

Message from the Country Managing Partner	03
Executive summary	04
Southeast Asia Economic Review 2018	06
Thailand Economic Review 2018	20
Topical views from our expert	36
• How to protect your crown jewel?	37
Industry sector update	38
• Consumer and Industrial Products	41
• Financial Services Industry	55
• Energy and Resources	68
• Technology, Media and Telecommunications	76
• Life Sciences and Healthcare	84
• Public Sector	89
Key Sector Overview	
Business journal: “Navigating the future of work”	96
Satisfaction and views towards Thailand’s economy 2018 survey	104

Please kindly help us to complete the following survey to let us know your opinions which will be very useful in improving our Economic Outlook Report to you.

The survey can be both accessed via link and QR code below. We thank you in advance for your time and kind opinions.

https://az1.qualtrics.com/jfe/preview/SV_5bzw4pAN106yJg1?Q_CHL=preview

or





Dear our valued clients,

We are very pleased to release the Economic Outlook Report 2018 to you. It is a part of our constant endeavors to provide valuable insights to our clients. This report is compiled with high-level update and summary of the market conditions and impactful economic highlights. Thereby, we hope this report will bring you a greater understanding of the business environment and additionally provide support with your decision-making processes and strategic development for your business.

The global economy has gradually recovered from a long period of a slow growth path. An economic rebound in advanced and developing economies has assisted in strengthening this recovery. Although, uncertainties and risks such as US protectionism, Brexit and political tensions between powerful countries still pose significant challenges on the medium-term outlook.

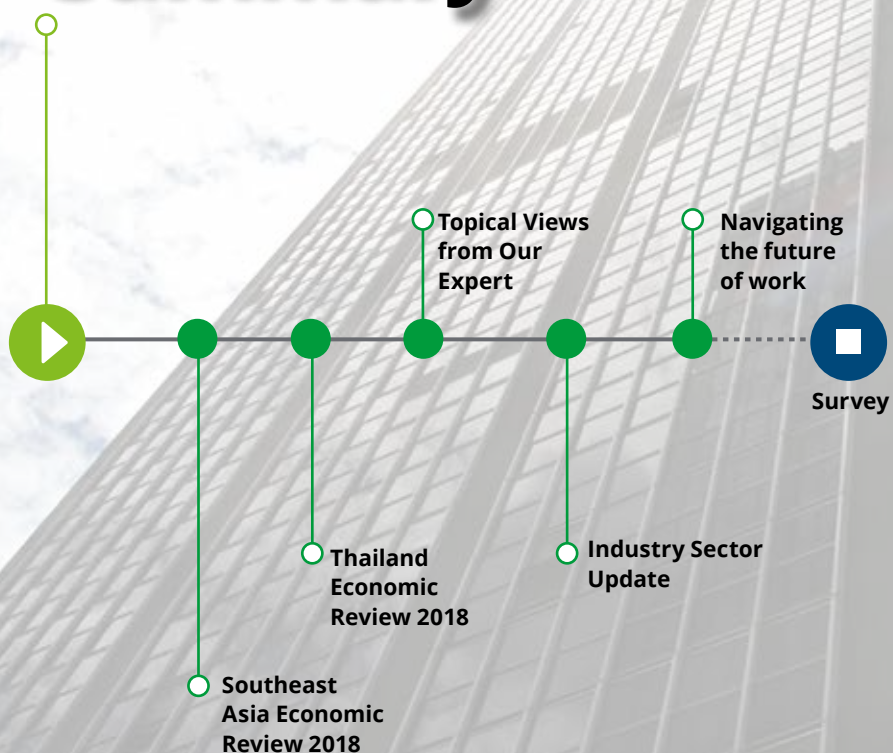
In 2018, the global economic growth is estimated at 3.9%, which has considerably improved from 3.6% in 2017. For Asia, an economic growth is forecasted to remain at 5.2% in 2018 due to upward revision for Thailand counters downward revision from Malaysia as GDP growth softened to 5.3% from 5.9% in 2017. Robust domestic demand, particularly for private consumption and investment, continued to support economies in the sub region. The global economic recovery, as well as the increase in export activities, have played an important role in directly improving Thailand's economy and stimulating other major industries. The continuous effort from the government through public infrastructure investments, especially the Eastern Economic Corridor (EEC) initiative is crucial in driving public and private consumption. Accordingly, Thailand's economy is expected to grow at 4.2% in 2018. However, the high level of household debt still remains an obstacle that will slow down the economy.

On behalf of Deloitte Thailand, we very much look forward to supporting you in the dynamic and changing business environment. If you have any questions or inputs, please do not hesitate to contact us at Deloitte. On the next page, we would like you to complete our electronic survey about your overall satisfaction in our Economic Outlook Report and your views towards Thailand's economy in 2019 which will be helpful for us to keep improving continuously.

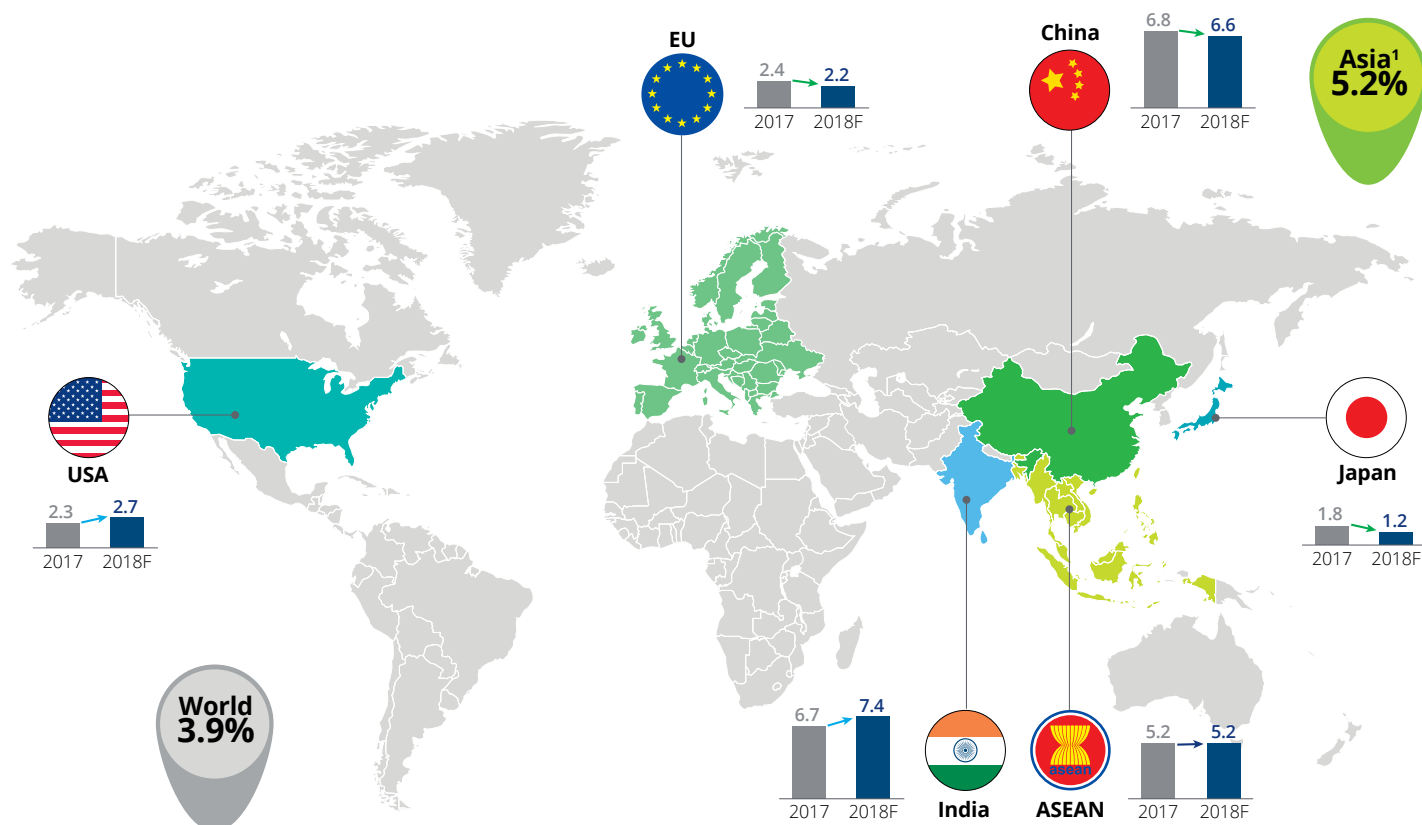
Best Regards,

Subhasakdi Krishnamra
Country Managing Partner

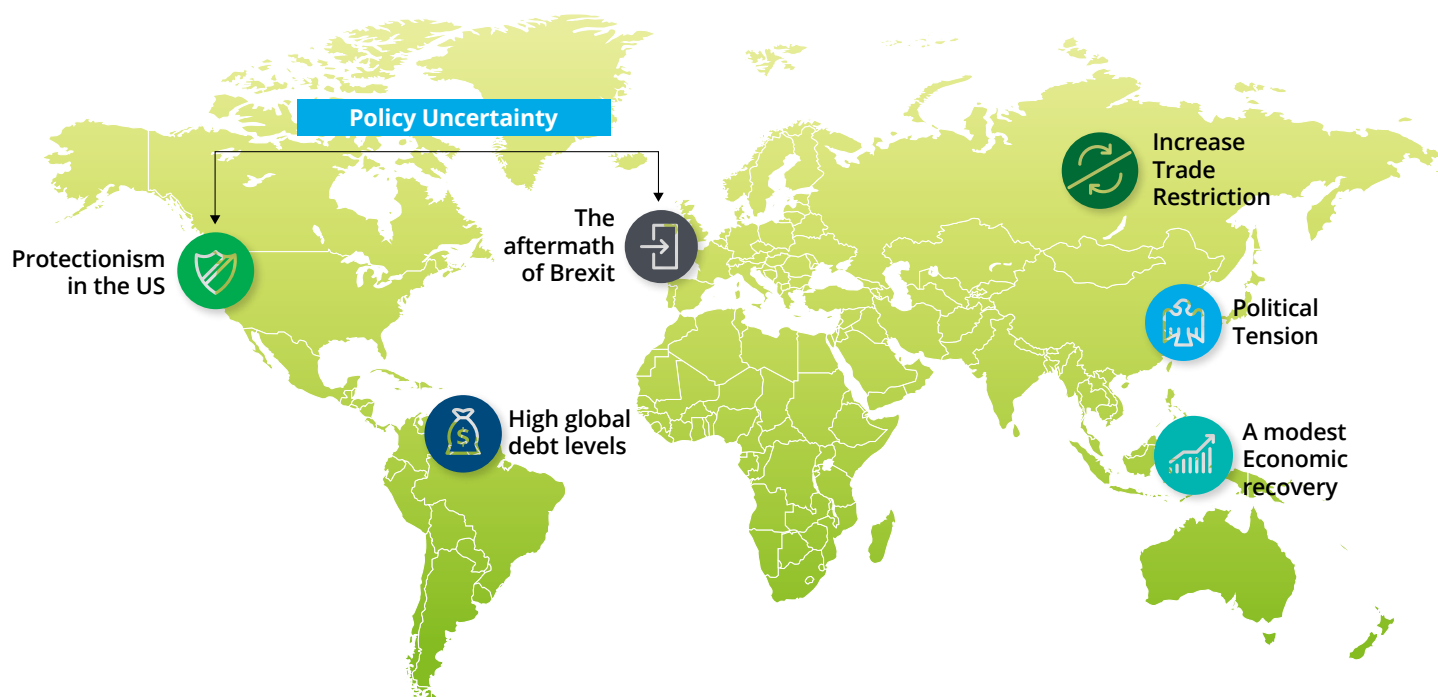
Executive summary



Global growth has eased but remains robust and is projected to reach 3.9 percent in 2018 and 2019, although with downside risks. The trade protectionism and heightened geopolitical tensions continue to cloud the outlook.



Several risks and challenges remains and will continue to shape the global economy in 2018



Executive summary

World Economy

- Global growth has eased but remains robust, although with downside risks. The possibility of financial market stress, escalating trade protectionism and heightened geopolitical tensions continue to cloud the outlook. The pace of expansion in some economies appears to have peaked and growth has become less synchronized across countries. Growth divergences between the United States on one side, and Europe and Japan on the other, are widening. It is forecasted that the global GDP growth will grow 3.9% in 2018 and 2019, compared to 3.8% in 2017.

Euro Zone

- Growth in the euro area economy is projected to slow gradually from 2.4 percent in 2017 to 2.2 percent in 2018 and to 1.9 percent in 2019.
- Forecasts for 2018 growth have been revised down for Germany and France after activity softened more than expected in the first quarter, and in Italy, where wider sovereign spreads and tighter financial conditions in the wake of recent political uncertainty are expected to weigh on domestic demand.

Asia

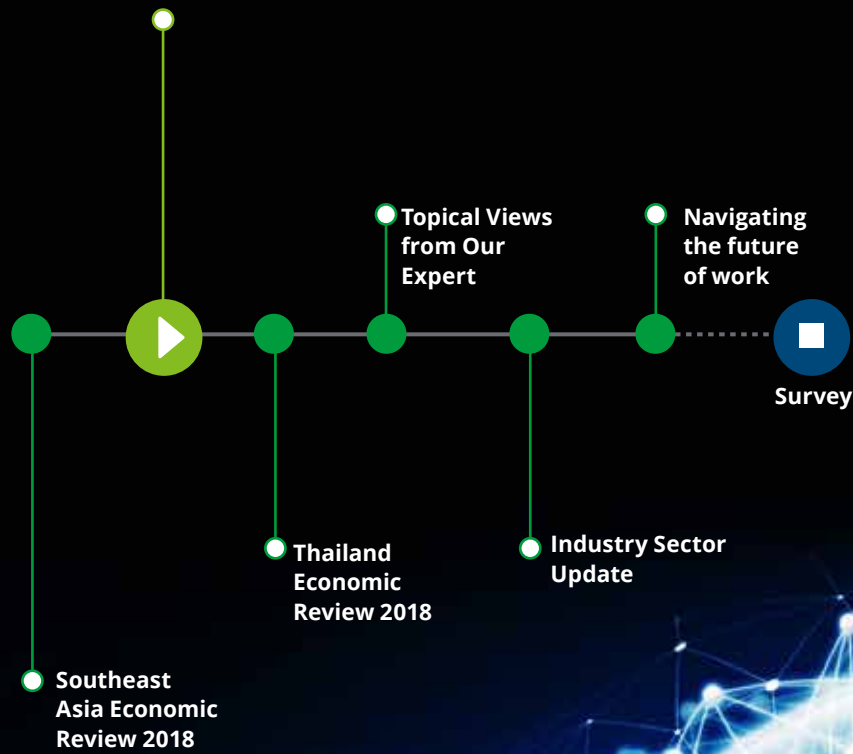
- Asia's economic growth is forecasted to remain at 5.2% in 2018 due to upward revision for Thailand counters downward revision from Malaysia as GDP growth softened to 5.3% from 5.9% in 2017. Robust domestic demand, particularly for private consumption and investment, continued to support economies in the sub region. Growth in exports added a further boost to the economies of Singapore, Thailand, and Vietnam.

Thailand

- GDP growth is predicted at 4.2 % in 2018 compared with 3.2 % from its previous estimate owing to external demand and public investments. Public infrastructure investments by the government (EEC) will continue to attract both private domestic and foreign investments .

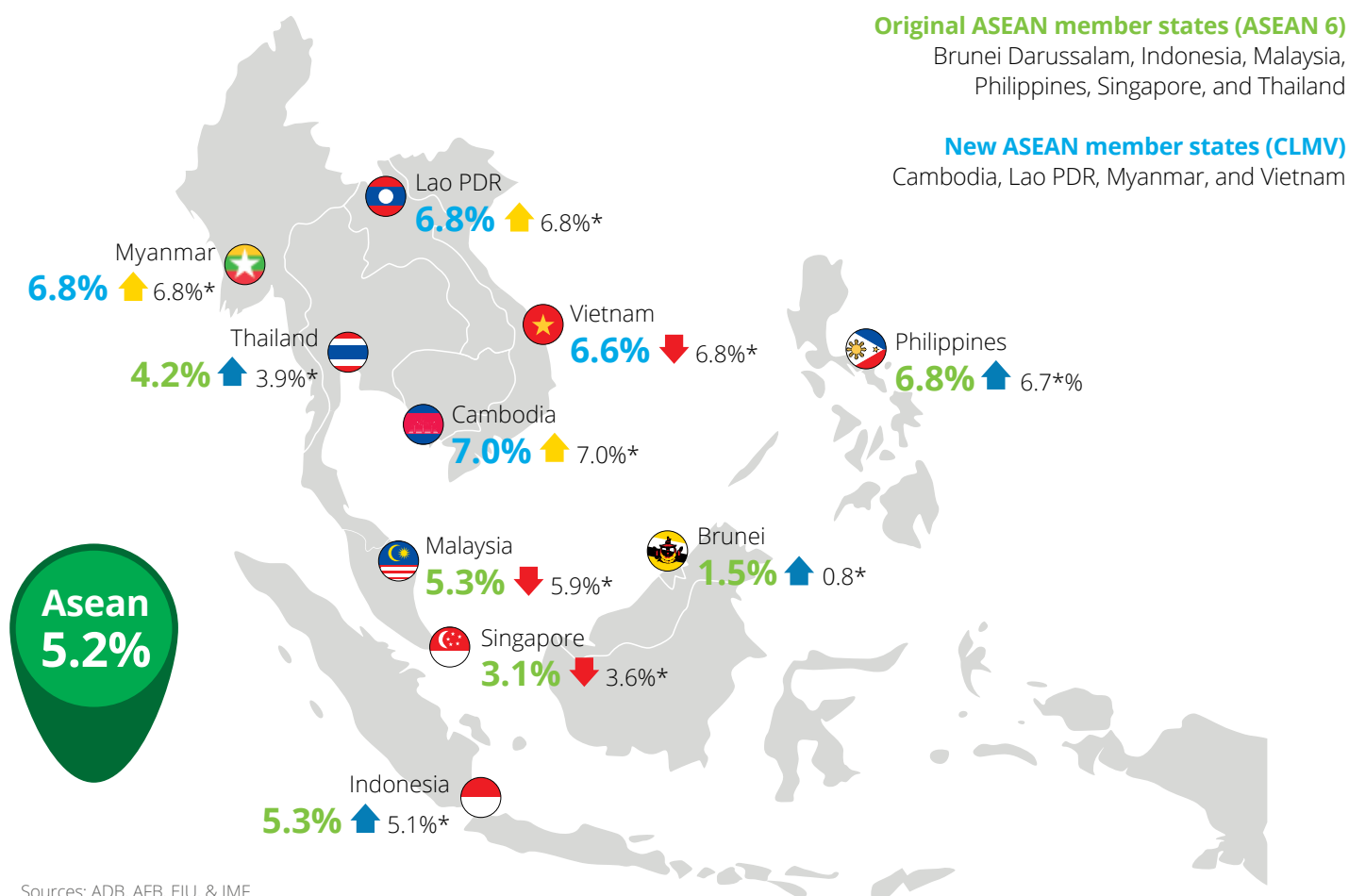


Southeast Asia Economic Review 2018



The region remains resilient amid global uncertainties

ASEAN GDP growth in 2018 (Forecast)

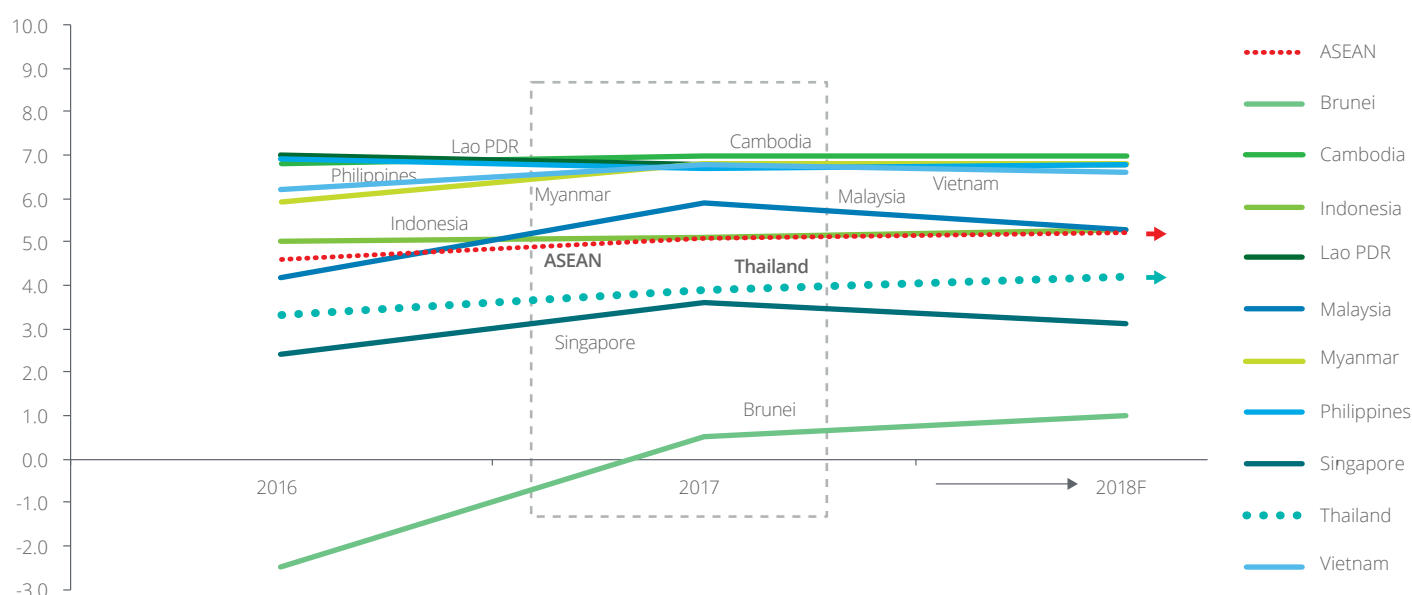


Sources: ADB, AFB, EIU, & IMF
* Actual GDP 2017

The growth projection of South-East Asia countries will be broadly stable as upside and downside risks remain balanced

Regional economic growth in 2018 will be driven by growing private and public consumption, robust infrastructure investment and accommodative monetary policies.

