The Future of ASEAN: Viet Nam Perspective
Fifty years after its establishment, the Association of Southeast Asian Nations (ASEAN) has become a strong community with a growing role and stature globally. ASEAN today is one of the fastest growing and most dynamic regions in the world.

Once among the smaller economies in ASEAN, Viet Nam has emerged as a country poised for economic modernisation and is participating actively in competitive, export-oriented and service industries.

Since joining ASEAN, Viet Nam has enjoyed years of robust growth and macroeconomic stability, a relatively stable exchange rate, and strengthening external trade relations. Foreign direct investments (FDI) reached a record high in 2017 and are now among the strongest in the region.

The region is expected to outperform average global growth, and is estimated to expand by 5.3% in 2018. This growth is led by emerging economies such as Viet Nam, which is projected to grow by 6.9% in 2018 according to the Organisation for Economic Co-operation and Development’s (OECD) statistics.

The country’s geographical position near global supply chains, coupled with a fast growing consumer market and competitive labour market adds to its appeal as an attractive business location for companies.

Viet Nam offers promising prospects for the investment community. Its economic priorities are closely aligned with business interests. Economic reforms pursued by the government are set to accelerate growth and open up new business opportunities in this digital age. These include digital financial services, the key driver for financial institutions, as well as new opportunities for e-commerce to exploit Viet Nam’s thriving consumer goods sector.

Companies stand to gain by leveraging on Viet Nam’s fast growing economy. This publication will explore what makes this country an attractive investment destination and how it compares against other markets in the region. It will also highlight some key sectors of opportunity as well as discuss the challenges the country faces and steps to address them.

Come and explore Viet Nam’s potential and find out what the country, its market and its people have to offer.

Dinh Thi Quynh Van
General Director
PwC Viet Nam
Chapter 1: ASEAN and Viet Nam’s growth journey
Viet Nam posts strong track records across three areas: the economy, foreign direct investments and demographics.

Chapter 2: Financial services
Viet Nam is an untapped market, with double-digit credit growth, a rising middle class and increasing digital adoption.

Chapter 3: Consumer goods
Viet Nam’s strong consumer confidence has propelled spending on consumer goods especially in the areas of food and beverages, premium goods and apparel.

Chapter 4: Infrastructure - transportation
A focus on investment in transport infrastructure is vital to Viet Nam’s competitiveness.

Chapter 5: Challenges and ways to win
To sustain Viet Nam’s growth trajectory, the government needs to address critical issues like external trade risk, fiscal stability, institutional voids and technology readiness.

In this report
Chapter 1

ASEAN and Viet Nam's growth journey
Chapter 1: ASEAN and Viet Nam’s growth journey

1.1 ASEAN, a top 5 global economy

In 2017, the Association of Southeast Asian Nations (ASEAN) celebrated 50 years of peace and prosperity, and continues to grow strongly. Its gross domestic production (GDP) is projected to reach US$4 trillion by 2022, when it is forecast to become the fifth-largest economy worldwide. Over the next five years, the region’s economy is expected to expand by just under 50%, a short-term growth phase that is unprecedented in ASEAN’s history.¹

---

Figure 1.1: Top 10 markets worldwide by GDP size in 2022
Collectively, ASEAN is the fifth-largest economy in the world

<table>
<thead>
<tr>
<th>Country</th>
<th>GDP at current prices, US$ billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>23,505</td>
</tr>
<tr>
<td>Japan</td>
<td>18,383</td>
</tr>
<tr>
<td>ASEAN</td>
<td>5,482</td>
</tr>
<tr>
<td>China</td>
<td>4,452</td>
</tr>
<tr>
<td>Germany</td>
<td>4,090</td>
</tr>
<tr>
<td>India</td>
<td>3,924</td>
</tr>
<tr>
<td>France</td>
<td>3,162</td>
</tr>
<tr>
<td>U.K.</td>
<td>2,961</td>
</tr>
<tr>
<td>Brazil</td>
<td>2,629</td>
</tr>
<tr>
<td>Italy</td>
<td>2,244</td>
</tr>
</tbody>
</table>

ASEAN GDP projections
GDP at current prices, US$ billions

<table>
<thead>
<tr>
<th>Phase 1: ~40 years</th>
<th>Phase 2: ~10 years</th>
<th>Phase 3: ~5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>1,163</td>
<td>2,720</td>
</tr>
<tr>
<td>2006</td>
<td>2,720</td>
<td>2,938</td>
</tr>
<tr>
<td>2007</td>
<td>2,938</td>
<td>3,179</td>
</tr>
<tr>
<td>2018</td>
<td>3,179</td>
<td>3,449</td>
</tr>
<tr>
<td>2019</td>
<td>3,449</td>
<td>3,764</td>
</tr>
<tr>
<td>2020</td>
<td>3,764</td>
<td>4,090</td>
</tr>
<tr>
<td>2021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: International Monetary Fund (IMF) World Economic Outlook (WEO) Database, cited in PwC’s “The Future of ASEAN - Time to Act,” 2018
Chapter 1: ASEAN and Viet Nam’s growth journey

A diversified group

Although ASEAN as a group has made some impressive progress, variations remain between individual markets, due to their different economic lifecycles. Having a strong understanding of the differences between the ASEAN markets is essential for companies to be able to identify and prioritise target markets to achieve further growth.

Among the ASEAN member countries, Viet Nam together with countries such as Cambodia, Lao PDR and Myanmar (CLMV) are well poised for robust growth, having recorded some of the region’s strongest GDP growth rates (between 6% and 7%) in 2016.3

Nevertheless, these markets are expected to regain some momentum in the coming years. Growth is projected to hover at 5.3% per year until 2022 and this will still outstrip global growth levels and those of developed ASEAN nations.

Resilient growth outlook

The emerging ASEAN 5 markets (Indonesia, Malaysia, the Philippines, Thailand and Viet Nam) have not been immune to the slowdown resulting from ongoing global uncertainties since the 2008 economic crisis. Growth dropped to 4.9% in 2016, after reaching a high of 6.9% in 2010.4

Nevertheless, these markets are expected to regain some momentum in the coming years. Growth is projected to hover at 5.3% per year until 2022 and this will still outstrip global growth levels and those of developed ASEAN nations.
Chapter 1: ASEAN and Viet Nam’s growth journey

Strong growth momentum for Viet Nam

Viet Nam, the largest economy in the CLMV group, is projected to reach US$327 billion in GDP by 2022, recording growth of 6.2% annually between 2016 and 2022. While this is slightly lower than the average growth of 6.4% achieved over the last 20 years from 1997 to 2017, it is noticeably higher than projected growth for the ASEAN 5 group as a whole and Singapore.

