



# MACRO & MARKET REPORT 2019

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# Investment strategy in 2019

Among the strongest growth markets in the world in the first quarter, 2018 is still a sad year for investors when VN-Index went down 9.3%. The price fever passed through and left behind many lessons, but one important achievement is that the ability to cope with the world volatility of the Vietnamese economy has improved markedly and investors in the market have matured in comparison to the market fever 11 years ago. Besides, Vietnam's stock market continues to attract foreign investors' attention with a historical net buying record of 1.875 billion USD through the trading floor, of which 1.3 billion USD was contributed by VHM. Along with IPOs and large-scale divestments of state-owned enterprises such as BSR, POW, OIL, VCG, the private sector also affirmed its position in the stock market through the capital sale worth billion of USD (VHM and TCB), and hundreds millions of dollars (MSN, TPB, YEG).

The stock market has a good foundation to attract domestic and international investors. The obstacles at the end of 2018 such as the deceleration of key economies, the trade war, the volatile world commodity and stock markets, along with major geopolitical events which will also affect early 2019, is still covering the market. Major factors will have the strongest impact on the 2019 market outlook and the opportunities for the market next year are as follows:

## **About issues that are sure to significantly affect the market outlook in 2019:**

**US-China trade war:** Deadline for negotiations on February 28, 2019. Vietnam benefited in the short term by filling the market gap, in the medium term, by shifting production from price correlation and tariff barriers. However, a long trade war will damage the business environment, and in turn, affects the growth potential and causes macro instability.

**US stock market may enter the "bear market" cycle at the end of 2019:** Evaluate 4 following criteria: the US yield curve, US retail investor sentiment on "Bull market", moving average of 4 weeks initial jobless claim and the value of global M&A contracts, the US stock market has 2/4 criteria confirming the US stock market has entered a correction phase.

**Oil price development in 2019:** WTI oil price in 2019 is forecasted to be at an average level of 59 USD/barrel and Brent oil price to be 66 USD/barrel. Stable oil prices facilitate the planning and administration of macro policies in 2019.

**Development of USD/VND exchange rate in 2019:** USD maintained a strong rally due to positive correlation between economic growth and FED's interest rate roadmap. We forecast USD/VND at the level 23,800 - 24,100, equivalent to 1.66% to 2.94%.

**Vietnam's public debt and major public investment projects:** Budget deficit is forecasted to be at a low level by the end of 2018, public debt/GDP is estimated at 62.68%. The disbursement scale is quite large in 2019, major projects in the ministry of transportation, agriculture and rural development, electricity and health can be facilitated to complete.

**Growth of Vietnam's middle class:** Vietnam's middle class is expected to increase to 18.5% in the period 2016-2020 and is the growth foundation for the following sectors: transport

(aviation) and real estate (middle and affordable segments), Banks (retail services), Health and health services (Pharmaceuticals and medical services), and Retail.

**Amendments of stock market regulations and market upgrade possibility:** Amended stock market regulation is expected to be passed in the fourth quarter of 2019. Vietnam can upgrade FTSE Russell's primary emerging market in 2019; however, the upgrade process of MSCI must wait till 2020 - 2022.

**VN30 in the first period of 2019, changes in all marketcap groups of 2019:** 4 stocks including VHM, HDB, EIB and TPB are forecasted to replace HSG, DHG, DPM and BMP while KDH, GEX, DXG, VCI and BVH are supplementary stocks.

- VN30 stocks are expected to increase their proportion from 63.9% to 74.1% in the VN-Index and exert a greater influence on the market thanks to the upgrade opportunity in 2019.
- MidCap stocks are likely to be attractive in 2019 thanks to improved profitability and state divestment.
- SmallCap stocks are unlikely to change due to the large divergence among this group and dependence on many capital investment flows which are not expected to be strong in 2019.

**Regarding macro-economic of 2019,** BSC forecasts that GDP growth in 2019 will reach 6.7%. The macro is stable with inflation below 4%, the exchange rate falls below 3% and interest rates rise below 0.5%. Consumption and trade are the keys to growth. Public investment is expected to accelerate to complete the socio-economic development plan for the period 2019-2020 (*Table 9*).

**Regarding stock market of 2019,** VN-Index forecasts price scenarios from 800.3 to 1,265.6 and 1050 points at the end of 2019. The positive period is from March to June. The news stock market upgrade granted by FTSE Russell is expected to be an important driving force to attract new cash flows to participate. Market capitalization is forecasted to reach USD 202 billion thanks to new exchange and listing activities. Average market liquidity is expected to be 310 million USD / session (*Table 16*).

**Regarding notable investment stocks in 2019,** the groups of stocks are expected to have advantages and interest in 2019, including: (1) Stocks in the VN30 thanks to the expectation of upgrading the market class; (2) Stocks benefiting from the trade war include Textiles, Fisheries, Industrial Zones and Seaports; (3) Defensive stocks with high income, industries with stable and long-term growth potentials such as Utilities, Pharmaceuticals, and information technology; (4) Fundamental stocks, which are not only reasonably valued but also listed in the government divestment plan; (5) Industries focused on domestic consumption growth such as retail, beverages, aviation services ...

**For sectors outlook and notable stocks in 2019,** see details at “Vietnam Sector Outlook 2019”.



## Built a solid foundation, Vietnam seeks opportunities in challenges.

The positive picture of the world economy in the first half of 2018 has gradually shifted to gray colors in the second half of 2018. The trade war launched by the US cast a shadow on the world economic outlook of 2019. This war not only negatively affects world growth from the instability of key regions and economies, but also creates unpredictable fluctuations in the financial and monetary market along with goods and services market. This phenomenon obstructs the flow of global investment and deepens the gap between world economies. The deeply integrated economy of Vietnam is one of the most open economies in the world. Negative impacts have somewhat affected Vietnam economy in 2018. Nevertheless, Vietnam utilized this economic turbulence to fill the market gap and maintain its economic growth along with macro-economic stability. The strong core values of Vietnam's economy are certain to overcome difficulties and challenges in 2019 and thus, become a bright spot in emerging and frontier countries:

**The economy has grown well thanks to economic restructuring and reform,** industrial and construction sectors and the service sector have become the core of the economy replacing the agriculture, forestry and fisheries sectors. Thanks to 16 negotiating and signing FTA and domestic reforms, Vietnam attracts FDI inflows in the manufacturing sector, which broadens and diversifies exports markets by utilizing market gaps created by the US-China trade war. International organizations positively stated that GDP growth remained above 6.5% -7% in 2019. McKinsey Global Institute also stated that Vietnam is one of 18 economies with "outstanding efficiency" thanks to policies supporting the growth cycle, productivity, income and demand.

**The golden population structure, the development of the middle class is certain to support the momentum of economic growth in the next 10 years.** According to the United Nations, Vietnam's population is estimated at 96.87 million, an increase of 0.85 million compared to 2017, ranking 14th and accounting for about 1.27% of the world population. The average age is 32-year-old; the urbanization rate is 35%. The population aged in the range 15 - 64 is 67.13 million, accounting for 67.1% of the population. Currently, the middle-class accounts for about 13% of the population with annual increase approximately 1.5 million people. The World Bank expects this class to account for 26% of the population structure by 2026. Large workforce with competitive wage will boost the production and consumption sectors to rise sharply and thus, become the main growth driver of the economy for many years to come.

**Business environment is increasingly improved, drastically reforming business conditions and changing administrative procedures.** 738/5,700 clauses of business regulations have been abolished or simplified. Transparency, "anti-corruption" is thoroughly enforced by the entire political system and concretized in the economic sector by Resolution 139/NQ-CP, Directive No. 20/2017 and amendment of Finance Ministry's Circular 40 that cuts down on business costs and fees of the companies. Improving the business environment to cultivate domestic resources, especially from the private sector, supporting start-up companies, ready to embrace the 4.0 revolution are the new growth engine next to FDI growth.

**The size and liquidity of the stock market improve; the reforms are necessary to increase the stock market to become an emerging market in the next few years.** The economy, the size and liquidity of the stock market have approached the emerging market criteria. Old regulations are hindering upgrade process. Amendment of stock market laws and more open and transparent regulations is the breakthrough point for upgrading decisions from FTSE and MSCI for the period of 2019-2020 and 2020-2021.

# Macro & Market significant topics in 2019

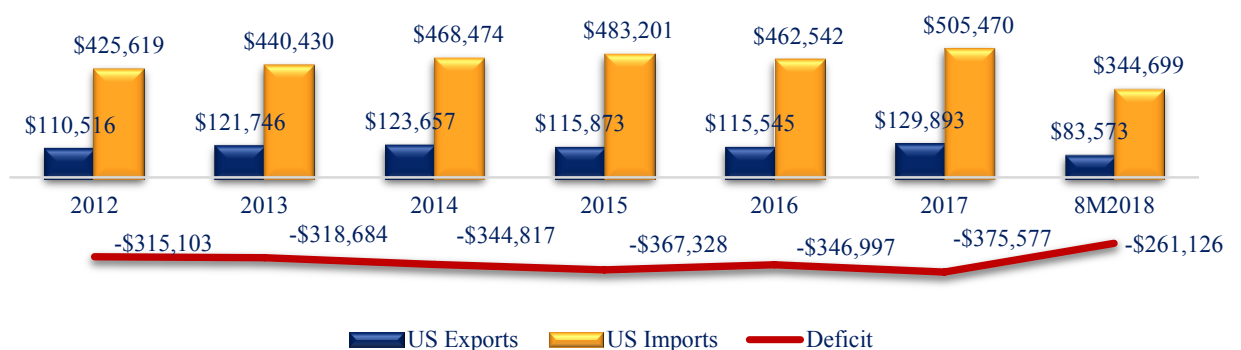
The impacts from the world have a significant effect on the macro and stock market in 2018. In general, the macro economy has overcome challenges, remained stable and is the base for market stability during the volatile and unpredictable period in the second half of 2018. International and domestic issues strongly affect the stock market in 2019. We offer 8 big questions for the economy. Vietnam's macro and stock market includes the US-China trade war, fluctuations in the US stock market, the movement of VND / USD, changes in oil prices, public debt and key projects, the development of the middle class save, securities law to amend and upgrade the market and the list of VN30 period 1/2019.

## 1. How does the US-China trade war affect Vietnam?

Accusing China of violating intellectual copyright, the United States launched a trade war by applying tax packages worth \$ 34 billion on July 6, \$ 16 billion on July 10 and \$ 200 billion on August 3. The total value of tax on Chinese goods is USD 250 billion, of which USD 50 billion in the first two packages of 25% tax and USD 200 billion for 10% tax. The USD 200 billion tax package is effective on September 24 and its tax rate is expected to increase from 10% to 25% by January 1, 2019.

At the US-China talks on December 1, the leaders of the two countries agreed to suspend the application of tariff barriers. The United States will maintain the tariff barriers of \$ 200 billion of Chinese goods at 10% instead of 25% as expected from January 1, 2019. After 90 days, if there is no progress in structural reform, the United States will raise taxes rate to 25%. This new unification blocked the escalation of the trade war and paved the way for more substantive negotiations over the next 90 days.

**Graph 1: US - China trade turnover (million USD)**



Source: Census.gov

Negative effects from the trade war and the deceleration of the Chinese economy, the global trade index (WTOI) announced by the WTO decreased from 101.8 points to 100.3 points in the third quarter and forecast to stay at 98.6 points in the fourth quarter.

**Import and export activities of China, Vietnam and Southeast Asian countries have not been significantly affected.** By the end of September, China's import and export activities still increased by 11%, down from 12% in 2017 and still significantly higher than the average annual increase of 7%/year. Five Southeast Asian economies including Thailand, Malaysia, Vietnam, Indonesia and the Philippines grew by 10%, down from 16% in the same period of 2017 but still outperformed the average of 5.0% for 10 years (Appendix 1).

**Vietnam is benefiting from the relative price of goods exported to the US - China and production reallocation.**

As of the end of November, CNY dropped 5% compared to 2.7% decrease of VND against USD. CNY depreciation rate greater than VND reduced the competitiveness of Vietnamese goods exported to China and increased the export advantage to the US. However, **Vietnam import-export turnover in 10 months to China and the United States still increased by 18% and 19% compared to the same period in 2017.**

In general, Vietnam's exports have double-digit growth including Vegetables, Rice, Coal, Chemicals, chemical products, handicrafts, textiles, steel, computers and electronic equipment and machinery, and electric cables.

Market gaps and correlations create conditions for Vietnamese exports to increase in 2018 and 2019. Vietnamese goods that could benefit from the taxation of Chinese export good, including:

**Table 1. Export Chinese goods are being subjected to US's tariff**

HTS Code	Products (HTS2)	Number of taxed products	China export to US in 2017 ( USD Bil)	Vietnam export to US in 2017 (USD Bil)
85	Electrical and electrical equipment and parts; sound recorders and reproducers, television image and sound recorders and reproducers, parts and accessories of the above	489	147.0	10.9
84	Nuclear reactors, boilers, machines and mechanical equipment; and their respective parts	764	109.6	3.1
94	Furniture; bedding, cushion, cushion frame, mattress	73	31.9	4.7
42	Leather products; saddles and harnesses; travel goods, bags and similar containers; products made from animal gut (except silkworm intestines)	86	7.3	1.2
08	Edible fruits and nuts; Citrus fruits or melons	90	0.2	1.2

Source: USITC, BSC Research

**The trend of shifting production from China and the United States can be seen in rising capital contribution and share purchase activities.** In 9M2018 alone, the number of new projects, the number of projects added capital, the number of capital contributions and shares purchases of FDI from China and the US into Vietnam has improved, indicating the trend of capital flows shift. Chinese and US businesses are looking to invest in neighboring countries, typically Vietnam, to avoid tariffs on goods from the United States.

**Table 2: Investment activities of the US and China into Vietnam 9M2017 – 9M2018 (Mill USD)**

Nation		New projects		Projects added capital		Capital contribution, share purchase		Total value
		# of projects	Value	# of projects	Value	# of Project	Value	
9T2018	China	256	547.9	67	404.6	853	416.4	1,369.0
	US	54	129.1	21	34.9	208	250.3	414.3
9T2017	China	195	1,281.7	54	183.3	593	269.8	1,734.8
	US	48	258.8	14	76.3	126	65.8	400.9

Source: Ministry of planning and Investment

**Vietnam benefits in the short and medium term, but risks will increase as the trade war escalated in long term.** Vietnam is taking advantage of opportunities to fill gaps and increase market share, boost domestic production. Beneficial industries such as Textiles, Fisheries, Wood, computers and electronic equipment, machinery are experiencing good growth for short term.

In the medium term, the shift of investment production from China and other countries to Vietnam was formed at the end of 2018 and is expected to accelerate in 2019. The geography proximity and favorable conditions is helping Vietnam to be one of the attractive destinations in the process of shifting production to take advantage of price differences, avoid tariff barriers and trade barriers from trade war.

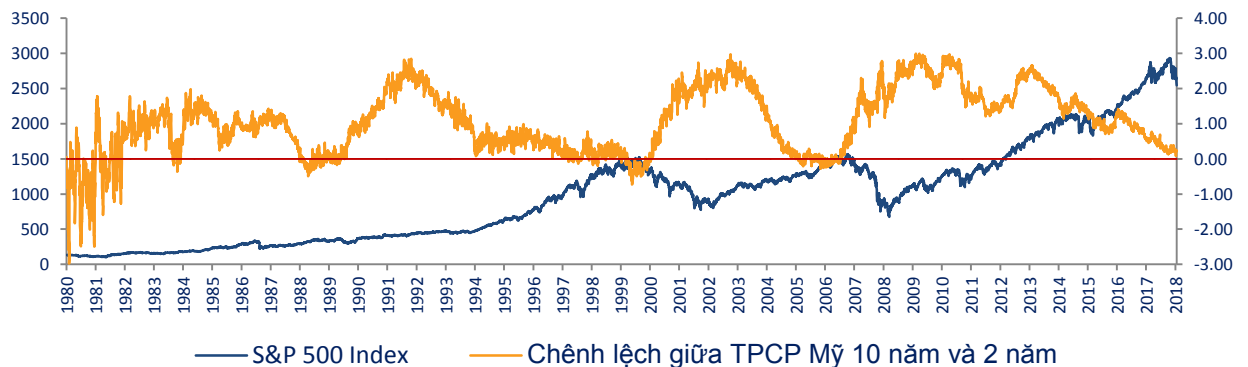
In the long term, the US and China are two major Vietnam trading partners; both countries account for about 30% of the total export turnover. Vietnam is a country with a high degree of openness with total Import-export/GDP value of 196% in comparison to the average of 5 ASEAN countries of 79% and China of 36% (*Appendix 2*). Thus, the long-running US-China trade war not only affects the global economic outlook, interferes with international trade but also causes the business environment to become less stable and brings negative impacts for growth potential and macro stability of Vietnam.

## 2. Is the US stock market about to enter the "bear market" cycle in 2019??

The S&P 500 reached 2,930.7 points on September 21, 2018, up 131% since the market hit its bottom on March 9, 2009. To determine the bear market cycle, investors around the world often use four indicators: **(1) The yield curve; (2) US retail investor sentiment on "Bull market" (AAII Bull), (3) Moving average of 4 weeks initial jobless claim and (4) Total value of global M&A contracts.**

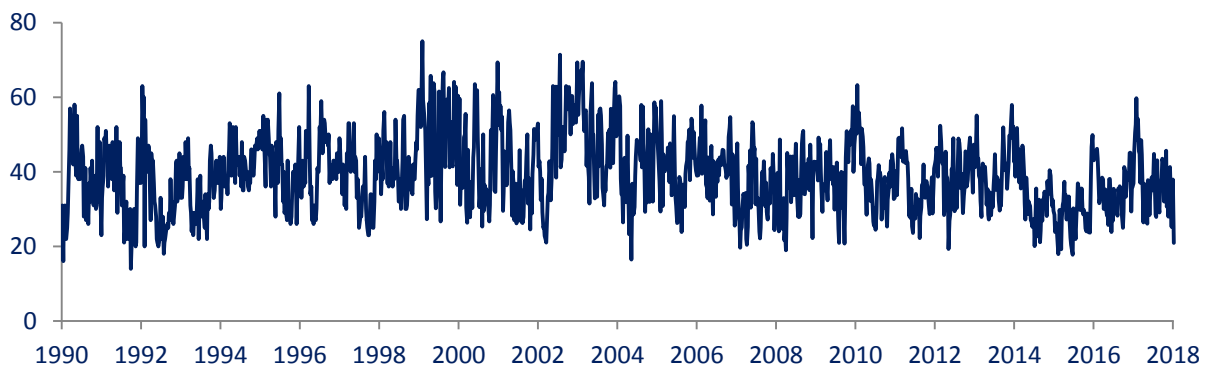
**The yield curve**, the difference between long term and short term interest rate that reversed to a negative trend, often foretold recessions and the bear market cycle. This signal did not happen in the 1987 bear market, but this signal warned and preceded the bear market in 1980, 2000 and 2007. Currently, the yield curve has decreased to a relatively low and approached zero when the difference between the two interest rates is only 0.21 points on December 17, 2018. Based on historical data, a year-long reverse trend signals US economy entering the recession cycle and US stock market went into the bear cycle. **The yield curve illustrates that bear stock market is close and may start at the end of 2019**



**Chart 2. Government bond interest rate difference (US T-bond 10 year and 2 year)**

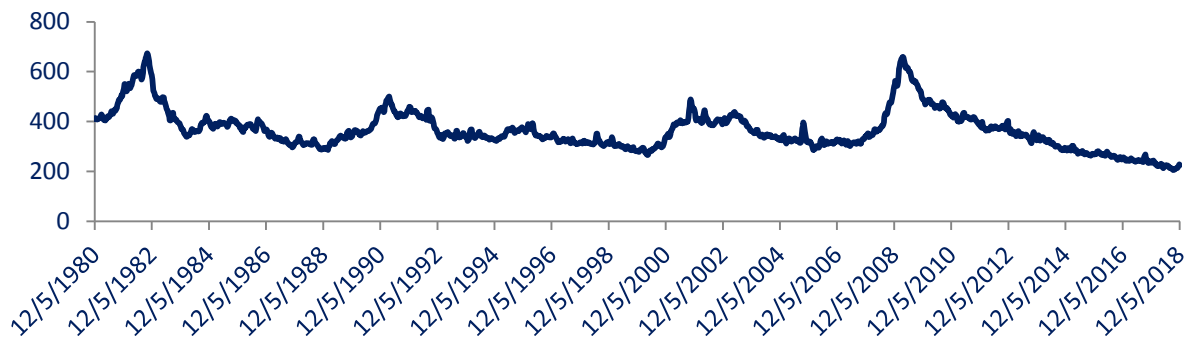
Source: Bloomberg, BSC Research

**US retail investor sentiment on "Bull market" (AAII Bull)** is a sentiment survey of retail investors. The American Association of Individual Investors requires retail investors to predict the direction of the S&P 500 in the next six months. This measure worked very well just before the dot-com bubble and spiked just before the sell-off in 2011 and 2018. The levels of caution are at the 50, 60 and 70 thresholds. The threshold of 50 points, which is a careful signal for selling profit and investors, should be wary. Beyond the 60 point, the correction trend will occur shortly, approximately in the next 1-2 months. If the survey reaches 70, the market's correction will occur quickly in about one month. **Based on this indicator, the bear market trend has begun to show up at the end of 2017.**

**Chart 3. US retail investor sentiment on "Bull market"**

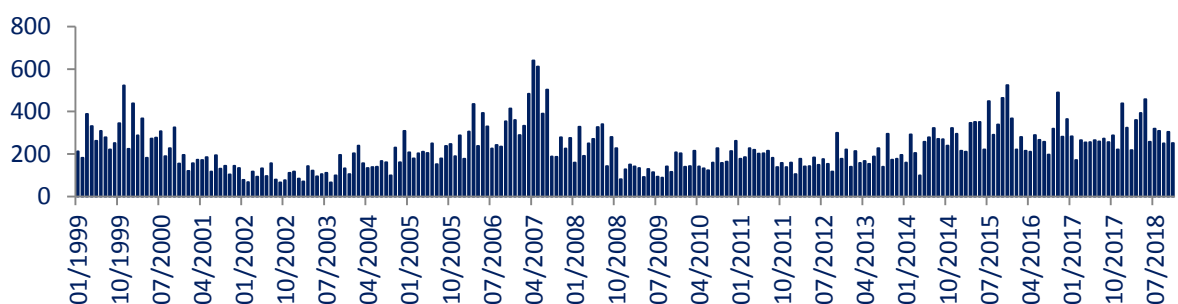
**Moving average of 4 weeks of US jobless claims:** Number of people applying weekly to receive unemployment insurance benefits. This indicator works quite well, when signs of rising start often signal the economic downturn in 2000 and 2008. FED's unemployment rate is still quite low, only 3.7% in November. The number of unemployed applications still fluctuates in the range of 200-228 thousand in the second half of 2018. If the unemployment rate returns to the 5% threshold accompanied by this moving average consecutive rising for 3 months or more will be the signal of the bear market and the recession economic cycle. **This indicator shows that the bear market and the economic downturn have not happened yet.**

Chart 4. Moving average of 4 weeks of US jobless claims



**Global M&A contracts value** is the USD equivalent of global mergers and acquisitions contracts every month. M&A trading activities often increase strongly at the end of the bull market. M&A activities, in 2000 and 2007, soared just before the peak of the stock market which signal the acceptance of excessive risks. Many recent peaks have been misleading, but M&A values have skyrocketed by the end of 2015 and early 2018 followed by a period of adjustment later. The signal level that needs to be noted is when the value exceeds 400 million USD, signaling that M&A activities take place quite fiercely on the world market. **Based on this indicator, the bear cycle has begun when the increase was quite strong in early 2018.**

Chart 5. Global M&amp;A contracts value



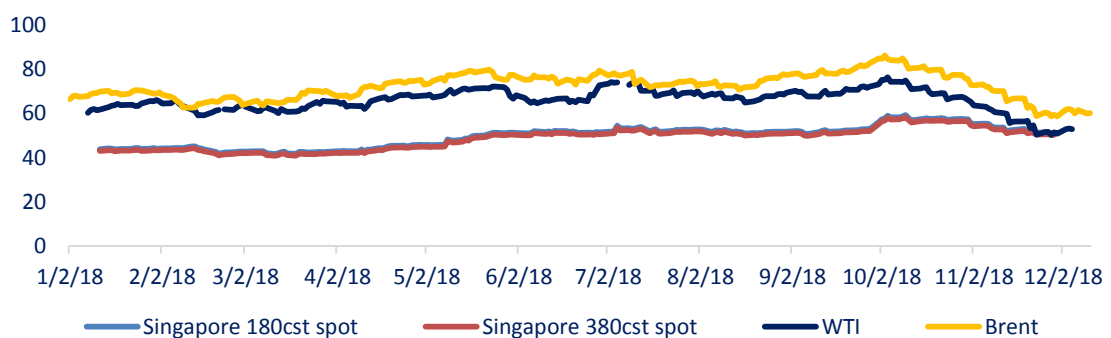
**Therefore, 2/4 indicators showed that US market has entered the correction period.** Combining 4 indicators, the market is currently moving into the initial period of the "bear market" but the downward momentum is limited due to the production and service remain unaffected. The business results were positive thanks to President Trump's tax abolishment, but the general retail investors' sentiment expecting the bear market is quite high. The distance between the short and long-term bonds is at an alarming level when they are differenced by only 0.21 points. The US stock market is facing a risky period, and may enter the recession cycle. The clearest sign will be a 20% drop from the nearest S&P 500 peak of 2,975.3 points set on 20/09/2018. On December 14, 2018, only the S&P 500 reached 2,599.9 points and 14.4% lower than the historical peak, while the NASDAQ index has already fallen more than 20% from the peak of 8,109.54 established on August 31, 2018.

### 3. How does oil price movement in 2019 affect Vietnam and economic sectors?

Oil prices rose slightly at the beginning of the year 2018 and peaked in early October due to concerns about the interruption and decline in worldwide oil supply caused by US sanctions of Iran and Venezuela, and an OPEC and Russia's oil production cut agreement.

However, oil price dropped sharply and started to move sideways in the last 3 months due to concerns about the excess of global crude oil supply. The slowdown in demand from large markets such as China and the continuing supply boost from the United States and Russia are factors that put pressure on oil prices.