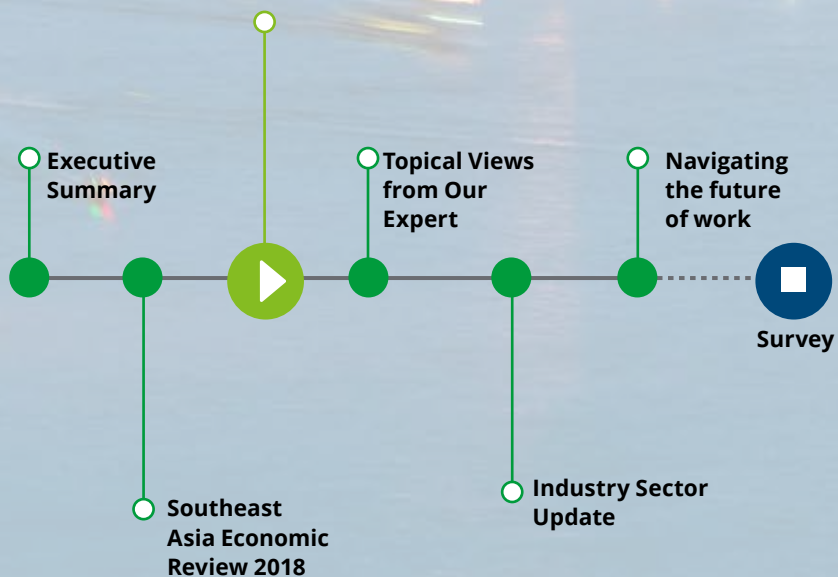
Real GDP growth rate of ASEAN economies from 2016 – 2022F



Real GDP growth rate	ASEAN	Brunei Darussalam	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
2016	4.6	-2.5	6.8	5.0	7.0	4.2	5.9	6.9	2.4	3.3	6.2
2017	5.1	0.5	7.0	5.1	6.8	5.9	6.8	6.7	3.6	3.9	6.8
2018F	5.2	1.0	7.0	5.3	6.8	5.3	6.8	6.8	3.1	4.2	6.6
2019F-2022F	5.0	5.0	6.0	5.6	6.8	4.9	7.4	7.0	2.6	3.5	6.5
Trend	→	↑	→	↑	→	↓	↑	↑	↓	→	→

Sources: ADB, AFB, EIU, IMF, NESDB, & Research Houses

Thailand Economic Review 2018

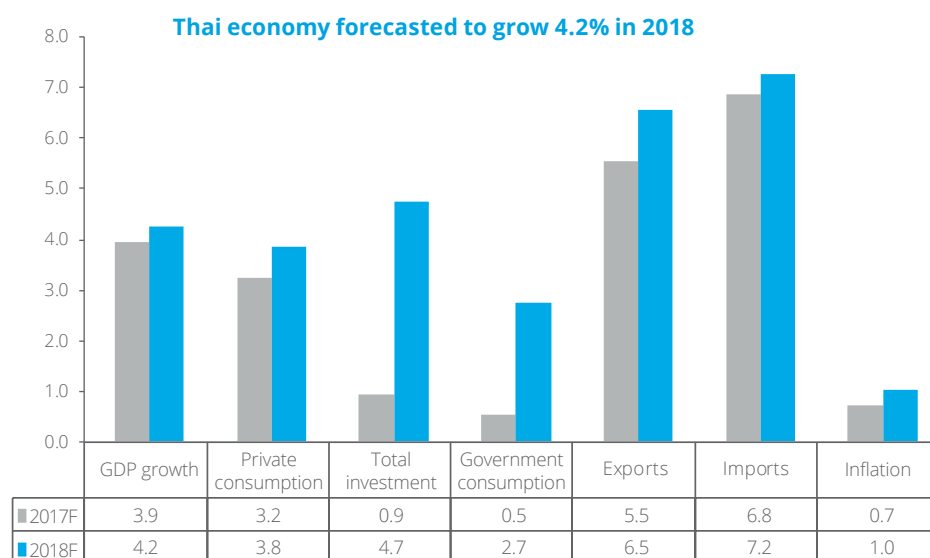


Thailand

Thailand growth momentum is expected to continue which a strong growth in tourism and exports are the main contribution. Moreover, public infrastructure investments by the government will attract private domestic and foreign investments.

- GDP growth is predicted at 4.2 % in 2018 compared with 3.2 % from its previous estimate owing to external demand and public investments.
- Private consumption, which is the main contribution to Thai economy's GDP, is likely to expand in line with the improvement of income.
- The net contribution to overall growth from the external sector will remain positive until 2021 as the drive from rapid export growth.
- Private domestic and foreign investment will keep their growth momentum owing to Thailand's public infrastructure investment drive.

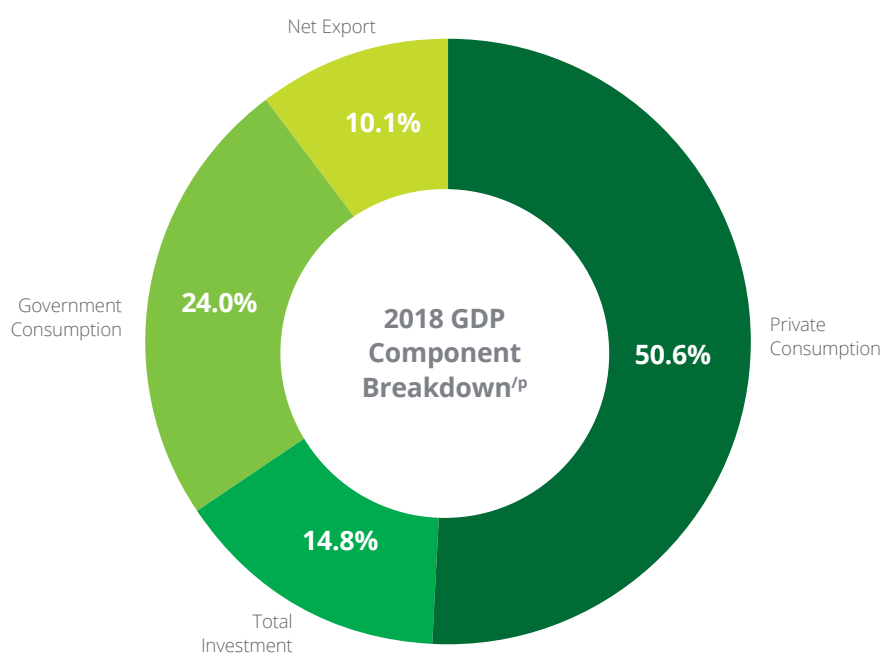
Real expenditure on GDP (% change)



Sources: ADB, NESDB, EIU, & IMF

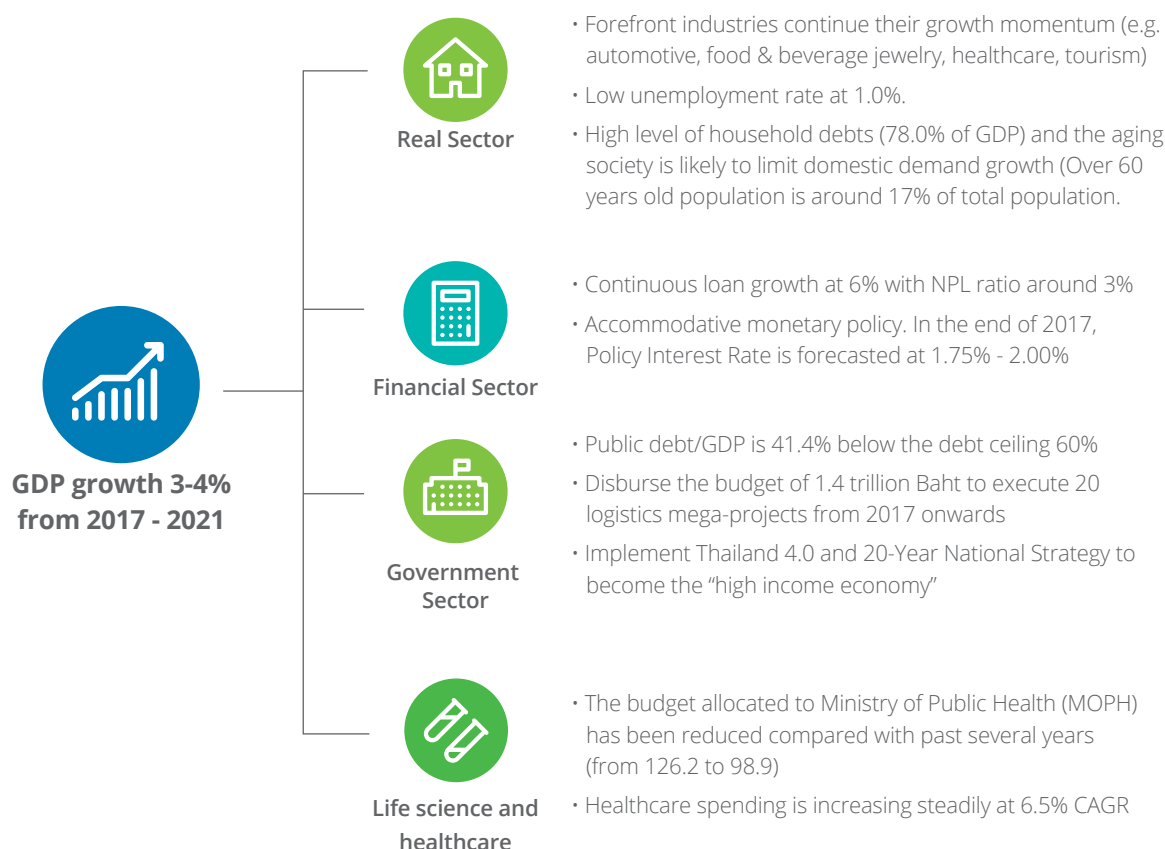
Exports (excluded imports) remain the biggest component of Thailand's GDP in 2018 followed by private consumption and investment.

- The expansion of household consumption, increase in the number of tourists and the growth of exports of manufacturing goods are expected to remain strong which in turn help mitigate the negative effects of an external downward trend in the coming years.
- Household debt within the country is still high which is the result from past policies. The household spending should be reduced
- The external sector continues to grow due to a recovery in global demand. Merchandise exports of both agricultural and industrial products will gradually increase; however net contribution from the overall growth is forecasted to be negative as imports of goods and services rise faster than exports.
- Some risks and uncertainties from external factors such as the exchange rate volatility, geopolitical tensions, the monetary policies trends in major economies, the US protectionist policies, the aftermath of Brexit, and the trade tension between China and US will limit Thailand's growth potential during the forecasted period.



Sources: ADF, BOT, NESDB, & DTTJ Estimates
/p preliminary data

Overall economic fundamentals remain strong with positive outlook over the medium and long-term.



Sources: BOT, NESDB, PDMO, & The Royal Thai Government

Note: Latest data from the above agencies with cut-off date of 2017.

Thailand 4.0 is a long-term vision to transform the country from heavy manufacturing into high-value-added and innovation-driven economy.



1. Infrastructures Development

The government aims to develop fundamental infrastructures in order to attract investors to choose Thailand as a location to run businesses such as EEC. This will help in growing the country's economy and enhancing competitiveness.



2. Target Industries

Industries which have high potential to grow in the future are defined and grouped along with an allocation of resources to support these industries. There are four groups of industry; Bioeconomy, Electronic and Robotic parts, Aviation related, and Medical.



3. Enterprises

SMEs, entrepreneurs, and start-up companies will be a key player to drive innovations and new technologies through collaboration with governmental agencies and big companies. This is a way to transform from traditional manufacturing into high-value-added and innovation-driven economy.

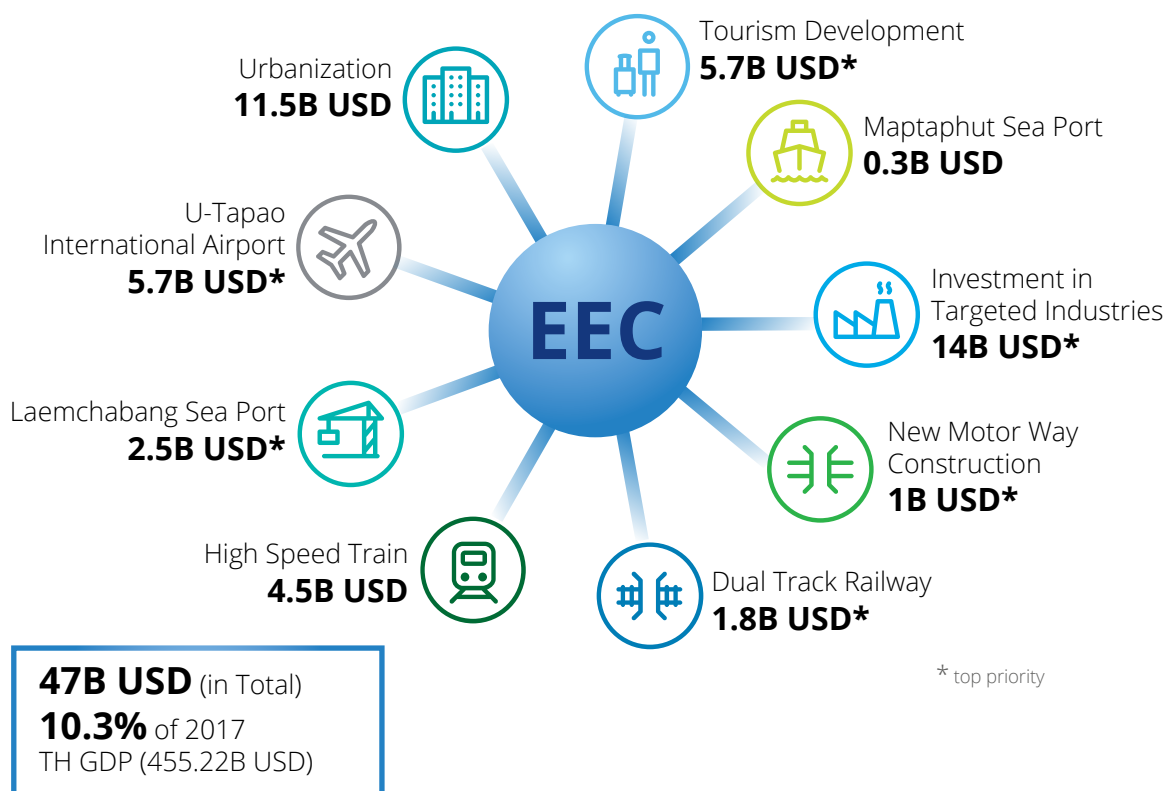


4. People

To cope with technologies and innovations, workers must be well prepared to possess critical skills. They will be required to deal with specific tasks rather than repetitive tasks which can be executed by utilizing technologies.

Eastern Economic Corridor is part of Thailand 4.0 strategy to develop basic infrastructures of the country.

It is anticipated that the global economic expansion will shift towards Asia more. Thus, EEC is a priority to be executed with the support of Thailand 4.0 roadmap.



Source: www.set.or.th

Eastern Economic Corridor (EEC) is a project to enhance Thailand's competitiveness as it is located at the best strategic location in the region and has a potential to be a center of the regional economy.



In terms of the foundation, EEC has various advantages to be established as an economic area.

- Establishment of 29 industrial estates with 50,500 million USD investment and 3,768 manufacturing factories.
- The center of automobile and aviation industry with the investment of 12,500 million USD.
- The location of top 5 in Asia petrochemical with 13,000 million USD investment.
- Developed 21 industrial estates with 2,345 Hectares land and 6 developing industrial estates with 2,431 Hectares land.
- Significant market size and buying power from China, India, and Southeast Asia.
- A central of tourism and manufacturing destination.



Source: www.set.or.th

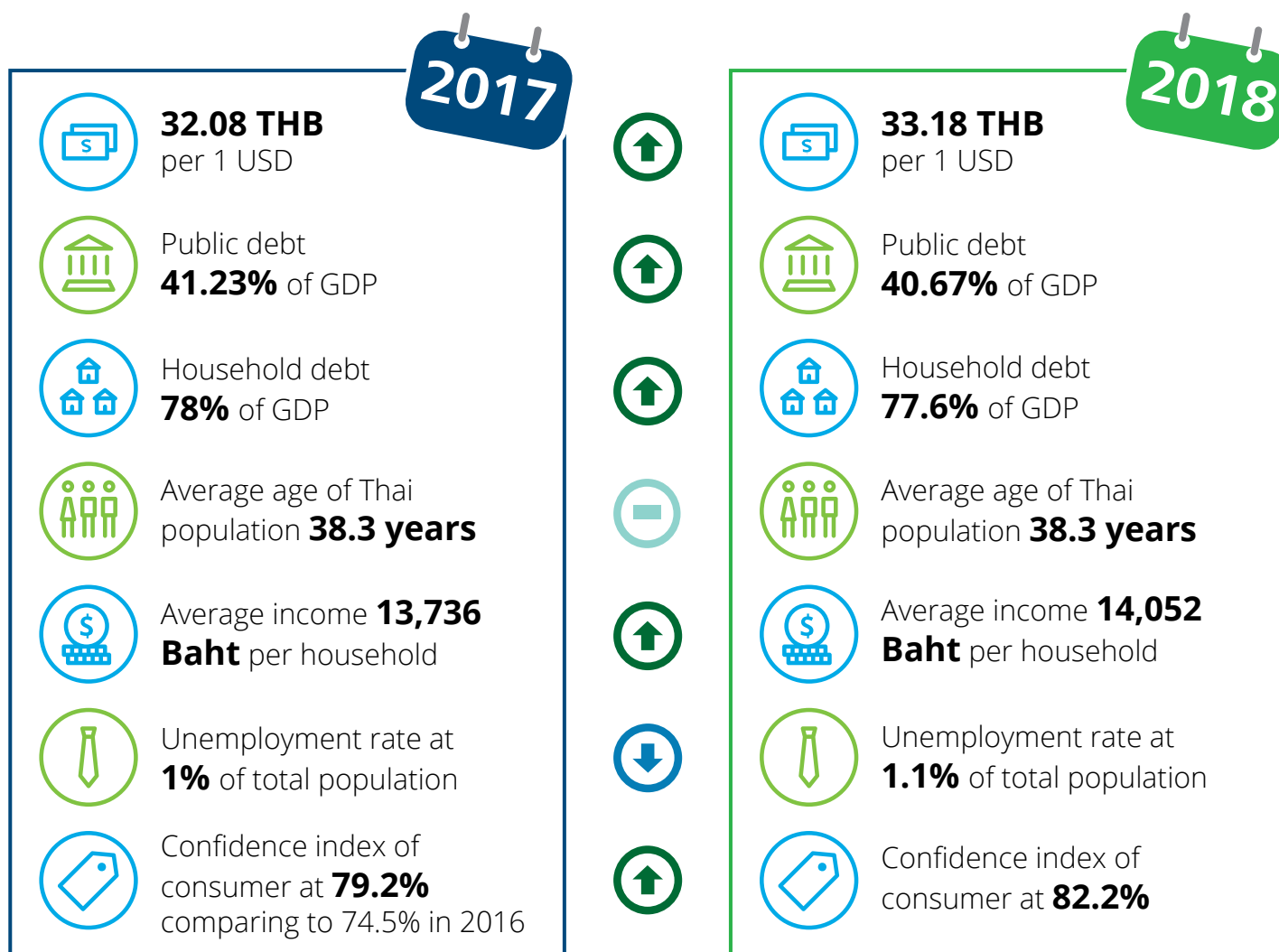
Escalating businesses in Thailand



	Telecommunications and Information Technology	The policy of the government in favor of all mobile operators as Digital Economy is being promoted in National Strategy. An alliance between mobile operators and business counterparties including banks (i.e. FinTech) will play essential roles in driving the growth of telecommunication industry.
	Medical services	An Increasing number of global population and the trend toward aging society will drive the need for medical services. Also, the growth of medical technology is critical in supporting the needs.
	E-Commerce	The support from the government in Thailand 4.0 roadmap and the significant increase in the number of smartphone and social media users in Thailand is likely to stimulate the growth of E-commerce business.
	Cosmetics and skincare product	As a consequence of social medias embracement among Thai people, the awareness towards health, physical appearance, and beauty tend to be a key driver for the industry.
	Petrochemicals	Lower oil prices directly contribute to the industry as the manufacturing cost could be reduced considerably. A stable increase in global demand especially in China has ensured the growth of the business.
	Logistics	The constant growth of e-commerce market creates significant benefits to the logistics business which is a critical part of the supply chain. Thus, logistics business tends to grow in accordance with the e-commerce.

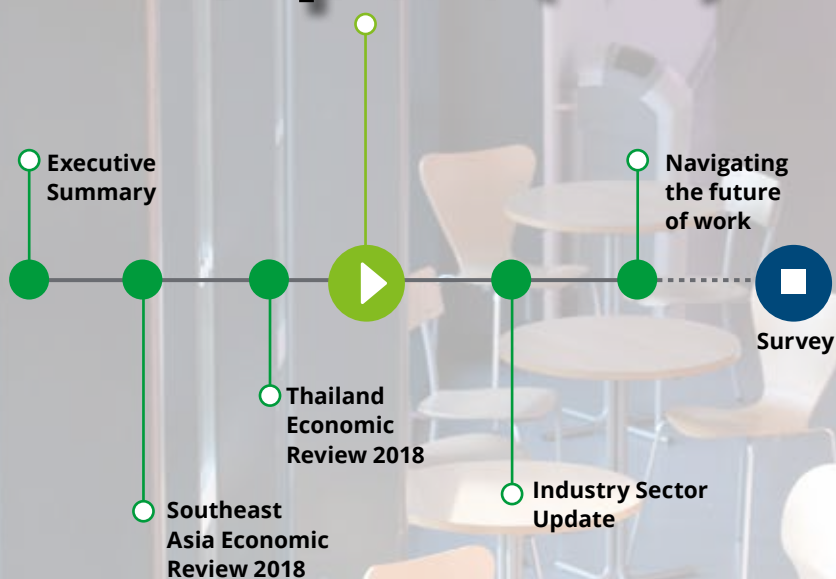
Sources: UTCC/Thairath, and compilation of various sources

Selected indicators in Thailand's economy



Sources: BOT (EC_MB_039, EC_RL_014_S2), NESDB, PDMO, and Deloitte researches
 Note: The information was as of 01 August, 2018.

Topical views from our expert (DLP)



Views from our expert – How to protect your crown jewel?



Parichart Jiravachara
Partner, Risk Advisory

Q: What are the challenges in cyber risk perspective for business to become more digitized?

