

Vietnam Monthly Review 1st Quarter of 2020

BSC Research

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Macroeconomics

- The gross domestic product (GDP) in the first quarter of 2020 is estimated to increase by 3.82% over the same period last year, the lowest increase of the first quarter in the period of 2011-2020.
- The PMI index plummeted from 49 points in February, to 41.9 points in March 2020.
- For the first quarter of 2020, total estimated retail sales of consumer goods and services reached VND 1,246.1 trillion, up 4.7% over the same period last year
- Registered FDI in the first quarter of 2020 increased to 6.6 billion USD, up 28.9% over same period last year. Production and distribution of gas and electricity sector is the main contribution of Vietnam's FDI.
- Fluctuation range of the interbank exchange rate is 23,190 23,760 USD/VND in the first quarter of 2020. Medium-term interbank rates continued to decrease in March, short-term interbank rates remained stable around 2%.

Stock market

- As of March 31, 2020, the VN-Index officially decreased by -219.7 points compared to the end of the previous month (-24.9% MoM) and HNX-Index also decreased similarly -16.9 points (-15.5% MoM). By the end of the first quarter, the VN-Index decreased -297.35 points (-30.9% QoQ), the HNX-Index decreased -9.87 points (-9.6% QoQ).
- The average liquidity on the 2 exchanges increased +18% compared to February 2020, and maintained at 5,058 billion VND/session and equivalent to nearly 217 million USD/session.
- In March, foreign investors were net sellers on the HSX with the value of VND 7,838 billion, and VND -854 billion on the HNX.
- P/E of VN-Index dropped to 10.27, equivalent to -25.3% MoM, -33.3% QoQ and HNX-Index also returned to 7.00, respectively a decline of -15.4% MoM, -5.82% QoQ. The P/E of the HSX dropped sharply below the 5-year average.

Market outlook in Quarter II

The VN-Index's trend in the second quarter is recovered gradually. The price fluctuation range is from 600 to 800 points. VN-Index forecasts to fluctuate above 635 points in the first few weeks of April and tended to recover clearly in the second half of April. World epidemic movements in general and in Vietnam in particular, supportive policies Economic support determines the height and level of the recovery phase. BSC offers two scenarios for April as follows:

- In a positive case, VN-Index accumulates over 635 points and may increase gradually by the end of April when there is supportive information.
- In a negative case, VN-Index will continue to bottom in the accumulation area of 535-635 lasting from 2014 to 2016 if there is negative disease situation and the pressure to divest from foreign investors.

Recommended stocks:

- Sectors and stocks are evaluated positively in the Sector Outlook Report 2020 (Link), Banking Sector Outlook Report (Link);
- Stocks with improvements and positive outlook such as Banking, Retail, Information Technology - Postal and Telecommunications;
- > Stocks benefiting from diseases such as Healthcare, Pharmaceutical;
- > Highly defensive stocks and stock with high dividend payout;
- ➤ In the long-term, BSC's recommended stocks will be mentioned in Sector Outlook Report 2020, stocks with good changes are recommended in the Weekly Report (Link) and update report for Sector/Company (link).

Macroeconomics of 1st Quarter 2020

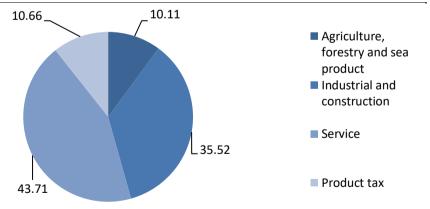
Economic growth

- The gross domestic product (GDP) in the first quarter of 2020 is estimated to increase by 3.82% over the same period last year, the lowest increase of the first quarter in the period of 2011-2020.
- The PMI index plummeted from 49 points in February, to 41.9 points in March 2020.

The gross domestic product (GDP) in the first quarter of 2020 is estimated to increase by 3.82% over the same period last year, the lowest increase of the first quarter in the period of 2011-2020. Agriculture, forestry and fishery increased by 0.08%, contributing 10.11% to the growth; industry and construction increased by 5.15%, contributed 35.52%; service sector increased by 3.27%, contributing 43.71%.

In the first quarter of 2020, the industry and construction sector saw a low growth of 5.28%, contributing 1.89 percentage points to the total added value of the whole economy. Processing and manufacturing industry saw the lowest growth in the period 2016-2020 at 7.12%, contributing 1.64 percentage points. The mining industry dropped -3.18%, reducing -0.21 percentage points. The construction industry achieved a low growth rate of 4.37%, contributing 0.25 percentage points.

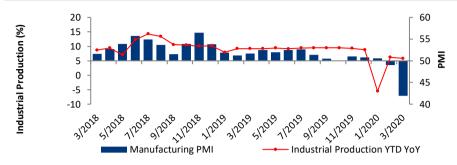
Chart 1
Economic sector proportion in 1st Quarter 2020 (%)



Source: GSO, BSC Research

In the first quarter of 2020, the Industrial Production Index (IIP) is estimated to increase by 5.8% over the same period last year: Processing and manufacturing industry increased by 7.12% YoY, electricity production and distribution increased by 7.1% YoY, water supply and waste treatment increased by 6.3% YoY, mining decreased by 5.2%.

Chart 2 **Industrial production index & PMI**



Source: GSO, Markit, BSC Research

Consumption index for processing and manufacturing industry in March 2020 increased by 11.6% over the previous month and by 5.8% over the same period last year. For the first quarter of 2020, consumption index of processing and manufacturing industry increased at 2.8% over the same period last year (the same period in 2019 increased by 8%). The top three industries with high consumption index: pharmaceutical increased by 27.3%, petroleum refining increased by 24.7%, and other processing and manufacturing industry increased by 22.8%.

Inventory index of processing and manufacturing industry was estimated at 24.9% as of March 31, 2020 compared to the same period last year (the same period in 2019 increased by 15.6%), of which, some sectors had increased strongly over the same period last year: Food processing increased by 27.5%, textile increased by 36.2%, and manufactured products from precast metal increased by 45.4%.

Inventory rate of processing and manufacturing industry in the first quarter of 2020 averaged at 78.4% (72.9% in the same period last year), of which, some industries had high inventory rate: textiles 115%, chemicals production 104.6%, and other non-metallic mineral products 104.5%.

The PMI index plummeted from 49 points in February, to 41.9 points in March 2020. Latest data reflect negative impact of Covid-19 epidemic on Vietnam's manufacturing sector:

- Production output, new orders, and employment dropped sharply;
- Stagnant production activities in all three areas are consumer goods, intermediary goods, and investment goods;
- Input purchasing activities plummeted, leading to a sharp drop in both inventory and purchases of finished goods;
- Covid-19 continued to have a negative impact on the supply chain when delivery time was extended;
- Business prospects decreased to lowest level since April 2012.

In contrast, China's PMI rebounded positively from a low of 40.3 in February to 50.1 in March, showing signs of stabilisation of manufacturing conditions. Production and business activities were resumed after bans were removed. Nevertheless, Covid-19 continued to have a negative impact on the demand for

goods as well as the supply chain. New orders fell for the second consecutive month. Delivery time was extended. Business prospects remain positive as many manufacturers expect commodity demand to rebound once the epidemic concluded.

Inflation

- Average CPI for the first quarter of 2020 increased by 5.56% over the same period in 2019.
- CPI of March 2020 decreased by -0.72% over the previous month, and increased by 4.87% over the same period in 2019.
- Total estimated retail sales of consumer goods and services for the first quarter of 2020, reached VND 1,246.1 trillion, up 4.7% over the same period last year

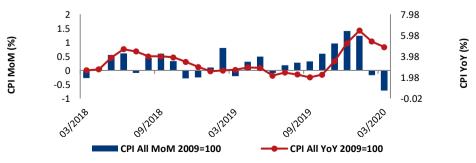
CPI of March 2020 decreased by -0.72% over the previous month, and increased by 4.87% over the same period in 2019. Core inflation in March 2020 decreased by -0.06% over the previous month and increased by 2.95% compared to the same period last year.

