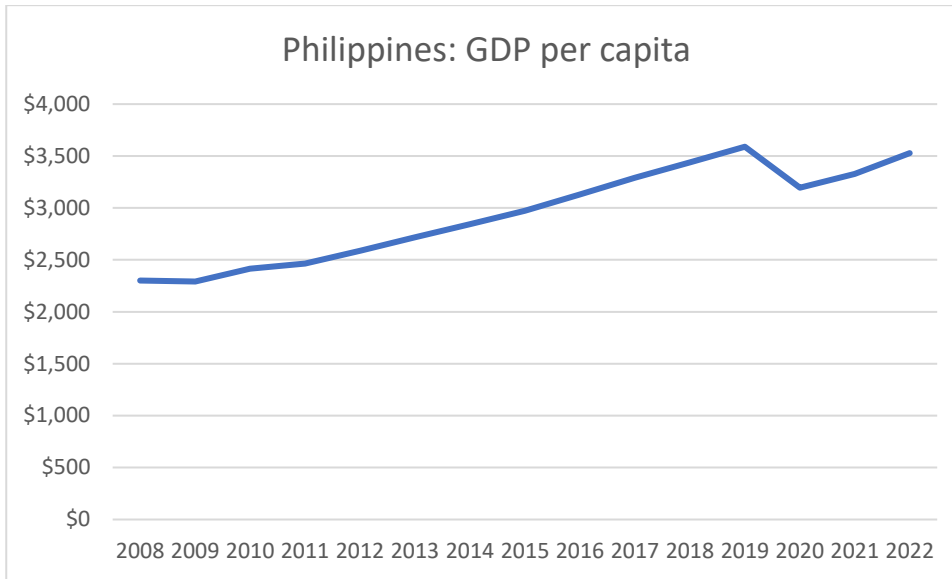
Appendix QQQ



**Breakdown:** Annual GDP growth in the Philippines fluctuated significantly after the financial crisis, but showed strong and consistent performance between 2012-2019, though indicating a slight downwards trend starting in 2016. The economy plunged from 6,12% to negative -9,52% in 2020 with the outbreak of the pandemic, but the economy immediately rebounded to 5,71% growth in the year after. Annual GDP growth in the Philippines further increased to 7,57% in 2022, reporting its highest annual economic growth rate in more than four decades. Overall, economic growth expanded at an average of 4,91% per year between 2008-2022.

**Source:** World Bank.

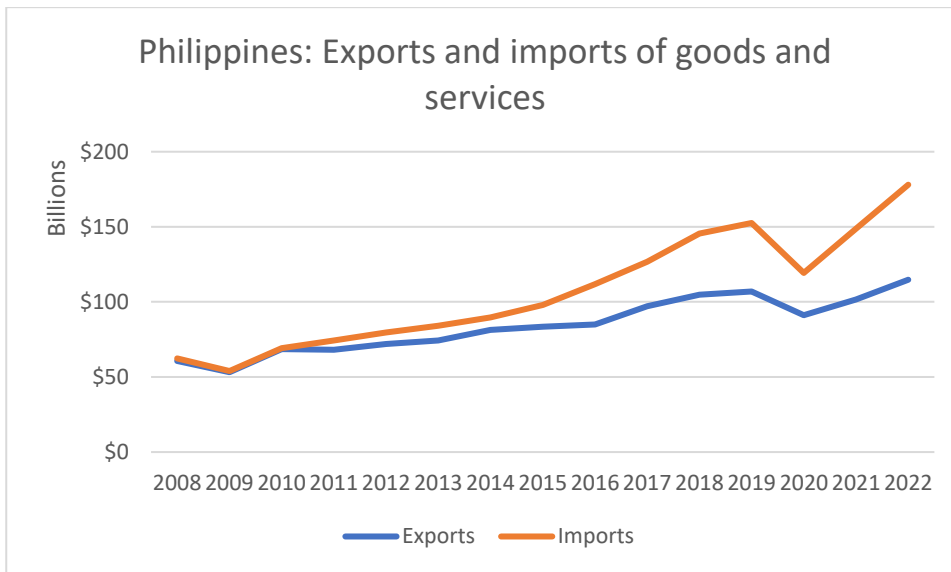
## Appendix RRR



**Breakdown:** GDP per capita in the Philippines has increased by 53,32% from \$2301 to \$3528 between 2008-2022 but dropped significantly during the pandemic and remains down from its peak of \$3590 in 2019.

**Source:** World Bank.

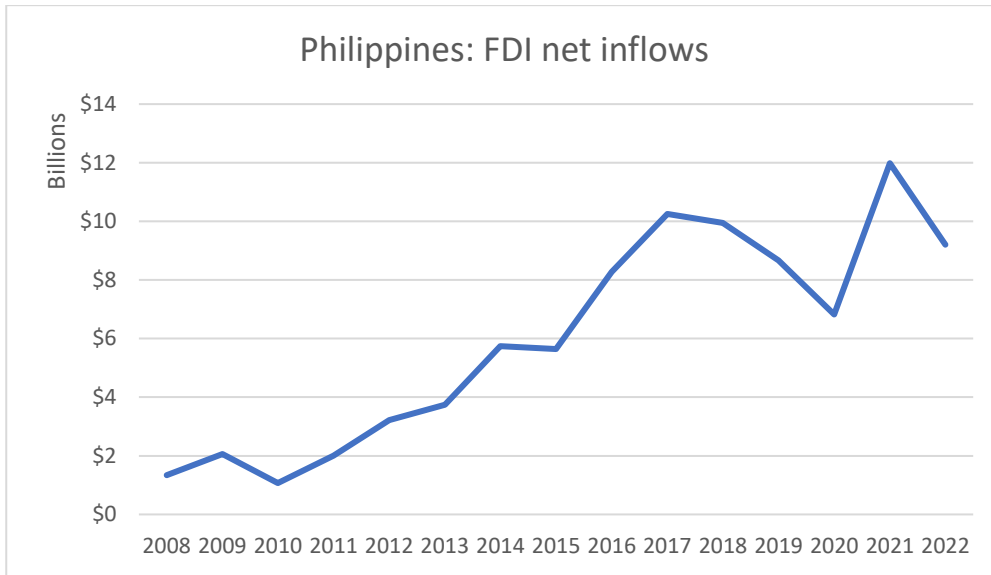
Appendix SSS



**Breakdown:** Exports of goods and services have increased by 89,44% from \$60,58 to \$114,76 billion between 2008-2022, dropping slightly in 2020 before exports accelerated again. Imports of goods and services have increased by 185,55% from \$62,34 to \$178,01 billion in the same period. Notably, imports steadily climbed after the financial crisis but dropped significantly during the onset of the pandemic. However, imports quickly surged again by nearly 50% from \$119,26 to \$178,01 between 2020-2022. Correspondingly, the Philippines gradually display a significantly higher level of imports than exports for the period, with the exception of 2020. In 2022, the Philippines recorded a trade deficit of \$63,26 billion.

**Source:** World Bank.

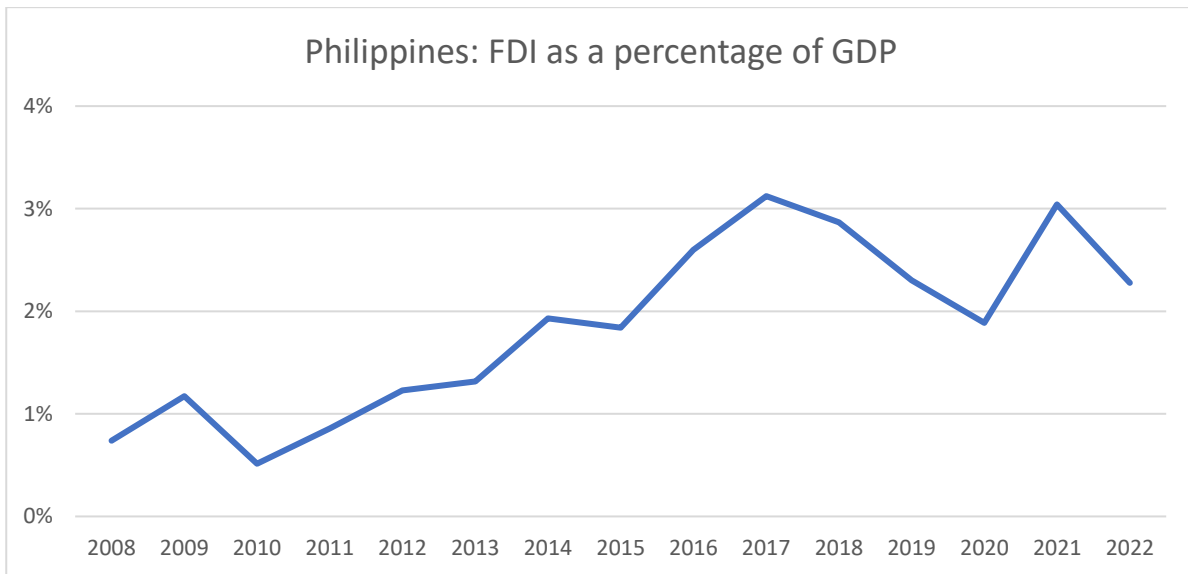
Appendix TTT



**Breakdown:** FDI net inflows in the Philippines increased substantially after the financial crisis from \$1,07 to \$10,26 billion between 2010-2017, but deteriorated significantly at the end of last decade to \$6,82 billion in 2020. While FDI net inflows rebounded strongly in 2021, peaking at \$11,98 billion for the period, foreign investments dropped again to \$9,20 billion in 2022.

**Source:** World Bank.

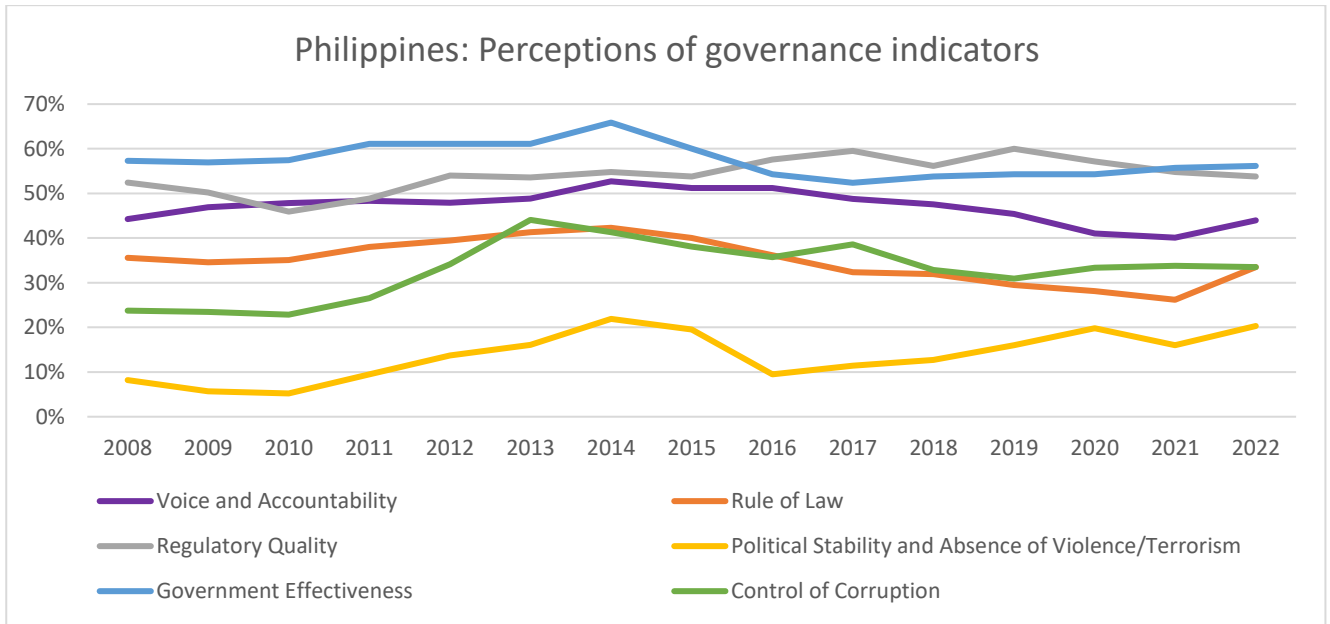
Appendix UUU



**Breakdown:** FDI as a percentage of GDP display a similar pattern to FDI net inflows. Between 2010-2017, the economic contribution of foreign investment in the Philippines increased considerably from 0,51% to 3,12% of GDP before declining at the end of last decade to 1,89% in 2020. While jumping to 3,04% in 2021, FDI as a percentage of GDP dropped again to 2,28% in 2022.