Growth is expected to be driven by improvements in domestic consumption, rising foreign direct investments (FDI), and growth in manufacturing exports over the coming years. For example, 2017 marked a successful year for trade with export turnover reaching $214 billion, up 21% from 2016 - the highest ever year-on-year increase.

In terms of economic structure, services accounted for the largest part of GDP in 2017 at 41.3%, followed by manufacturing and construction at 33.3%, while agriculture, forestry and the fishing sectors contributed 15.4%.

Figure 1.4: Viet Nam’s economy and GDP growth

Source: IMF WEO Database, cited in PwC’s “The Future of ASEAN - Time to Act,” 2018

1.2 A leading destination for FDI

ASEAN has been on the receiving end of FDI despite rising volatility in capital flows worldwide. It has managed to attract significant investments to enable it to record seven-fold growth between 1990 and 2016. This has enabled it to become the fourth most popular investment destination globally, and the second-largest FDI destination in Asia. Singapore and Viet Nam attracted the most investments in ASEAN in 2016. Intra-ASEAN investment also rose significantly (14% year-over-year in 2016), representing the largest source of investment for the agriculture and mining sectors.
Viet Nam is among the few countries in ASEAN to consistently record positive FDI growth in recent years, mainly led by growing investments in manufacturing. Policy reforms designed to attract further FDI will be key to finance growth in the future, especially in sectors such as infrastructure and manufacturing where productivity is a concern - shifting focus over time from labour-intensive production to higher value-add segments such as electronics and automotive.

Going forward, Viet Nam needs to balance its overdependence on global value chains by building up ASEAN as a major source of demand for exports in sectors such as agri-products and electronics.9
Chapter 1: ASEAN and Viet Nam’s growth journey

1.3 Promising demographics

Expanding labour force

ASEAN’s impressive growth and investments are underpinned by the region’s formidable labour force and the emergence of a wealthier middle class. The expansion of the region’s labour force has been a major contributor to ASEAN’s growth story, with more than 100 million people estimated to have joined ASEAN’s workforce over the past 20 years.10

The International Labour Organisation estimates that ASEAN will record the second-largest growth in labour force worldwide between now and 2030. Another 59 million people are projected to enter the ASEAN workforce between 2015 and 2030. This would represent the third-largest labour force worldwide, behind only China and India, accounting for a total of 10% of the global labour force by 2030.11

Viet Nam’s current population is over 94 million and is expected to grow at an annual rate of 1.3% to around 110 million by 205012. With a median age of 30.7 years, Viet Nam has a relatively young population with around 52% of the population falling within the working age bracket (for males: 15 – 59 years old and for females: 15 – 54 years old)13.

Viet Nam has a growing educated workforce and approximately 22% of the labour force is considered trained or skilled, with either diplomas or certificates14.

As more than a million people are added to the workforce annually, these factors create an ideal population structure that ensures a steady labour force.
Rising middle class

There are already some 87 million middle class ASEAN households with incomes exceeding the level at which they can begin to make significant discretionary purchases. Fuelled by increased urbanisation and subsequent rising consumption levels, this middle class is set to reach 120 million households by 2025, making it a pivotal consumer market of the future.\(^{15}\)

ASEAN’s middle-income segment (defined as US$10 to US$100 in daily expenditure) is projected to represent two-thirds of the overall population by 2030, compared with 29% in 2010.\(^{16}\)
Chapter 1: ASEAN and Viet Nam’s growth journey

Viet Nam leads ASEAN in terms of growth of per capita spending by the middle 60% of the population from 2016 to 2021, with a compound annual growth rate (CAGR) of 10.1%. This growth rate puts it ahead of other major ASEAN markets such as Singapore and Malaysia.17

The rapidly growing middle class population in Viet Nam makes the country a very attractive market for foreign brands. It is estimated that the number of middle class Vietnamese will reach 44 million by 2020 and 95 million by 2030.18

As Viet Nam’s middle class grows and disposable incomes rise across all segments of the population, greater spending power is spurring a demand for services and higher value-added products. Disposable income per capita for Viet Nam is estimated to reach US$2,009 by 2020.

1.4 Growth market opportunities

There are significant growth opportunities for the private sector across a number of industries in Viet Nam. However, some sectors are more developed than others given the dynamics of the country’s business environment. This publication will explore some of the untapped domestic sectors that might have great potential for growth and investments.

The sectors are:
- Financial services
- Consumer goods
- Infrastructure - transportation

This report examines the opportunity for growth in each sector as well as strategies companies can adopt to position themselves for success in Viet Nam.

Figure 1.10: Middle income population* in ASEAN
Disposable income projections, US$ per capita, 2016-2021

<table>
<thead>
<tr>
<th>Country</th>
<th>2016</th>
<th>2021</th>
<th>CAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>29,856</td>
<td>33,490</td>
<td>8.3%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>11,419</td>
<td>15,077</td>
<td>5.5%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>10,591</td>
<td>13,249</td>
<td>7.5%</td>
</tr>
<tr>
<td>Philippines</td>
<td>4,124</td>
<td>5,172</td>
<td>10.1%</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>2,411</td>
<td>2,769</td>
<td></td>
</tr>
</tbody>
</table>

* Middle 60% of the population

Key takeaways on Viet Nam

Among the fastest growing economies in ASEAN, in terms of:

- GDP growth: 6.2% (2016-2022)
- FDI: US$17.5 billion (2017)

Viet Nam leads ASEAN in terms of growth of per capita spending by the middle 60% of the population from 2016 to 2021, with a compound annual growth rate (CAGR) of 10.1%. This growth rate puts it ahead of other major ASEAN markets such as Singapore and Malaysia.
Chapter 2
Financial services
Chapter 2: Financial services

2.1 An untapped market

Since the Asian financial crisis in 1997–98, ASEAN has been building a strong foundation for growth. The financial services sector in most ASEAN countries has shown steady growth from 2005 to 2016. The financial gross value add for most of the ASEAN-6 leading economies (Indonesia, Singapore, Thailand, Philippines, Malaysia, Viet Nam) exceeded US$20 billion in 2016. However, for Viet Nam the figure is relatively low and can be attributed to the country’s low banking penetration rate.19

According to the World Bank, just 30.9% of Vietnamese people above 15 years of age had an account at a financial institution in 2015, compared to a regional average of 61.7%. It is however, generally accepted that the banking penetration among young Vietnamese has increased since 2015.

Viet Nam together with other emerging ASEAN countries like the Philippines and Indonesia also has significant infrastructure gaps, including a very low number of banking branches and ATMs, especially outside the major urban areas.

With only 3.8 bank branches per 100,000 people, Viet Nam has one of the lowest numbers of banks in East and Southeast Asia and the majority are state-run institutions.

The situation is also relatively similar for Viet Nam’s total insurance penetration which stands at 1.7% (life and non-life gross premiums as a % of GDP) and retail customer investment market penetration. Whilst Viet Nam’s low financial market penetration presents challenges, it also presents an array of opportunities.