For the first quarter of 2020, average CPI increased by 5.56% over the same period in 2019, of which food increased the most and reached 10.42% over the same period last year. For the first quarter of 2020, average core inflation increased by 3.05% over the same period last year.

In the first quarter of 2020, average CPI increased by 5.56% over the same period in 2019. CPI increased mainly due to the following reasons:

- Demand for goods during the Lunar New Year increased sharply over the same period last year, such as: food increased by 1.51%, food products increased by 13.21%, beverages and cigarettes increased by 1.8%, readyto-wear clothing increased by 1.19%, housing maintenance materials increased by 2.52%;
- Effects of the Covid-19 epidemic caused the price of imports from China to increase, such as vegetables by 4.14%, along with the rise in prices of healthcare products, electricity and water, increased by 1.43%, 9.89%, and 4.75% respectively.

Chart 3 **Monthly CPI movements**



Source: GSO, BSC Research



CPI of 7/11 commodity and service groups in March 2020 decreased compared to the previous month. Transportation group dropped the most by 4.87%, mainly due to the impact of gasoline and oil price adjustment on February 29 and March 15, causing gasoline and oil price to drop by 9.83%, making CPI dropping by 0.43%, and public transport service price was also decreased. Culture, entertainment, and tourism dropped by 1.4% due to a sharp decline in travel, tourism, and festive activities due to the impact of the Covid-19 epidemic.

Total retail sales of consumer goods and services in March 2020 were estimated at VND 390.0 trillion, down -4.0% MoM and -0.8% YoY. In which, retail sales of goods reached 316.1 trillion dong, down -1.5% MoM and up 4.7% YoY.

For the first quarter of 2020, total estimated retail sales of consumer goods and services reached VND 1,246.1 trillion, up 4.7% over the same period last year, of which: retail sales of goods reached VND 985.8 trillion, up 7.7% YoY.

Chart 4 **Retail Sales**

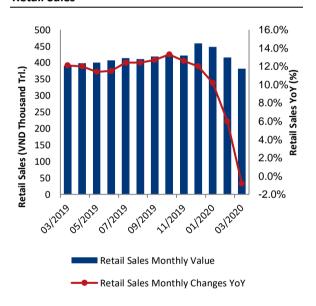


Table 1 Increase/decrease of service sectors in March

No	.Sector	MoM (%)	YoY (%)
1	Food and catering		
	services	-0.43	10.42
2	Beverages and cigarettes	-0.11	1.56
3	Apparel, hats, shoes		
		-0.15	1.19
4	Housing and construction		
	materials	-0.25	4.45
5	Appliances, household		
	appliances	0.09	1.39
6	Drugs and medical	0.05	3.28
7	Traffic	-4.87	-2.62
8	Post and		
	Telecommunication	-0.06	-0.65
9	Education	0.04	4.69
10	Culture, entertainment		
	and tourism	-1.4	-0.79
11	Other goods and services	0.16	3.62

Source: GSO, BSC Research

Foreign Direct Investment (FDI)

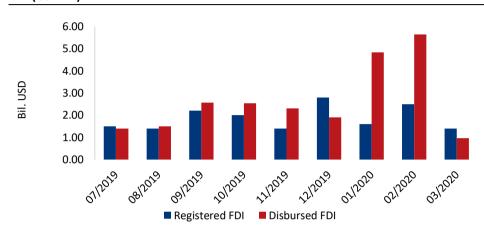
- Total newly and additionally registered FDI capital reached USD 6.6 billion , increased + 28.9% YoY.
- Realized foreign direct investment was estimated at USD 3.9 billion, decreased -6.6% YoY.
- For the first quarter of 2020, production and distribution of gas and electricity attracted largest foreign direct investment

Total newly registered FDI capital as of March 20, 2020 of 758 projects (-3.4% YoY), reached USD 5.5 billion (+ 44.8% yoy), plus USD 1.1 billion of adjusted registered capital of 236 projects licensed in previous years. Therefore, the total

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newly and additionally registered FDI capital reached USD 6.6 billion (+ 28.9% YoY). For the first quarter of 2020, realized foreign direct investment was estimated at USD 3.9 billion (-6.6% YoY).

Chart 5 FDI (USD Bil)



Source: GSO, BSC Research

In the first quarter of 2020, production and distribution of gas and electricity attracted largest foreign direct investment with registered capital of licensed projects reached USD 4 billion, accounting for 72.3% of total newly registered capital; manufacturing and processing industry reached 1.2 billion USD, accounting for 21.4%; remaining industries reached USD 0.3 billion, accounting for 6.3%.

If including additional registered capital for licensed projects from the previous years, foreign direct investment in the manufacturing and processing industry in the first quarter of 2020 reached USD 2 billion, accounting for 30.7% of total registered capital; production and distribution of gas and electricity remained at 4 billion USD, accounting for 60.7%; remaining industries reached 0.6 billion USD, accounting for 8.6%. For capital contribution of foreign investors, capital invested in processing and manufacturing industry reached USD 0.7 billion, accounting for 35.7% of the total value of capital contribution; automobiles industry reached USD 0.4 billion, accounting for 22.6%, remaining sectors reached USD 0.8 billion, accounting for 41.7%

Top three regions attracting FDI: Bac Lieu (US \$ 4 billion - 72.3%), Tay Ninh (US \$ 0.3 billion - 6.0%), Ho Chi Minh City (US \$ 0.1 billion - 2.6%).

In the first quarter of 2020, Singapore was the largest direct investor in Vietnam with an investment capital of USD 4.2 billion, accounting for 76% of the total newly registered capital; followed by China with USD 0.5 billion, accounting for 8.2%, and South Korea with USD 0.3 billion, accounting for 5.1%.



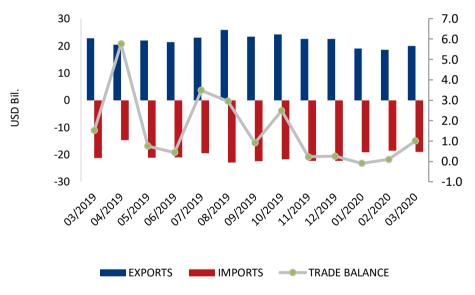
Trade balance, Import and Export

- Trade balance in March was estimated at surplus of USD 1 billion. For the first guarter of 2020, trade surplus is estimated at US \$ 2.8 billion.
- In the first quarter of 2020, total import and export turnover of goods is estimated at 115.34 billion USD (-0.7% YoY).

Export turnover in March was estimated at 20 billion USD, down 4.1% MoM and -12.1% YoY. Domestic sector reached USD 6.16 billion, down by 1% MoM and down by 3.7% YoY; foreign-invested sector reached USD 13.84 billion, down 5.4% MoM and 15.4% YoY.

Import turnover in March was estimated at USD 19 billion, up 2.3% MoM and down 10.1% YoY. Domestic sector reached USD 7.7 billion, up 4.1% MoM and down 14% YoY. Foreign-invested sector reached USD 11.3 billion, up 1% MoM and down 7.2% YoY.

Chart 6 Import and Export (Bil USD)



Source: GSO, BSC Research

In the first quarter of 2020, export turnover was estimated at USD 59.08 billion, up by 0.5% YoY, of which domestic sector reached USD 18.65 billion, up 8.7% YoY; FDI sector (including crude oil) reached USD 40.43 billion USD, down 2.9% YoY. Estimated for the first quarter of 2020, mobiphones and components maintained leading position in export, reaching USD 12.4 billion, up 2% YoY. Electronics, computers and components were in second position, reaching USD 8.2 billion, up 16.2% YoY. Textile and garments ranked third, reaching USD 6.5 billion, down 8.9% YoY.

