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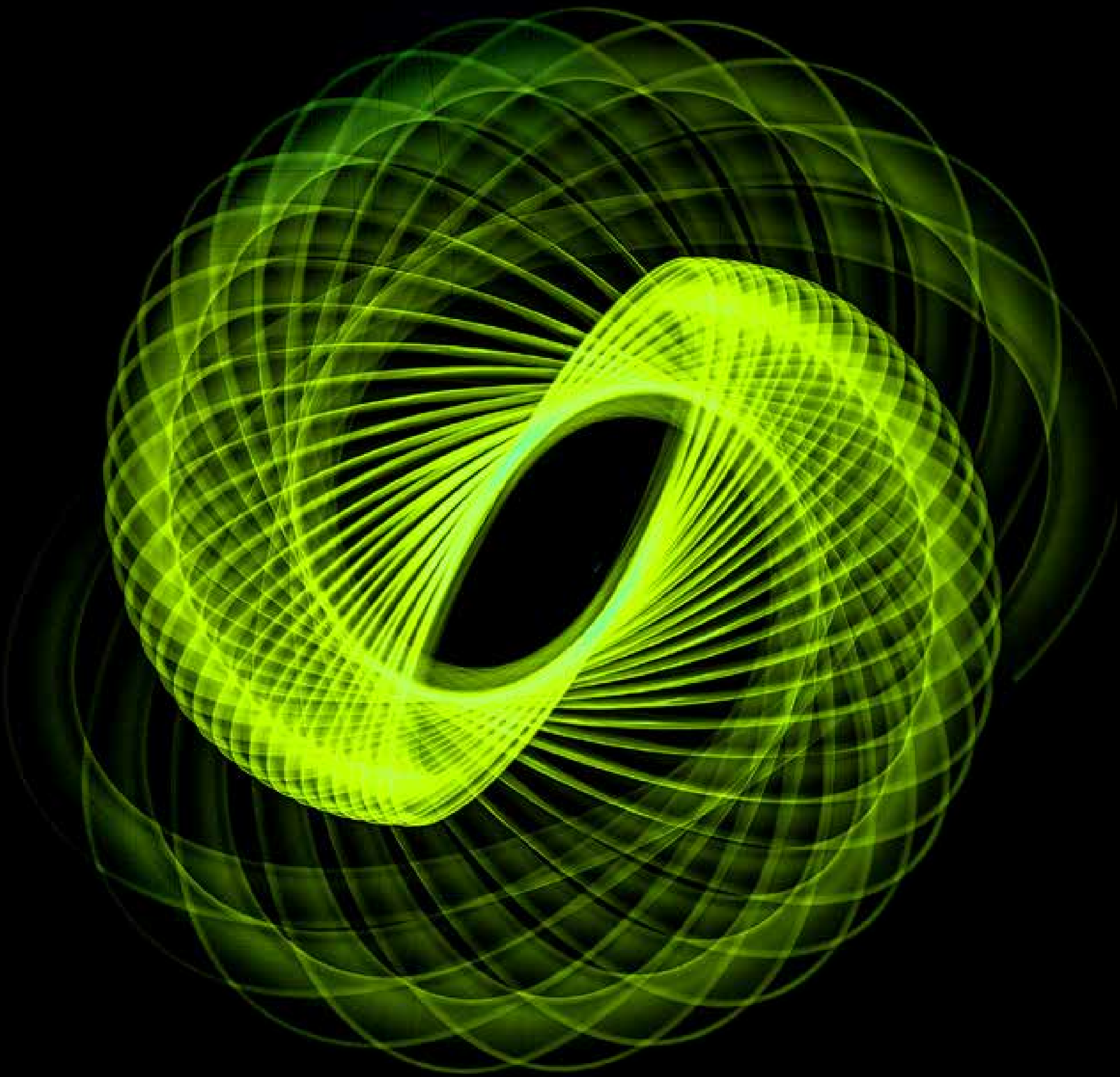

Economic Outlook Report 2019

Deloitte Thailand

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 Reports 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 2019 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.

Global economic growth has eased but remains robust after considered the uncertainty in economic situation. An overall economic projection has slow down slightly. Owing to, uncertainties and risks such as US protectionism, Brexit and political tensions between powerful countries still pose significant challenges on the medium-term outlook.

In 2019, the global economic growth is estimated at 3.5%, which has a slight recession from 3.9% in 2018. For Asia, an economic growth forecast has adjusted to 4.8% in 2019 which is still considered a Steady growth. Due to upward revision for Thailand, Myanmar, Lao, Philippines, and Indonesia counters downward revision from Malaysia, Singapore and etc. as GDP growth softened in 2018. Robust domestic demand, particularly for private consumption and investment, continued to support economies in the sub region. Furthermore, the infrastructure development project from China also support the growth counter the weak foreign demand. 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 3.9% in 2019. 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' economy in 2019 which will be helpful for us to keep improving continuously.

Best Regards,

Subhasakdi Krishnamra
Country Managing Partner

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Southeast Asia Economic Overview 2019

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Topical Views from Our Expert

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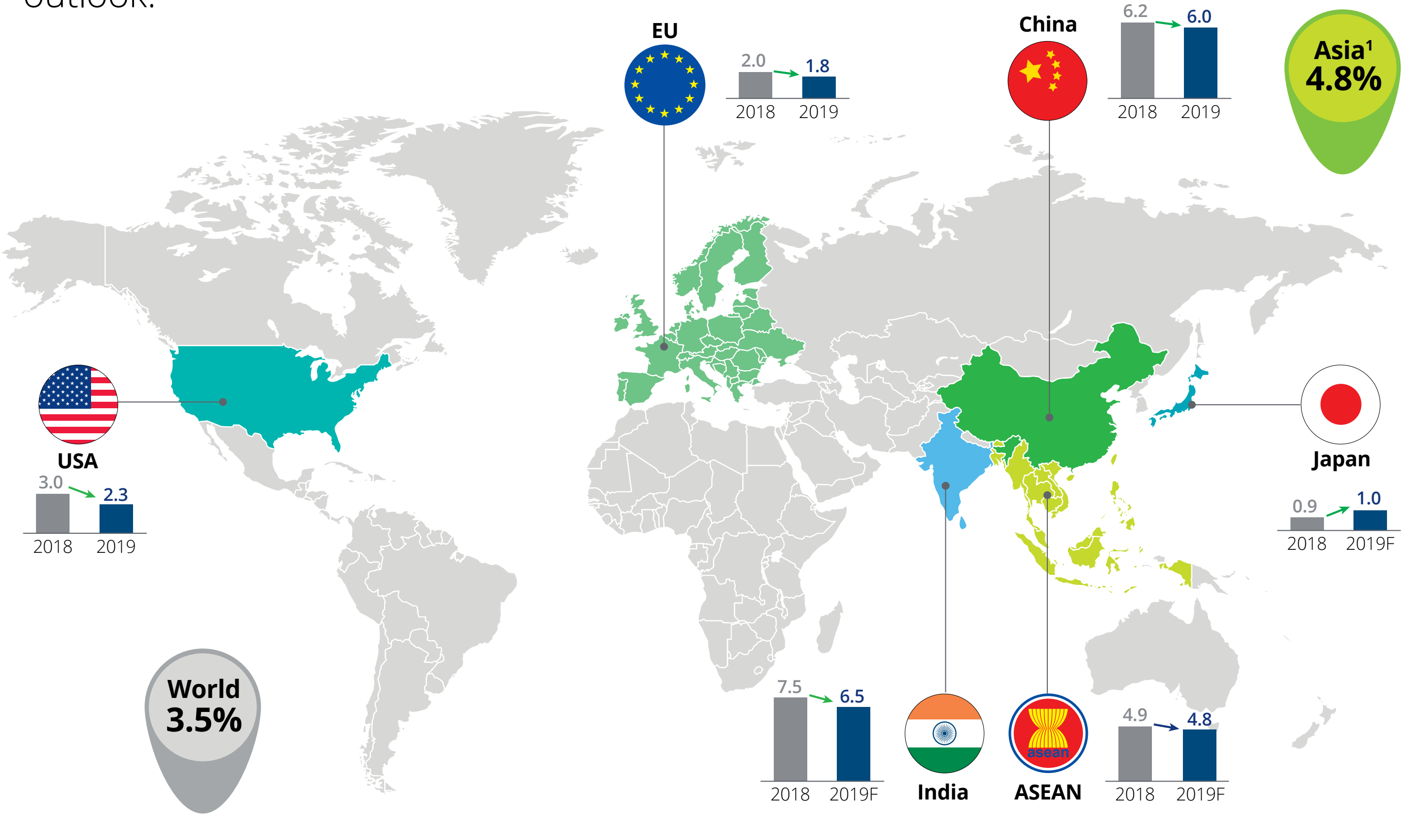
Thailand Consumer Survey

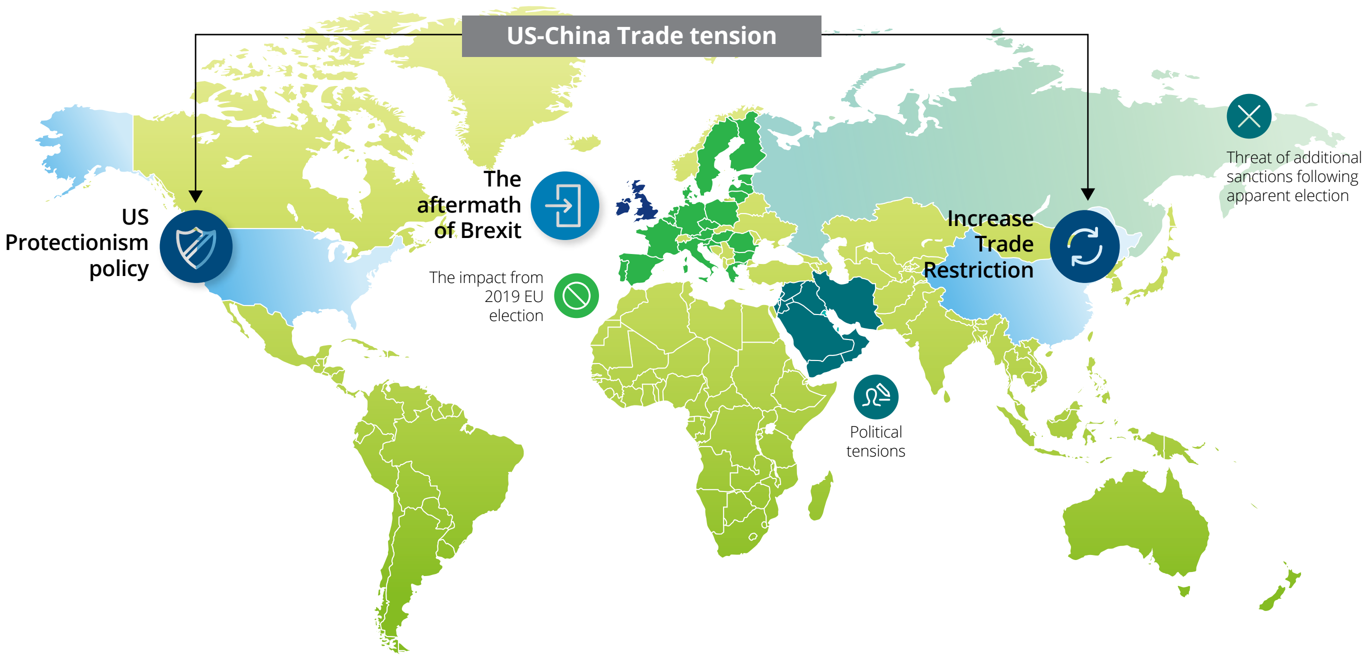
Survey

Global growth has eased but remains robust with projected GDP of 3.5 percent in 2019 a slight slow down from 3.7 percent in 2018, due to risk and uncertainties. The trade protectionism and heightened geopolitical tensions continue to cloud the outlook.



Source: IMF, **WEO**, and **Dataconsult**
Note: 1 excl Japan

Several risks and challenges remains and will continue to shape the global economy in 2019



Southeast Asia Economic Review 2019

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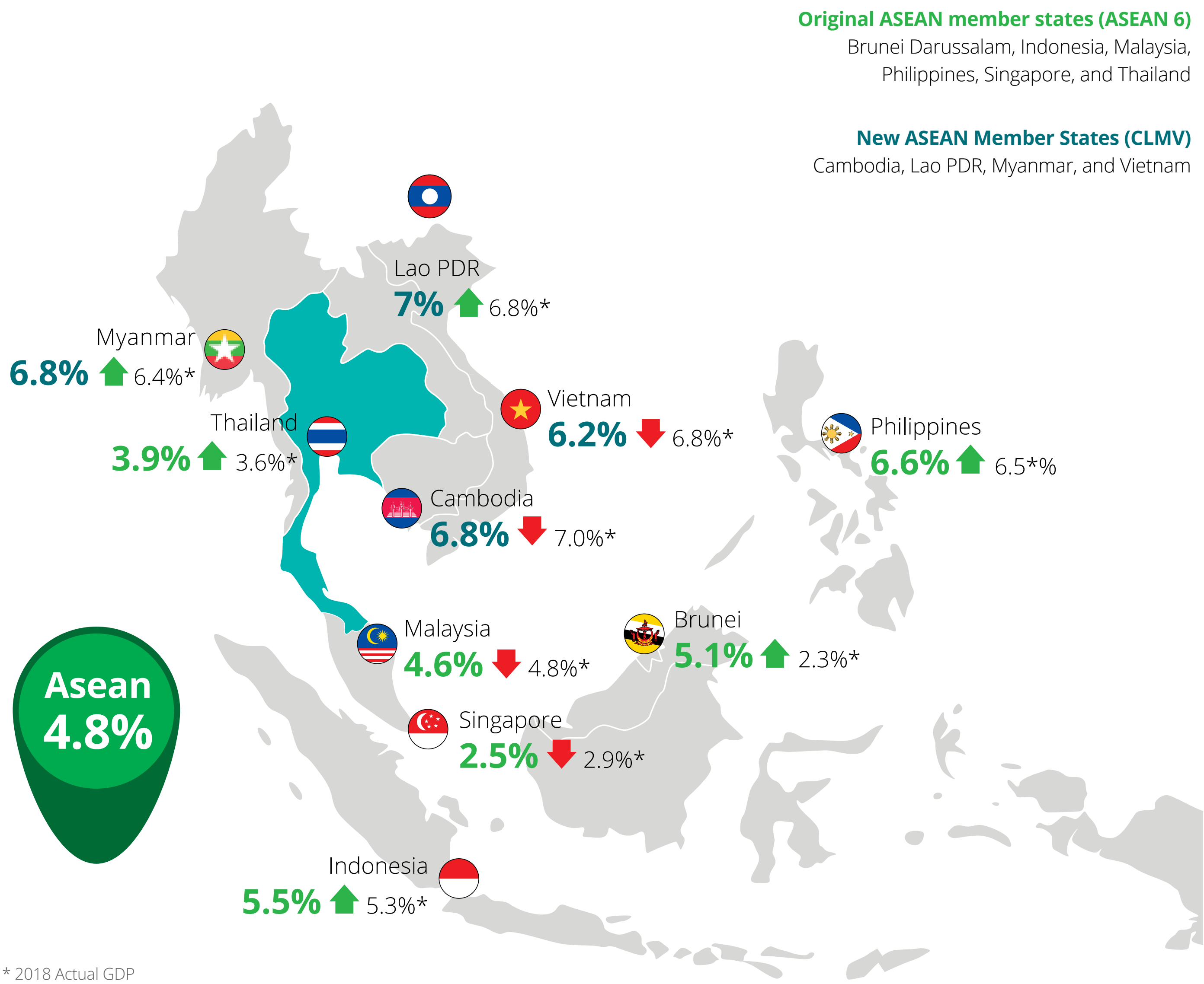
Survey

The region remains resilient amid global uncertainties

ASEAN GDP growth in 2019 (Forecast)

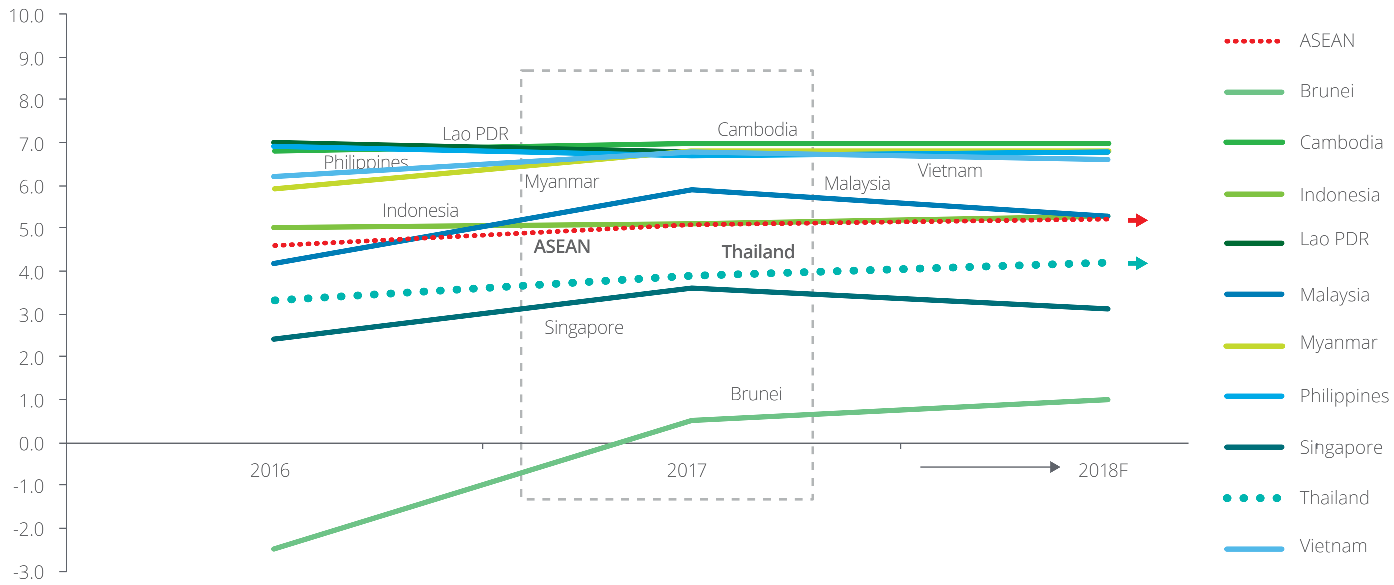


* 2018 Actual GDP
Sources: **WEO**,EIU, IMF, & **Dataconsult**

The growth projection of South-East Asia countries will be broadly stable to slightly decrease as upside and downside risks remain balance

Regional economic growth in 2019 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
2018	4.8	2.3	7.0	5.3	6.8	4.8	6.4	6.5	2.9	3.6	6.8
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 2019

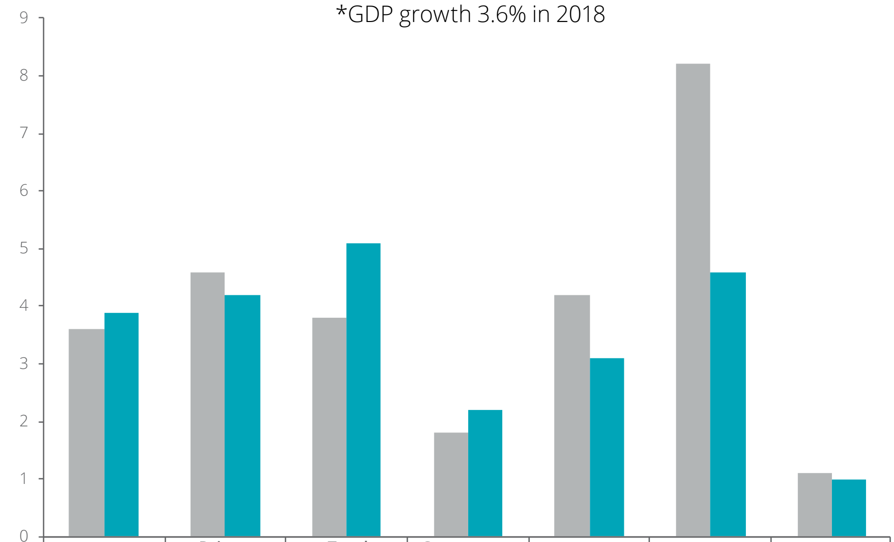
Thailand

Thailand growth momentum is slow down due to a weak exports from a sluggish of foreign market and a fall in Chinese visitor which are the main contribution. Moreover, the current flows of FDI in the year end is not very strong but expected to be improve in 2019.