Source: Asian Development Bank, BMI


Figure 2.1: Financial gross value add of selected Southeast Asian countries, US$ billions
(measures the financial sector contribution to the economy)

Source: Asian Development Bank, BMI

Figure 2.2: Total banking penetration, 2014
(population with bank accounts)

Source: World Bank, BMI

Figure 2.3: Total insurance* penetration, 2015
(premium percentage of GDP)


* Life and non-life insurance combined
Chapter 2: Financial services

2.2 Double-digit credit growth

Viet Nam’s banking sector has achieved strong credit growth since emerging from its banking crisis in 2012. Credit growth hit a high of 18.7% in 2016 and is among the highest in the region. Analysts forecast sustained credit growth of 15% to 17% over the 2018 and 2019 periods driven by a growing labour force, rising income levels and affluence as well as an increase in urbanisation, with more people exposed to financial service offerings.

With about 60% of its nearly 100 million-strong population under the age of 35, the working class population will continue to expand over the next twenty years and bring about greater demand for consumer banking services. Because Viet Nam is still a heavily cash-based society with close to 99% of financial transactions conducted in cash, the demand for other types of banking products is also set to grow; in particular demand for payment cards and wealth management services.
2.3 Dominated by local players

The Vietnamese banking industry consists of a wide range of players, from large state-owned and joint-stock commercial banks to small privately held banks. State-owned commercial banks maintained 45% of market share in terms of total assets as at December 2017, followed closely by joint-stock commercial banks (JSCBs) with a market share of 40%.

In terms of chartered capital, the JSCBs are better capitalised than the state-owned banks, with the former accounting for around 41% of the total industry charter capital, while the latter has a share of roughly 30%.

Vietnamese banks are open for foreign investments but foreign ownership is limited to 20%. Joint-venture and 100% foreign-owned banks account for a relatively small market share of 10% of total assets, but a higher market share of 22% in terms of charter capital.21

Figure 2.7: Viet Nam - Banking assets by sector, 2017

<table>
<thead>
<tr>
<th>Operating in Viet Nam as at 31 December 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>04 State-owned banks</td>
</tr>
<tr>
<td>31 Joint-stock banks</td>
</tr>
<tr>
<td>11 Joint ventures and wholly owned foreign banks</td>
</tr>
</tbody>
</table>

Source: BMI and SBV, 2017
Chapter 2: Financial services

2.4 Rising digital adoption

Growing internet penetration and the proliferation of affordable smartphones, coupled with lower data costs and higher bandwidth (speed) are accelerating the growth of digital banking services across ASEAN.

The digital banking market could potentially service 483 million internet users in ASEAN-6 countries by 2020. Viet Nam alone is expected to have 82 million internet users, accounting for the third largest digital community in the region. Among the notable digital banking services making their mark in ASEAN and Viet Nam is the usage of digital wallets in line with the increasing smartphone penetration rate. This could be a stepping stone to providing a broader range of digital banking services as well as increased financial inclusion among the underbanked segment.

In Viet Nam, just under 16% of its mobile internet users used e-wallets in 2015, which grew at a CAGR of 16% over 2013 to 2015. The country’s mobile internet users are expected to expand further from 29 million in 2017 to 40 million by 2021, thereby increasing the market reach of digital wallets in the country.

Digital banking penetration could continue to rise as devices evolve to store biometric data, which will significantly improve security for digital financing, further accelerating the growth of digital banking.

To support banking digitalisation initiatives, the State Bank of Viet Nam’s (SBV) Steering Committee on FinTech was set up in 2017. The Steering Committee brings together the State Bank, representatives from departments within the central bank, and the National Payment Corporation of Viet Nam to encourage the development of FinTechs. Non-bank organisations are also allowed to offer intermediary payment services such as electronic payment portals, cash collection and payment services, electronic money transfer services, and e-wallet services with permission from SBV. So far, more than 20 e-wallets have been licensed to operate in Viet Nam.

Figure 2.8: Internet users among ASEAN-6 countries, in millions

Figure 2.9: E-wallet penetration trend among mobile internet users, %

Source: Statista, cited in PwC’s “The Future of ASEAN: Time to Act,” 2018
Partnerships

Partnerships provide banks with an opportunity to bridge the gaps they are experiencing in servicing the country's new middle class, such as in bancassurance. Partnering with non-banking institutions will enable synergies in driving financial access and usage of digital financial services.

2.5 Key opportunities

Digital financial services

Digital financial services remain the key driver for financial institutions, in addressing the low banking penetration rate and limited use of digital payments. It is essential for financial institutions seeking growth in Viet Nam to embrace the digital mindset.

One of the key advantages of digital technology is its low-cost scalability, bearing in mind that Viet Nam has one of the lowest numbers of bank networks in Southeast Asia.

Bancassurance

Viet Nam has one of the fastest growing middle income groups in the region, growing at 10% CAGR between 2016 and 2021. There is also a change in the awareness of middle income class individuals, among whom increasing importance is placed on protection and insurance. This promotes the growth of bancassurance — the selling of insurance products and services by banking institutions.

This is a key opportunity for financial institutions as the bancassurance market in Viet Nam is very underdeveloped compared to other countries.

Expanding customer needs, increasing demand for life coverage and the growing need for medical protection and long-term savings for education and retirement offer ample opportunities for players to provide a diverse and sophisticated range of market-leading life insurance solutions. The partnership with banks in delivering this product is, and will continue to be, a significant trend.

Consumer lending

When it comes to individual needs, use of credit cards and personal loans is still nascent in Viet Nam. Credit cards account for just a modest proportion of the total number of bank cards in Viet Nam. This presents a relatively untapped market for banks to invest in.

In 2017 alone, consumer lending grew at three times the average credit growth rate, reaching 65% growth and amounting to US$51.54 billion, according to Viet Nam’s National Financial Supervision Committee. This was driven in part by a rise in consumption and the standard of living.

- Access to a new customer base: Telecommunications, postal services, and social media have larger customer bases than banked customers. By collaborating with or leveraging these platforms, banks can gain access to this new customer pool quickly.

- Innovative technology platforms: FinTech companies are able to offer innovative technologies more rapidly than banks. Banks can leverage existing platforms without building a new solution thanks to the FinTech companies’ lean, independent nature.

- Last mile coverage: Postal services and telecommunications have established merchant outlets which can cover the last mile in rural and small city locations, enabling banks to service customers at a lower cost.

- Cashless payments: Banks need to also consider partnering with government agencies, social media companies, FinTech companies, and e-commerce providers to drive the cashless payments agenda.

• Access to a new customer base: Telecommunications, postal services, and social media have larger customer bases than banked customers. By collaborating with or leveraging these platforms, banks can gain access to this new customer pool quickly.