For the first quarter of 2020, the United States was Vietnam's largest export market with a turnover of USD 15.5 billion (+ 16.2% YoY), followed by China with USD 8.4 billion USD (+ 11.5% YoY), and EU with USD 7.5 billion (-14.9% YoY).

Table 2

Top 10 export goods

No **Exported Good** %YoY Turnover 1 2 00 Mobile phone 12.36 2 Electronics 16.20 8.20 Textile 6.50 -8.90 3 Other machines 4 4.68 17.70 5 Shoes 3.86 -1.90 6 Woods 2.48 9.50 Vehicles 2.04 -5.50 8 Aquaculture 1.59 -11.20 9 0.96 -15.4010 Fibers and yarns 0.89 -10.30

Table 3

Top 10 imported goods

No	Imported Goods	Turnover	%YoY
1	Electronics	13.19	11.80
2	Machine	7.82	-8.60
3	Mobile phone	3.18	14.10
4	Fabric	2.36	-17.70
5	Plastic	2.01	-6.10
6	Steel	1.90	-16.00
7	Plastic Products	1.60	8.10
8	Crude oil	1.50	67.90
9	Automobile	1.40	-24.40
10	Other metals	1.38	-7.90

Source: GSO, BSC Research

Source: GSO, BSC Research

For the first quarter of 2020, import turnover was estimated at USD 56.26 billion, down 1.9% YoY, of which domestic sector reached USD 23.08 billion, down 3.4% YoY; FDI sector reached USD 33.18 billion, down 0.8% YoY. Estimated for the first quarter of 2020, electronics, computers and components accounted for the largest proportion of import, with USD 13.2 billion (+ 11.8% YoY). Machinery and equipment was in second position with USD 7.8 billion (-8.6%). Mobiphones and components ranked third with USD 3.2 billion, up +14.1% YoY.

In the first quarter of 2020, China was still the largest importer to Vietnam with a turnover of USD 13.3 billion (-18% YoY), followed by South Korea with 11.7 billion USD, up 2.4% YoY, and ASEAN with 7.2 billion USD, down 8.3% YoY.

Covid-19 epidemic spreads quickly among Vietnam's trading partners, such as China, South Korea, Japan, the United States and the EU. In the first quarter, total import and export turnover reached USD 115.34 billion, down 0.7% over the same period of 2019. Vietnam had a trade surplus of USD 2.8 billion.

Forex market

- USD/VND exchange rate in March increased strongly compared to February and January when capital continued to flow to shelter assets such as USD, as global financial market deteriorated
- Dollar Index fluctuated strongly in March due to concern about Covid-19 havign downward pressure on asset value worldwide, leading to financial crisis and prolonged reccession similar to 2008-2009.

Central exchange rate in March fluctuated in the range of 23,190 - 23,814 VND / USD, similar to the range of 23,196 - 23,814 VND / USD in February. The average for the month was 23,333 VND / USD. On March 31, the exchange rate was traded at 23,235 VND/USD. Thus, value of VND decreased by -0.34% YTD and -1.12% YoY.

Interbank exchange rate in March fluctuated in the range of 23,190 - 23,760

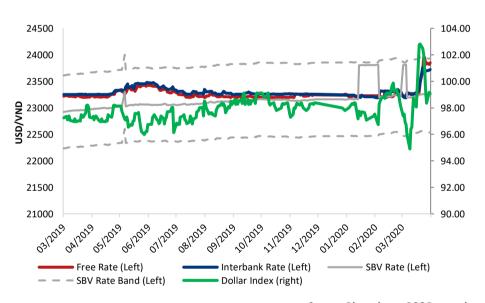
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VND / USD, up from the range of 23,190 - 23,350 VND / USD in February. The average for the month was 23,412 VND / USD. On March 31, exchange rate was traded at VND 23,720 / USD. Thus, value of VND decreased -2.07% YTD and -2.02% YoY.

Free exchange rate in March fluctuated between 23,230 and 23,950 VND / USD, up from the range of 23,200 - 23,320 VND / USD in February. The average for the month was 23,456 VND / USD. On March 31, the exchange rate was traded at 23,850. Thus, value of VND decreased by -2.54% YTD and -2.78% YoY.

Dollar Index on March 31, 2020 increased by 0.9% compared to the end of February, and by 1.8% compared to the same period last year. In March, the index ranged from 94.9 to 102.8 with the average of the month reaching 98.8. Currently, this index is trading at the price of 99.05.

Chart 7 **Exchange rate movements**



 ${\it Source} : {\tt Bloomberg}, {\it BSC} \ {\tt Research}$

In the context of declining world financial markets, investors tended to hold cash, so USD in the world market increases. In ASEAN and BRICS, compared to USD, the value of currencies decreased: Chinese Yuan -1.3%, Singapore Dollar -2.1%, Malaysian Ringgit -2.5%, Thai Baht -3.9%, and Indian Rupee 4.9%.

Bank - Interest rate

- Credit growth of the economy increased by 0.68% (the same period in 2019 increased by 1.9%).
- Medium-term interbank rates continued to decrease in March, shortterm interbank rates remained stable around 2%.

As of March 20, 2019, total means of payment increased by 1.55% compared to the end of 2019 (the same period in 2019 increased by 2.54%); capital mobilization of credit institutions increased by 0.51% (the same period in 2019

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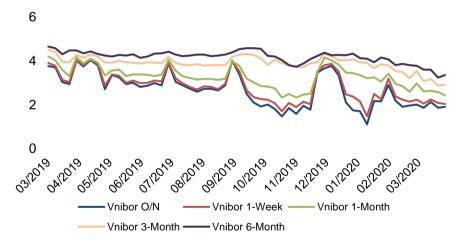
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increased by 1.72%); credit growth of the economy increased by 0.68% (the same period in 2019 increased by 1.9%). VND deposit interest rate ranged at 0.2-0.8% / year for deposits with term less than 1 month; 4.3-5.0% / year for deposits with term from 1 month to less than 6 months; 5.3-7.0% / year for deposits with a term of 6 months to less than 12 months; and over 12 months tenor at 6.6-7.5% / year. Meanwhile, VND lending interest rate ranged at 6.0-9.0% / year for short term; 9.0-11% / year for the medium and long term.

In March, via treasury channel, SBV withdrew VND 24,995.9 billion in the first week, VND 1999.8 billion in the second week. Through OMO channel, SBV injected VND 1.05 billion on March 18, VND 1.09 billion on March 27, VND 2,858.09 billion on March 31 and VND 9,448 billion on April 1. Intermediate interest rates continued to decrease in the first week of the month, when credit demand decreased due to Covid-19, and only increased when the content of Circular No. 01/2020 / TT-NHNN on repayment schedule, interest rate reduction and exemption were gradually being completed. In the last two weeks of the month, interest rates decreased when SBV issued the decision 418 to 423, reducing interest rates. Short-term interest rates maintained at 2%, as SBV reduced trading activities in treasuries as well as OMO. As of March 31, the overnight, 1 week, 1 month, 3 months, and 6 months interest rates were 2.04%, 2.18%, 2.60%, 3.08%, and 3.40% respectively.