Real expenditure on GDP (% change)

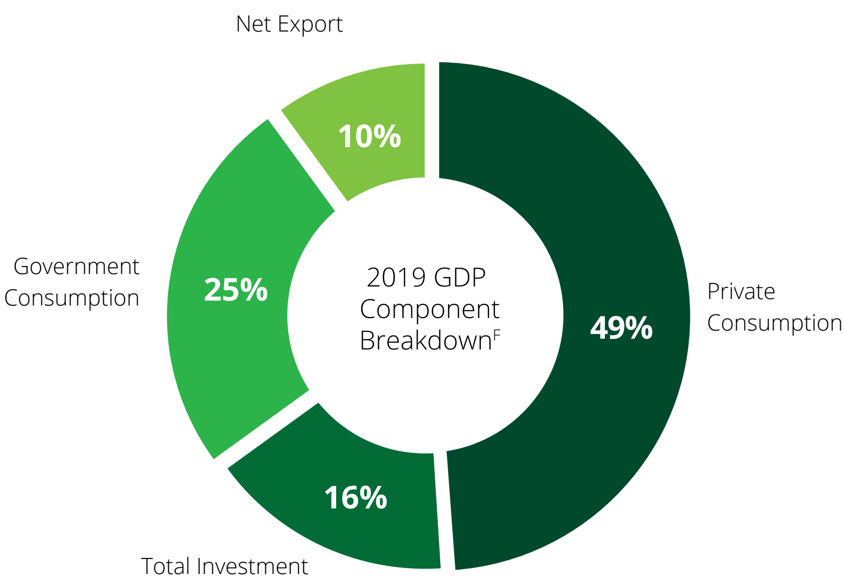
Thai economy forecasted to grow 3.9 % in 2019

*GDP growth 3.6% in 2018



	GDP growth	Private consumption	Total investment	Government consumption	Exports	Imports	Inflation
2018	3.6	4.6	3.8	1.8	4.2	8.2	1.1
2019F	3.9	4.2	5.1	2.2	3.1	4.6	1

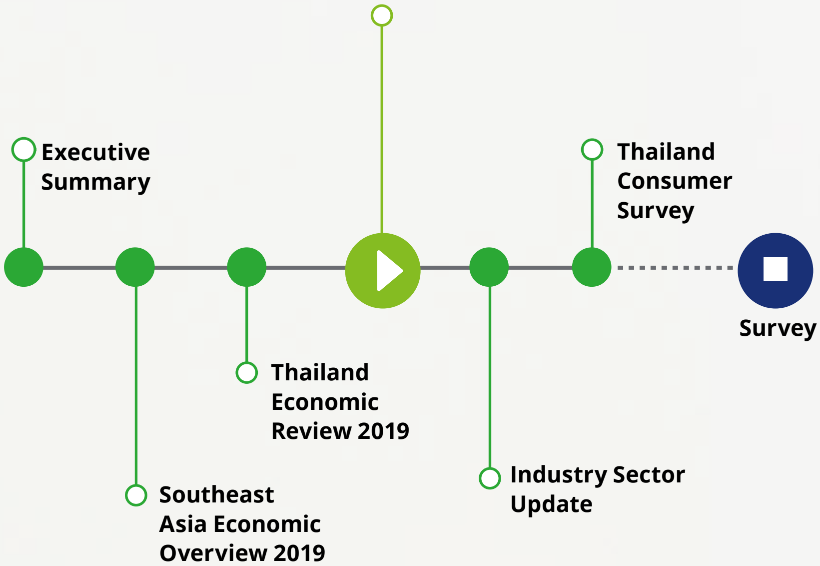
Sources: ADB, NESDB, EIU, & IMF



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

Topical Views from our expert

(Digital Transformation in Finance)



Digital Transformation in Finance

Marisa Aunhavichai
Partner, Consulting Services

Q: What are the key changes that Finance Organization will experience due to digital disruption?
A: Digital will drive more effective business process improvement, but also changing expectation for adding insight. Key changes that Finance Organization will face including:

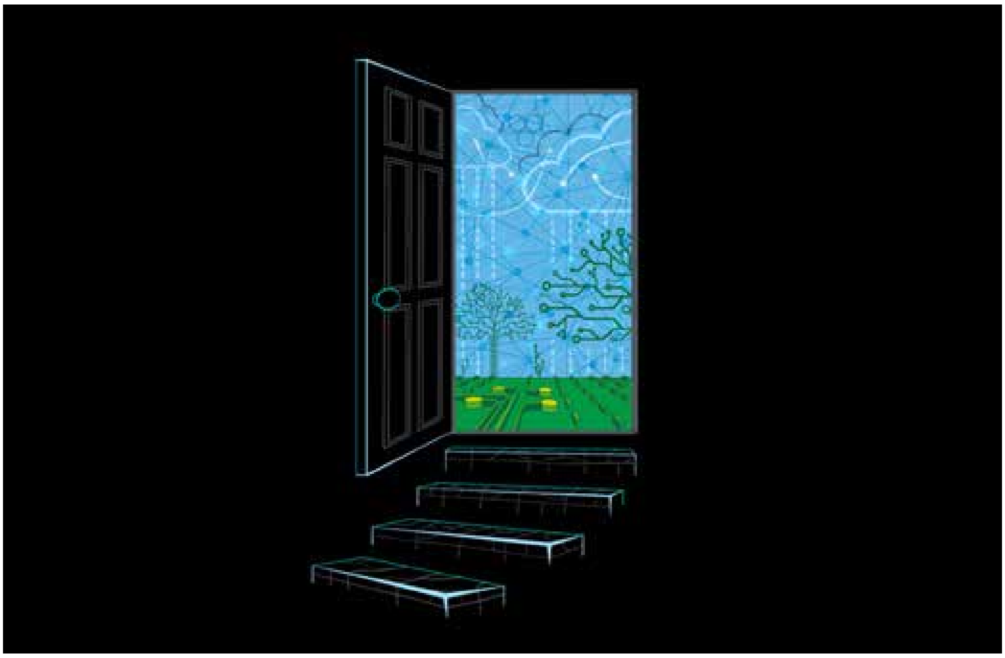
1. Exploded data volume: The emerging of Internet of Things, social media introduce massive data volume to the business, information is flooding.

2. Different pattern of unstructured data: Both massive growth of unstructured data and format variation. Amount of unstructured data from videos, photographs and the raising of demand in gaining insights from those unstructured data. Finance organization need to prepare both in term of technology readiness and talent's skill readiness.

3. Higher expectation in providing insight: People in business have access to analytical tools that used to be owned by Finance. Then Finance need to enhance their skill in order to add value to business, to protect Finance's business partnership role

4. Extremely short of business cycles: In a digital world, products can be launched in hours, not months. And vice versa, can disappear just as quickly. Cycles for planning, forecasting, capital allocation, and closing are all up for grabs. Finance need to do more things in real time

5. The talent crunch is real: Talent models for digital finance tilt toward data science, and business partnering. Many organizations struggle to fill the right talent. New skill recruitment become an urgency. Training and developing current staffs alone is not good enough to cope with the drastic changes in required skill.



Q: What are new tools that will help Finance Organization to cope with the new challenges effectively?

A: There are some new digital tools available to support Finance to boost its performance and serve the business more effectives. There are 7 key tools that will enabling Finance to cope with digital disruption effectively, especially when these tools are used together

Cloud

For companies that expect flexible and scalable services without incurring large startup costs with IT architecture and code maintenance. Cloud is made to order. According to Gartner, from 2018: at least 25% of new core finance application are cloud software.

Process robotics

Process robotics automates transaction processing and communication across system. Many finance organization have discovered good opportunities to reduce cost and improve productivity through process robotics. Robots perform recurring processes like human but with less risk of errors and fatigue.

Visualisation

Visualization refers to the innovative use of images and interactive technology to explore large, high density data sets. Visualization suites compliment business intelligence and analytics platforms by offering rich graphics, interactivity and impressive customer experiences.

Advance analytics

Analytics has been a part of finance arsenal for a while. But new techniques help business people tackle with the crunchy questions with insightful answers. There are various ways to apply analytics to amplify the strategist and catalyst roles of finance.

Cognitive computing

Cognitive computing and Artificial Intelligence (AI) simulate human thinking. This technology includes machine learning, natural language processing, speech recognition and computer vision. Natural language science (NLS) enables the reading of contracts, purchase orders without human intervention. Natural language also can supplement routine reports with narrative commentary.

In-memory computing

In-memory computing refers to storing data in main memory to get faster response time. Dynamic big data calculations can be done in milliseconds.

Blockchain

Blockchain offers the storage of immutable records of transaction data through distributed networks. It retains the full history of transactions, which make them verifiable and independently auditable. Blockchain also enables peer-to-peer transfer of value, potentially eliminating the need for intermediaries.

Following up the previous section which is to introduce you to the disruption in financial sector. We are having our second expert to give you more an in-depth detail regard technology and challenges occur in the finance organization. Furthermore, we will elaborate more on the example cases from Deloitte experiences.

Montri Khongkruephan
Partner, Audit & Assurance

Q: What are the challenges that organizations are facing in financial perspective?

There are many challenges in the organization that related to finance but, refer to our experiences the problems that all finance department struggle the most is account closing process. The current process require many steps of highly detail and time consuming reconciliation process. With a short timeline, the CFO won't be able to make sure that those process was done properly. The account closing is a period which usually keep CFO waking at night as there are many challenges which CFO would face during the account closing period. We have categorized the challenges into four main areas. First is **timeliness**, the issue is tight timeline for the closing period organization usually solving it by adding more staff to fasten the process. However, it still does not ensure that the closing process will be done on time. Second, the **lack of visibility** in the close process. CFO won't be able to know progress of their team whether, the work will be done before a usually short deadline or not and what have not been done after the report was issued. Another challenge, CFO won't be able to fully control the **quality and accuracy** of all reconciliations. Since a tight timeline for the closing, CFO will not be able to know whether some reconciliation has not been completed or the adjustments has not been raised. Combining previous three issue, it leads to a fourth challenge which is a **lack of proper governance**. Segregation of duties is one of the key controls during the close process. The inability to identify who done the reconciliation, review, approval, and etc. from a tight schedule. It can cause a high chance of an adjustment of resubmit report which is bad for CFO's performance and credibility.

Q: What is Deloitte recommendation to tackle the problems mentioned earlier?

The Organization can enhance their existing process by applying the automation technology. A Financial close automation software helps organization to govern and to automate financial accounting processes, reconciliation, control, and monitoring. It's a system that help CFO's and Executive to have a visibility throughout the account closing process which links to a better governance. Also, transforming your organization financial processes to automation, reduce some manual works. With the application of financial close automation, CFO could tackle the challenges and improve their current account closing process.

With the timeliness and quality issue, CFOs and Controllers feel enormous pressure to shorten their close period, speed up management reporting and increase meaningful metrics, while having little time to dedicate to strategic projects. The financial close automation could help improve the efficiency and quality using the capability to automate the transaction matching and reconciliation process. Also, it helps eliminate the issue in managing team members to align with the workload. Furthermore, they can increase the report quality and decreasing a chance of number adjustments from reducing a human errors.

The lack of visibility in account closing process could be improve by the help of monitoring capability in financial close automation system. The CFO and controller can track the progress of the closing process. Which, they are able to support their team when needed from the visibility that the system provides. Furthermore from the visibility provided, it could lead to a better governance. The system could help provide CFO with the clearer visibility throughout the closing process and be able to govern the team better with the support from system.

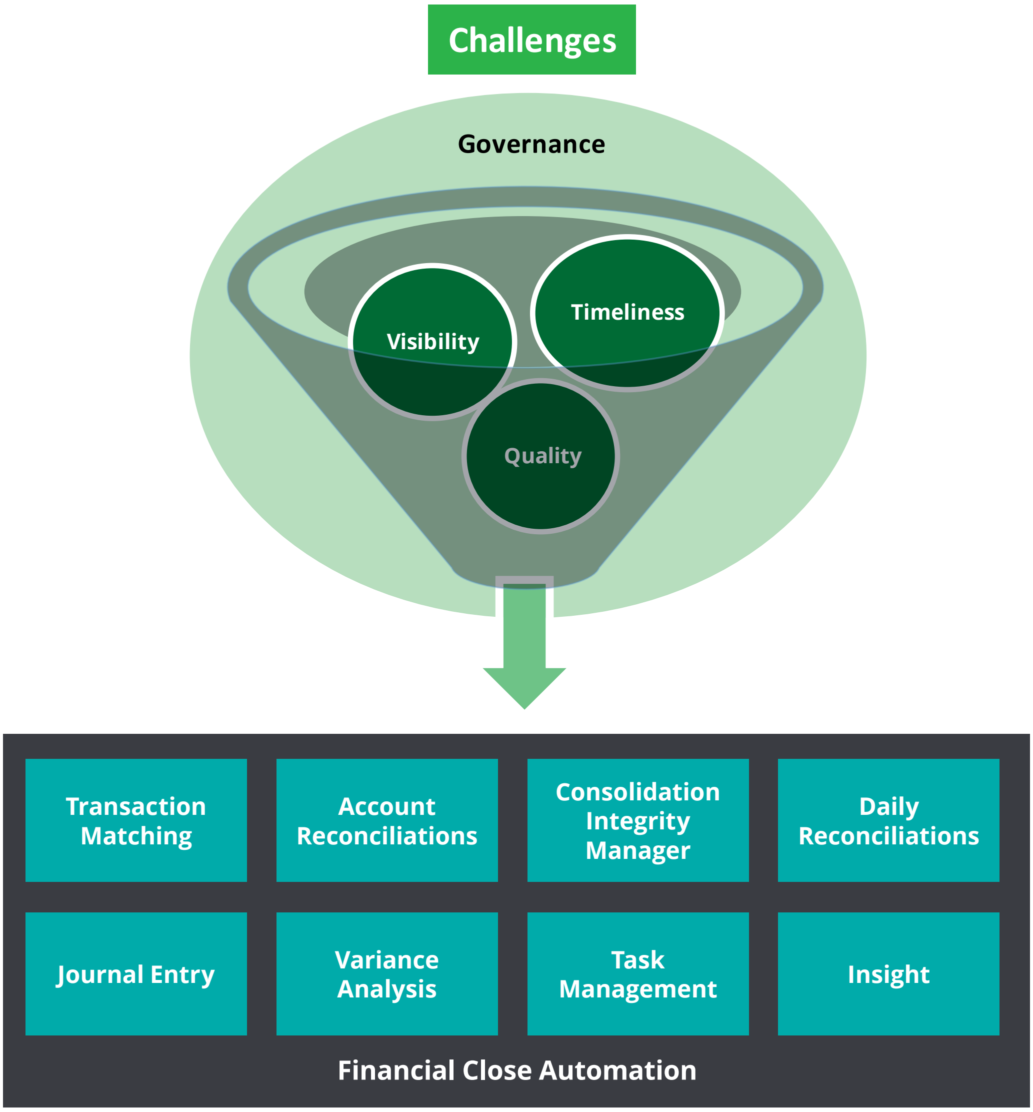
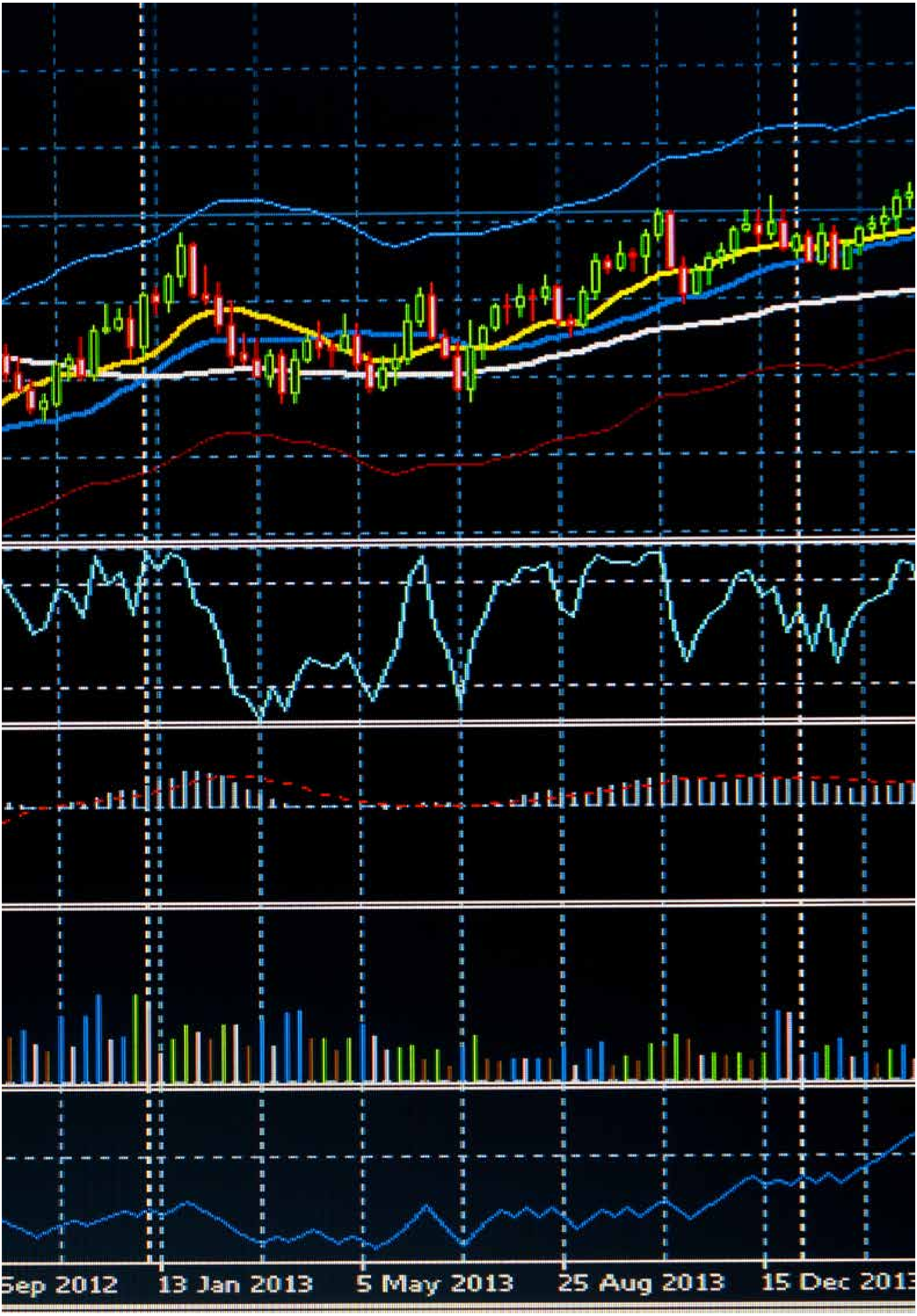


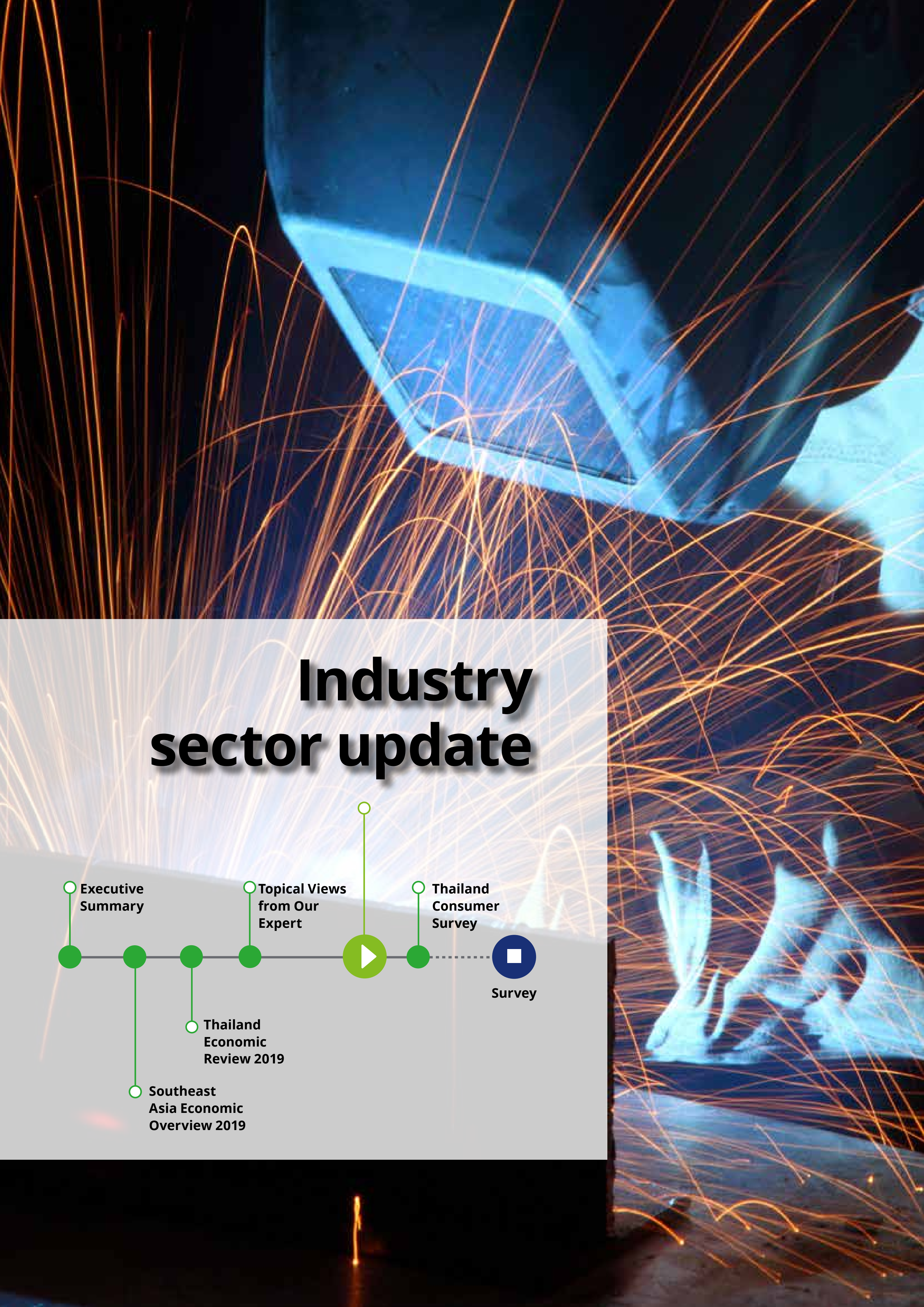
Figure: Financial close automation overview

Q: How could Deloitte help navigate our clients in accounting and finance transformation?
Not just implement technology automation etc., it's also about the process optimization. At Deloitte we are not just advise you in technology transformation, we also help you transform the accounting process and policy to be more efficient and better align with technology. We will navigate you since the discovery stage in identify the issue/pain, how to close the gap by doing process improvement (Leaning accounting process), and design workflow and policy. Furthermore, provide technology system combine with a good accounting process to build the best solution for your organization. Which, it could enable enterprise finance organizations to accelerate the complex financial close processes that frees-ups valuable resources, provides greater controls and compliance. Furthermore, we can navigate CFO in planning the transformation project to ensure a higher chance of success in both planning stage (including pitching to the Board) to implementing stage.