• Innovative technology platforms: FinTech companies are able to offer innovative technologies more rapidly than banks. Banks can leverage existing platforms without building a new solution thanks to the FinTech companies’ lean, independent nature.

• Last mile coverage: Postal services and telecommunications have established merchant outlets which can cover the last mile in rural and small city locations, enabling banks to service customers at a lower cost.

• Cashless payments: Banks need to also consider partnering with government agencies, social media companies, FinTech companies, and e-commerce providers to drive the cashless payments agenda.
Chapter 3

Consumer goods
Chapter 3: Consumer goods

3.1 Third largest consumer goods market

The consumer goods sector has been one of the early benefactors of ASEAN’s growth and economic prosperity, which have led to increased expenditure by its growing middle class.

ASEAN is now the third-largest consumer goods market globally, in terms of consumer expenditure’s share of GDP at 26.3%, after the Middle East and Africa region and Eastern Europe.24 The leading consumer good markets in the region are the Philippines (42.1%) and Viet Nam (37.5%).

Consumer expenditure among the leading ASEAN-6 countries is expected to expand with a CAGR of 7.7% from 2016 to 2021. Viet Nam is forecast to lead in terms of growth, with a CAGR of 10.2% from 2016 to 2030, followed by the Philippines with a CAGR of 9.7%.25

Figure 3.1: Consumer expenditure as % of GDP, 2010 - 2030
Philippines and Viet Nam are the leading consumer goods markets in ASEAN

Growth segments

The food and drink, apparel and footwear, and consumer electronics segments continue to remain the main subsectors of growth within ASEAN’s consumer goods sector.

Food and drink:
Growth has been fuelled by changing lifestyles and consumer preferences. The presence of foreign companies in ASEAN markets is expanding, led by: rising consumer awareness; partnerships between local and foreign companies; an increase in government health and wellness programmes; and new legal frameworks, which allow foreign companies to expand local productions with imported products.

Apparel and footwear:
Apparel and footwear retailers, particularly “fast fashion”, continue to expand in the region. The arrival of international fashion retailers, the rising popularity of sports inspired apparel as well as the increasing online retail trend are driving growth in clothing and footwear sales in ASEAN.

Consumer electronics:
The growing connectivity and rise of e-commerce across ASEAN underpins the rising demand for consumer electronics such as laptops, smartphones, wearable technologies and gaming devices.
3.2 Viet Nam in the fast lane

Viet Nam’s strong consumer confidence and rising household income levels have contributed to an overall increase in consumer spending. The median disposable income rose by 46% to an estimated US$3,822 per household in 2016, from US$2,613 in 2010. Meanwhile, total household spending is forecast to grow by 47% from US$122 billion in 2017 to US$179 billion in 2021.

Among the key spending trends in Viet Nam:

- **Food and beverage** - the largest portion of household spending in Viet Nam is on food and non-alcoholic drinks, followed by housing and utilities and transport spending.

- **Premium goods** (including health goods) - in recent years, Viet Nam consumers have increasingly become more willing to purchase premium items to enhance their quality of life, notably healthcare and organic products.

- **Product quality** - consumers are becoming more conscious about the quality of products and their potential health impact. This has resulted largely from scandals involving poor quality foodstuffs, toys and personal care products. Such concerns extend to other products such as clothing, footwear, electrical appliances and household items.

- **Other consumer goods** - nearly half of consumers were willing to spend their income on new clothes (49%) and holidays (44%). Around two in five spent on new technology products (40%), out of home entertainment (41%) and home improvements (42%).

- **Foreign brand presence** - due to the rising appetite for foreign goods coupled with higher disposable income, many global brands are increasingly distributing their products via dealers or even using their own channels. In major cities such as Ho Chi Minh City, Hanoi and Da Nang, consumers have a wide range of fashionable products from both local and foreign brands to choose from.

- **High propensity to save** - Vietnamese consumers have a strong habit for saving, with 72% saying they would put their additional income into savings.
Chapter 3: Consumer goods

3.3 Key opportunities

Against the backdrop of rising consumer spending and disposable income in Viet Nam, a number of opportunities emerge for consumer goods and these include:
- Regional sourcing and manufacturing of goods
- E-commerce business
- Partnerships

Sourcing in Viet Nam

Viet Nam and Thailand are the two largest agricultural exporters in ASEAN, with their agricultural exports valued at US$15 billion and US$13 billion respectively in 2016.28

However, Viet Nam’s food product sector has huge room for growth, with exports worth US$4 billion in 2016. Thailand in comparison exported US$18 billion worth of food products in the same year.

Viet Nam’s large agriculture base provides considerable opportunities to advance the country’s food processing and manufacturing capabilities to supply higher value added food products to the region and global markets.

Figure 3.4: Export of agricultural and food products in Viet Nam and Thailand in 2016

Viet Nam has a large agricultural base, however its food product sector is still relatively untapped.

<table>
<thead>
<tr>
<th>Export items</th>
<th>Viet Nam</th>
<th>Thailand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural products</td>
<td>US$15 bn</td>
<td>US$13 bn</td>
</tr>
<tr>
<td>Food products</td>
<td>US$4 bn</td>
<td>US$18 bn</td>
</tr>
</tbody>
</table>

Source: The Observatory of Economic Complexity, 2018
Chapter 3: Consumer goods

Rapid adoption of e-commerce

One of the fundamental growth drivers for the consumer sector in ASEAN is the adoption of digital technologies for consumption. The total e-commerce market in Southeast Asia is estimated to reach around US$88 billion in 2025, with a CAGR of 32% between 2015 and 2025.29

Vietnam is rapidly developing its online marketplace, but its e-commerce sector is still relatively nascent. The Vietnamese e-commerce market is expected to grow in revenue from $1 billion in 2016 to $2.3 billion in 2020, with a CAGR of 23%.30 In comparison, the retail market is only expected to grow at a CAGR of 6% between 2010 and 2020.

However, online retail makes up only 1% of the total retail market in Vietnam, compared with 14% in the US and China.31 Although there is still a long way to go for the Vietnamese e-commerce market to develop, foreign companies have invested in the country early to get ahead in the market.

Vietnam’s e-commerce prospects still look attractive for the consumer product market. Based on PwC’s Global Consumer Insights Survey 2018, the Vietnamese are a strong propensity to buy groceries online than the consumers in other ASEAN markets.

Partnerships

Although Vietnam’s e-commerce potential is exciting, consumer goods companies are finding it challenging to enter and expand on their own. Seeking partnerships with e-commerce platforms can ease entry into e-commerce for consumer goods companies.