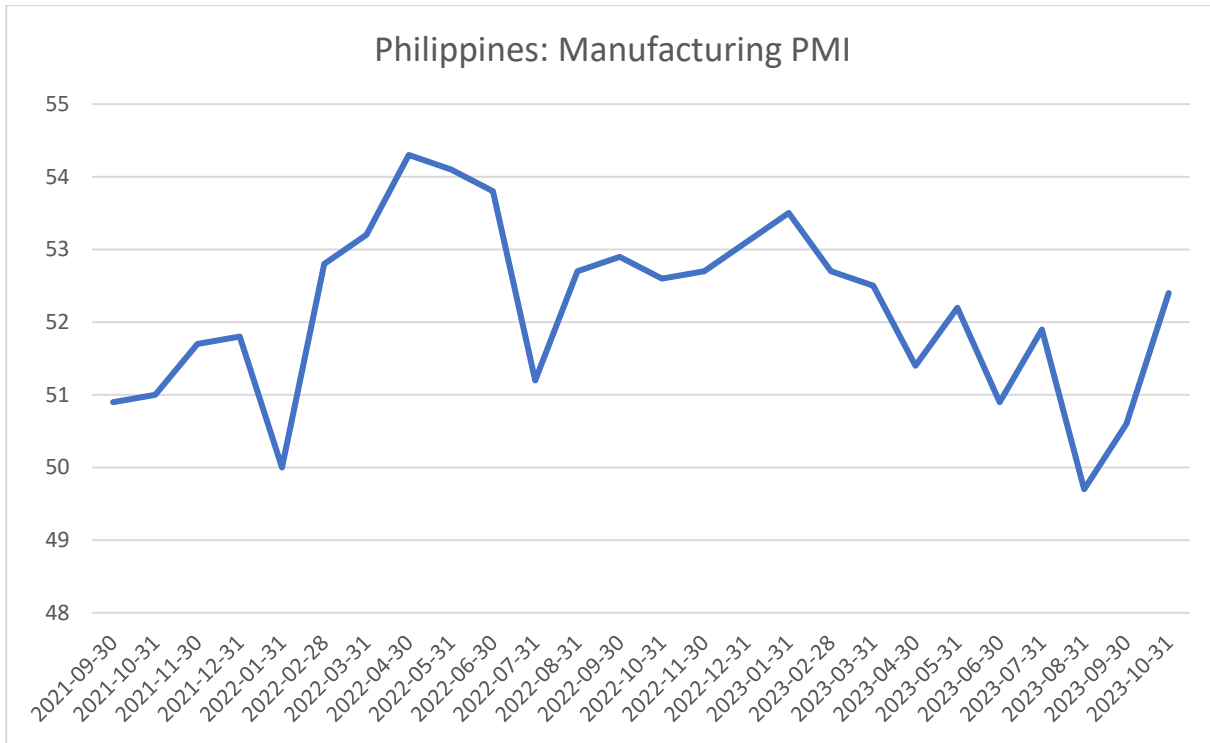
**Source:** World Bank.

Appendix VVV



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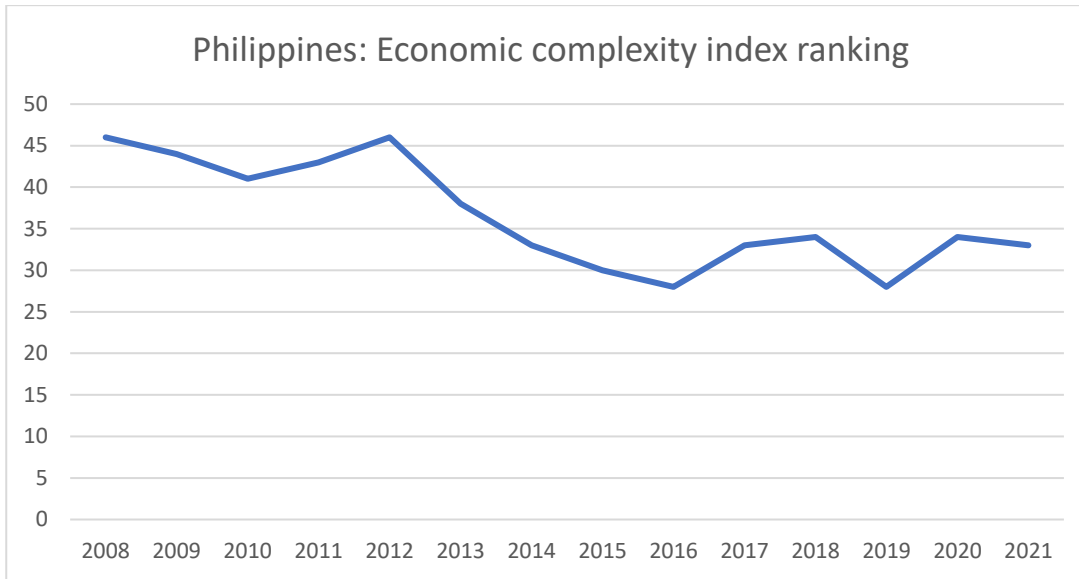
Appendix WWW



**Breakdown:** Manufacturing PMI in the Philippines has expanded at an average of 52,18 since the end of August 2021. Sentiments about the manufacturing sector in the Philippines indicated a gradual deterioration in 2023, contracting for the first time in 23 months last August, but suggest a strong rebound again at the end of 2023. While displaying some fluctuations, this suggest that purchasing managers are still optimistic about manufacturing business conditions in the Philippines.

**Source:** Macrovar.

Appendix XXX



**Breakdown:** The Philippines climbed considerably from rank 46 to rank 28 in the economic complexity index ranking between 2012-2016, but economic complexity indicate fluctuations since the end of last decade. However, the Philippines still demonstrate significant overall improvements from rank 46 in 2008 to rank 33 in 2021.

**Source:** The Atlas of Economic Complexity.

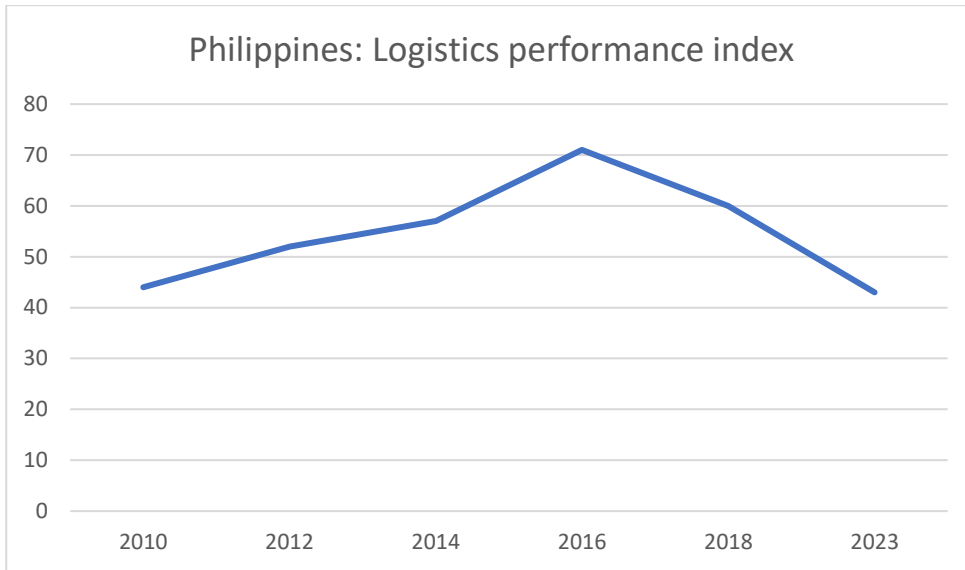
Appendix YYY



**Breakdown:** GDP contribution per person employed in the Philippines has increased by 46,59% from \$14727 to \$21588 between 2008-2022. Notably, GDP per person employed remains down from its peak of \$21864 in 2019 before the economy crashed.

**Source:** World Bank.

## Appendix ZZZ



**Breakdown:** Logistics performance in the Philippines indicated a strong downwards trend last decade, dropping from rank 44 to rank 71 in the logistics performance index between 2010-2016. However, this trend reversed at the end of last decade, and the Philippines has fully recovered to rank 43 in 2023, though part of this jump is attributed to the World Bank switching to a grouped ranking approach in its latest index.

**Source:** World Bank.

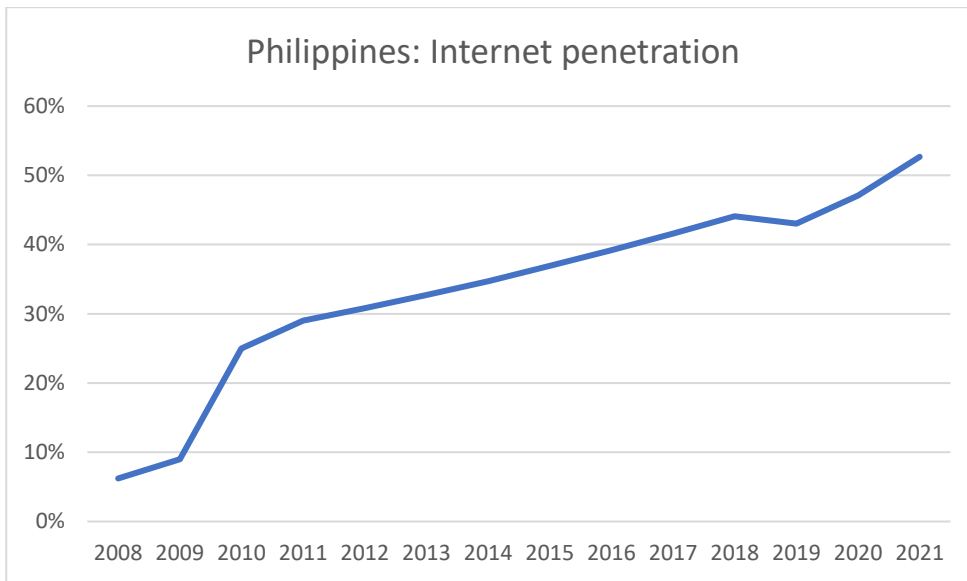
Appendix AAAA



**Breakdown:** The monthly minimum wage in the Philippines has increased by 60,10% from \$203 to \$325 between 2008-2023. Notably, minimum wages stagnated from 2018 to 2021, but has in recent years increased significantly from \$286 to \$325, corresponding to an increase of 13,64%.

**Source:** Trading Economics.

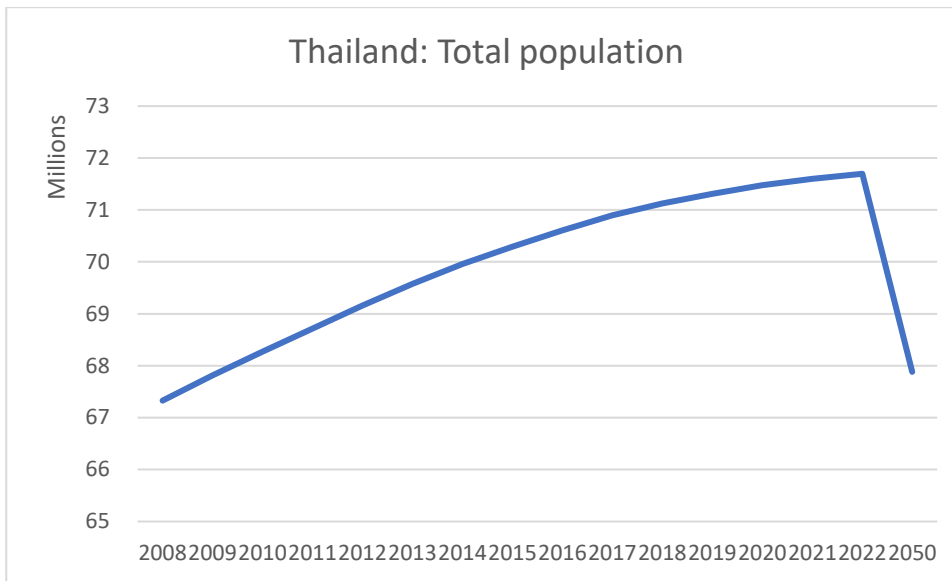
## Appendix BBBB



**Breakdown:** Internet penetration in the Philippines increased from 6,22% to 52,68% between 2008-2021, now covering more than the majority of the Philippine population. In particular, the percentage of the population using the internet surged significantly in 2010. Internet penetration dropped in 2019 but has since accelerated significantly again.