Sep 2012
13 Jan 2013
5 May 2013
25 Aug 2013
15 Dec 2013

Industry sector update



Executive summary

Sectors in 2018 can be separated into 3 groups which are Expansion, Deceleration and Recovery

Deceleration

Tourism	Even though tourism market experienced impressive growth for several years, It started slow down to single-digit growth rate in 2018.
Finance & Banking	Loan outstanding growth declined from 8.1% in 2017 to 2.6% in 2018, mainly because of corporate.
Oil & Gas	Consumption growth rate of primary energy was slow down from 1.3% in the previous year to 1.2% in 2018.
Telecommunications	Telecommunication market faced saturation which had only 1.5% growth of mobile subscription in 2018.

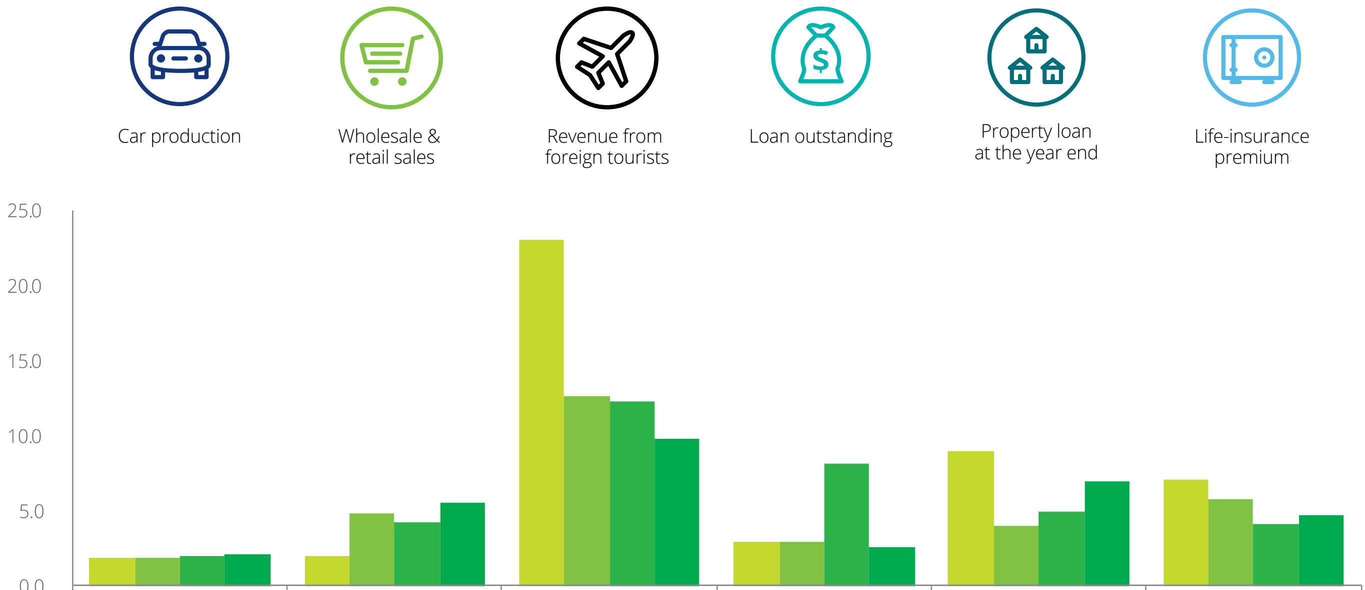
Recovery

Insurance	Life insurance market rose at 4.7% in 2018, driven by non-life insurance segment.
Electricity	Medium and large scale businesses have been the key drivers for electricity consumption to rise 1.9% in 2018.
Healthcare Services	Healthcare Spending highly increased by 7% in 2018 partially due to the increasing trend of aging population.
Public Sector	Government spending soared by 11% in 2018 to become one of the key factor to drive economic growth.

Expansion

Automotive	Car production increased by 2.2% in 2018 mainly due to growth of domestic demand.
Wholesale & retail	Wholesale & retail sales grew at 5.6% in 2018, led by retail sales which presented 9.4% growth in 2018.
Residential Real Estate	Residential market dramatically expanded in 2018 especially condominium which had aggressive growth of 42%.

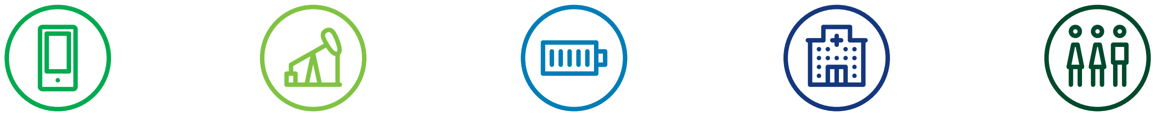
Thailand key industries are expected to continue their moderate growth path

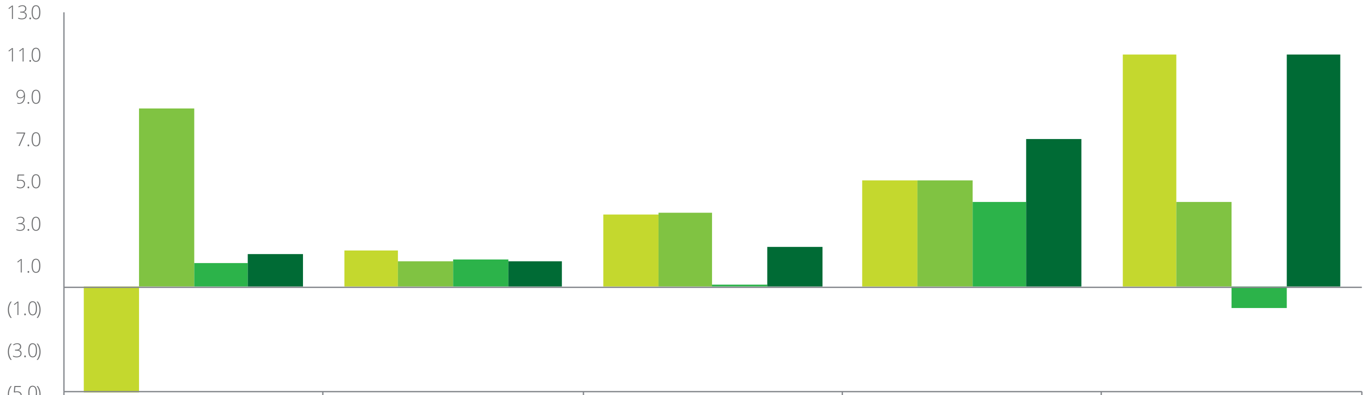


	Automotive	Wholesale & Retail	Tourism	Finance & Banking	Residential and Realestate	Insurance
2015	1.9	2.0	23.0	3.0	9.0	7.1
2016	1.9	4.9	12.6	3.0	4.0	5.8
2017	2.0	4.3	12.3	8.1	5.0	4.1
2018	2.2	5.6	9.8	2.6	7.0	4.7

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

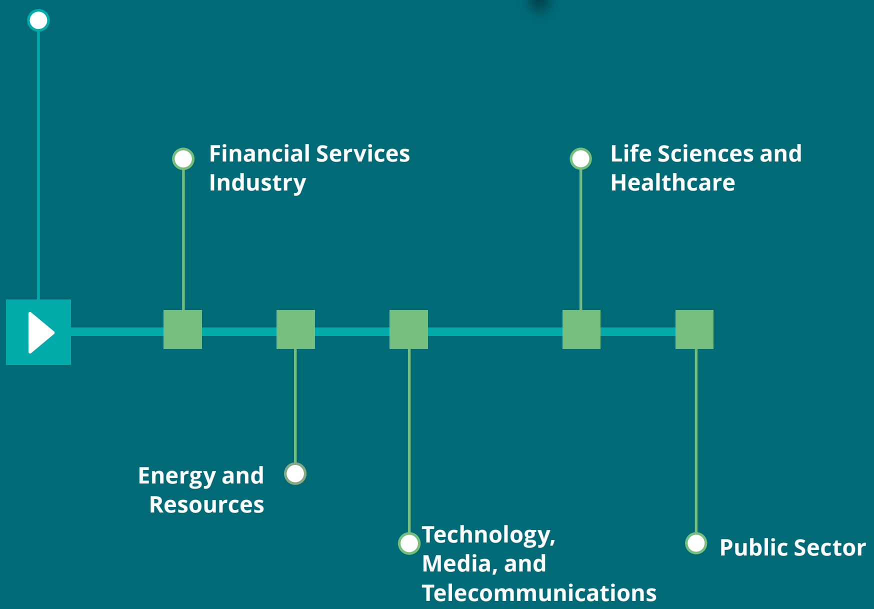




	Telecommunication	Oil & Gas	Electricity	Healthcare Services	Public sector
2015	(13.0)	1.7	3.4	5.0	11.0
2016	8.4	1.2	3.5	5.0	4.0
2017	1.1	1.3	0.1	4.0	(1.0)
2018	1.5	1.2	1.9	7.0	11.0

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

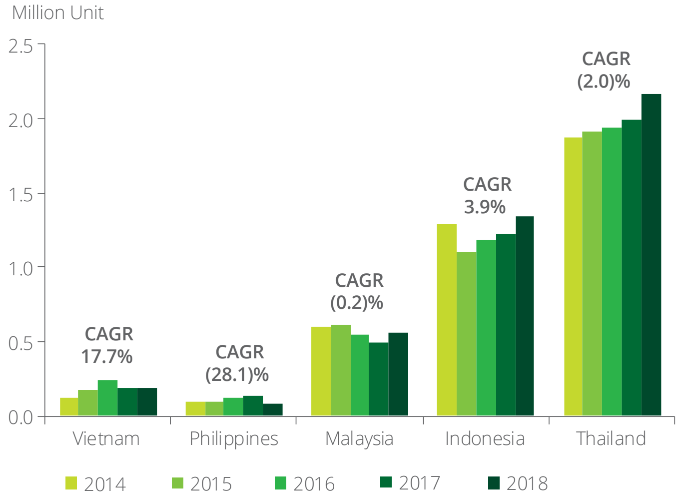
Consumer and industrial products



Automotive

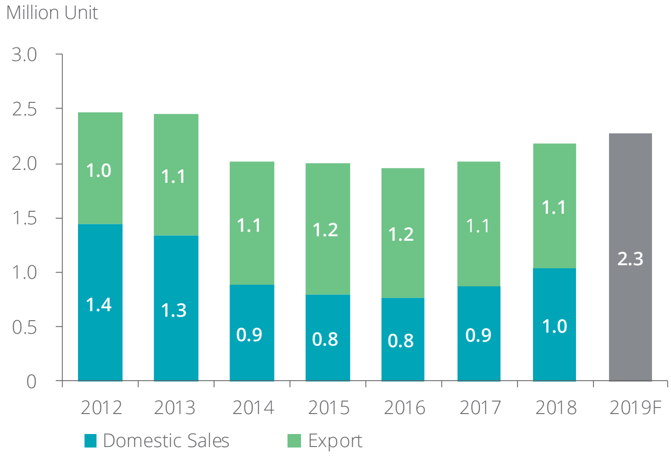
Thailand remains the ASEAN's automotive industry leader in the coming years underpinned by a solid supply chain and a large pool of established facilities.

ASEAN car production volume (2014 – 2018)



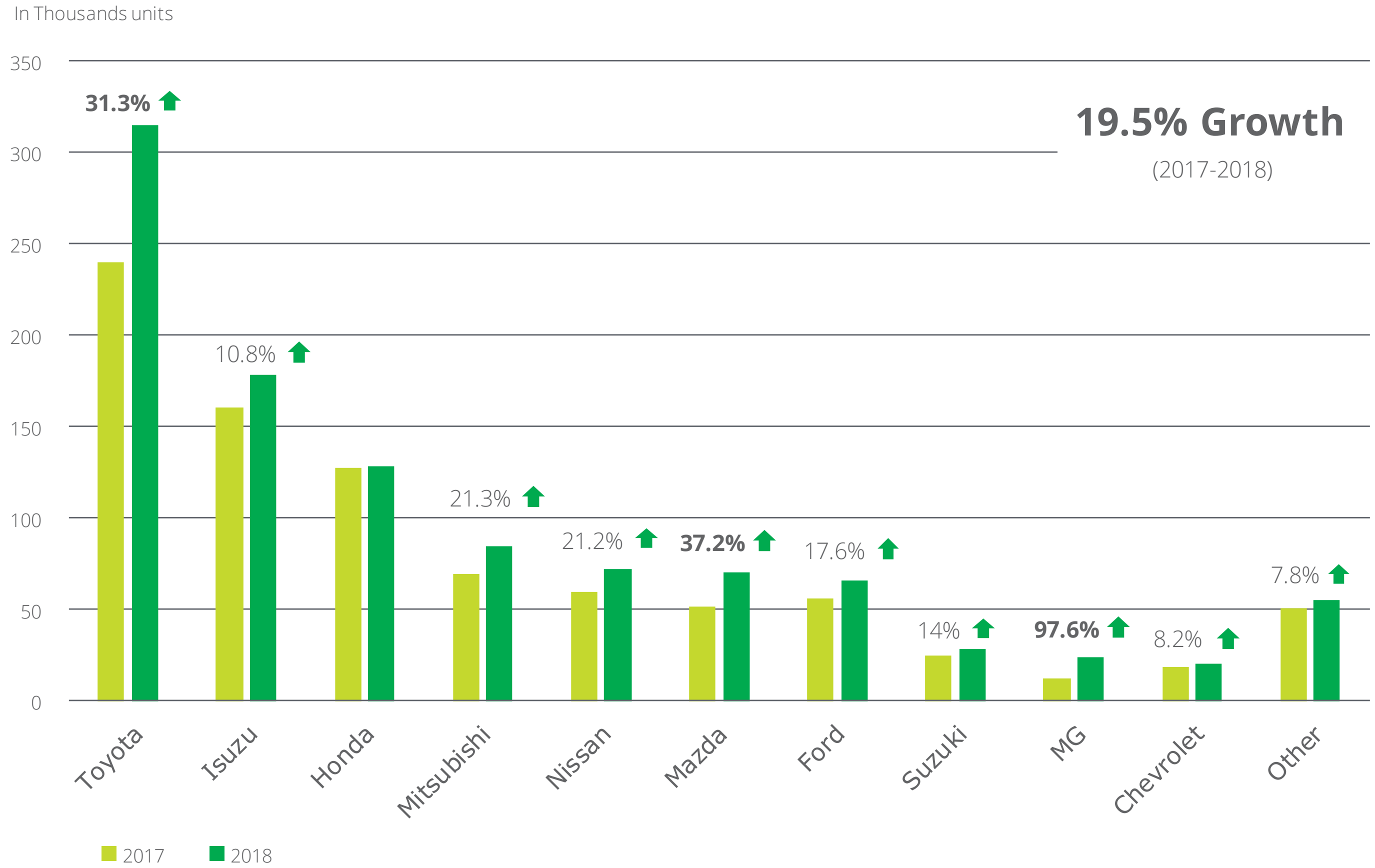
- Although CAGR displays negative production growth, Thailand remains the leading car producer of ASEAN with 49.9% market share.
- Overall, ASEAN car industry in 2018 grew 7.7% compared to 2017. Car export from ASEAN is expected to grow while domestic demand remains in a contraction mode.

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



- During 2018, Thailand produced 2.1 million cars growing 8.5% from 2017. Domestic sales volume was 1 million units raised by 19.5%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 2.3 million car units growing 4.3%YoY.

Sales volume summary during 2018

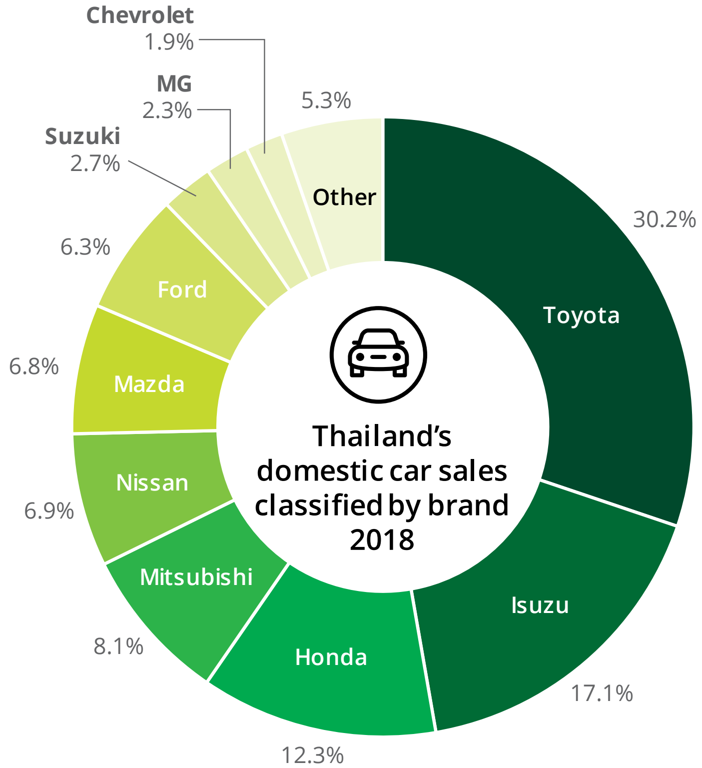


Source: Toyota (Thailand) Co. Ltd.

Domestic car sales during 2018 expanded by 20% compared 2017

Update Thailand Car Market for 2018

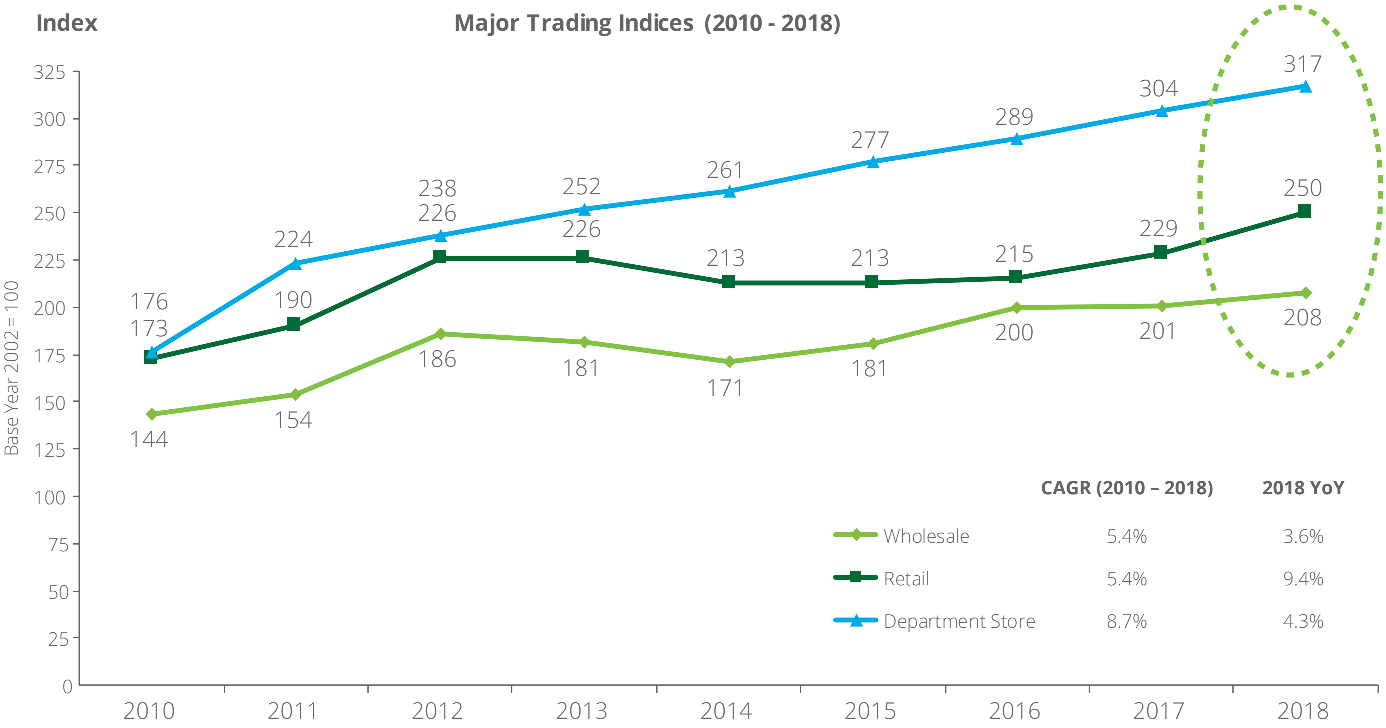
- The total number of domestic car sales during 2018 was 1.04 million units risen 20% YoY.
- Major Japanese car manufacturers (Toyota, Isuzu, Honda, Mitsubishi, Nissan, Mazda, and Suzuki) together sustain the market leadership in the Thailand car market occupying around 84% of domestic market share.
- 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.