There are a number of cross-functional benefits for consumer goods companies if they leverage on partnership with e-commerce players. Consumer goods companies stand to differentiate themselves and are able to compete more effectively through better customer insights, tailored products and marketing campaigns. They are also able to test new products, prices and positioning among a targeted group of pilot customers via soft product launches on e-commerce platforms.

Figure 3.6: Benefits of partnership between a consumer goods company and an e-commerce platform

Source: PwC, cited in PwC’s “The Future of ASEAN - Time to Act,” 2018

Source: PwC’s Global Consumer Insights Survey 2018
Chapter 4
Infrastructure - transportation
4.1 A boost in infrastructure spending

ASEAN governments have identified transport infrastructure to be of strategic importance for their economic development and increasing trade competitiveness. The total infrastructure investment needs in ASEAN from 2016 to 2030, according to Asian Development Bank (ADB), is forecast to reach US$2.8 trillion (baseline estimate), or an annual investment of US$184 billion.32

Given rising demand for more efficient transport networks, this has placed pressure on the region’s governments to renew their commitment to spending on transport infrastructure to reduce logistics costs. For example, the logistics costs represented about 9% of GDP in Germany and 12% in Brazil in 2016, while they stood at 21% of GDP in Viet Nam and 26% in Indonesia.33

Developing economies in ASEAN such as Viet Nam lag behind on transport infrastructure spending. Nevertheless, Viet Nam ranks slightly ahead of Indonesia and the Philippines in terms of quality of logistics infrastructure.

Recognising the infrastructure gap, Viet Nam is increasing investment in this area. From 2012 to 2016, Viet Nam’s infrastructure spending growth was among the fastest in ASEAN, at 11.5% p.a., nearly double its GDP growth.

The government is also speeding up plans to attract more private investment for infrastructure as the state can currently only meet a third of its infrastructure costs.34 According to the G20 Global Infrastructure Outlook 2017 report, Viet Nam will require US$605 billion in infrastructure investments by 2040.35 Energy is expected to account for the largest portion of its infrastructure investments with a 44% share, followed by transportation (28%), telecommunications (16%) and water (12%).36

Figure 4.1: ASEAN-6 infrastructure position and spending

<table>
<thead>
<tr>
<th>Country</th>
<th>Infrastructure spending per capita (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>2,049</td>
</tr>
<tr>
<td>Malaysia</td>
<td>705</td>
</tr>
<tr>
<td>Thailand</td>
<td>522</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>284</td>
</tr>
<tr>
<td>Indonesia</td>
<td>314</td>
</tr>
<tr>
<td>Philippines</td>
<td>115</td>
</tr>
</tbody>
</table>

Figure 4.2: ASEAN-6 infrastructure spending and GDP growth

<table>
<thead>
<tr>
<th>Country</th>
<th>Average growth rates from 2012-2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philippines</td>
<td>12.6%</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>11.5%</td>
</tr>
<tr>
<td>Thailand</td>
<td>10.3%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>8.7%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>8.6%</td>
</tr>
<tr>
<td>Singapore</td>
<td>4.3%</td>
</tr>
</tbody>
</table>

Source: Oxford Economics, World Bank Data, cited in PwC’s “Understanding infrastructure opportunities in ASEAN,” 2017

Source: World Bank — LPI, PwC analysis and International Monetary Fund, 2017
Chapter 4: Infrastructure - transportation

4.2 Transportation infrastructure vital to Viet Nam’s competitiveness

Among the ASEAN countries, Viet Nam has the second highest spending on transport infrastructure and it is projected to increase to US$11 billion in 2020 and US$17 billion by 2025. The government sees transportation as an integral strategy to position the country as a regional manufacturing hub. This is critical in cutting down travel time and cost across the supply chain from the industrial centres to the ports.

Figure 4.3: ASEAN-6 transport infrastructure spending (road, rail, sea and airports)

Figure 4.4: Breakdown of Viet Nam’s transport infrastructure investment needs, forecast 2016-2040
Emphasis is on roads followed by railways
In Viet Nam, roads are the dominant mode of freight transport supporting the country’s development as a regional manufacturing hub. Statistics show that roads served about 77% of all freight transport and 94% of all passengers transported in 2016.\(^\text{37}\)

The Vietnamese government intends to continue improving its road infrastructure, as observed from its development plans.

Amongst ASEAN countries, Viet Nam has the highest number of pipeline road and bridge projects in the region.

From 2018 to 2020, the country plans to complete the construction of 654 kilometres out of 1,300 kilometres of North-South Expressway under the public-private partnership (PPP) model. The state will contribute some 40% of the total investment capital.\(^\text{38}\)

Viet Nam’s Socio-Economic Development Plan (SEDP) 2016-2020 important road projects:

The SEDP is Viet Nam’s medium-term development plan which identifies key objectives for the country. Under the SEDP 2016-2020, investments identified include:

- **US$48 billion** for transport infrastructure projects between 2015 and 2020
- **US$13 billion** for a 10-lane road spanning 1,800km between Hanoi and Ho Chi Minh City

Viet Nam’s Socio-Economic Development Plan (SEDP) 2016-2020 important road projects:

The SEDP is Viet Nam’s medium-term development plan which identifies key objectives for the country. Under the SEDP 2016-2020, investments identified include:

- **US$48 billion** for transport infrastructure projects between 2015 and 2020
- **US$13 billion** for a 10-lane road spanning 1,800km between Hanoi and Ho Chi Minh City

### Chapter 4: Infrastructure - transportation

#### Roads

In Viet Nam, roads are the dominant mode of freight transport supporting the country’s development as a regional manufacturing hub. Statistics show that roads served about 77% of all freight transport and 94% of all passengers transported in 2016.\(^\text{37}\)

The Vietnamese government intends to continue improving its road infrastructure, as observed from its development plans.

Amongst ASEAN countries, Viet Nam has the highest number of pipeline road and bridge projects in the region.

From 2018 to 2020, the country plans to complete the construction of 654 kilometres out of 1,300 kilometres of North-South Expressway under the public-private partnership (PPP) model. The state will contribute some 40% of the total investment capital.\(^\text{38}\)

### Figure 4.5: ASEAN-6 road and bridge projects by country

<table>
<thead>
<tr>
<th>Country</th>
<th>Past</th>
<th>Pipeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Singapore</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Viet Nam</td>
<td>97</td>
<td></td>
</tr>
</tbody>
</table>

Source: BMI, cited in PwC’s “Seizing greenfield infrastructure opportunities in ASEAN,” 2017
**Chapter 4: Infrastructure - transportation**

**Rail**

Viet Nam is also stepping up to upgrade its rail infrastructure, which is over 136 years old. The country’s rail network is centred on a 1,726km single-track mainline running from Hanoi to Ho Chi Minh City. Currently Viet Nam has 29 rail projects in the pipeline, which places it second among the ASEAN countries, just behind Indonesia and just ahead of Thailand. The rail projects include the modernisation and expansion of the national railway network and the construction of subway (MRT) lines in Hanoi and Ho Chi Minh City.