**Source:** World Bank.

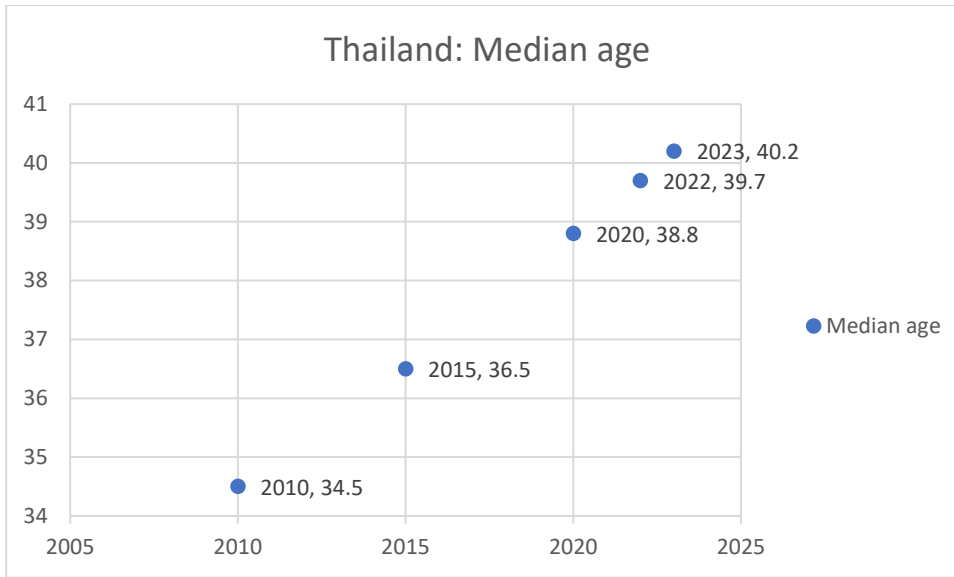
Appendix CCCC



**Breakdown:** Thailand’s population has increased by 6,49% from 67.328.239 to 71.697.030 between 2008-2022. However, population growth has slowed down significantly and is projected to start declining by 2030. In 2050, Thailand’s population is estimated to drop to 67.880.083, corresponding to a decrease of 5,32% compared with 2022.

**Source:** World Bank.

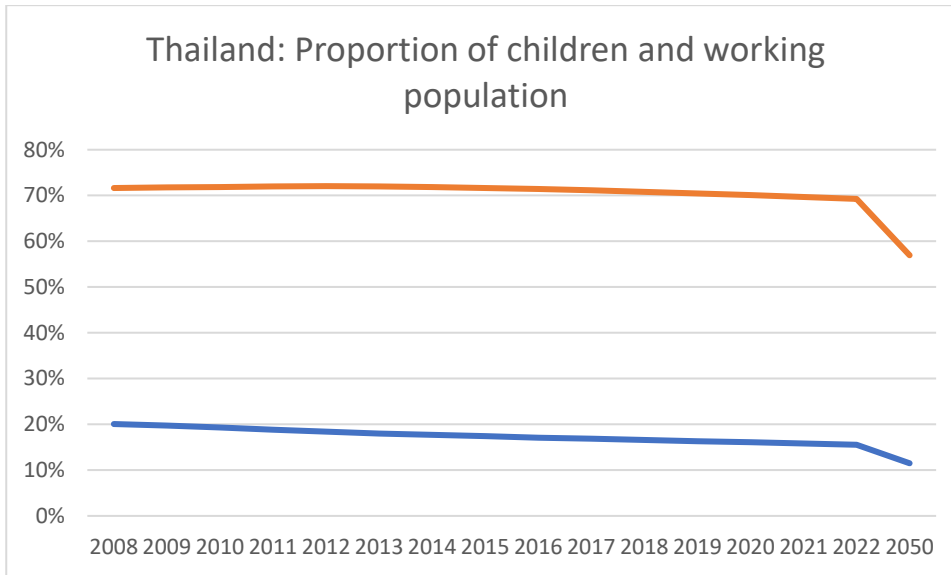
Appendix DDDD



Breakdown: The median age in Thailand has increased by 5,7 years from 34,5 to 40,2 between 2010-2023, at an average rate of approximately 0,44 per year.

Source: Worldometer.

Appendix EEEE



**Breakdown:** The proportion of the working population in Thailand has decreased from 71,61% to 69,27% between 2008-2022, steadily declining each year since 2012. By 2050, the working population is estimated to make up 56,93% of the population. The proportion of children has also consistently decreased from 20,07% to 15,52% between 2008-2022 and is estimated to drop to 11,50% by 2050. This means that 31,57% of Thailand’s population is estimated to be aged 65 or older in 2050.

**Source:** World Bank.

Appendix FFFF



**Breakdown:** Unemployment in Thailand improved significantly after the financial crisis from 1,49% in 2009 to 0,25% in 2013 before deteriorating slightly. Unemployment indicated improvements again at the end of last decade, but jumped above 1% again during the pandemic, though the unemployment rate in Thailand remains remarkedly low. Notably, due to insufficient access to data during the pandemic, recent unemployment estimates from 2020 onwards are uncertain.

**Source:** World Bank.

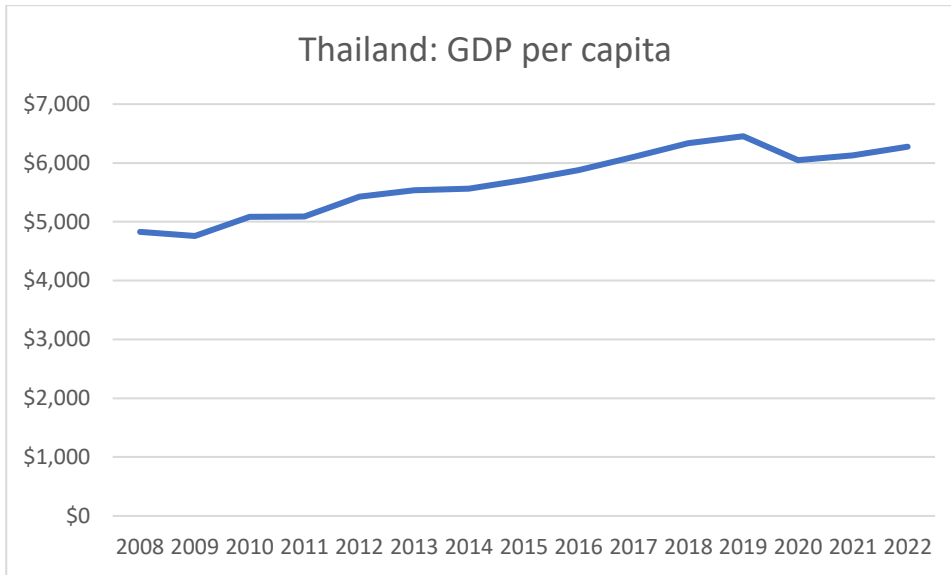
Appendix GGGG



**Breakdown:** Annual GDP growth in Thailand was volatile after the financial crisis, but showed signs of stabilizing after 2014, indicating a slow but consistent upwards trend between 2015-2018. However, economic growth declined steeply again from 4,22% to 2,11% in 2019, before Thailand’s economy crashed with the outbreak of the pandemic. While the economy quickly recovered from negative -6,07% to 1,49% in 2021, and further increased to 2,59% in 2022, annual GDP growth display significantly lower growth rates compared with 2010 and 2012. Overall, economic growth in Thailand has expanded at an average of 2,36% per year between 2008-2022.

**Source:** World Bank.

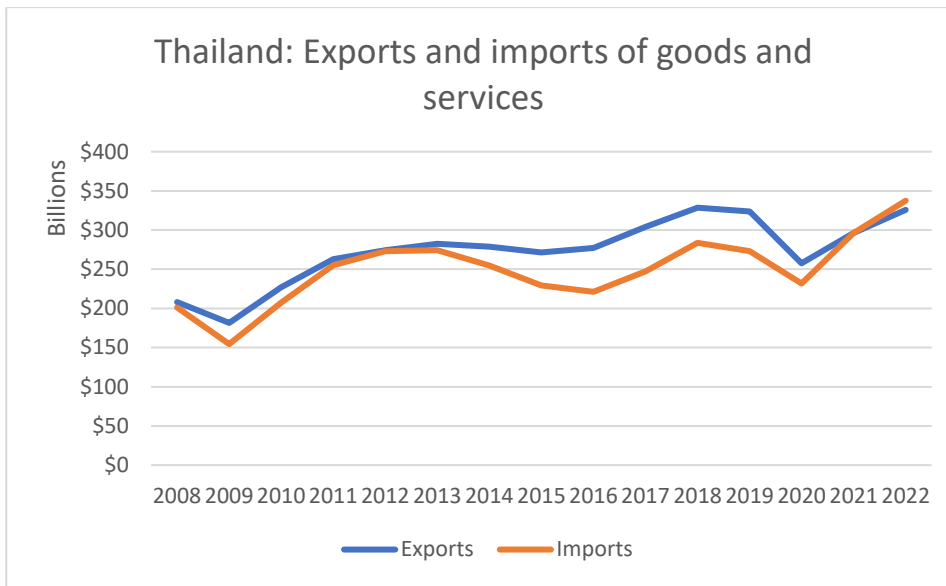
## Appendix HHHH



**Breakdown:** GDP per capita in Thailand has increased by 30,06% from \$4827 to \$6278 between 2008-2022, but dropped significantly during the pandemic and still remains down from its peak of \$6454 in 2019.

**Source:** World Bank.

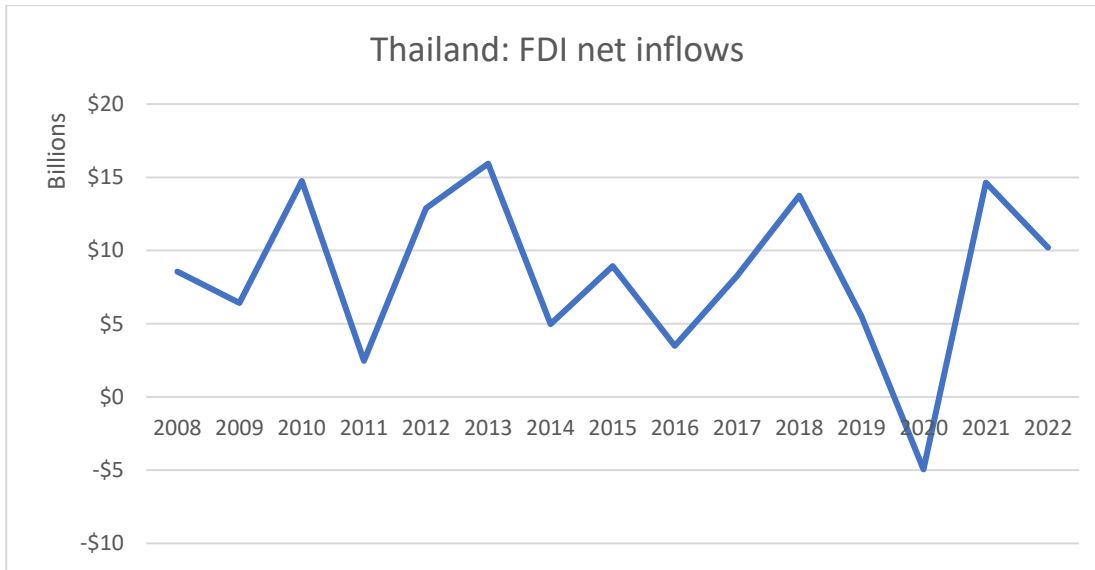
Appendix III



**Breakdown:** Exports of goods and services have increased by 56,59% from \$208,10 to \$325,86 billion between 2008-2022. In particular, exports surged after the financial crisis but gradually slowed down before declining slightly in both 2014 and 2015. Furthermore, while increasing significantly again from 2016 to 2018, exports also declined in 2019 and dropped significantly during the pandemic. With exports of goods and services surging again from \$257,71 to \$325,86 between 2020-2022, corresponding to a jump of 26,44%, this means that the increase of exports is effectively concentrated between 2009-2013 and 2020-2023. Imports of goods and services have increased by 67,8% from \$201,11 to \$337,47 between 2008-2022. Indicating a similar but more extreme pattern as exports, though also declining in 2016, this increase of imports of goods and services is also effectively concentrated between 2009-2013 and 2020-2023. Notably, imports surged tremendously by 45,62% from \$231,74 to \$337,47 between 2020-2022. As a result, Thailand now exhibit a slight trade deficit of \$11,61 billion.

Source: World Bank.