Wholesale & retail

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

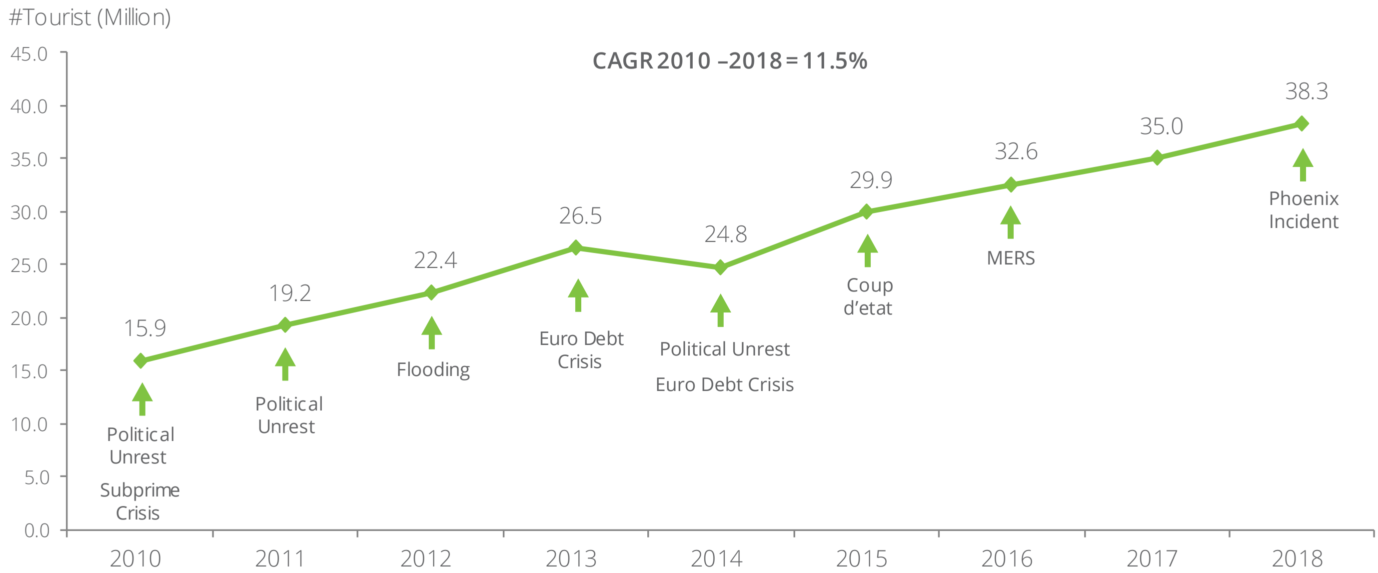


Sources: BOT (EC_EI_032,033) & EIU
Note: Our analysis covers only wholesalers and retailers of foods and customer package products.

Tourism

Total tourist arrivals in 2018 reached 38.3 million person or raised 9.4% compared to 2017s'.

Foreign Tourists 2010 – 2018



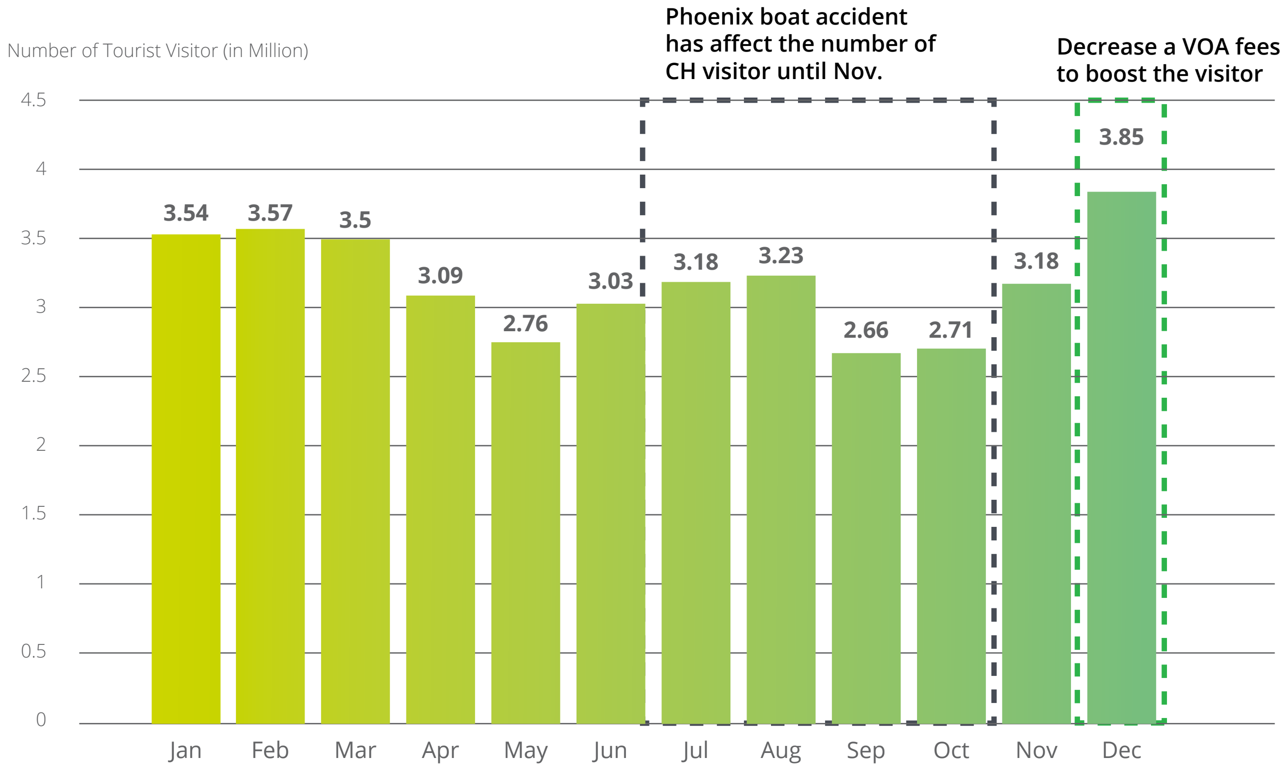
Hotel Occupancy(%)	49%	50%	58%	61%	65%	56%	62%	69%	71.4%

- In 2018, the accumulated number of foreign tourists was 38.3 million growing 9.4%YoY in which it resulted in the highest of hotel room occupancy rate that was at 71.4% particularly in North and Northeast region.
- In 2019, the number of international tourists is expected to grow by 7%, and the country is expected to attract 41 million visitors especially from India, South Korea and Japan.
- Hotel room occupancy rate is projected at 71.5-72.5% 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.

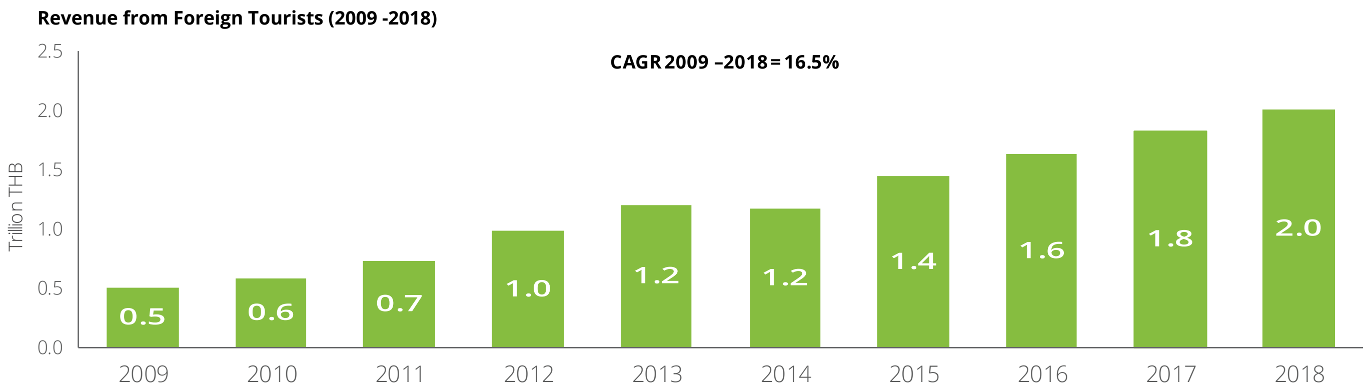
Sources: Department of Tourism, TAT, The Royal Thai Government, & DTTJ Estimate

Tourists from China and other emerging markets Slowdown

- Tourism arrival have increases by 10% in the first 8 month of 2018 while tourism receipts rose by 13%, contributed by Chinese tourist
- The third quarter saw an only modest increase by 2.70 % in overall arrivals (9,06 million), largely due to a decrease in Chinese arrivals Which Phoenix is likely relateded to a boat accident in early July.



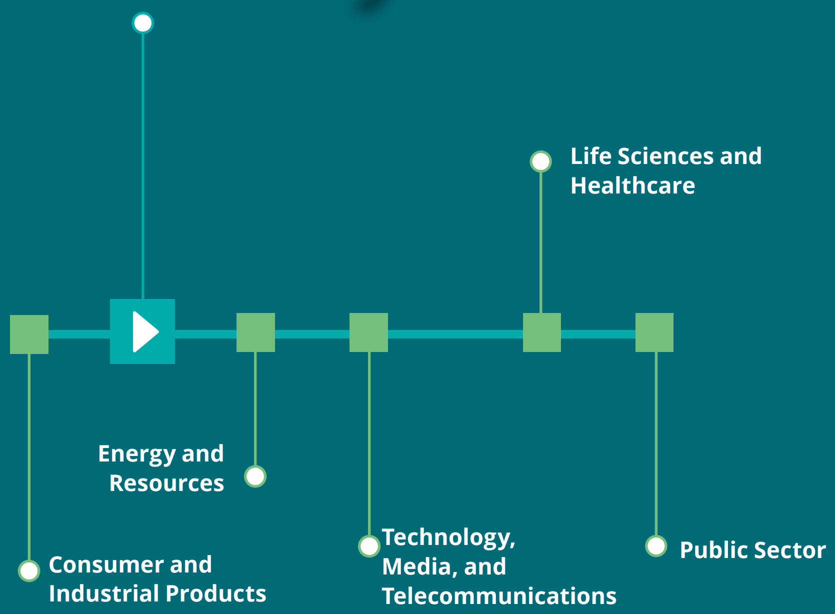
Thailand's tourism strategy focusing on "Quality Tourism" continues to drive revenues from foreign tourists in 2018 and contributes to Thai GDP in a large proportion.



- During 2018, 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 2.0 trillion Baht raising 11.1%YoY.
- In 2019, Tourism will continue to be an important driver for economic growth this year, expected to generate up to 2.21 trillion Baht in income, rising 10%YoY from 41.1 million international arrivals.
- 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

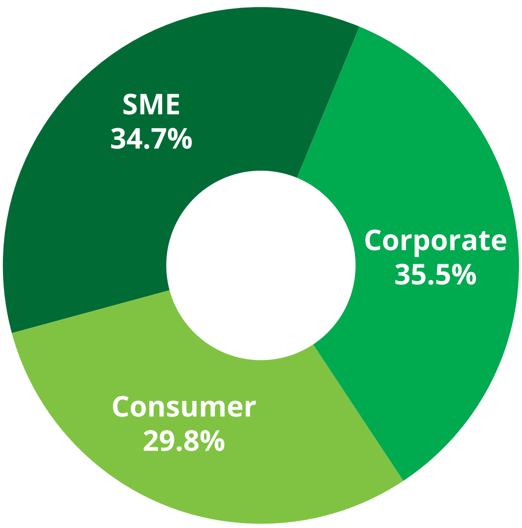
Financial Services Industry



Finance & banking

Total loan outstanding at the end of 2018 was 15.1 trillion Baht. Corporate, SME and Consumer loan proportion were 35.5%, 34.7% and 29.8% respectively.

Loan proportion in 2018



Loan growth comparisons

Unit: Trillion baht

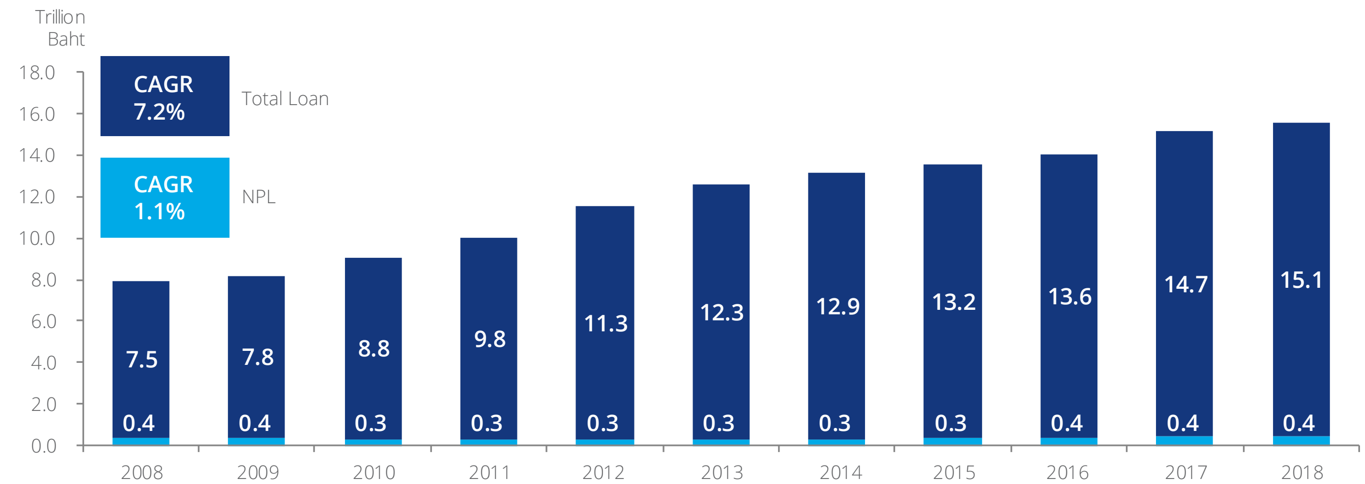
	2016	2017	2018	%Δ YoY (17-18)	%Δ YoY (16-17)
Corporate	5.0	5.5	5.4	(3.3)%	11.4%
SME	4.7	5.0	5.2	3.5%	6.3%
Consumer	3.9	4.1	4.5	9.4%	6.1%
Total	**13.6**	**14.7**	**15.1**	**2.6%**	**8.1%**

Source: Bank of Thailand (FI_CB_021)

Thailand's total loan outstanding during 2018 was 15.1 trillion Baht growing by 2.7% YoY. During the same period, NPL proportion reached 0.44 trillion Baht or 2.91% of total loan increasing 2.3% YoY.

Loans continued to expand in line with economic growth. Loan expansion was mainly driven by consumer loan growth from mortgage lending and auto loan. NPL proportion in 2018 was quite similar to proportion of total loan outstanding in 2017 which are at 2.91% and 2.93%, reflecting stable overall loan quality. In 2019, NPL proportion is estimated with a slight increase to nearly 3% due to 3 factors, 1) concerning of SME loan, mortgage lending and auto loan 2) higher ratio of special mention loans (SMs) and 3)debt restructuring turning to become NPL.

Thailand's total Loan vs. NPL 2008 – 2018

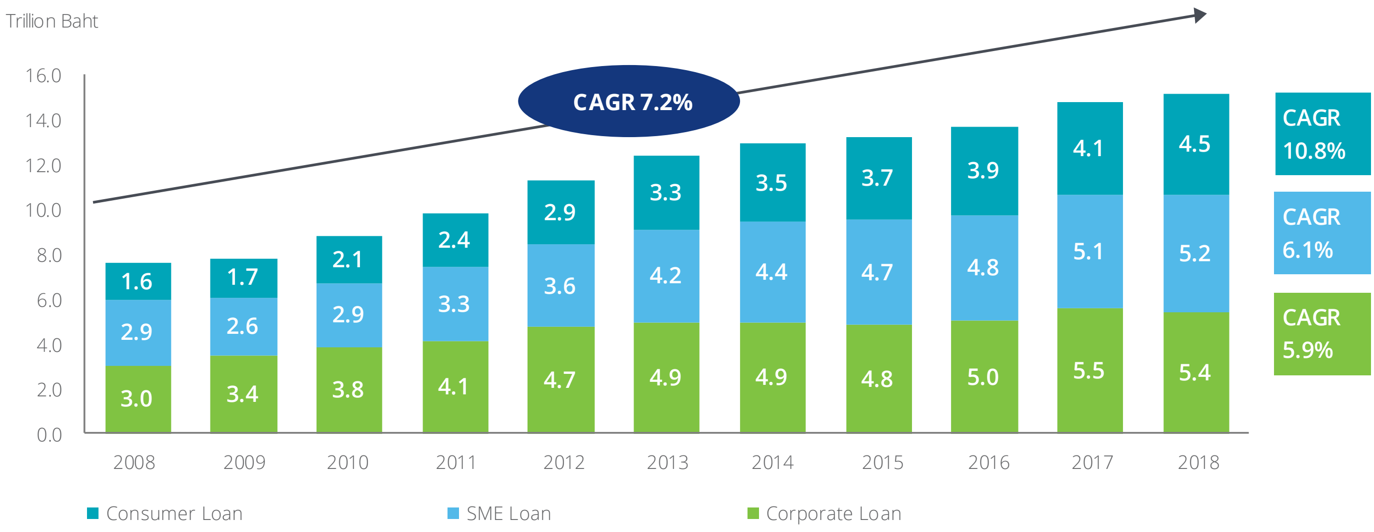


% NPL	5.3%	4.8%	3.6%	2.7%	2.3%	2.2%	2.2%	2.6%	2.8%	2.9%	2.9%

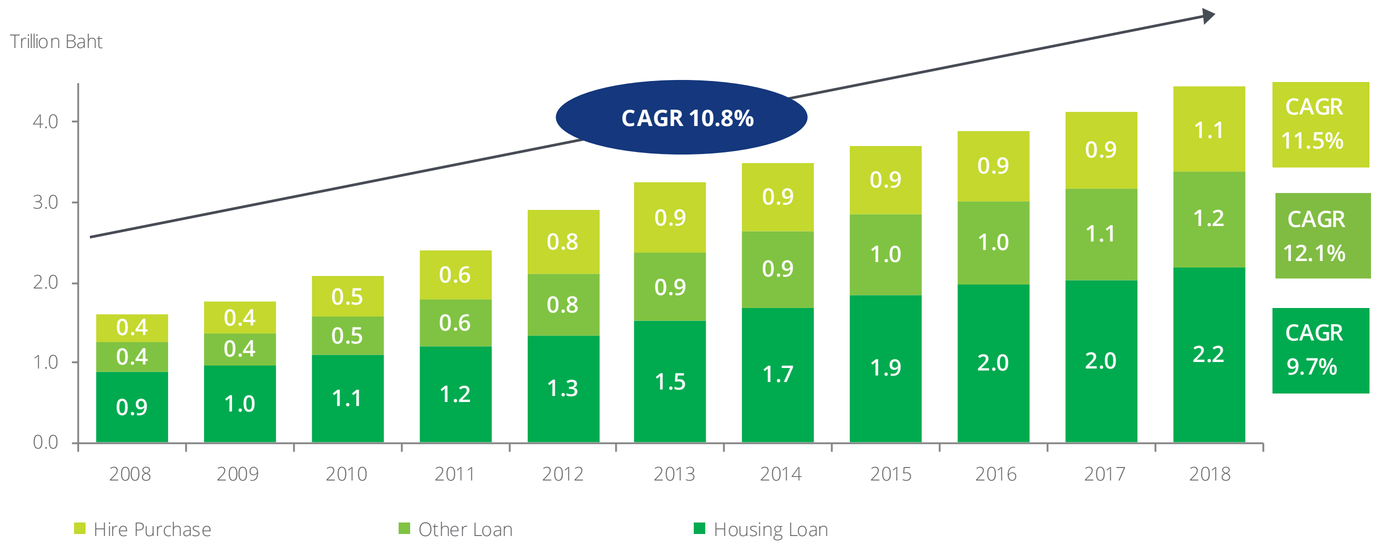
Sources: BOT (FI_NP_008, FI_NP_001), EIU, SCB EIC, K-Research, TMB Analytics, & DTTJ Estimates
Note: (1) Total Loan includes both Thai banks' and foreign banks' loan outstanding as of Q2-2018.
(2) NPL includes both Thai banks' and foreign banks' gross NPL outstanding as of Q2-2018.