A: As the business nowadays has started to shift their strategy and model to become more digitized. They are also exploring ways to develop new product and services by adopting disruptive technologies to be able to stay ahead in the highly competitive market. However, this also inevitably opens the door to the risk of technology and cybersecurity that can hinder innovation and business transformation. One of the challenges in this changes is related to the security of data and information which has increased in value and started to become a main valuable asset of the business. How to protect your valuable data while maintaining the highest possible productivity is one of the questions. For example, the company started to collect more customer information to be able to provide better services to their client which those information have a great value for the company also the clients (client privacy data). Furthermore, there are other information that could be classified as valuable, e.g. Intellectual Property and company plan and strategy. The leak of those information could cost the company a significant loss includes reputation and customer trust. The organization should consider the security of their data flow not only within the company but also the whole supply chain. Also, the risk of valuable information falls into the wrong person or party. The main key concern for this challenge is having authorize person doing unauthorized things. These are the things that you should ask yourself and assess your readiness for the cyber-risk.

Q: What are the possible impact and outcome of cyber-attack to the business?

A: Usually, the main motivation of cyber-attack is to steal valuable information from the organization and defame their reputation. It could be said that the impact was on the company brand and reputation which greatly affect the customer trust on the product or services the company provides. The consequences are a long and costly recovery process that does not guarantee the result. Listed below is a possible hidden cost which could occur from a cyber-incident.

Above the surface (more Visible cost)

- Technical investigation
- Customer breach notification
- Post-breach customer protection
- Regulatory compliance
- Public relations
- Attorney fees and litigation

Beneath the surface (Hidden cost / less visible)

- Insurance premium increase
- Increased cost to raise the debt
- Impact of operational disruption
- The lost value of customer relationship
- Value of lost contact revenue
- Devaluation of trade name
- Loss of Intellectual property

Consequently, the regulatory environment is starting to tighten up with more legislation around cybersecurity to deal with technology and the increasing pace of change in the business landscape. In order to protect citizens and businesses, governments are also working with international bodies and industries to standardize cybersecurity policies and practices to address any risk that may arise.

Take for example – as financial institutions continue to become more data-driven and move into a digital mode of business, the cyber maturity of the organization becomes a critical success factor for the organization and its business function. Therefore, it is highly recommended that organizations adopt a Cyber Maturity Model to assess and improve on its current capabilities.

Q: How the company prepare themselves and be ready for the attack?

A: Our recommendation is started with assessing within your organization. The clients should concern about their cybersecurity strategy and to ensure that they have a proper strategy and risk management. By doing a cybersecurity assessment first, to properly understand your company current maturity level. A Cyber Security Maturity Framework is a set of standards and best practices from the industry, professional or international bodies with a logical structure for organizations to benchmark their current capabilities. This framework is a risk-based approach to manage the cyber risk that complements an organization's existing risk management program, specifically to manage cyber-related risks. There are many frameworks to follow for the assessment. However, this is not a one-size-fits-all approach for managing cybersecurity risk as all organizations have unique risks. There are a number of Cyber Security Maturity Frameworks available and depending on each model, the approach to achieve the desired maturity level may differ.

Here are some Cyber Security Frameworks or Maturity Models that are available:

- **National Institute of Standards and Technology (NIST) Cybersecurity Framework** – This is a voluntary framework, based on existing standards, guidelines, and practices, for critical infrastructure organizations to better manage and reduce cybersecurity risk. In addition to helping organizations manage and reduce risks, it was designed to foster risk and cybersecurity management communications amongst both internal and external organizational stakeholders.
- **Federal Financial Institutions Examination Council (FFIEC) Cybersecurity Assessment Tool** – The Assessment is a voluntary tool to determine inherent risk and cybersecurity preparedness of a Financial Institution. It was developed in conjunction with the NIST Cybersecurity Framework. The Financial Service Sector Coordinating Council (FSSCC) collaborated with the Financial Services Information Sharing and Analysis Center (FS-ISAC) to develop an automated version of the Assessment tool.
- **Information Security Forum (ISF) Maturity Model** – The ISF Maturity model helps organizations to assess their current information on security maturity, translate business objectives into a target maturity, and develop actionable plans to achieve it.
- **Hong Kong Monetary Authority Cyber Resilience Assessment Framework (C-RAF)** – The C-RAF is a structured assessment framework for authorized institutions (AIs) to assess their inherent risks and the maturity levels of their cybersecurity measures against a set of principles set out in the C-RAF, called “control principles.” Through this process, AIs will be able to understand better, assess, strengthen and continuously improve their cyber resilience.

These frameworks and models have a common theme, which is to build capabilities to reduce cybersecurity risks, at the same time balancing the needs of the business to ensure a practical approach for the organization to pursue profitability without compromising security. However, as we mentioned earlier, it's not a one-fits-all framework. At Deloitte, we have developed our framework which has been designed based on our experiences as well as taking those standards/frameworks (NIST, ISO 27001, and CIS) into account to create a more suitable framework for our clients. The Deloitte cyber strategy framework consists of four main pillars (Strategy, Secure, Vigilant, Resilient) shown in the figure.

Secure

Establishing effective controls around the organization's most valuable or sensitive assets and balancing the need to reduce risk, while enabling productivity, business growth and cost optimization objectives.

Strategy

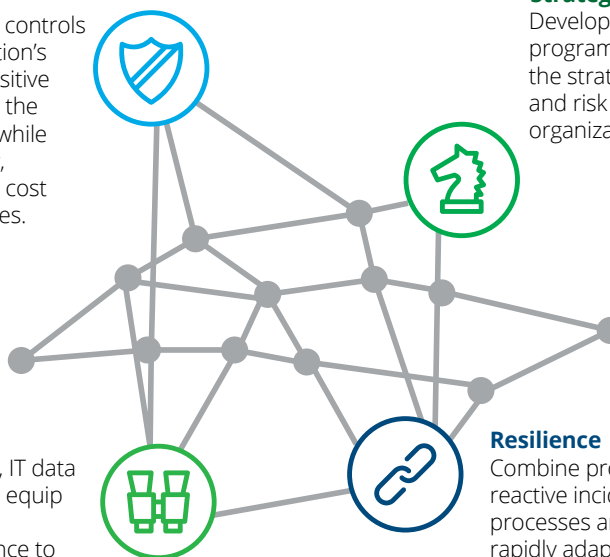
Develop a cyber-risk program in line with the strategic objectives and risk appetite of the organization

Vigilance

Integrate threat data, IT data and business data to equip security teams with context-rich intelligence to proactively detect and manage cyber threats and respond more effectively to cyber incidents.

Resilience

Combine proven proactive and reactive incident management processes and technologies to rapidly adapt and respond to cyber disruptions whether from internal or external forces.



We have basic self-assessment questions for you to check whether your organization has proper security or not?

- Do you treat cybersecurity as a business, not IT responsibility?
- Do your security goals align with business priorities?
- Do your business culture has security as a top priority?
- Do you have the basic right management? (control over access right, shared drive, software patching, vulnerability management, virus outbreaks, a regulatory security requirement, and data leakage prevention)
- Do your third parties has kept your valuable information secure?
- Have you identified and protected your valuable process and information?
- Are your organization has a comprehensive compliant?
- Do you evaluate the effectiveness of your security?
- Do you have a process to monitor your system and prevent breaches?
- Do you have a plan responding to a security breach?

Industry sector update

Executive Summary

Topical views from our expert

Navigating the future of work

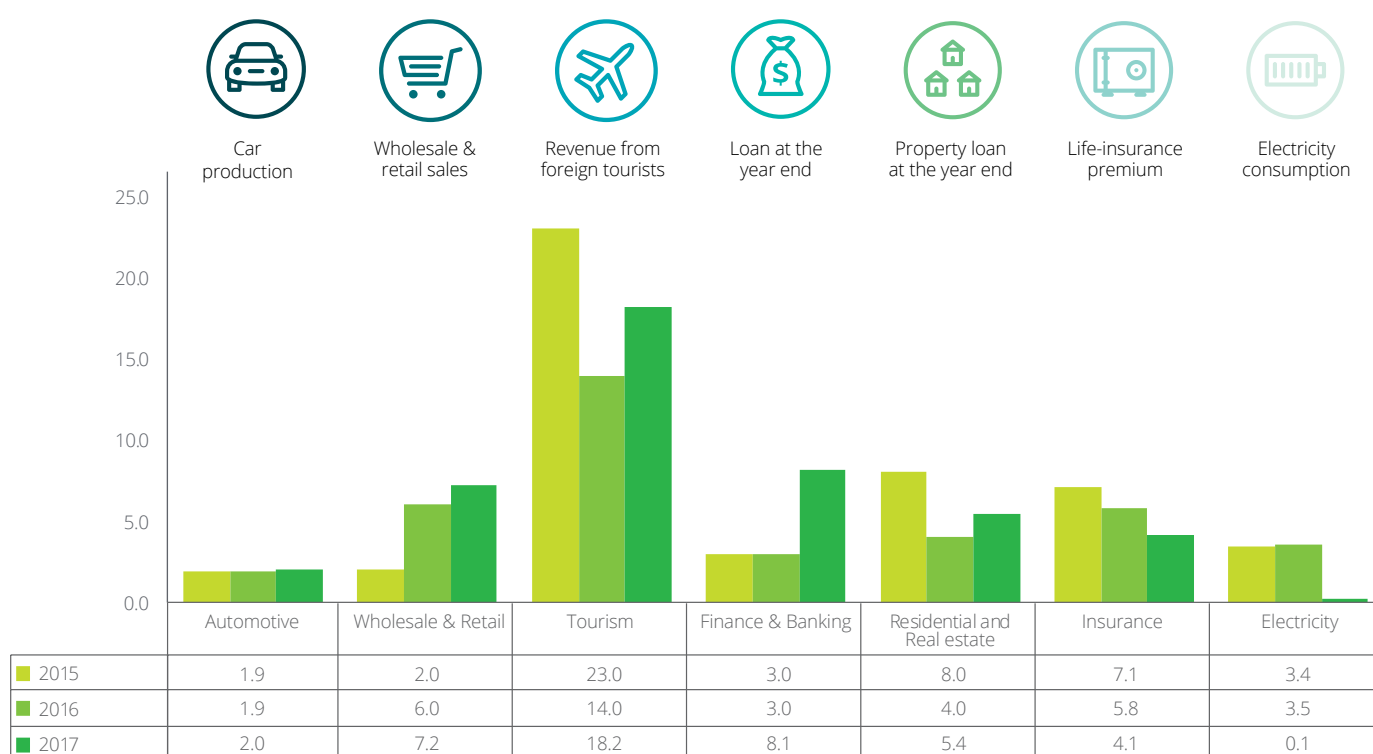
Thailand Economic Review 2018

Southeast Asia Economic Review 2018

Survey



Thailand key industries are expected to continue their moderate growth path in 2018



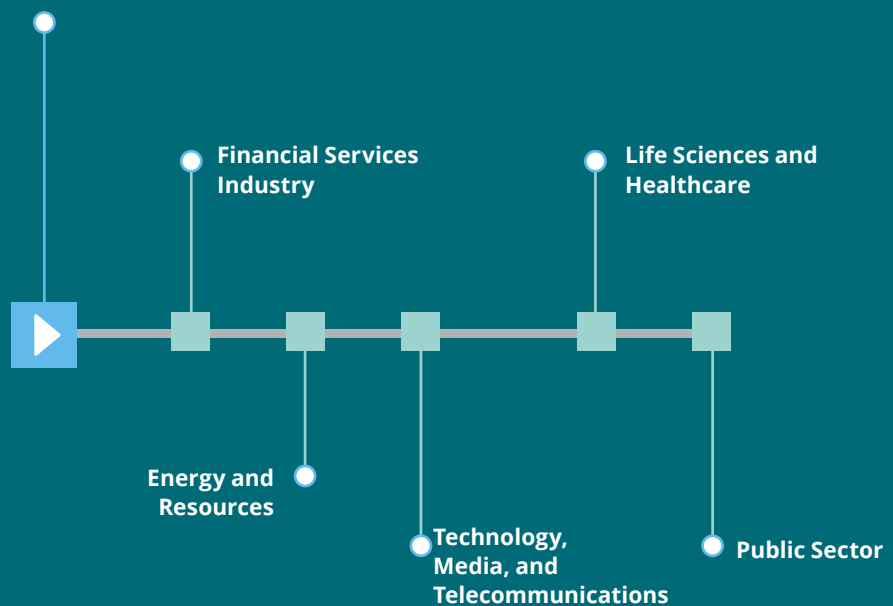
Sources: Compiled from various research houses & agencies (e.g. BOT, EIU, MOC, NESDB, OIE, OIC) & DTTJ Analysis

Thailand key industries are expected to continue their moderate growth path in 2018



Sources: Compiled from various research houses & agencies (e.g. BOT, EIU, MOC, NESDB, OPPO, OIE, OIC) & DTTJ Analysis

Consumer and industrial products

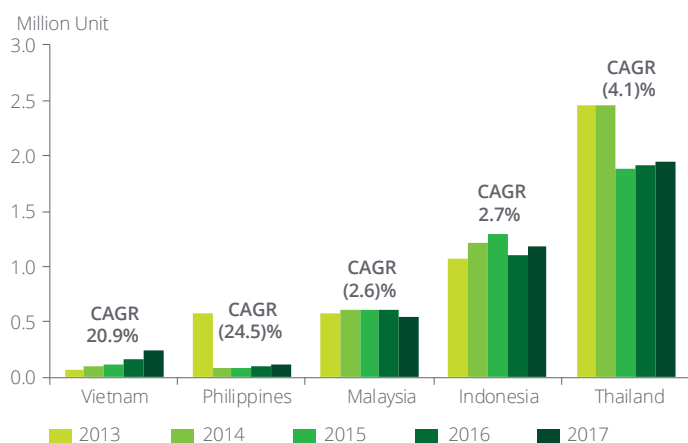




Automotive

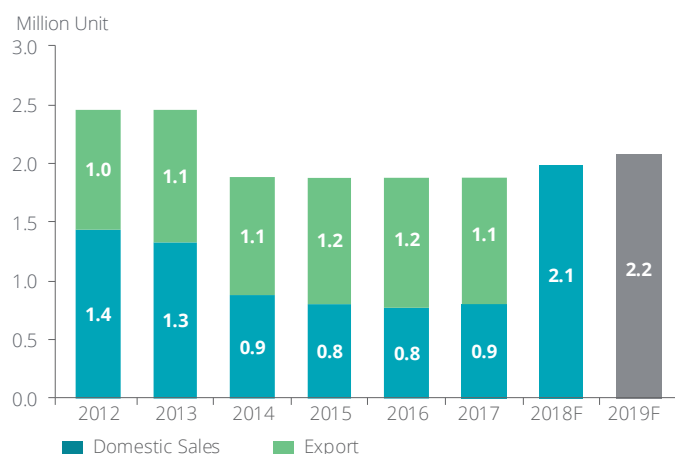
Thailand remains the ASEAN's automotive industry leader in the coming years underpinned by a solid supply chain and a large pool of established facilities.

ASEAN car production volume (2013 – 2017)



- Although CAGR displays negative production growth, Thailand remains the leading car producer of ASEAN with 49.3% market share.
- Overall, ASEAN car industry in 2017 grew 1% compared to 2016. Car export from ASEAN is expected to grow while domestic demand remains in a contraction mode.

Thailand domestic car sales and export (2012 – 2019F)



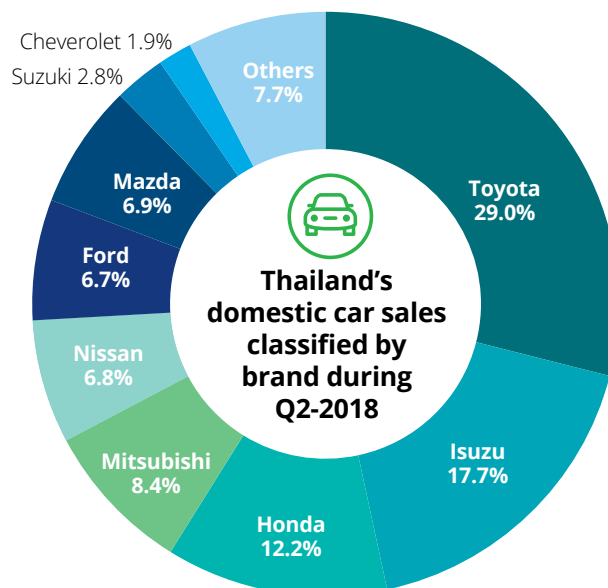
- During 2017, Thailand produced 2 million cars growing 2.8% from 2016. Domestic sales volume was 0.87 million units contracted by 13%YoY.
- Despite the slowdown in both global and domestic car demands, automotive players in Thailand can outperform other regions as a result of an established solid supply chains and a large pool of skilled labors in Thailand. In 2018, Thailand is forecasted to produce 2.1 million car units growing 4.4%YoY.



Domestic car sales during Q2-2018 expanded by 19.3% compared to the same period of 2017.

Update Thailand Car Market for Q2-2018

- The total number of domestic car sales during Q2-2018 was 0.49 million units risen 19.3% YoY.
- Major Japanese car manufacturers (Toyota, Isuzu, Honda, Mitsubishi, Nissan, Mazda, and Suzuki) together sustain the market leadership in the Thailand car market occupying around 84% of domestic market share.
- However, downside risks of the domestic car market remain evident such as commodity price uncertainty, high level of household debt, and so on.



Source: Toyota (Thailand) Co. Ltd.

Sales volume summary during Q2-2018

	Sales Volume Q2 -2017	Sales Volume Q2 -2018	Sales Growth (%) Q2-YoY	Market Share Q2 -2017 (%)	Market Share Q2 -2018 (%)
Toyota	112,203	141,693	26%	27.4%	29.0%
Isuzu	77,109	86,363	12%	18.8%	17.7%
Honda	61,428	59,838	(3%)	15.0%	12.2%
Mitsubishi	32,537	41,101	26%	7.9%	8.4%
Mazda	23,893	33,593	41%	5.8%	6.9%
Nissan	28,170	33,446	19%	6.9%	6.8%
Ford	25,513	32,677	28%	6.2%	6.7%
Suzuki	10,754	13,832	29%	2.6%	2.8%
Chevrolet	8,750	9,132	4%	2.1%	1.9%
Other	29,623	37,443	26%	7.2%	7.7%
Total	409,980	489,118	19%	100.0%	100.0%

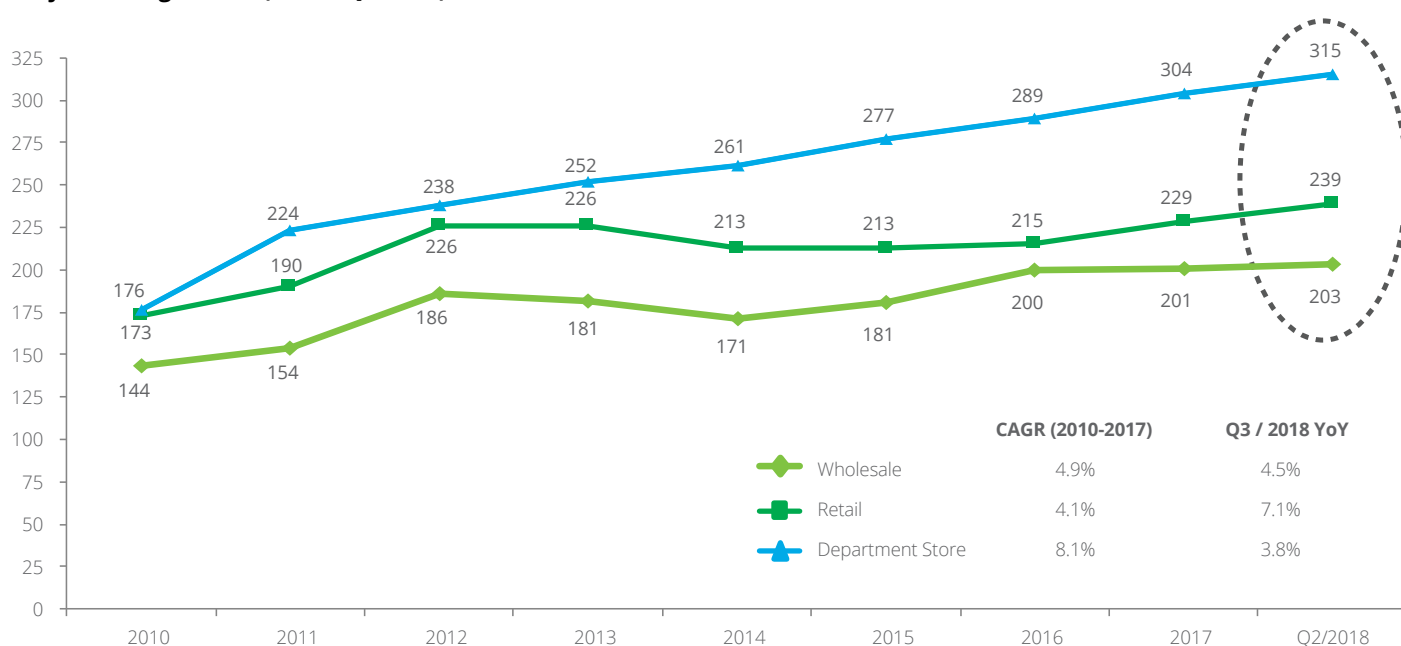
Source: Toyota (Thailand) Co. Ltd.



Wholesale & retail

Overall, three major sales channels remain in positive growth mode. During Q2-2018, wholesalers and department store gained their moderate growth path, while retailers have enjoyed a speedy pace of sales expansion.