Chart 8 Interbank interest rates



Nguồn: Bloomberg, BSC Research

Macro Forecast for March 2020

On an international scale, Vietnam's macro-economic performance in 2nd quarter is affected by some of the following impacts:

- 1. FED monetary policy meeting (April 28-29 and June 9-10). To cope with COVID 19 epidemic, the Fed have used almost all of its financial instruments to support the US economy. Easing policy is expected to be maintained until economic indicators improve. Although growth data for the first quarter have not been released, other indicator indicators are quite negative. Government bonds fell below the 1% threshold, number of unemployed increased sharply in the last week of March (March 23-27) and PMI index dropped to 48.5. Currently, FED has implemented the following measures:
 - Interest rate cut: Fed cut interest rates twice in March and brought the
 overnight lending rates to banks to near zero. This aims to reduce the
 cost of loans to banks and their customers to ensure borrowers can
 continue to access credit channels during the crisis.
 - REPO market: FED provides almost unlimited cash support to the
 overnight lending market. On March 31, 2020, the Fed also announced
 that it had expanded repo deals with foreign central banks. The deal
 allows central banks to swap overnight USD loans with US Treasury
 securities they hold.
 - **Discount window:** Banks have increased borrowing in recent weeks, reaching largest amount since 2009. This channel is rarely used because banks worried that using this channel will cause the market to percieve them as financialy vulnerable. But policymakers have lowered the interest rate on loan to 0.25% and extended the loan period from one day to 90 days. From the beginning of the year to March 25, 2020, banks borrowed more than 50 billion dollars through this channel.
 - SWAP line with other central banks: The Fed enter transactions agreements with 5 other major foreign central banks Bank of Canada, European Central Bank, Bank of England, Bank of Japan and Swiss National Bank with the aim of providing liquidity to their financial institutions in times of stress. The Fed has increased the frequency of daily operations. It also provides swap line with nine other countries to easily access the dollar, which is in high demand because the debts of many foreign governments and companies are denominated in USD.
 - Ensure flow of credit in the economies: Fed stands to ensure the solvency and quality of loans on the bond, credit and money market channels through the programs such as TALF, CPFF, PMCCF, SMCCF, PDCF, MMMFLF.
- **2. ECB Policy Meeting (April 30 and June 4):** Similar to the Fed, ECB will also maintain support policies to minimize the impact of the epidemic on the economy. Although they still keep interest rates at 0.5%, but have allowed banks in Europe to borrow interest rates at -0.75% to encourage lending

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activities in the context of economic slowdown. The economic situation in the EU continues to show worrying signs when the German PMI index drops to 45.4 in March from 48 in February and the French PMI also drops to 43.2 in March from 49.8 in February. ECB is using the following tools:

- Long-term refinancing operations (LTRO) will be conducted temporarily, to provide immediate liquidity support to the euro area financial system.
- TLTRO III changes the terms to more beneficial to the banking system in terms of interest payment and payment schedule.
- Program to buy net assets of 750 billion euros through government bonds, corporate bonds, and other assets to inject money into financial markets deeply affected by the pandemic. Buying period is expected to be carried out until the end of 2020.

In addition, European Union is likely to focus on the tools provided by Eurozone's ESM relief fund and European Investment Bank to support the economy. Eurozone and Eurogroup finance ministers have two weeks (April 7 deadline) to come up with ideas to support the economy after EU leaders fail to reach an agreement last week.

3. **OPEC Meeting (June 9):** After collapse of production cut negotiations between Saudi Arabia and Russia during the OPEC meeting on March 9, relationship between OPEC and Russia has not shown any sign of improvement. OPEC's Algerian chairman promotes the OPEC Economic Committee (ECB) meeting in April 2020. At least four members including Saudi Arabia, the de facto leader of OPEC, the UAE, Kuwait and Nigeria have made it clear that they see no need for such a meeting. Moreover, from April 1, 2020, producers including Saudi Arabia and the UAE said they would produce crude oil production at maximum capacity. This event will continue to keep WTI oil price below 30 USD/barrel before OPEC meeting in June. However, there have been some positive changes in oil prices when US President Donald Trump and Russian President Vladimir Putin agreed by telephone, asking their top energy officials to discuss the declining oil market around the globe on March 31, 2020. This is a positive signal that the United States may return to talks with Russia and OPEC about production cuts in the second half of 2020.

For the domestic policy, the notable topics that will influence Vietnam economy in 2nd quarter are:

1. The 9th National Assembly Session XIV (late May 2020): National Assembly Chairwoman Nguyen Thi Kim Ngan said, to get comments on the major issues and different opinions of some Law projects submitted National Assembly Advisory Committee will hold an online meeting of special members in charge in April. 5 bills will be discussed at the Conference, including the PPP Law Project; Investment Law Project (amended); Enterprise Law Project (amended). These bills will be notable in the next quarter for improving the

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progress of administrative procedures and disbursement of public investment projects in the context of economic slowdown from COVID 19. .

- 2. Guiding the activities of payment and money transfer relating to cross-border goods transfer business. Circular 02/2020 / TT-NHNN stipulating payment and transfer of money related to the business of cross-border transfer of goods is carried out on the basis of two separate payment and money transfer transactions: transactions of transferring money to pay for copurchase of goods and transactions received from sale contracts. Payment transfers can be made before or after receiving money. All payment and money transfer activities related to cross-border goods transfer business must be conducted via authorized banks. Traders may only make payments and transfer money in one cross-border goods transfer transaction under goods purchase contracts and sale contracts of such goods at the same authorized bank. Traders may use foreign currencies on payment accounts in such foreign currencies, such as those bought by banks, which are permitted to remit abroad for goods purchase contracts.
- **3.** Circular 28/2019 / TT-NHNN regulating bank card activities. State Bank of Vietnam issued Circular 28/2019 / TT-NHNN amending Circular 19/2016 / TT-NHNN on bank card activities. People over 15 years old can use a secondary credit card. Accordingly, the object of a secondary cardholder may be:
 - Persons aged 18 years or older with full civil capacity as prescribed by law: can use debit cards, credit cards, prepaid cards.
 - Persons from 15 18 years old who do not lose or have limited civil capacity: can use debit cards, credit cards, prepaid cards
 - People from 6 to 15 years of age who do not lose or have limited their civil capacity and are allowed in writing by their legal representative to use the card: can use debit cards, prepaid cards.
- **4. Schools and hospitals entitle to preferential Internet access charges.** According to Circular 02/2020/TT-BTTTT, some subjects are entitled to preferential rates of postpaid fixed land broadband internet services including: schools, hospitals, and People's Committees.:
 - VND 75,000/month/organization when using internet access service packages with the maximum download speed from 4 Mbps to less than 12 Mbps;
 - 100,000 VND/month/organization for package with speed of 12 Mbps to less than 32 Mbps;
 - VND 250,000/month/organization for package with speed from 32 Mbps to less than 45 Mbps;
 - VND 450,000/month/organization for package with speed of 45 Mbps or higher.
 - Each organization is only supported for one internet package from one telecommunications enterprise.

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- **5.** Compensation of up to 3 months wages for VNPT and Vietnam Airlines employees, ccording to Government's Decree No. 20/2020/ND-CP on piloting regulation on labor, wages and bonus management for a number of sateowned enterprises. This decree will be applied from April 1, 2020. The Decree stipulates principles of setting up the bonus and welfare Fund for employees and executive board in these enterprises as follows:
 - If the realized profit is not lower than the plan, employee and the
 executive board are entitled to a bonus not exceeding 03 months'
 wages for implementation;
 - If the realized profit is lower than the plan, the bonus is no more than 03 months' wages to be multiplied by the percentage of realized profit compared to the planned profit.
 - In particular, bonus paid to the general director does not exceed 07 times the average bonus of employees.