Thailand's total loan in 2018 was 15.1 trillion Baht growing by 2.7% YoY.

Commercial Bank Loan 2008 –2018

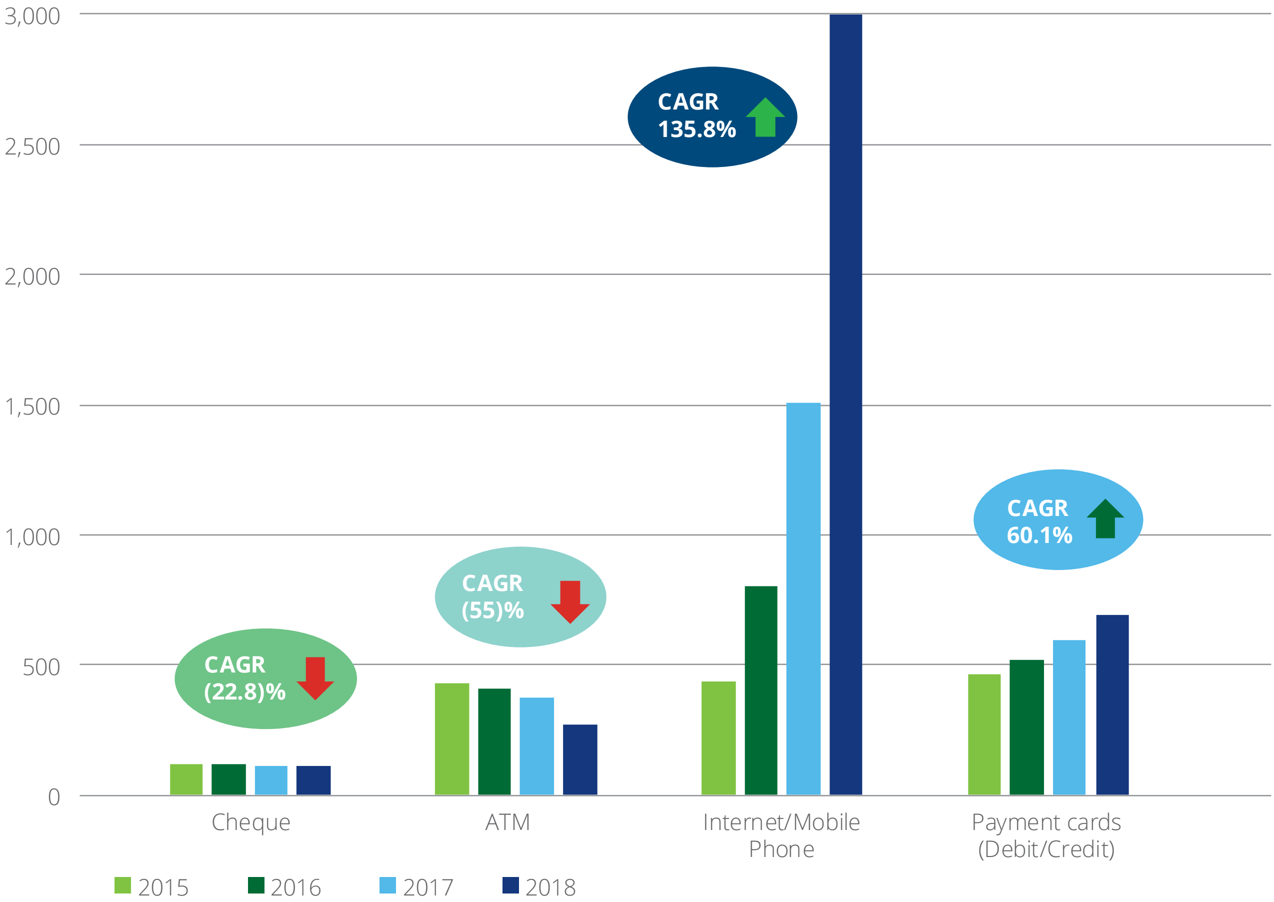


Consumer Loan 2008 –2018

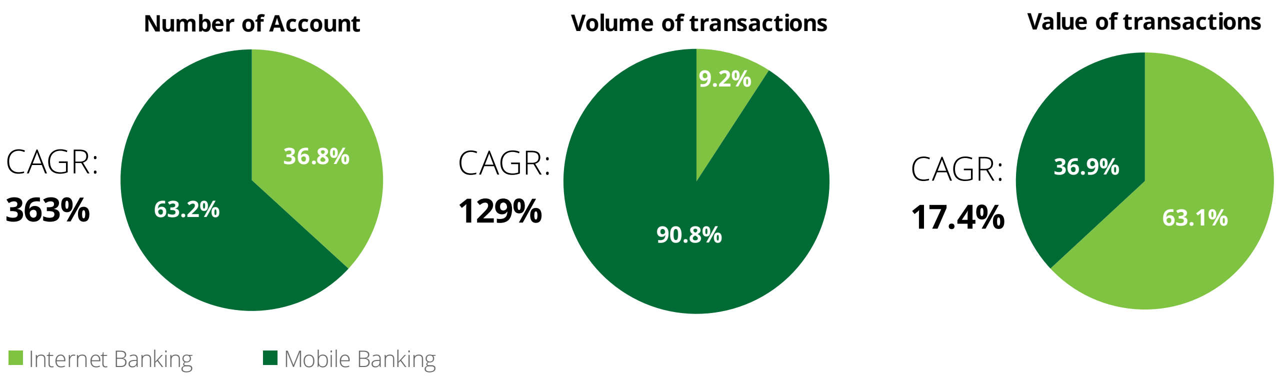


Sources: **BOT** (FI_CB_021) & DTTJ Estimates
Note: * Data have been revised by Bank of Thailand.

Internet and mobile phone transaction became the most popular in 2018 which soared by 135.8% CAGR



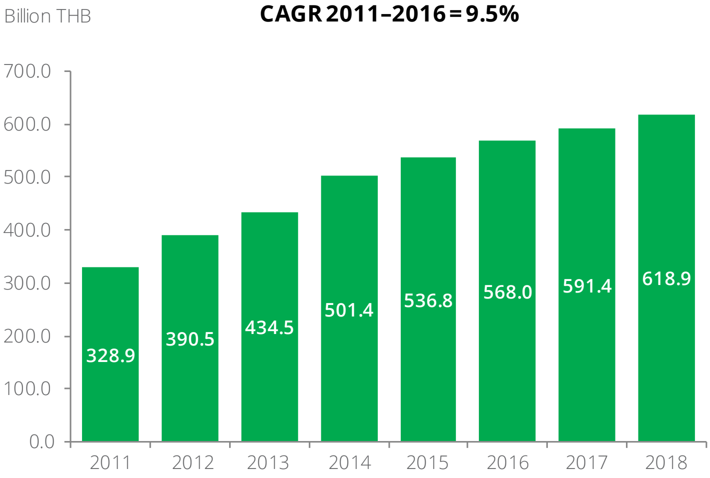
Sources: BOT (FI_CB_021) & DTTJ Estimates
Note: * Data have been revised by Bank of Thailand.



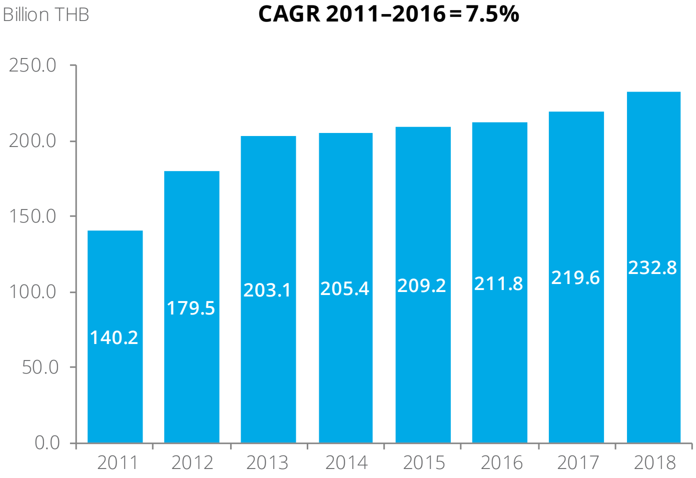
Insurance

Both life- and non-life insurance market have expanded steadily and are projected to grow during 2018 by 4.7% and 5.9% respectively.

Total Life-Insurance Premium Received



Total Non-life Insurance Premium Received

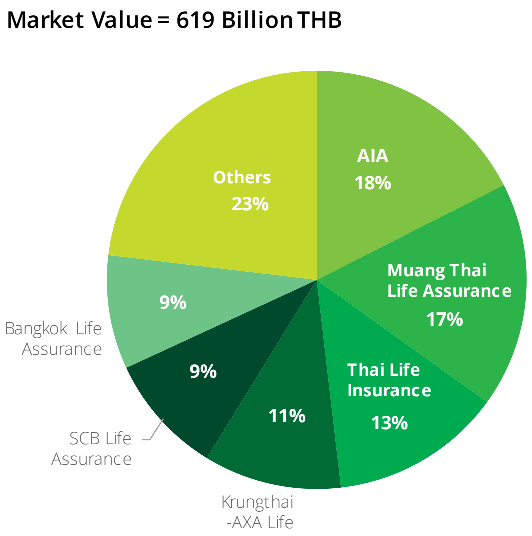


- Life insurance market has grown steadily based on past couple of years at 9.5% CAGR, whereas non-life insurance market has grown at a slower pace at 7.5% CAGR.
- At the end of 2018, total life- and non-life insurance premium grew by 4.7 % and 5.9% respectively compared to 2017's owing to improved economic conditions along the year.

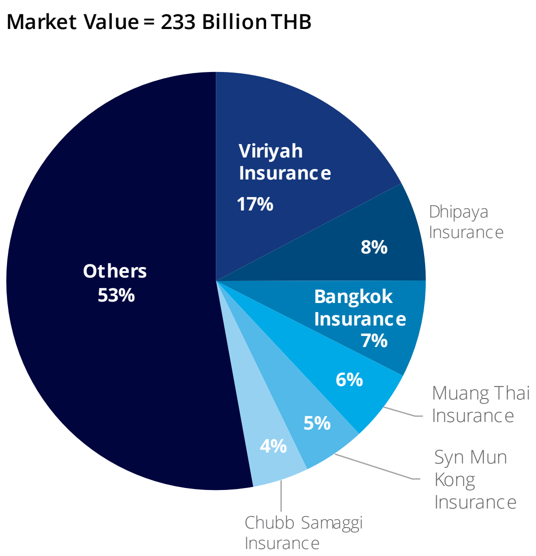
Sources: EIU, Office of Insurance Commission (OIC) & DTTJ Estimates

At the end of 2018, AIA maintained its leading position in life-insurance market at 18% out of the 619 billion Baht. For non-life insurance, Viriyah dominated the market at 17% out of total market size of 233 billion Baht.

Life-Insurance Market Share



Non-life Insurance Market Share



By the end of 2018, 6 major players of life-insurance dominated around 77% of market share. Life-insurance market in 2018 grew 4.7% compared to 2017s'.

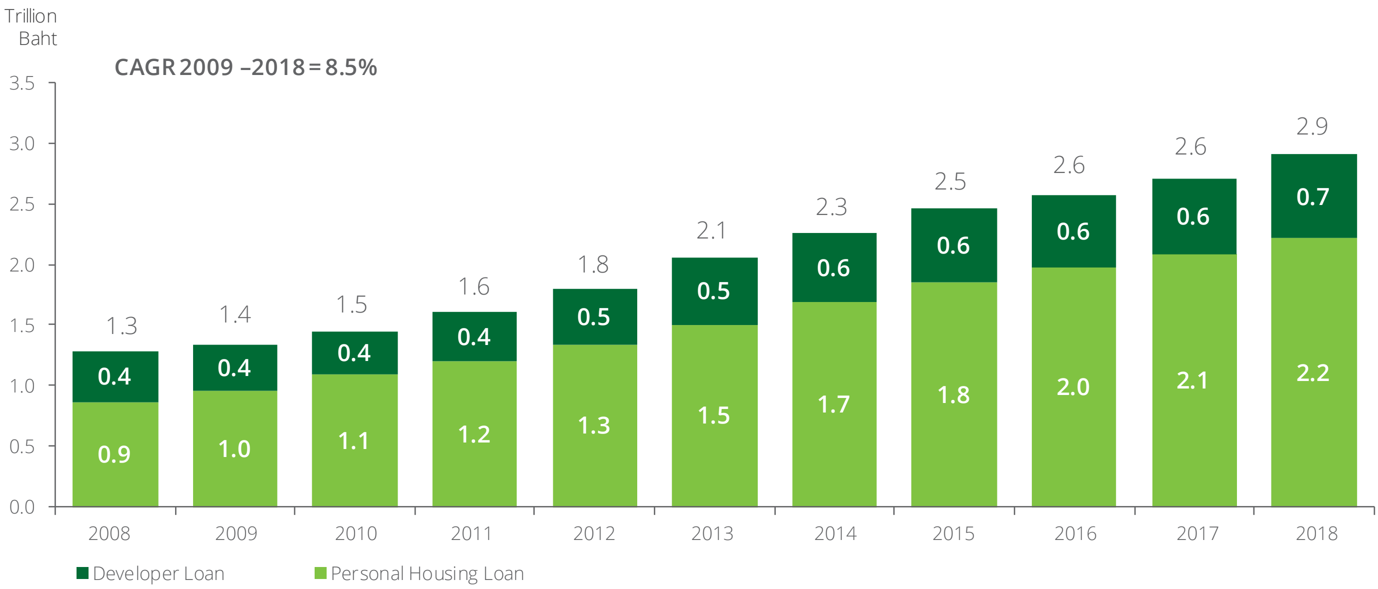
For non-life insurance, 47% of market share belonged to 6 major players. The market growth during 2018 to 2017 was 5.9% which shown a continue recovery from 3.7% in 2017 and 1.2% in 2016.

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

Residential Real Estate

Property loan was 2.9 trillion Baht, growing 11.5% YoY in 2018 mainly driven by personal housing loan in line with residential demand expansion

Property Loan Outstanding

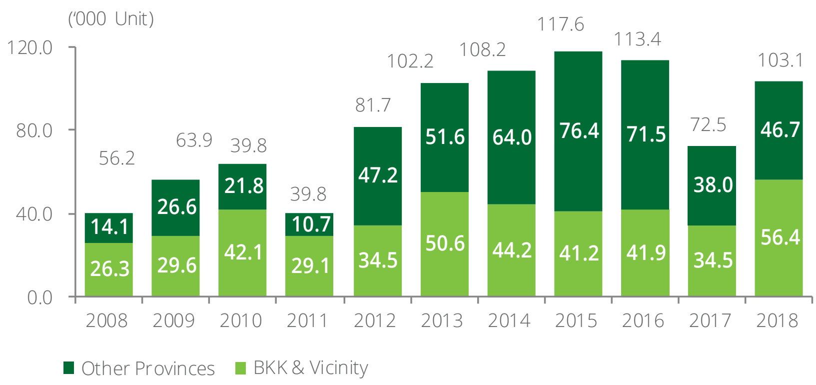


- Developer loan also rose to 0.7 trillion Baht, rising 10% YoY in 2018 as interest rate was expected to rise in upcoming year.

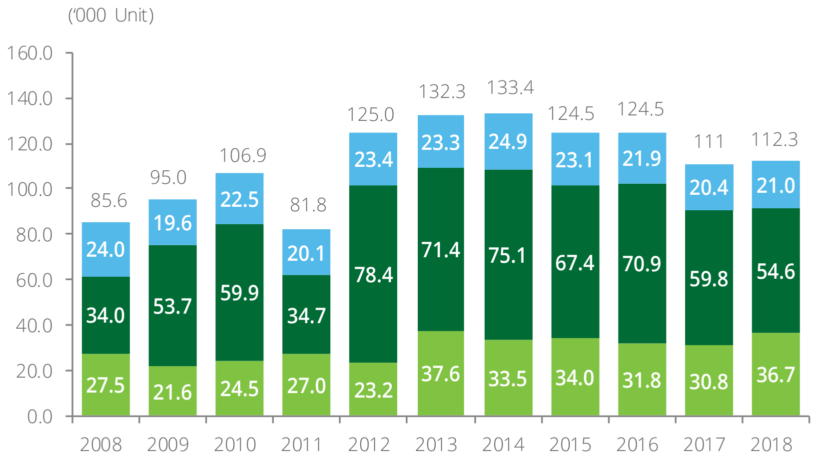
Sources: BOT(EC_EI_016_S2), GHB, REIC & DTTJ Estimates

Nationwide condominium registration in 2018 has been obviously recovery from previous year by 42%YoY. In the same period, new housing activities in Bangkok and vicinity displays a positive growth by 63.5%YoY as purchasers rushed to transfer residential ahead of new lending curbs launched by BOT enforcing on April 1.