Major Trading Indices (2010 - Q2/2018)



Sources: BOT & EIU

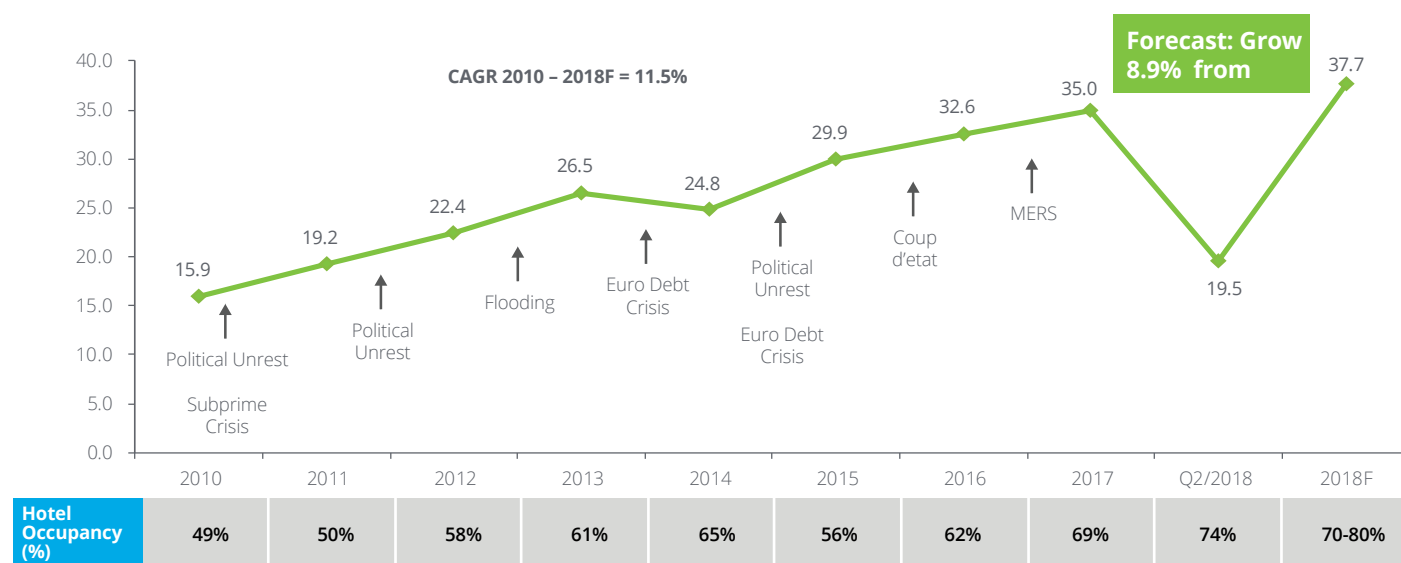
Note: Our analysis covers only wholesalers and retailers of foods and customer package products.



Tourism

Total tourist arrivals in 2018 are forecasted at 37.7 million or raised 8.9% compared to 2017s'.

Foreign Tourists 2010 – 2018F



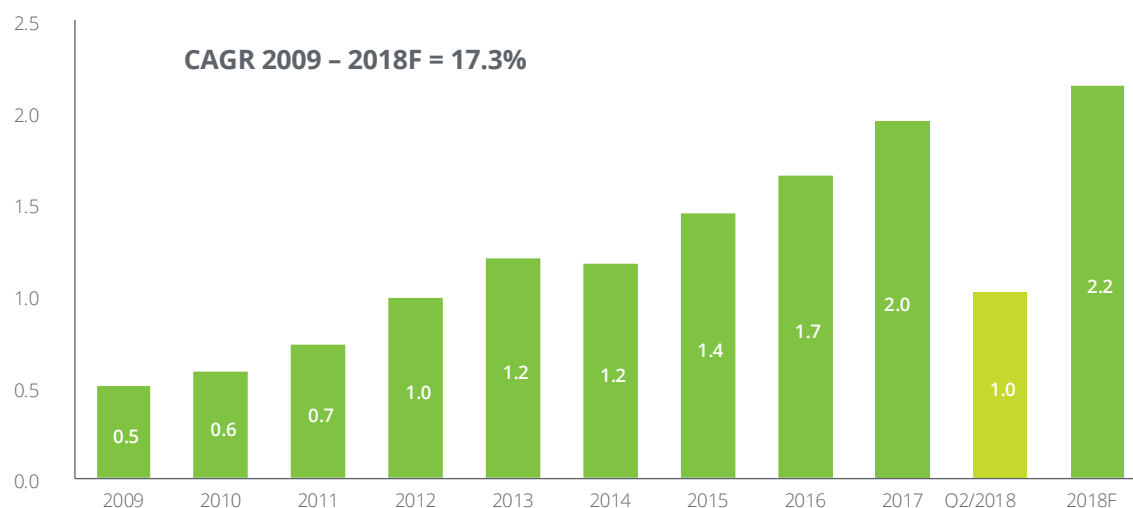
- In 2017, the accumulated number of foreign tourists was 35 million growing 7.4%YoY. The 2 quarter of 2017, the number of foreign tourists was 19.5 million and hotel room occupancy rate is projected at 74.1%
- In 2018, the number international tourists is expected to grow by 8.9%, and the country is expected to attract 37,654,000 visitors.
- Hotel room occupancy rate is projected at 70-80% in line with increasing number of tourists. However, the large proportion of room occupancy remains in major tourist destinations such as Bangkok, Phuket, Chiang Mai, Chonburi and the like.

Sources: Department of Tourism, TAT, The Royal Thai Government, & DTTJ Estimate



Thailand's tourism strategy focusing on "Quality Tourism" continues to drive revenues from foreign tourists in 2018 and contributes to Thai GDP in a large proportion.

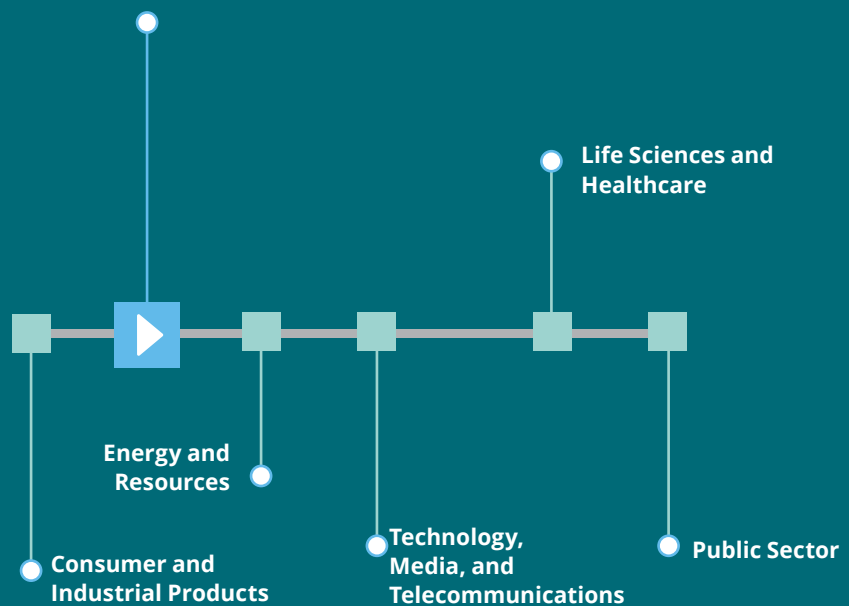
Revenue from Foreign Tourists (2009 -2018F)



- During 2017, the growth momentum of tourism activities across tourism supply chain including hotels, airlines, travel agents, restaurants, and so on. In turn, total revenue from foreign tourists was 1.95 trillion Baht raising 18.2%YoY.
- For Q2 of 2018 total revenue from foreign tourists was 1.02 trillion Bath rising 11.1% from the same period of 2017.
- In 2018, total forecast revenue from foreign tourists is projected at 2.15 trillion Baht raising 10.3%YoY. Due to, the deceleration in the number of tourists and tourism receipts in the second quarter of 2018.
- For the 2018 – 2028 period, WTTC has maintained the cumulative average growth rate (CAGR) of 5.7%. In turn, WTTC has estimated a direct contribution of 2.71 trillion Baht or 12.8% of total GDP in 2028.

Sources: Department of Tourism, Minister of Tourism & Sports, NESDB, World Travel & Tourism Council 2017 (WTTC) & DTTJ Estimate

Financial Services Industry

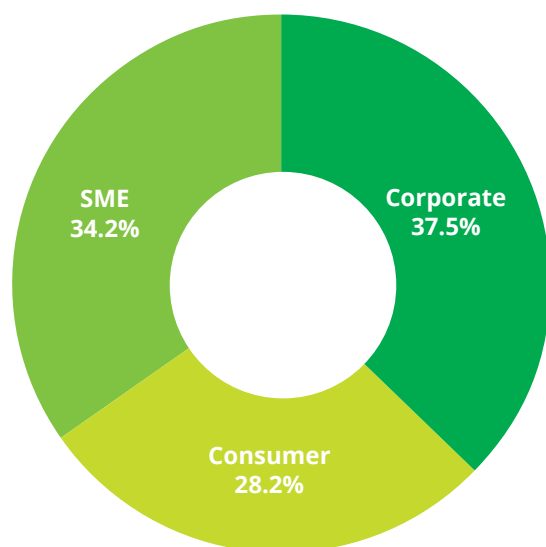




Finance & banking

Total loan outstanding at the end of Q2/2018 was 15.1 trillion Baht. Corporate, SME and Consumer loan proportion were 37.5%, 34.2% and 28.2% respectively.

Loan proportion in Q2/2018



Loan growth comparisons

Unit: Trillion baht

	2016	2017	Q2 / 2018	%Δ	%Δ YoY
Corporate	5.0	5.5	5.7	7.4%	11.4%
SME	4.7	5.0	5.2	5.8%	6.3%
Consumer	3.9	4.1	4.3	8.0%	6.1%
Total	13.6	14.7	15.1	7.0%	8.1%

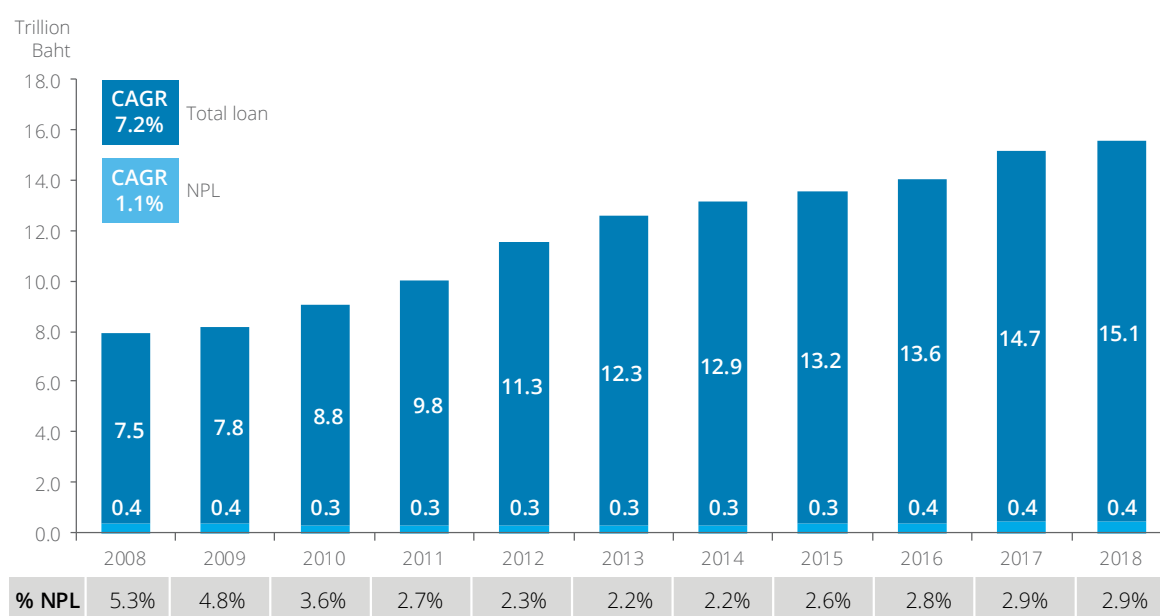
Source: Bank of Thailand



Thailand's total loan outstanding during 2018 was 15.1 trillion Baht growing by 7% YoY. During the same period, NPL proportion reached 0.42 trillion Baht or 2.93% of total loan increasing 6.1% YoY.

As a result of stimulus packages, corporate, SME, and personal loan keeps their growth path steadily. This indicates a large number of investments by private sector. NPL proportion is still in a low growth at 2.93% compared to 2.91% in 2017 thanks to rigorous credit approval by financial institutions. In 2018, NPL proportion is estimated with a slight increase to 3% as there will be a lot of demands for loans by the private sector to execute projects in preparation of Thailand 4.0 strategy. Financial technology (FinTech) is expected to play a more important role in the coming years, means Thailand financial service industry is likely to be disrupted.

Thailand's total Loan vs. NPL 2008 – 2018 (Q2)



Sources: BOT (FL_NP_008, FL_NP_001), EIU, SCB EIC, K-Research, TMB Analytics, & DTTJ Estimates

Note: (1) Total Loan includes both Thai banks' and foreign banks' loan outstanding as of Q2-2018.

(2) NPL includes both Thai banks' and foreign banks' gross NPL outstanding as of Q2-2018.

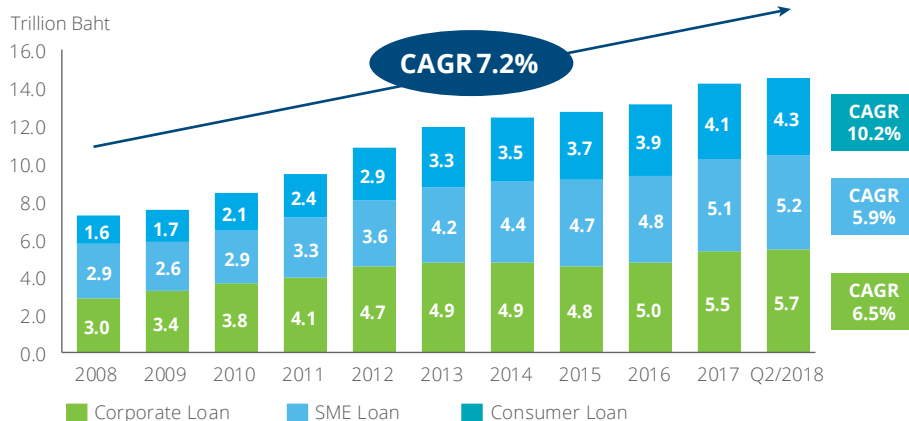


Thailand's total loan in Q2/2018 was 15.1 trillion Baht growing by (0.6)% QoQ.

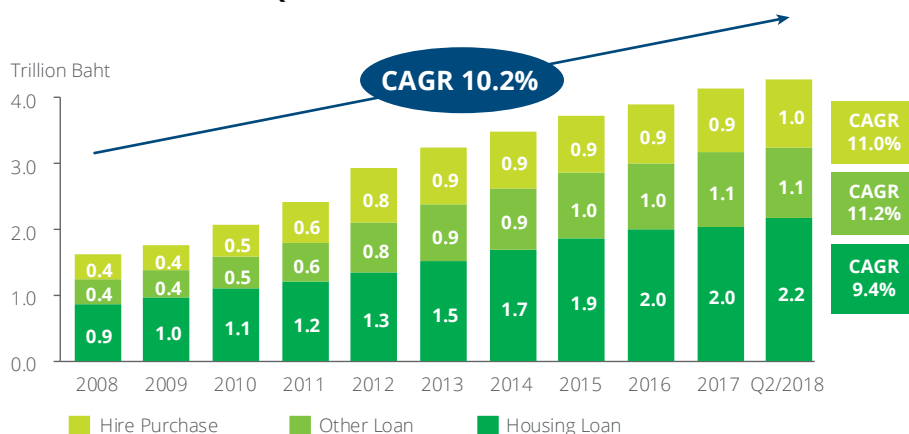
Selected Financial Statistics as of Q2-2018

Number of	Total
Thai Commercial Bank	15
Foreign Bank Subsidiary & Branch	15
Specialized Financial Institution	8
Foreign Representative	50
Asset Management Company (AMC)	54
Credit Card Company	8
Personal Loan Company	36
Nano Finance Company	25
Credit Card	20.3 M
Debit Card	53.1 M
ATM Card	8.7 M
Personal Loan Account	12.8 M
Nano Finance Account	0.32 M
E-Money Card Account	44.3 M
Internet Banking Account*	20.5 M
Mobile Banking Account*	31.6 M

Commercial Bank Loan 2008 – Q2/2018



Consumer Loan 2008 – Q2/2018

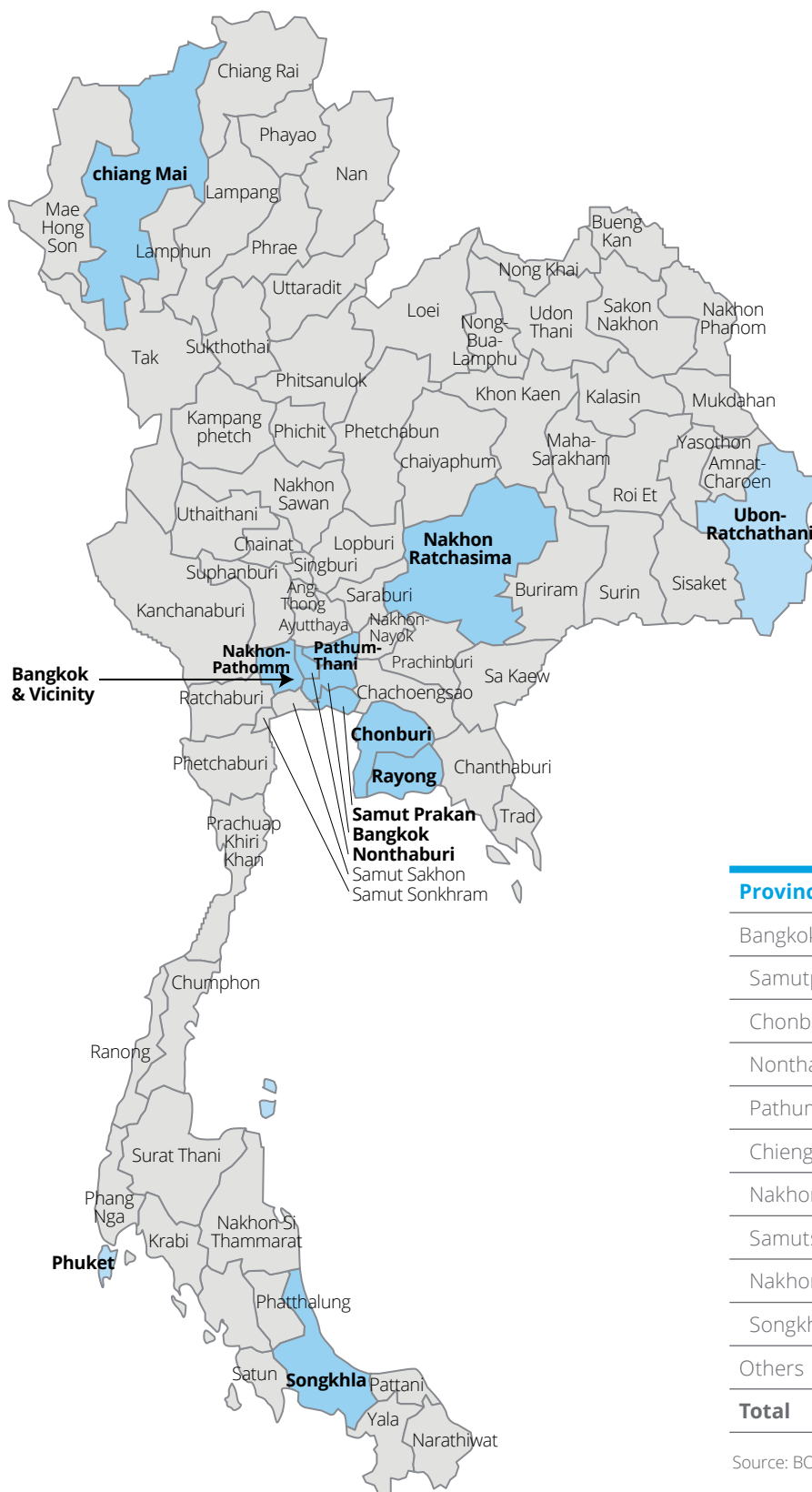


Sources: BOT (FI_CB_021) & DTTJ Estimates

Note: * Data have been revised by Bank of Thailand.