Table 4

Monthly macro indicators

Indicator/Month	2019M08	2019M09	2019M10	2019M11	2019M12	2020M01	2020M02	2020M03
GDP YoY (%)	-	7.31	-	-	6.97	-	-	3.82
GDP ytd YoY (%)	-	6.98	-	-	7.02	-	-	3.82
PMI	51.4	50.5	50.0	51.0	50.8	50.6	49.0	41.9
IIP YoY (%)	10.5	9.7	9.2	5.4	10.4	-5.5	23.7	5.4
IIP ytd Yoy (%)	9.5	9.5	9.5	9.3	8.86	-5.5	6.2	5.8
Retail sales YoY (%)	12.4	12.7	13.3	12.6	11.4	10.2	6.0	-0.8
Retail sales ytd YoY (%)	11.5	11.6	11.8	11.8	11.3	10.2	8.3	4.7
CPI MoM (%)	0.28	0.32	0.59	0.96	1.4	1.23	-0.17	-0.72
CPI YoY (%)	2.26	1.98	2.24	3.52	5.23	6.43	5.40	5.56
Registered FDI (Bil USD)	13.2	15.76	18.30	20.60	22.5	4.83	5.64	6.60
Disbursed FDI (Bil USD)	12.0	14.2	16.20	17.60	20.4	1.60	2.50	3.90
Export (Bil USD)	25.9	23.3	24.2	22.6	22.5	19.0	18.6	20.0
Import (Bil USD)	22.5	21.7	22.4	22.5	22.3	19.1	18.5	19.0
Trade Balance (Bil USD)	3.4	1.6	1.8	0.1	0.2	-0.1	0.1	1.0
Exchange rate (USD/VND)	23,284	23,266	23,262	23,260	23,218	23,200	23,233	23,637
Credit growth (%)	-	8.4	-	-	13.7	-	-	-

Source: BSC Research



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Table 5 **Quarterly macro indicators**

Indicators/Quarter	Q1/2018	Q2/2018	Q3/2018	Q4/2018	Q1/2019	Q2/2019	Q3/2019	Q4/2019	Q1/2020
GDP yoy (%)	7.38	6.73	6.88	7.31	6.79	6.71	7.31	6.97	3.82
IIP yoy (%)	11.6	12.3	10.7	9.4	9.2	9.2	10.3	7.4	5.8
Retail Sales yoy (%)	9.9	10.7	12.5	12.9	12	11.1	12.7	12.5	4.7
CPI yoy (%)	2.66	3.23	3.57	3.44	2.63	2.65	2.23	3.66	5.56
Registered FDI (Bil. USD)	3.91	12.3	3.4	5.68	5.12	5.18	5.46	6.74	6.60
Disbursed FDI (Bil. USD)	3.88	4.5	4.9	5.18	4.12	4.98	5.1	6.2	3.90
Export (Bil. USD)	55.8	58.2	64.3	63.9	58.7	63.9	71.8	68.8	59.08
Import (Bil. USD)	52.9	57.0	62.0	62.9	57.0	65.3	67.8	66.0	56.26
Balance of Trade (Bil. USD)	2.8	1.2	2.3	1.0	1.7	-1.4	4.0	2.8	2.82
Exchange rate (USD/VND)	22,820	22,967	23,260	23,351	23,245	23,404	23,279	23,196	23,637
Credit growth (%)	3.5	6.35	9.52	14	2.28	6.09	8.4	12.1	0.68

Source: BSC Research



Stock market March 2020

Market outlook

In March, the market recorded a sharp decline when the epidemic situation was getting complicated and the oil price war between OPEC+ members **broke out.** The epicenter shifted from China to developed countries. Investors' sentiment was strongly affected by the net withdrawal from foreign investors due to market risks. The monetary and fiscal support actions of the Central Banks and the Governments around the world as well as in Vietnam have only partly eased but could not help the market recover positively. As of March 31, 2020, the VN-Index officially decreased by -219.7 points compared to the end of the previous month (-24.9% MoM) and HNX-Index also decreased similarly -16.9 points (-15.5% MoM). By the end of the first quarter, the VN-Index decreased -297.35 points (-30.9% QoQ), the HNX-Index decreased -9.87 points (-9.6% QoQ).

Compared to February, stock groups by capitalization had consensus movement. Cash flow was strongly withdrawn from large-cap stocks and VN30. In March, the HSX had 37 gainers, 340 losers and 4 unchanged stocks. 5 stocks supporting VN-Index including HPX increased by 22.01% (contributed 0.33 points), DTL increased by 63.80% (contributed 0.1 points), GAB increased by 5.67% (contributed 0.1 points), QCG increased by 24.77% (contributed 0.1 points), ABS increased by 81.85% (contributed 0.1 point). Stocks that caused the VN-Index strongest decline include VHM decreased -31.59% (-24.4 points), VCB decreased -24.76% (-21.9 points), VIC decreased -20.87% (-21.5 points), BID decreased -32.2% (-17.1 points) and GAS decreased -27.70% (-11.6 points).

Considering Q1, the average liquidity on the 2 exchanges decreased slightly by -3.3% compared to the fourth quarter of the previous year and maintained at 4,526 billion VND/session and equivalent to 194 million USD/session. The average liquidity in the first 3 months dropped sharply compared to 2019, the cash flow focused on large-cap stocks and VN30. In 3M2020, on HSX, there were 41 gainers, 340 losers and 2 unchanged stocks. 5 supporting stocks of VN-Index including GAB increased by 693.8% (contributed 0.45 points), HPX increased by 25.3% (contributed 0.37 points)., LGC increased by 12.4% (contributed 0.27 points), VCF increased by 12.9% (contributed 0.18 points), QCG increased by 34.2% (contributed 0.11 points). Stocks that caused the VN-Index to decline the most include VJC -27.5% (-30.90 points), VCB -31.3% (-30.32 points decrease), VHM -35.1% (-28.73 points decrease), GAS declines -41.5% (-21.61 points reduction) and SAB -45.05% (-17.8 points reduction).

Month

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Table 6 Fluctuation in the last 6 months on HOSE

Index

Fluctuation in the last 6 months on HNX Volume (Bil Capitalization Index Month (VND Trillion) shares) 3 92.64 184.05 1.43 0.81 2 109.58 211.55 1 102.36 0.47 192.02

0.56

0.46

0.61

3 662.53 4.73 2,312.03 2 882.19 3.36 3,020.00 1 936.62 2.35 3,206.04 12 960.99 3.69 3,279.93 11 970.75 3.50 3,309.56 10 998.82 3.50 3,380.04

Volume (Bil

shares)

Source: HNX, Bloomberg, BSC Research

194.72

182.75

186.38

Source: HSX, Bloomberg, BSC Research

Capitalization

(VND Trillion)

Stock groups performances

Stocks classified by market capitalization had consensus movements. In the first week of March, most stock groups maintained sideways movement. However, negative movements when the disease broke out again in Vietnam and shifted to developed countries, triggered cash flow from large-cap stocks. The VN30 and LargeCap groups recorded a sharp decline of -26.6% and -27.7%, while the performance of MidCap, SmallCap and Pennies decreased by -15.9%, -16.8% and -11.5% respectively. The market corrected on a large scale with large-cap groups under the greatest pressure

Table 7

12

11

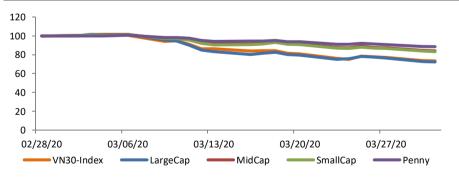
10

102.51

102.5

105.19

Chart 9 Stock sector developments

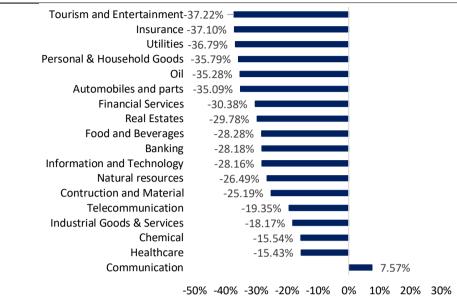


Source: Bloomberg, BSC Research

In the first guarter, the market had 18/19 sectors decreased. In which, Tourism and entertainment sector saw the strongest drop of -37.2% with the adjustment of HOT and VJC with decline of -48.9% and -27.5%, and Insurance -37.1% with BVH (-46.1%), Power, water & petroleum decreased by -36.8%.