Nationwide Condominium Registration

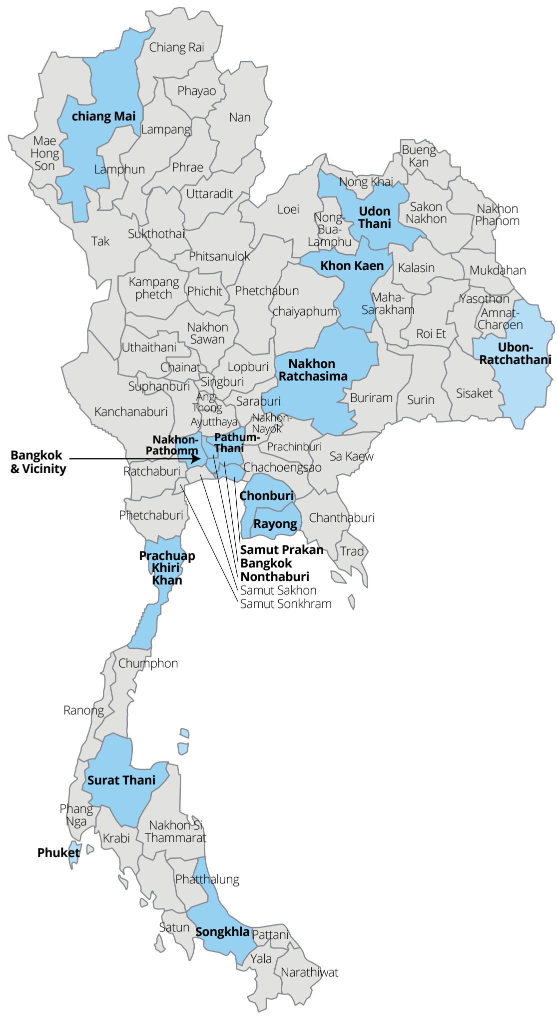


New Housing in Bangkok & Vicinity

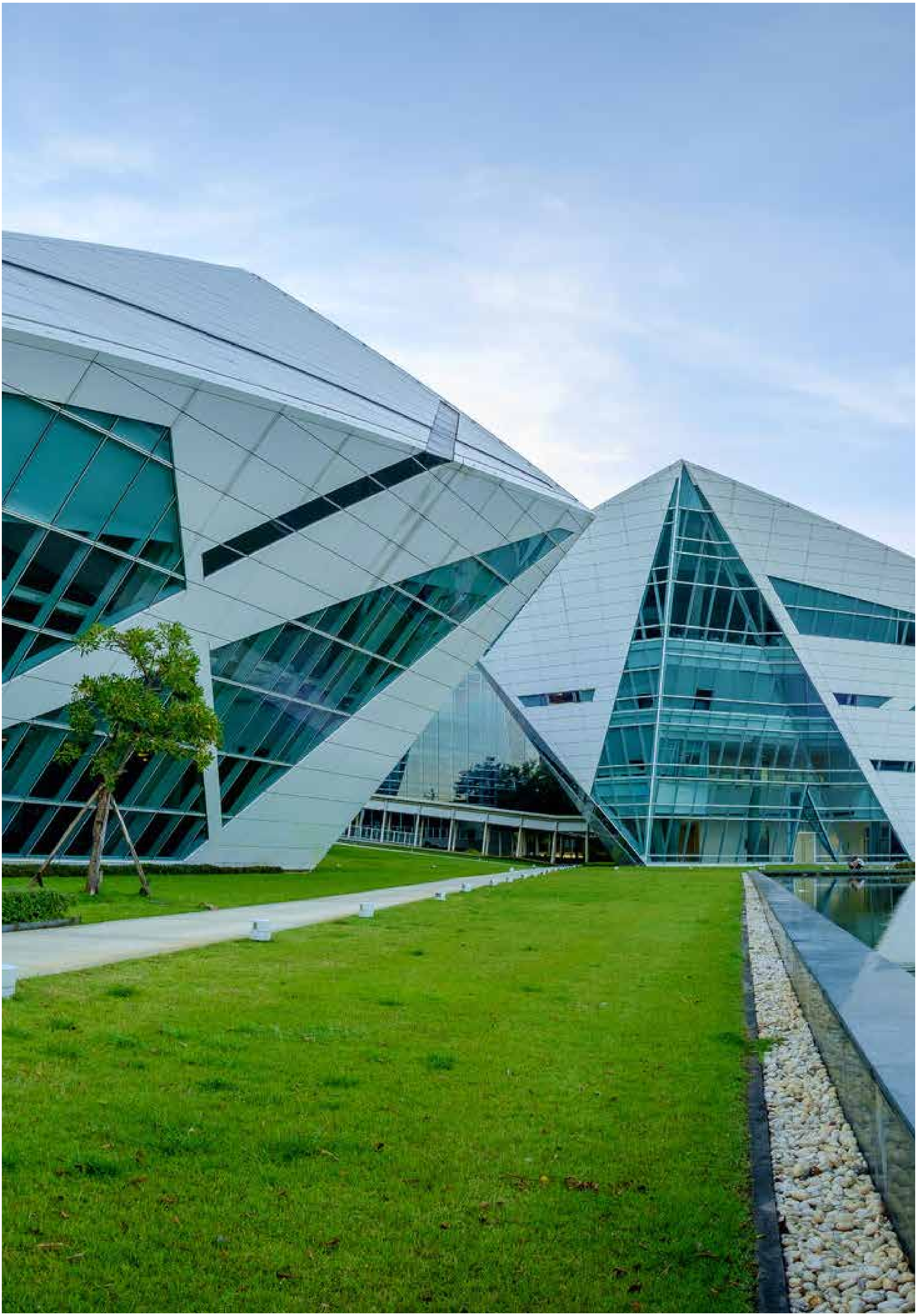


Sources: BOT (EC_EI_009_S2), GHB, REIC, & DTTJ Estimates

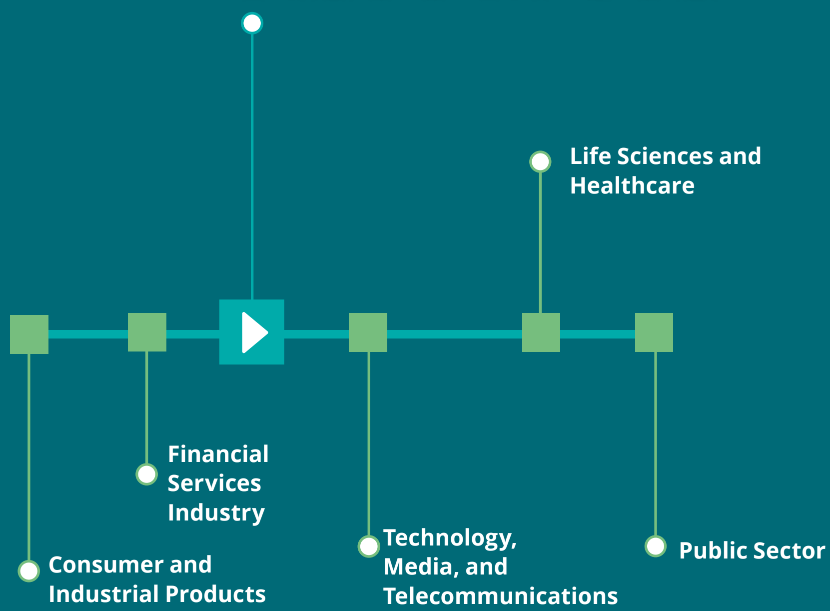
Key Real Estate Landscapes

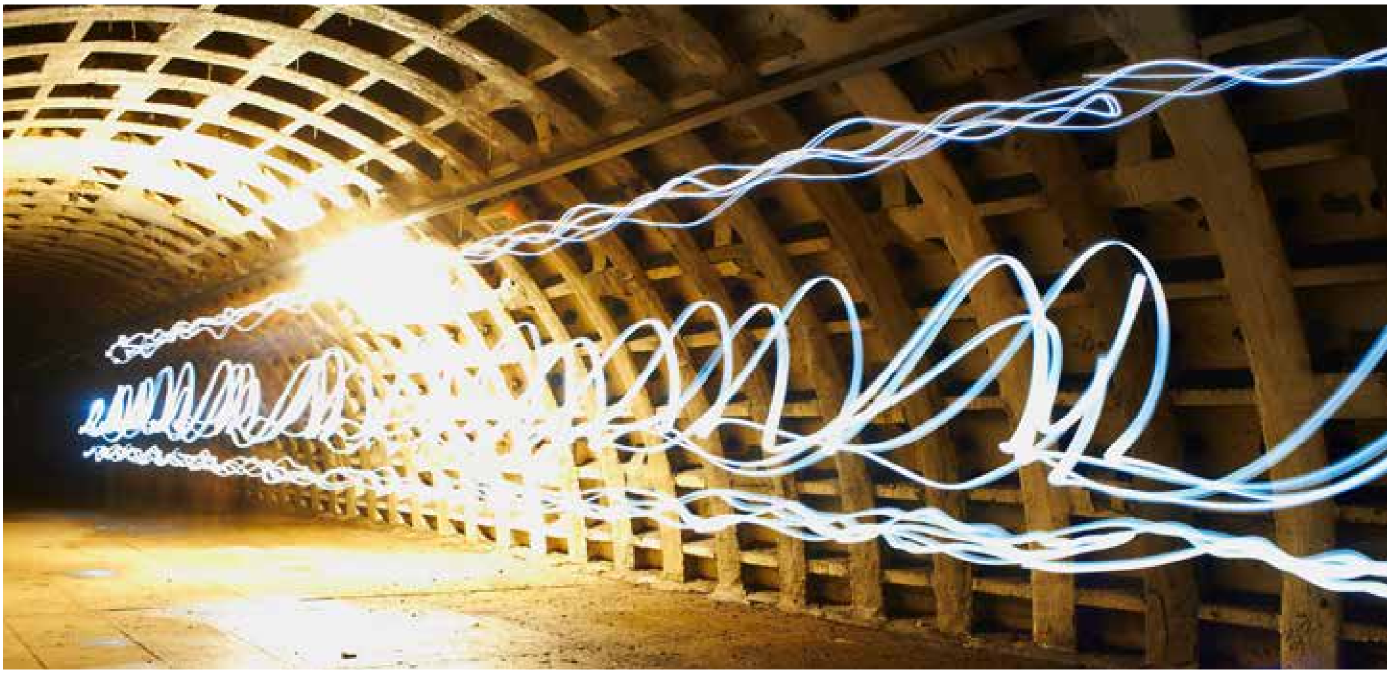


Key UPC real estate markets
- Chiang Mai
- Chonburi
- Khon Kaen
- Nakorn Ratchasima
- Phuket
- Prachuab Kirikhan (Hua Hin)
- Rayong
- Songkhla (Hadyai)
- Surat Thani (Koh Samui)
- Ubon Ratchathani
- Udon Thani



Energy and Resources



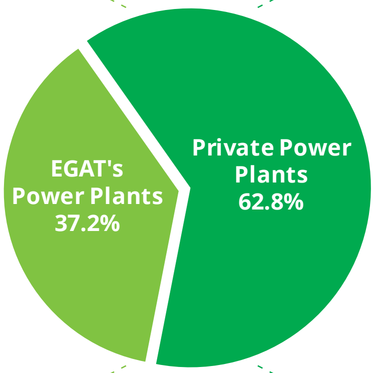


Energy: electricity

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

Total Electricity Generating Capacity: 43,930.51 MW
with 3,004.43 Renewable (7.04%) EGAT only*

EGAT's capacity	
Combined cycle	21.3%
Thermal	6.8%
Renewable	9.6%
Diesel	0.01%



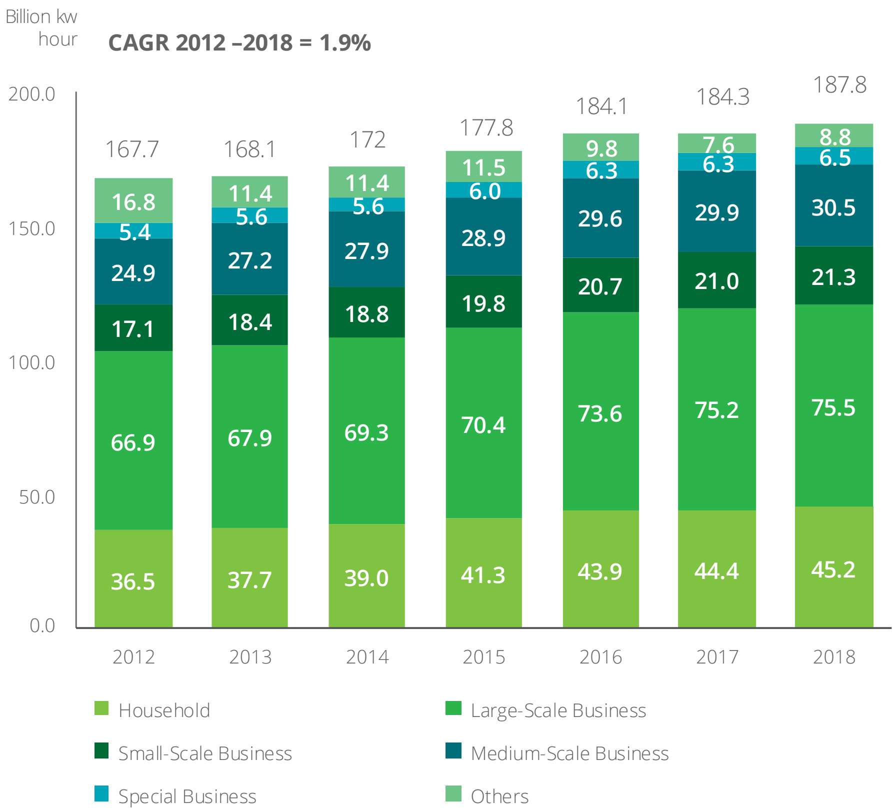
Types of producers	
IPP	34%
SPP	20%
Neighbouring countries	9%

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 2%.

- During 2018, total electricity consumption was 187.8 billion kilo-watt hour rising 1.9% compared to 2017s'.
- 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%.

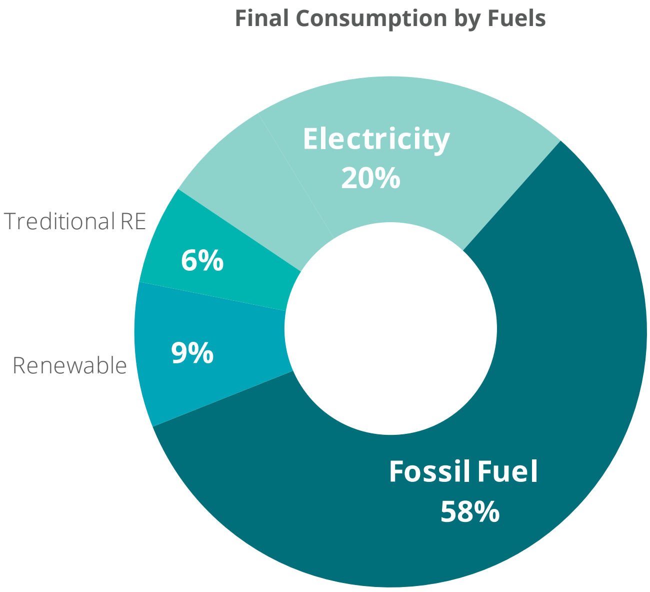
Thailand Electricity Consumption

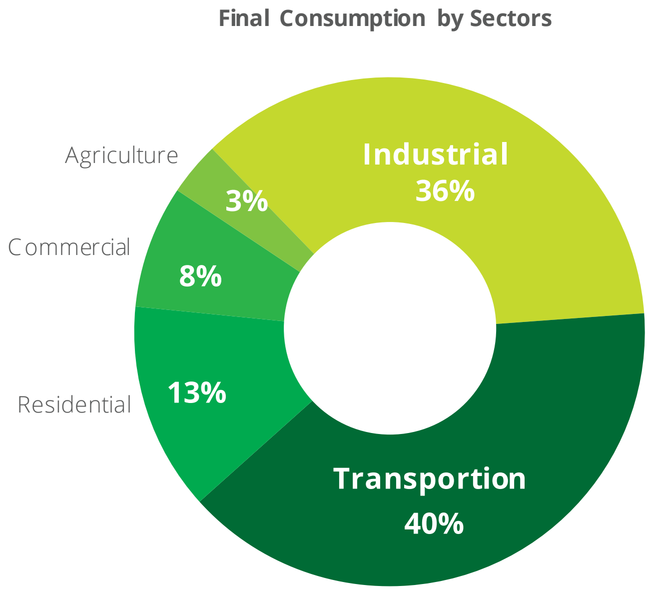


Sources: BOT, EGAT, Energy Regulatory Commission (ERC), Ministry of Energy & DTTJ Estimate
Note: kw hour = kilo-watt hour

Oil & gas

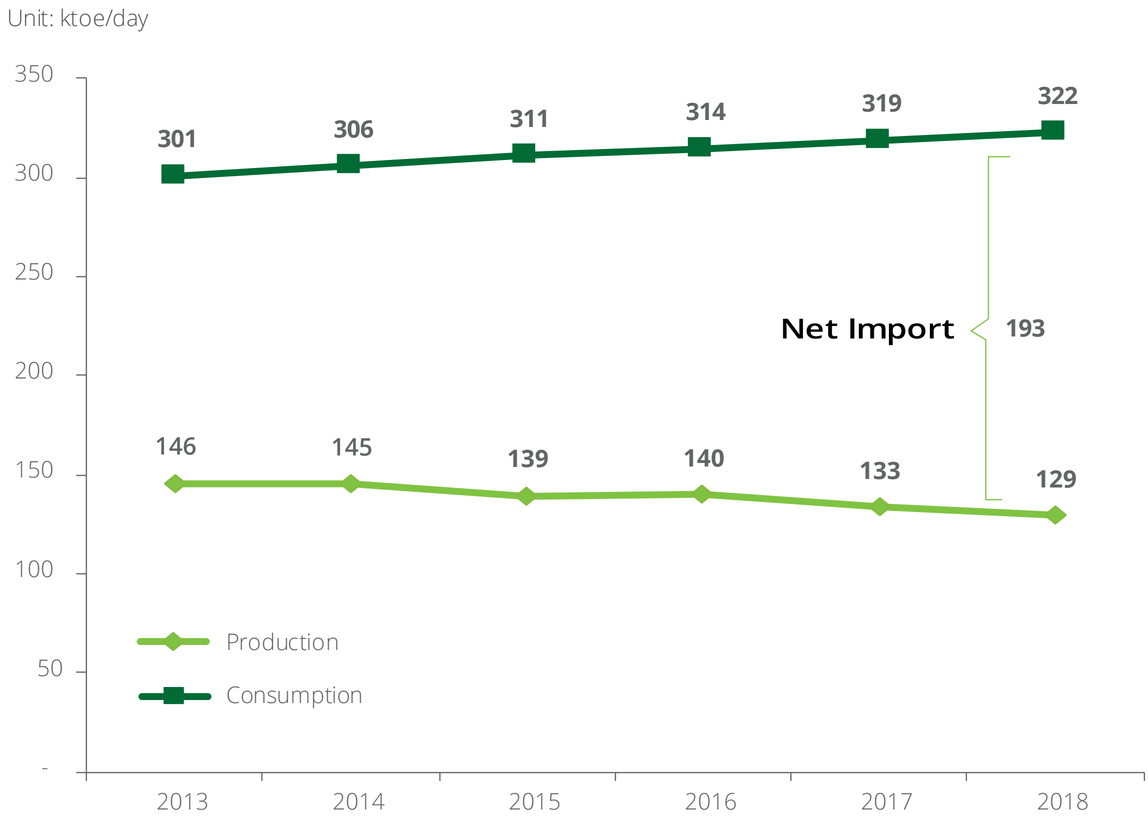
Thailand’s energy balance at the end of 2018





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

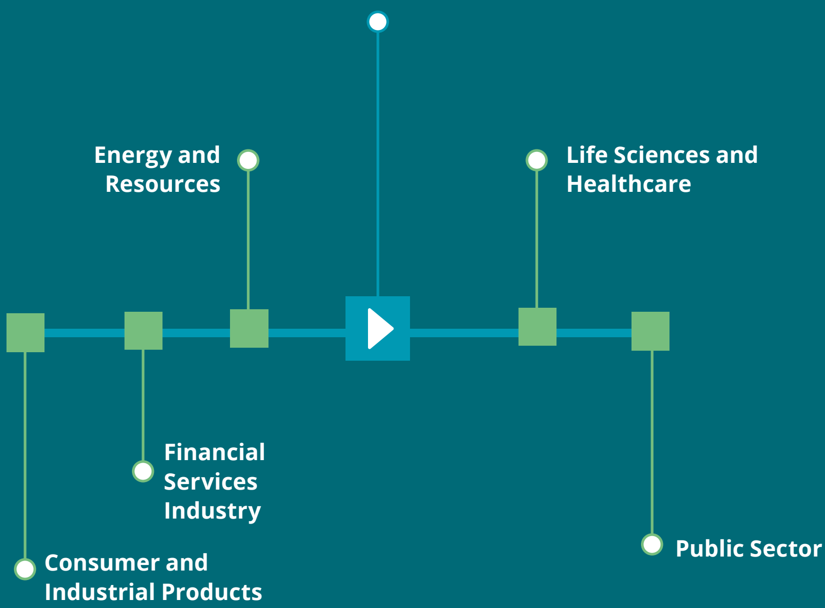
Consumption & Production of Commercial Primary Energy



- Industrial and transportation represented 36% and 40% of total energy consumption in Thailand respectively which are expected to grow in line with economic growth and Thailand Development plan.
- Fossil fuels will continue to dominate Thailand's energy mix at 63%. The electricity generated from gas-fired power plants is decrease slightly around 3.1% in 2018. Thus, The import growth of natural gas is slightly decrease instead the coal import is increase 15.7% in 2018.

Sources: EIU, EPPO, & DTTJ Analysis
Note; ktoe = kilo tonne of oil equivalent. 1 ktoe = 7,256 barrel of oil.

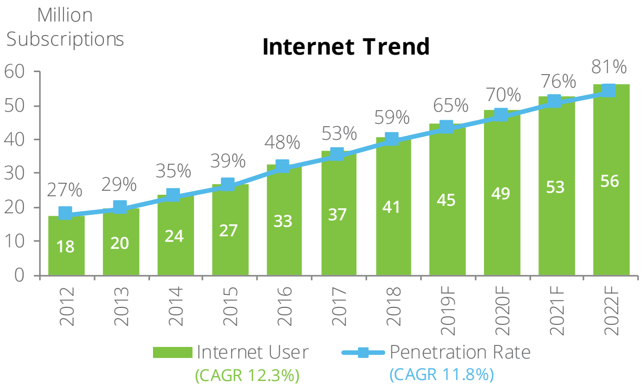
Technology, Media, and Telecommunications

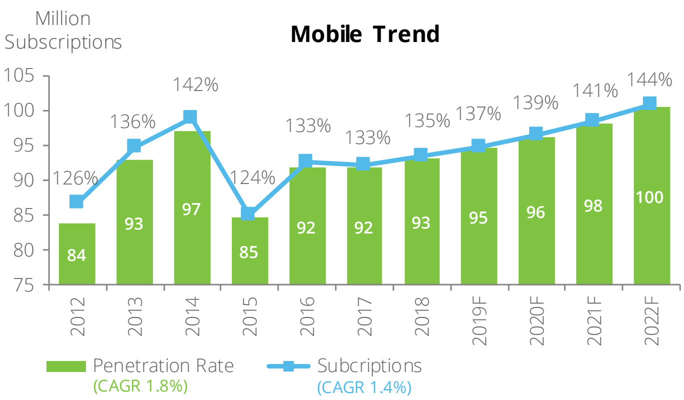


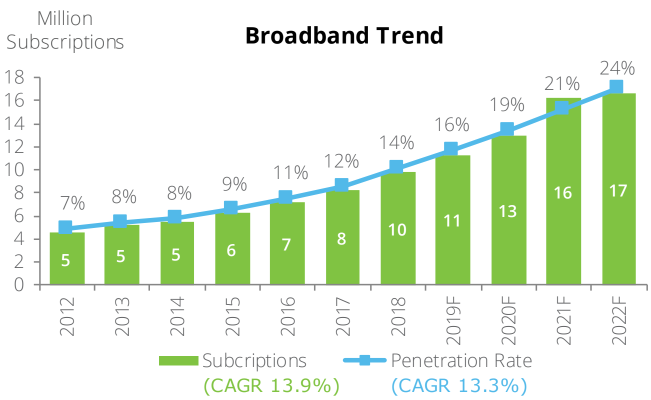
Telecommunications

Mobile subscriptions have recovered from 2016 onwards. The growth of both internet and broadband services in 2018 remains increasing

- 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.