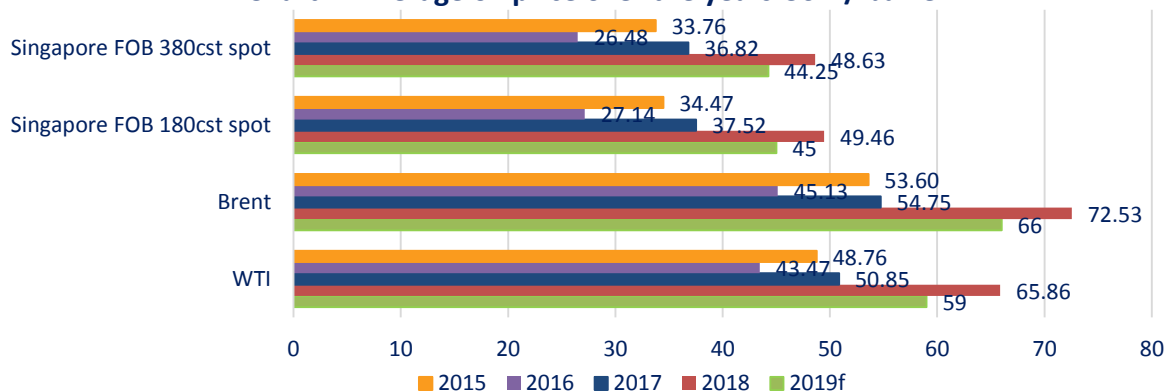
**Chart 6. Oil prices 2018**



Source: Bloomberg, BSC

According to oil price adjustment forecast of major organizations such as OPEC, IEA, Morgan Stanley, the world average oil price in 2019 will decrease slightly compared to 2018. WTI oil price will decrease to the average level of 59 USD/barrel next year. Brent oil price will fall slightly to the average level of 66 USD/barrel. Singapore oil price FOB will also fall slightly to 44.25-45 USD /barrel.

**Chart 7. Average oil price over the years USD / barrel**



Source Bloomberg, BSC

The factors push the average oil prices in 2019 decline compared to this year:

Bloomberg: BSCV <GO>

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**In terms of Supply**, the United States continued to increase its production and oil export. The IEA forecasted an average of 12.1 million barrels a day in 2019, up 11% from an average of 10.9 million barrels a day in 2018.

OPEC lost its ability to dominate the oil market as its share of the total oil supply became weaker. In addition, the oil supply of Iran and Quarta will continue to be maintained in the first half of 2019 which is 2,600 thousand barrels/day.

**In terms of demand**, oil demand increased more slowly than supply as forecasted supply will exceed demand in 2019-2020 and this gap will be increased according to OPEC forecasts.

Oil demand is forecast to increase slowly due to the prospect of world economic growth and slowdown in manufacturing. This is also an inevitable consequence of the effects of the Sino-US trade war and the cyclical global economic recession.

**In terms of policies and exchange rates**, FED is likely to continue its roadmap to increase interest rates twice in the next year, which makes the USD price appreciated and push oil prices which down slightly and stable. In addition, the Trump government also wants to keep oil prices low to support the economy and revive the country's manufacturing sector.

**In terms of production costs**, advances in technology and management efficiency have reduced the cost of oil extraction and production. Specifically, Kuwait is the country with the lowest production cost of oil with only about 8.5 USD/barrel; Saudi Arabia with 9.9 USD/barrel, Iraq 10.7 USD/barrel, UAE 12.3 USD barrel, Iran 12.6 USD/barrel. The United States needs oil prices at \$ 45 a barrel to maintain stable production according to Citigroup's assessment while Russia only need 40 USD/barrel.

**In terms of political factors**, the United States and the West continue to use oil prices as a tool to punish and weaken the heavily depended oil exports economy such as Russia, Venezuela, and Iran.

**Prospects and asset risks**, concerns about global economic prospects, concerns about excess supply and high US oil and gas reserves will cause investors to sell off and reduce investment proportion for future oil contracts. Therefore, the average oil price will be low next year.

**The marketshare of oil in total global energy demand.** The trend of reducing dependence on oil will continue to increase. According to OPEC's forecast, the proportion of oil from the total global energy demand will fall from 31.5% in 2015 to 25% in 2040 due to the strong growth of energy demand from gas and renewable energy. Energy sector have a lot of potential and are supported by national governments.

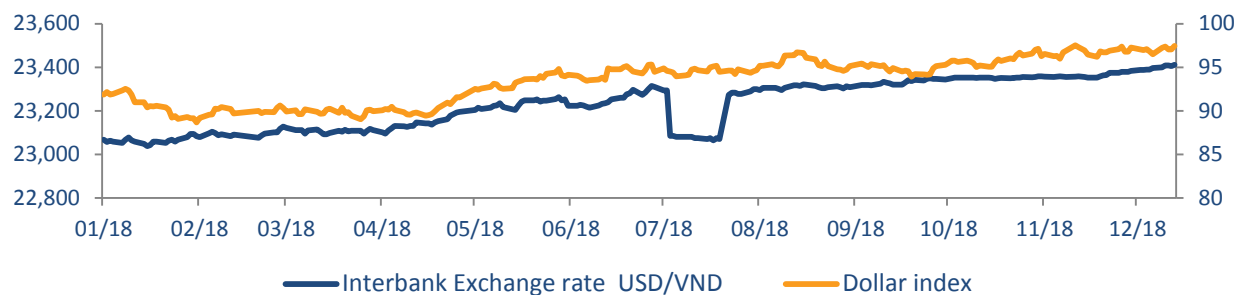
Oil price volatility increased sharply and brought both positive and negative effects to Vietnam in different directions (Appendix 3). With a forecast of stable oil prices and a slight decrease in 2019, the impact on Vietnam will therefore be reduced, enabling government to plan and operate policies more easily in 2019.

Falling oil prices are expected, some industries such as chemicals, fertilizers, energy, tires, plastics, transportation and construction materials benefit in 2019 (Appendix 4). However, some industries and enterprises in Vietnam have revenues mainly from oil and gas production and trading activities affected by low product and export prices. Companies that utilize, export and refine are strongly affected by declining oil prices, while others are also under pressure this price trend such as natural rubber exporters.

#### 4. The trend of USD/VND movement in 2019:

The exchange rate this year has increased from 22,720 (12/31/2017) to 23,411 (12/14/2018) with an increase of 3.04%. The Dollar Index, a measure of the value of the dollar against the world's currencies, surged to the year-to-date peak of 97.39 (+ 5.6% YTD and + 4.1% YoY). ahead of the 4th FED interest rate meeting. In 2019, BSC estimates that the USD/ VND exchange rate will reach 23,800-24,100, equivalent to an increase of 1.66% -2.94%. Increasing amplitude will be affected significantly from 3 important factors for the following year: (1) The price increase of the dollar in the world; (2) US-China trade war; (3) Foreign currency reserves of the State Bank.

**Chart 8. Development of USD/VND and Dollar Index in 2018**



Source: Bloomberg, BSC Research

**The Dollar Index will continue to rise in 2019 as the US economy continues to grow at a slower pace and the FED maintains raising interest rate policy:**

In the third quarter of 2018, the United States had a 3.5% economic growth rate, the lowest unemployment rate in half a century -3.7% and the November inflation rate returned to 2.2%. OECD estimates that US economic growth will reach 2.9% in 2018 and 2.7% in 2019 with inflation ranging from 2.0-2.5%. While employment growth in the United States slowed, consumer growth remained stable and supported by the rise in wages as the labor market became tighter. Business investment will grow strongly in 2019 and 2020 thanks to President Trump's tax reform and financial conditions that support the trend of business investment. Fiscal stimulus policies issued in 2017 and 2018 are still impacting on the economy but will weaken in 2019.

**Other key economies also show slight growth but are still poor compared to the US, which will make the USD more attractive than other currencies.:**

**Table 3. United State and Dollar Index nations economic growth (Appendix 5)**

Nation	Dollar Index Proportion	GDP		Inflation	
		2018	2019	2018	2019
USA		2.90%	2.70%	2.10%	2.15%
EU	57.60%	1.90%	1.80%	1.80%	1.90%
Japan	13.60%	0.90%	1.00%	1.00%	1.40%
UK	11.90%	1.30%	1.40%	2.50%	2.30%
Canada	9.10%	2.10%	2.20%	2.30%	2.10%

Source: OECD, BSC incorporated.

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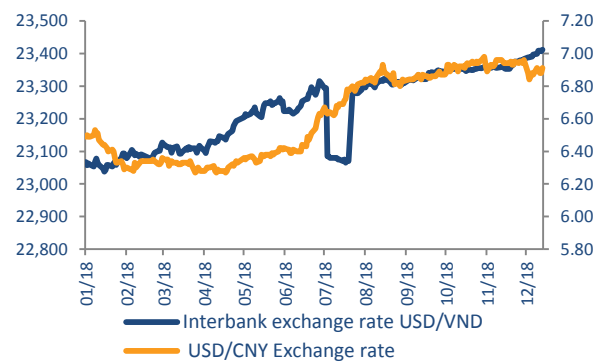
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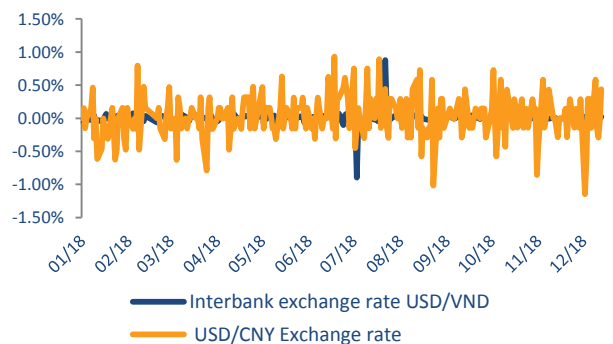
Such economic growth momentum will maintain the Fed's policy of raising interest rates. High interest rates will attract international cash flow into US financial investment channels that will increase the value of the Dollar. Currently, the general judgment on the market is that FED will raise interest rates twice next year. US economic growth is estimated to slow down in 2019.

***The US-China trade war will have a big impact on the USD / CNY exchange rate and significantly affect the USD / VND exchange rate.***

**Chart 9. Development of USD/VND and USD/CNY**



**Chart 10. Fluctuation range of USD/VND and USD/CNY**



Source: Bloomberg, BSC Research

Central Bank of China is implementing a policy to maintain the highest level of USD/CNY exchange rate at 7.00 with the largest difference in the trading day of 2%. On December 14, 2018, the exchange rate of USD/CNY reached 6.91 (+ 6.5% YTD) was quite high compared to the exchange rate of USD/VND 23,411 (+ 3.04% YTD). The fluctuation of USD/CNY exchange rate is quite strong compared to the fluctuation of USD/VND exchange rate. The following year, the level of influence from the RMB exchange rate is expected to increase more sharply as the government allows the yuan to trade in 7 Northern border provinces and the trend of shifting production supply chains. from China to Vietnam. This phenomenon will be a big challenge for the state bank in operating monetary and fiscal policies to stabilize the exchange rate band of USD / VND.

***Foreign currency reserves of the State Bank of Vietnam will be supplemented by the following four internal factors:***

- The total import-export turnover is expected to reach USD 541.51 billion (+ 12.75% YoY) in 2019 and the surplus from the trade balance in 2019 is estimated to reach USD 6.7 billion (-7.0% YoY) lower compared to 2018 but still maintained a high surplus.
- The divestments of state-owned enterprises are expected to bring in US \$ 15-20 billion in the period 2016-2020. In 2016 and 2017, these deals contributed USD 11.75 billion to the state budget. As of December 14, 2018, the divestment activities were quite slow; the whole year only earned about 1.23 billion USD with major contributions from divestments of OIL, BSR, and POW. Large SOEs such as VGC, VEAM, ACV, BFC, and DPM will be promoted to divest in 2019 to reduce financial pressure on the government budget.
- Overseas remittances continue to maintain at the level of 10-11 billion USD, the average level of the period 2011-2017 due to slight interest rate rise and stable macro economy in 2019.

- The current amount of foreign exchange reserves is about USD 60 billion, the State Bank still has enough financial resources to curb the rise of the exchange rate at 23,800 -24,100.

From a general perspective, considering the three macro factors: the price increase of the US dollar, the US-China trade war and the SBV's foreign exchange reserves, BSC forecasted that the USD/VND exchange rate will reach 23,800- 24,100. In case the FED only raises interest rates twice and the state of trade war does not progress to the next stage, the VND / USD exchange rate will only increase to 23,800 (+ 1.66%). In case the FED raised interest rates three times and the tension of trade war continues to escalate, the VND/USD exchange rate will rise to 24,100 (+ 2.94%).

### 5. Vietnam's public debt and the state of public investment in national key projects.

**Vietnam's public debt is maintained at high level.** The ratio of public debt to GDP is 62.7%. In 2018, the total loan and debt repayment plan of the government was VND 384,000 billion (+ 12.26% YoY) compared to the previous year and the total net debt was also increased to VND 311,014 billion (+ 10.97% YoY). The slight increase is mainly because the government is shifting from ODA loan mechanism to non-preferential loans, making the estimate of overspending and debt payment increase compared to 2018.

**Table 4. Government debt plan (Unit VND Billion) (Appendix 6)**

Criteria	2016	2017	2018
<b>General debt</b>	<b>452,000</b>	<b>342,060</b>	<b>384,000</b>
Debt rollover	95,000		
Offsetting overspending	245,000	172,300	195,000
Repayments	56,650	144,000	146,770
Investment bonds	60,000		
Re-lending	43,000	25,760	42,230
<b>Total guarantee</b>	<b>85,025</b>	<b>82,212</b>	<b>73,784</b>
Development banks	23,000	25,145	24,430
Social Policy Bank	13,000	9,250	9,670
Key project	3,000	8,000	2,000
Bonds of CQĐP	12,500	23,857	21,514
Commercial loans of businesses	33,525	15,960	16,170
<b>Total net debt</b>	<b>385,375</b>	<b>280,272</b>	<b>311,014</b>
<b>Total public debt</b>	<b>2,863,738</b>	<b>3,144,010</b>	<b>3,455,024</b>
<b>% GDP</b>	<b>63.60%</b>	<b>62.78%</b>	<b>62.68%</b>

Source: Decision 1011 / QĐ-TTg, Decision 583 / QĐ-TTg and Decision 1011 / QĐ-TTg of the Prime Minister, report on final accounts and annual state budget reports, BSC Research.

**Notes:** Total net debt = Total debt minus debt repayment, principal repayment and total guarantee.

**The government's disbursement plan is quite slow compared to the schedule, leading to a relatively low budget deficit.** As of November 15, 2018, the budget deficit was only VND 7,194 billion, 3.5% of the plan. This figure is made up by the progress of budget collection reaching 87.9% (the same period in 2017: 82.4%) and the progress of budget spending is quite slow compared to the plan, only 76.6% (same

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period 2017: 76.6%). Progress in the state budget revenue achieved positive results because the progress of this year's collection is higher than the previous year and exceeded the planned number thanks to oil tax and land levies (Appendix 7).

**The government still maintains the growth rate of total development investment over 20% in the period of 2017-2019.** The main proportion is allocated to the following 4 central agencies: Ministry of Transport, Ministry of Agriculture and Rural Development, Social Policy Bank and Ministry of Health.

**Table 5. Allocation of total development investment expenditures (2017-2019)**

Central Agencies	2017			2018			2019		
	Bil VND	% Total	% Growth	Bil VND	% Total	% Growth	Bil VND	% Total	% Growth
Ministry of transportation	31,616	56.4%	60.9%	28,113	40.0%	-11.1%	41,171	47.7%	46.4%
Ministry of Agriculture and Rural Development	6,230	11.1%	-18.2%	15,998	22.8%	156.8%	14,938	17.3%	-6.6%
Social Policy Bank	2,010	3.6%	239.9%	5,716	8.1%	184.4%	7,148	8.3%	25.1%
Ministry of Health	5,138	9.2%	197.2%	5,260	7.5%	2.4%	7,139	8.3%	35.7%
Other agencies	11,102	19.8%	-25.1%	15,197	21.6%	36.9%	15,990	18.5%	5.2%
Total investment expense	56,096	100%	26.3%	70,283	100%	25.3%	86,387	100%	22.9%

*Source: Report of estimates and reports on annual state budget estimates of the Ministry of Finance, BSC Research*

According to the 2019 State budget estimate of the Ministry of Finance, the Government attaches importance to the distribution of total development investment in 2019, focusing mainly on the Ministry of Transport with the growth rate of 46.4% compared to the previous year and accounting for 47.7% of total investment expenditures in 2019. With this level of expenditure, the Ministry of Transport has had the highest investment spending in the 6-year period 2014-2019. In addition, the Ministry of Agriculture and Rural Development maintained the investment around VND 15,000 billion in the last 2 years, accounting for a high proportion and will also be the priority subject in the total investment expenditure.

**In 2019, the government will focus on disbursing public investment projects for the two agencies, namely the Ministry of Transport and the Ministry of Agriculture and Rural Development.** Currently, the Ministry of Transport will focus on completing 6 national key projects (Appendix 8) and the Ministry of Agriculture and Rural Development will focus on disbursing 5 existing ODA-funded projects from Asian Development Bank and other organizations (Appendix 9) in 2019. For two major projects, Long Thanh Airport project and the North-South public road project: The government estimates that the investment approval for the former can only be carried out at the end of November 2019 and the latter will be disbursed in the period 2020-2021. Thus, these two projects will not have a big impact on public investment in 2019.

***In addition, the public investment projects of Vietnam Electricity Corporation (EVN) are likely to be deployed in 2019 due to the pressure from electricity demand of manufacturing and processing industry.***

**EVN also has sent a report the risk of electricity shortage in 2019 to the government.** The demand for electricity growth in the period of 2016-2020 is 10.3-11.3%/year. Although the investment capital of EVN's project often used other sources of capital instead of the central and local government budgets, Bloomberg: BSCV <GO>

the public investment projects EVN also have a high number of total investment values. The disbursement of these projects will contribute significantly to the economic development of Vietnam in 2019 (Appendix 10). The focus projects in 2019 are Bac Ai hydropower project (1200MW) and O Mon 4 thermal power plant project (750MW) and especially projects on power transmission systems including installation of power substations and power transmission lines.

With such public investment situation, BSC expects 2019, if the government fulfills the plan as estimated by the Ministry of Finance, the government's consumption in GDP will grow strongly and ensure the growth rate 6.7% in 2019 (forecasted by BSC). Regarding enterprises in the stock market, the group of enterprises with favorable conditions in 2019 is:

- Building materials sector: Cement and construction stone (HT1), providing raw materials for infrastructure construction projects for 6 national projects of the Ministry of Transport.
- Construction sector: CII, VCG participated in building infrastructure projects or building Phuoc Thai solar power plant or O Mon 4 thermal power plant.
- Electricity and electrical construction sector: PC1 and GEX, construct power transmission line and substations to serve the needs of power transmission from power plants nationwide.

#### 6. The growth trend of the middle class in the world and Vietnam, which economic sectors benefit from this trend?

The middle class has increased strongly in Asia in recent years, especially in China and India and developing countries in Southeast Asia. Vietnam is one of the countries with the highest middle class growth in the region, with a growth rate of 14.5% in the period 2005-2015 and is reported to increase by 18.5% in 2016-2020 according to research from Brookings Institute. The Consumer and Consumer Research Center believes that Vietnam's middle class and affluent people have an average income of USD 714 a month or more.

Chart 11: ASEAN middle-class growth table

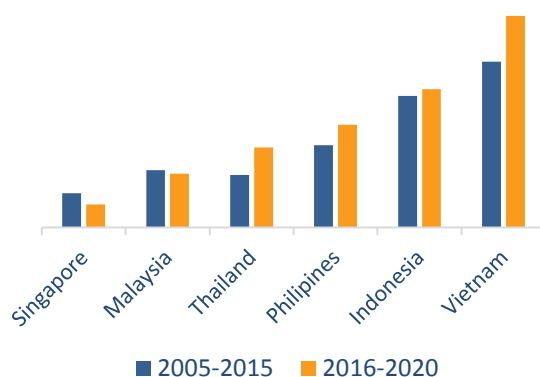
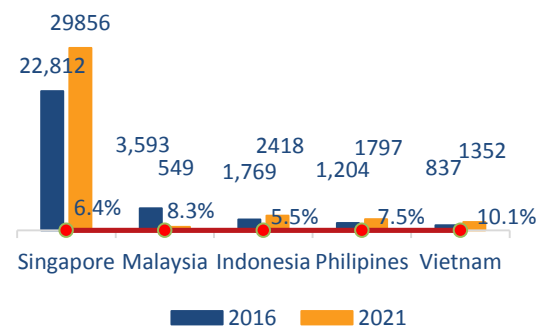


Chart 12: Average income of some ASEAN countries (USD person)



Source: Brookings institute, BMI, BSC Research

The growth of a strong middle class in Vietnam and Asia is an inevitable consequence of the improvement in average income in emerging markets with high GDP growth. According to IMF forecast, Vietnam's GDP growth in the period of 2018-2022 will maintain above 6%/year while in Asian 5, the Bloomberg: BSCV <GO>

world and Singapore are 5%, 3.5% and 2.5% respectively. Consumption trends and experiences are more open when the proportion of young population in these markets prevails, especially the X and Y generation, the generation born in the digital age.

The characteristic of the middle class is a more social and more open class of culture, a high level of education compared to the general and stable occupation. They also have a taste for consumption and lifestyle towards new experiences. The middle class focuses on human investment and is the main driver of economic growth, social stability and sustainable development.

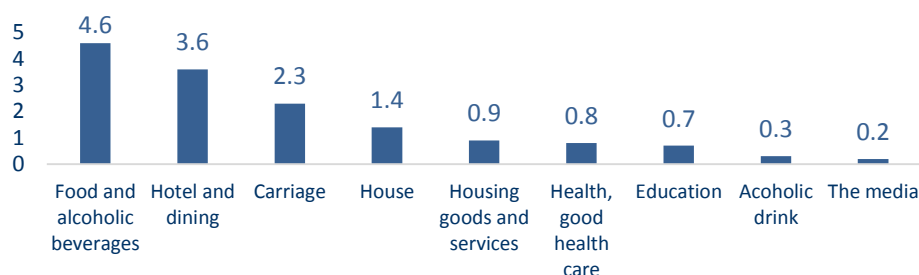
According to Euromonitor research, Vietnam's consumption trend has experienced strong growth. **In the period of 2012-2017, the hotel and catering industry is the group with the fastest growth rate of consumption in Vietnam at a rate of over 10%, followed by housing spending (+ 8%), clothing, shoes (+ 7%), food and non-alcoholic beverages (+ 5%).**

The key to the above results is the fact that Vietnam's population has more than 34% of consumers aged 21-34. Vietnamese youth like to experience, explore, travel, and be less economical than the previous generation. Income trends follow the rise of GDP that allows young people to spend more on tourism activities and enjoy outside meals, helping to increase hotel and dining needs.

In addition, essential items such as housing, food, non-alcoholic beverages, footwear and the top of the group saw strong growth as basic demand spending was the top priority when Vietnam remained in the low income sector in the world.

**The four lowest consumer sectors in Vietnam in the period of 2012 - 2017 are: communication (+ 3%), entertainment (+ 0.2%), transportation (-0.3%), household appliances (-3%).** The proportion of the rural population is majority and the low income level has limited the demand of these non-essential consumer groups.

**Chart 13. Middle-class consumer spending 2017 (Billion USD)**



Source: Euromonitor, BSC research

**Internet growth forms new consumer habits:** Vietnamese middle class is adapting quickly to technology development. Consumer trends are increasingly dependent on online consumer services. Retail sales through the internet increased 333% in the period 2012-2017 and are expected to continue to increase 391% from 2017 to 2030 due to the popularity of online shopping.

**Young consumers boost spending growth:** According to research by Euromonitor and danso.org, half of the population under 30 years old and the population of Vietnam have an average age of 30.8 years in



2017. From 2012 to 2017, the average income of people aged 20 to 29 increased by 22.3% to nearly VND 50 million in 2017, and increased to more than VND 62 million for those in their thirties.

Young married groups soon promote the need for spending on goods and services related to families and children. On the other hand, the young consumer group has a thought that late marriage will spend more for them, boosting consumer demand for fashion and tourism. In addition, middle-class Vietnamese youths also spend part of their spending on meeting friends and consuming a large amount of alcoholic drinks when Vietnam is the third beer consumer in Southeast Asia.

**Consumption trend continued to increase strongly in 2017;** consumer spending per household averaged 119,020,977 VND, growing nearly 14% compared to 2012.

**In addition to spending on basic needs, high demand for shopping and experience services in Vietnam also expands and promotes high demand for debt.** The demand for credit to buy houses, buy cars as well as much other expenditure increased sharply, especially in the young population. From 2013 to 06/2018, consumer credit balance doubled.

Year	2013	2014	2015	2016	2017	ES.2018
Consumer credit (VND billion)	500.5	597.5	727.3	857.3	993.9	1,133

Source: Euromonitor, BSC Research

#### Forecast of consumption prospects of Vietnamese people in the period 2018-2030

According to Euromonitor forecasting the period 2018-2030, the strong growth of the middle class in the proportion of the Vietnamese population continues to be the main driving force affecting consumer trends. The most developed consumer groups in Vietnam are: **transport (+ 6%), entertainment (+ 5%), communication (+ 4.8%), household appliances and housing services (+ 4.7%), housing (+ 4.6%), health and health services (+ 4.3%).**

Transportation is expected to be the largest growth item by 2030. The main reason for driving transportation spending is due to travel demand, shopping demand combined with express delivery services and the increasing tourism of the middle class.

The aviation sector is the strongest growth sector benefited from the rising average income and middle class in Vietnam. **According to the General Statistics Office, the number of passengers participating in air transport from 2012 to 2017 has increased about 3 times**, the average annual growth rate of 24%. The number of outbound trips increases by 82% from 2012 to 2017. According to data from the International Air Transport Association (IATA), Vietnam is one of the five markets with the fastest number of visitors and the number of passengers traveling by plane worldwide in the next 20 years will reach 7.2 billion, an increase of nearly 2 times compared to 2016.