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Chart 10 Tier 2 sector in March 2020



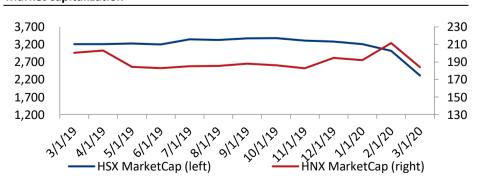
Source: Fiinpro, BSC Research

Capitalization scale

Market capitalization on both exchanges reached VND 2,496 trillion, equivalent to USD 107.6 billion, plummeting -23% MoM, -28% QoQ. Upcom floor plummeted to VND 679.8 trillion at the end of March. As of March, there were no first listed shares on HOSE, 64.5 million additional listed shares and no delisted shares; 4.6 million additional listing ETFs, 32.3 million ETF delisting; there are no first listed bonds and unlisted bonds; 16.9 million CW delisted.

Regarding the listing scale on HOSE on March 31, there are 88.9 billion listed shares equivalent to VND 889.7 trillion (95.62% market value), 349.2 million bonds equivalent to 34.9 trillion dong (3.75% market value), 495.2 million ETF certificates equivalent to 4.95 trillion VND (0.53% of the market).

Chart 11 Market capitalization



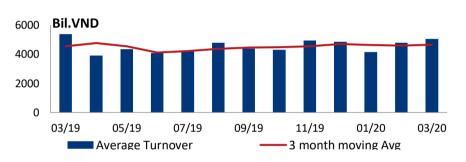
Source: Bloomberg, BSC Research

Average market liquidity

The average liquidity on the 2 exchanges increased +18% compared to February 2020, and maintained at 5,058 billion VND/session and equivalent to nearly 217 million USD/session. The liquidity increased sharply after the first week of March, showing investors' panic state about the volatility of key stock markets and unpredictable movements of the disease. Besides, the portfolio structure of ETFs also partly increases the liquidity of the market.

Considering Q1, the average liquidity on the 2 exchanges decreased slightly by -3.3% compared to the fourth quarter of the previous year and maintained at 4,526 billion VND/session and equivalent to 194 million USD/session.

Chart 12 Average market liquidity

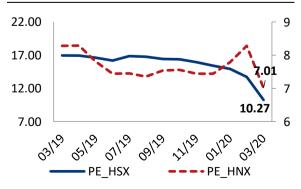


Source: Bloomberg, BSC Research

Price level of Vietnam stock market

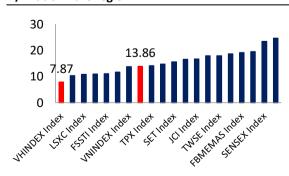
P/E of VN-Index dropped to 10.27, equivalent to -25.3% MoM, -33.3% QoQ and HNX-Index also returned to 7.00, respectively a decline of -15.4% MoM, -5.82% QoQ. The P/E of the HSX dropped sharply below the 5-year average. Compared to February, the P/E of the VN-Index fell to 14th and the HNX-Index remained 20th in Asia.

P/E indicator or performance on both Exchanges



Source: Bloomberg, BSC Research

Chart 14 P/E ratio in the region



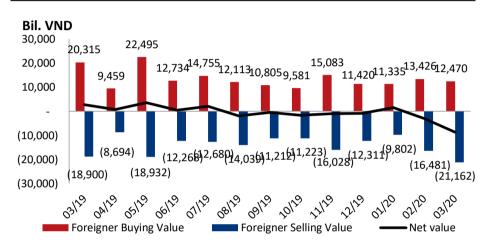
Source: Bloomberg, BSC Research

Foreign trading

In March, foreign investors continued to be net sellers on both HSX and HNX.

Upcom on March also saw selling pressure with a selling value of -114.5 billion dong, they focused on selling -59.1 billion dong of BSR and -34.8 billion dong of QNS while net buying of 33.2 billion dong of VTP.

Chart 15
Foreigner transaction performances on both Exchanges



Source: BSC Research

In March, foreign investors were net sellers on the HSX VND -7,838 billion with 249 shares sold and 103 shares net bought, VND -854 billion on the HNX with 140 shares sold and 74 shares buy. On the HSX, they sold MSN (-1,377.9 billion), HPG (-1,054.2 billion dong), VHM (-663.9 billion dong), VIC (-553.3 billion dong), VRE (-516.3 billion dong) and bought FUESSVFL (202.4 billion dong), PHR (116.7 billion dong), and VNM (99.4 billion dong). On the HNX, this group focused on selling SHB (-517.4 billion), PVS (-257.1 billion) and buying ART (4.9 billion dong) and VCS (4.0 billion dong).

Table 8

Top 10 foreign traded stocks on HSX in 03/2020

Top 10 foreign traded stocks on HSX in 03/2020						
Ticker	Net value	Ticker	Net value			
TICKET	(VND Bil)	Hekei	(VND Bil)			
FUESSVFL	202.43	MSN	(1,377.86)			
PHR	116.73	HPG	(1,054.17)			
VNM	99.42	VHM	(663.91)			
CTG	38.12	VIC	(553.33)			
SCS	22.73	VRE	(516.35)			
TCH	17.31	VJC	(416.43)			
LDG	12.74	SVC	(309.51)			
SAB	12.37	E1VFVN	(302.71)			
NLG	9.15	GAS	(234.56)			
D2D	8.34	VCB	(230.35)			

Bloomberg: BSCV <GO>

Source: BSC Research

Top 10 foreign traded stocks on HNX in 03/2020

10p 10 1010.811 11 11 11 11 11 11 11 11 11 11 11 11					
Ticker	Net value (VND Bil)	Ticker	Net value (VND Bil)		
ART	4.95	SHB	(517.37)		
VCS	4.00	PVS	(257.09)		
SLS	2.80	HUT	(47.86)		
KLF	1.85	TNG	(17.91)		
NBC	1.60	NTP	(9.46)		
LAS	1.46	SHS	(3.74)		
SDT	1.40	IDJ	(3.52)		
CEO	1.29	PGS	(3.12)		
WCS	1.14	PLC	(2.30)		
SD6	1.12	S55	(2.12)		

h Source: BSC Research

In Q1, foreign investors were net sellers on the HSX VND -9,581 billion with 236 stocks sold and 128 bought, net VND -1,511 billion on the HNX with 164 stocks sold and 92 stocks bought. On the HSX, they sold a lot of MSN (-1,730.2 billion), VIC (-890.0 billion), HPG (-725.5 billion), VHM (-514.0 billion) and bought PGD (VND 1,017.7 billion).), MWG (VND 587.7 billion), FUESSVFL (VND 202.4 billion). On the HNX, this group focused on selling SHB (-593.9 billion), PVS (-354.1 billion), HUT (-54.5 billion) and buying VCS (28.3 billion dong), ART (8.5 billion dong). Upcom also focused on trading with a net selling value of -139.3 billion, focusing on selling -67.8 billion ACV, -47.2 billion LPB and -27.9 billion BSR while net buying 54.8 billion VTP, VND 46.3 billion VEA.