On the horizon, the government is looking to build a North-South High Speed Rail line linking major cities and economic zones across Viet Nam. In addition, the Ministry of Transportation and the Korea International Cooperation Agency are also currently studying the feasibility of a 500km railway link to Laos.

**Public Private Partnership (PPP)**

PPP are partnerships between the government and private-sector companies to finance, build and operate projects. They are expected to provide a significant source of financing for infrastructure projects in Viet Nam.

Two of Viet Nam’s largest road projects, the 235km Nha Trang-Phan Thiet Expressway (worth US$2.16 billion) and the 200km Dau Giay-Lien Khuong Expressway (worth US$3 billion) are currently under construction as PPP schemes and are due for completion by 2020.

The country also has a relatively well-established PPP environment and is ranked among the highest in ASEAN according to the World Bank’s 2017 PPP Procurement Benchmark report. The Vietnamese government recently adopted a PPP framework aimed at attracting private capital to the country’s infrastructure sector. The new decree outlines the sectors, investment conditions for PPP projects including a significant increase in the investor equity ratio.

Like any emerging economies, there are still challenges in the implementation of PPPs. Although a number of decrees have been put forward to facilitate PPP investment, foreign investors would like to see better project preparation and processes by the government. Investors are also not granted the necessary flexibility regarding these projects. Consequently, most PPPs to date have been between the government and state-owned enterprises (SOE) or related local entities.

---

**Figure 4.6: ASEAN-6 rail projects by country**

<table>
<thead>
<tr>
<th>Country</th>
<th>Past</th>
<th>Pipeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>31</td>
<td>43</td>
</tr>
<tr>
<td>Malaysia</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Philippines</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Singapore</td>
<td>13</td>
<td>61</td>
</tr>
<tr>
<td>Thailand</td>
<td>17</td>
<td>28</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>5</td>
<td>29</td>
</tr>
</tbody>
</table>

Source: BMI, cited in PwC’s “Seizing greenfield infrastructure opportunities in ASEAN,” 2017
Many countries in the world are looking to smart cities to elevate the pressure placed by rapid urbanisation on infrastructure, public amenities, and living and working spaces. Viet Nam’s urban population is forecast to rise rapidly from 33 million in 2016 to 54 million by 2035, with around 1 million people migrating to the cities every year⁴¹. With the government investing billions into infrastructure every year, the key is to make these investments as smart as possible to allow Viet Nam to compete in the global landscape.

In the case of transportation, this could involve developing a roadmap for intelligent transport systems, with sensors at public transport interchanges to help enhance people’s mobility through better traffic control systems or public transportation scheduling.

Deploying smart cities will require collaboration with multiple stakeholders, from transport authorities, technology firms, telco companies, real-estate firms to engineering and construction companies. This cross sectorial collaboration in setting up smart cities opens up opportunities for non-construction players to invest in urban infrastructure developments.
Figure 4.9: Example smart transport solutions for smart cities

- **Traffic control/smart roads:** Monitoring vehicle and pedestrian levels to optimise or divert traffic according to conditions.
- **Smart parking:** Monitoring availability of parking space across the city and parking metres adjust rates dynamically.
- **Smart lighting:** Intelligent and weather adaptive street lights to boost energy efficiency.
- **Fast lane:** Intelligent, adaptive fast and slow lane for walking and cycling.
- **Electric transport:** Electric vehicles and public transport, with charging stations across the city.
- **Real-time updates:** Instant traffic updates sent to smartphones to help route planning and avoid congestion.
- **Smart toll:** Dynamic pricing of toll roads based on time, distance travelled and use of tunnels and bridges.
- **Connected vehicles:** Vehicles with integrated internet access to various transport systems.

**Example of private sector providers**

- Robots and drones solution providers
- Mobile app developers
- Telecom providers
- Autonomous vehicles and connected vehicle technology and solution providers
- Toll operators
- Parking lot providers
- Construction industry
- Delivery service providers
- Public transport operators

Source: Visual Capitalist and PwC’s “Report of Consultancy Study on Smart City Blueprint for Hong Kong,” 2017
Chapter 5
Challenges and ways to win
5.1 Sustaining the growth journey

ASEAN has enjoyed remarkable growth over the last 50 years, emerging as the third largest economy in Asia with the third largest labour force in the world. Viet Nam has been a key beneficiary of this trend, moving from its position as the 5th largest FDI recipient in ASEAN in 2010 to the 2nd largest in 2017.

However, questions have been raised about the sustainability of the region and growth story in the face of sluggish global growth and rising economic uncertainties and protectionism in the developed parts of the world. In the first six months of 2018, Viet Nam has seen slower growth in FDIs to 5.7%, down from 54.8% growth in the same period last year.

For ASEAN to fulfill its potential, member countries, including Viet Nam, need to become more proactive in their bid for growth by addressing a number of challenges including:

- Over-dependence on external trade
- Fiscal vulnerability
- Institutional voids
- Low technology readiness

5.2 Trade at risk

The importance of trade to ASEAN’s economy has increased significantly since 1967. The region’s share of global exports has also risen, from 2% in 1967 to 7% by 2016.

Meanwhile, the region’s trade-to-GDP ratio has doubled from 43% in 1967 to 87% in 2016 (see Figure 5.1). Viet Nam’s reliance on external trade is significantly higher at 185% of GDP.

However, global trade growth has been on a downward trajectory since 2012, threatening growth in trade-dependent economies such as ASEAN.
Figure 5.1: ASEAN dependence on global trade
Trade is an important aspect of ASEAN’s economy, however, its position is threatened by slower global growth.

Rising protectionist sentiments in Western markets including the U.S. could further threaten ASEAN’s trade growth. In fact, a recent study by the World Bank pointed out growing policy uncertainties emanating from such protectionist sentiments as the major factor behind the slowdown in global trade in 2016.44

Rebalancing trade to intra-ASEAN
ASEAN will need to take more measures to increase its intra-ASEAN trade flows, not only to serve the fast-growing domestic consumer base, but to counterbalance risks that can arise from over dependence on external trade partners (extra-ASEAN trade).

Extra-ASEAN trade continues to dominate ASEAN exports, accounting for 75% of exports in 2016. There is a significant risk associated with a high level of dependence on external partners, especially China and the U.S.45

Amongst ASEAN countries, Viet Nam is one of the most trade dependent. It will need to balance its overdependence on global value chains by building up ASEAN as a major source of demand for exports in sectors such as agri-products, and electronics.46

Figure 5.2: Intra-ASEAN trade, 2005-16
Intra-ASEAN trade has remained stagnant and untapped.