The number of vehicles in Vietnam is the largest in the region. Annual growth of passenger vehicles and commercial vehicles is 17% and 10.7% respectively. According to the ASEAN Automobile Association, the number of vehicles in Vietnam is the largest in the region.

**Entertainment sector**, 43% of Vietnamese people want to spend on entertainment activities according to Nielsen. Vietnam's entertainment trend focuses mainly on the consumption of movies, musical performances, entertainment areas combined with commercial shopping centers. Revenue from CGV cinema system in Vietnam (accounting for 46% market share) increased 42% from 2015 to 2017.

**The media sector** has the third highest growth rate with the increasing demand for communication and telecommunications products as well as the product cost more and more suitable for many consumer segments. According to PWC's forecast, the percentage of internet users in Vietnam in 2012 is 37%, 2016 is 48.2% of the population and 2017 is 50.5% and will increase sharply to 65.7% in 2021. Rate of using smartphone will increase from 31% in 2016 to 58.5% in 2021.

**Housing and housing services sector**, increased residential income allows more conditional consumers to buy houses. Euromonitor forecasts that the number of homeowners will increase by about 21% during 2017-2030. In addition, the debt of young middle-class people to own and use housing services also increased rapidly. From 2013 and 2018, home loan outstanding has increased more than 2.3 times.

Year	2013	2014	2015	2016	2017	ES. 2018
Mortgages / Home loans (VND billion)	133.6	158.2	194.4	231.6	273.4	316.2

Source: Euromonitor, BSC Research

Based on the above estimates and forecasts, the sectors that are expected to have high growth potential in the next few years include **transportation** (aviation), **real estate** (mid-end and affordable) and **banks** (Retail services), **Health and health services** (Pharmaceuticals and medical services), and **Retail sector**.

## 7. Amended Securities Law, support to upgrade emerging markets in the period of 2019-2021?

**The amended Securities Law aims to improve market quality, facilitate easy market access and protect investors.** The amendments focus on 100% foreign ownership in public companies except where lower international or specialized laws provide lower rates; Modify and supplement the organizational model of Stock Exchanges and Securities Depository Centers; Stricter regulations with public offering, private placement; Supplementing new regulations related to securities companies, fund management companies, information disclosure activities, regulations on inspection and handling of violations.

The revised law is expected to be submitted to the Government to the National Assembly Standing Committee in the second quarter of 2019 and submitted to the National Assembly in the fourth quarter of 2019. The effective amendment of securities law will promote the stock market to develop stably and sustainably, ensuring publicity, transparency, and guarantee of legitimate rights and interests of investors. Moreover, the content changed from the amended Securities Law will meet most of the criteria to upgrade emerging markets.

**Upgrading from MSCI, new points in the revised Securities Law will speed up the process of reviewing emerging markets.**

**Table 6. Upgrade evaluation criteria of MSCI**

Criteria	Marginal	Emerging
A. Economic development	Not required	Not required
B. Scale and liquidity		
Number of enterprises meeting the following criteria:	2	3
Total capitalization	USD 797 million	USD 1,594 million
Capitalization is in circulation	USD 71 million	USD 797 million
Liquidity	2.5% ATVR	15% of ATVR
C. Market access		
Opening level for foreign investors	Minimum	Good
The degree of ease of in / out capital transfer	Minimum	Good
The effectiveness of the operation system	Modest	Good and verified
Competitive environment	Good	Good
Stability of the institutional framework	Modest	Modest

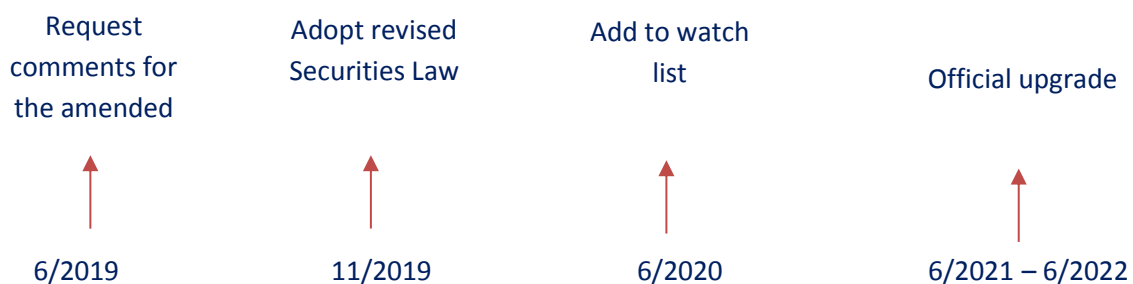
Source: MSCI, BSC Research

According to MSCI standards, Vietnam has 7 companies including VIC, VNM, VRE, VCB, MSN, HPG and NVL in 2018 in response to the requirement of 3 companies in criteria B. However, the qualitative criteria are most important "C. Market access", in the past 5 years, Vietnam has only improved the criteria of "Registration and account opening" and compared to newly upgraded Kuwait and the Philippines, the emerging countries but still have many criteria which must be improved, about 6 more criteria need to be improved to be able to consider an upgrade (Appendix 11).

In the report in June 2018, MSCI noted that the main issue of Vietnam stock market includes 2 issues related to foreign room limit, 2 issues related to disclosure of enterprise information and market information as not always published in English, a problem related to the level of foreign exchange liberalization, an issue related to clearing due to the VSD acts only as a clearing agent and does not have an overdraft basis as well as pre-compulsory deposit regulations for transactions.

In the above problems, the foreign ownership limit issue will be basically solved due to the Law, the information disclosure will be improved and the VSD upgrade will also help to improve the clearing. Therefore, when the Law on Securities changes and the guiding regulations take effect, the above problems will basically be solved.

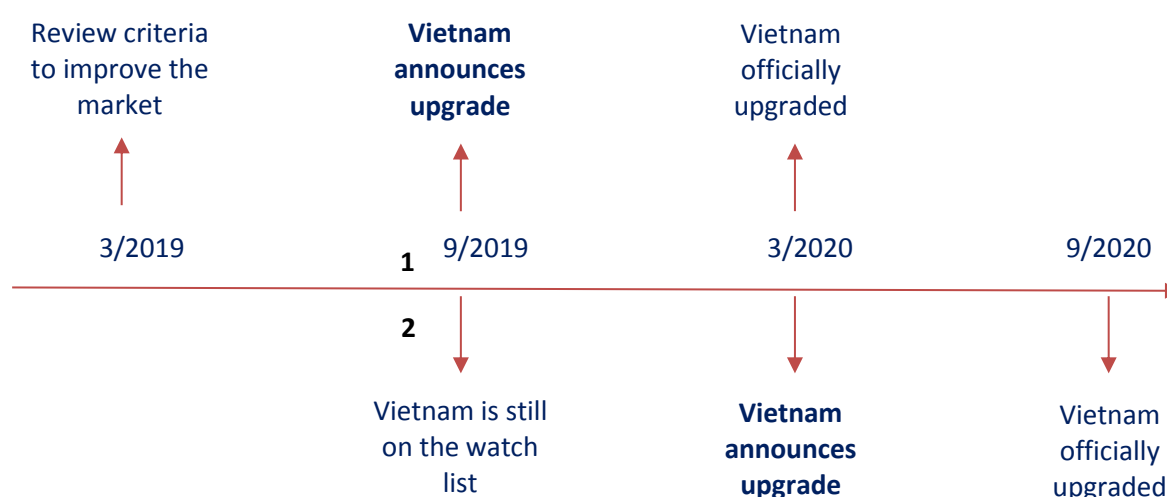
**MSCI's roadmap for market upgrading forecast is forecast as follows:**



**Vietnam has the opportunity to upgrade to secondary emerging markets earlier from FTSE Russell due slight lower requirements as emerging emerging markets.**

The Vietnamese market has fully met the criteria for secondary market upgrade in the March report and has been included in the monitoring list in September 2018 (Appendix 12). Among the FTSE indexes on marginal markets such as FTSE Frontier 50 Index, FTSE Frontier Series, Vietnamese market shares participated in a high proportion. The set of FTSE Vietnam Index Series only for Vietnam market also has 22 stocks. And according to our assessment, we also have 4 stocks including VIC, VHM, VNM and VCB enough criteria to join FTSE All-World and FTSE Emerging Total Cap indicators so that Vietnam can upgrade. Vietnam also meets all criteria for secondary emerging markets. If maintaining this status in the next review period, Vietnam will have a high chance of being officially upgraded.

**The roadmap for forecasting FTSE's secondary emerging market is forecasted (case 1: favorable, case 2: unfavorable):**



**Vietnam is likely to be upgraded to the secondary emerging market of FTSE in 2019 in the favorable scenario and 2020 if not favorable.** However, in order to raise rank to the high-level emerging market of FTSE or the emerging market of MSCI, Vietnam can fulfill conditions until 2021-2022 as the regulators maintain huge efforts to remove market barriers by the implement of the revised Securities Laws and guidelines.

**The story of market upgrade is the factor attracting foreign investors' cash flow in 2019.** In the case of MSCI, although it is not possible to upgrade the rank in the next 2 years, iShares fund, with an asset scale of USD 459 million invested in The MSCI index of marginal areas, will increase the proportion of investment in Vietnam market when Argentina and Kuwait officially upgrade in June 2019. With FTSE, the market will be waiting for information on the upgrade ability listed in the index reports in March and September 2019. In any case the market will welcome new capital flows from foreign investment.

## 8. Forecasting VN30 stocks in the first period of 2019, and movement of stock sectors in 2018-2019?

VN30 portfolio for the first period of 2019 will be determined based on data at the ending session of 31/12 and will public officially at least 5 days before the effective date of 28/1/2019.

Based on data on 12/12 and VN30 criteria, **we forecast that changes in VN30 in the period 1/2018 (Appendix 13):**

**Newly expected stocks: VHM, HDB, EIB, and TPB**

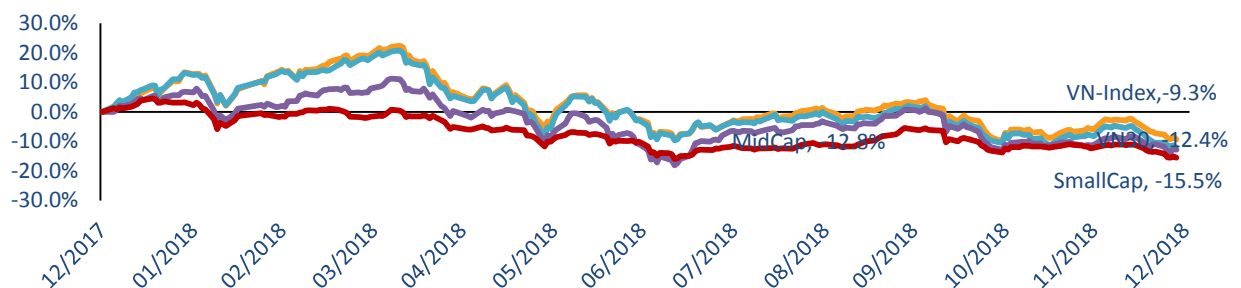
**Stocks are expected to exclude: HSG, DHG, DPM, and BMP.**

**Defensive stocks: KDH, GEX, DXG, VCI and BVH**

5 stocks of defensive stocks including BVH, KDH, VCI GEX and DXG had the largest market capitalization beyond VN30 group which are 2.61 billion USD, 0.54 billion USD, 0.44 billion USD, 0.43 billion USD, and 0.41 billion USD respectively. The weight of stocks in VN30 is forecasted not to fluctuate in the 2 group of leading stocks, new shares such as VHM, HDB, EIB, and TPB have the proportion of 8.3%, 3.3%, 2.0%, and 2.0% respectively (Appendix 14)

**VN30 outperformed other stocks in 2018.** Tracking movements of index groups in 2018, VN30 index fluctuated quite closely to VN-Index, however since August, this group has started to underperform VN-Index. As of December 28, VN30, Midcap and Smallcap performed respectively -12.4%, -12.8% and -15.51%, lower than the -9.3% of the VN-Index. The leading role of VN30 declined compared to 2017 due to the proportion of VN-Index decreased from 67.6% to 63.9% and the decrease in cash flow after establishing a short-term peak in April 2018.

**Chart 14. Movement of all market-cap stocks in 2018**



Source: FiinPro, BSC Research

**VN30 is expected to have a big impact on the VN-Index in 2019 due to the increase in the proportion and ETF anticipation of upgrading market.** According to BSC's forecast, the weight of the VN30 group will increase by 10.2%, from 63.9% to 74.1% in the first portfolio restructuring in 2019. Along with that, ETFs' foreign investment capital simulating VN30 in anticipation of market upgrade is an important factor to help VN30 move positively and have a greater influence on VN-Index in 2019.

Currently there are 2 direct investment ETFs according to VN30 index through E1VFN30 certificate. The asset size of E1VFN30 is USD 189 million, of which the Korean ETF has a property scale of USD 170 million and a certificate of Thai IPO investment on December 3, which listed on December 18 with a size of about USD 19 million. The investment trend in VN30 is expected to accelerate in order to catch up with the trend of upgrading market rank in 2019.

The average P/E of VN30 is 20.1 times, if the stocks with P/E above 50 times include CII, VIC and VRE, the VN30 P/E is 14.7 times (Appendix16). Average EPS increased by 10%, VN30 stocks showed a reasonable level and can attract mid-term and long-term capital inflows as well as advancing in price level.

**MidCap and SmallCap stocks were quite stagnant in 2018, however, MidCap sector had a chance to improve in 2019 thanks to positive business results and state divestment.** Other stocks such as MidCap



and SmallCap all have quite stagnant movements compared to VN-Index, especially with SmallCap in 2018.

The average P/E and average P/E removed all stocks that had P/E above 50-times stocks of MidCap, are 15.4 and 12.1 respectively. Midcap stocks have an average EPS growth of 17%. Strongly improved profits in the third quarter of 2018 also helped this group narrow the gap with the VN-Index. MidCap stocks are likely to be more attractive in 2019 thanks to improved profits and divestment activities in many stocks in this group.

SmallCap stocks have an average P/E and average P/E removed all stocks that had P/E over 50 times, of 23.1 and 10 with a less attractive average EPS growth of -1.3%. SmallCap stocks, due to the large divergence and dependence on speculative cash flow, which did not highly appreciate in 2019, is unlikely to have significant changes in 2019.

# Macro-economic picture of 2018

## Economic growth

- GDP of the whole year is estimated at 7.08%.
- The IIP in 2018 grew stronger than in 2012-2016, although still lower than 2017 at 14% as manufacturing and processing continued to grow strongly.
- Retail sales grew well due to rising price and purchasing power.

Chart15: GDP over the years to 2018

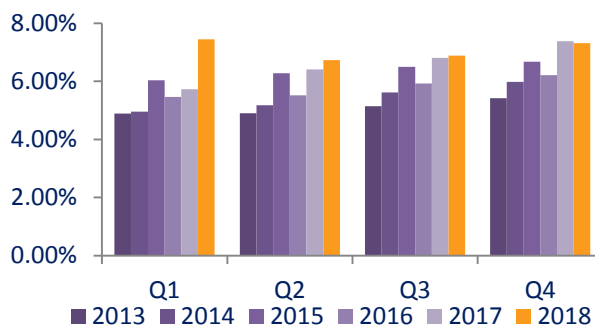
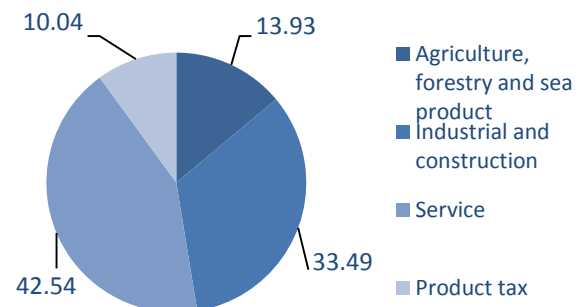


Chart16: GDP proportion in 2018 (%)



Source: GSO, BSC Research

**The gross domestic product (GDP) in 2018 is estimated to increase 6.80% YoY (Q1 increases 7.45%, the Q2 increases 6.73%, Q3 increases 6.88%, and Q4 increases 7.31%).**

In industry and construction, industry in 2018 maintained a good growth rate of 8.79%, contributing 2.85 percentage points to the growth rate of the economy. The processing and manufacturing sector continue to affirm that it is the bright spot in the economy. It is the main driver of growth rate with an increase of 12.98%, lower than the growth rate of the same period in 2017 but much higher than the level increased in 2012-2016 years, contributing 2.55 percentage points. Mining sector is still negative (down 3.11%), reducing 0.23 percentage points of the total value added of the economy but the reduction has been narrowed considerably compared to the decrease of 7.1% of the year before. Construction sector in 2018 maintained a good growth rate of 9.16%, contributing 0.65 percentage points.

**The Industrial Production Index (IIP) in 12/2018 is estimated to increase by 11.4% YoY**, of which the mining sector decreased by 3.2%; processing and manufacturing sector increased by 13.7% because it is the time when enterprises focus on producing consumer goods for the Lunar New Year in 2019; electricity production and distribution increased by 11.7%, the highest level since August, mainly due to the increase in electricity production and construction demand compared to previous months; water supply and waste and wastewater treatment increased by 5.6%. For the whole year of 2018, IIP increased by 10.2% YoY, lower than the 11.3% increase of 2017. The spearhead growth continued to be the processing and manufacturing sector increased by 14.2 % and contribute 9.5 percentage points to the overall increase of IIP.

Chart17: IIP growth over the years

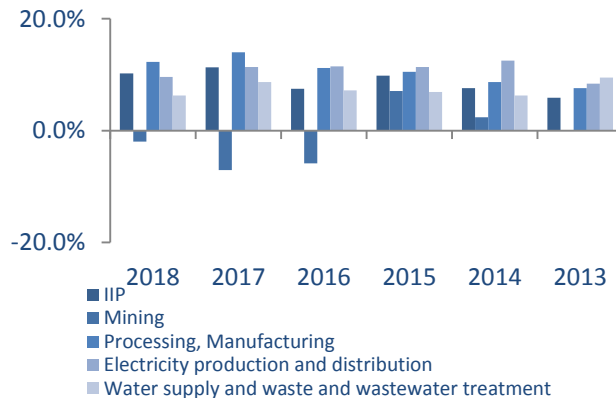
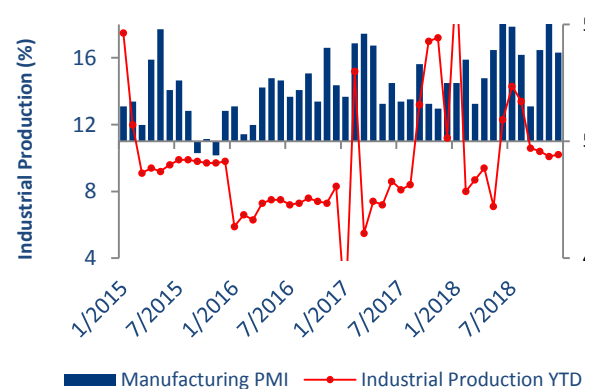


Chart18: IIP and PMI over the years



Source: GSO, BSC Research

The PMI in December fell back to 53.8 after rising sharply to 56.5 last month, and higher than the 11T2018 average of the year of 53.7 points (the 2017 average is 52.6 points). The manufacturing and business sector in December has improved to one of the strongest levels in the history of the survey that lasted nearly 8 years when the output and the number of new orders increased sharply and quickly. Rising inventories are the highlight of the latest survey with both inventory and finished goods inventories rising at a record level as companies prepare for the upcoming workload. Employment has also increased at the high level of the survey and the level of confidence in business has increased again.

In addition, China's PMI dropped sharply. PMI index for September, October, November, and 12 were respectively 50.8, 50.2, 50 and 49.7. The PMI of China dropped to this level, showing that the growth of orders and the quantity of goods produced in the economy has declined in comparison to the economic growth cycle. China PMI falls below the 50 level, which signaled the start of the recession economic cycle in the country. China's PMI downward trend and Vietnam's PMI upward trend showed that Vietnam's export products are benefiting from the US trade war as companies began to shift supply from the Chinese goods to products or supplementary products in Vietnam.

## Inflation

December CPI dropped -0.29% MoM and increased 2.98% YoY. By the end of December, the average consumer price index of 2018 was 3.54%, and met the target of the National Assembly.

Basic inflation in December 2018 increased 0.09% MoM and increased by 1.7% over the same period last year. The average basic inflation in 2018 increased by 1.48% compared to the average of 2017.

The average CPI in 2018 increased due to the following main reasons:

- Local authorities adjusted prices of medical services and medical services according to Circular No. 02/2017 / TT-BYT and Circular No. 39/2018 / TT-BYT, increasing health service prices by 13.86% (operative CPI action increased by 0.54%).

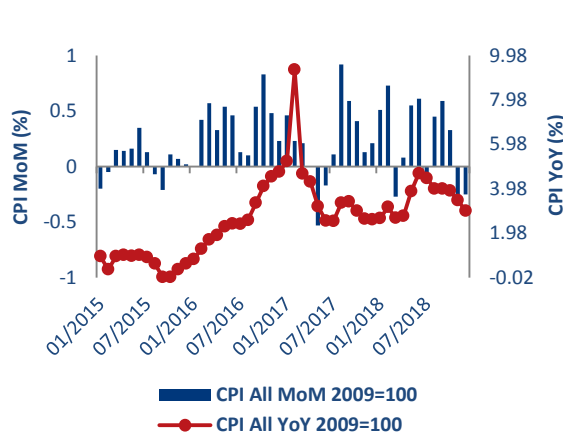
- Continuing to implement the schedule of increasing tuition fees according to Decree No. 86/2015 / ND-CP, making the price index of education services group in 2018 increase by 7.12% compared to 2017 (impact on CPI increase of 0.37%).
- The increase in regional minimum wages applies to employees of enterprises from January 1, 2018 and the basic salary level applicable to officials, public servants, and armed forces from July 1 / 2018 made the average price of some services increase by 3% -5% compared to 2017.
- There are also some market factors, prices of food products rose 3.71%, prices of pork increased 10.37%, and gasoline and oil prices rose 15.25% ... and price of some other essential items increased.

**Table 7: Changes of Good and Services in December (MoM and YoY)**

#	Goods and Services	MoM (%)	YoY(%)
1	Restaurant and Food	0.05	5.09
2	Service	-4.88	0.21
3	Transportation	5.76	3.65
4	Pharmaceutical & Healthcare	-0.89	1.14
5	Housing & Construction Material	0.02	1.72
6	Entertainment	0.22	1.56
7	Beverage & Cigarettes	0.43	1.68
8	Apparel, hats & footwear	0.16	1.36
9	Household Appliances	0	6.52
10	Education	0.02	-0.8
11	Postage and telecommunications	0.24	2.4
<b>Consumer Price Index</b>		<b>-0.29</b>	<b>2.98</b>

Source: GSO, BSC Research

**Chart19: CPI development over the years**



Source: GSO, BSC Research

**Chart20: Monthly Retail sale of 2018**



**Total retail sales of consumer goods and services in November were estimated at VND 394.5 trillion, up 2.1% over the previous month and 12.7% over the same period last year.**

In the whole year 2018, total retail sales of consumer goods and services are estimated at 4,395.7 trillion VND, up 11.7% over the same period last year, if excluding price factor of 9.4% (same period last year). 2017 increased 9.25%).

## Foreign Direct Investment (FDI)

- Registered FDI in 2018 reached USD 25.58 billion (-13.9% YoY). However, disbursed FDI increased by 9.1% compared to last year and reached 19.1 billion USD.
- FDI capital concentrates mainly on processing industry, manufacturing and real estate sectors.
- Hanoi attracts investment capital of USD 5,041.6 million, accounting for 28%, leading the whole country.

Chart21: FDI registered and disbursed

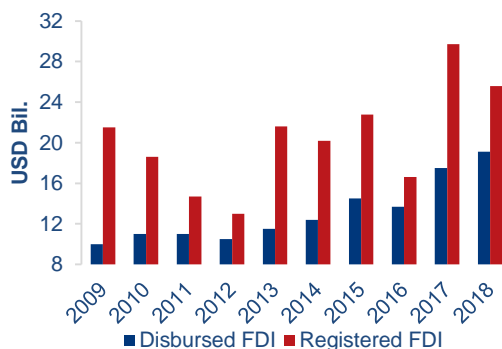


Chart22: Total export-import turnover (USD bil)



Source: GSO, BSC Research

Total newly registered FDI and increased by the end of December 20, 2018 of 3,046 projects (+ 17.6% YoY) reached 17,976 million USD (-15.5% YoY), plus 7,596 million USD of adjusted registration capital of 1,169 projects licensed in previous years. **Thus, total newly registered FDI and additional capital reached 25,572 million USD (-13.9% YoY).** FDI has dropped sharply compared to 2017 because there are not many billion-dollar projects this year. At the end of 2018, there were only 2 billion-dollar projects namely Dong Anh Smart City of Japan (USD 4.14 billion) and the project of Polypropylene (PP) and underground storage of liquefied petroleum gas (LPG) of Korea (USD 1.2 billion).

**Disbursed FDI in 2018 was estimated at 19.1 billion USD, an increase of 9.1% compared to the same period in 2017.**

**FDI capital structure in 2018:** processing and manufacturing industry attracted the largest FDI with the registered capital of newly licensed projects reached USD 9.067.5 million, accounting for 50.5% of total capital registration for new grants; real estate business reached 5,216.8 million USD, accounting for 29%; the remaining sectors reached 3,691.9 million USD, accounting for 20.5%. If additional registered capital of projects licensed in previous years is included, FDI in processing and manufacturing industry this year reached 14,161.3 million USD, accounting for 55.4% of total registered capital; real estate business reached 5,944.2 million USD, accounting for 23.2%; the remaining sectors reached USD 5,467.4 million, accounting for 21.4%.

Top 3 areas attracting FDI registered nationwide include Hanoi (USD 5,041.1 million - 28%), Ba Ria-Vung Tau (USD 1,803.5 million - 10%), Binh Duong (USD 1,216.6 million - 6.8%). In 2018, Japan was the largest direct investor in Vietnam with an investment of US \$ 6,592 million, accounting for 36.7% of the total newly registered capital; followed by South Korea with 3,657 million USD, accounting for 20.3% and Singapore with 1,423 million USD, accounting for 7.9%.