Table 10 Top 10 foreign traded stocks on HSX in 03/2020

Top 10 foreign traded stocks on HNX in 03/2020

Ticker	Net value (VND Bil)	Ticker	Net value (VND Bil)	Ticker	Net value (VND Bil)	Ticker	Net value (VND Bil)
PGD	1,017.66	MSN	(1,730.23)	VCS	28.33	SHB	(593.88)
MWG	587.71	VIC	(890.05)	ART	8.55	PVS	(354.07)
FUESSVFL	202.43	HPG	(725.55)	SLS	6.61	HUT	(54.48)
CTG	165.55	VHM	(514.03)	NBC	4.75	NTP	(52.27)
VNM	163.35	VRE	(485.52)	LAS	3.55	DGC	(23.99)
PHR	116.90	VJC	(478.17)	AMV	3.50	TNG	(17.72)
PNJ	80.45	NVL	(478.02)	NRC	2.66	SHS	(17.27)
DGW	57.32	VCB	(463.57)	PVC	2.32	NDN	(13.89)
SCS	38.09	SVC	(421.46)	KLF	1.81	PLC	(12.54)
SAB	30.15	POW	(339.60)	SD6	1.73	CEO	(6.27)
		_				_	

Source: BSC Research

Source: BSC Research



Market Outlook for 2nd Quarter of 2020

From an unnoticed spark in Wuhan City in December, the Covid virus - 19 quickly spread on a global scale and became a pandemic with 202 countries and territories recorded the disease. If at the end of February, the world recorded only 83,000 people infected and more than 2,800 deaths in 51 countries, the epidemic broke out in March with 858,000 cases on March 31, of which 178 thousand people recovered and 42 Thousands of deaths. Currently more than 3 billion people in 70 countries, including many of the world's major economic centers, such as the United States, Europe, and the Asia Pacific, are required to stay at home in governments' anti-epidemic efforts.

The negative influence of the Covid-19 epidemic has exceeded the initial forecasts when it shifted from the birth and consumption habits of the public to the production and circulation of global production chains. By mid-March, China was basically controlling the disease. However, production recovery still faces difficulties due to the stalling production and consumption activities of major markets. The synchronization of major areas after epidemics will be an important factor for production, business and consumption activities to return to normal.

To deal with the impact of the disease, countries have implemented stimulus policies that combine both fiscal and monetary scale with drastic and unprecedented scale. Although FED participated in the trend of lowering interest rates more slowly than the central banks of China, Korea, India, Asean countries, etc. (30 countries lowered interest rates in March), they took drastic action to bring interest rates back to 0% - 0.25% after 2 interest rate cuts in March. FED simultaneously activated a series of tools to support market liquidity since the 2008 crisis and issued an unlimited quantitative easing package for buying. Government bonds and securities are secured by mortgages. The Fed also launched a new tool to provide credit to large businesses ranked by investing by buying corporate bonds in the primary and secondary markets.

Along with that, the US Congress also approved the USD 2 trillion fiscal package, equivalent to 10% of GDP and doubled the value of the 2008 crisis package, supporting the economy through tax reduction, supporting small and medium enterprises, and directly support areas of severe damage from disease outbreaks. Similar policies are excecuted in the EU, Japan and other countries.

The widespread Covid-19 epidemic caused panic in all markets in March. MSCI indexes of developed markets, MSCI emerging markets, MSCI border areas (at USD exchange rate) have decreased by -12.2%, -14.1% and -22.7% in March, bringing the first quarter reduction of only -21.4%, -23.9% and -

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32.3%. Commodity market (Bcom Index) also saw a decrease of -23.5% in the first quarter, mainly contributed by a decrease of -66% of oil while gold was the only commodity with a 3.3% gain.

In Money market, the USD Index increased by 2.8% in the first quarter, USD increased in most compared to other currencies despite the FED lowered the interest rates to 0%. The local currency RUB (Russia), BRL (Brazil), IDR (Indonesia), THB (Thailand) decreased by -27.4%, -27%, -17.1% and -8.7% against the USD. VND only depreciated by -1.8%, being a stable currency.

Vietnam's stock market moves in alignment with regional and global market trends. The VN-Index decreased slightly in January and gradually decreased in February and March. The index dropped sharply by 24.9% in March, bringing the first-quarter decrease to -31.1%. Negative movements from the world market, epidemic situation affected psychologically and foreign investors pushed up the net selling, all strongly affected the index. The decrease of VN-Index is still lower than the decrease of MSCI Frontier market (-32.3%) thanks to the stable exchange rate.

In the face of the negative progress of the disease, BSC focused on updating information, assessing and forecasting impact through three reports: Corona Virus Impact Report, Covid-19 Disease Report (report 2nd version and SARS-Cov-2 epidemic report (3rd report). We carry out vision sharing reports for investors such as Sector Outlook 2020 Report, Banking Sector Outlook Report, Life Insurance Sector, Impact of oil price dropped on stocks Report. Many stocks plunging are also opportunities for long-term investment activities. We also perform reports on investment opportunity analysis in the first quarter of QNS, PNJ, PVT, DHG, DGW, DRC, FPT, VHC, MWG, AAA, VNM, KDH, SAB, KBC, ACB, GMD and quickly update 21 companies via iBroker as well as provide investment tools via i-Invest.

The countries of the epidemic have taken strong measures to control the disease. Disease movements are still quite complex and unpredictable. Along with economic support policies, early disease control is a key issue to be able to revive economies at the threshold of crisis. This information is still a major factor affecting economic prospects, market sentiment and thereby affecting stock markets in the near future. Along with that, the information also has an impact on the market in March as follows:

The Covid-19 Virus epidemic has a strong impact on the Vietnamese economy, many supportive policies have been introduced but the Government considers disease control as a current focus. The first quarter macro-social economy plunged in February: (1) GDP in the first quarter increased by 3.82%, the lowest level since 2009. Growth drivers such as service and industry - construction and agriculture - forestry - fishery all declined; (2) The total social investment capital increased by only 2.2%, of which FDI decreased by 20.9% over the same period; (3) Import-export turnover in the first quarter increased by 0.5% over the same period, figures in March decreased by 4.1% over the previous month; (4) Average CPI in the



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first guarter of 2020 increased by 3.05% compared to the same period last year; (5) International visitors in the first quarter decreased by 18% over the same period, of which the number of visitors in March decreased by 63.8% compared to February.

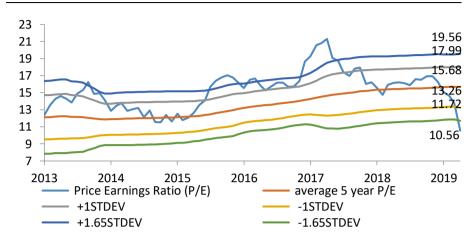
The PMI index plummeted from 49 points in February to 41.9 points in March. Business conditions have declined to the strongest level since the survey began in March 2011 when production, the number of orders. new jobs and job losses at record levels. Business prospects are deteriorating rapidly and negatively affecting quarter II growth if the disease is not controlled soon.

In response to the disease, the SBV has adjusted the operating interest rate from 0.5% - 1%. Along with the policy of reducing, postponing, rescheduling debt, keeping the same debt group with businesses, commercial banks also registered a total of 285 trillion dong capital with interest rates lower than 0.5% - 1% compared to the premises for businesses suffering Influence from disease. The Ministry of Finance also proposes to extend the payment of VAT, rent and land taxes. The Government is also considering soon offering a VND 30,000 billion welfare package, whereby the poor and the unemployed may receive VND 1 million/month.

Current government policies are similar to those of other countries in order to limit the negative impact of the disease. However, the current supporting policies are still quite modest compared to other countries because the Government is focusing all resources to fight epidemics. The Prime Minister has just issued Directive No. 16/CT-TTg after announcing the nationwide epidemic of Covid-19, thereby implementing social isolation within 15 days from 0:00 on 1 April 2020. nationwide. Vietnam has 207 cases of infection and the next 2 weeks are also the golden time to control the disease does not spread. Only when the disease is controlled will the opportunity for recovery take place in the second half of 2020.