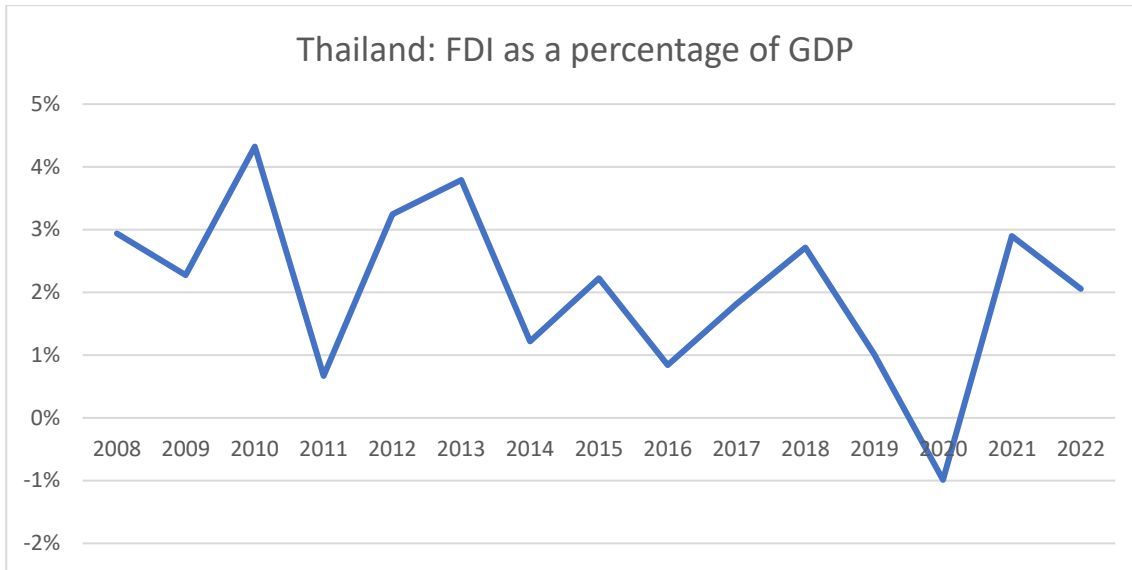
Appendix JJJ



**Breakdown:** FDI net inflows in Thailand have fluctuated heavily since the financial crisis, peaking at \$15,94 billion in 2013 but also reporting its first ever negative annual FDI of negative -\$4,95 billion in 2020. FDI net inflows were \$10,20 billion in 2022, down slightly from \$14,64 billion in 2021, but indicate no immediate positive or negative long-term trend for foreign investments in Thailand.

**Source:** World Bank.

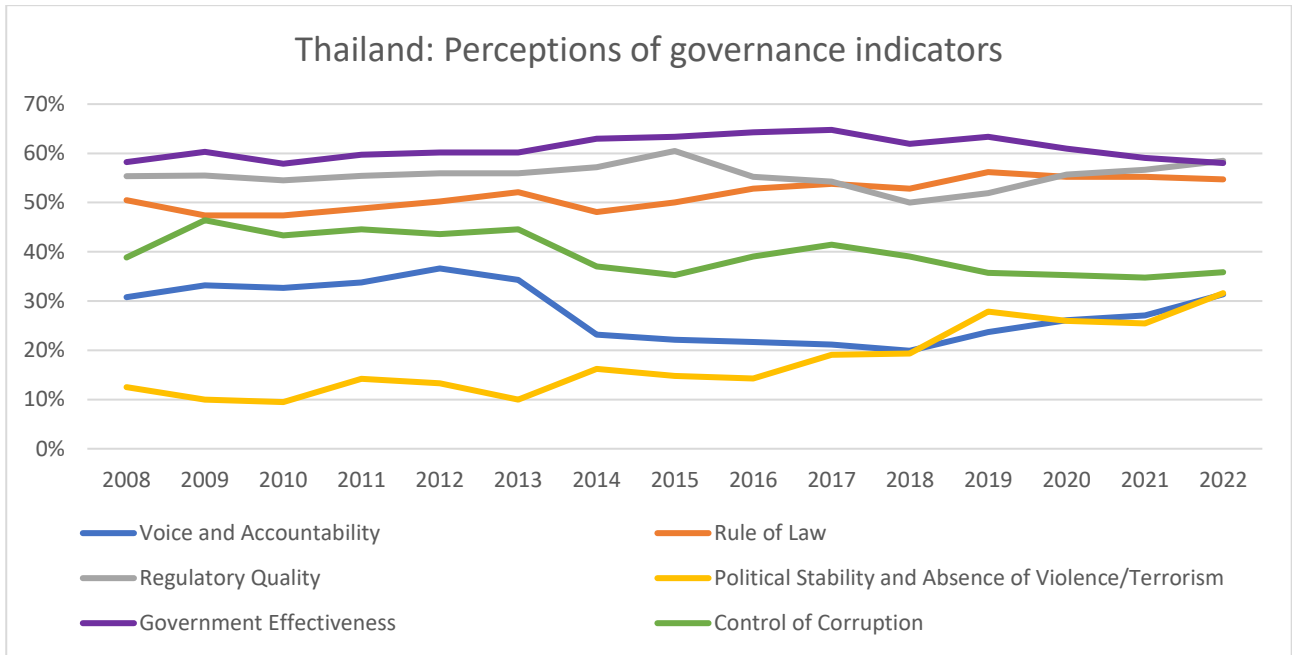
Appendix KKKK



**Breakdown:** FDI as a percentage of GDP in Thailand display a similar pattern to FDI net inflows, fluctuating heavily since the financial crisis. Notably, due to Thailand’s negative FDI net inflows in 2020, foreign investments contributed a negative -0,99% in the same year. In 2022, FDI net inflows corresponded to 2,06% of Thailand’s GDP but like FDI net inflows indicate no immediate long-term trend.

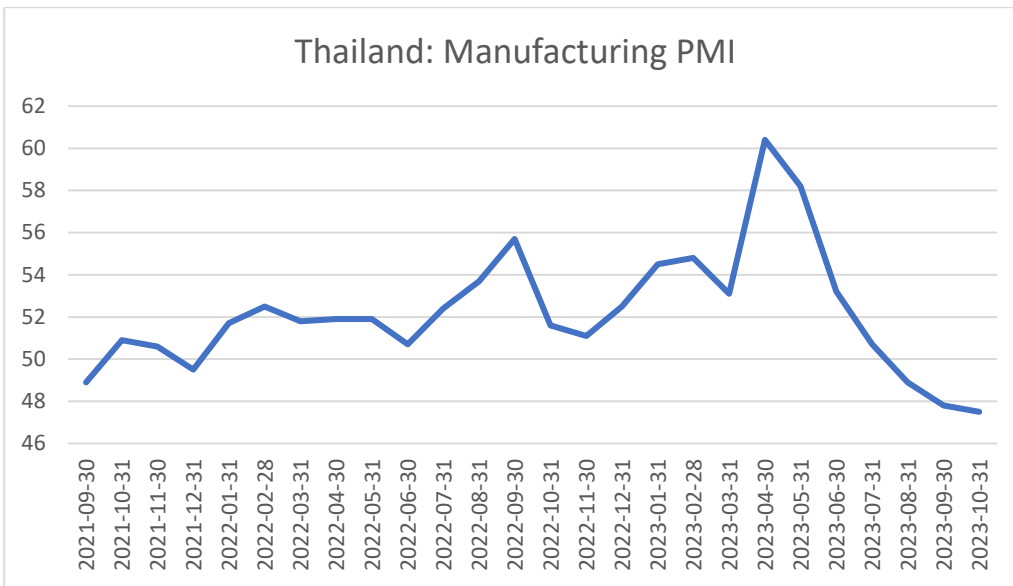
**Source:** World Bank.

Appendix LLLL



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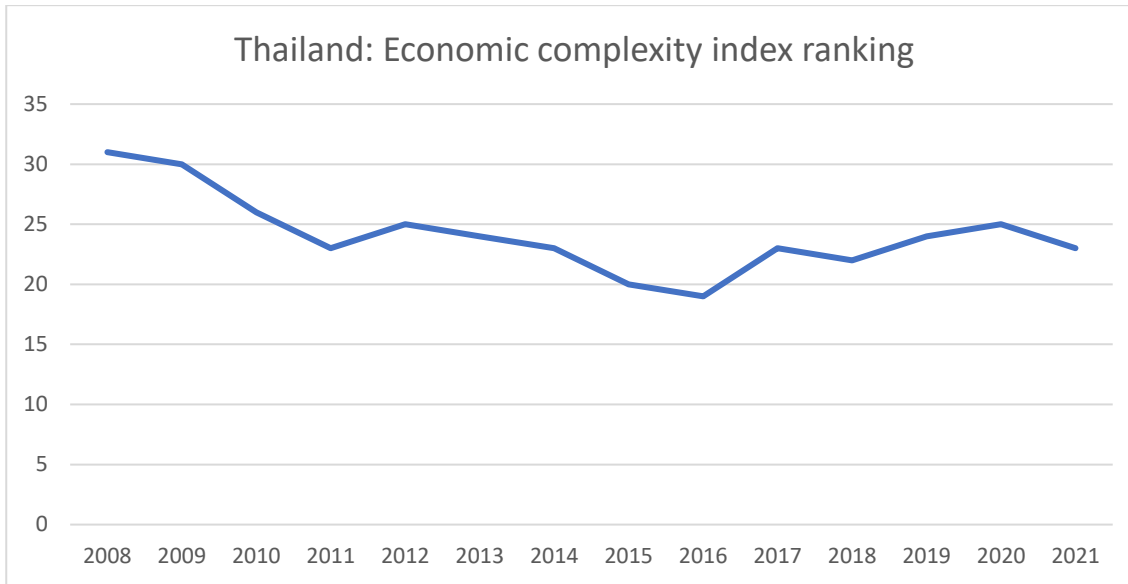
Appendix MMMM



**Breakdown:** Manufacturing PMI in Thailand initially expanded for 19 consecutive months from January 2022 to July 2023. However, despite jumping to a remarkable peak of 60,4 in April 2023, sentiments about manufacturing business conditions in Thailand have sharply deteriorated in the last six consecutive months. In August 2023, optimism contracted for the first time in nearly two years, and in October 2023 manufacturing PMI had dropped to 47,5, its lowest point in 32 months. Overall, manufacturing PMI in Thailand has expanded at an average of 52,17 since the end of August 2021.

**Source:** Macrovar.

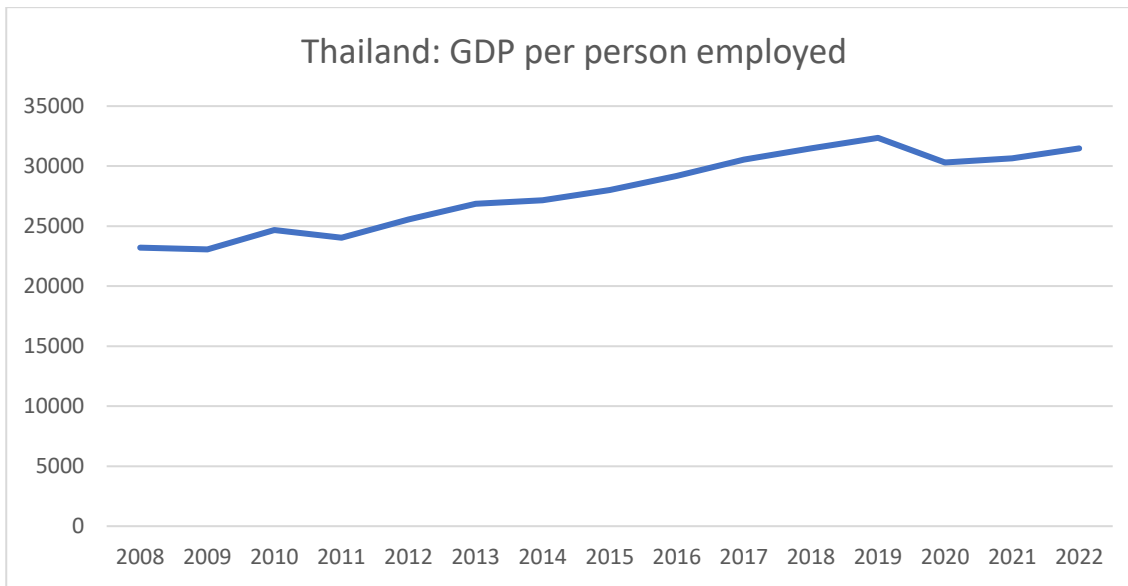
Appendix NNNN



**Breakdown:** Thailand demonstrated a significant positive trend to economic complexity since the financial crisis, climbing substantially from rank 31 to rank 19 in the economic complexity index ranking between 2008-2016, though dropping slightly in 2012. However, Thailand displayed a slight reversal after 2016, declining from rank 19 in 2016 to rank 25 in 2020. The economic complexity index indicated some improvement again in the year after and still display significant overall improvements from rank 31 to rank 23 between 2008-2021.