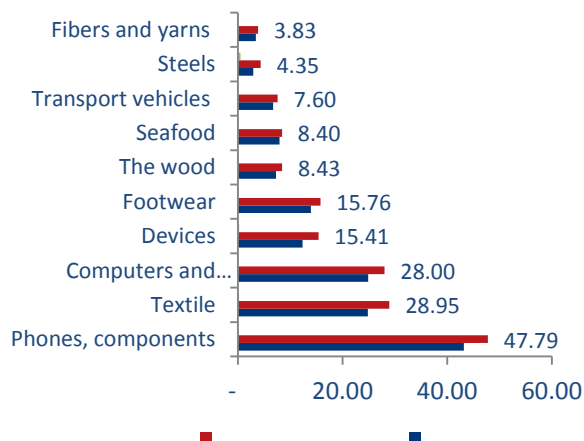
## Trade, Import and Export

- From the beginning of the year, Vietnam's trade balance was estimated at 7.21 billion USD.
- December estimated trade deficit of 200 million USD.

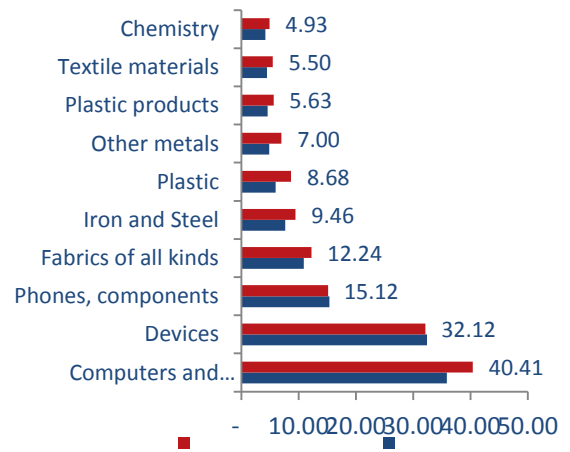
Export turnover in December 2017 is estimated at 21 billion USD, down by -3.4% MoM, cumulative export turnover is estimated at USD 242.72 billion, up 13.8% YoY. Export turnover of some key products continued to increase compared to the same period last year. From year start to December 15, electronic component phones continued to maintain the leading position; reaching 47.79 billion USD (+ 10.5%) mainly thanks to Samsung's stable and sustainable production activities. Next, textile and apparel grew by 16.6% to US \$ 28.95 billion thanks to the support of commercial war activities and the effects of CPTPP and EVFTA agreements. Computer electronics in third place reached 25.1 billion (+ 12%).

Import turnover in December 2018 was estimated at USD 21.2 billion, down -1.8% MoM, cumulative estimated at USD 237.51 billion, up 11.5% YoY. Import turnover of some growth items is as follows: From year start to December 15, some imported products in December saw a large turnover including Computer Electronics 40.41 billion USD (+ 13.5% yoy), machinery and equipment 32.12 billion USD (+ 0.4% yoy), mobile phones reached 15.12 billion USD (-0.1% yoy). The source of imported raw materials on computer electronic devices and electronic devices maintains a sustainable growth trend when shifting production chains required high technology and productivity to maintain production activities.

**Chart23: Top 10 exported goods till 1H December (billion USD)**



**Chart24: Top 10 imported goods till 1H December (billion USD)**



Source: GSO, BSC Research

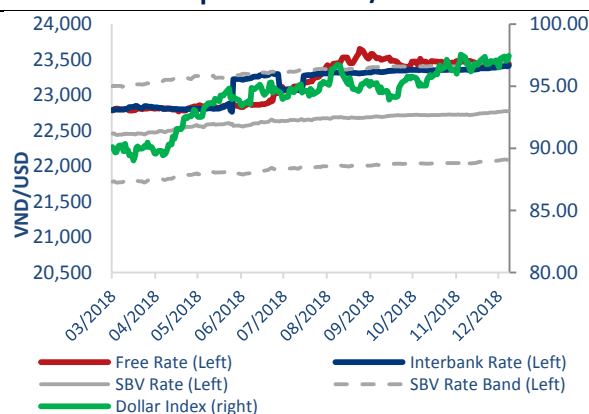
Total export and import turnover in 2018 is estimated at 477.92 billion USD, up by 13.03% YoY, the trade balance is estimated to reach a historical record surplus of 7.21 billion USD in 2018, a strong increase compared to 2.91 billion USD. of 2017. This achievement was achieved not only because Samsung made and exported phone products such as S8, S9, and Note 8, Note 9 through Vietnam but also due to the influence of the US trade war. China-China caused market share growth in textile, mechanical equipment and phone parts.

## Exchange rate

The exchange rate rose sharply in 2018 due to the impact of the US-China trade war and FED's tight financial policy. As of December 27, the interbank exchange rate increased sharply by 3.26% YTD, while the unofficial rate also increased by 2.27% YTD. The rise of the unofficial USD/VND exchange rate has decreased quite sharply in the last month of the year thanks to a lot of remittances, which helped reduce the USD rallied pressure. Influence of FED's rate hike activities continued to boost the overall increase of the exchange rate.

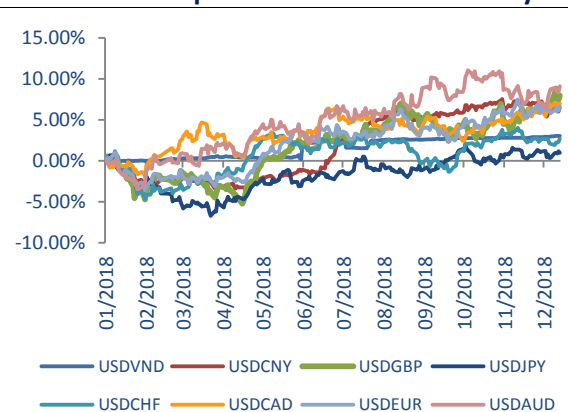
From year start to December 14, 2018, the Dollar Index (DXY) increased by 5.6% and the USD increased against many other currencies such as CNY (+ 6.5%); EUR (+ 6.7%), GBP (+ 8.0%), CHF (+ 2.7%), AUD (+ 9.09%).

**Chart25: Development of USD/VND**



Source: GSO, BSC Research

**Chart26: Development of currencies in the year**



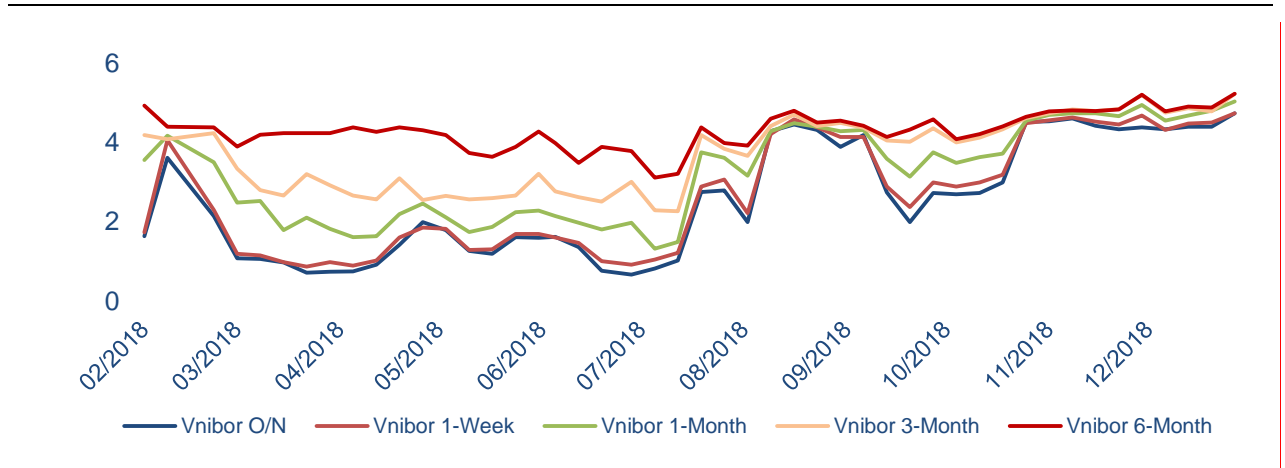
## Bank – Interest rate

- Credit growth in 2018 is estimated to be approximately 14%, down slightly compared to 2017, mobilizing capital is estimated at about 16%, equivalent to that of 2017.
- Deposit and lending rates started to increase in the last two weeks, interbank liquidity was less abundant.

The pressure of high interest rate is quite strong on the banking system in 2018 because the information of FED raising interest rates and the tension of trade war continues to escalate until the end of the year. Banking liquidity has been less abundant and under pressure from exchange rate growth in 2018. As of December 28, interbank interest rates have increased again after a slight decrease in the first week of December. Interest rate at overnight, 1 week, 1 month, 3 month and 6-month terms reached 4.75%, 4.75%, 5.05%, 5.25%, and 5.25% respectively.

Deposit rates began to increase in December. Popular lending rates of priority sectors were 6% -9%/ year for short-term, 9% -11%/year for middle and long-term. Lending rates for production and business sectors are usually 0.5% -1%/year for short-term; 4.5-6.5 for medium-term interest rates and 6.5% - 7.3%/ year for long-term interest rates.

Chart27: Interbank Interest rate



Source: Bloomberg, BSC Research

Table 8: Compare lending rates for terms

Period	2017	2018M12	Diff
VND short	6.8 – 8.5	6.0 – 9.0	(0.8)-0.5
VND mid, long	9.3 – 10.3	9.0 – 11.0	(0.3)-0.7
USD short	2.8 – 4.2	2.8 – 4.7	0.5
USD mid, long	4.6 – 6.0	4.5 – 6.0	(0.1)

Source: FiinPro, BSC research

Table 9: Compare financing rates for terms

Period	2017	2018M12	Diff
<b>VND</b>			
0 - 1 month	0.8 – 1.0	0.5 – 1.0	(0.3)
1 month - 6 month	4.3 – 5.5	4.5 – 5.5	0.2
6 month - 12 month	5.3 – 6.5	5.5 – 6.5	0.2
12 months above	6.5 – 7.3	6.6 – 7.3	0.1
<b>USD</b>			
Civilians	0	0	0
Institutions	0	0	0

Source: FiinPro, BSC research

### Economic indicators over the years and forecasts for 2019

- GDP of 2018 is estimated to reach 7.08%.** The growth rate of the year was strongly supported mainly by Samsung's phone production and their high-end product line such as Samsung Note 9, S9 and S9 +. In 2018, retail consumption reached VND 4,395 billion, ensuring a year-on-year growth rate of 11.7%, indicating a stable internal economic condition. In addition, thanks to the geographical position near China, commercial war activities are also positively influencing Vietnam in this period. The October and November PMI of Vietnam increased sharply in contrast with China, in which the main contributing factor was the increase in export orders. Thus, the positive PMI index along with stable domestic consumption situation helps us ensure GDP growth rate for the following year.
- GDP in 2019 is expected to achieve a slight decrease compared to 2018, at 6.7%.** We maintain our prediction that GDP growth will mainly come from import-export activities and personal consumption activities which maintain the growth rate of over 10%. Import-export turnover will keep the same growth rate for next year due to 3 factors: (1) trade war continues to benefit our country, in which 2 main components of benefit are industry sector (set mechanic, telephone, textile) and agriculture sector (seafood); (2) Samsung continues to deploy new phone products.

(3) The national major public investment projects are likely to be disbursed to complete the 2019-2020 plan, which leads to a consensus increase in government expenditure.

- **CPI is estimated at 3.54% in 2018.** CPI dropped sharply to 3.54% for the whole year thanks to the sharp drop of oil prices, affecting the transportation group (accounting for 9.4%). **2019 CPI will increase to 4.0% again because** (1) oil price maintains its current trading level with estimated Brent price traded at 65-68 USD/Barrel and WTI price is expected to trade at the price range of 58-61 USD/Barrel; (2) Fed and ECB switched to tightening monetary policy. The Fed is expected to continue raising interest rates twice in 2019 and the ECB will narrow its balance sheet by the end of 2018 and raise interest rates in the second half of 2019; (3) With a two-year GDP growth rate of 2017 and 2018 continuously reaching above 6.8%, electricity prices will likely increase sharply next year in the situation of electricity shortage when the processing and manufacturing industry continues to maintain strong growth rate throughout the year.
- **Export and import turnover in 2018 will reach 480.32 billion (+ 13%) and 541.1 billion (+ 12.75%) in 2019.** In 2019, exports will reach 274.11 billion (+ 12.5% YoY) and imports will reach 267.40 billion (+ 13% YoY). The growth rate of import in 2019 is expected to increase more strongly than in 2018; the trend of shifting the chain of production lines from China to Vietnam will increase the total amount of imports to meet demand. Production for new orders volume. The price of input materials under the survey of November PMI has increased strongly, signaling the high possibility of importing raw materials. The total export turnover is expected to continue to grow for the following year because (1) Advantage from shifting the chain from the Chinese market to the Vietnamese market; (2) Samsung products officially opened selling S10 in the first quarter and Note 10 in the second half of 2019. These factors are expected to maintain Vietnam's export surplus.
- **Exchange rate can be maintained at 23,400 at the end of 2018 due to 4 times FED's interest rate increase this year.** In 2019, the exchange rate will likely fluctuate in a range of 1.7% -3%, depending largely on the state of trade war. The exchange rate of USD/VND was strongly affected by the approval of currency exchange transactions in 7 Northern border provinces. This will increase the yuan's influence on the VND. The impact of the yuan devaluation will have a stronger impact on the money supply to Vietnam next year. Besides, the FED's policy of raising interest rates also continues to make the USD attractive in the world currency basket. However, the factors maintaining the foreign currency reserve of the State Bank of Vietnam will ensure a stable and low rate of exchange rate increase band.
- **Public debt and government debt are likely to slow down in 2019, because** (1) GDP continues to maintain growth and (2) The Government actively implements activities of divesting state-owned enterprises and thereby, reduces financial pressure, (3) Vietnam is using preferential loans and can proceed to borrow fully according to market conditions.
- **Credit growth is estimated at 14% in 2019.** In 2018, credit growth only reached 14%. Currently, credit growth of many banks has been raised to 17% in the last 2 months of 2018. BSC estimates that credit growth will be at this level next year because banking system liquidity is under pressure from the rise of exchange rate and the Government still uses accommodative fiscal measures to maintain economic expansion policy.
- **Registered FDI at the end of 2018 is expected to reach 25.57 billion (-13.9% YoY) because there were only 2 projects that can be valued in billion-USD this year in comparison to 5 projects in**

**2017.** In 2019, it is estimated to reach 24.00 billion (-6.5% YoY). FDI registered may increase due to the shifting of some high-tech production from China to Vietnam. This year, JA Solar bought an additional 30ha in Quang Chau IP of KBC and several satellite companies of Apple also signed a contract with KBC in Quang Chau Industrial Zone. In addition, the impact of the US trade war - China could make Samsung continue to shift its production structure to Vietnam. During a visit by Korean businessman, Samsung also expressed its intention to build a third factory in Vietnam. In addition, the lack of electricity may also have a strong impact on finding foreign investors to finance Bac Ai hydropower project and thermoelectric projects such as O Mon 4 Thermal Power Plant.

- **FDI disbursed VND 19.1 billion (+ 9.1% YoY) in 2018 and will reach VND 19.9 billion (+ 4.2% YoY) in 2019.** Capital disbursement will also grow in concurrent with registered FDI sources because International Corporation will need to build the new production supply chain quickly to meet the market demand and minimize negative effect of trade war. In addition, the government continues to improve disbursement speed through reforming administrative and legal procedures to ensure the socio-economic development plan for the period 2016-2020. National key projects will also be promoted to implement disbursed capital sources such as Ho Chi Minh City's No.1 urban railway, Ben Thanh - Suoi Tien route.

**Table 10: Economic indicators over the years and forecasts for 2019**

indicator/Year	2014	2015	2016	2017	2018E	2019E
GDP YoY (%)	6	6.7	6.2	6.8	7.08	6.7
Inflation (%)	4.08	0.62	4.7	3.5	3.54	4.0
Trade balance (billion USD)	2.14	-3.54	2.6	2.7	7.21	6.7
Total trade (billion USD)	298	327	349.2	424.87	480.23	541.51
Exchange rate (VND/USD)	21,388	22,485	22,365	22,750	23,400	23,800-24,100
Public debt/GDP (%)	59.6	61.3	63.6	62.6	62.8	62.7
Government debt/GDP (%)	47.4	48.9	52.6	51.8	52.5	52.3
Credit growth (%)	14.16	17.29	18.7	17	14	14
FDI disbursed (billion USD)	20.2	22.76	20.9	29.7	25.57	24.0
FDI registered (billion USD)	12.4	14.5	15.80	17.50	19.1	19.9

Source: BSC Research

# Vietnam stock market movements in 2018

The stock market 2018 has spent 1 year with fluctuations. In the first 4 months, the market grew well and reached the peak in 2018 with 1,204.3 points in early April, the highest milestone in the past years. However, the market has been affected in the remaining time due to macro factors from the world and bottomed at 888.82 points at the end of October. Since the beginning of the year, VN-Index has dropped 9.31. % and located in countries with low stock index decline in the region and behind Mongolia, Indonesia, Pakistan, Australia, Taiwan, New Zealand and India.

Foreign investors continued to be the leading factor in Vietnam's stock market in 2018 with a net buying of VND 44,098 billion on all three exchanges, equivalent to USD 1,892 billion, up 108% YOY. While most of the regional markets witnessed the withdrawal of strong capital flows, Vietnam continues to be the market receiving strong cash flows in the region. Behind China, Vietnam continues to be the market which receives strong foreign cash flows in the region and maintains this cash inflow in second year after 2017.

The market capitalization of all 3 exchanges reached VND 4,004.97 trillion, equivalent to USD 171.88 billion, up by 18.95% compared to 2017. UPCOM market capitalization was overwhelming compared to HNX and reached over VND 933.48 trillion, up by 38.68% YoY. The trend of equitization and divestment continues to create a solid foundation for market capitalization growth in Vietnam. A series of large codes such as VHM, POW, BSR ... with high attractiveness have strongly received not only capital flows of foreign investors but also domestic investors.

Average liquidity on HSX and HNX reached VND 6,283 billion/session, up sharply from VND 4,805 billion/session in 2017, corresponding to an increase of 30.75%. Liquidity increased the most in the first months of 2018. Liquidity reached the highest level in January with VND 9,640 billion/session and remained at a high level in the next 4 months.

The stock market has been mobilized in accordance with forecasts about the seafood and textile industries benefiting from the world's demand, especially the international market. This is in line with the forecast of BSC in the report VIETNAM MACRO & MARKET OUTLOOK 2018, "The textile and seafood industry will be the two industries benefiting and growing strongly in 2018". In general, the market movement in the first quarter is accurately forecasted in the above report and the first quarter report. However, the complex and complicated macro movements from the regional and world markets pushed the domestic and international market sentiment into a worry sentiment with many strong corrections and out of our expectations in the second and third quarters.

In terms of the above indicators and the positive forecasts on the domestic macro situation and the possibility of reducing trade tension in the following year, we expect that Vietnam market still has a foundation and a favorable position for good growth next year. The economy continued to improve due

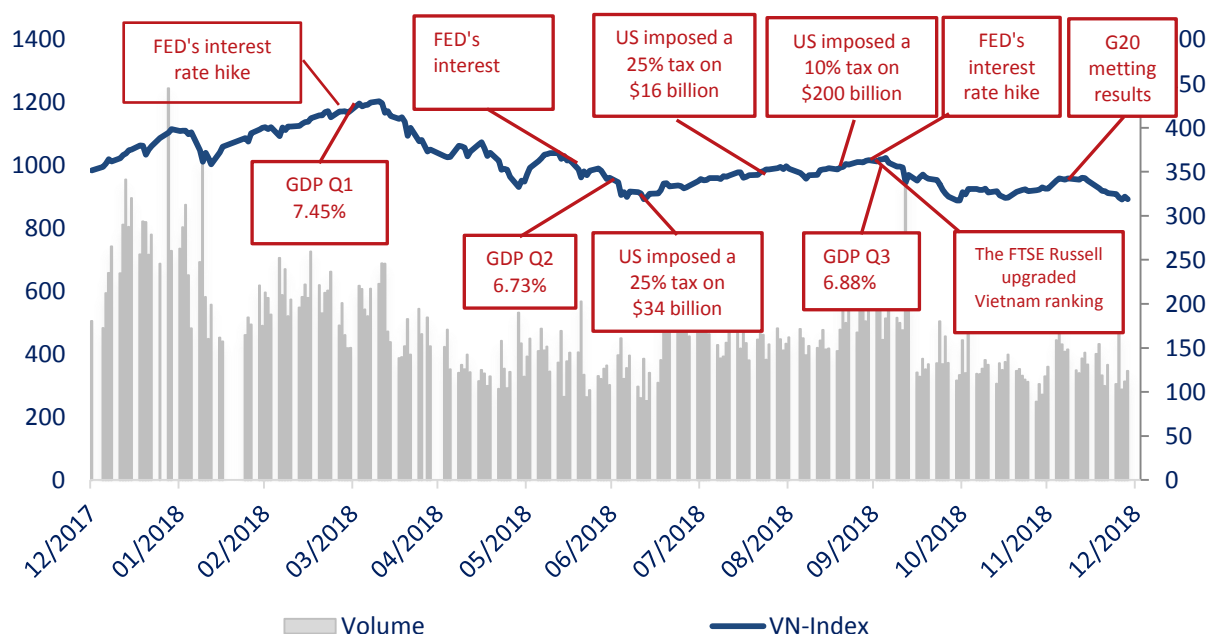


to continual supply of large foreign investment, domestic enterprises also made certain progress thanks to the support and policy of the government. In addition, Vietnam's income continues to increase due to the middle class growing trend and the falling cost of goods. Lower oil prices will be a premise to support domestic demand for development. In the following year, the retail, transport, seafood and textile sectors will be the sectors that are forecasted to be positive next year.

## The flow of events

Contrary to the growth in 2017, the two indexes on the HSX and HNX were adjusted and saw a drop of 9.31% and 10.81% respectively on December 28. The indexes rose sharply, surpassing the 10-year peak accompanied by a record trading value. The average trading value per day on both exchanges was VND 6,283 billion, equivalent to USD 269.64 million, up 30.75% compared to 2017.

**Chart 28: The flow of events of VN-Index**



Source: BSC Research

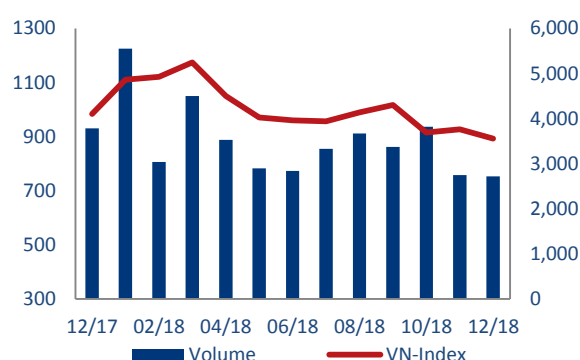
**The general trend is to alternately increase and recover periods,** market movements can be divided into 3 phases:

- **Phase 1 (from January 2, 2018 to April 10, 2018):** The index gained strongly by 21.73% thanks to improved business results and information that GDP reached record growth and FED raised interest rate for the first time at the end of the March. Foreign investors net bought VND 8,706 billion on both exchanges in the first 3 months. Liquidity of both HSX and HNX reached VND 8,612 billion/session.
- **Phase 2 (from April 12, 2018 to July 11, 2018):** The index decreased by 23.85% due to the FED's second rate hike and negative sentiment from trade war tension and claims to impose taxes on Chinese goods of the United States. Liquidity on both exchanges reached VND 6,979 billion/session. The market

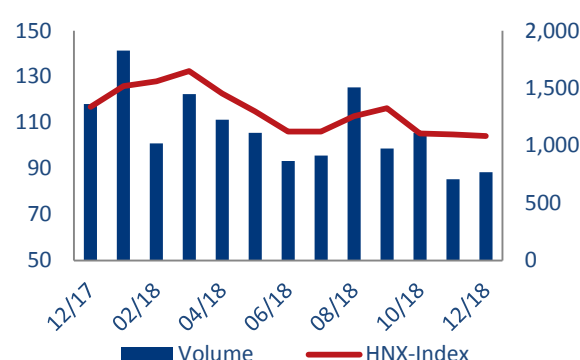
fell into a deep correction as the US started a trade war with China with a 25% tax package to USD 34 billion and the Fed carried out a second rate hike in the year. Foreign investors saw a strong net buying in this period with a net buying of VND 24.197 billion, mainly focused on VHM.

- **Phase 3 (from July 12, 2018 to December 28, 2018):** The index dropped slightly by 0.66%, the market was in a state of correction mixed with rebound areas. Liquidity fell sharply to 4,805 billion VND /session. Foreign investors also bought a net amount of VND 6.832 billion in this period. Conservative market sentiment and external macro fluctuations dominate trading activities during this period.

**Chart 29: VN-Index performance**



**Chart 30: HNX-Index performance**



Source: HNX, HSX, Bloomberg, BSC Research

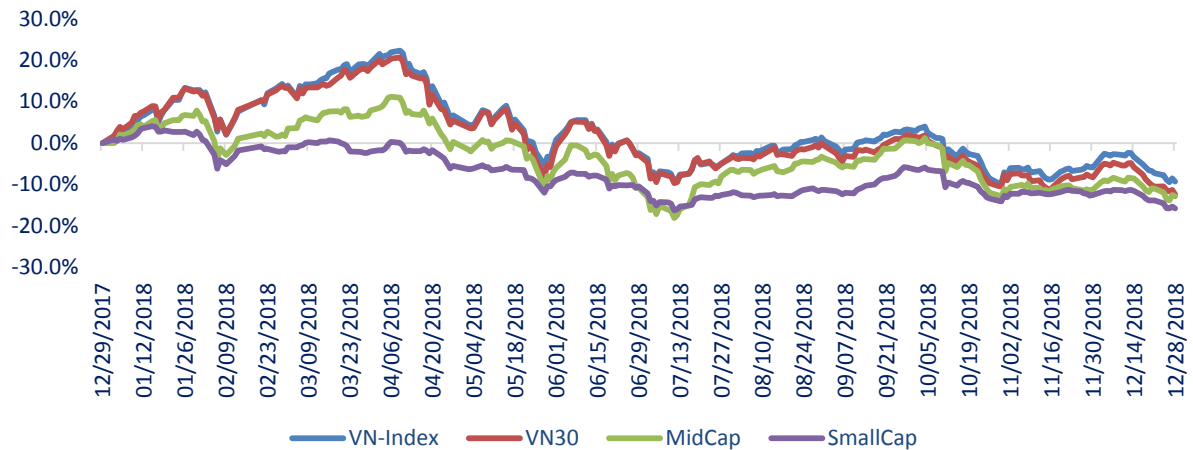
## Performances of Index groups

As of December 28, 2018, the performance of all sectors decreased in the same direction with the decline of the VN-Index. The biggest ones are SmallCap with 15.8%, MidCap down 12.8% and VN30 down 12.4% and VN-Index down 9.3%.