Source: ASEAN Secretariat, 2017
Source: ASEAN Secretariat, 2017, cited in PwC’s “The Future of ASEAN - Time to Act,” 2018
Chapter 5: Challenges and ways to win

**Figure 5.3: Viet Nam’s high dependence on extra-ASEAN trade**

Trade as a % of GDP, 2016

<table>
<thead>
<tr>
<th></th>
<th>World</th>
<th>ASEAN</th>
<th>Viet Nam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extra - ASEAN</td>
<td>5%</td>
<td>67%</td>
<td>185%</td>
</tr>
<tr>
<td>Intra - ASEAN</td>
<td>95%</td>
<td>33%</td>
<td>15%</td>
</tr>
</tbody>
</table>

* The average share of inter-ASEAN exports amongst ASEAN countries in 2016
Source: International Monetary Fund, ASEANstats

**5.3 Fiscal stability**

Emerging ASEAN markets as a whole have relatively low levels of government debt. This puts the region in a much stronger position to combat growth risks and volatility by improving the government’s ability to make investments in priority sectors or adopt fiscal policies that boost economic expansion.

There are however, a number of ASEAN countries with high debt levels. In Viet Nam, the state continues to maintain a stronghold on the economy’s investment capital. This has crowded out private sector investments and developments and diminished national competitiveness.
Chapter 5: Challenges and ways to win

Figure 5.4: Gross government debt as a % of GDP in emerging markets
Viet Nam’s public sector debt is rising

<table>
<thead>
<tr>
<th>Year</th>
<th>State</th>
<th>Emerging ASEAN 5</th>
<th>Emerging markets (Global)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>36</td>
<td>35</td>
<td>36</td>
</tr>
<tr>
<td>2011</td>
<td>37</td>
<td>37</td>
<td>37</td>
</tr>
<tr>
<td>2012</td>
<td>37</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>2013</td>
<td>38</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>2014</td>
<td>44</td>
<td>44</td>
<td>44</td>
</tr>
<tr>
<td>2015</td>
<td>47</td>
<td>47</td>
<td>47</td>
</tr>
<tr>
<td>2016</td>
<td>48</td>
<td>48</td>
<td>48</td>
</tr>
</tbody>
</table>

Source: International Monetary Fund, ASEAnstats

Figure 5.5: Investment capital by economic sector
The private sector currently accounts for the largest share of the economy’s investment capital, followed closely by the state

Viet Nam also has relatively low foreign reserves; as of March 2018 its foreign reserves equaled 3 months worth of imports.

These reserves need to be strengthened to safeguard against risks emanating from capital outflows or high debt repayments.

<table>
<thead>
<tr>
<th>Year</th>
<th>State</th>
<th>Non-state</th>
<th>FDI sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>35.6%</td>
<td>41.6%</td>
<td>23.2%</td>
</tr>
<tr>
<td>2000</td>
<td>57.3%</td>
<td>24.3%</td>
<td>18.8%</td>
</tr>
<tr>
<td>2010</td>
<td>38.1%</td>
<td>36.1%</td>
<td>25.8%</td>
</tr>
<tr>
<td>2016</td>
<td>37.5%</td>
<td>39.0%</td>
<td>23.4%</td>
</tr>
<tr>
<td>2017</td>
<td>35.7%</td>
<td>40.5%</td>
<td>23.8%</td>
</tr>
</tbody>
</table>

Source: General Statistics Office of Viet Nam

Increasing private sector involvement in the economy
Moving towards a more private sector-led economy will help limit fiscal deficit and debt burden. SOE’s are not always as capital efficient, needing to invest an average of 8.03 units of capital to produce one more unit of output (also referred to as ICOR- incremental capital output ratio). This is 1.5 times higher than that of the overall economy and almost double compared to the private sector (non-state).
Viet Nam has an opportunity to enhance the private sector’s role in the economy by developing a supportive ecosystem conducive to doing business. This will help to ensure the efficient use of available capital for growth and development.

In order to enhance private sector involvement in the economy, the scope and breadth of SOE reforms should be widened. International experiences have shown that SOE reforms – through market liberalisation, changes in ownership, better aligned incentives structures, and perhaps most crucially, a dramatically improved corporate governance culture – can significantly improve productivity and contribute to economic growth.49

1ICOR measures the marginal amount of investment capital necessary for an organisation to generate a unit of production. A lower ICOR value implies the organisation’s production is more efficient. ICOR of a country is calculated by dividing annual investment share to GDP by the economic growth rate.
Chapter 5: Challenges and ways to win

5.4 Institutional voids

As is the case in most emerging economies, the business environment in emerging ASEAN markets including Viet Nam is still maturing and is marked by institutional gaps that weaken investor confidence and slow the region’s growth particularly during periods of global uncertainty. Among foreign respondents asked about Viet Nam’s investment climate, one of the key factors that continues to register high levels of dissatisfaction is the country’s laws and regulations (see Figure 5.8).50 Viet Nam’s institutional environment, as ranked by WEF in the Global Competitiveness Index 2017-2018 also trails behind developed ASEAN counterparts such as Singapore, Malaysia and Indonesia.

Figure 5.8: Business Environment Factors - Laws and Regulation, 2018
Laws and regulation are of great concern in Viet Nam and Indonesia

Companies looking to invest in Viet Nam need to carefully consider the institutional frameworks in place and the impact of these on market entry and expansion. Such companies must:

- Understand the overall cost of doing business and impact on brand and reputation through proper market research and due diligence.
- Invest in developing new capabilities to mitigate regulatory and security-related risks associated with specific ASEAN markets.
- Ensure strong engagement with all stakeholders whilst also adopting robust risk management frameworks and practices.
- Explore the deployment of more advanced technology solutions (such as Internet of Things-based monitoring tools or blockchain-based smart contracts to minimise any supply-chain disruptions).51

Figure 5.9: Global Competitiveness Index - Institutions Pillar Ranking *, 2017-2018
Viet Nam’s institutional environment ranking trails behind its overall competitiveness ranking (55th position)

<table>
<thead>
<tr>
<th>Country</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>2</td>
</tr>
<tr>
<td>Malaysia</td>
<td>27</td>
</tr>
<tr>
<td>Indonesia</td>
<td>47</td>
</tr>
<tr>
<td>Thailand</td>
<td>78</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>79</td>
</tr>
<tr>
<td>Philippines</td>
<td>94</td>
</tr>
</tbody>
</table>

* Covers property rights, efficiency and transparency of public administration, independence of judiciary, physical security, business ethics and corporate governance.