**Source:** The Atlas of Economic Complexity.

Appendix OOOO



**Breakdown:** GDP per person employed in Thailand has increased by 35,54% from \$23215 to \$31466 between 2008-2022. Notably, in addition to both 2009 and 2020 when Thailand reported negative annual economic growth, GDP per person employed also dropped in 2011 when annual GDP growth dropped steeply. GDP per person employed in Thailand still remains down from its peak of \$32355 in 2019 before the economy crashed with the pandemic.

**Source:** World Bank.

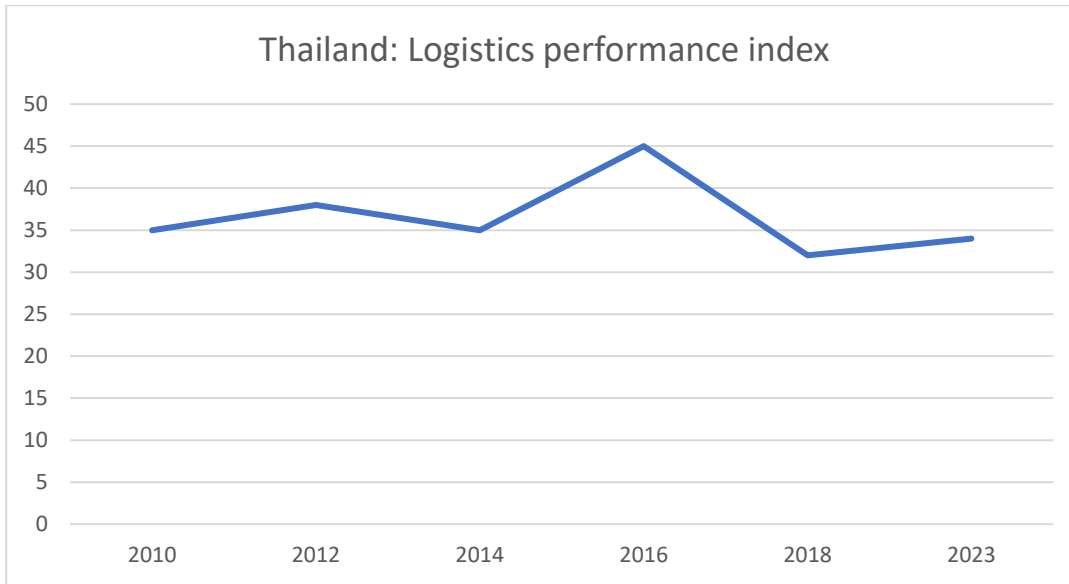
Appendix PPPP



**Breakdown:** The monthly minimum wage in Thailand has increased by 74,10% from \$166 to \$289 between 2008-2023. In particular, minimum wages jumped substantially from \$181 to \$252 in 2012 but stagnated until 2016. The monthly minimum wage in Thailand increased significantly between 2016-2018 and again in 2022, but remained relatively unchanged from 2018 to 2021, and stalled again in 2023. In effect, the increase of the monthly minimum wage in Thailand is primarily concentrated in 2012, 2016-2018, and 2022.

**Source:** Trading Economics.

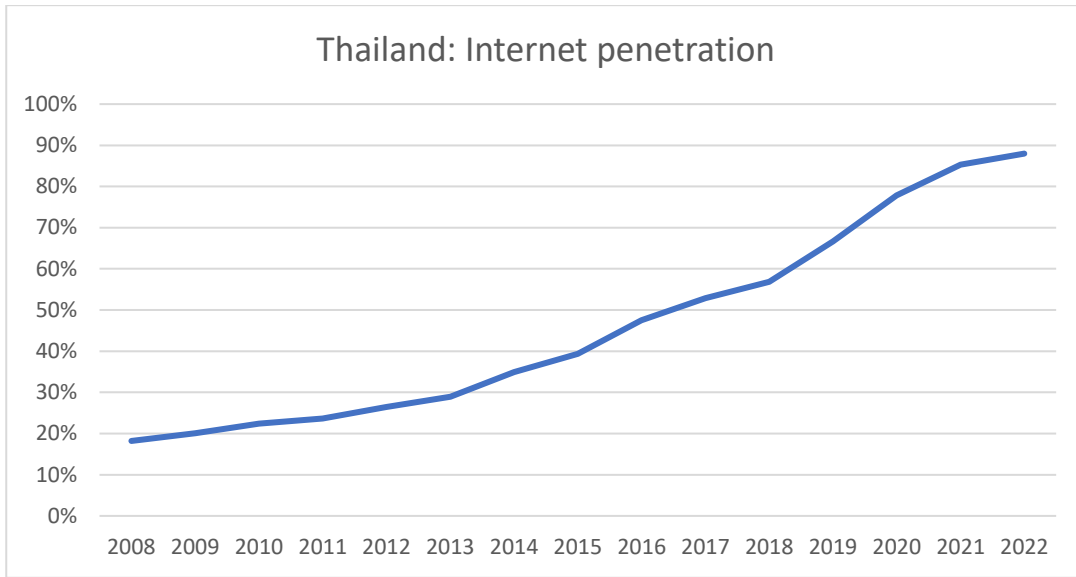
Appendix QQQQ



**Breakdown:** Logistics performance in Thailand indicated a considerable deterioration from rank 35 to rank 45 in 2016 in the logistics performance index but strongly rebounded to rank 32 again in 2018. Between the other logistics index, Thailand’s ranking has otherwise been relatively stable, only exhibiting minor swings. In 2023, Thailand ranked 34 in the logistics performance index, but it is unclear how much of this ranking is the result of the World Bank implementing a grouped ranking approach in 2023.

**Source:** World Bank.

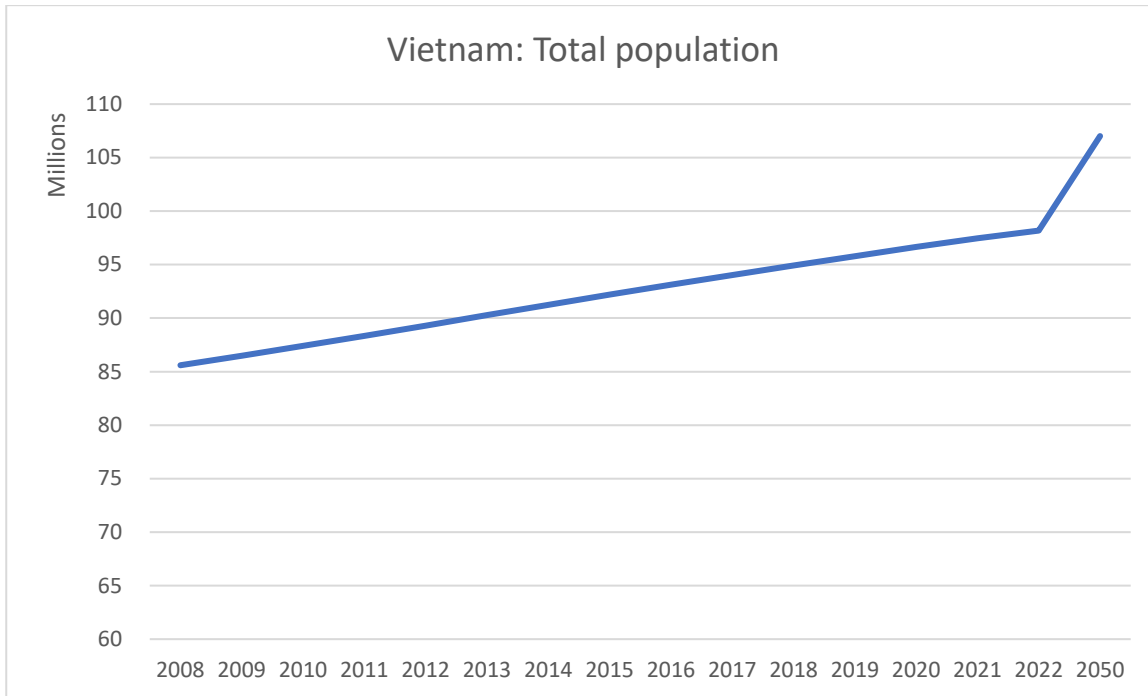
## Appendix RRRR



**Breakdown:** Internet penetration in Thailand has increased substantially from 18,2% to 87,98% between 2008-2022, rapidly covering almost the entire population.

**Source:** World Bank.

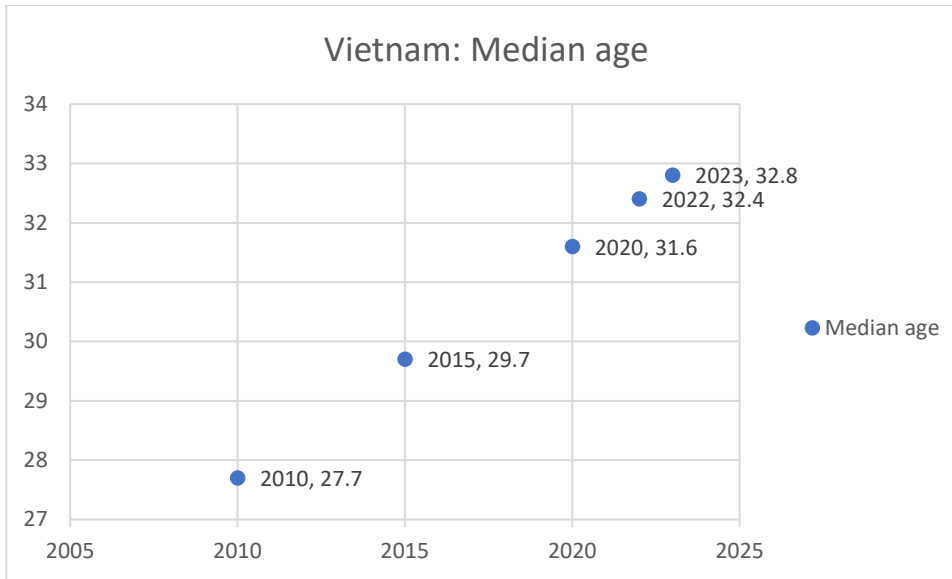
Appendix SSSS



**Breakdown:** Vietnam’s population has increased by 14,71% from 85.597.241 to 98.186.856 between 2008-2022. While population growth is estimated to slow down significantly, Vietnam’s population is projected to grow another 8,99% and reach 107.012.939 by 2050.

**Source:** World Bank.

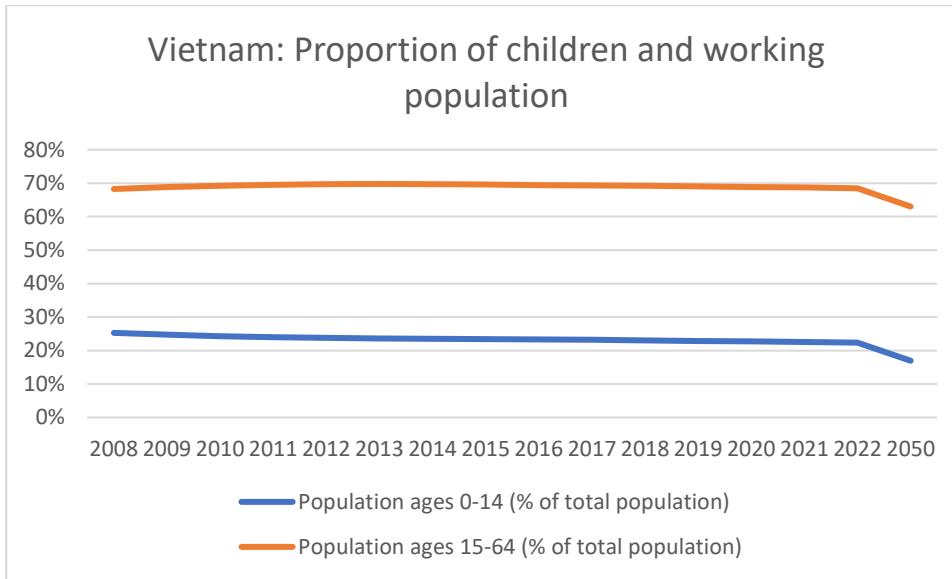
Appendix TTTT



Breakdown: The median age in Vietnam has increased by 5,1 years from 27,7 to 32,8 between 2010-2023 at an average rate of approximately 0,4 per year.

Source: Worldometer.