For the whole year, BSC divided stock movements into 2 periods (1) the first 6 months of the year and (2) the last 6 months of the year. Specifically, VN Index increased the most in the period (1) thanks to the VN30 stocks and MidCap stocks which had a strong increase in performance due to continual supply of large foreign capital. Contrary to the above two sectors, SmallCap has a significant performance decrease and has a negative level of performance in most stages (1). In the period (2) all groups had negative performance due to the Central American trade stress factors and the rapid rate of interest rate increase from FED created panic sentiment for regional and domestic markets.

MidCap sector dropped deeply and surpassed the drop of SmallCap in the beginning of July and rebound strongly in the second half of July. From the October's start to November's end, the market fell into a strong correction period due to the FED's third time interest rate hike in 2018, US 10-year government bond yields soar and increase China-US trade tension. This sector rebounded slightly from December's start before dropping and keeping their performance at negative level by year end because the FED raised the interest rate for the fourth time.

Chart 31: All marketcap stocks performance



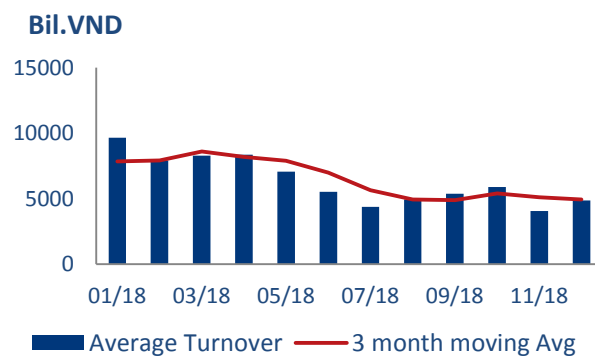
Source: Bloomberg, BSC Research

## Market statistics in 2018

### Market liquidity

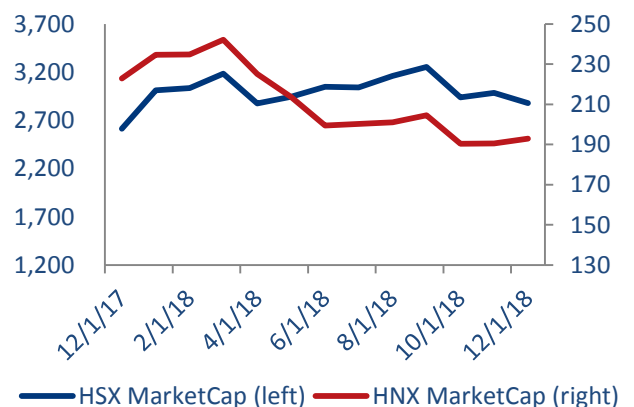
As of December 28, 2018, average liquidity on HSX and HNX reached VND 6283 billion/session, up sharply from VND 4,805 billion/session in 2017, corresponding to an increase of 30.75%. Liquidity surged and reached the highest level in January with an average liquidity of 9,640 billion VND /session. The high liquidity of over 7,000 billion VND/session continued to be maintained in the first 5 months due to the excitement of the market after the successful divestment of the state in the last 2 months of 2017, along with large capital from foreign investors. Foreign investors poured into the market, especially in Blue-Chip stocks. In the remaining 7M2018, liquidity decreased and fluctuated strongly due to the macro factors of the world such as US-China trade conflict and strong fluctuations in crude oil prices, which negatively impacted the overall market sentiment.

Chart 32: Average order matching value in 2018



Source: HNX, HSX, Bloomberg, BSC

Chart 33: Market capitalization



## Market capitalization

As of the end of 28/12/2018, the market capitalization of HSX and HNX reached VND 3,071.49 trillion, equivalent to USD 131.82 billion, up 8.26% compared to 2017.

UPCOM market capitalization continued to dominate compared to HNX and reached VND 933.48 trillion, up 38.68% YoY. HNX reached VND 192.89 trillion, down 13.46% YoY. UPCOM market capitalization continued to improve strongly due to attracting a large amount of investors from new stocks in 2018 such as POW, VEA, BSR, OIL, MCH. The promotion of divesting and equitizing large state corporations with good prospects has attracted capital into the stock market in 2018.

Compared to the end of 2017, the number of listed stocks on the HSX increased by 28 stocks (+ 8.1%), Upcom received 106 more stocks (+ 15.27%) and HNX dropped 10 stocks (-2.6%). The whole market has 410.06 million unlisted securities units. In which stocks were 263.16 million, bonds were 24.5 million and ETF were 122.4 million. The number of listed shares for the first time is 8,159.28 million and additional listing is 9,342.19 million. ETF has 0.5 million initial listed stocks and 247.3 million additional listings. Fund certificates in 2018 also had the first listing price of 17 million units. The number of stocks listed on the Upcom floor increased sharply in this year due to the strict listing standards on the HSX so it is common for newly listed enterprises to go on Upcom floor first. With several huge IPO deals on Upcom this year, BSC expects that in 2019 there will be many good stock options in term of both quality and quantity for investors on the HSX that originated from Upcom.

## Foreign transaction

Foreign capital continued to play a leading and oriented role in 2018, especially in the first half of the year and peaked in May. In October, foreign investors also increased their net buying at over VND 9 trillion. BSC expects that the market will continue to recover and increase in 2019 when the negative factors from the world macro are eased.

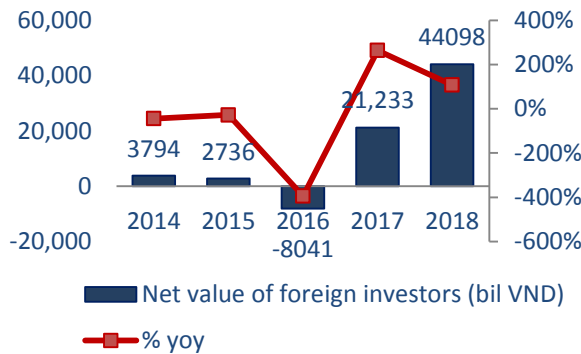
As of December 28, foreign investors bought a net amount of VND 44,098 billion on all three exchanges, equivalent to USD 1,892 billion, up 108% YOY.

Foreign investors have net selling in March, June, July, August and December while they have net buying in the remaining months of the year. In May, net buying reached more than 22 trillion. In October, foreign investors bought over VND 9 trillion with major contribution from MSN (over VND 10 trillion).

Foreign investors also focused on Upcom when they bought a net amount of VND 2,637.05 billion and focused on buying the most on VEA (VND 937.13 billion), POW (VND 878 billion), VTP (VND 568.78 billion), and QNS (VND 560.86 billion), VGT (VND 259.66 billion).

Foreign capital inflows into the Vietnamese market continued to increase with the rate of 50.5% compared to the end of 2017. In addition, Vietnam market is the only market in Asia after China that contradicted the region trend. In addition, the net buying value of Vietnam is very large compared to GDP and compared to past data.

Chart 34: Foreign transaction 2014-2018

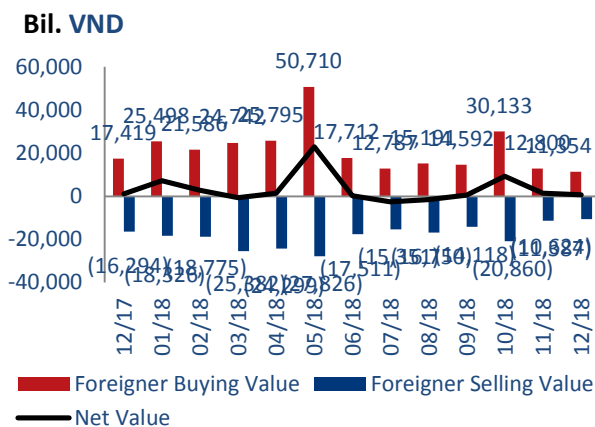


Source: Bloomberg, BSC Research

Table 11: Foreign transaction in Asia countries (USD million)

Country	Dec 2018	Quarter 4	FY2018
India	284	-2,599	-4,605
Indonesia	-355	30	-3,656
Japan	-9,897	1,602	-50,284
Malaysia	-229	-741	-2,870
Philippines	-13	490	-1,079
Korea	135	-3,589	-5,677
Taiwan	-2,267	-6,506	-12,176
Thailand	-8.9	-2,395	-8,913
Vietnam	31	504	1,886

Chart 35: Foreign transactions on HSX



Source: Bloomberg, BSC Research

Foreign investors bought net amount of VHM (VND 25,978 billion), MSN (VND 13,305 billion), VRE (VND 3,828 billion), YEG (VND 2,579 billion) on HOSE and strongly sold a net amount of VIC (VND -9,949 billion), VJC (VND -2,511 billion), HPG (VND -1930 billion), VNM (VND -1,595), and CTD (VND -366 billion).

Foreign investors strongly bought net amount of SHB (354 billion), PVS (271 billion), SHS (158 billion), CEO (99 billion) on HNX and sold a net amount of VGC (VND -1,057 billion), VCG (VND -868 billion), NDN (VND -128 billion), ACB (VND -117 billion), and VIX (VND -98 billion).

Chart 36: Foreign transactions on HNX

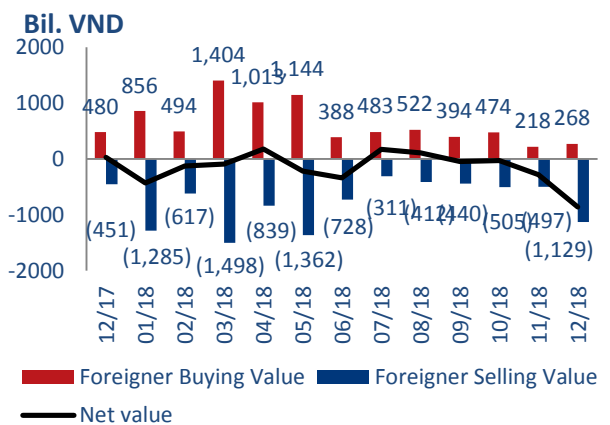


Chart 37: Top 10 foreigners net bough value on HOSE

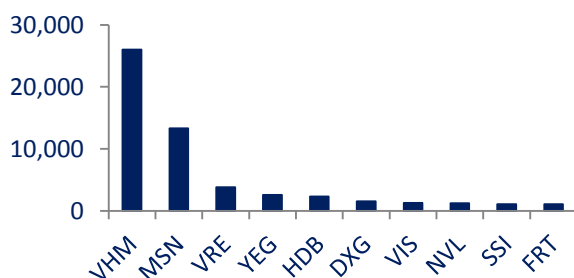
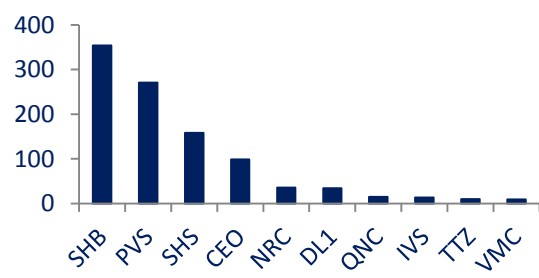


Chart 38: Top 10 foreigners net bough value on HNX



Source: Bloomberg, BSC Research

Chart 39: Top 10 foreigners net sold on HOSE

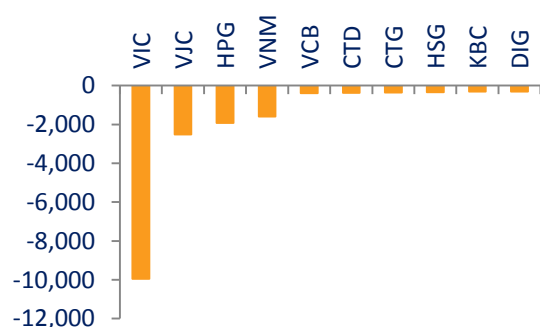
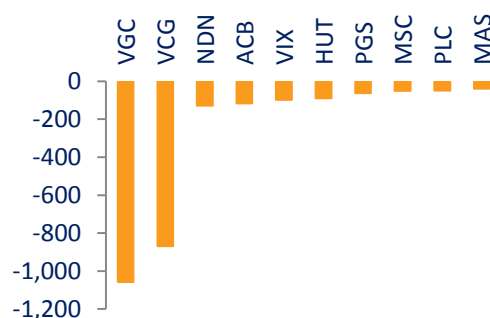


Chart 40: Top 10 foreigners net sold on HNX



Source: Bloomberg, BSC Research

Chart 41: Total asset and number of shares of ETF VNM

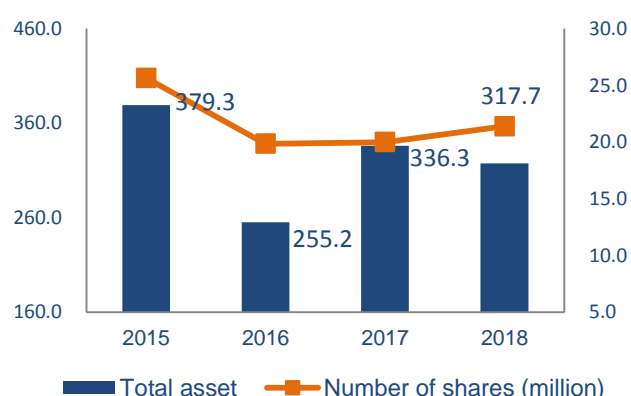
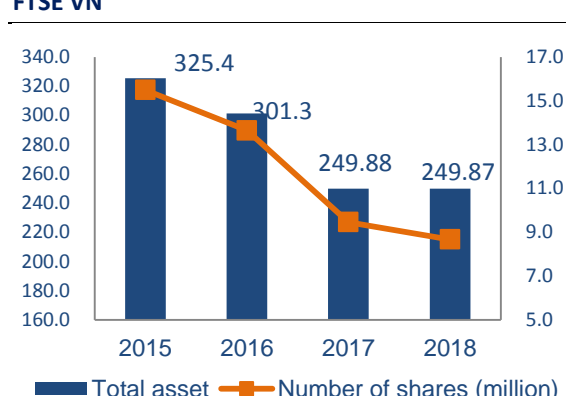


Chart 42: Total asset and number of shares of ETF FTSE VN



Source: Bloomberg, BSC Research

## 2 ETFs VNM and FTSE VN are different on changing size and outstanding shares in 2018.

VNM ETF increased 7% scale from 20 million fund certificates in 2017 to 21.4 million fund certificates in 2018. Contrary to the increase in scale, the asset value decreased 5.53% from 336.3 million USD to 317.7 million USD.

FTSE ETF fell 8.3% scale from 9.46 million fund certificates in 2017 to 8.67 million fund certificates in 2018. The asset value decreased 0.4% from 249.88 million USD in 2017 to 249.87 million USD in 2018.

VN30 ETF fund increased 74% scale from 170.2 million fund certificates in 2017 to 295.6 million fund certificates. The asset value also increased by 55.7%, from VND 2,717.79 billion in 2017 to VND 4,217 billion in 2018.

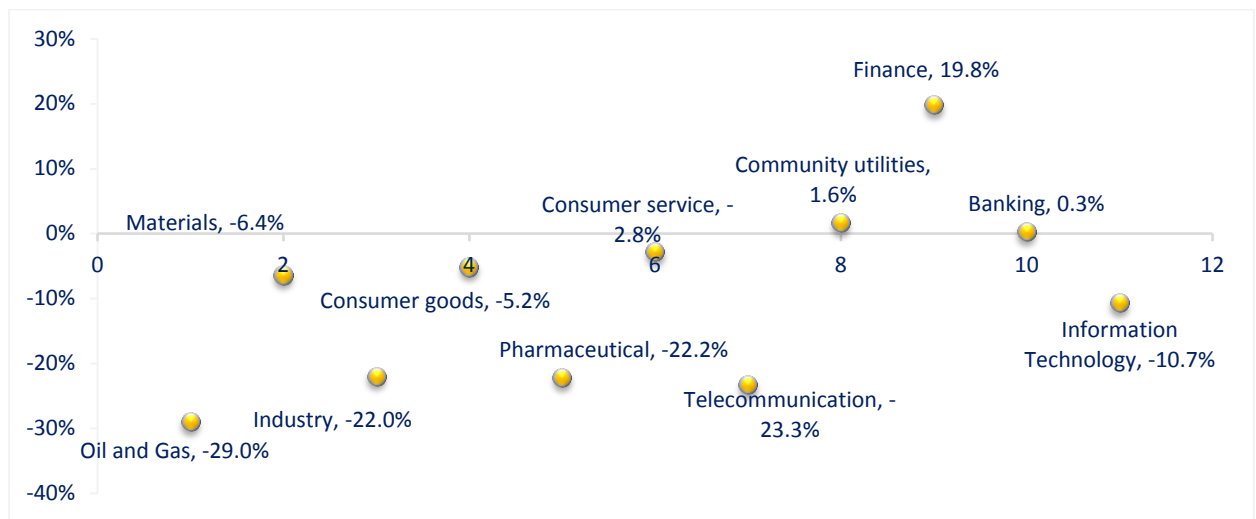


## Assessment of stock market trend in 2018

Following the rise in 2017, VN-Index maintained strong gains in the first 3 months, reaching a record peak of 1,204 points. Cash flow strongly poured into stocks, positive sentiment, improved business results and good IPOs have helped the market create a new record of scores, capitalization and liquidity also improved markedly. However, the market then weakened rapidly with the decline of cash flow, insecurity sentiment before the complex fluctuations of the world market caused by the US-China trade war, the move to raise interest rates of FED and lower domestic currency prices of emerging market areas. VN-Index has declined in almost all the remaining 9 months. The index is currently struggling around the short-term bottom accumulation area from 880 to 900 points. The market differentiated and moved positively in some sectors along with short-term benefits from the trade war, but liquidity was also quite limited. Some movement trends of major stock sectors in 2018 (Outstanding stock sectors developments Appendix 15 and Appendix 16):

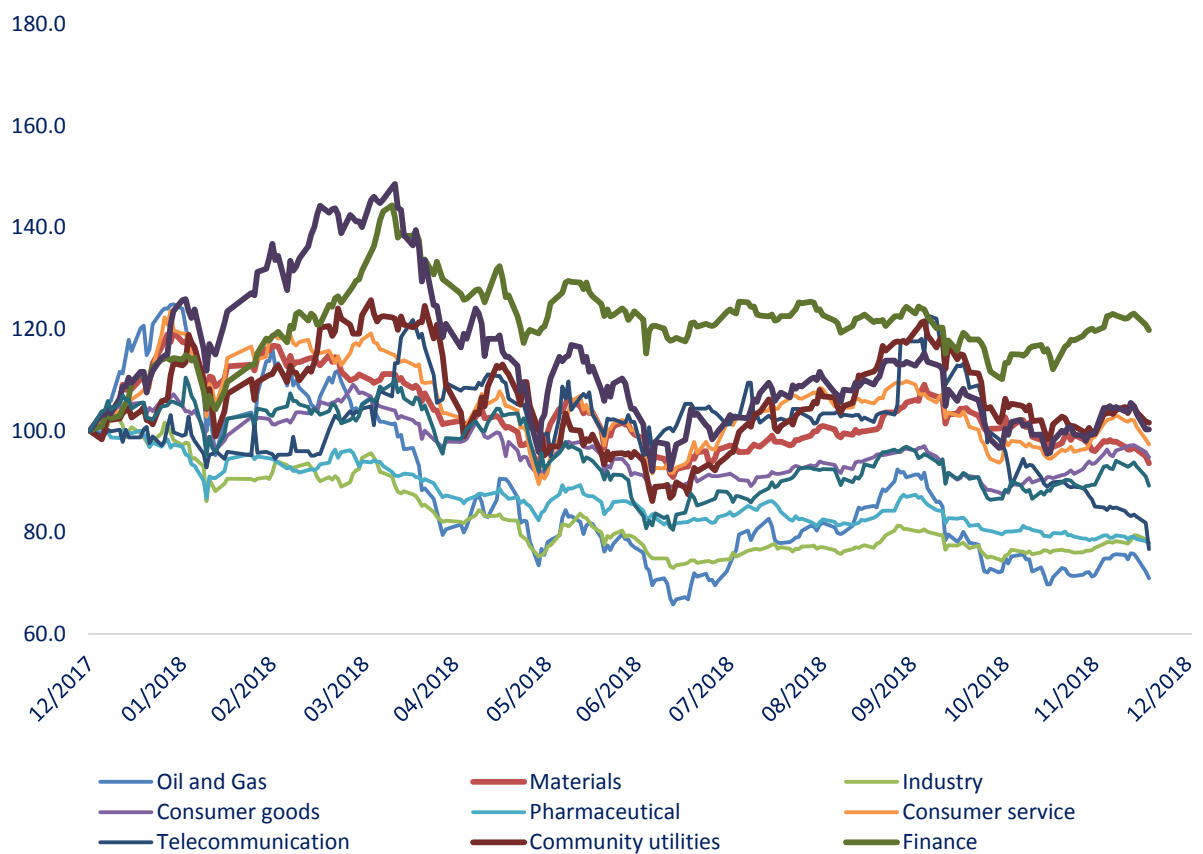
- **Movement follows the big trend from outstanding business results.** 3/11 level 1 active sectors include Banking (VCB, ACB, MBB), Finance (Real estate- VIC-VHM, DXG, NLG) and Community utilities have strongly improved profits and thus, perform better than the market.
- **Movement follows expectations of IPOs and state divestment in listed companies and new listing waves.** IPOs deals in state-owned enterprises in the first quarter such as BSR, POW, OIL, new listed stocks of the private sector (HDB, TPB, FRT, VHM, TCB, YEG, HPX), and stocks divestments SCIC capital (VCG) attracted foreign capital inflows and had a positive effect on the market at some points, especially in Q1. The trend of investing in the OTC market took place in 2018 as investors bought new listing stocks to benefit by the listing waves on the main market, especially Banking stocks. However, this effect decreased significantly in the second half of 2018 due to slow and less attractive state-owned shares and divestments.
- **Movement follows strong improved business results which benefited from positive effects from the US-China trade war.** The US-China trade war on the one hand has a significant impact on cash flow, sentiment and market movements. On the other hand, it brings short-term opportunities for some sectors with large production scale and competition against Chinese goods exporting to the United States. Seafood stocks (VHC, ACL, CMX, ANV), textile stocks (VGT, HTG, TNG, GIL), industrial zone stocks recovered and rose sharply in the second half of 2018 when the trade war takes place.
- **Movement follows the commodities in the world.** Many of the world's best basic commodities including oil, gas, and metal prices, etc., in the first quarter of 2018 positively affected stock prices in the sector. However, the reversal of world production in the context of slowed world economic growth and escalating trade war also made these stocks move up and down abnormally. These stocks include oil and gas stocks (GAS, PVD, PVS) and, steel stocks (HPG, HSG, NKG).
- **Movement follows the large cap stock.** VN30 stocks gained significantly compared to other stocks marketcap types thanks to foreign buying activities and effects from several projects that are valued by USD billion. The valuation level of VN30 stocks was pushed to the top at a P/ E of 19.9 while the VN-Index was 21.75 in early April.

Chart 41: ICB Sectors development in 2018



Source: FiinPro, BSC Research

Chart42: Development of ICB\_level I sector in 2018



# Market outlook in 2019

## Major factors affecting the stock market

We assess the factors affecting the stock market prospect based on following aspects (1) Economic environment and macroeconomic prospects, (2) Domestic market, (3) Capital flows, (4) World economy and (5) Other issues. The stock market is still supported by a stable macro economy, an open business environment that facilitates the development of enterprises. However, the world economy is growing slowly, the US-China trade war has not yet ended and remained to be a significant challenge to the market in 2019. Market size continues to expand thanks to the new listing process, equitization divestment. Foreign capital is expected to flow into the market thanks to the prospect of market upgrading in 2019. The stock market has reached a more reasonable area but the fluctuation from outside is still an unpredictable factor and complicates market movements 2019, which is predicted to have many difficulties.

**Table 12: Major factors affecting the stock market in 2019**

#	Factor	Impact	Direction
1	Economic Environment	Population, income and urbanization	.....
		Good growth thanks to economic restructuring and strong integration with the world	.....
		Promulgated the Law on Prevention and Corruption in 2018	.....
		Ranking 69/140 economies	.....
		Cut administrative procedures and business conditions	.....
		Support small and medium enterprises, startups and 4.0 revolution	.....
		Amended securities law, expected to pass and valid in 2020.	.....
2	Domestic market	Upgrade the stock market (prospects in 6/2019)	.....
		Equitization and divestment of state capital	.....
		Private businesses develop the foundation for IPO and M&A activities	.....
		Level of profit improvement	.....
		Market capitalization and market liquidity improved	.....
		Improving the market of Derivatives	.....
		Interest rates and exchange rates are stable	.....
3	Capital flows	Foreign cash flow	.....
		Prudent credit growth, strict management of securities investment and real estate	.....
			.....