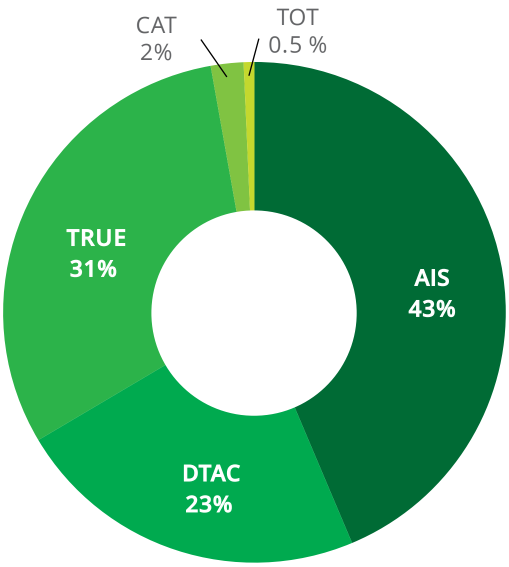




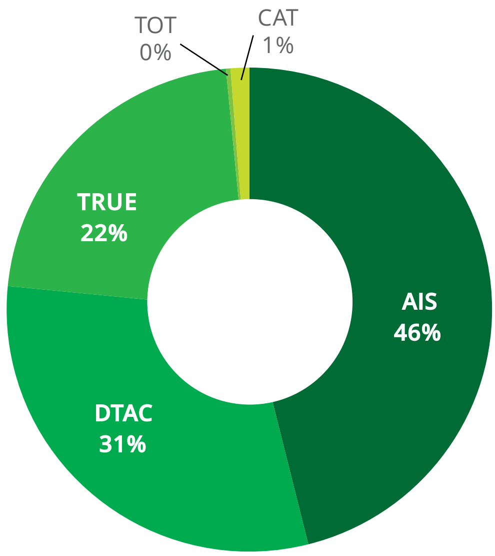
Sources: EIU, NBTC, & Ministry of Digital Economy and Society (MDES)

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

Mobile Service Market Share 2018

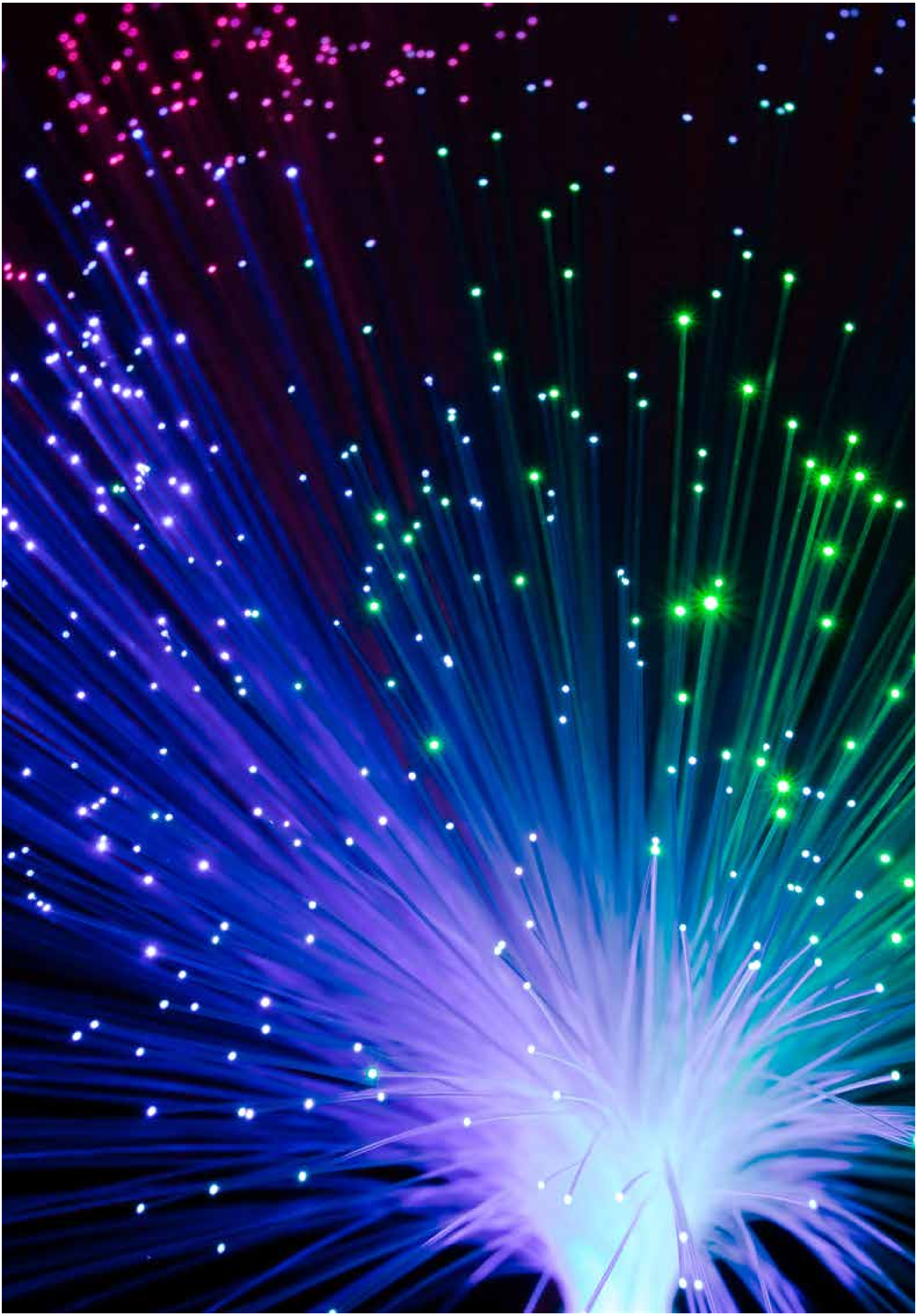


Mobile Internet Market Share 2018

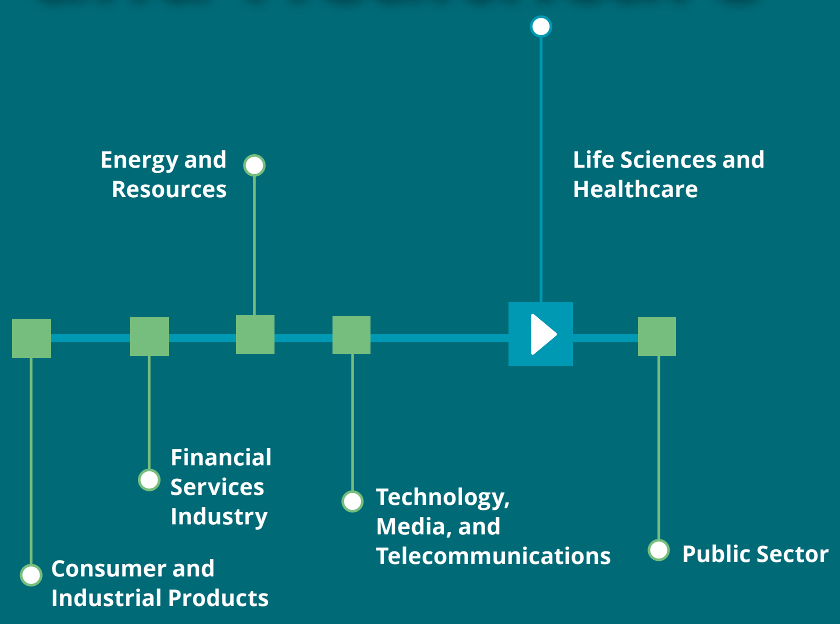


- More than 60% of service revenue was generated by mobile internet services, while the rest was from mobile services, what's more mobile internet market was expected to become key growth area.
- In 2018, Advanced Info Services (AIS) still ranked number 1st in both mobile service and mobile internet which have 43% and 46% of market share respectively, while True Corporation performed better than Total Access Communication (DTAC) in Mobile service market as it took 31% of market share.

Sources: EIU, Companies' Annual Reports and Websites, & NBTC
Note: Market Share Data as of Q3-2016



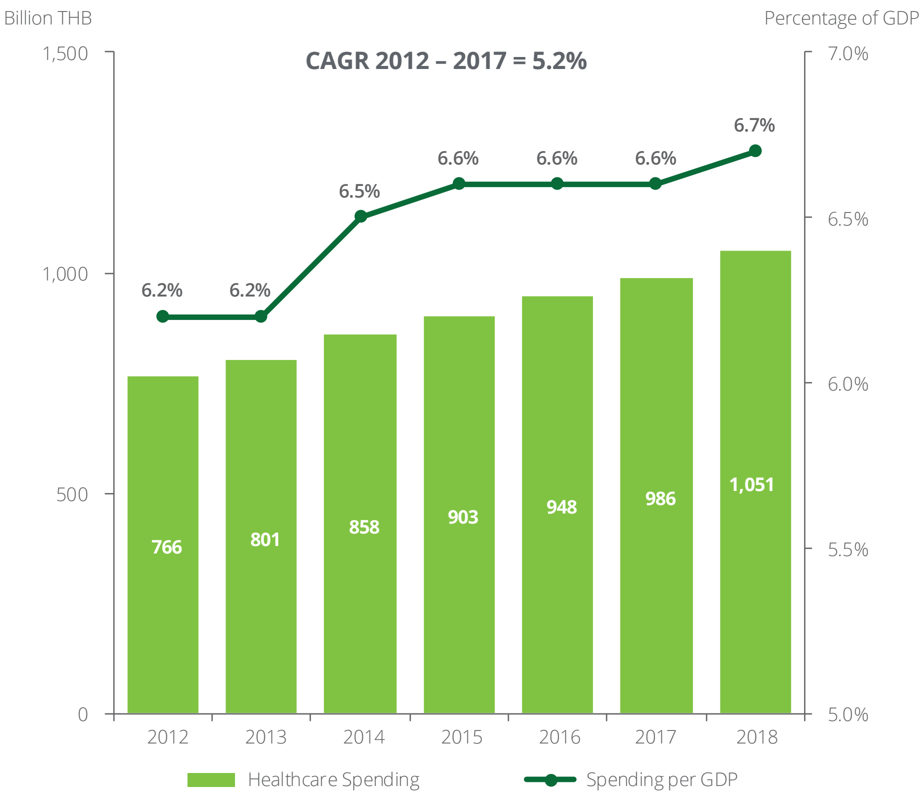
Life Sciences and Healthcare



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

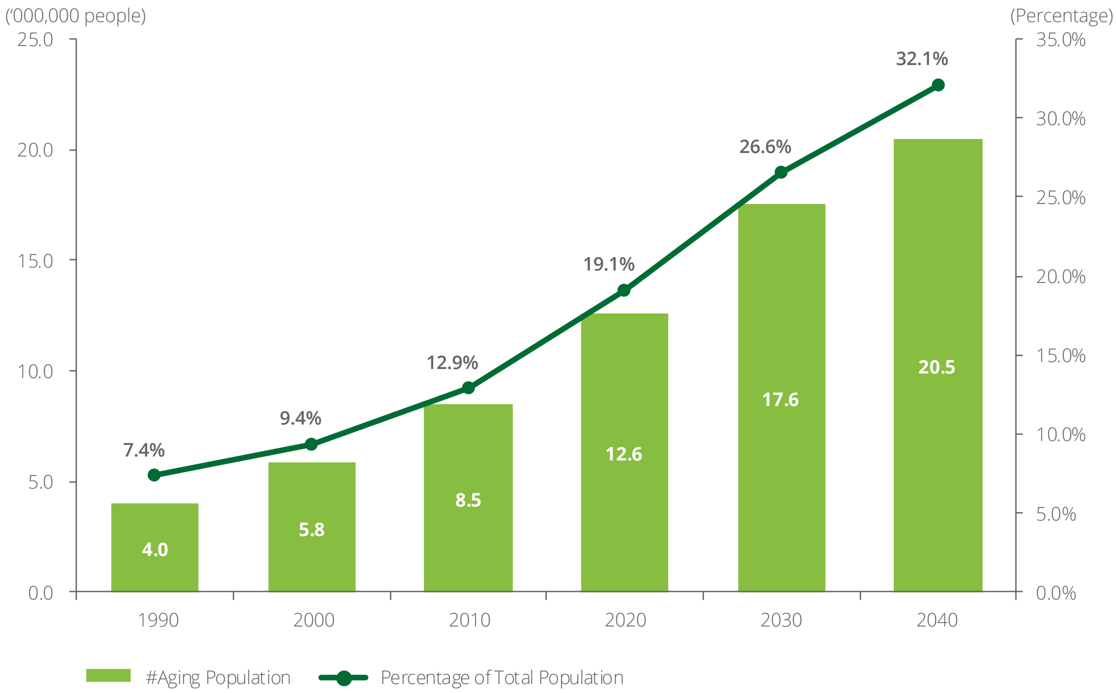


- Thailand spent on healthcare around 6.6% of GDP in 2018.
- The public sector will still dominate healthcare spending in Thailand. The rolling out of central healthcare funding will cause some categories of care to be no longer free of charge, while people are encouraged to have private health insurance 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.

Sources: EIU & NESDB

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

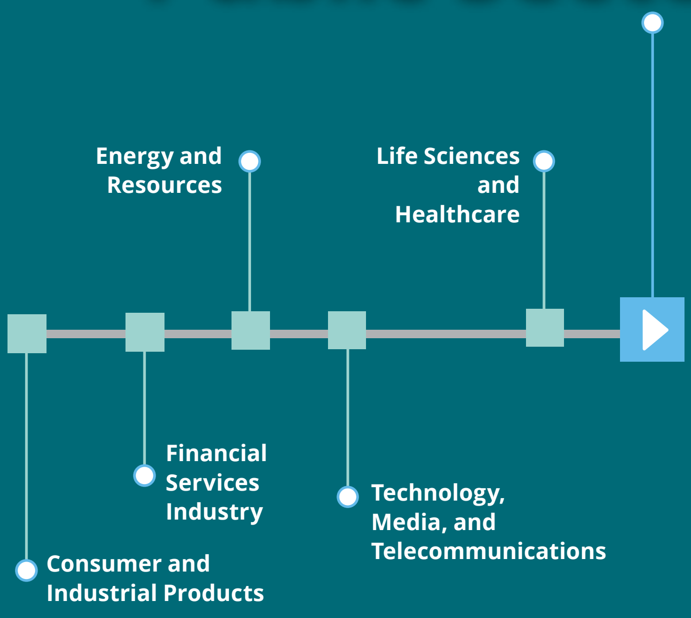
Aging Population Statistics



- 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.

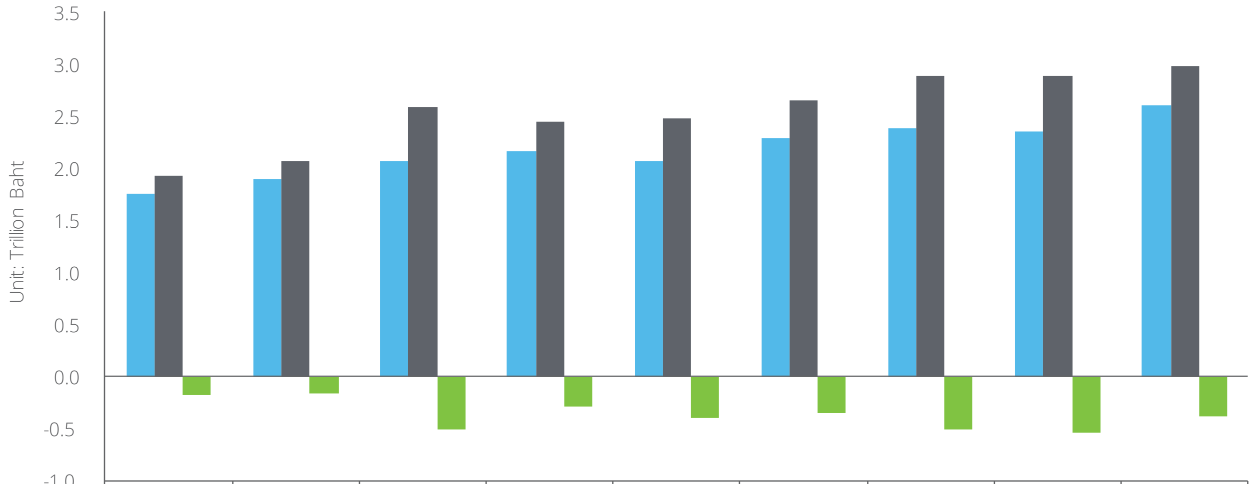
Public Sector



Public Sector

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

Government Revenue and Expenditure for 2010 – 2018



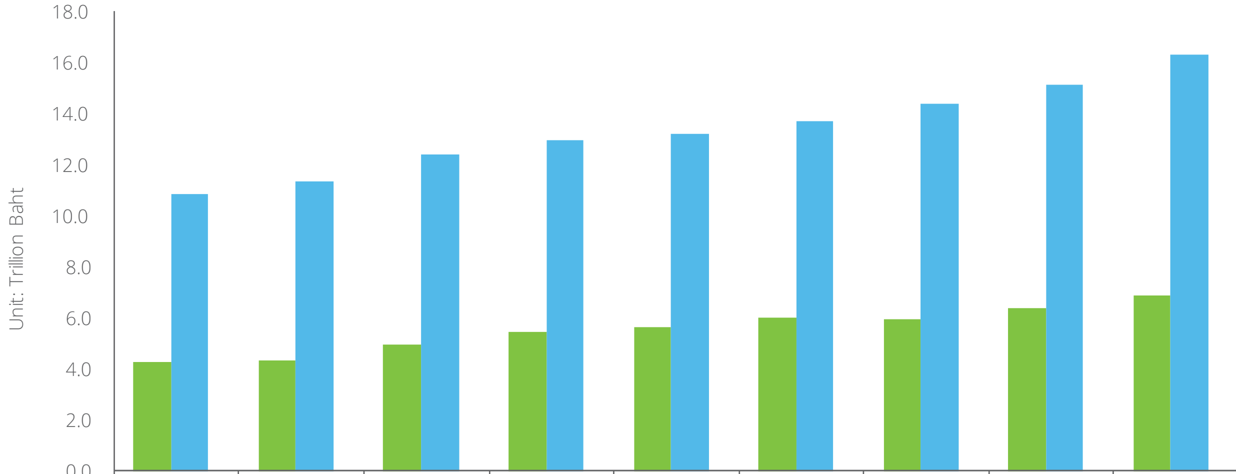
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Revenue	1.8	1.9	2.1	2.2	2.1	2.3	2.4	2.3	2.6
Expenditure	1.9	2.1	2.6	2.4	2.5	2.6	2.9	2.9	3
Budgetary Balance	-0.2	-0.2	-0.5	-0.3	-0.4	-0.4	-0.5	-0.5	-0.4

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 41.9% which is lower than ceiling level of 60%, imposed by Public Debt Management Act.

Public Debt Level Against GDP during 2010 - 2018



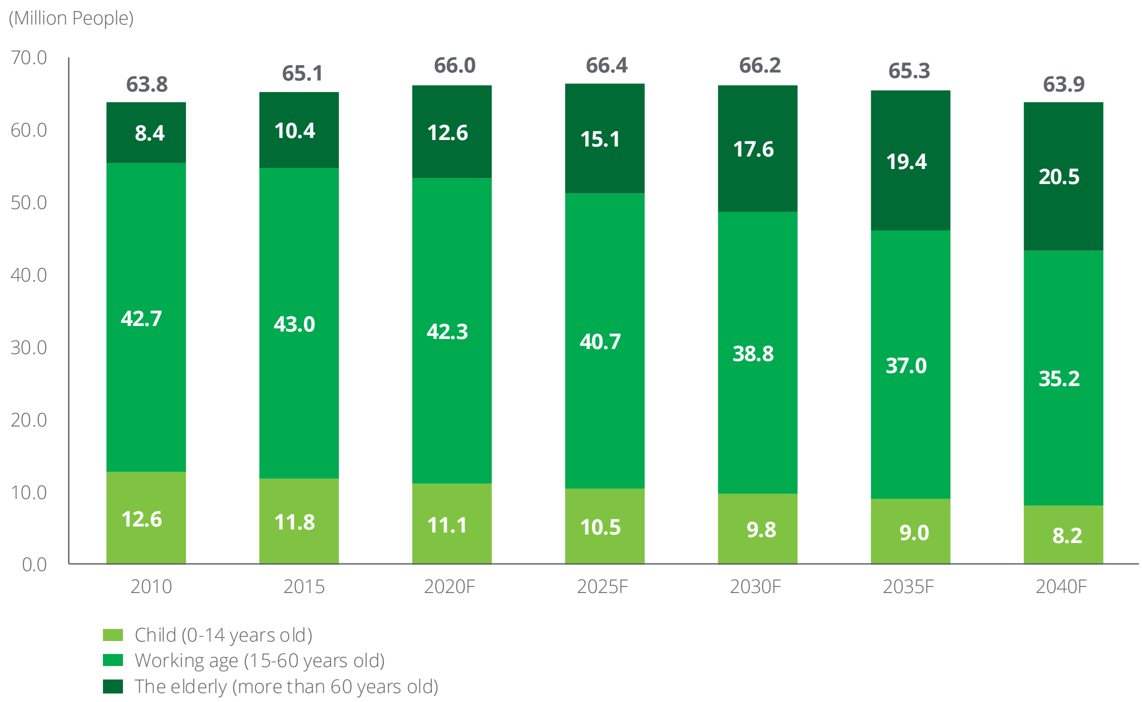
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Public Debt	4.3	4.3	5.0	5.4	5.6	6.0	5.9	6.4	6.8
Estimated GDP	10.8	11.3	12.4	12.9	13.2	13.7	14.4	15.1	16.3
Public Debt/GDP (%)	39.6%	38.0%	40.1%	42.2%	42.6%	43.9%	40.8%	41.2%	41.9%

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 42%, 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 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)



- 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

Thailand Consumer Survey

Executive Summary

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Thailand Economic Review 2019

Topical Views from Our Expert

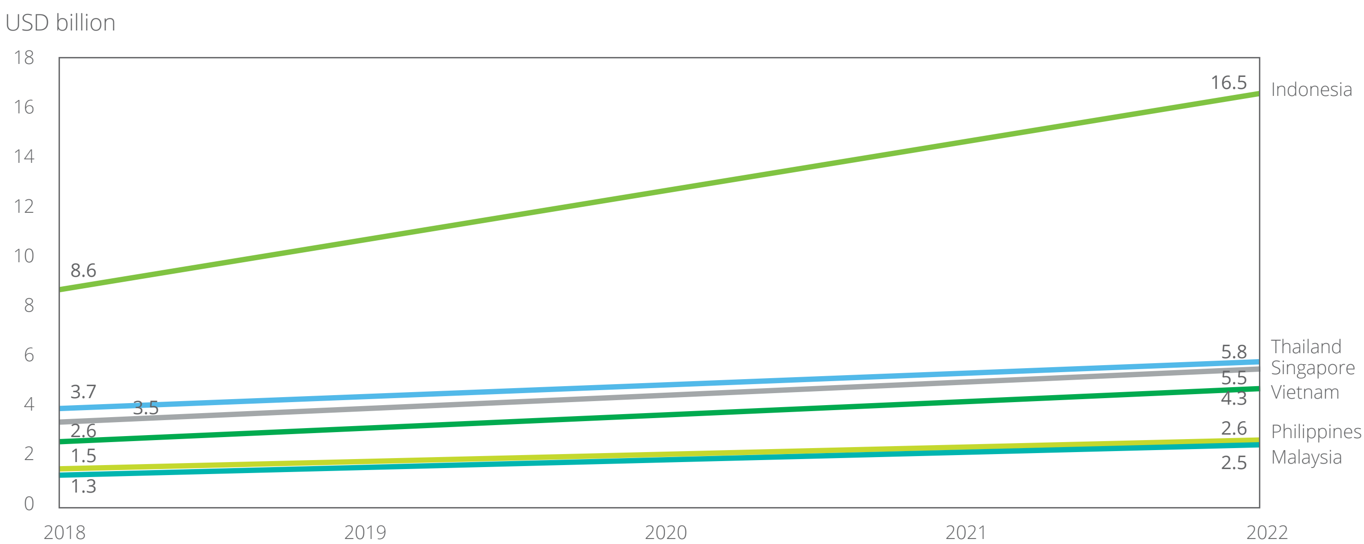
Industry Sector Update

Survey

Digital Transformation for Retail business

With its increasing online transaction volumes, Thailand is expected to replace Singapore as the second largest e-commerce market in Southeast Asia by 2020 (see Figure 1) This growth opportunity for e-commerce has also not escaped the attention of many traditional brick-and-mortar companies, who are embracing these platforms in a bid to curate a seamless shopping experience.