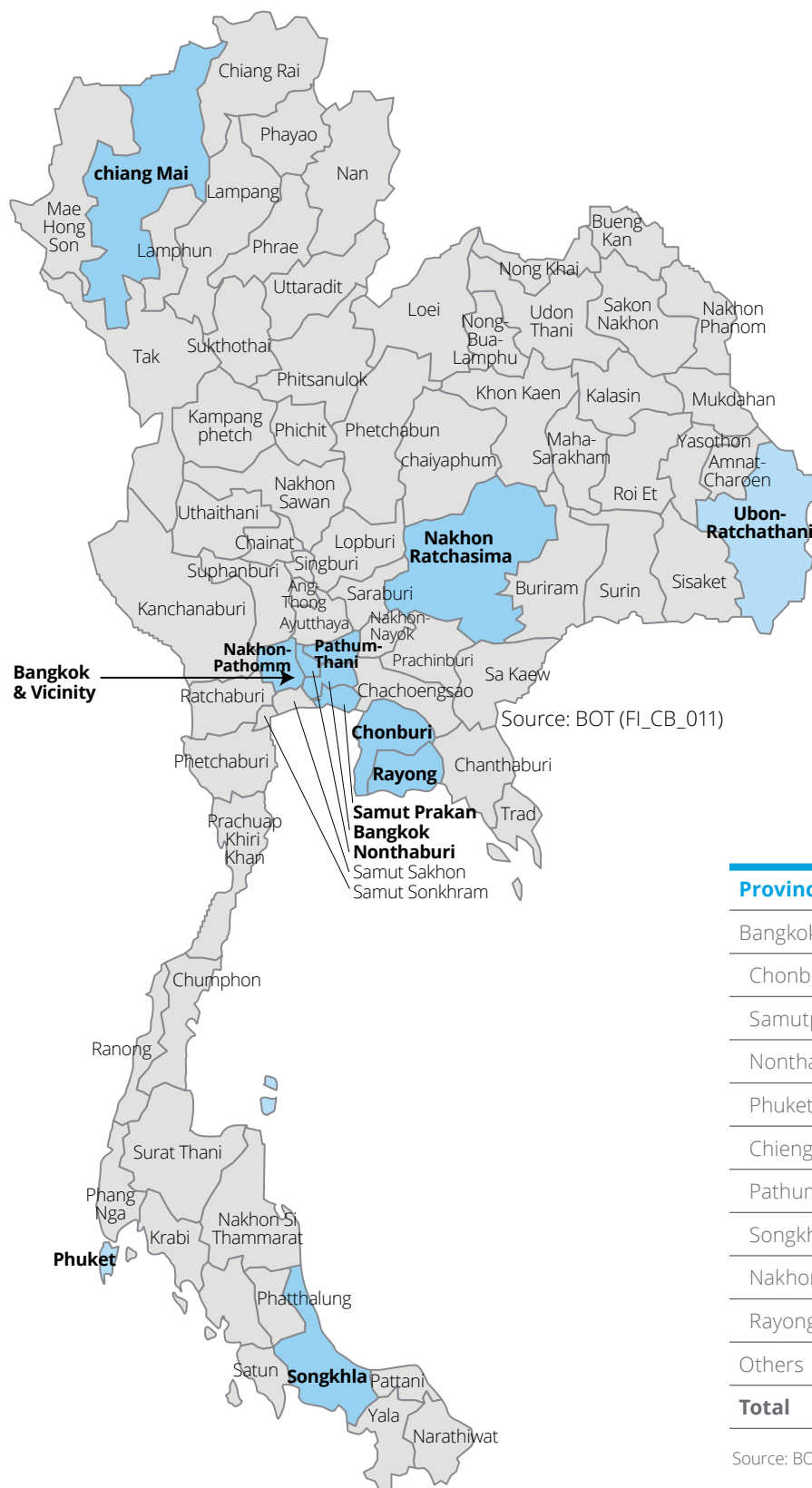
Top 10 Provinces - Deposit



Province	Trillion THB
Bangkok	8.42
Samutprakan	0.46
Chonburi	0.42
Nonthaburi	0.42
Pathumthani	0.27
Chiangmai	0.24
Nakhonpathom	0.19
Samutsakhon	0.15
Nakhonratchasima	0.15
Songkhla	0.15
Others	2.47
Total	13.34

Source: BOT (FI_CB_011)

Top 10 Provinces - Loan



Province	Trillion THB
Bangkok	9.00
Chonburi	0.31
Samutprakan	0.17
Nonthaburi	0.16
Phuket	0.16
Chiangmai	0.14
Pathumthani	0.13
Songkhla	0.11
Nakhonratchasima	0.10
Rayong	0.10
Others	1.40
Total	11.77

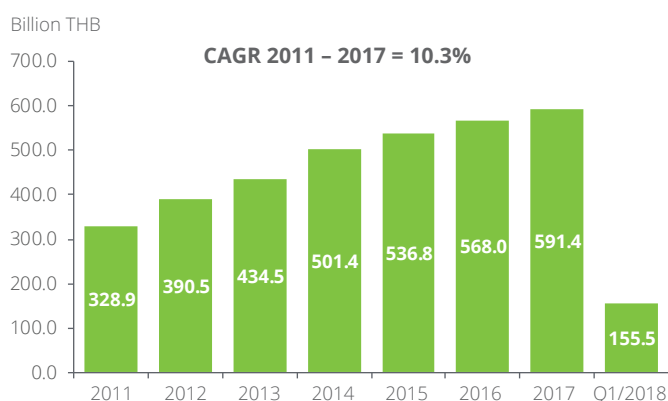
Source: BOT (FI_CB_011)



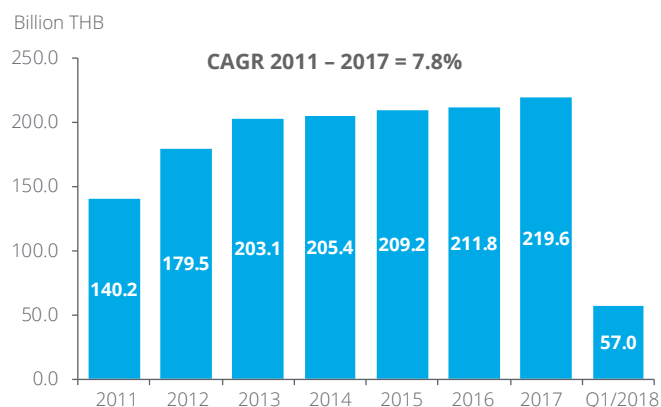
Insurance

Both life- and non-life insurance market have expanded steadily and are projected to grow during 2018 by 6.6% and 3.5% respectively.

Total Life-Insurance Premium Received



Total Non-life Insurance Premium Received



- Life insurance market has grown steadily based on past couple of years at 10.3% CAGR, whereas non-life insurance market has grown at a slower pace at 7.8% CAGR.
- At the end of 2017, total life- and non-life insurance premium grew by 4.1 % and 3.7% respectively compared to 2016's owing to improved economic conditions.
- For Q1-2018, life- and non-life insurance premium grew 6.6 % 3.5 % and respectively compared to the same period last year.

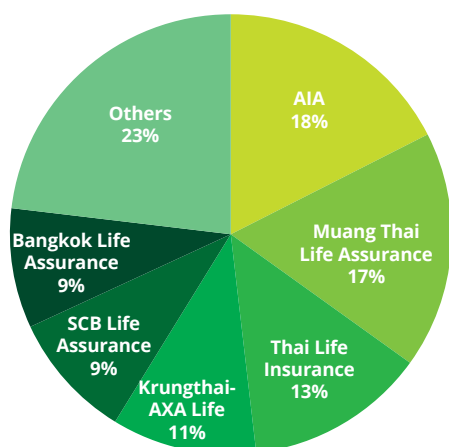
Sources: EIU, Office of Insurance Commission (OIC) & DTTJ Estimates



At the end of Q2/2018, AIA maintained its leading position in life-insurance market at 18% out of the 432.7 billion Baht. For non-life insurance, Viriyah dominated the market at 17% out of total market size of 160 billion Baht.

Life-Insurance Market Share

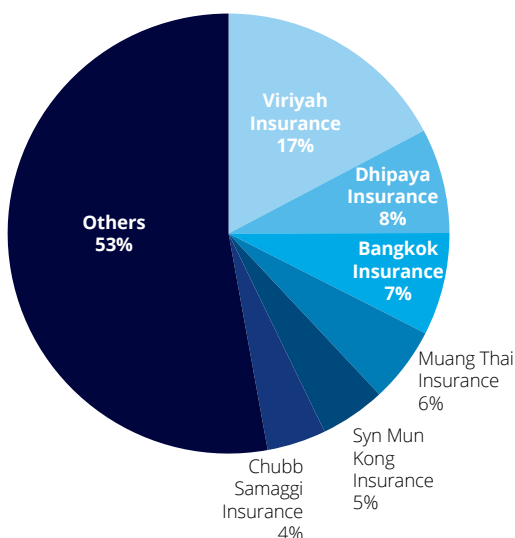
Market Value = 432.7 Billion THB



By the end of Q2/2018, 6 major players of life-insurance dominated around 77% of market share. Life-insurance market in 2017 grew 4.1% compared to 2016s'.

Non-life Insurance Market Share

Market Value = 160 Billion THB



For non-life insurance, 47% of market share belonged to 6 major players. The market growth during 2017 to 2016 was 3.7% which shown a sign of recovery from 1.2% during 2016 to 2015s' due to subdued export activities and economic stagnation.

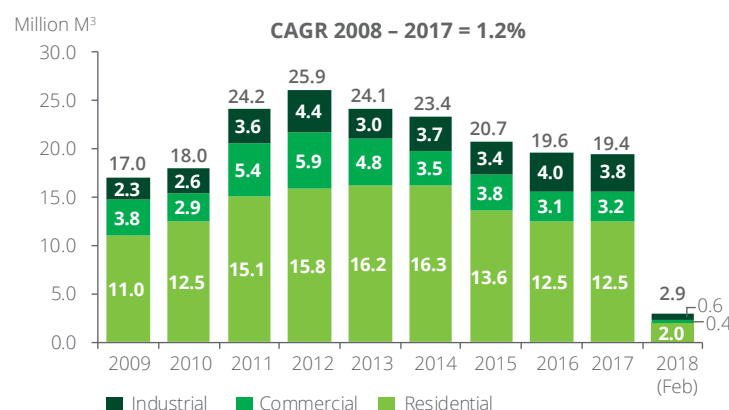
Sources: EIU, Office of Insurance Commission (OIC) & DTTJ Estimates



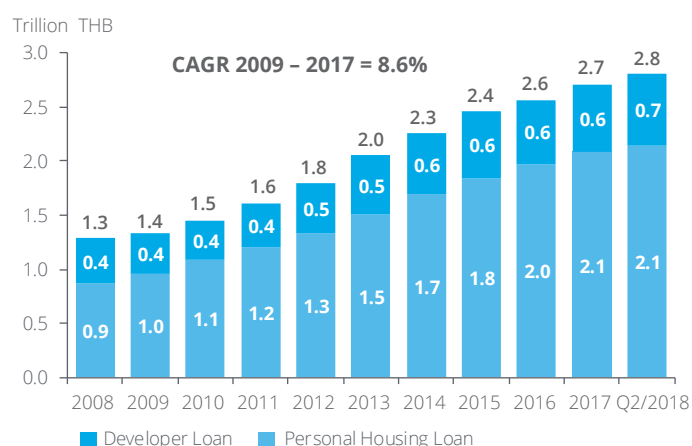
Residential Real Estate

Property loan is expected to have a medium growth momentum in 2018 due to the excess supply of property in the market. However, the government infrastructure development plan will help boost the growth.

Permitted Construction Areas in Municipal Zones



Property Loan Outstanding



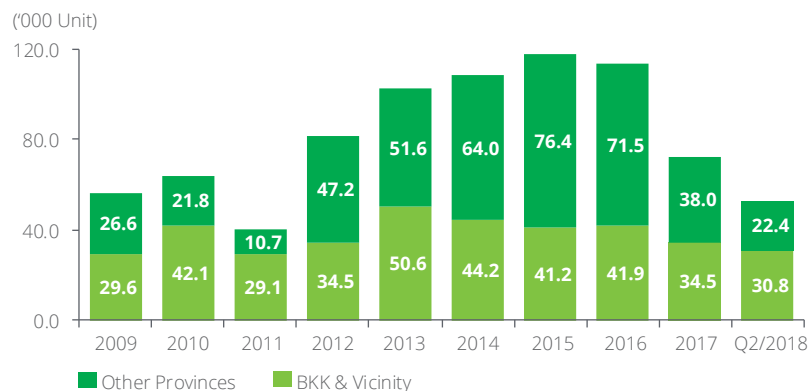
- For the first 2 months of 2018, residential construction, commercial and industrial permitted construction areas were expanded 13.5%, 40.4% and 39.5% compared to 2017s' respectively.
- Furthermore, infrastructure investment and urbanization in Bangkok and vicinity and major regional provinces are expected to continue drive the growth of property loan in coming years.

Sources: BOT(EC_EI_016_S2), GHB, REIC & DTTJ Estimates

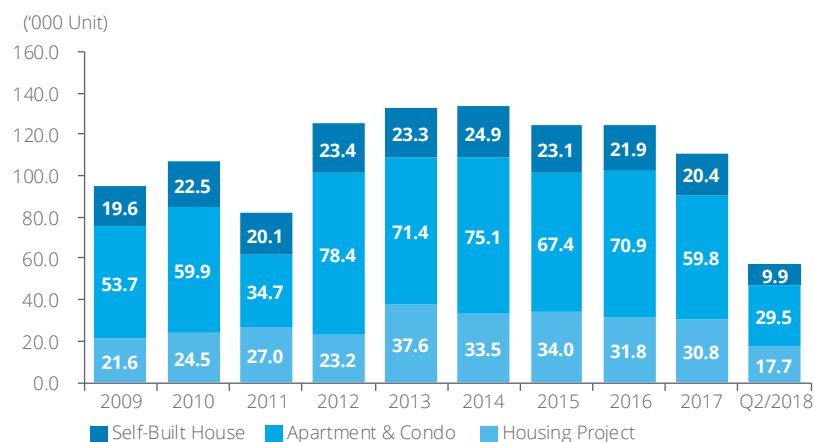


Nationwide condominium registration in Q2/2018 has shown a sign of recovery from previous year by 69%QoQ. In the same period, new housing activities in Bangkok and vicinity displays a positive growth by 8.4%QoQ.

Nationwide Condominium Registration

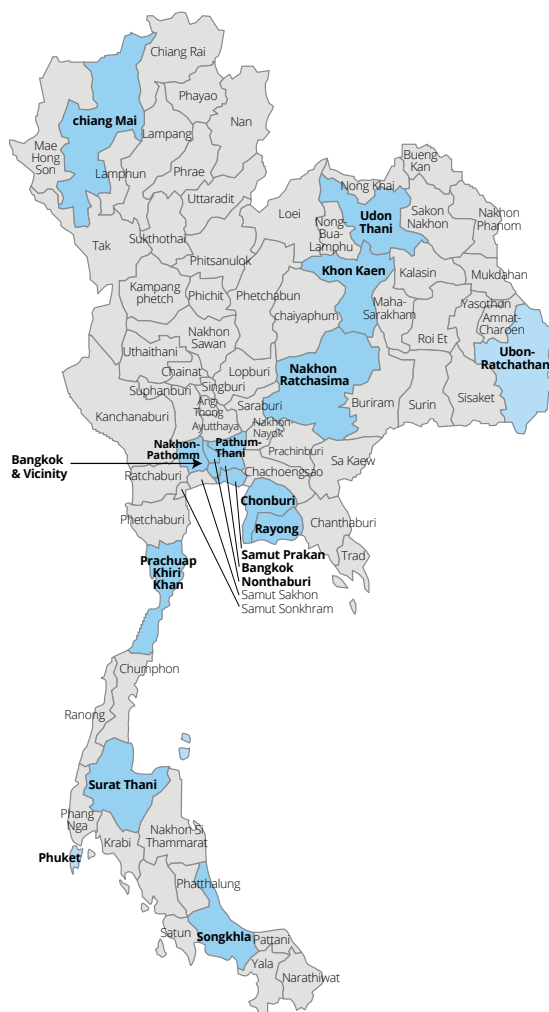


New Housing in Bangkok & Vicinity



Sources: BOT (EC_EI_009_S2), GHB, REIC, & DTTJ Estimates

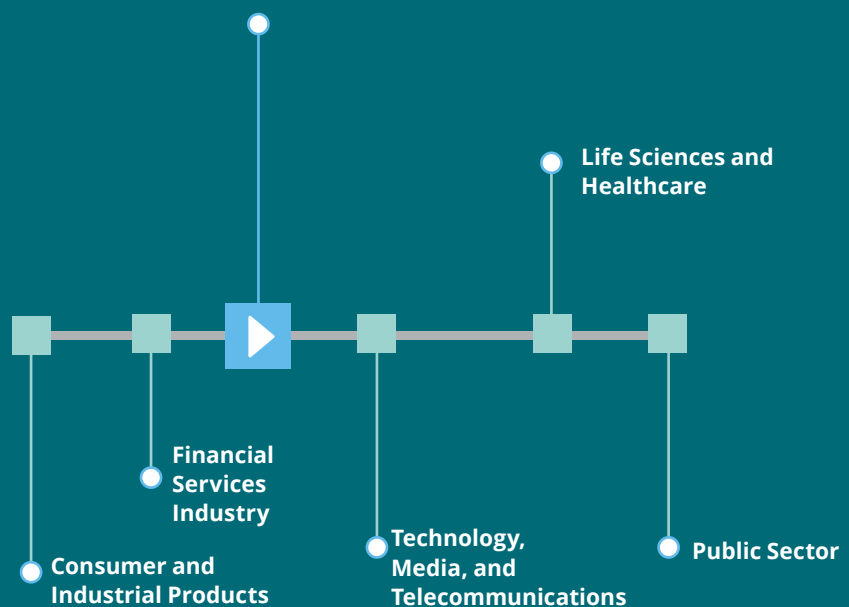
Key Real Estate Landscapes



Key UPC real estate markets

- Chiang Mai
- Chonburi
- Khon Kaen
- Nakhon Ratchasima
- Phuket
- Prachuab Kirikhan (Hua Hin)
- Rayong
- Songkhla (Hadyai)
- Surat Thani (Koh Samui)
- Ubon Ratchathani
- Udon Thani

Energy and Resources

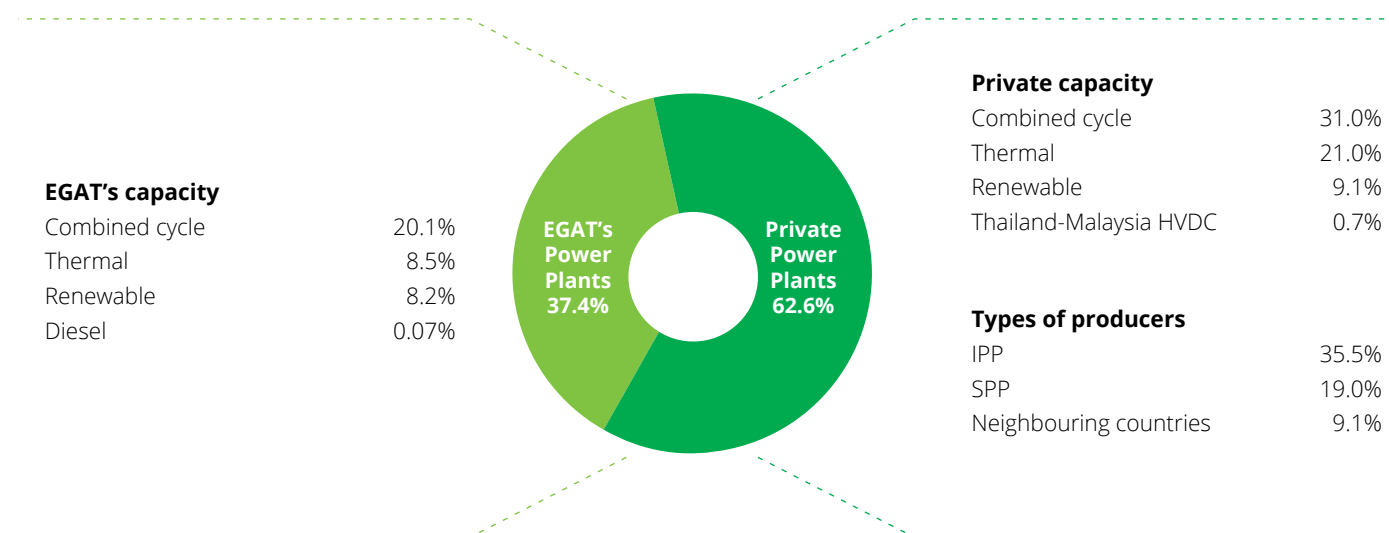




Energy: electricity

Private power plans serve approx. 63% of total electricity capacity in August 2018 with the rising proportion of renewable inputs.

Total Electricity Generating Capacity: 42,694.15 MW



Sources: EGAT & Electricity Generating Company Websites

Note: (1) Thai government has privatized electricity generating industry

(2) data as of September 2017

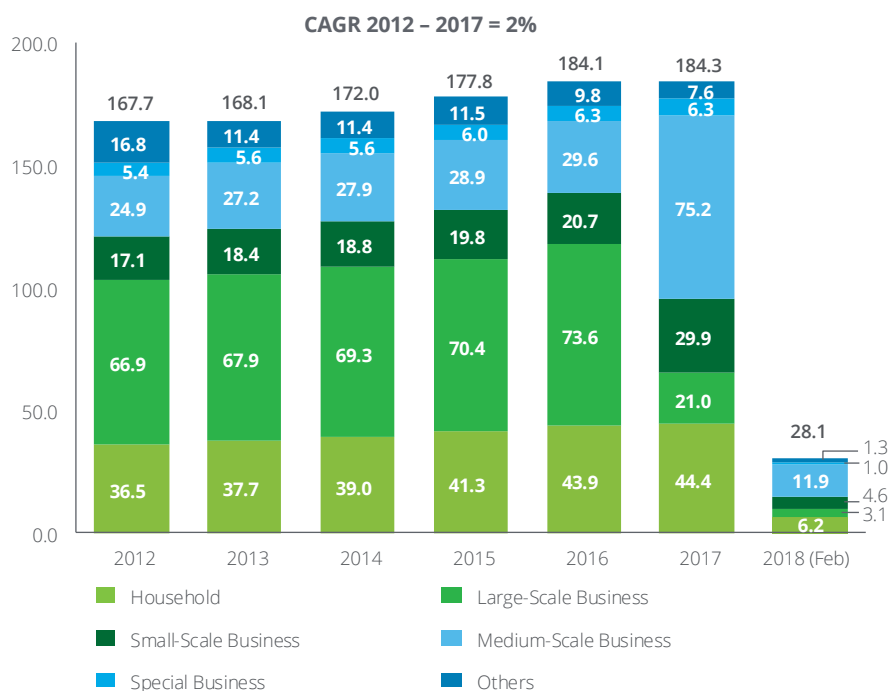
(3) MW = megawatt. 1 MW = 1 million watts



The majority of electricity consumption in Thailand stems from both large-scale business and household sector with an average long-term growth rate around 3%.

- During 2017, total electricity consumption was 184.3 billion kilo-watt hour rising 0.14% compared to 2016s'.
- For the past 2 months of 2018, total electricity consumption has increased 2% compared to the same period in 2017.
- Regarding PDP2015, fossil fuels remain the major input of electricity generating in Thailand during 2015 - 2020 accounting for around 80%.
- But in 2036, the final year of PDP2015, the proportion of fossil fuel input is projected at 60%, while the use of renewable and other inputs will reach 40%.