4	Other issues	Trade agreements	••••	
		The government public debt is high, but the disbursement is slow in 2018 to supplement the budget for 2019	••••	Public investment 2019 has growth potential
		Increasing bank capital under Basel II standards	••••	Safety system, sustainable credit
5	World economy	The US-China trade war	•••••	Influence world economic and trade prospects
		FED raised interest rates, expected 2 times 2019 and 1 time 2020	••••	Influence of foreign capital
		The large KT background grows slowly	••••	Influence Growth prospects and import-export
		Brexit, public debt and Italian budget issue	•••	Unstable potential
		OPEC cut oil production	•••	
		Geopolitical issues	•••	Unstable potential

Source: BSC Research

### Stock market forecast for 2019

- The market in the process of forming a consolidated area after creating peaks in 2018. The stock market has reduced to a reasonable level and the growth rate of the Company's profit is still well maintained as a basis for creating a price base support in 2019. Based on 3 methods of forecast, VN-Index will range from 800.3 to 1,265.6 points, focusing on 1,050 points. The rally will depend on the new cash flow, which is expected to upgrade to FTSE's primary emerging market.
- Number of listed companies based on the average 5-year growth rate of 8.5% and adjusted forecasts of 5% due to many listed stocks UPCOM after IPOs. The number of accounts based on average growth of 12%/year for 5 years, is expected to increase by 5% in correlation with listed companies. The net buying volume decreased because there aren't any large capital selling before listing due to consideration of market upgrade possibility. Liquidity increased by an average of 22%/year for 5 years, is expected to increase only 10% due to the peak of the market and the put-through transaction will decrease. Market capitalization increased by an average of 38%/year for 5 years, forecasted to increase by 10% relative to the price increase and new listing and listing activities.
- EPS VN-Index of the whole market (the total profit after tax / total listed shares) in the last 4 quarters is VND 2,262 with a 4-year average growth rate of approximately 6%. It is estimated to increase by 5% to VND 2,390 in 2019. The average of forecasted VN-Index shows respective P/E and P/B of 15.7 and 2.5 in 2019. Similarly, P/E and P/B HNX-Index in 2018 are forecasted to be 10 and 1.0 respectively.

Table 13: Stock market fundamental ratios and forecasting 2019

Indicators	2016	2017	2018F	2019F
<b>Market indicators</b>				
- VN-Index	664.8	984.2	892.5	1,050.0
% growth	14.8%	48.0%	-9.3%	17.6%
- HNX-Index	80.1	116.9	104.2	115
- UPCOM-Index	53.8	54.91	52.8	55
Number of listed companies	1,103	1,417	1,623	1,706
% growth	5.6%	28.5%	14.5%	5.0%
- VN-Index	320	349	384	404
- HNX-Index	376	383	356	390
- UPCOM-Index	407	685	883	912
Number of accounts (thousands unit)	1,690.0	1,902.0	2,167.0	2,275.4
% growth	7.6%	12.5%	13.9%	5.0%
- Domestic account	20.1	23	28.8	
- Foreign account	1,670.0	1,879.0	2,138.2	
Market capitalization (bil USD)	78.4	148.5	173	190.3
% growth	26.9%	89.4%	16.5%	10.0%
Net of foreign purchase/sale on listed market (mil USD)	(355.1)	950.0	1,875.0	500.0
<b>Market liquidity</b>				
Avg transaction value/session including put-through trading value of 3 exchanges (mil USD)	136.9	217.8	280.1	308.11
% growth	16.9%	59.1%	28.6%	10.0%
Market liquidity turn-over (stock turn over/year)	0.6	0.7	0.5	0.5
- HSX	0.6	0.7	0.6	
- HNX	1.0	1.1	1.0	
- Upcom	0.1	0.1	0.1	
Average trading session above 1 mil USD/days	23	45	58	55
<b>Fundamental ratios</b>				
VN-Index				
- P/E	12.5	15.6	15.6	15.8
- P/B	1.7	2	2.4	2.5
HNX-Index				
- P/E	10.3	10	9.0	10.0
- P/B	1.0	0.9	1.0	1.0

Source: BSC Research

# Forecast VN-index in 2019

We use 3 methods including P/E method, large weighted stock method, and technical method to forecast VN-Index. VN-Index is forecasted to move from 800.3 points to 1,265.6 points with a focus area at 1,050 points by the end of 2019. The above forecast is based on the evaluation of existing stocks, the level of change will depend on the price on the floor and the weight of new listed stocks affecting the index. The methods of forecasting VN-Index are as follows:

## Forecast VN-Index by P/E method:

### Method overview

- Market EPS is forecasted on the average of securities companies and financial institutions for 2019, other stocks get closing prices on December 24.
- Market PE forecast at 15.7, equivalent to the bottom in 2018.
- VN-Index built on EPS (VN-Index division) in 2019 multiplied by forecasted P / E.

### Forecast of market EPS

Based on the average after-tax profit of statements from securities companies and financial institutions with companies for 2019, the results are shown in the table below:

Date	Forecasted EPS	% growth comparing to 2015 EPS
12/31/2019	67.7	18.6%

Profit growth mainly came from VHM and Banking stocks including VCB, BID, VPB, MBB, HDB, and TPB.



Source: Bloomberg, BSC Research

### VN-Index forecast in 2019

	2019
VN-Index scenario	1,062.9



## Forecast VN-Index by large weight stock method

### Method overview

- This method is based on valuation of important stocks in 2018 for the next 6-12 months by domestic and international securities companies and financial institutions.
- The VN-Index is based on the average price (the arithmetic average price of all price forecasts), the highest price, the lowest price of 35 stocks with the largest scale (accounting for 84.7% of VN-Index). Other stocks closed prices on 12/12.
- ROS, EIB, HNG have no forecast and thus, we used closing price on 12/12 as the price for calculating the index. BVH have surpassed the positive evaluation at the time of calculating the index.

Calculation result are as follows: (Appendix 17)

	Target Score	Max score	Min score
<b>VN-Index 2019</b>	1,058.8	1,169.2	961.8

Source: BSC Research

## Forecast VN-Index by Technical Analysis method

We use technical analysis methods to analyse 30 stocks that had the largest proportion in order to support our forecasting results. We focus on the most positive and negative scenario of most important stocks in the medium term of 1 year.

### Method overview

- VN-Index is determined by the expected peak and bottom price of 30 stocks with the largest proportion (accounting for 82.96% of market capitalization), other shares are priced at 12/12/2018.
- Using the weekly technical chart, the bottom price of the stock chart is a tight cumulative price before increasing or including technical lines and a strong support is usually support level 2, Peak price is the price determined by the extended Fibonacci lines, the wavelength, the price channel, the old peak and the recorded pattern ....

Calculation result are as follows: (Appendix 18)

	Max score	Min score
<b>VN-Index 2019</b>	1,265.6	800.3

Source: BSC Research

# Appendixes

## Appendix 1. Import/export activities of 5 Asean nations and China in 9M2018 (USD bil)

Year	Thailand		Malaysia		Vietnam		Philippine		Indonesia		5 ASEAN nations		China	
	XNK	± %	XNK	± %	XNK	± %	XNK	± %	XNK	± %	XNK	± %	XNK	± %
2018 yoy	476	9%	458	11%	468	10%	173	6%	368	11%	1,943	10%	4,638	11%
2017	436	11%	414	15%	426	21%	163	15%	330	16%	1,770	16%	4,176	12%
2016	392	-2%	359	-4%	351	7%	142	9%	285	-1%	1,529	1%	3,730	-4%
2015	401	-8%	373	-16%	328	10%	130	2%	288	-18%	1,520	-8%	3,903	-8%
2014	436	-4%	441	2%	298	13%	127	7%	351	-5%	1,653	1%	4,260	2%
2013	455	0%	431	1%	264	16%	119	4%	368	-4%	1,637	2%	4,195	6%
2012	455	6%	426	2%	227	12%	114	5%	382	0%	1,605	4%	3,941	9%
2011	431	20%	416	14%	204	30%	109	2%	384	28%	1,543	20%	3,618	18%
2010	359	32%	365	30%	157	24%	106	31%	300	36%	1,287	31%	3,063	35%
2009	272	-18%	281	-21%	127	-9%	82	-23%	221	-15%	982	-18%	2,269	-9%
2008	333	21%	356	10%	139	22%	106	0%	259	105%	1,192	26%	2,503	13%
Average	3%		2%		21%		5%		3%		5%		7%	

Source: Bloomberg, BSC Research

## Appendix 2. Export-Import/GDP of 5 Asean nations and China in 10 years (USD bil)

Year	Thailand	Malaysia	Vietnam	Philippine	Indonesia	5 ASEAN nations weighted average)	China
2018F	100%	139%	196%	52%	34%	79.4%	36%
2017	96%	132%	196%	52%	33%	76.7%	34%
2016	95%	121%	172%	46%	30%	71.1%	33%
2015	100%	126%	169%	44%	33%	74.3%	35%
2014	107%	130%	164%	45%	39%	78.8%	41%
2013	108%	133%	154%	44%	40%	78.0%	44%
2012	115%	135%	151%	46%	42%	79.2%	46%
2011	116%	140%	146%	49%	43%	80.1%	48%
2010	105%	143%	137%	53%	40%	77.3%	50%
2009	97%	139%	120%	48%	41%	75.8%	44%
2008	114%	154%	140%	61%	51%	91.3%	54%

Source: Bloomberg, Trading Economics, BSC Research

### Appendix 3. Effect of oil price fluctuations on the Vietnamese economy

Positive effects	Negative effects
<p><b>1. Positive impact on people's consumption and business performance.</b></p> <p>Vietnam is a net importer of petroleum products, so the drop in oil prices also helps to reduce the import prices of these products. People save on transportation costs, thereby increasing consumption for the economy. Consumer spending in the economy improved, total retail sales of goods and net consumer service revenue in 2015, 2016 and 2017 increased by 8.4%, 10.2% and 10.9% respectively.</p> <p><b>2. Improved efficiency of enterprises contributes to domestic revenue from tax increases strongly contributing to the state budget. Positive influence on stock prices of enterprises with large share of fuel costs such as transportation.</b></p> <p>Typically, the state budget revenue increased sharply from the private enterprises in the years with the average oil price decreased by 2015, 2016 with an increase of 15.5% and 21.18%. This level only increased by 15.26% again in 2017 and decreased by 1.27% in 11 months of 2018 when oil prices rebounded strongly.</p> <p><b>3. Low inflation is controlled, macro economy is stable and attractive for investment activities.</b></p> <p>The sharp fall in oil prices has a direct impact on the transportation group and the service group of electricity, water, fuel and construction materials and indirectly and indirectly stabilizing food, food and eating out of families. As a result, CPI in 2015 reached a record low of 0.63%. The trend of rising oil prices from 2016 to 2018 pushed CPI up 4.74% in 2016, 2.6% in 2017 and 3.59% in the first 11 months of 2018</p> <p><b>4. Stability of interest rates and exchange rates.</b></p> <p>Falling oil prices helped the state bank and the government have more room to adjust mechanisms and policies to implement the proposed economic goals such as stabilizing exchange rates and interest rates. Since then, it has stimulated people to deposit in local currency into banks and businesses and small business households to boost investment loans.</p>	<p><b>1. Reducing state budget revenue from crude oil.</b></p> <p>The state budget revenue from crude oil decreased 32.5% in 2015 and 40.59% in 2016 due to a sharp decline in world oil prices. Oil price recovery in 2017 and May 11, 2018 helped state budget revenues from oil increase by 23.44% and 9.69%.</p> <p><b>2. Negative effects on oil and gas enterprises and stock prices of these enterprises</b></p> <p>Oil prices plummeted and volatile also negatively affected oil and gas enterprises, especially crude oil exploiting companies and drilling rigs.</p> <p><b>3. Investment attraction activities for oil and gas-related industries are affected.</b></p> <p>Falling oil prices will also put pressure on new oil exploration and exploitation projects. In addition, the activities of attracting investment capital to expand the project were also difficult when the oil price dropped due to the high cost of oil exploitation in Vietnam (30-70 USD / barrel) and the performance of the houses. Oil refinery is not high.</p> <p><b>4. Great impact on the rubber industry</b></p> <p>The cost of crude oil accounts for a significant proportion in the cost of producing synthetic rubber. Therefore, falling oil prices will directly lead to a decrease in synthetic rubber prices and indirectly affect the prices of natural rubber exports in the world commodity market</p>

**Appendix 4. Benefited sectors from decreasing oil price**

<b>Chemistry</b>	Input chemical products such as sulfur, base oil, and asphalt ... are products of petrochemical refining so low oil prices will help cheaper raw material prices of businesses. In addition, low oil prices also reduce transportation costs when the majority of input materials for chemical production in Vietnam are imported.
<b>Fertilizer industry</b>	Input gas prices of urea producers are calculated according to 46% of FO oil prices in Singapore market last month, so fertilizer enterprises benefit directly when oil prices fall. For nitrogen fertilizer, gas prices account for 60-70% of production costs, so the fall in oil prices will help reduce costs significantly. For phosphate fertilizer, due to sulfur price moving in the same direction with oil price, falling oil price will help phosphate producers benefit. In addition, fertilizer is the industry with large transportation costs, so the direct decrease in fuel prices helps businesses reduce costs.
<b>Energy industry</b>	Crude oil and gas are the main input fuel for thermal power plants. The price of gas on consumption is calculated based on market price of FO oil will help gas thermal enterprises benefit directly from the decline of oil prices. Currently gas costs are accounting for nearly 68% of revenue of power plants.
<b>Tire industry</b>	Falling oil prices caused synthetic rubber prices to fall as oil accounted for 15% of production costs, while putting pressure on the increase of natural rubber prices because synthetic rubber and natural rubber were two alternative product lines. Therefore, rubber price is forecasted to be stable and there is little price increase which helps improve input costs of tire companies.
<b>Plastic industry</b>	Plastic beads are produced from oil and natural gas, so the price of plastic beads has a close relationship with the oil price movements. Lower oil prices help businesses reduce production costs and import materials, thereby improving profit margins for plastic businesses.
<b>Transportation industry</b>	Fuel costs account for 30-35% of road transport costs, 20-30% in sea routes and 30% -40% with air routes. Therefore, falling oil prices have a positive impact, helping businesses in general as well as transport enterprises in general reduce costs, lower production costs and improve profits. In addition, the retail and food industry, logistics, and tourism sectors also benefit significantly when oil prices fall due to falling transportation costs and resonant impacts from improved costs from related industries.
<b>Construction materials industry</b>	Although falling oil prices do not directly affect production activities, enterprises in the construction materials industry will benefit from reduced transportation costs due to lower oil prices.

## Appendix 5. Economic growth forecast of countries in the Dollar Index

Nation	%Dollar Index	GDP		Inflation		Outlook
		2018	2019	2018	2019	
United States		2.90%	2.70%	2.10%	2.15%	While employment growth in the United States slowed, consumer growth remained solid, supported by wage growth as the labor market tightened further. Business investment will grow strongly in 2019 and 2020 thanks to President Trump's tax reform and financial conditions that support the trend of business investment. Large fiscal stimulus issued in 2017 and 2018 is continuing, although it will become weak in 2019; The budget will have a wide range of neutral impacts on operations in 2020.
EU	57.60%	1.90%	1.80%	1.80%	1.90%	Economic growth is estimated to be moderate. Accommodative monetary policy and fiscal easing policy will support domestic demand, especially private consumption and employment needs. Investment household businesses will remain high, reflecting favorable financial conditions and the need to expand the production capacity of the economy. Inflation is expected to increase gradually, when the wage increase turns into a boost of basic inflation. The eurozone fiscal position is expected to be in a slight expansion in 2018-2020.
Japan	13.60%	0.90%	1.00%	1.00%	1.40%	Economic growth is expected to maintain about 1% in 2018-19, because of high corporate profits and a shortage of labor to promote business investment. In addition, the increase in workers' salaries will support private consumption by 2019. Although the consumption tax increase in October 2019 will temporarily reduce demand, growth is expected to continue in the beginning of 2020, supported by government spending and the 2020 Olympic Games in Tokyo. Sustainable growth, combined with higher oil prices, is expected to increase inflation by 1% (excluding the impact of increased consumption tax) by 2020.
UK	11.90%	1.30%	1.40%	2.50%	2.30%	Economic growth is expected to increase slightly in 2019 before slowing down in 2020, if there is a smooth Brexit leaving the European Union. Some uncertainties related to Brexit will remain until there is clarity about future trading arrangements. An expansionary fiscal policy and slow rebound in exports are expected to support growth, while monetary stimulus will be gradually withdrawn. Inflation is expected to increase by 2% by the end of 2020. With inflation on target and the remaining major uncertainties, monetary policy will normalize at a very slow pace. Fiscal stimulation is expected to reach peak in 2019.
Canada	9.10%	2.10%	2.20%	2.30%	2.10%	Canada's economic growth is moderate with slow consumption in response to a smaller increase in housing prices, and employment and exports return to normal levels when US growth started decreasing. Unemployment is expected to remain near record lows and inflation will rise to more than 2%. Canadian banks are expected to continue withdrawing monetary stimulus measures to stabilize inflation around the average mid-term target of 1-3%. While fiscal policy is expected to remain neutral, reducing the structural budget deficit will reduce the burden on monetary policy and create more room to support the economy in the event of a recession. The cautious macro policies have been enforced and the housing market is stable.

Source: OECD, BSC research

#### Appendix 6. Government Debt (Unit: VND Bil)

Criteria	2016	2017	2018
Total debt of the Government	452,000	342,060	384,000
Government bonds, Social Insurance, SCIC	336,000	243,300	275,970
Government bonds	250,000	183,396	175,000
Social Insurance, SCIC	86,000	59,904	100,970
ODA	99,000	98,760	0
Foreign currency bonds	17,000	0	0
Foreign loan	0	0	108,030

Source: Decision 1011 / QD-TTg, Decision 583 / QD-TTG and Decision 1011 / QD-TTg of the Prime Minister, report on final settlement and annual state budget report, BSC Research.

#### Appendix 7. Status of state budget revenues and expenditures from 2013 to November 15, 2018 (Unit: VND Bil)

Criteria	2013	2014	2015	2016	2017	15/11/2018	2019
<b>Nominal GDP</b>	<b>3,584,262</b>	<b>3,937,856</b>	<b>4,192,862</b>	<b>4,502,733</b>	<b>5,007,857</b>	<b>5,512,079</b>	<b>6,043,037</b>
<b>Total collection</b>	<b>1,084,064</b>	<b>1,130,609</b>	<b>1,291,342</b>		<b>1,277,638</b>	<b>1,159,577</b>	--
Estimate	828,348	877,697	998,217		1,212,180	1,319,200	1,411,300
Above estimation	255,716	252,912	293,125	393,072	65,458	--	--
<b>Total expenditure</b>	<b>1,277,710</b>	<b>1,339,489</b>	<b>1,502,189</b>		<b>1,451,638</b>	<b>1,166,771</b>	--
Estimate	1,088,153	1,103,983	1,265,625		1,390,480	1,523,200	1,633,300
Above estimation	189,557	235,506	236,564	301,248	61,158	--	--
<b>Overspending</b>	<b>236,769</b>	<b>249,362</b>	<b>263,135</b>	<b>248,728</b>	<b>174,000</b>	<b>7,194</b>	--
%GDP	6.60%	6.30%	6.30%	5.6%	3.47%	0.13%	--
Estimate	162,000	224,000	226,000	254,000	178,300	204,000	222,000
<b>%Overspend/total expense</b>	<b>18.53%</b>	<b>18.62%</b>	<b>17.52%</b>	<b>15.80%</b>	<b>11.99%</b>	<b>0.62%</b>	--

Source: Finalization report and annual report of the state budget, GSO, BSC Research

**Notes:** Data from 2013 - 2016 are data of state budget settlement.

Data for 2017 are data estimated by the Ministry of Finance but not yet finalized.

Data from the beginning of 2018 to November 15, 2018 were taken from the General Statistics Office, GDP was estimated under the state of economic growth of 6.8%.

2019 data are taken from the 2019 State Budget Estimates of the Ministry of Finance



### Appendix 8. Ministry of Transport Projects in 2019

#	Projects	Investor	Status	Total investment ( VND bil)	Budget type	Land use area
1	Investment project on construction of urban railways in Hanoi, South Ho Tay route - Ngoc Khanh - Lang - Hoa Lac - Ba Vi	Vietnam Railway Bureau	Executing	60,272	Central budget capital	126.54 ha
2	Building Ho Chi Minh City's No. 1 urban railway, Ben Thanh - Suoi Tien route	Transportation Ministry	Executing	47,325	ODA -88.4% Local budget capital -11.4%	336,410 m2
3	To invest in the construction of a channel for large tonnage ships into the Hau river	Transportation Ministry	Executing	9,781	Central budget capital	13,201,155 m2
4	Investment in construction of Hai Phong international gateway port under Component A - Inception phase	Transportation Ministry	Executing	4,660	ODA Government bond capital	848.7 ha
5	Investment project to renovate and upgrade National Highway 1 section Km1027-Km1063 + 877 and Km1092 + 577-Km1125 + 000, Quang Ngai province	Transportation Ministry	Executing	2,709	Government bond capital	84.65 ha
6	Strengthening sustainable urban transport for Hanoi urban railway project No. 3	Hanoi Department of Transport	Executing	1,238	ODA Central budget capital	88.093 m2

Source National Investment Supervision Ministry, BSC research

### Appendix 9. Project of Ministry of Agriculture and Rural Development in 2019

#	Projects	Investor	Status	Total investment ( VND bil)	Budget type	Place of invest
1	Sustainable agricultural transformation project in Vietnam	Project Management Unit for Sustainable Agricultural Transformation in Vietnam	Executing	5,101	Central budget and ODA	
2	Coastal resources for sustainable development To invest in the construction of a channel for large tonnage ships into the Hau river	Management Board of Agricultural Projects	Executing	225	Central budget and ODA	Thanh Hoa province Nghe An province Ha Tinh province Pacify the province Phu Yen Province Khanh Hoa province Soc Trang Province Ca Mau Province Ninh Thuan Province

3	Strengthening Irrigation Management and Improving Irrigation Systems	Management Board of Agricultural Projects	Executing	194	Central budget and ODA	Hanoi City Ha Tinh province Thua Thien Hue province Pacify the province Phu Yen Province Ninh Thuan Province Binh Thuan Province
4	Development of sustainable rural infrastructure in the Northern mountainous provinces	Central Management Board of irrigation projects	Executing	3,225	Central budget and ODA	Bac Ninh province Hai Duong Province Hung Yen province
5	Sustainable agricultural transformation project in Vietnam	Management Board of Agricultural Projects	Executing	284	Central budget and ODA	Bac Giang province Bac Kan Province Cao Bang Province Dien Bien Province Ha Giang Province Hoa Binh province Lai Chau Province Lang Son Province Lao Cai Province Phu Tho province Son La Province Thai Nguyen province Tuyen Quang Province Vinh Phuc Province Yen Bai Province
6	Coastal resources for sustainable development	Central Management Board of irrigation projects	Executing	135	Central budget and ODA	Dong Thap Province Tien Giang Province
7	Resistant to integrated climate and sustainable livelihoods in the Mekong Delta	Central Management Board of irrigation projects	Executing	1,670	Central budget and ODA	Ca Mau Province Bac Lieu Province Soc Trang Province Kien Giang Province An Giang province Dong Thap Province Tra Vinh province Vinh Long Province Ben Tre Province

Source: National Investment Supervision Ministry, BSC research

### Appendix 10. Projects of Vietnam Electricity Corporation

#	Project	Investor	Status	Total Investment ( VND Bil)	Budget type
1	Bac Ai Hydropower Project	Vietnam Electricity Corporation	Pause	21,101	Development investment credit capital of the State.
2	Human resource training project for nuclear power plants in Ninh Thuan province	Vietnam Electricity Corporation	Executing	15,278	Development investment credit capital of the State.
3	O Mon IV Thermal Power Plant Project	Power Generation Corporation 2	Investment approved	13,901	Investment capital of state-owned enterprises
4	Project of Management and Operation Zone, Specialist Zone and Head Office of Ninh Thuan Nuclear Power Project Management Board	Vietnam Electricity Corporation	Executing	2,609	Investment capital of state-owned enterprises
5	Infrastructure project for construction of nuclear power plant projects in Ninh Thuan province	Vietnam Electricity Corporation	Executing	1,925	Investment capital of state-owned enterprises
6	Phuoc Thai solar power plant project 1	Vietnam Electricity Corporation	Investment approved	1,112	Other capital source
7	220kV substation Can Duoc and connection line, Long An province	Southern Power Corporation	Investment approved	337	ODA
8	220kV Long Xuyen 2 substation and connection line	Southern Power Corporation	Investment approved	309	ODA
9	110kV substation Chau Thanh 2 and 110kV Chau Thanh 2 line - 220kV Can Tho station under the efficient Distribution project (DEP) borrowed from WB capital	Southern Power Corporation	Investment approved	131	ODA
10	110kV Long An 2-An Thanh line & 110kV station An Thanh of the Efficient Distribution (DEP) project borrowed WB capital	Southern Power Corporation	Investment approved	126	ODA
11	Go Quao 110kV substation and 110kV Giong Rieng-Go Quao transmission line of the Efficient Distribution Project (DEP) borrowed WB capital	Southern Power Corporation	Investment approved	114	ODA

Source: National Investment Supervision Ministry, BSC research

### Appendix 11. MSCI's assessment of market access levels from 2014-2018

Bloomberg: BSCV <GO>

<https://www.bsc.com.vn//> | 53

Criteria	Vietnam					Kuwait	Philippines
	2014	2015	2016	2017	2018	2018	2018
<b>Opening level for foreign investors</b>							
Regulations on foreign investors	++	++	++	++	++	++	++
Foreign ownership limit	-/?	-/?	-/?	-/?	-/?	-/?	-/?
Effect of foreign room limit	-/?	-/?	-/?	-/?	-/?	++	-/?
Fair rights of foreign investors	-/?	-/?	-/?	-/?	-/?	+	+
<b>The ease of capital rotation</b>							
Regulation of capital flow limits	++	++	++	++	++	++	++
Freedom degree of forex market	-/?	-/?	-/?	-/?	-/?	++	-/?
<b>Effective system level of operation</b>							
<i>Market entry</i>							
Investment Registration and account open	-/?	-/?	-/?	-/?	+	+	++
<i>Market organization</i>							
Market regulations	+	+	+	+	+	+	++
Information flow	-/?	-/?	-/?	-/?	-/?	-/?	++
<i>Market infrastructure</i>							
Payment and clearing	-/?	-/?	-/?	-/?	-/?	+	+
Registration	++	++	++	++	++	+	++
Registration / depository	++	++	++	++	++	+	++
Deal	++	++	++	++	++	++	++
Transfer	-/?	-/?	-/?	-/?	-/?	-/?	++
Securities lending	-/?	-/?	-/?	-/?	-/?	-/?	-/?
Short sale	-/?	-/?	-/?	-/?	-/?	-/?	-/?
<b>Competitive environment</b>							
<b>Stability of the institutional framework</b>	+	+	+	+	+	+	+

++: No problem; +: No big problem, need improvement; -/? : must be improved, the level is assessed

**Appendix 12. Criteria for assessing Vietnam's FTSE monitoring list in September 2018**

Criteria	Developed market	High level Emerging Market	Secondary emerging market	Vietnam updated March 2018
GNI per capita				Average
Investment limit				Speculative
Market and legal environment				
The administrative agency of the stock market officially took the initiative in regulating market	x	x	x	Satisfy
Equitable treatment of minority shareholders	x	x		Limited
There is no or selection rate for foreign ownership	x	x		Limited
No significant objection or limitation or penalty applies to capital investment or withdrawal of capital and income	x	x	x	Satisfy
Free and well-developed capital market	x	x		Limited
Free and well-developed Forex market	x	x		Limited
No or simple registration process for foreign investors	x	x		Limited
Custody and payment				
Rate of rare failures transactions	x	x	x	Satisfy
Depository: Effective competition ensures high quality depository services	x	x	x	Satisfy
Payment - T + 2 / T + 3	x	x	x	T+2
Payment - Delivery in advance	x			Not Satisfy
Depository: Separate account management for foreign investors	x	x		Satisfy
Trading activity				
Brokerage: Effective competition ensures high quality brokerage services	x	x	x	Satisfy
Liquidity: Market accounts are wide enough to support global investment scale	x	x	x	Satisfy
Transaction costs: default and official costs must be reasonable and competitive	x	x	x	Satisfy
Allow stocks borrowing	x			Limited
Allow short selling	x			Not Satisfy
Allow forex trading	x			Limited
Effective trading mechanism	x			Limited
Transparency: in-depth market information, visualization and timely reporting of transactions	x	x	x	Satisfy
Derivative				
Derivative market developed	x			Not Satisfy

Source: FTSE Russell

### Appendix 13. Regulation of stock criteria in and out of VN30 in the first period of 2019

Stocks participating in VN30 meet the following conditions: (1) Listed shares in HOSE are not subject to warning due to violations of information disclosure, control, stop trading within 3 months and have trading time above 6 months; (2) Free float rate  $\geq 10\%$ , or Free float  $\leq 10\%$  when Free float (Market-cap\_f) adjustment capitalization  $>$  median aggregation Market-cap\_f of stock basket; (3) Stock turnover rate  $> 0.05\%$ ; (4) Stocks belong to the 90% cumulative trading volume of VNAllshare. Stocks arranged by decreasing value of capitalization, stocks standing at position 20 and above are always selected into VN30 basket, stock positioning in the range 21-40 are prioritized when they are in the portfolio. Only after those 40 stocks, Security Commission considered other stocks on market. After identifying VN30 stocks, the 5 largest marketcap stocks are selected in the reserve list.