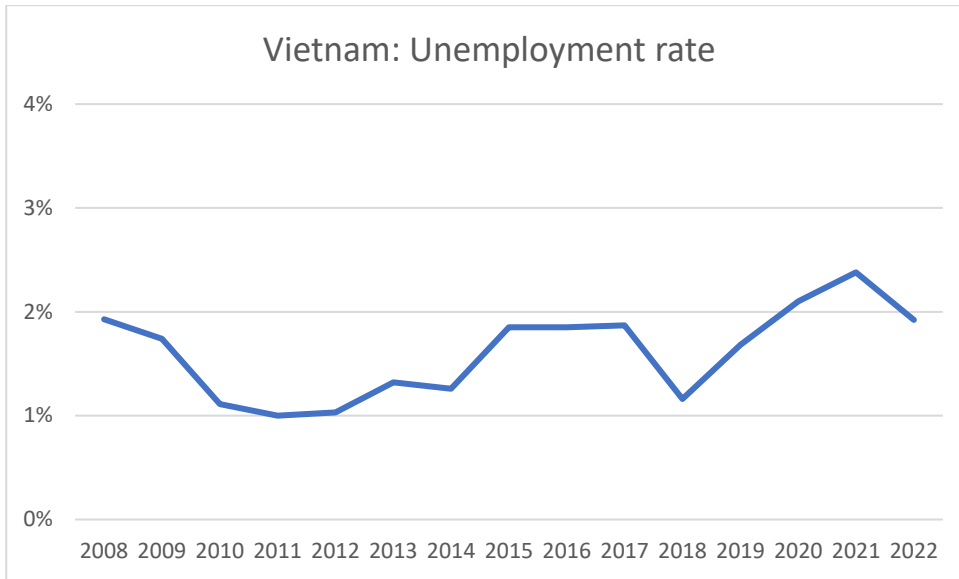
Appendix UUUU



**Breakdown:** The proportion of the working population in Vietnam has increased marginally from 68,27% to 68,49% between 2008-2022. However, the proportion of the working population in Vietnam has consistently declined each year since 2013, and is estimated to decline to 63,02% of the population by 2050. The proportion of children has consistently declined each year from 25,27% to 22,39% between 2008-2022 and is estimated to further drop to 16,94% of the population by 2050. Correspondingly, 1 in 5 of the population is projected to be aged 65 and above in Vietnam by 2050.

**Source:** World Bank.

Appendix VVVV



**Breakdown:** Unemployment in Vietnam initially displayed improvements from 1,93% to 1,00% between 2008-2011 but subsequently reversed and deteriorated to 1,97% by 2017. While unemployment briefly indicated a significant rebound in the year after, the unemployment rate declined again from 1,16% to 2,38% from 2018-2021, though suggesting some recovery in 2022 after recovering to 1,92%. However, unemployment in Vietnam remains low for the period. Notably, unemployment estimates from 2020 onwards are uncertain due to insufficient access to employment data during the pandemic.

**Source:** World Bank.

Appendix WWWW



**Breakdown:** Annual GDP growth in Vietnam dropped significantly in 2012, but otherwise show strong and consistent performance. While economic growth plunged from 7,36% to 2,87% in 2020 with the outbreak of the pandemic, and further declined to 2,56% in 2021, Vietnam escaped negative growth, and in 2022 the economy rebound to 8,02%, recording its highest annual GDP growth rate since 1997. Overall, economic growth in Vietnam expanded at an average of 6,02% per year between 2008-2022.

**Source:** World Bank.

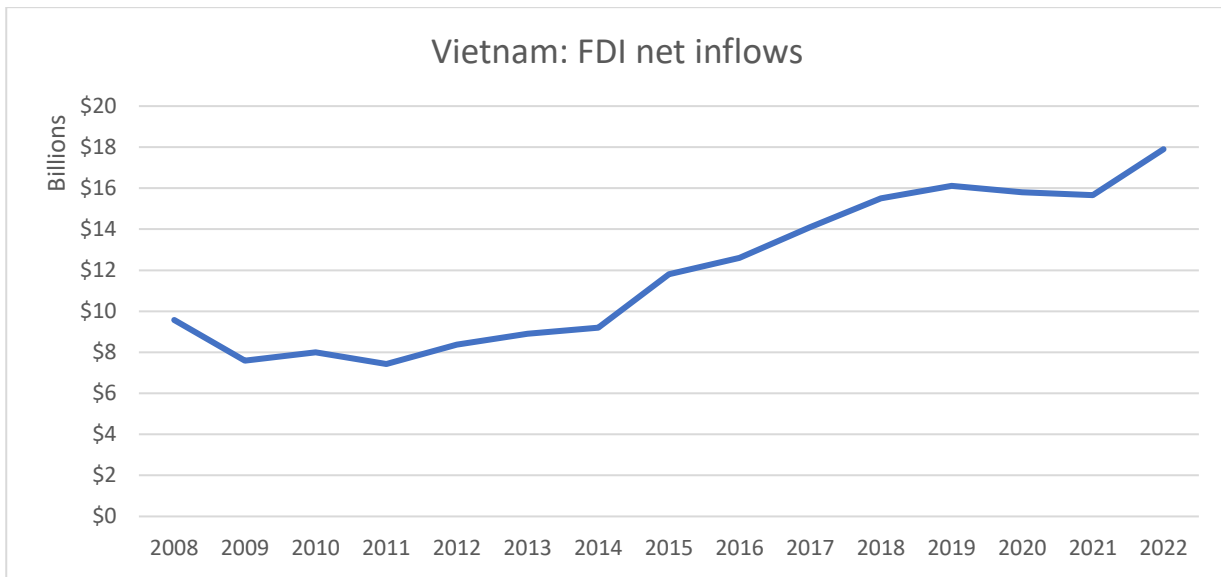
Appendix XXXX



**Breakdown:** GDP per capita in Vietnam has increased by 97,89% from \$1847 to \$3655 between 2008-2022, slowing down slightly in 2020-2021 during the pandemic when annual GDP growth dropped.

**Source:** World Bank.

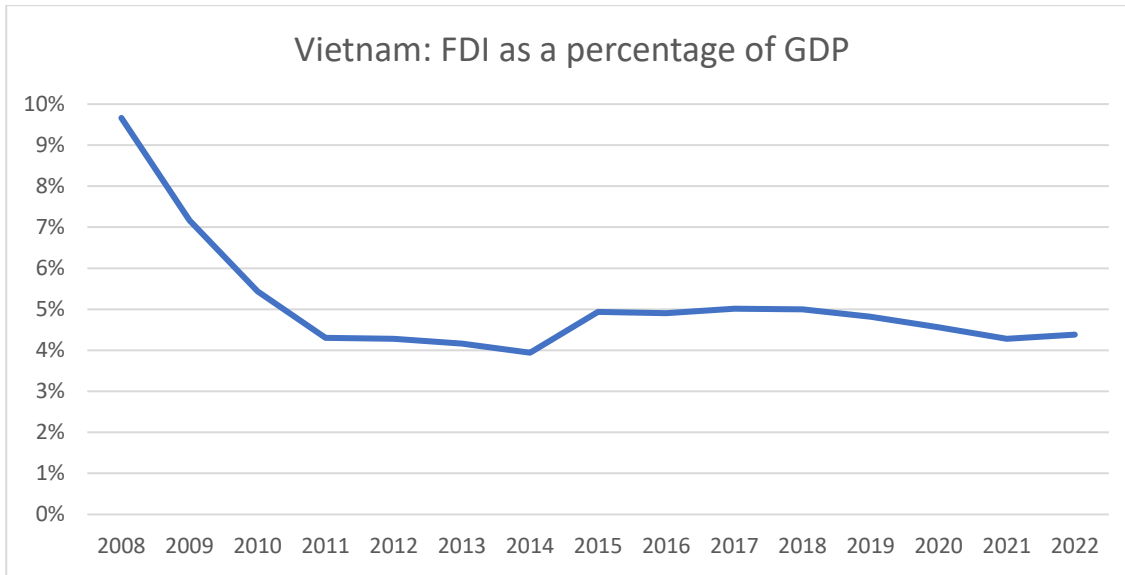
Appendix YYYY



**Breakdown:** FDI net inflows in Vietnam dropped after the financial crisis but steadily increased from \$7,43 to \$16,12 billion between 2011-2019. While foreign investments declined slightly during the pandemic, FDI net inflows in Vietnam has accelerated significantly again, jumping from \$15,66 to \$17,90 billion in 2022.

**Source:** World Bank.

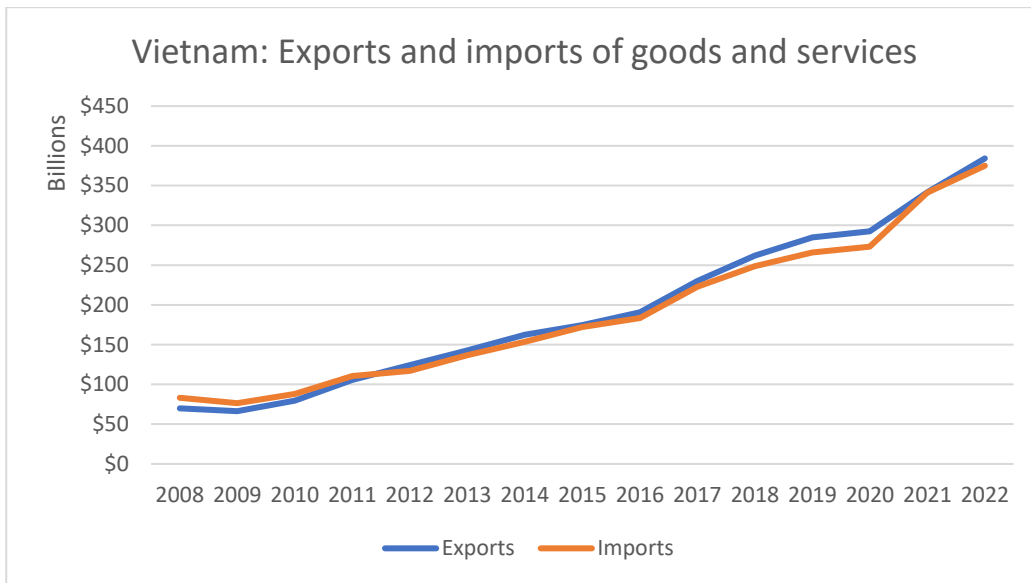
Appendix ZZZZ



**Breakdown:** FDI as a percentage of GDP in Vietnam declined sharply after the financial crisis from 9,66% to 4,30% between 2008-2011, further gradually declining to 3,94% by 2014. While foreign investments as a percentage of Vietnam’s economy jumped to 4,93% in 2015, FDI as a percentage of GDP in Vietnam indicate a gradual decrease again, though displaying some minor swings. In 2022, FDI net inflows corresponded to 4,38% of Vietnam’s GDP.

**Source:** World Bank.

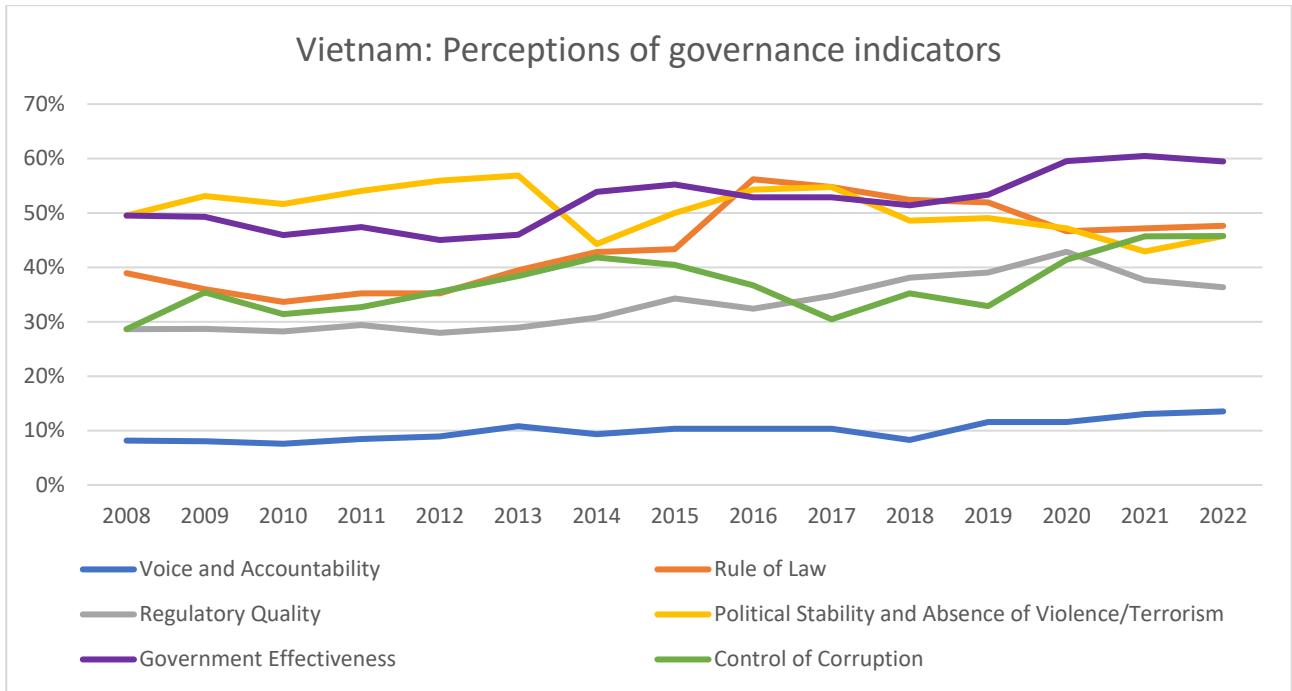
Appendix AAAAA



**Breakdown:** Exports of goods and services increased by 451,09% from \$69,72 to \$384,2 billion between 2008-2022, consistently expanding each year since the financial crisis in 2008. Exports briefly slowed down with the outbreak of the pandemic, only increasing by \$7,74 billion in 2020, but surged by \$91,74 billion from \$292,48 in 2020 to \$384,22 billion in 2022, corresponding to an increase of 31,37% in recent years. Imports of goods and services increased by 350,51% from \$83,25 to \$375,05 billion between 2008-2022, also expanding each year from 2009 onwards. Similar to exports, imports of goods and services slowed down significantly with the outbreak of the pandemic, increasing by \$7,38 in 2020, but surged with \$101,69 billion from \$273,36 to \$375,05 billion between 2020-2022, an increase of 37,2% in recent years. Vietnam has maintained a small trade surplus since 2012.