Thailand Electricity Consumption



Sources: BOT, EGAT, Energy Regulatory Commission (ERC), Ministry of Energy & DTTJ Estimate

Note: kw hour = kilo-watt hour



Oil & gas

Thailand's energy balance at the end of Q2/2018



Primary energy supply: 59,546 ktoe

- Production 31,572 ktoe
- Import 34,488 ktoe
- Export (4,853) ktoe
- Stock (1,661) ktoe



Conversion process: (18,158) ktoe¹

- Transformation (14,425) ktoe
- Own Uses & Losses (3,733) ktoe

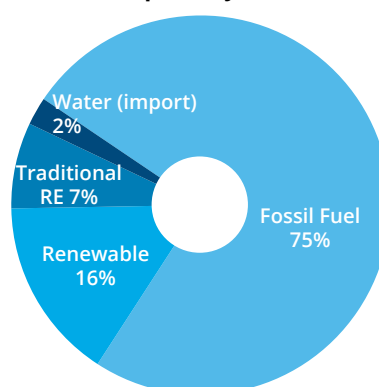


Energy consumption: 68,036 ktoe

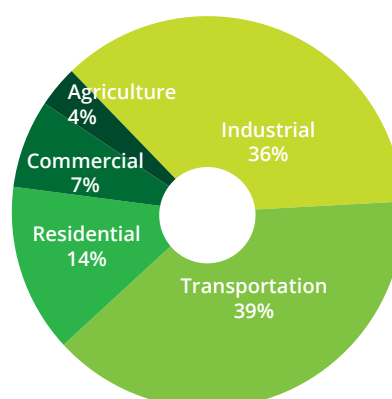
- Non-Energy Uses 5,245 ktoe²
- Final Consumption 36,143 ktoe



Final consumption by fuels



Final consumption by sectors



Source: Thailand Energy Balance 2016 by Department of Alternative Energy Development and Efficiency - Ministry of Energy (dede)

Note:

1. Transform raw energy inputs to be usable energy outputs

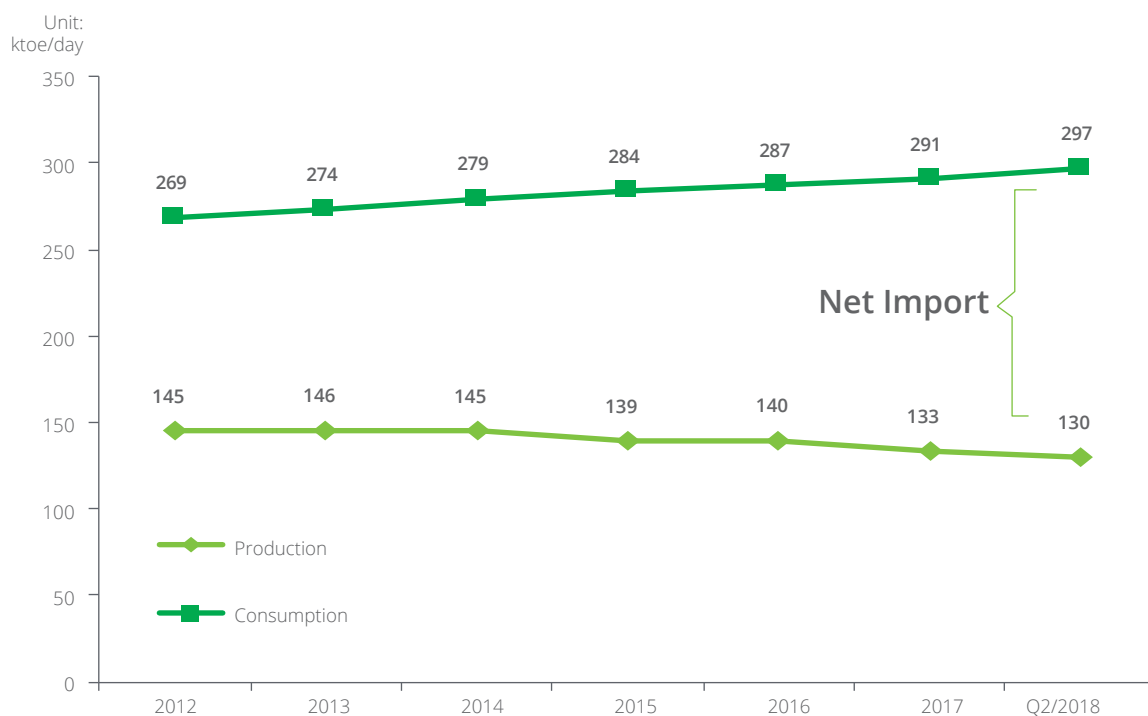
2. Non-Energy Use means raw materials for petrochemical industries

ktoe = kilo tonne of oil equivalent. 1 ktoe = 7,256 barrel of oil.



Oil and gas remain the biggest proportion in both total energy consumption and production in Thailand.

Consumption & production of commercial primary energy

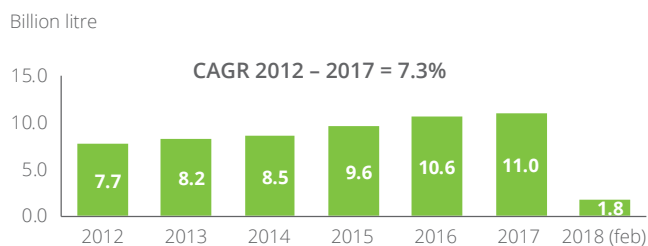


- During 2017, Thailand is the second-largest consumer of energy in ASEAN at 133 million tonnes oil equivalent (mtoe) behind 175 mtoe in Indonesia.
- Industrial and transportation represented 36% and 39% of total energy consumption in Thailand respectively and are expected to grow in line with economic growth.
- Fossil fuels will continue to dominate Thailand's energy mix. The electricity generated from gas-fired power plants will increase slightly in the coming years as a result of lower costs. Thus, Thailand will import more natural gas.

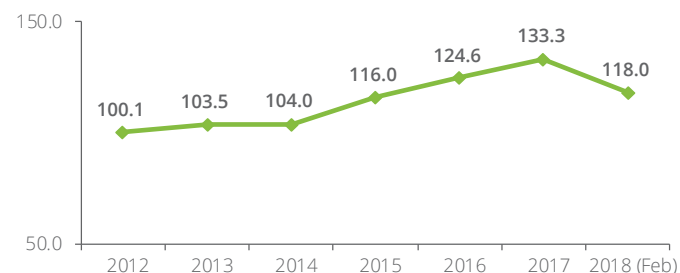


Diesel and Benzene/Gasohol sales have shown a strong correlation with economic growth as the growth rates are in the similar pace.

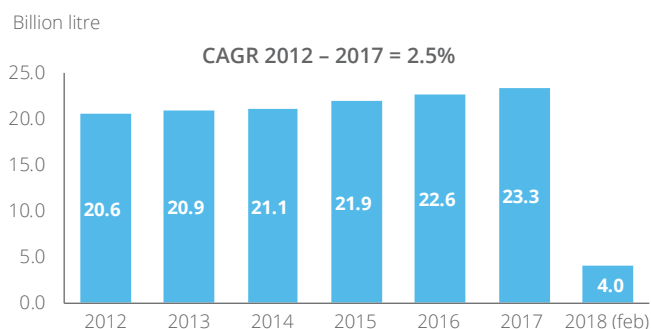
Benzene/Gasohol Sales



Fuel index (Base Year 2010 = 100)



Diesel Sales

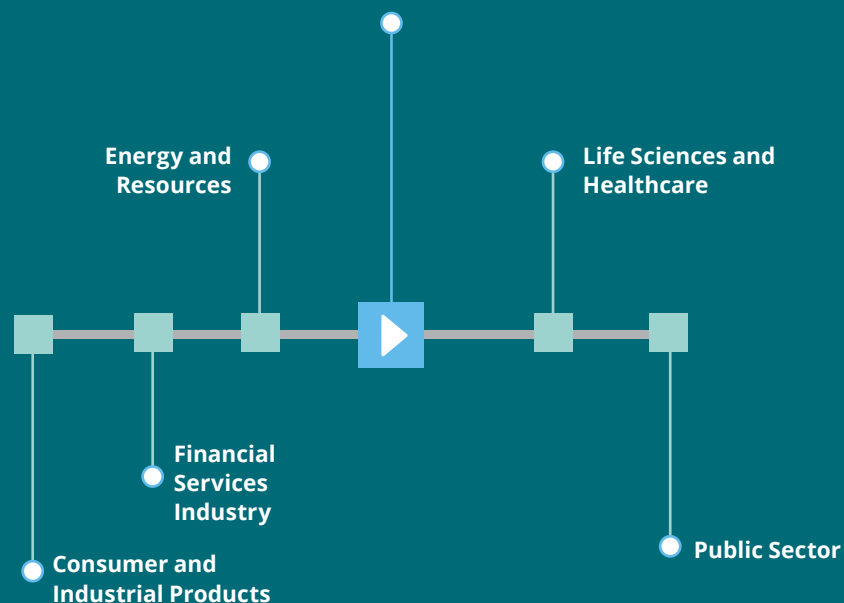


- From January – February 2018, Fuel Index dropped by (11.4)%. However, sales volume of benzene/gasohol and diesel during the same period grew 5.8% and 4.1%YoY respectively.
- Sales of Benzene/gasohol has grown more rapidly than Diesel at CAGR of 7.3% to 2.5% respectively.
- It is forecasted that the consumption of both benzene/gasohol and diesel will rise around 5% owing to the increase in car sales and improved economic conditions.

Sources: BOT(EC_EI_015_S2) & EIU Estimates for 2018

Note: ktOE = kilo tonne of oil equivalent. 1 ktOE = 7,256 barrel of oil

Technology, Media, and Telecommunications

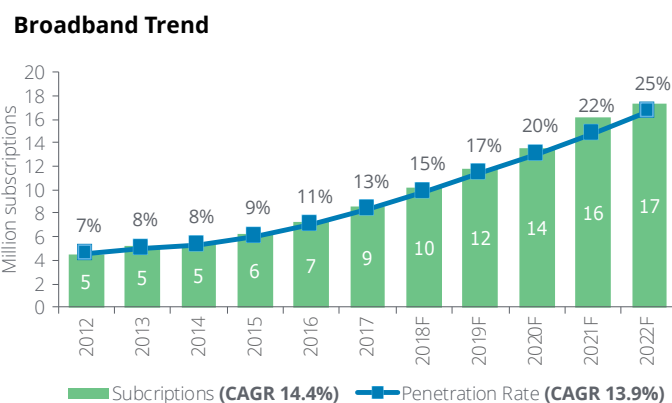
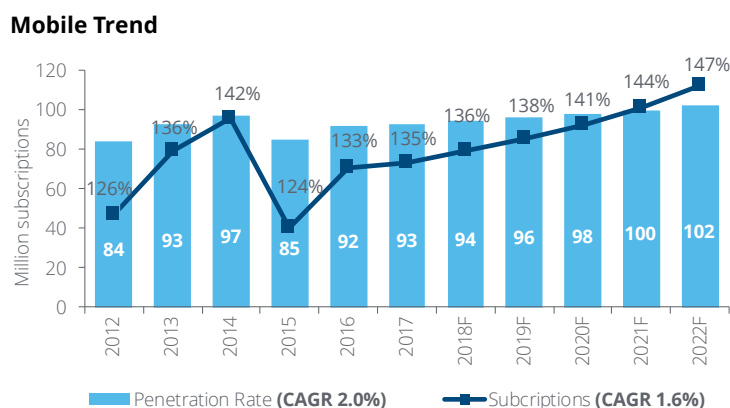
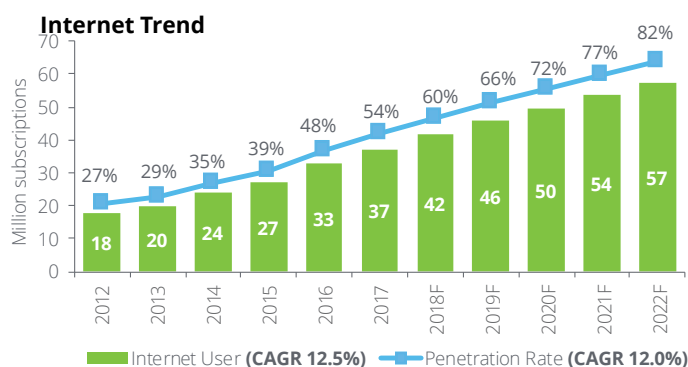




Telecommunications

Mobile subscriptions have recovered from 2016 onwards. The growth of both internet and broadband services in 2017 and first half of 2018 remains on track.

- In the longer term, telecom market growth will be supported by the launch of new services associated to the digital trend and strong demand for mobile Internet services, particularly in urban areas.
- Digital Economy Agenda by Thai Government will drive Internet and broadband service demands across various sectors in the coming years. Aggressive marketing campaigns for broadband services are underway and competition to extend the customer-base has intensified.

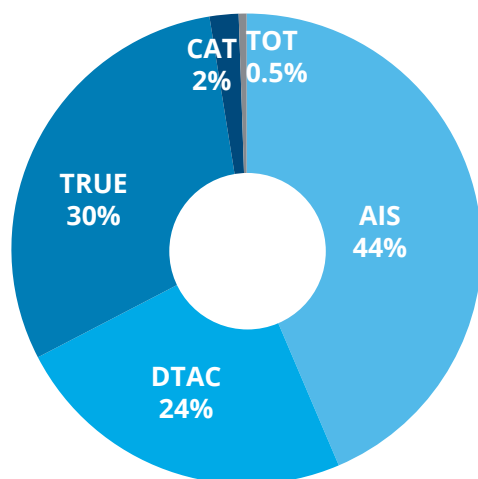


Sources: EIU, NBTC, & Ministry of Digital Economy and Society (MDES)

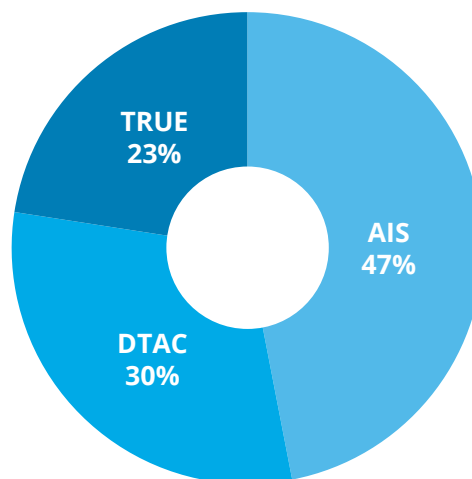


Intense competition among three major mobile operators continues with innovative services and marketing campaigns to boost advantages.

Mobile Service Market Share 2018-Q2



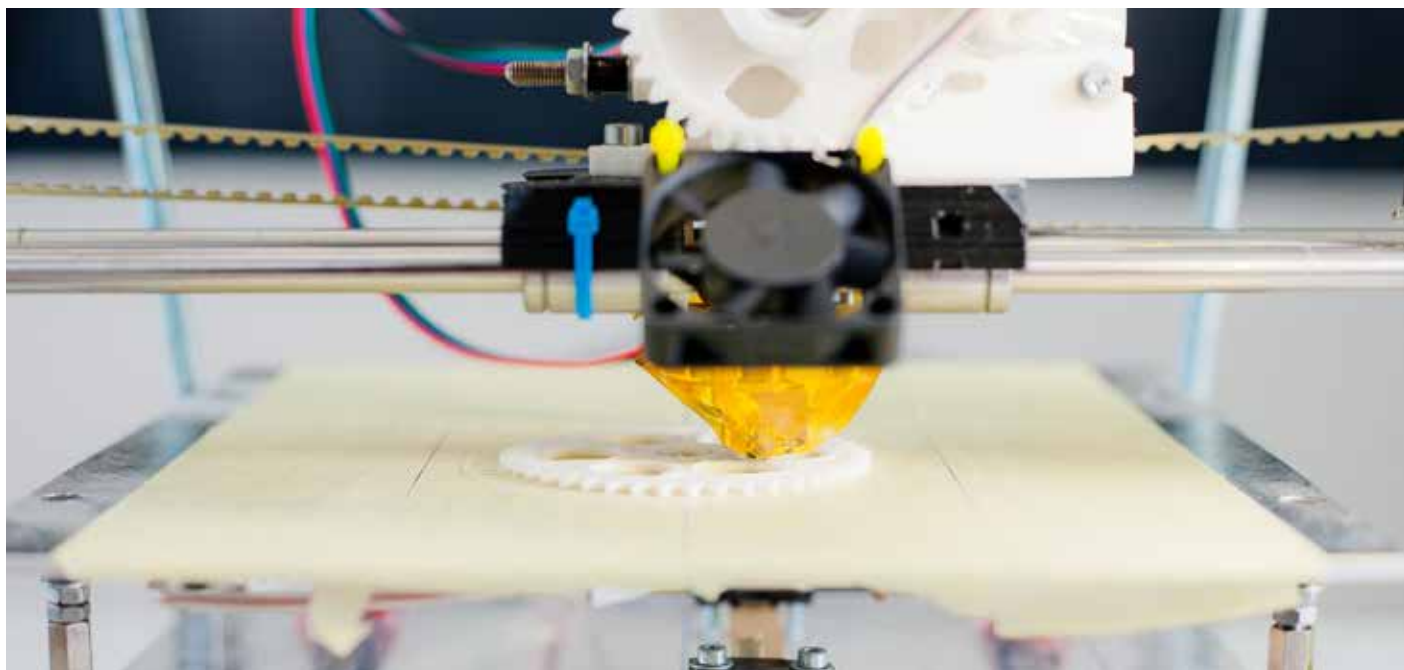
Mobile Internet Market Share 2018-Q2



- In the second quarter of 2018, Advanced Info Services (AIS) led the mobile market with 43.6 percent market share, follow by True Corporation has a 30.1 percent from 29 percent in 2017 and Total Access Communication (DTAC) has a 24 percent of the market.
- Internet and mobile banking are forecasted as the major growth areas in the coming years. Regarding the Bank of Thailand's statistics, Mobile banking transactions in 2017 rose by 110% YoY.

Sources: EIU, Companies' Annual Reports and Websites, & NBTC

Note: Market Share Data as of Q3-2016

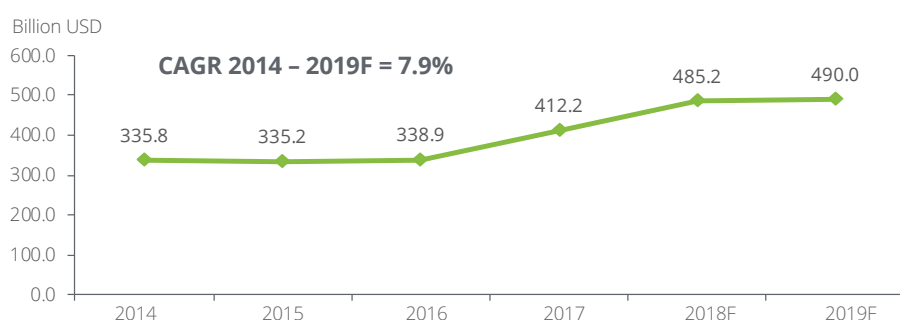


Electronics

Global electronic industry still continues a moderate growth path in coming years, but heavily relies on economic conditions.

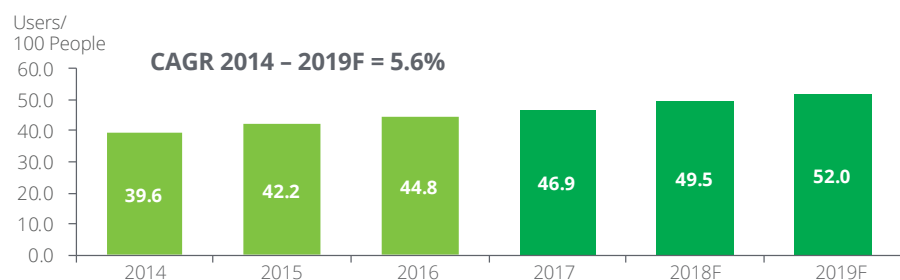
Computers & parts

Global Semiconductor Sales



- The global semiconductor sales in 2017 grow by 21.6% from 2016 or reach 412.2 billion USD as a consequence of an economic rebound in many major countries. An expected economic downturn in China and US in 2018 will have a considerable impact. However, the growth form first and second quarter is around 20% over the same quarter last year which increase the prediction of 2018 global semiconductor sales to 485.2 billion USD.

Personal Computer User



- According to the information, it indicates that the trend of computer penetration is growing steadily as a result of digitalization. In 2018, there were almost 50 computer users per 100 people and it will keep increasing over the long term especially in under developing and developing countries.

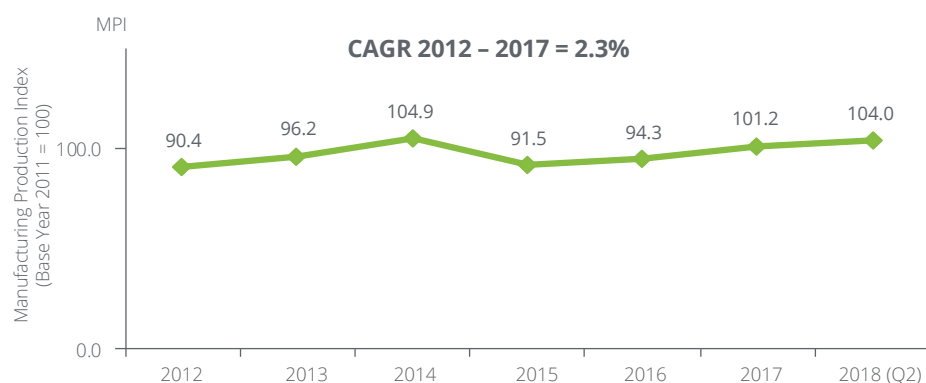
- Apple and Samsung still dominate the mobile phone market. Meanwhile, there are some new players entering the market to steal share from these two big players like Huawei and Xiaomi. This creates fierce competition in the market. However, it also indicates that the demand is still increasing over the long term.

Sources: EIU, OIE, Semiconductor Industry Association (SIA), & World Semiconductor Trade Statistics (WSTS)



A sign of recovery in computers and parts sector is evident as a result of trade recovery. However, the sector is in the stagnant phase caused by technological shifts and innovations.

Production

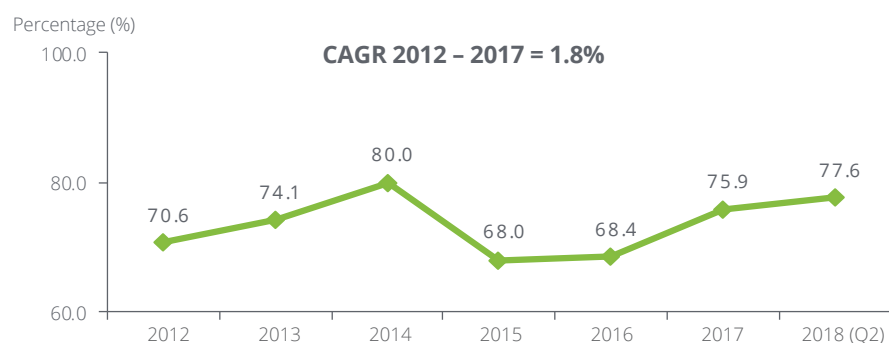


- MPI and capacity utilization in 2017 were at 101.2% and 75.9% rising by 6.9% and 7.5% respectively. Furthermore, the number in first half of 2018 has displayed a growth trend which demonstrate a slight recovery in computers and parts businesses.