Stock	Marketcap_f	Estimated Free float	Stock turnover	Other requirements	Status
VHM	USD 3.01 bil 3 <sup>rd</sup> position	25%	0.11%	Trading over 6 months, meeting FF criteria $> 10\%$ , top 20 Marketcap_f and other criteria.	In
HDB	USD 1.15 bil 10 <sup>th</sup> position	70%	0.44%	Deals over 6 months, meeting turnaround criteria and other criteria.	In
EIB	USD 0.57 bil 19 <sup>th</sup> position	75%	0.08%	Deals over 6 months, meeting turnaround criteria and other criteria.	In
TPB	USD 0.49 bil 20 <sup>th</sup> position	68%	0.09%	Deals over 6 months, meeting turnaround criteria and other criteria.	In
HSG	USD 0.15 bil 39 <sup>th</sup> position	65%	1.36%	Eliminate because there are stocks to replace in the top 20 and Marketcap_f low	Out
DHG	USD 0.14 bil 40 <sup>th</sup> position	55%	0.63%	Eliminate because there are stocks to replace in the top 20 and Marketcap_f low	Out
DPM	USD 0.13 bil 48 <sup>th</sup> position	40%	0.43%	Below Marketcap_f	Out
BMP	USD 0.10 bil 55 <sup>th</sup> position	45%	0.76%	Below Marketcap_f	Out

Source: BSC Research

### Appendix 14: Forecast of listing stocks in VN30

#	Stock	Market cap (mil USD)	FF rates	Market cap proportion limit	Forecasted proportion
1	VIC	3,191,626,624	30%	65.2%	10.0%
2	VNM	1,451,246,749	50%	66.0%	10.0%
3	VHM	2,631,760,936	25%	100.0%	8.3%
4	HPG	2,123,907,166	60%	100.0%	6.7%
5	MSN	1,053,249,616	40%	100.0%	5.7%
6	VJC	541,611,941	50%	100.0%	5.5%



7	VPB	2,423,072,185	60%	100.0%	5.1%
8	VRE	1,901,078,733	45%	100.0%	4.4%
9	MBB	2,160,451,381	55%	100.0%	4.2%
10	SAB	641,281,186	15%	100.0%	3.8%
11	FPT	613,554,396	80%	100.0%	3.4%
12	STB	1,803,653,429	95%	100.0%	3.4%
13	NVL	907,455,928	35%	100.0%	3.4%
14	HDB	990,744,802	70%	100.0%	3.3%
15	VCB	3,597,768,575	10%	100.0%	3.3%
16	MWG	322,890,596	65%	100.0%	2.9%
17	EIB	1,220,556,132	75%	100.0%	2.0%
18	TPB	861,089,415	68%	100.0%	2.0%
19	PNJ	162,138,615	70%	100.0%	1.7%
20	GAS	1,913,950,000	5%	100.0%	1.5%
21	SSI	499,847,842	60%	100.0%	1.4%
22	CTG	3,723,404,556	10%	100.0%	1.4%
23	PLX	1,158,813,235	10%	100.0%	1.1%
24	CTD	78,288,344	55%	100.0%	1.1%
25	REE	310,050,926	55%	100.0%	0.9%
26	SBT	495,417,773	55%	100.0%	0.9%
27	ROS	567,598,121	25%	100.0%	0.8%
28	CII	246,244,905	75%	100.0%	0.8%
29	GMD	288,276,957	55%	100.0%	0.7%
30	KDC	205,661,141	60%	100.0%	0.5%

### Appendix 15: Sectors trend and notable stocks in 2018

STT	Sector	Level	± until 18/12	P/E	P/B	Top 3 notable stocks
1	<b>Petroleum</b>	<b>1</b>	<b>-29.0%</b>	<b>11.0</b>	<b>2.2</b>	
	Petroleum	2	-29.0%	11.0	2.2	PEQ+15.8%, PVS-8.6%, PVB-15.2%
	Petroleum production	3	-28.7%	10.5	2.4	PLX-20.5%, OIL-38.5%
	Equipment, Services and Distribution of Petroleum	3	-19.2%	17.1	0.7	PVS-8.6%, PVB-15.2%
2	<b>Materials</b>	<b>1</b>	<b>-6.4%</b>	<b>8.9</b>	<b>1.8</b>	
	Chemicals	2	-3.7%	8.4	1.3	VFG+64.9%, DGC+56.5%, DDV+41.8%
	Basic resources	2	-11.4%	9.2	2.1	DHM+53.3%, THT+44.6%, HMC+30.5%
	Forestry and Paper	3	-12.5%	12.3	1.4	GVT+156.4%, TQN+51.3%, AFC+28.8%
	Metals	3	-14.9%	7.1	1.5	VGL+128.9%, HMC+30.5%, DFC+27.1%
	Mining	3	0.2%	28.5	3.8	MMC+85.7%, DHM+53.3%, THT+44.6%
	<b>Industry</b>	<b>1</b>	<b>-22.0%</b>	<b>14.3</b>	<b>3.4</b>	
	Construction and Materials	2	-34.9%	11.9	1.8	TTZ+102.3%, TTB+98.2%, VSI+77.5%
	Goods & Services Industry	2	-12.1%	15.7	4.1	SMA+97.3%, ARM+92%, TV2+87.1%
	Industry goods	3	-8.4%	0.0	1.2	DPC+59.9%, SDG+44.2%, STP+35.5%

<b>3</b>	<b>Electronics &amp; Electrical Equipment</b>	<b>3</b>	<b>29.1%</b>	<b>11.4</b>	<b>2.4</b>	AME+369.8%, KIP+149.4%, LGC+50.5%
	Heavy Industry	3	12.3%	9.2	2.3	DAS+100%, L10+81.4%, VEA+55.5%
	Transportation	3	-20.8%	18.9	5.0	PJC+44.2%, HCT+35.2%, VNT+29.4%
	Consulting & Support Business	3	13.9%	12.9	1.5	SMA+97.3%, ARM+92%, TV2+87.1%
	<b>Consumer goods</b>	<b>1</b>	<b>-5.2%</b>	<b>18.7</b>	<b>6.6</b>	
	Cars and spare parts	2	-8.9%	15.8	1.5	CTF+39.7%, GGG+28.6%, SRC+7.5%
	Food & Beverage	2	-5.6%	20.2	7.0	ACL+332%, CMX+262%, ANV+181.4%
	Beer and beverages	3	-3.8%	27.2	8.6	SBL+64.8%, VTL+34.6%, HAT+6.8%
<b>4</b>	<b>Food production</b>	<b>3</b>	<b>-6.1%</b>	<b>18.4</b>	<b>6.3</b>	ACL+332%, CMX+262%, ANV+181.4%
	Personal & Household Goods	2	1.6%	9.7	2.7	KSD+87.5%, MPT+71.9%, TNG+59.2%
	Household appliances	3	-18.9%	5.4	1.4	KSD+87.5%, TMW+37.1%, GDT+11.3%
	Recreational goods	3	14.1%	235.4	4.1	BEL+64.8%, NHT+61.5%, MSC+28.3%
	Individual goods	3	3.1%	9.8	2.7	MPT+71.9%, TNG+59.2%, GIL+41.7%
	Cigarette	3	-2.7%	8.8	1.2	NST+110.7%, HJC+60%, CLC+1.8%
	<b>Pharmaceuticals and Health</b>	<b>1</b>	<b>-22.2%</b>	<b>13.7</b>	<b>2.5</b>	
	Medical	2	-22.2%	13.7	2.5	YTC+164.4%, AMV+115.8%, DP3+16.6%
<b>5</b>	<b>Medical Equipment and Services</b>	<b>3</b>	<b>-9.6%</b>	<b>13.6</b>	<b>3.1</b>	YTC+164.4%, MRF+2.8%, JVC-23.4%
	Pharmaceuticals	3	-22.6%	13.7	2.5	AMV+115.8%, MKV+29.6%, DP3+16.6%
	<b>Consumer Services</b>	<b>1</b>	<b>-2.8%</b>	<b>16.5</b>	<b>4.3</b>	
	Retail	2	-15.2%	13.7	4.0	THS+37.8%, DGW+16.6%, BSC+9.2%
	Distribution of food & pharmaceuticals	3	20.8%	0.0	1.1	AGX+63.9%, TH1-7.4%, AFX -12.5%
<b>6</b>	<b>Retail</b>	<b>3</b>	<b>-15.6%</b>	<b>13.2</b>	<b>4.1</b>	DGW+16.6%, BTT+7.2%, MWG-11.9%
	Media	2	0.7%	32.4	5.5	TPH+66.4%, VEF+30%, EBS+12.3%
	Travel and Entertainment	2	-0.8%	16.2	4.2	SGH+74.4%, HOT+67.6%, PDC+55%
<b>7</b>	<b>Telecommunication</b>	<b>1</b>	<b>-23.3%</b>	<b>0.0</b>	<b>1.6</b>	
	Telecommunication	2	-23.3%	0.0	1.6	TTN+55.6%, FOX-32.9%, ABC-37.2%
	<b>Public utilities</b>	<b>1</b>	<b>1.6%</b>	<b>13.3</b>	<b>3.0</b>	
	Electricity, water & gasoline gas	2	1.6%	13.3	3.0	PCG+99.1%, GDW+53.3%, S4A+40.9%
<b>8</b>	<b>Electrical Manufacturing &amp; Distribution</b>	<b>3</b>	<b>-6.5%</b>	<b>12.3</b>	<b>1.5</b>	S4A+40.9%, HJS+25.3%, BTP+18.3%
	Water & Gas	3	1.4%	13.9	3.8	PCG+99.1%, GDW+53.3%, PGS+27.4%
<b>9</b>	<b>Banking</b>	<b>1</b>	<b>0.3%</b>	<b>11.6</b>	<b>2.1</b>	NVB+36.1%, BID+32%, VIB+14.7%
	<b>Finance</b>	<b>1</b>	<b>19.8%</b>	<b>24.9</b>	<b>4.7</b>	
<b>10</b>	<b>Insurance</b>	<b>2</b>	<b>25.7%</b>	<b>31.0</b>	<b>3.7</b>	BVH+46%, MIG+17.3%, PVI+12.1%
	Real-estate	2	22.7%	27.3	4.9	NVT+91.2%, VIC+59.7%, NTL+58.6%
	Financial services	2	-12.7%	9.0	1.5	OGC+70.8%, APG+61.8%, FTS+46.8%
<b>11</b>	<b>Information Technology</b>	<b>1</b>	<b>-10.7%</b>	<b>8.4</b>	<b>1.9</b>	
	Information Technology	2	-10.7%	8.4	1.9	SRA+488.2%, UNI+62.7%, TST+55.1%
	Software & Computer service	3	-10.6%	7.9	2.1	SRA+488.2%, UNI+62.7%, TST+55.1%
	Devices and Hardware	3	-12.6%	15.4	0.9	VIE+54.5%, CKV+23.1%, SMT+19%

**Appendix 16. Fundamental indicators in VN30, MidCap and SmallCap in 2018.**

VN30 stocks (More details in VN30 first half of 2019 forecast)

Stock	Marketcap (Mil USD)	P/E	FF	% Govern	% Foreign	%± EPS**	%±P/E	%±P/B	% ± until 12/12	Contribute VN-Index
BMP	201.3	10.3	45%	0%	77%	-2%	-32%	-34%	-27.83%	(0.73)
CII	279.4	80.1	75%	9%	54%	-94%	1245%	-25%	-24.22%	(0.82)
CTD	526.2	7.8	55%	0%	44%	-1%	-30%	-36%	-28.50%	(1.91)
CTG	3,755.4	11.4	10%	64%	30%	34%	-27%	-11%	-2.89%	(0.06)
DHG	464.6	20.5	25%	43%	49%	-8%	-22%	-33%	-26.95%	(1.33)
DPM	352.7	14.1	40%	60%	21%	-3%	0%	-4%	+3.27%	0.01
FPT	1,170.5	8.4	75%	6%	49%	19%	-25%	-13%	-6.02%	(0.27)
GAS	7,967.9	15.0	5%	96%	3%	30%	-23%	-3%	+3.89%	3.78
GMD	368.3	4.6	85%	0%	49%	219%	-77%	-18%	-6.74%	(0.25)
HPG	3,062.8	7.8	60%	0%	39%	9%	-8%	-17%	+0.41%	2.00
HSG	122.7	7.0	65%	0%	16%	-68%	-10%	-71%	-64.71%	(1.89)
KDC	219.3	-	60%	0%	22%	-123%	-100%	-34%	-33.98%	(1.10)
MBB	2,086.3	9.5	55%	27%	20%	44%	-27%	-6%	+7.68%	1.14
MSN	4,343.1	16.1	45%	0%	40%	92%	-41%	-4%	+13.43%	4.65
MWG	1,653.2	13.8	65%	0%	49%	21%	-24%	-33%	-7.61%	(1.69)
NVL	2,649.3	28.7	35%	0%	7%	-7%	46%	10%	+36.84%	4.56
PLX	3,043.7	18.6	10%	76%	11%	10%	-25%	-15%	-14.35%	(4.89)
PNJ	702.4	18.1	85%	0%	49%	27%	-15%	-6%	+8.60%	1.23
REE	439.1	6.5	55%	5%	49%	14%	-30%	-27%	-17.16%	(0.74)
ROS	897.7	28.5	25%	0%	2%	-13%	-72%	-76%	-75.66%	(23.15)
SAB	6,963.3	36.7	15%	36%	10%	0%	2%	-18%	+4.43%	1.96
SBT	429.5	23.3	60%	0%	11%	-7%	-38%	-43%	-2.88%	(0.22)
SSI	635.2	10.2	60%	0%	58%	31%	-22%	-7%	+6.13%	0.40
STB	983.1	17.1	95%	0%	13%	34%	-26%	-3%	-1.17%	(0.12)
VCB	8,955.8	17.3	10%	77%	21%	60%	-33%	-9%	+8.19%	5.58
VIC	13,999.3	74.8	30%	0%	9%	-9%	76%	-1%	+59.98%	44.22
VJC	3,026.5	13.8	50%	0%	24%	0%	6%	6%	+9.12%	2.69
VNM	10,015.0	26.8	50%	36%	59%	-6%	-18%	-29%	-21.24%	(24.10)
VPB	2,361.9	6.5	75%	0%	23%	0%	-28%	-28%	-11.59%	(1.48)
VRE	3,278.3	50.8	45%	0%	32%	0%	-15%	-15%	-14.78%	(4.67)
<b>Total</b>	<b>84,954.0</b>	<b>14.7</b>				<b>9%</b>				<b>2.805</b>
<b>VN-Index</b>	<b>63.9%</b>	<b>20.1</b>				<b>10%</b>				<b>(22.96)</b>

MidCap (stocks that, were ranked bellowed VN30, were rearranged in an average daily descending order without free float adjustment until the 40th position in the index, stocks below 81th position will be excluded; from rank 41th to 80th position stocks are preferably selected, and then new stocks are considered to be categorized as Midcap )

Stock	Marketcap (Mil USD)	P/E	FF	% Gover	% Foreign	%± EPS**	%±P/E	%±P/B	% ± 12/12	Contribute VN-Index
AAA	121.2	9.5	60%	0%	10%	-34%	-1%	-44%	-32.33%	(0.44)
ASM	109.0	2.5	60%	0%	1%	478%	-83%	-26%	-0.94%	0.03
BFC	63.4	7.9	35%	65%	14%	-26%	4%	-26%	-13.01%	(0.09)
BIC	130.9	17.3	15%	51%	48%	28%	-45%	-31%	-27.77%	(0.41)
BMI	88.2	11.5	30%	51%	43%	29%	-51%	-40%	-36.62%	(0.42)
BWE	160.9	22.7	15%	41%	0%	0%	10%	10%	+12.06%	0.13
CAV	132.5	8.5	15%	0%	0%	28%	-20%	-9%	+8.93%	0.09
CHP	124.9	28.9	35%	28%	3%	-75%	256%	1%	-7.05%	(0.07)
CMG	75.5	13.6	40%	0%	9%	18%	54%	67%	-7.04%	(0.06)
CSM	66.3	94.7	50%	51%	3%	-70%	222%	-2%	-2.39%	(0.03)
CSV	57.6	5.2	25%	65%	20%	16%	-31%	-22%	-9.28%	(0.05)
CTI	66.0	10.2	85%	0%	24%	-4%	-16%	-26%	-17.42%	(0.10)
DCM	235.2	10.4	25%	76%	4%	-7%	-18%	-24%	-17.25%	(0.46)
DIG	172.8	14.7	70%	0%	38%	45%	-43%	-21%	-17.93%	(0.28)
DMC	114.8	12.6	15%	35%	63%	2%	-35%	-40%	-32.62%	(0.45)
DPR	63.1	7.4	45%	56%	19%	-7%	1%	-3%	+7.62%	0.04
DRC	117.3	19.3	50%	51%	24%	-15%	12%	-5%	-1.58%	(0.03)
DXG	390.4	8.5	75%	0%	48%	39%	-2%	15%	+36.33%	0.93
EIB	722.9	12.4	75%	0%	30%	65%	-34%	2%	+8.30%	0.54
FCN	66.4	8.7	80%	0%	35%	-24%	8%	-16%	-15.36%	(0.10)
FIT	31.7	49.2	35%	0%	2%	-86%	143%	-66%	-65.68%	(0.48)
FLC	163.9	11.7	80%	0%	7%	-13%	-1%	-16%	-10.33%	(0.16)
GTN	118.0	61.8	65%	0%	37%	10%	-38%	-33%	-32.10%	(0.47)
HAG	206.6	-	65%	0%	2%	-562%	-100%	-26%	-29.39%	(0.71)
HBC	172.9	5.3	75%	0%	27%	-4%	-28%	-40%	-29.54%	(0.61)
HCM	311.9	9.2	40%	29%	62%	42%	-34%	-15%	-2.62%	(0.01)
HDG	156.4	10.9	55%	0%	14%	93%	-25%	24%	+46.01%	0.36
HNG	641.3	-	30%	0%	0%	-243%	-100%	88%	+76.26%	1.83
HQC	32.5	17.0	85%	0%	5%	-35%	-7%	-40%	-39.08%	(0.17)
HT1	248.1	9.5	20%	80%	5%	25%	-22%	2%	+7.61%	0.07
IJC	47.4	5.0	20%	79%	3%	32%	-38%	-21%	-8.89%	(0.04)
IMP	119.6	25.5	75%	20%	48%	5%	-7%	-7%	-1.73%	(0.03)
ITA	122.0	29.5	60%	0%	3%	1182%	-93%	-8%	-7.06%	(0.12)
KBC	295.4	13.0	75%	0%	19%	-9%	20%	3%	+9.33%	0.18
KDH	545.5	21.9	60%	0%	46%	-17%	41%	12%	+19.37%	0.61
KSB	65.3	5.5	70%	0%	8%	12%	-35%	-39%	-25.28%	(0.18)
LDG	135.0	8.8	45%	0%	4%	0%	-2%	-14%	-1.91%	0.08
LIX	69.4	13.2	50%	51%	23%	-10%	29%	2%	+26.17%	0.11

NBB	79.9	21.4	55%	2%	34%	2%	-6%	-8%	-4.50%	(0.04)
NCT	80.9	7.6	35%	65%	14%	-2%	-35%	-28%	-29.99%	(0.30)
NKG	64.8	3.9	50%	0%	42%	-55%	-33%	-72%	-70.05%	(1.16)
NLG	291.5	6.8	60%	0%	49%	51%	-25%	-8%	+15.32%	0.24
NSC	72.4	7.4	20%	0%	10%	8%	-6%	6%	+3.37%	0.02
NT2	317.5	8.9	30%	65%	22%	4%	-26%	4%	-4.52%	(0.17)
PAC	85.4	13.0	40%	51%	29%	8%	-18%	-5%	-3.55%	(0.05)
PAN	263.8	26.7	40%	0%	46%	-46%	134%	8%	+25.56%	0.48
PC1	133.1	6.6	50%	0%	36%	74%	-60%	-39%	-30.43%	(0.47)
PDR	311.0	14.1	40%	0%	6%	24%	-26%	-18%	-8.57%	(0.18)
PGI	64.7	11.2	25%	45%	21%	-7%	-20%	-24%	-20.06%	(0.15)
PHR	184.3	8.7	35%	40%	7%	85%	-34%	11%	+28.52%	0.40
PME	215.4	15.4	30%	0%	62%	0%	-8%	-8%	-6.17%	(0.11)
POM	91.5	3.7	15%	0%	8%	-16%	-14%	-36%	-28.28%	(0.19)
PPC	257.3	6.1	25%	51%	15%	15%	-28%	-24%	-4.30%	(0.20)
PTB	137.2	7.9	60%	0%	15%	7%	-20%	-33%	-13.73%	(0.18)
PVD	285.9	112.6	50%	50%	17%	121%	-67%	-26%	-25.48%	(0.87)
PVT	192.7	7.4	45%	51%	34%	51%	-44%	-18%	-10.23%	(0.18)
QCG	67.0	30.5	30%	0%	1%	-87%	200%	-61%	-59.34%	(0.81)
SAM	71.9	15.9	100%	0%	2%	2%	-7%	-7%	-5.46%	(0.03)
SCR	118.4	6.7	70%	0%	2%	47%	-33%	-4%	-1.82%	0.01
SJD	64.6	7.4	50%	51%	29%	-11%	5%	6%	+10.96%	0.06
SJS	71.6	9.6	50%	36%	11%	32%	-58%	-42%	-44.03%	(0.43)
SKG	41.5	7.4	65%	0%	44%	-24%	-16%	-40%	-32.55%	(0.17)
STG	73.3	14.8	15%	0%	0%	-70%	225%	-10%	-3.38%	(0.03)
TCH	304.8	21.1	55%	0%	4%	-31%	66%	16%	-0.99%	0.15
THI	75.3	6.5	25%	71%	0%	0%	8%	8%	+9.43%	0.06
VCI	347.0	11.6	70%	0%	41%	0%	-14%	-14%	-13.01%	(0.36)
VHC	402.1	7.6	45%	0%	37%	103%	-6%	48%	+101.41%	1.54
VND	183.0	10.1	75%	0%	45%	-20%	23%	-13%	+2.60%	0.05
VSC	96.1	7.8	95%	0%	40%	35%	-23%	-3%	+9.81%	0.04
VSH	149.6	10.6	30%	31%	14%	17%	-16%	-4%	+3.97%	0.05
<b>Total</b>	<b>11,757.7</b>	<b>12.1</b>								<b>(3.95)</b>
<b>VN-Index</b>	<b>8.8%</b>	<b>15.4</b>				<b>17%</b>				<b>(22.96)</b>