Source: WEF Global Competitiveness Index 2017-2018

Source: AmCham, ASEAN Business Outlook Survey, 2018
Chapter 5: Challenges and ways to win

5.5 Technology readiness

The past few decades have seen ASEAN emerge as a major production and logistics centre as part of global value chains or GVCs. It is estimated that 66% of ASEAN exports are accounted for by participation in GVCs, making the region the second-largest regional grouping worldwide in terms of GVC presence, behind only the E.U. (which has a 70% share). However, the advent of Industry 4.0*, marked by adoption of new technologies such as the Internet of Things, advanced robotics, and artificial intelligence (AI) could threat the growth story in the long term — unless ASEAN markets start preparing themselves for the shift.

ASEAN’s core value proposition of lower labour costs will become less valuable over the coming decades, as rising protectionist sentiments build the political case and new technologies improve the economics of keeping production within the developed parts of the world.

Viet Nam’s low technological readiness places the country at a disadvantage as new technological innovations such as automation diminish its key advantage of low labour costs.

Digital connectivity

ASEAN countries need to start preparing themselves for Industry 4.0. Improving digital connectivity across the region will be the first step in this direction. This will help integrate ASEAN into a single market and provide new value propositions for companies to locate their production and service centres.

This will provide for easier movement of capital, goods, and services and help develop stronger end-to-end regional value chains for products - with more mature production centres focusing on R&D, design, and high-tech components, and low-value production and assembly being undertaken in the less advanced centres.

Acquire and strengthen skills

Addressing talent gaps and re-skilling the labour force will be central to getting the workforce ready for Industry 4.0. Unlike technology infrastructure which can be built or purchased, fostering the right mindset and developing the skills for Industry 4.0 is much harder.

Therefore, these capabilities ought to be considered and planned for to ensure the right people and skills are in place to operate the new technology operating model.

Emerging ASEAN markets such as Viet Nam can learn from developed peers how they have been preparing for technological disruption. One example is how Singapore’s banking industry is taking the first step towards digital adoption through HR transformation. The Association of Banks in Singapore (ABS) has set out new HR practices that calls for banks to:

- Acquire and strengthen skills
- Digital connectivity
- Proactively assess the impact of technological changes on their workforce
- Collaborate with various stakeholders (the Monetary Authority of Singapore, Institute of Banking and Finance, and Workforce
- Adopt inclusive hiring practices which focus on the skills required vs using a strict minimum number of years of experience as a criteria
- Conduct retrenchment exercise responsibly and work with the stakeholders mentioned to support affected employees

*Industry 4.0 encompasses end-to-end digitization and data integration of the value chain: offering digital products and services, operating connected physical and virtual assets, transforming and integrating all operations and internal activities, building partnerships, and optimizing customer-facing activities.

---

Figure 5.10: Technological readiness ranking
Gaps between Viet Nam’s overall competitiveness and technological readiness ranking

<table>
<thead>
<tr>
<th>Country</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>14</td>
</tr>
<tr>
<td>Malaysia</td>
<td>46</td>
</tr>
<tr>
<td>Thailand</td>
<td>61</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>79</td>
</tr>
<tr>
<td>Indonesia</td>
<td>80</td>
</tr>
<tr>
<td>Philippines</td>
<td>83</td>
</tr>
</tbody>
</table>

Source: WEF Global Competitiveness Index 2017-2018

<table>
<thead>
<tr>
<th>Country</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>1</td>
</tr>
<tr>
<td>Malaysia</td>
<td>27</td>
</tr>
<tr>
<td>Thailand</td>
<td>49</td>
</tr>
<tr>
<td>Philippines</td>
<td>55</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>65</td>
</tr>
<tr>
<td>Indonesia</td>
<td>67</td>
</tr>
</tbody>
</table>

Source: EIU Preparing for disruption Technological Readiness Ranking 2018
Viet Nam is a rising star of the global economy. From being one of the world’s least developed economies, it has risen into the middle-income bracket and is recognised as one of the most dynamic countries in ASEAN.

Being an emerging economy, it is important to recognise that Viet Nam’s market is different from those of its developed counterparts. It has its own set of challenges and reforms to address in order to sustain its economic growth.

For Viet Nam to succeed, both the public and private sectors have a key role to play in ensuring that the country achieves its true potential, by developing and executing innovative strategies and business models, to address its ever more demanding consumer base, whilst simultaneously overcoming the country’s challenges in a more efficient and profitable manner.
Contacts
Key contacts for further information

Dinh Thi Quynh Van
General Director
Partner, Tax Services
T: +84 24 3946 2231
E: dinh.quynh.van@pwc.com

Grant Dennis
Partner, Consulting Services
T: +84 28 3824 0127
E: dennis.a.grant@pwc.com

Johnathan Ooi
Partner, Deals Services
T: +84 28 3824 0126
E: johnathan.sl.ooi@pwc.com

Tiong Hooi Ong
Partner, Deals Services
T: +84 28 3824 0108
E: tiong.hooi.ong@pwc.com

Hoang Hung
Partner, Viet Nam Markets Leader
T: +84 24 3946 2246 ext. 4555
E: hoang.hung@pwc.com

Quach Thanh Chau
Partner, Assurance Services
T: +84 28 3824 0102
E: quach.t.chau@pwc.com

Nguyen Phi Lan
Partner, Assurance Services
T: +84 24 3946 2230
E: nguyen.phi.lan@pwc.com

Nguyen Thanh Trung
Partner, Tax Services
T: +84 28 3824 0103
E: nguyen.thanh.trung@pwc.com

Phan Thi Thuy Duong
Senior Associate, Legal Services
T: +84 28 3823 0796, ext. 1508
E: phan.thi.thuy.duong@pwc.com

Abbreviations

ADB Asian Development Bank
ASEAN The Association of Southeast Asian Nations
bn billion
BMI Business Monitor International
CAGR Compound annual growth rate
CLMV Cambodia, Lao PDR, Myanmar and Viet Nam
FDI Foreign direct investment
GDP Gross domestic production
ILO International Labour Organisation
IMF International Monetary Fund
JSCB Joint-stock commercial bank
mln million
SBV State Bank of Viet Nam
tn trillion
UNCTAD United Nations Conference on Trade and Development
VND Viet Nam Dong
WEO World Economic Outlook
Endnote

14 The Straits Times, “Viet Nam among leaders in Asian infrastructure race,” 2017
16 Ibid
17 Viet Nam, General Statistics Office
18 Hanoi Times, “Viet Nam needs $48 billion for transport infrastructure development,” 2018
19 BMI Viet Nam Infrastructure Report, 2018
20 BMI, 2017
21 BMI Database, 2018
25 ASEAN Secretariat, AEC Chartbook, 2016
27 CEIC database, 2018
30 AmCham, ASEAN Business Outlook Survey 2018
32 The ASEAN-Japan Centre, Global Value Chains in ASEAN: A Regional Perspective, September 2017; OECD, Making Global Value Chains (GVCs) Accessible to All, May 2014; International Monetary Fund, Reaping the Benefits from Global Value Chains, September 2015
33 Ibid