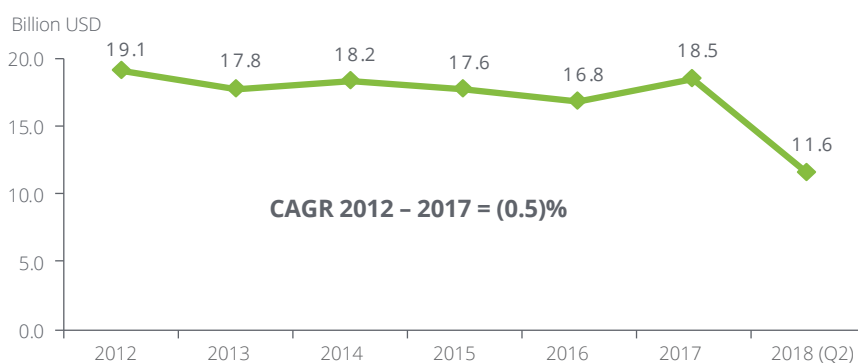
- As a result of trade recovery, MPI, Export, and capacity utilization are projected to improve from 2016's.

- Due to the contraction of computer and parts industry across the world, Thailand can no longer take great benefits from this industry as before. Value has migrated to growing adjacent segments (i.e. tablet, smartphone).

Capacity Utilization



Export



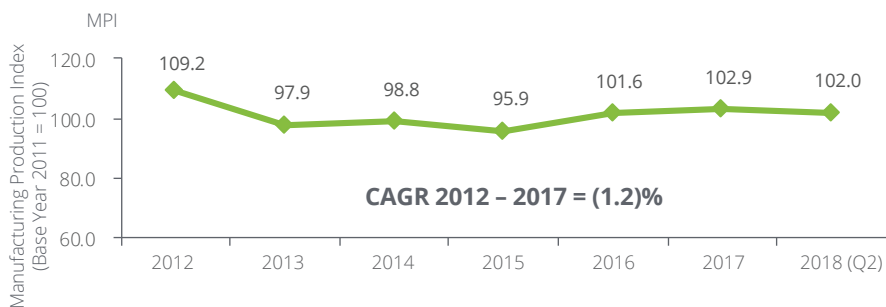
Sources: DTTJ Estimates, Department of International Trade Promotion (DITP) & OIE



Domestic electrical appliances

Domestic electrical appliances industry in 2018 is likely to face a slow growth due to a slowdown in real estate industry which is partly in correlation with the industry.

Production



- From 2017, MPI improved slightly thanks to an overall economic recovery which stimulated domestic consumption. In contrast, declining demand in overseas caused the decrease in export value. However, in 2018 export has a good sign of recovery due to the overall country export is increase.

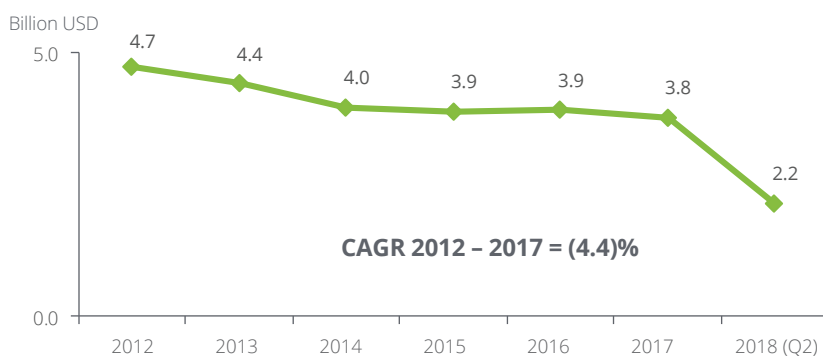
- In general, there is a fierce competition in electrical appliances in the domestic market.

- Thailand is no longer attractive in the electronic industry. Thus, Thailand is being seen as a springboard to other parts Southeast Asia particularly CLMV.

Capacity Utilization



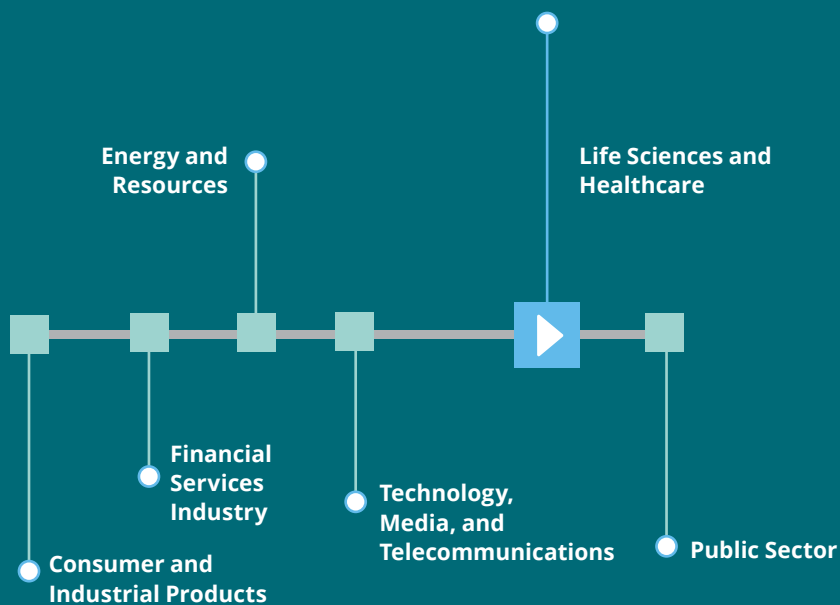
Export



Sources: DTTJ Estimate, DITP, & OIE

Note: Domestic Appliances include several electrical products such as air conditioner, rice cooker, refrigerator, water pot, electric fan and so on.

Life Sciences and Healthcare

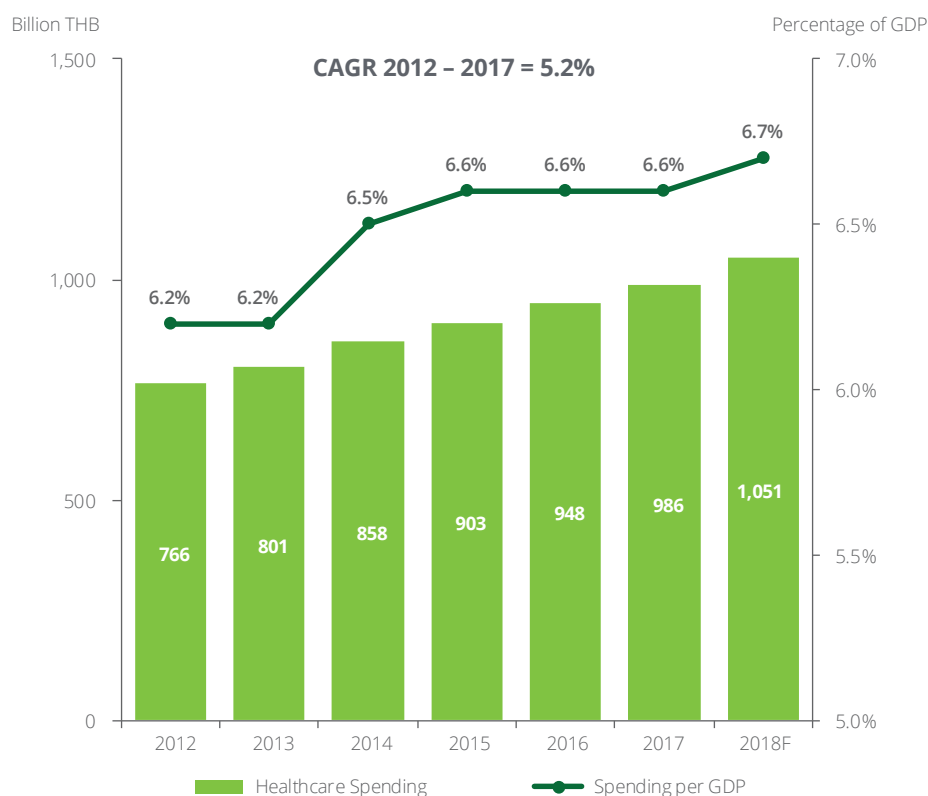




Healthcare services

Healthcare spending in Thailand is forecasted to increase steadily as shown in past several years primarily due to aging population and Universal Healthcare scheme.

Healthcare Spending



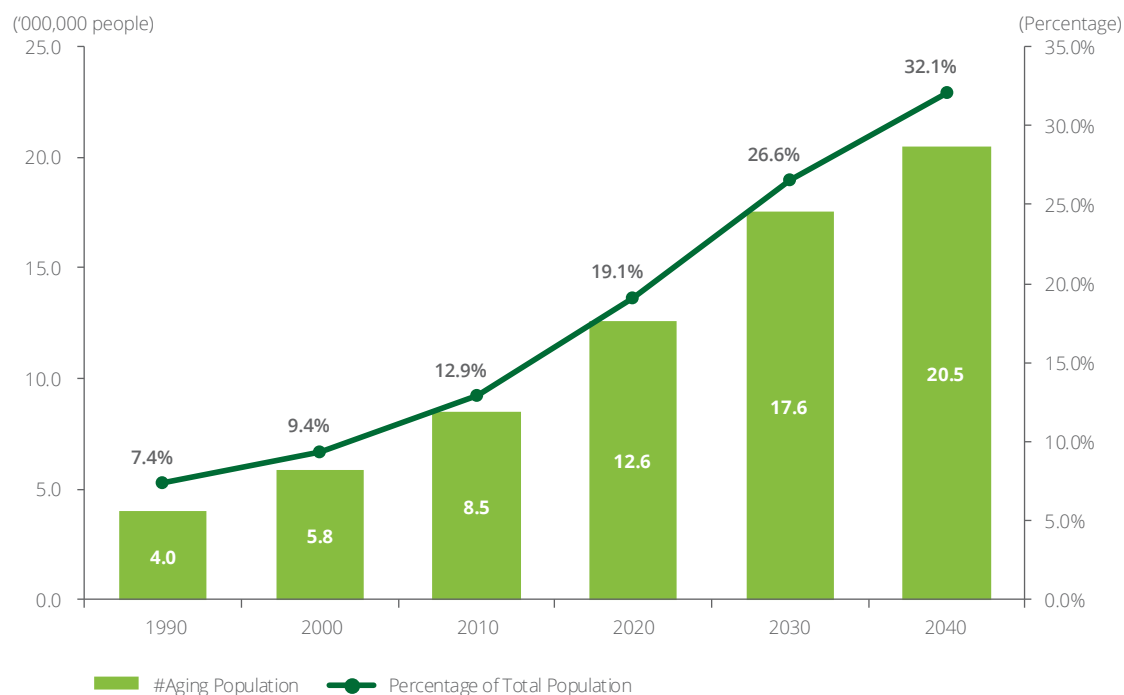
Sources: EIU & NESDB

- Thailand spent on healthcare around 6.6% of GDP in 2017.
- The public sector will still dominate healthcare spending in Thailand. The rolling out of central healthcare funding will cause some categories of care to be no longer free of charge, while people are encouraged to have private health insurance to cover the costs.
- Over the long-term, healthcare expenditure per GDP is projected to rise to 6.8% by 2021 largely affected by an aging population, a growing prevalence of chronic diseases and new technologies.



The increasing trend of aging population will put pressure on healthcare spending over the long term.

Aging Population Statistics

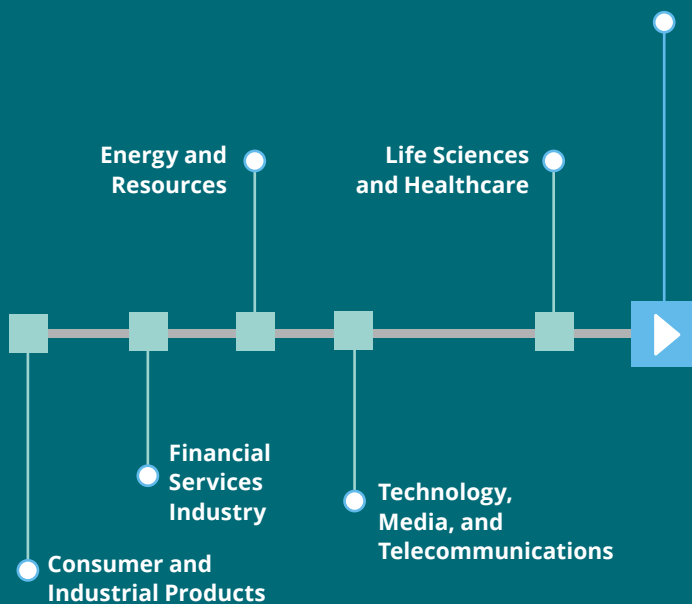


- Based on the current situation and historical statistics, it is projected that aging citizens will represent more than 30% of total population by 2040. Birth rate and population growth will still be a critical issue in the long term.
- The government will have to take into consideration regarding aging society issue as healthcare services must be well-prepared to cope with future needs.

Sources: EIU & NESDB

Note: Aging population means those citizens with the age above 60 years old.

Public Sector

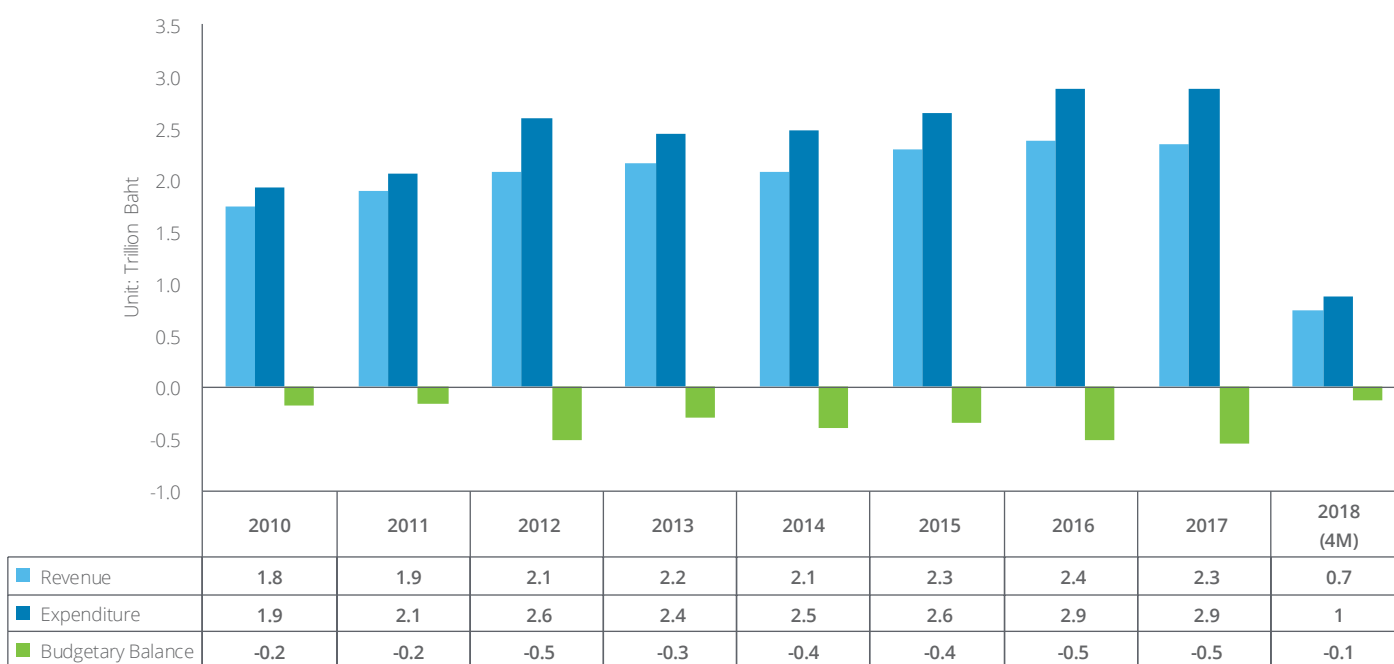




Public Sector

Public investments are still ongoing, therefore, fiscal deficit will keep continue in the future.

Government Revenue and Expenditure for 2010 – 2018 (4M)



As the expenditure of the Thai government is greater than its revenue, the fiscal deficit has become the major tool in financing to meet the spending needs.

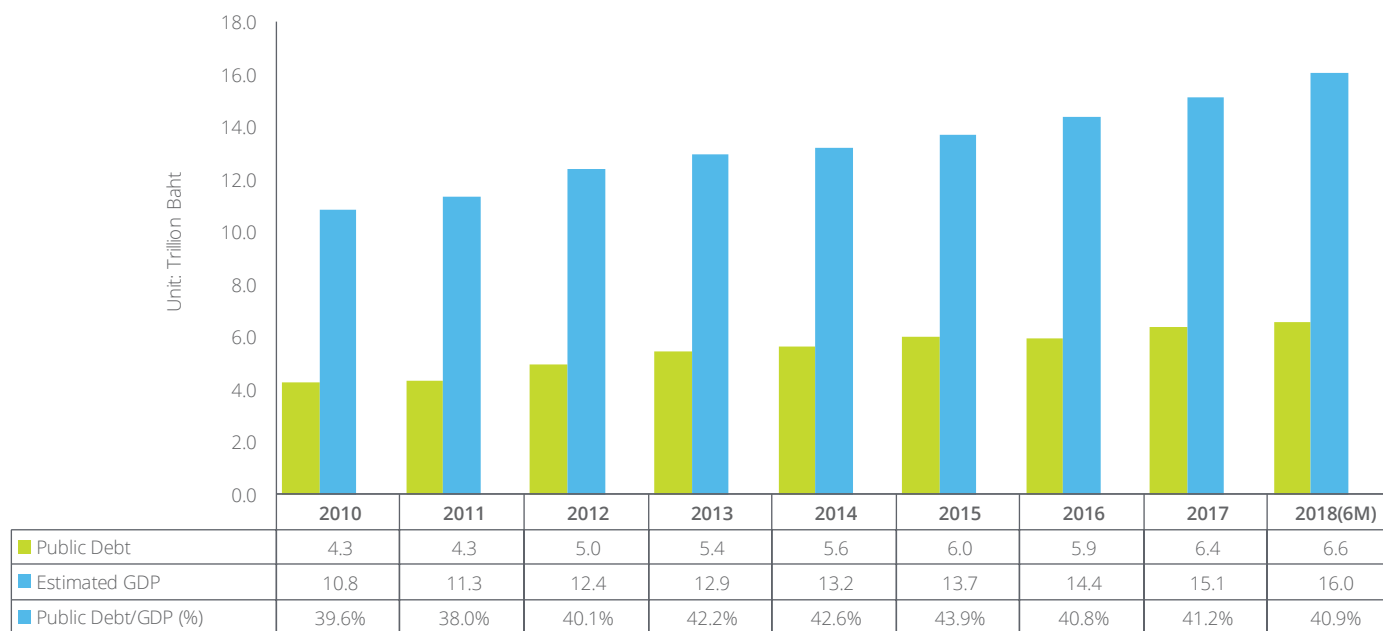
Source: Ministry of Finance – The Royal Thai Government

Note: The Royal Thai Government's fiscal year starts from 1 October this year till 30 September next year.



Public Debt remains healthy at 41% which is lower than ceiling level of 60%, imposed by Public Debt Management Act.

Public Debt Level Against GDP during 2010 - 2018(6M)



Even there are uncertainties in the global economies especially in China and US which expect to face a slowdown. The government can still deploy deficit fiscal policy to retain the momentum of economic growth in the coming years as the debt level is maintained at 41%, below the ceiling level at 60%.

Source: Ministry of Finance – The Royal Thai Government

Note: The Royal Thai Government's fiscal year starts from 1 October this year till 30 September next year.



The execution of Eastern Economic Corridor (the EEC) projects has been underway to create the next wave of competitiveness under Thailand 4.0.

EEC is a strategic location of Asia-Pacific region

- Strengthen “the existing Eastern Seaboard” to become the world-class economic zone.
- Combine public and private investment budget of 1.5 trillion Baht over 5 year period (2017 – 2021).
- A comprehensive connectivity and logistics infrastructure (i.e. double-track railway, motorway, airport, deep seaport, industrial estate, and industrial park) covers Bangkok, Chachoengsao, Chon Buri and Rayong.
- 5 priority out of 15 key projects to be kicked-off in 2017 are as follows:
 - U-Tapao Airport;
 - Laem Chabang Port;
 - High speed rail;
 - Target industries (i.e. Bio-Economy, Modern Automotive, Electronics, Robotics, Aviation, and Medical Hub) and;
 - New cities.

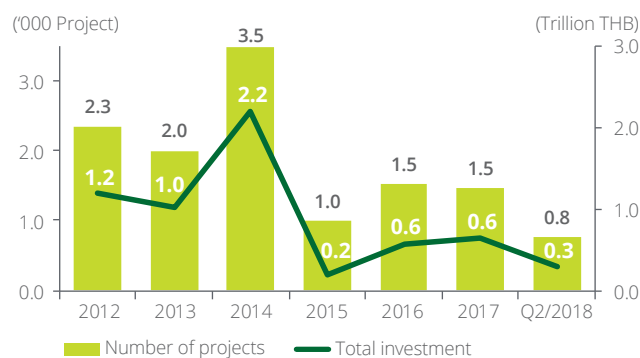
Source: “Eastern Economic Corridor Development project” Driving Forward... 15th February 2017 by Thailand Board of Investment (BOI)



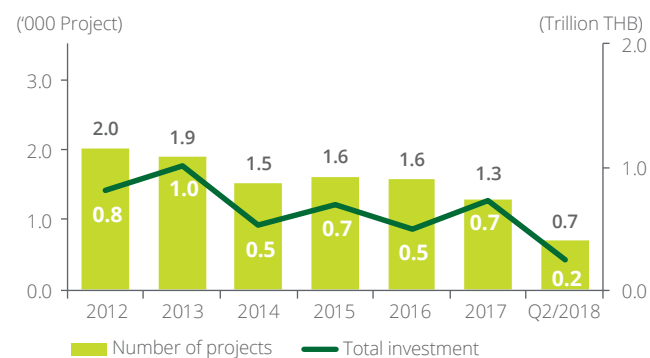


New incentives have been launched by BOI to accelerate private investments in support of Thailand 4.0.

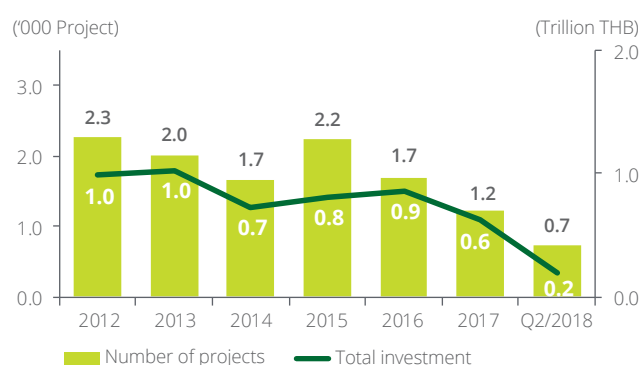
Net applications received by BOI



Promotion certificates issues by BOI



Applications approved by BOI



- In pursuit of Thailand 4.0, new investment benefits have been given to investors in targeted industries by BOI in order to support the roadmap towards Thailand 4.0.
- EEC is underway with five main priorities including U-Tapao international airport, Laemchabang port, investment in targeted industries, new motorway, and tourism development.
- In fact, Thailand's BOI investment policy not only provides attractive schemes for investors but also encourage them to deploy Thailand as a springboard to other AEC member states.