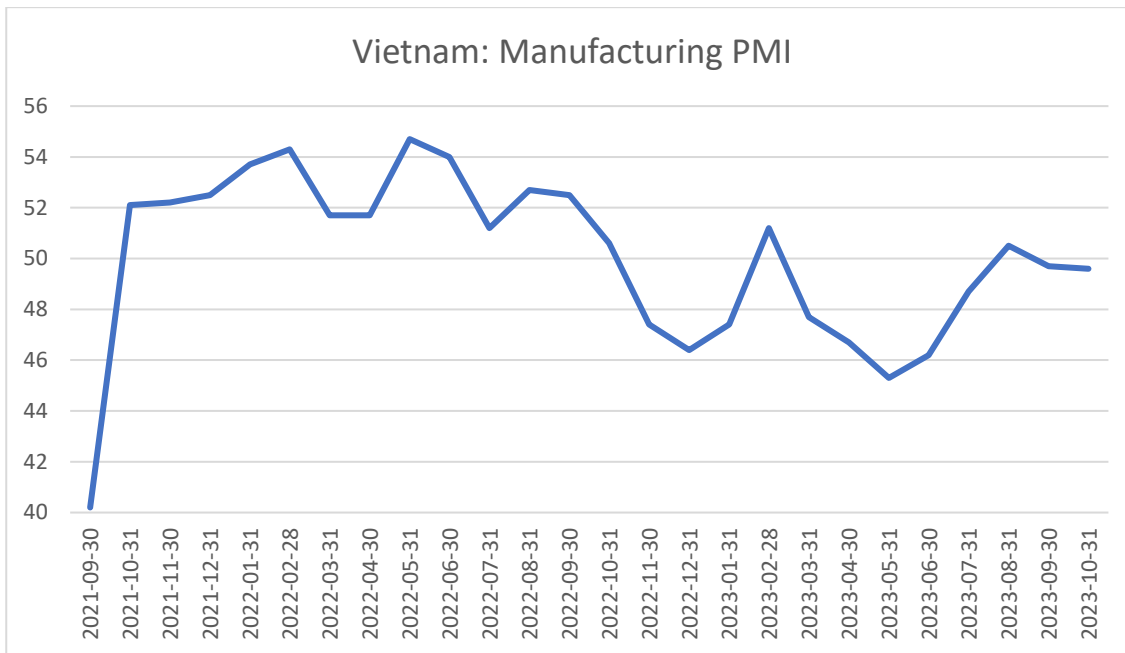
**Source:** World Bank.

Appendix BBBBB



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Appendix CCCCC



**Breakdown:** Manufacturing PMI in Vietnam indicated significant optimism at the end of 2021, rebounding tremendously from a steep contraction of 40,2 to an expansion of 52,1 in October 2021. However, while sentiments about manufacturing business conditions in Vietnam remained positive for 13 consecutive months despite some drops from October 2021 to October 2022, perceptions about manufacturing conditions in Vietnam contracted again in November 2022. Since then, sentiments contracted in all but two months, indicating significant swings with no clear long-term trend. Overall, manufacturing PMI in Vietnam has marginally expanded at an average of 50,03 since the end of August 2021.

**Source:** Macrovar.

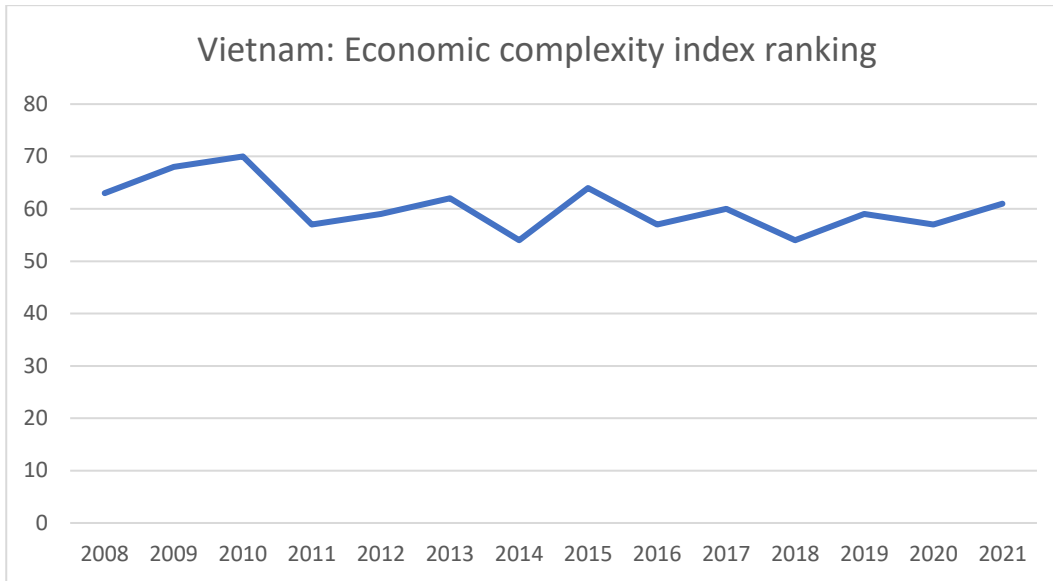
Appendix DDDDD



**Breakdown:** The monthly minimum wage in Vietnam has increased by 365,85% from \$41 to \$191 between 2008-2023. Notably, minimum wages in Vietnam consistently increased each year from 2008 to 2020 but indicated no changes in both 2021 and 2023. This suggest that the explosive growth of the monthly minimum wage in Vietnam has slowed down significantly in recent years. In example, minimum wages increased by 5,52% from \$181 to \$191 between 2020-2023, whereas the monthly minimum wage increased by 18,3% from \$153 to \$181 between 2017-2020.

**Source:** Trading Economics.

Appendix EEEEE



**Breakdown:** Vietnam dropped significantly in the economic complexity index rankings after the financial crisis but jumped considerably from rank 70 to rank 57 in 2011. However, Vietnam subsequently demonstrated annual fluctuations and indicate no immediate long-term pattern, though suggesting a decline in recent years dropping from rank 54 in 2018 to rank 61 in 2021.

**Source:** The Atlas of Economic Complexity.

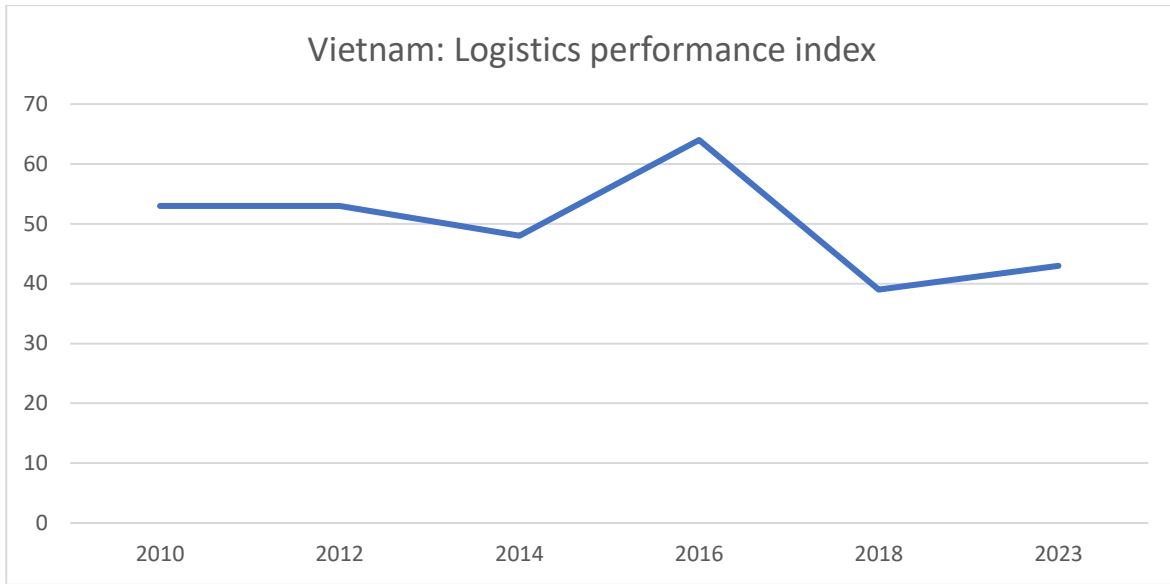
Appendix FFFFF



Breakdown: GDP contribution per person employed in Vietnam has consistently increased by 94,91% from \$10462 to \$20392 between 2008-2022.

Source: World Bank.

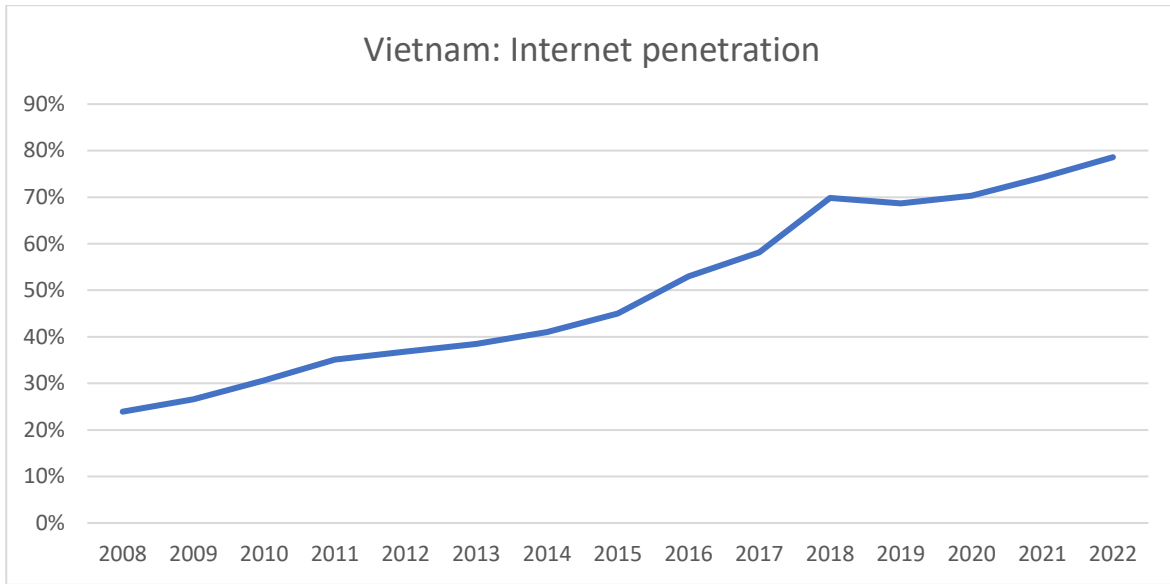
Appendix GGGGG



**Breakdown:** Vietnam dropped substantially from rank 48 to rank 64 in the logistics performance index in 2016, but logistics performance immediately rebounded strongly to rank 39 in 2018. While declining again in the latest index, logistics performance indicate significant overall improvements from rank 53 to rank 43 between 2010-2023. Part of the drop in 2023 is likely attributed to the World Bank switching to a grouped ranking approach in its latest index.