Figure 1: e-Commerce revenue across different Southeast Asian markets



Source: Statista

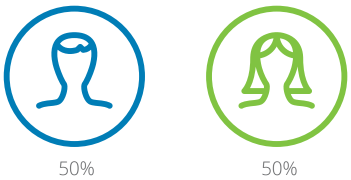
The transformation toward digital retailer could be more visible throughout the year such as a collaboration between The Mall Group and Siam Commercial Bank to launch the new SCB M campaign to create an experiential and more convenient shopping experience for consumers. The initiative features the use of Line messaging chatbots, which consumers use to place orders, and an indoor navigation system to assist consumers in locating stores.

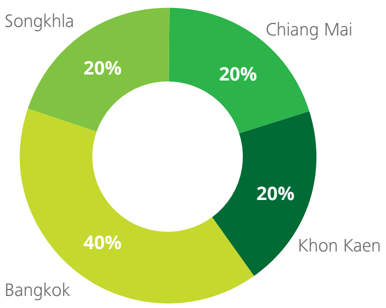
In addition to collaborations and partnerships, companies are also realising the value of mergers and acquisitions in developing their multi-channel strategies. For example, Thai e-commerce fulfilment start-up Sokochan raised a six-figure investment from locally listed logistics conglomerate Begistics PCL for a 10% stake. Thailand's Central Group has also acquired 49% of shares in the traditional electronics retailer Nguyen Kim in Vietnam, with the jointventure then acquiring e-commerce platform Zalora to enlarge its online retail market share.

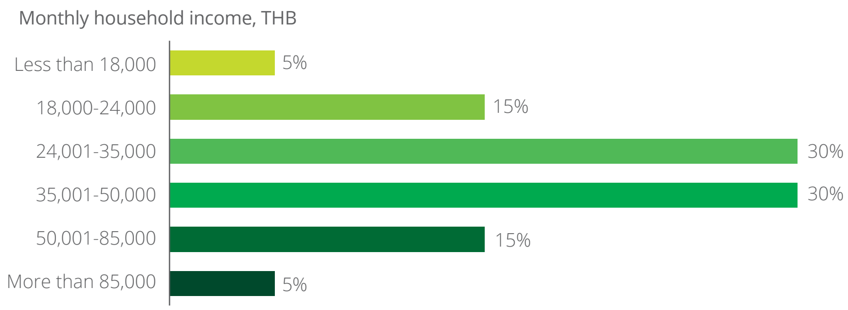
The Thailand Consumer Survey
Methodology / Respondents

- The survey was conducted across 1,000 households via face-to-face interviews in four metropolitan cities in Thailand: Bangkok, Chiang Mai, Khon Kaen, and Songkhla. Which was chosen for its size in terms of contribution to Gross Domestic Product and their strong economic growth
- The Respondents was selected based on four criteria (Gender, Age group, Location, and Household income)

Demographics of survey respondents





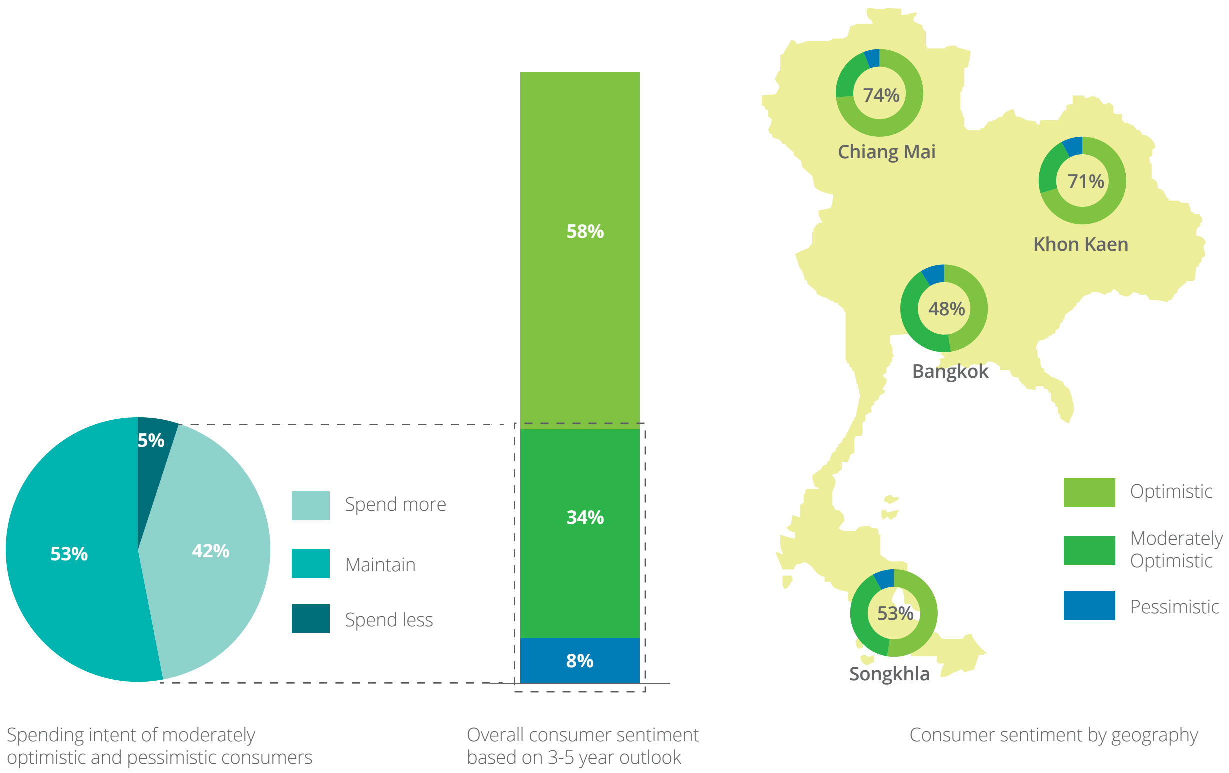


Pre-Consumption

Consumer sentiment

"**Consumer confidence continue to climb**" The proportion of optimistic respondents rising from 54% in 2017 to 58% in 2018. Amongst the remaining 42% respondents, comprising those who are moderately optimistic (34%) and pessimistic (8%), 95% also to increase or maintain their current expenditure, with only 5% of them expressing intentions to spend less (see Figure 2).

Figure 2: Consumer Sentiment

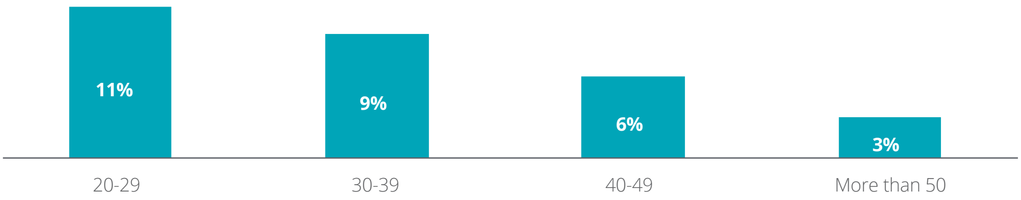


Consumer awareness

The traditional communication channels, such as Television, In-Store Promotions and word-of-mouth from Relatives, as well as Friends and Colleagues, remain the most effective for generating and enhancing awareness amongst respondents.

Meanwhile, Online and Digital channels (7%) continue to grow as the preferred source of information. These channels have a greater impact on younger respondents aged 20-29, with 11% of these respondents preferring these channels, as compared to only 3% for those aged over 50 (see Figure 3).

Figure 3: Preferred for Online and Digital channels by age group



Source: Deloitte's Thailand Consumer Survey (2018)

Purchasing preferences

Quality triumphs for the brand-savvy Thai consumer

F&B product
F&B product categories account for a large volume of consumption in the Thai consumer market. The purchasing preferences is base on the taste which is the primary attribute driving decisions for the Beverages (Alcoholic and Non-Alcoholic), Packages Foods, and Tobacco product.

Non F&B product
As for the Non-F&B product, Quality remains the dominant attribute in the purchase decision. Thai consumers also have a penchant for trendy products, particularly in the Clothing and Footwear category, with equal importance placed on Design and Quality. The ability of consumer companies to produce and deliver higher quality and trendier designs is therefore likely to translate to higher demand if they can be offered at affordable price points.

For the Consumer Electronics product categories, 44% of survey respondents indicated that Quality and Brand Trust were the main considerations for the purchase decision. Interestingly, Price was not a key consideration.

Evolving brand preferences

Non Electronics products
There is an increase in overall receptiveness to Foreign brands, driven by spikes in preferences for Foreign brands in the F&B products. Incidentally, the significant 17% increase in preference for Foreign brands in the Tobacco category could be attributed to the reduction in basic retail prices to below THB 60 per pack for Foreign tobacco brands. On the other hand, Foreign brands saw a decline in popularity in product categories such as Household Cleaning Products, and Personal Hygiene Products. In general, survey respondents with higher levels of household income continue to prefer Foreign brands for Beverages (Alcoholic), Packaged Foods, Clothing and Footwear, and Tobacco (see Figure 4).

Consumer Electronics products
For the Consumer Electronics product categories, continue to show an overwhelming preference for Foreign brands. However, its appears to be a relatively higher demand for Local brands in the Household Appliances (small product catagories). Overall, distinct brand preferences can be observed for several product categories, with Japanese and Korean brands dominating the market.

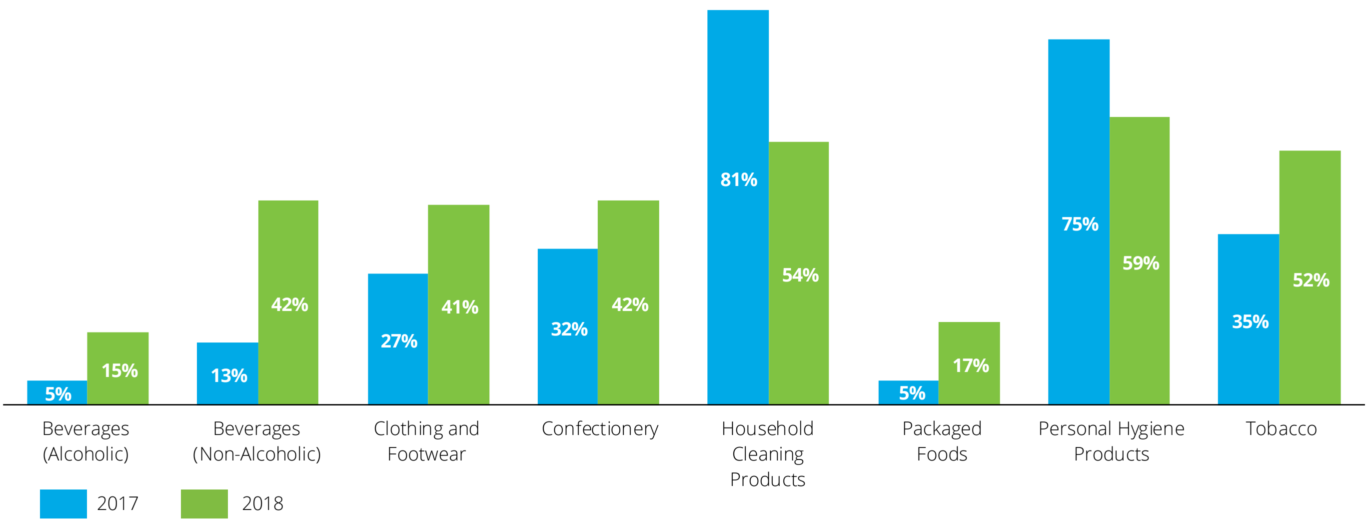


Figure 4: Comparison of Foreign and Local brand preferences across Non-Electronic product categories

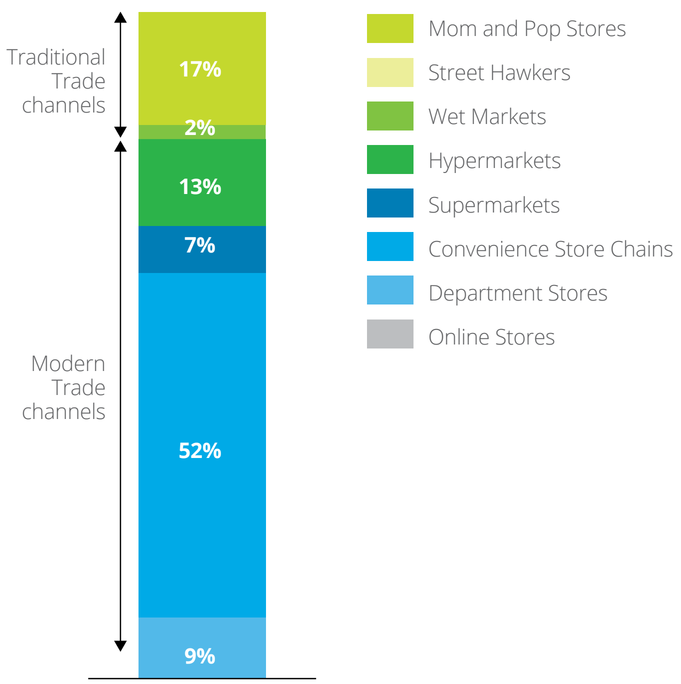
Consumption

Purchasing behaviors

Convenience, convenience, convenience

Convenience Store Chains ranking the highest by far as the channel of preference with a majority of 52%, surpassing Mom and Pop Stores at 17%, which had held the top spot in previous editions of the survey (see Figure 5). One driving factor for this could be the recent aggressive expansion of Convenience Store Chains across Thailand, resulting in their greater availability to consumers. With their close proximity to consumers and longer operating hours, Convenience Store Chains are able to take advantage of the consumer's growing desire for convenience. Such a desire for convenience was also reflected in a top inhibitors for in-store shopping: difficulties with parking, traffic congestion, and proximity to stores (see Figure 6).

Figure 5: Preference for Modern Trade and Traditional Trade channels



Source: Deloitte's Thailand Consumer Survey (2018)

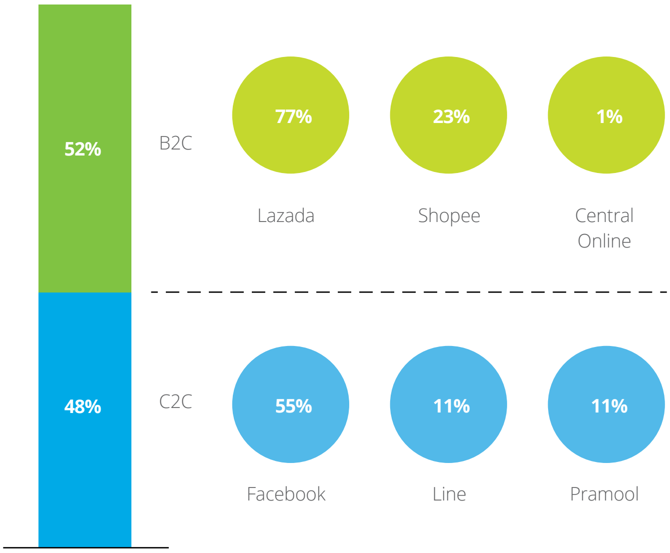
Figure 6: Shift in preference from Traditional Trade to Modern Trade channels

Rank by preference	2017	2018
1	Mom and Pop Stores	Convenience Store Chains
2	Hypermarkets	Mom and Pop Stores
3	Convenience Store Chains	Hypermarkets

The tale of online retail

C2C channels are popular in Thailand because of the use of social interaction elements to optimize the consumer's purchasing experience. The popularity of C2C channels could also be driven by the consumer's desire for instant gratification. Due to lower transaction volumes on the seller's end, C2C transactions typically offer faster delivery speeds, and quicker responses to customer queries. This aspect of the consumer experience has not escaped the attention of B2B competitors: a major e-commerce player in Thailand is automating some aspects of its purchase experience to provide elements of a C2C experience on its platform.

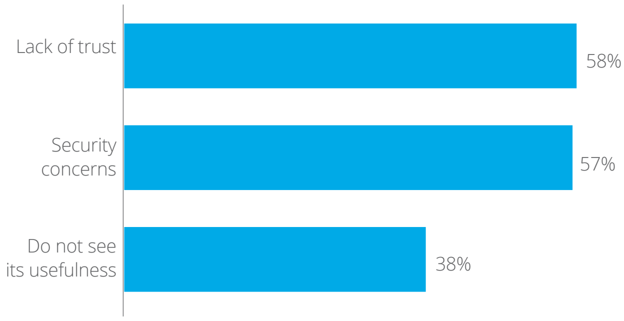
Figure 8: Top online retail platforms



The tale of online retail

Despite the increasing uptake of online shopping, online shopping platforms citing a lack of trust in product authenticity and security concerns as two of the top deterrents. In addition, a significant 38% do not see the usefulness of online shopping, implying that opportunities exist to win over such consumers through better engagement and communication (see Figure 9). Ultimately, trust is an underlying issue that remains to be addressed.

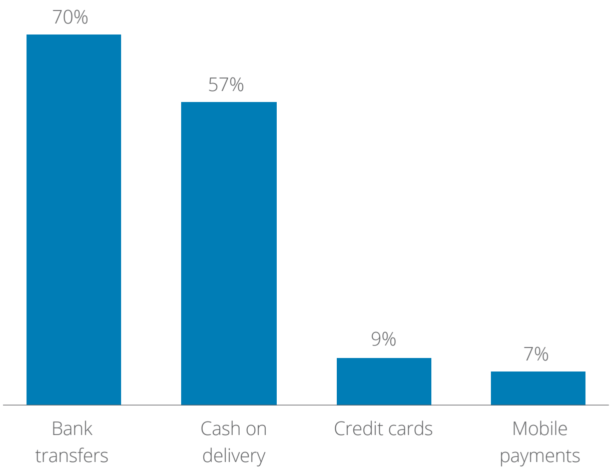
Figure 9: Top three deterrents for online shopping



Moving towards the use of cashless platforms including QR codes and mobile applications, with cash-based transactions, such as cash-on-delivery, accounting for a significant volume of payments, and 57% of respondents still relying on cash.

The rapid uptake of PromptPay is also reflected in our results, with 70% of survey respondents indicating that bank transfers (including PromptPay transfers) were their most frequently used payment method for online purchases (see Figure 10). This represents a significant increase from the previous survey, where the figure was only 59%.

Figure 10: Payment methods frequently used for online purchases



Survey

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