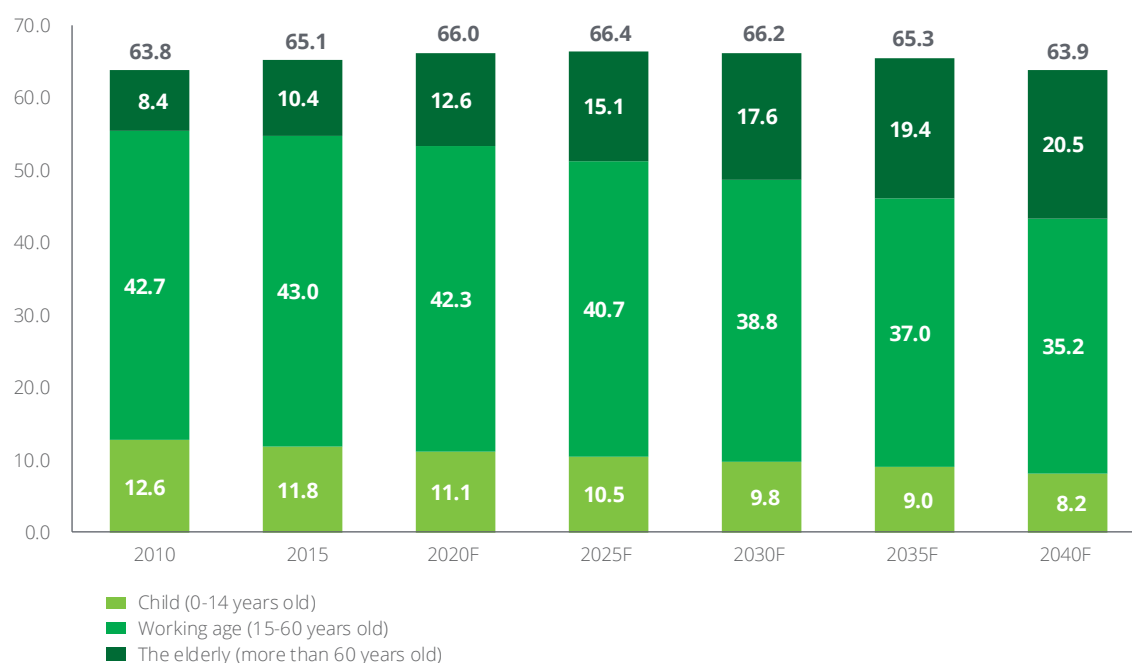
Sources: BOI & BOT



The aging society is still a serious issue in Thailand's economy as the reduction of working age proportion will impact on productivity which directly links to GDP growth.

Thailand Demographic Structure (2010 – 2040)

(Million People)



- Based on NESDB projected data, both child and working-age population continue the negative growth years over years with CAGR of (1.4)% and (0.6)% respectively.
- With the moderate population growth rate of 0.4%, it is expected that by the end of 2040 the number Thai population will tie with 2010's level.
- Thai Government has adopted incentive schemes in both tax and non-tax mode to encourage the population growth rate, but also implemented policies (e.g., the elderly fund, the senior citizen health insurance) to support the elderly people.

Sources: NESDB, The Royal Thai Government, & College of Population Studies

Overview of the Key Sector

Q2-2018



The **Consumer and Industrial Products** is expanded by grew 7.1%, comparing with a 6.0% QoQ favorable by the expansion of country export and the acceleration of domestic demand.



Wholesale and retail trade are grow continuously by 7.2% compare to 7.0% in the last quarter. **Wholesales Index** increased by 4.3%, mainly supported by 12.2% growth in wholesales of other goods. Furthermore, **retail Sales Index** increased by 7.0% from 6.4% in previous quarter supported by retail sales of other goods.



Tourism sector grew by 11.1% in the first half of 2018 compared with 6.0% in the same period last year, **tourism receipts** stood at 1,015.9 billion baht, number of foreign tourists increased by 12.5%, and average **occupancy rate** was at 73.48% compare to 67.46% in the same period last year. However in the second quarter, its is **slightly slow down** from the deceleration in the number of tourists and tourism receipts at 9.4% from a 12.8% in the previous quarter.



Financial Services the commercial banks and other financial institutions has maintained their deposit and lending rates at the same level as in the previous quarter. The **total loan outstanding** at the end of Q2/2018 was 15.1 trillion Baht growing by 7% YoY. Corporate, SME and Consumer loan proportion were 37.5%, 34.2% and 28.2% respectively which in line with the continually improvement of economic condition. During the same period, **NPL proportion** reached 0.42 trillion Baht or 2.93% of total loan similar to those in the previous quarter.



Energy and Resources sector increased by 1.9%, compared to 0.3% growth in the same quarter last year. **Electricity production and sale** increased by 2.3%, slightly slowed down from 3.3% growth in the previous quarter, mainly due to the lower demand for electricity used in household from lower average temperature over the country. For **sales volume** of **benzene/gasohol** and diesel during the same period grew 5.8% and 4.1%YoY respectively. Its predicted to continue rise around 5% owing to the increase in car sales and improved economic conditions.



Telecommunications services expanded by 11.6%, increase from 9.5% growth in the previous quarter. Furthermore increased 10.9% from the same quarter last year, according to a better operating result of telecommunication service providers.



Navigating the future of work

Executive Summary

Topical Views from Our Expert

Thailand Economic Review 2018

Southeast Asia Economic Review 2018

Industry Sector Update

Survey

Navigating the future of work



Author: Dr. Narain
Chutijirawong / Director, MCBT

'Learning is a lifetime journey', we may have heard this words of wisdom countless times. We tend to just take it for granted and may never seriously apprehend it. In the future, or even now, this words is getting more relevant as we have witnessed the new discovery of knowledge and technology has replaced or surpassed our knowledge that we hold before. It is important to keep learning and updating ourselves to stay on top of it.

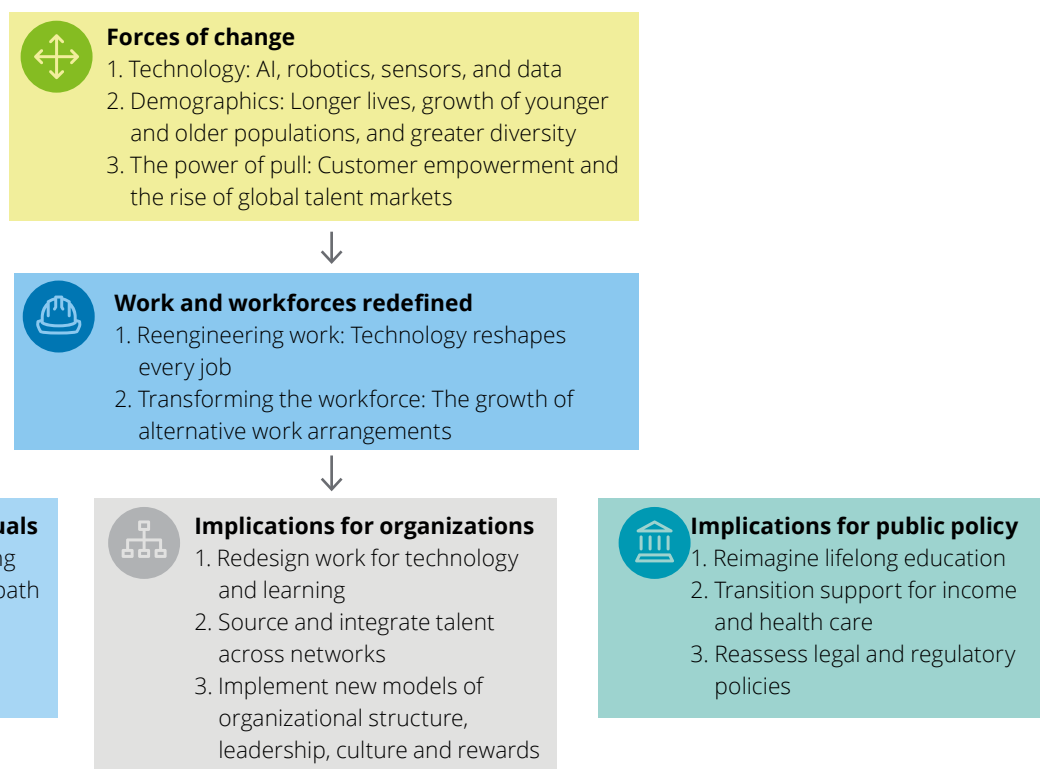
"The future is already here"

What the 'Future' looks like would depend on the point of view of each person, here it doesn't mean about thousands of robot running or working around us. Rather we focus on the future of work which center around people, business and society. The working population's shifting demographics, with the workforce growing older in developed nations with new younger generation start joining workforce more and more. The traditional way of hiring employee has been changed dramatically, we have heard the word - global gig economy in which most individuals work for themselves, lending their labor—physical or intellectual, online or in person—to a variety of employers on their own time and terms.

The outlines of the picture are already emerging. Indeed, it may be misleading to explore all this under the heading of "the future of work," which suggests that the changes are not yet here, and will occur in an indeterminate number of years. The truth is that many of these changes are already playing out, driven by forces that have been underway for decades. As science-fiction novelist William Gibson reminded us, "The future is already here—it's just not evenly distributed."

A FRAMEWORK FOR UNDERSTANDING THE FUTURE OF WORK

What are the components that collectively constitute "the future of work"? Based on Deloitte analysis (see picture below), we start by explaining the forces of change that create a driving force to work and workforce itself. Then we posit how these will impact to individuals, organizations and public policy makers.



Source: Deloitte analysis

FORCES OF CHANGE

Technology: Artificial intelligence, robotics, sensors, and data

Technological advances—for example, in the areas of robotics, artificial intelligence (AI), sensors, and data—have created entirely new ways of getting work done that are, in some cases, upending the way we use and think about our tools and how people and machines can complement and substitute for one another.

Indeed, exponentially improving digital technology and infrastructures are reshaping the economics of work across the spectrum. On one hand, automation is dramatically lowering the cost of certain routine tasks, as is expanded geographic access to low-wage labor. On the other, organizations can significantly augment the value of other tasks by leveraging technology capabilities and the increased ability to access deep specialization, wherever it is located.

Demographics: Longer lives, growth of younger and older populations, and greater diversity

Demographic changes are shifting the composition of the global workforce. In most places, people are living longer than ever, and overall, the population is becoming both older and younger, with individual nations becoming more diverse.

In parallel, developing economies are supplying a growing share of younger workers to the global workforce. Digital technology infrastructures are making a growing number of these workers available—as full-time or gig workers—to developed economies that are confronting an aging population, not to mention giving them access to each other across the developing world.

Next to demographic change, competition for the war for talent was ranked as the second most important factor for recruiting. According to an EIU survey, more than 60% of respondents answered that “talent shortages are likely to affect their bottom line in the next five years” – especially in the highly skilled talent pool.

The power of pull: Customer empowerment and the rise of global talent markets

Largely thanks to digital technologies and long-term public policy shifts, individuals and institutions can exert greater “pull”—the ability to find and access people and resources when and as needed than ever before. Institutions and prospective workers alike now have access to global talent markets, enabled by networks and platforms opening up new possibilities for the way each interacts with the other.

The demand for these platforms will likely be enhanced by increasing customer power and accessibility of productive tools and machines, opening up opportunities for more creative work to be done in smaller enterprises and by entrepreneurial ventures.

WORK AND WORKFORCES REDEFINED

Reengineering work: Technology reshapes every job

Since the 1980s, knowledge-intensive occupations have led to approximately 2 million new jobs every year, even though an increasing number of jobs are affected by the rise of automation. However, still many conversations about the future of work quickly devolve into discussions of the potential of robotics and AI technology to cut costs, automate tasks, and displace human beings altogether. The anxiety is understandable, given these technologies’ continuing exponential price/performance improvement and the impact they are already having on the elimination of jobs.

The greater opportunity to enhance productivity may lie in reinventing and reimagining work around solving business problems, providing new services, and achieving new levels of productivity and worker satisfaction and passion. We expect to see multiple approaches to redesigning jobs emerge: from a narrow focus on identifying tasks to automate, to the radical reengineering of business processes, to the reimagining of work around problem-solving and human skills.

In this view, employers should become much more focused on exploring opportunities to create work that takes advantage of distinctively human capabilities such as curiosity, imagination, creativity, and social and emotional intelligence. Research suggests that more than 30 percent of high-paying new jobs will be social and “essentially human” in nature.

Transforming the workforce: The growth of alternative work arrangements

Technology is transforming more than the way individual jobs are done—it’s changing the way companies source labor. Many global companies already actively use crowdsourcing efforts to generate new ideas, solve problems, and design complex systems.

Three factors are likely to drive rapid growth of the gig economy—defined as individual self-employed workers bidding for short-term tasks or projects.

- First, as companies face growing performance pressure, they will have more incentive to convert fixed labor costs, in the form of permanent employees, to variable labor costs incurred when there is a surge in business demand.

- Second, workers will likely increasingly seek work experiences exposing them to more diverse projects and helping them to develop more rapidly than in a single-employer career.
- Third factor driving the growth of the gig economy is the desire of workers who are marginalized or underemployed

IMPLICATIONS FOR INDIVIDUALS, ORGANIZATIONS, AND PUBLIC POLICY

Implications for individuals

Engage in lifelong learning. As rapid technological and marketplace change shrinks the useful lifespan of any given skill set, workers will need to shift from acquiring specific skills and credentials to pursuing enduring and essential skills for lifelong learning. Individuals will need to find others who can help them get better faster—small workgroups, organizations, and broader and more diverse social networks.

Shape your own career path.

Historically, a career was defined as a relatively stable, predictable set of capabilities that aligned with the needs of an organization and an industry. This included a progressive mastery of a set of predetermined skills required to advance in the corporate hierarchy

Rather than relying on paternalistic employers to shape their careers' nature and progression, workers will need to take the initiative to shape their own personalized careers. And as work evolves, individuals should cultivate a "surfing" mind-set, always alert to emerging, high-value skills and catching the wave at an early stage to capture the most value from these skills.

Pursue your passion. What are the obstacles to success in work as it transforms? The biggest obstacle may be ourselves. With any disruptive transition, we tend to experience fear and stress, generating an impulse to hold on to what has driven success in the past. We must resist that temptation and rethink it as an opportunity to achieve even more meaningful passion. "Passion of the explorer" is the form of passion that one commit long-term actively seek out new challenges and connect disposition that seeks to find others who can help them get to a better answer faster.

Implications for organizations

Employers can help individuals along this journey by shaping work and work environments and encouraging individuals to learn faster and accelerate performance improvement.

Redesign work for technology and learning. To take effective advantage of technology, organizations will likely need to redesign work itself, moving beyond process optimization to find ways to enhance machine-human collaboration, drawing out the best of both and expanding access to distributed talent.

For example, how can the technology be harnessed to "make the invisible visible" by giving workers richer, real-time views of their work? How can companies use robotics to provide workers with access to environments that would be far too dangerous for humans? What are some ways in which AI-based technology can complement human judgment and contextual knowledge to achieve better outcomes than either human or machine alone?

Source and integrate talent across networks. Beyond focusing on acquiring talent to be employed in their own organizations, they will need to develop the capability to access good people wherever they reside. They will also need to cultivate a continuum of talent sources—on and off the balance sheet, freelancers, and crowds and competitions—that harness the full potential of the open talent economy and tap into talent wherever it resides geographically.

Implement new models of organizational structure, leadership, culture, and rewards. Hierarchical structures are well suited for routine tasks, but as the emphasis shifts to more creative work done by small, diverse workgroups connecting with each other in unexpected ways, more flexible network structures will become more important.

Organizations will need to cultivate new leadership and management approaches that can help build powerful learning cultures and motivate workers to go beyond their comfort zone. Indeed, leadership styles must shift from more authoritarian—appropriate for stable work environments shaped by routine, well-defined tasks and goals—to collaborative.

To foster these new forms of creative work, organizations will need to reassess the rewards they offer to participants. In a world where routine tasks define work, people look to extrinsic rewards such as cash compensation to stay motivated. As the nature of work shifts to more creative work that rapidly evolves, participants are likely to focus more on intrinsic rewards, including the purpose and impact of their work and the opportunity to grow and develop.

Implications for public policy

Policy makers have an interest in both hastening the emergence of new forms of work—the better to raise citizens' overall standard of living—and preparing for the stresses of the transition.

Reimagine lifelong education. Policy makers face significant and formidable challenges to rethink education to draw out students' creative capabilities and to establish a framework to help everyone develop their talent more rapidly throughout their lives. This emphasis on lifelong education could have an especially strong impact if it were to include a more effective focus on marginalized populations and older generations who do not want to or cannot transition out of the workforce.



Transition support for income and health care. What public policies can help in reducing the stresses that workers will likely face when shaping their own careers, learning new skills, and participating in global talent networks? For those caught in challenging and unexpected transitions, how can public policies help to shorten the time spent on the unemployment rolls, support necessary retraining, and ensure the provision of basic necessities such as health insurance? Governments around the world are considering and revisiting basic income guarantees in various forms, and some recent proposals have surfaced to tax robots as a way to provide funding for transition support programs

Reassess legal and regulatory policies. Governments should consider updating the definitions of employment to account for freelance and gig economy work and the provision and access to government health, pension, and other social benefits through micro-payment programs. Business formation and bankruptcy rules could be updated to make it easier to launch—and exit—a business as an entrepreneur. Policymakers will likely find themselves under pressure to update regulations to make starting small ventures easier.

CONCLUSION: A FRAMEWORK FOR THE FUTURE

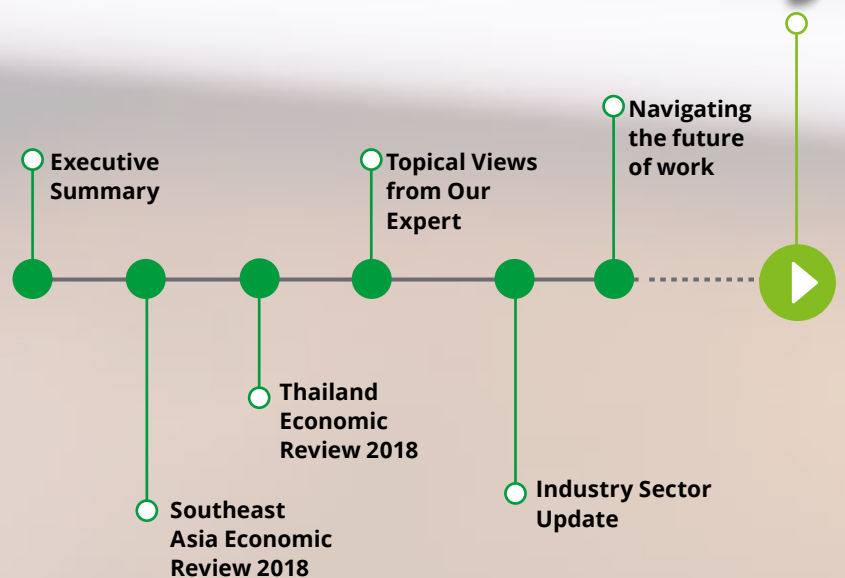
Today, none of these constituencies—individuals, businesses, public institutions—is prepared for the potentially turbulent and painful transition and possibilities ahead. The goal of this framework is to inform and motivate individuals, various forms of organizations, and public policy makers to proactively navigate the future of work and to come together and act now to make the transition as positive, productive, and smooth as possible.

- Individuals need to set their sights on longer careers, with multiple stages, each involving ongoing training and reskilling.
- Businesses must prepare to redesign work and jobs to take advantage of the growing capabilities of machines and the need to retrain and redeploy people to higher-value and more productive and engaging jobs working alongside smart machines and many types of workers.
- Public institutions need to proactively prepare for educational challenges, including funding for ongoing education, programs to mitigate the transition costs, and updating regulatory frameworks to support new types of work and workers and a more entrepreneurial economy.

Source: adapted & extracted from Navigating the future of work, Deloitte Review Issue 21, <https://www2.deloitte.com/insights/us/en/deloitte-review/issue-21.html>



Survey



Please kindly help us to complete the following survey to let us know your opinions which will be very useful in improving our Economic Outlook Report to you.

The survey can be both accessed via link and QR code below. We thank you in advance for your time and kind opinions.

https://az1.qualtrics.com/jfe/preview/SV_5bzw4pAN106yjg1?Q_CHL=preview

or





Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee (“DTTL”), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as “Deloitte Global”) does not provide services to clients. Please see www.deloitte.com/th/about to learn more about our global network of member firms.

Deloitte provides audit, consulting, financial advisory, risk advisory, tax and related services to public and private clients spanning multiple industries. Deloitte serves four out of five Fortune Global 500® companies through a globally connected network of member firms in more than 150 countries and territories bringing world-class capabilities, insights, and high-quality service to address clients’ most complex business challenges. To learn more about how Deloitte’s approximately 286,000 professionals make an impact that matters, please connect with us on Facebook, LinkedIn, or Twitter.

About Deloitte Southeast Asia

Deloitte Southeast Asia Ltd – a member of Deloitte Touche Tohmatsu Limited comprising Deloitte practices operating in Brunei, Cambodia, Guam, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam – was established to deliver measurable value to the particular demands of increasingly intra-regional and fast growing companies and enterprises.

Comprising approximately 330 partners and 8,000 professionals in 25 office locations, the subsidiaries and affiliates of Deloitte Southeast Asia Ltd combine their technical expertise and deep industry knowledge to deliver consistent high quality services to companies in the region.

All services are provided through the individual country practices, their subsidiaries and affiliates which are separate and independent legal entities.

About Deloitte Thailand

In Thailand, services are provided by Deloitte Touche Tohmatsu Jaiyos Co., Ltd. and its subsidiaries and affiliates.

This communication contains general information only, and none of Deloitte Touche Tohmatsu Limited, its member firms, or their related entities (collectively, the “Deloitte Network”) is, by means of this communication, rendering professional advice or services. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser. No entity in the Deloitte Network shall be responsible for any loss whatsoever sustained by any person who relies on this communication.