**Source:** World Bank.

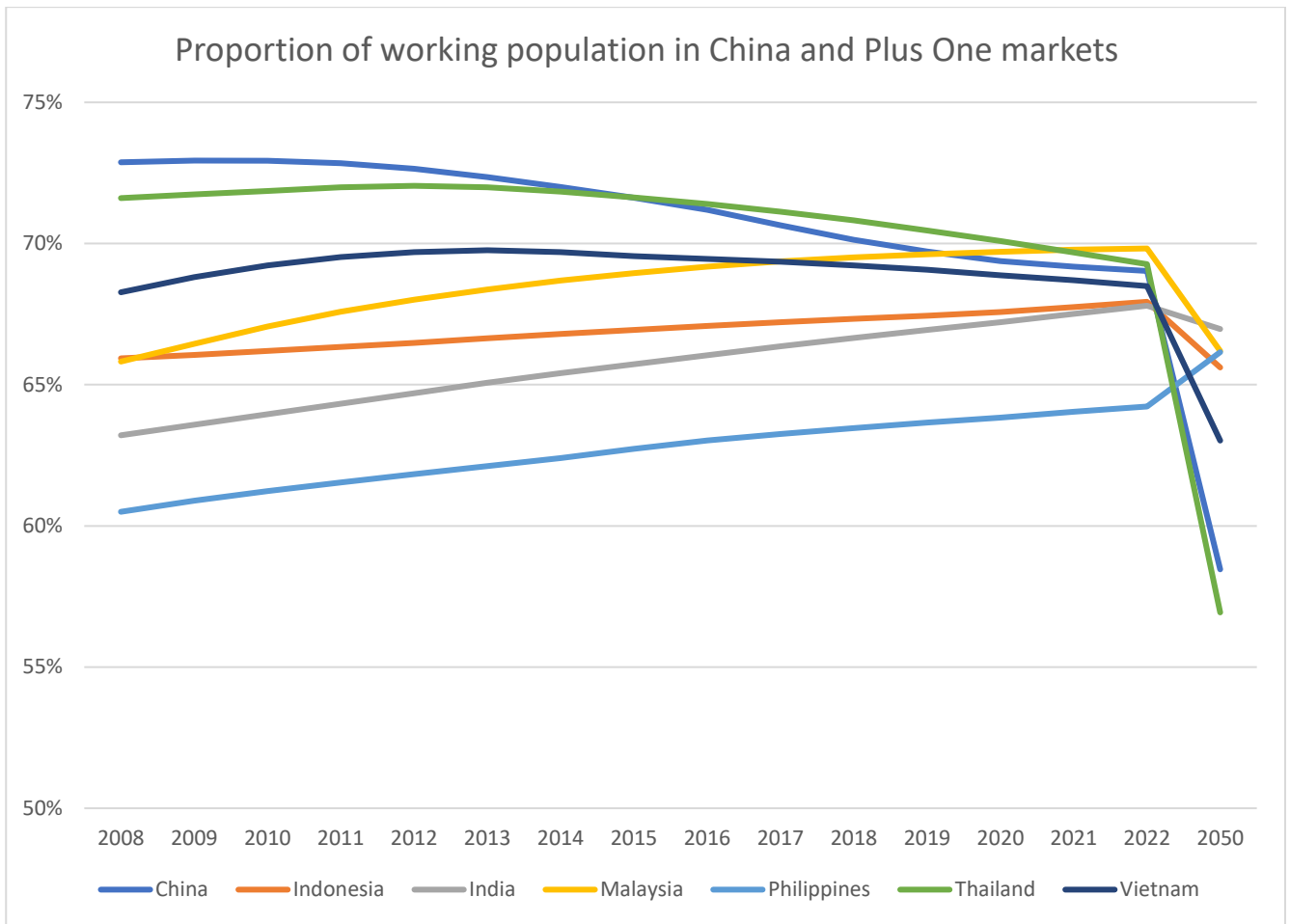
## Appendix HHHHH



**Breakdown:** Internet penetration in Vietnam has increased from 23,92% to 78,59% between 2008-2022. Notably, the percentage of the population using the internet accelerated significantly from 2015 to 2018, but dropped slightly from 69,85% to 68,66% in 2019 before slowly increasing again.

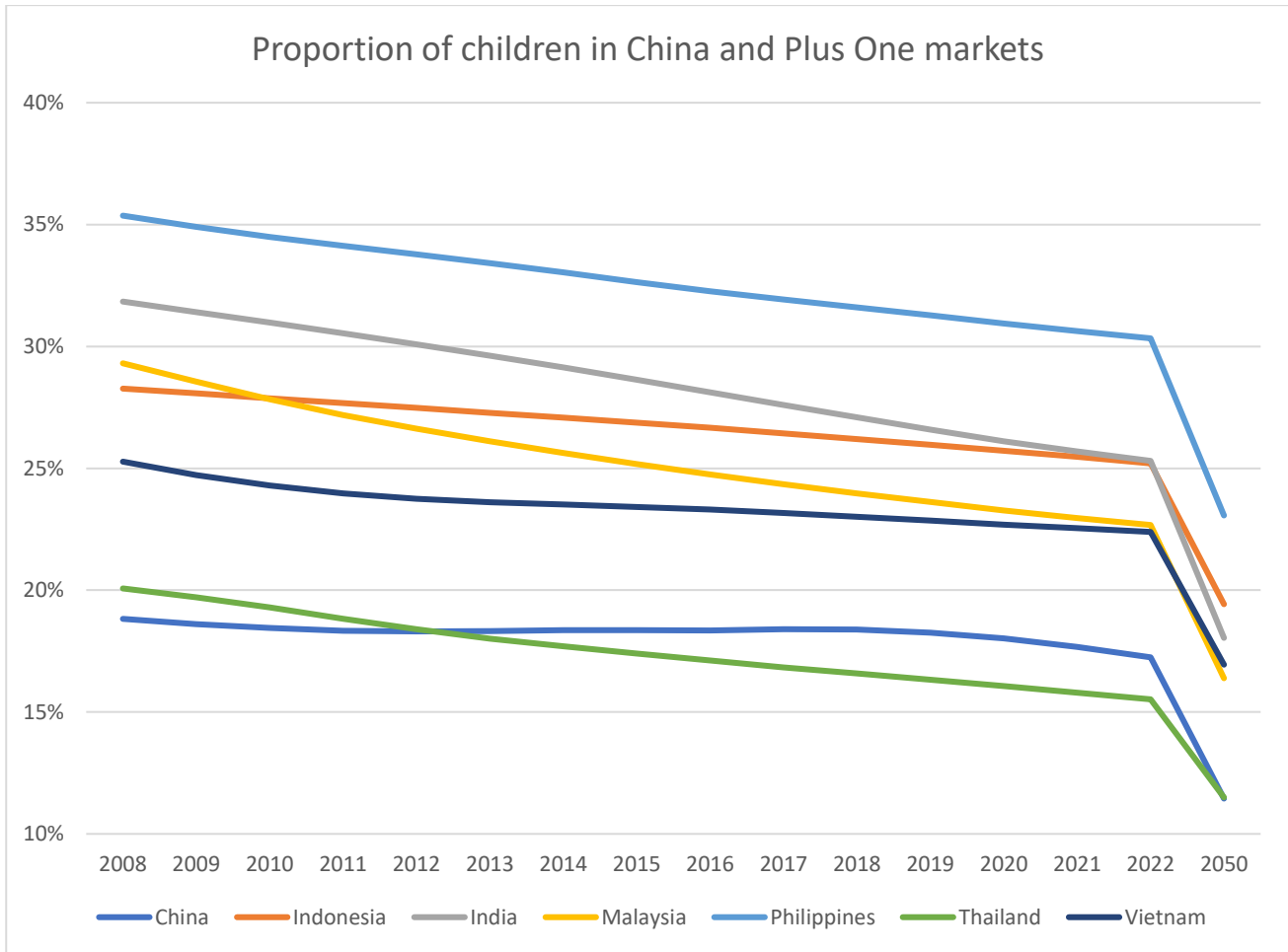
**Source:** World Bank.

Appendix IIIII



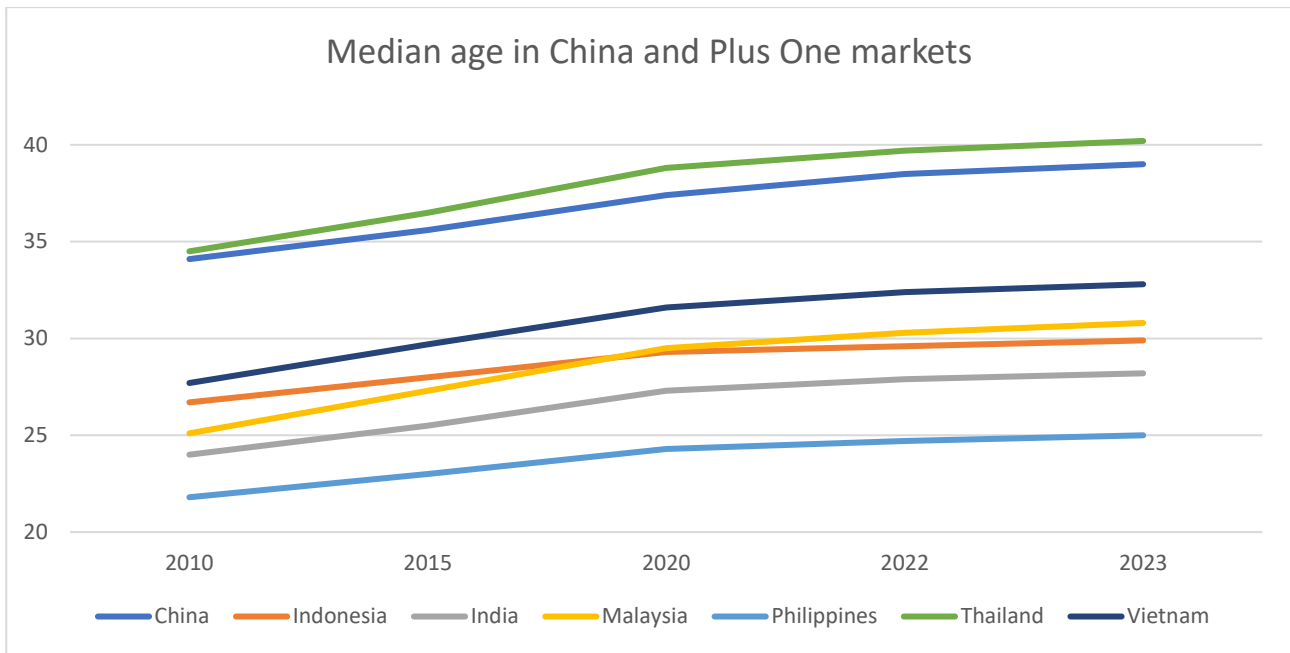
Source: World Bank.

Appendix JJJJ



Source: World Bank.

Appendix KKKKK



Source: Worldometer.

## Appendix LLLLL

FDI net inflows and trade data across China and selected Plus One markets

Billion USD	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>FDI net inflows</b>															
China	172	131	244	280	241	291	268	242	175	166	235	187	253	344	180
Indonesia	9	5	15	21	21	23	25	20	5	21	19	25	19	21	21
India	43	36	27	36	24	28	35	44	44	40	42	51	64	45	50
Malaysia	8	0	11	15	9	11	11	10	13	9	8	9	4	20	15
Philippines	1	2	1	2	3	4	6	6	8	10	10	9	7	12	9
Thailand	9	6	15	2	13	16	5	9	3	8	14	6	-5	15	10
Vietnam	10	8	8	7	8	9	9	12	13	14	16	16	16	16	18
<b>Exports</b>															
China	1498	1263	1655	2006	2175	2354	2463	2362	2200	2424	2656	2629	2730	3554	3714
Indonesia	152	130	183	235	226	218	211	182	178	205	219	208	184	254	323
India	289	274	375	447	448	472	468	417	440	498	539	529	500	678	760
Malaysia	230	185	222	254	249	244	249	209	201	223	246	238	208	257	300
Philippines	61	53	69	68	72	74	81	83	85	97	105	107	91	101	115
Thailand	208	182	227	263	274	282	279	271	277	304	329	324	258	296	326
Vietnam	70	66	80	106	124	143	162	174	191	230	262	285	292	342	384
<b>Imports</b>															
China	1149	1043	1432	1825	1943	2119	2241	2003	1944	2209	2564	2496	2375	3093	3138
Indonesia	147	115	169	213	229	226	217	179	171	195	230	213	166	223	276
India	351	347	450	567	571	528	529	465	480	582	640	602	510	761	911
Malaysia	178	144	181	208	216	217	218	187	181	202	222	211	186	230	272
Philippines	62	54	69	74	80	84	90	98	112	127	146	152	119	149	178
Thailand	201	154	207	255	273	274	255	230	221	247	284	273	232	296	337
Vietnam	83	76	88	111	117	137	154	172	183	223	249	266	273	341	375

Source: World Bank.