## SmallCap (Other stocks after VN30 and MidCap)

Stock	Marketcap (Mio.USD)	P/E	Free Float	% Gover	% Foreign	%± EPS**	%±P/E	%±P/B	% ± 12/12	Contribute VN-Index
ABT	22.2	7.8	20%	0%	3%	136%	-36%	47%	+66.11%	0.09
ACL	32.4	5.1	25%	0%	2%	585%	-40%	193%	+331.99%	0.20
ADS	15.0	4.5	40%	0%	0%	0%	-21%	-21%	-11.66%	(0.02)
AGR	30.9	18.1	25%	75%	2%	-39%	-8%	-46%	-43.73%	(0.20)
AMD	20.9	6.4	60%	0%	1%	-25%	-56%	-65%	-67.18%	(0.29)
ANV	162.6	10.5	25%	0%	3%	153%	9%	148%	+191.48%	0.89
APC	17.7	5.3	40%	0%	10%	26%	-66%	-65%	-57.58%	(0.21)
APG	5.8	13.8	85%	0%	1%	18%	62%	92%	+108.52%	0.02
ASP	10.4	6.4	40%	0%	49%	-14%	6%	-9%	-1.04%	(0.00)
ATG	1.2	24.7	85%	0%	2%	0%	-35%	-35%	-35.17%	(0.01)
BCE	7.5	7.3	45%	52%	7%	-1%	5%	8%	+19.97%	0.01
BCG	27.8	59.5	65%	0%	21%	-20%	21%	-2%	-2.76%	(0.01)
BMC	7.4	22.0	55%	25%	14%	-19%	14%	-7%	-2.98%	(0.00)
BSI	51.9	5.1	25%	78%	9%	23%	-34%	-28%	-19.15%	(0.09)
BTP	31.0	3.0	20%	80%	10%	160%	-62%	-2%	+18.69%	0.04
C32	17.8	3.7	90%	34%	30%	22%	-35%	-32%	-14.19%	(0.03)
C47	15.2	38.9	75%	0%	0%	-58%	211%	22%	+39.57%	0.03
CCL	6.6	5.3	70%	0%	5%	131%	-65%	-21%	-19.70%	(0.01)
CEE	28.6	8.3	45%	0%	0%	0%	-32%	-32%	-31.50%	(0.11)
CLC	38.1	7.5	45%	51%	5%	8%	-5%	-25%	+11.42%	0.03
CLG	2.5	16.1	35%	0%	9%	118%	-75%	-46%	-45.31%	(0.02)
CMX	9.2	3.1	50%	0%	0%	160%	41%	85%	+267.65%	0.05
CNG	30.1	6.1	45%	0%	23%	19%	-31%	-23%	-14.19%	(0.04)
CTF	38.6	28.0	40%	0%	0%	0%	34%	34%	+40.33%	0.03
CTS	48.9	6.2	25%	0%	12%	67%	-43%	-15%	-4.40%	(0.02)
CVT	36.4	5.3	80%	0%	15%	-4%	-42%	-50%	-42.34%	(0.20)
D2D	31.5	9.9	40%	58%	2%	15%	-7%	-2%	+15.00%	0.04
DAG	15.2	6.7	55%	0%	4%	-16%	-7%	-16%	-16.77%	(0.02)
DAH	8.9	20.8	70%	0%	3%	-63%	239%	30%	+37.01%	0.02
DCL	22.9	21.4	25%	0%	4%	-67%	23%	-60%	-57.76%	(0.25)
DGW	42.2	9.7	45%	0%	11%	25%	-9%	7%	+17.90%	0.06
DHA	20.0	7.6	60%	25%	10%	5%	-11%	-10%	+0.35%	(0.00)
DHC	62.5	10.3	65%	0%	33%	73%	-48%	-22%	-10.72%	(0.06)
DHM	7.3	41.5	65%	0%	0%	9%	32%	46%	+44.27%	0.02
DIC	3.8	19.3	80%	15%	8%	-55%	21%	-43%	-45.30%	(0.03)
DLG	23.4	31.1	80%	0%	8%	-70%	72%	-49%	-48.63%	(0.17)
DQC	36.2	8.1	50%	0%	18%	6%	-37%	-29%	-24.04%	(0.11)
DRH	31.3	17.7	95%	0%	0%	-40%	24%	-27%	-25.51%	(0.08)
DSN	32.7	8.0	60%	0%	21%	26%	-23%	-5%	+6.72%	0.01
DTA	5.4	45.6	40%	0%	0%	-36%	13%	-28%	-28.12%	(0.02)
ELC	16.7	25.2	45%	0%	22%	-65%	63%	-44%	-43.72%	(0.11)



EMC	6.5	-	40%	0%	0%	-119%	-100%	-18%	-17.55%	(0.01)
EVE	29.4	8.8	85%	0%	62%	62%	-47%	-14%	-8.78%	(0.03)
EVG	7.8	3.6	45%	0%	0%	0%	-48%	-48%	-42.36%	(0.03)
FCM	12.6	11.0	40%	0%	3%	-21%	46%	16%	+25.36%	0.02
FMC	52.1	-	40%	3%	6%	-100%	-100%	45%	+40.20%	0.11
FTM	32.6	20.2	45%	0%	0%	0%	23%	23%	+22.58%	0.05
FTS	80.7	8.1	45%	0%	22%	30%	17%	43%	+57.49%	0.24
GDT	28.7	7.2	50%	0%	24%	-4%	0%	-6%	+4.62%	0.01
GIL	29.5	3.8	65%	0%	7%	19%	18%	33%	+44.35%	0.07
GSP	17.3	6.2	30%	0%	14%	32%	-27%	-4%	+6.47%	0.01
GTA	6.1	8.7	30%	0%	10%	0%	-5%	-3%	+3.18%	0.00
HAH	28.1	4.0	55%	0%	23%	-12%	-19%	-30%	-24.65%	(0.06)
HAI	16.9	-	70%	0%	0%	-162%	-100%	-70%	-70.65%	(0.33)
HAP	8.5	7.1	85%	0%	7%	108%	-59%	-17%	-14.04%	(0.01)
HAR	23.0	20.4	75%	0%	0%	13%	-45%	-38%	-37.76%	(0.12)
HAS	3.1	13.2	60%	28%	20%	-71%	281%	13%	+18.88%	0.00
HAX	24.5	6.4	60%	0%	12%	6%	-37%	-38%	-30.43%	(0.06)
HCD	5.8	3.7	65%	0%	1%	-19%	-25%	-37%	-33.47%	(0.02)
HDC	30.4	9.2	85%	0%	18%	-5%	1%	-8%	-3.32%	(0.01)
HHS	45.2	5.5	55%	0%	4%	126%	-61%	-19%	-12.08%	(0.05)
HID	6.1	14.1	75%	0%	2%	-82%	188%	-46%	-34.78%	(0.02)
HII	17.9	5.2	50%	0%	1%	0%	-35%	-35%	-32.04%	(0.05)
HLG	18.2	5.2	20%	0%	1%	-35%	25%	-26%	-18.56%	(0.04)
HMC	13.0	2.8	35%	56%	0%	39%	-22%	8%	+30.22%	0.03
HOT	9.8	12.9	15%	57%	0%	64%	-3%	51%	+64.67%	0.04
HRC	41.9	148.2	45%	55%	4%	-23%	23%	-4%	-4.85%	(0.02)
HTI	13.1	4.5	40%	0%	18%	-13%	-15%	-25%	-16.52%	(0.02)
HTT	2.1	18.6	100%	0%	2%	0%	-46%	-46%	-46.29%	(0.02)
HU3	4.5	7.6	40%	51%	5%	-26%	56%	47%	+48.09%	0.02
IBC	72.1	6.6	25%	0%	2%	0%	-5%	-5%	-1.88%	(0.01)
IDI	87.9	3.6	45%	0%	2%	69%	-40%	-16%	+11.11%	0.09
ITC	34.8	10.0	50%	16%	6%	3%	-19%	-17%	-14.92%	(0.04)
ITD	9.0	7.9	70%	0%	17%	-58%	-3%	-60%	-14.20%	(0.01)
JVC	15.4	43.8	95%	0%	48%	-120%	0%	-8%	-22.38%	(0.04)
KHP	18.0	5.3	50%	52%	21%	184%	-62%	-2%	+11.45%	0.01
KMR	8.5	24.3	55%	0%	48%	2%	-20%	-20%	-18.60%	(0.02)
KPF	24.7	35.2	25%	0%	2%	0%	17%	17%	+21.24%	0.04
KSH	4.1	-	70%	0%	0%	-100%	-100%	-25%	-25.34%	(0.01)
LBM	11.7	5.8	35%	0%	6%	1%	-6%	-15%	+3.23%	0.00
LCG	36.1	6.9	70%	0%	28%	29%	-39%	-18%	-15.79%	(0.05)
LGL	14.8	2.2	45%	0%	1%	39%	-48%	-24%	-17.38%	(0.03)
LHG	44.8	4.2	50%	0%	18%	9%	13%	19%	+31.92%	0.10
LM8	11.3	1,220	40%	51%	2%	-99%	10103%	27%	+28.75%	0.02
LSS	19.3	180.3	40%	0%	3%	-98%	2145%	-52%	-39.01%	(0.11)
MCG	5.8	-	65%	1%	5%	-7381%	-100%	59%	-35.00%	(0.03)

MDG	5.1	7.2	20%	11%	1%	-35%	27%	-14%	-3.05%	(0.00)
MHC	8.5	3.9	75%	0%	3%	312%	-78%	-15%	-2.48%	(0.00)
NAF	22.0	16.8	65%	0%	6%	-47%	45%	-25%	-23.54%	(0.06)
NNC	45.8	5.4	45%	38%	21%	13%	-17%	14%	+23.17%	0.08
NTL	43.1	17.0	70%	0%	6%	-28%	109%	55%	+65.29%	0.13
PET	32.3	7.1	70%	24%	19%	-14%	-13%	-23%	-15.32%	(0.05)
PGC	37.0	5.1	30%	52%	11%	18%	-23%	-13%	-2.00%	(0.01)
PLP	9.1	4.1	50%	0%	15%	0%	-31%	-31%	-31.40%	(0.04)
PTC	4.2	-	25%	0%	0%	-443%	-100%	5%	+1.67%	0.00
PXS	13.5	-	40%	0%	12%	-12917%	-100%	-43%	-49.03%	(0.11)
PXT	1.6	2.4	50%	51%	1%	-30%	-44%	-61%	-60.26%	(0.02)
QBS	14.0	410.2	80%	0%	0%	-96%	1757%	-33%	-34.40%	(0.06)
RAL	42.4	4.7	30%	0%	3%	-3%	-34%	-36%	-32.05%	(0.16)
RDP	16.8	-	40%	0%	1%	32%	0%	-25%	-22.91%	(0.04)
SAV	5.0	5.5	40%	0%	49%	11%	-19%	-12%	-4.60%	(0.00)
SBA	37.3	8.1	60%	39%	0%	-21%	12%	-14%	-7.79%	(0.03)
SBV	17.5	3.8	30%	0%	20%	0%	-58%	-58%	-55.72%	(0.17)
SCD	8.7	22.8	35%	62%	10%	-252%	0%	-41%	-39.90%	(0.05)
SFG	28.1	8.2	30%	65%	1%	-13%	30%	8%	+26.68%	0.05
SGT	17.4	6.5	25%	0%	13%	-44%	39%	-28%	-21.71%	(0.04)
SHA	7.0	4.2	80%	0%	1%	-9%	-18%	-25%	-13.55%	(0.01)
SHI	23.9	3.2	65%	0%	1%	48%	-36%	-9%	+1.56%	0.00
SJF	38.4	20.8	75%	0%	0%	0%	-17%	-17%	-17.06%	(0.10)
SMA	12.7	5.0	85%	2%	0%	57%	5%	57%	+95.04%	0.05
SMC	37.5	3.0	40%	0%	34%	-3%	-20%	-33%	-17.91%	(0.06)
SRC	15.5	15.8	50%	51%	0%	-27%	38%	-3%	+4.66%	0.01
SRF	15.9	5.2	30%	13%	27%	7%	-41%	-34%	-32.67%	(0.06)
ST8	18.8	13.0	20%	0%	49%	36%	-37%	-13%	-7.71%	(0.02)
STK	46.8	6.7	50%	0%	8%	65%	-40%	-11%	+3.97%	0.01
SVC	47.2	8.1	60%	41%	48%	71%	-48%	-17%	-9.16%	(0.04)
SZL	25.1	6.9	40%	57%	16%	18%	-26%	-19%	-5.69%	(0.02)
TCD	21.0	8.6	30%	0%	15%	0%	-20%	-20%	-20.45%	(0.04)
TCM	56.6	6.6	60%	0%	49%	22%	-27%	-22%	-8.66%	(0.06)
TCT	33.9	9.5	35%	51%	19%	11%	-13%	-24%	-3.11%	(0.01)
TDC	33.6	6.3	40%	61%	2%	5%	1%	17%	+21.65%	0.06
TDG	2.8	2.2	90%	0%	6%	0%	-57%	-57%	-56.74%	(0.03)
TDH	37.5	10.2	90%	6%	37%	-27%	0%	-25%	-22.80%	(0.08)
THG	18.2	5.4	80%	0%	0%	-10%	-12%	-23%	-13.09%	(0.02)
TLD	5.5	7.6	75%	0%	1%	0%	-41%	-41%	-38.63%	(0.03)
TLH	25.8	2.3	60%	0%	4%	-23%	-24%	-46%	-38.86%	(0.12)
TMT	15.0	41.1	35%	9%	3%	-4%	11%	5%	+6.74%	0.01
TNA	17.3	6.0	50%	0%	14%	-22%	18%	-12%	-4.95%	(0.00)
TNI	20.9	10.9	50%	0%	0%	0%	43%	43%	+50.05%	0.06
TNT	3.1	27.0	95%	0%	0%	-31%	52%	5%	+5.26%	-
TPC	10.5	10.9	50%	0%	2%	-24%	44%	14%	+22.35%	0.02

TRC	28.9	6.1	40%	60%	8%	-24%	6%	-19%	-11.94%	(0.04)
TS4	5.1	17.1	30%	27%	2%	37%	-28%	-5%	-1.19%	(0.00)
TSC	8.9	-	45%	0%	1%	83%	0%	-62%	-62.16%	(0.12)
TVS	36.2	5.1	60%	0%	13%	-5%	41%	24%	+39.06%	0.09
TVT	21.6	6.4	40%	47%	0%	0%	14%	14%	+26.67%	0.04
TYA	13.8	6.2	20%	0%	44%	-27%	31%	10%	+14.69%	0.01
UDC	7.4	32.9	35%	68%	0%	1%	31%	35%	+35.86%	0.01
UIC	10.7	5.2	50%	51%	19%	0%	-6%	-10%	+4.71%	0.00
VDP	17.8	7.2	55%	14%	1%	0%	-13%	-13%	-10.34%	(0.02)
VDS	37.6	7.6	30%	0%	1%	-17%	16%	-10%	-3.64%	(0.02)
VFG	55.6	8.5	60%	0%	3%	17%	36%	60%	+68.71%	0.19
VID	7.2	9.0	60%	0%	0%	-83%	378%	-20%	-17.43%	(0.01)
VIP	19.8	4.9	45%	50%	7%	25%	-31%	-13%	-4.15%	(0.01)
VIS	79.2	-	10%	0%	76%	-415%	-100%	-11%	-23.79%	(0.18)
VNE	15.5	3.5	90%	0%	14%	88%	-69%	-46%	-37.28%	(0.08)
VNG	74.9	25.4	55%	0%	1%	144%	-47%	18%	+29.50%	0.11
VNS	52.1	12.6	50%	0%	25%	-48%	125%	12%	+15.86%	0.05
VPH	20.7	6.9	65%	0%	13%	-67%	102%	-34%	-29.05%	(0.06)
VRC	45.5	4.7	50%	0%	0%	49%	-16%	-1%	+25.44%	0.07
VSI	14.6	10.2	30%	60%	1%	8%	63%	94%	+93.92%	0.06
VTO	26.6	6.8	50%	52%	2%	-4%	-7%	-9%	-0.31%	(0.00)
<b>Total</b>	<b>3,710.4</b>	<b>10.0</b>								<b>(1.88)</b>
<b>VN-Index</b>	<b>2.8%</b>	<b>23.1</b>				<b>(1.3)</b>				<b>(22.96)</b>

(\*) Calculated based on average arithmetic and erase value that are above 50, or % above 50%.

(\*\*) EPS trailing 2018/EPS 2017

### Appendix 17. 35 stocks price evaluation that have the highest proportion incorporating all Securities corporations and financial institution

#	Stocks	VN-Index prop	Price 12/12	Avg Target price	% 20/12	Max price	% 20/12	Min price	% 20/12	P/E	P/B	52W Highest	52W Lowest
1	VIC	10.67%	102,200	100,882	-1.3%	111,570	9.2%	89,500	-12.4%	74.8	5.9	113,058	57,934
2	VHM	8.70%	80,300	82,080	27.8%	93,440	45.5%	70,240	9.3%	42.7	2.9	97,600	60,000
3	VNM	7.66%	134,000	133,100	-0.7%	164,600	22.8%	118,900	-11.3%	26.8	9.2	179,167	111,500
4	VCB	6.62%	58,000	56,400	-2.8%	79,500	37.1%	42,100	-27.4%	17.3	3.4	76,500	45,200
5	GAS	5.97%	97,000	105,350	8.6%	127,000	30.9%	97,000	0.0%	15.0	4.4	136,400	70,000
6	SAB	5.23%	253,000	172,700	-31.7%	192,500	-23.9%	152,800	-39.6%	36.7	9.7	317,900	193,800
7	BID	3.77%	34,650	30,800	-11.1%	39,700	14.6%	28,000	-19.2%	14.4	2.3	46,800	20,850
8	TCB	3.26%	28,900	37,200	28.7%	41,700	44.3%	33,200	14.9%	10.2	2.0	36,333	24,650
9	MSN	3.24%	87,000	98,100	12.8%	116,400	33.8%	88,400	1.6%	16.1	5.2	118,000	71,000
10	CTG	2.71%	23,500	25,700	9.4%	31,800	35.3%	19,000	-19.1%	11.4	1.3	38,250	20,300
11	PLX	2.53%	61,200	71,700	17.2%	89,200	45.8%	61,400	0.3%	18.6	3.6	95,500	51,800
12	BVH	2.27%	102,000	72,800	-28.6%	92,400	-9.4%	58,400	-42.7%	59.0	4.9	111,000	56,600
13	HPG	2.32%	33,600	45,900	36.6%	56,100	67.0%	34,000	1.2%	7.8	1.8	48,429	29,250
14	VJC	2.26%	130,200	157,400	20.9%	176,800	35.8%	129,000	-0.9%	13.8	6.7	191,167	110,417
15	NVL	1.98%	68,000	77,400	13.8%	85,100	25.1%	64,500	-5.1%	28.7	3.6	78,800	46,565
16	VRE	2.44%	32,800	38,400	17.1%	44,000	34.1%	34,900	6.4%	50.8	2.9	50,204	27,918
17	VPB	1.74%	22,400	34,400	53.6%	45,200	101.8%	27,200	21.4%	6.5	1.5	53,191	18,850
18	MBB	1.53%	22,500	29,400	30.7%	38,500	71.1%	24,200	7.6%	9.5	1.5	31,471	18,950
19	MWG	1.23%	89,500	118,100	32.0%	139,800	56.2%	105,700	18.1%	13.8	4.7	101,553	73,502
20	HDB	0.96%	30,550	36,800	20.5%	41,300	35.2%	31,800	4.1%	15.5	2.1	52,400	27,500
21	FPT	0.88%	44,450	59,750	34.4%	66,500	49.6%	54,500	22.6%	8.4	2.3	56,957	38,500
22	STB	0.79%	12,700	14,400	13.4%	15,000	18.1%	13,700	7.9%	17.1	1.0	17,300	9,670
23	ROS	0.67%	36,850	36,850	0.0%	36,850	0.0%	36,850	0.0%	28.5	3.6	151,417	35,000
24	BHN	0.62%	82,500	67,000	-18.8%	67,000	-18.8%	67,000	-18.8%	29.7	5.0	171,700	75,100
25	EIB	0.57%	13,700	14,100	2.9%	17,300	26.3%	10,400	-24.1%	12.4	1.1	16,600	12,000
26	PNJ	0.52%	98,000	117,300	19.7%	134,400	37.1%	97,700	-0.3%	18.1	4.7	138,733	75,000
27	SSI	0.48%	29,650	40,650	37.1%	45,000	51.8%	36,300	22.4%	10.2	1.6	44,400	25,200
28	TPB	0.46%	21,250	24,900	17.2%	25,600	20.5%	24,200	13.9%	15.9	2.3	27,319	18,265
29	HNG	0.42%	16,850	16,850	0.0%	16,850	0.0%	16,850	0.0%	-	1.4	18,400	6,070
30	KDH	0.42%	30,700	36,800	19.9%	40,400	31.6%	35,000	14.0%	21.9	2.0	40,952	25,905
31	CTD	0.41%	156,800	176,800	12.8%	192,000	22.4%	153,800	-1.9%	7.8	1.5	233,100	120,400
32	SBT	0.37%	20,200	14,400	-28.7%	15,000	-25.7%	13,700	-32.2%	23.3	1.7	24,600	13,300
33	DHG	0.35%	82,800	97,900	18.2%	107,800	30.2%	85,400	3.1%	20.5	3.7	118,000	81,000
34	REE	0.33%	33,000	42,850	29.8%	44,000	33.3%	41,700	26.4%	6.5	1.2	44,750	29,150
35	GEX	0.33%	25,450	30,000	17.9%	30,000	17.9%	30,000	17.9%	10.1	1.9	33,417	19,833
<b>Total</b>		84.7%											
<b>Average</b>				12.26%		28.76%		-1.20%	20.6	3.3			

Source: Bloomberg, BSC Research, , Other stocks that have not been forecasted would use the closing price as at 12/12 to calculate index points.

## Appendix 18: Assessing 30 stocks having the largest proportion based on technical analysis

STT	Stock	Proportion %	Trend	Support 2	Support 1	Resistance 1	Resistance 2	bottom level FW	Peak level FW	Notes
1	VIC	10.59	↑	74	90	113	140	74	140	Bottom price: 50% Fibonacci and weekly Ichimoku cloud; Expected peak price according to the ascending triangle model after breakout 113.
2	VHM	8.72	↔		60	96		60	96	Short trading time, bottom and top prices are taken at the lowest and highest prices since listing.
3	VNM	7.57	↑	95	110	154	175	95	175	Bottom price: Fibonacci 50% cycle from 2011; Peak price: Old peak 2018.
4	VCB	6.68	↑	45	50	65	85	45	85	Bottom price: Long-term price channel and Fibonacci 50% from 2014; Peak price: Target price systematic triangle model when breakout 65.
5	GAS	6.03	↑	70	80	120	154	70	154	Bottom Price: Fibonacci 50% 2016 cycle; Price peak: Target price systematic triangle model when breakout 120
6	SAB	5.31	↔		197	255	310	197	310	Short trading time. Bottom price: Fibonacci corrects 61.8% from December 2017 peak and short-term bottom; Peak price: The target price of pattern 2 is deviated from the neckline at 255.
7	BID	3.76	↑	23	28.5	38	46.5	23	46.5	Bottom price: Fibonacci 61.8% correction and short-term bottom of the 2014 cycle; Peak coincides with the peak of 2018.
8	TCB	3.26	↔		25.2	30.2	35	25.2	35	Short trading time. Bottom price: bottom price of stock; Peak price: The target price of the 2-bottoming pattern with the neckline at 25.2.
9	MSN	3.25	↑	71	79	95	118	71	118	Bottom price: Fibonacci corrects 61.8% from the bottom of 7/2017 and coincides with the short-term bottom; Peak coincides with the peak of 2018.
10	CTG	2.83	↓	17	20	23.2	28	17	28	Bottom price: Price channel from 2014; The peak coincides with the peak of Fibonacci retracement 38.2% from the peak.
11	PLX	2.56	↔	39	51	71.5	91.9	39	91.9	Short trading time. Top and bottom prices are the highest lowest prices since listing.
12	BVH	2.37	↑	50	70	110		50	110	Bottom price: Target price of 2 peak model when falling below the neckline at 70. Peak price: peak in 2018.
13	HPG	2.31	↓	24	28.5	40				Bottom price: Fibonacci corrects 61.8% from 1/2016 and SMA 200; The SMA50 week and the Ichimoku cloud are quite thick.
14	VJC	2.28	↔		115	155		115	155	Short trading time. Bottom price: Fibonacci corrects 61.8% from 2017; Peak price: Short-term peak and SMA50.

15	NVL	2.04	↑		57.5	79		57.5	79	Short trading time. Bottom price: Fibonacci corrects 61.8% from 2016; Peak price: Peak in 2018.
16	VRE	2.01	↓		28.5	49.7		28.5	49.7	Short trading time, bottom and top prices are taken at the lowest and highest prices since listing.
17	VPB	1.78	↓		20.3	43.2		20.3	43.2	Short trading time, bottom and top prices take the lowest and highest prices since the new price
18	MBB	1.58	↑	18	20	26	31	18	31	Bottom price: Fibonacci corrects 61.8% from 12/2016; Peak price: peak in 2018.
19	MWG	1.26	↑	62	75	95	102.4	62	102.4	Bottom price: Fibonacci correction of 50% from 9/2015 and SMA200; Price peak: peak in 2018.
20	HDB	0.98	↓		27.5	50.1		27.5	50.1	Short trading time. Top and bottom prices are the highest lowest prices since listing.
21	FPT	0.88	↑	32.5	37.5	46	54	32.5	54	Bottom price: Fibonacci correction of 50% from 2/2012; Peak price: peak in 2018.
22	STB	0.78	↔	7	11	14.9	17.3	7	17.3	The peak and bottom prices are the highest lowest prices of the long cycle that lasted from 2011 until now.
23	ROS	0.67	↓		25	65		25	65	Bottom price: Lower price channel dropped; Peak price: resistance at the bottom 6/2017.
24	BHN	0.62	↓		75.6	171.7		75.6	171.7	Short trading time. Top and bottom prices are the highest lowest prices since listing.
25	EIB	0.55	↔	9	12.1	16	18.5	9	18.5	Move sideways in a large margin. Top and bottom prices are the highest lowest prices since listing.
26	PNJ	0.52	↑	75	89	107	136	75	136	Bottom price: Fibonacci correction of 50% from August 2014; Peak price: peak in 2018.
27	SSI	0.48	↑	21	25	33	43	21	43	Bottom price: Fibonacci corrects 61.8% from August 2014; Peak price: peak in 2018.
28	TPB	0.46	↔		18.7	27.3		18.7	27.3	Short trading time. Top and bottom prices are the highest lowest prices since listing.
29	HNG	0.42	↑		6	30		6	30	Top and bottom prices are the highest lowest prices since listing.
30	KDH	0.41	↑	20.2	26.5	35	40.3	20.2	40.3	Bottom price: Fibonacci corrects 50% from 4/2013 and SMA200; Price peak: peak in 2018.

## Disclosure

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