The stock level has been falling to a low level, the VN-Index's P/E and P/B are at a 10-year low. As of 31/3, VN-Index P/E and P/B have decreased by 25% compared to the end of February to 10.3 and 1.5.

Chart 16 VN-Index P/E performance since 2013



Foreigners were net sellers of USD 331 million in March, bringing the total net selling value in the first quarter to US \$ 376 million. Foreign investors had a net selling chain in 33 consecutive sessions, significantly affecting market movements. Foreign investors' net selling value tended to decrease at the end of March and is expected to gradually decrease in April because the re-structure pressure is not much, which will open opportunities for the index to rebound. Along with that, the wave of registration to buy treasury shares of listed companies accelerated in March. 22 listed companies registered a value of more than US \$ 154 million based on market prices at the end of March. This trend will continue to expand in April and be a cash flow to help stabilize the market.

The world economy can avoid the crisis caused by the Covid-19 epidemic.

The COVID-19 virus outbreak is devastating in countries around the world. After 12 years, which is equivalent to an economic cycle from the subprime debt crisis from the US, the world economy is approaching the possibility of crisis if the epidemic is not controlled soon. International financial institutions lowered the growth forecast by nearly half compared to the preepidemic forecast and the negative scenario almost did not grow.

The establishment of ETFs under the new index will partly solve the foreign ownership limit in stocks that have run out of room by indirect ownership of fund certificates. The new ETFs are also expected to attract domestic and foreign capital to support the market in the short term.

Table 12 Global GDP growth forecast before and after Corona.

Organization	2020 (Before Corona)	Positive	Negative
Moody	2.40%	2%	-0.10%
Oxford Economic	2.50%	0%	-1.30%
Deustche Bank	2.40%	0.70%	<0%
OECD	2.90%	2.40%	1.50%

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Average	2.80%	1.54%	0.24%
Goldman Sachs	3.20%	1.25%	-1.00%
Morgan Stanley	3.20%	0.90%	-0.60%
Bank of America Merrill Lynch	3.10%	2.20%	0%
National Australia Bank	3.20%	3.00%	2.40%
Institute for International	2.60%	1.60%	1.00%
Fitch Rating	2.50%	1.30%	<0%

According to forecasts of financial institutions in the world, a group of countries with weak bases and heavily affected by epidemics such as China, Japan, and the EU will be hard to avoid the risk of recession even if the disease is controller in 2nd Quarter. China's economy will plummet 9-10% in the first quarter and grow about 3-4% for the whole year. Countries in the EU which inherently have many risks of recession due to aging population, high public debt face the shock of disease and the pressure from strong blockade measures, so the expected growth rate is narrowed by 0.5 to 1.0% in 2020.

Currently, major countries have issued many anti-epidemic regulations and implemented unprecedented fiscal and monetary policy packages to prevent recession and economic crisis. The implementation policies are somewhat more drastic and urgent than the solutions used in the 2008 crisis. There is not much room for monetary easing and fiscal stimulus when interest rates are low. Major economies in the US, Europe, Europe and Japan have reached zero and negative as well as high public debt ratio. The economy is therefore in a state of precariousness before a crisis and the deciding factor lies in the rapid or slow control of disease.

Table 13 Factors affecting the market in April 2020:

ractors arrecting the market in April 2020.	
Events	Impact on stock market
The Covid-19 Virus epidemic broke out in the United States,	Psychological influences,
Europe, Canada, the region accounted for nearly half of global	consumption and international
GDP.	production chains
Macroeconomics negatively affected by disease. A 15-day social	Negative short-term growth in
isolation policy is urgent but will significantly affect second quarter	the second quarter, positive
growth.	second half if the disease is
	controlled
The stock price has been at a low level for the past 6 years, the market	Positive, support for medium
has shown signs of oversold.	and long-term investment
	activities
Publication activities of the first quarter of 2020 and the annual	Positive short term
general meeting of shareholders.	
ETFs based on the VNFin lead Index and VNDimond Index.	More options for investors
The ETFs announced the portfolio structure in the second quarter of	Increase liquidity for the
2020, MSCI reviewed the upgrade and increased the proportion of	market
Vietnam	
Capital withdrawal activities of foreign investors in the first quarter	Negative impact
may extend to the beginning of the second quarter	

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Central Party Congress in May and National Assembly in June	Important information related to human resources as well as socio-economic development
ECB meets June 4 monetary policy, FED meets 9 - 10/6	Opinions on economy, policy orientation

Source: BSC Research

The market situation was out of our forecast when VN-Index dropped deeply below the support level of 873 points. The dropping effect spread from major markets, foreign investors saw strong net selling and weakening sentiment triggered wide-spread selling pressure. The market showed signs of oversold when the P/E VN-Index fell to 10, but the fundamental status of the stock has not been noticed when surrounded by many negative information from Covid-19. Based on quantitative models based on the statistics number of cure and new infections, we forecast epidemic peaks between April 22 and May 9, the worst case on June 8/2020 (Appendix pages 27-29). The VN-Index's trend in the second quarter is forecast to struggle and rebound gradually. The price fluctuation range is from 600 to 800 points. In March, the VN-Index is forecasted to fluctuate above 635 points in the first few weeks of April and clearly recover in the second half of April. The development of Corona virus in the world and Vietnam alogng with the economic support policies will determine the rebound's scale and scope.

- In a positive case, VN-Index accumulates over 635 points and may increase gradually by the end of April thanks to supportive information.
- In a negative case, the VN-Index continued to bottom out in the consolidation area of 535-635 lasting from 2014 to 2016 if the disease continued to develop netatively along with rising selling pressure from foreign investors.

Investors can refer to a number of topics, and updated reports in the month:

- Sectors and stocks are evaluated positively in the Sector Outlook Report 2020 (<u>Link</u>), Banking Sector Outlook Report (<u>Link</u>);
- Stocks with improvements and positive outlook such as Banking, Retail, Information Technology Postal and Telecommunications;
- Stocks benefiting from diseases such as Healthcare, Pharmaceutical;
- Highly defensive stocks and stock with high dividend payout;
- In the long-term, BSC's recommended stocks will be mentioned in Sector Outlook Report 2020, stocks with good changes are recommended in the Weekly Report (Link) and update report for Sector/Company (link).

Appendix: Quantitative models predicting COVID-19 epidemic peaks

The evolution of domestic epidemics depends on the general situation of the epidemic worldwide. Even now, Viet Nam is serious and prepared to deal with a complicated pandemic/ But only when global control of the epidemic is reached, it is sufficient to confirm that the situation in Vietnam is controlled both internally and externally. We update the worldwide peak epidemic forecast data in previous Quantitative reports, indirectly capturing the moment when the epidemic situation in Vietnam becomes more positive.

- **Approach 1:** Forecast of COVID-19 epidemic peak based on the ratio between the number of people cured during the day and the number of new infected people per day.

Forecast of peak epidemic: around 22/04/2020.

- **Approach 2:** The peak forecast for COVID-19 is based on event statistics.

Forecast of COVID-19 epidemic peak in base case: from 28/04/2020 - 09/05/2020.

Forecast of COVID-19 peak in the worst case: around 08/06/2020.

1. COVID-19 epidemic peak forecast is based on the proportion of people cured during the day and the number of new infections per day..

As mentioned in the previous COVID-19 report, BSC used a model based on the ratio of the number of people cured during the day to the number of new infections per day to predict the peak of COVID-19. We would like to repeat the model:

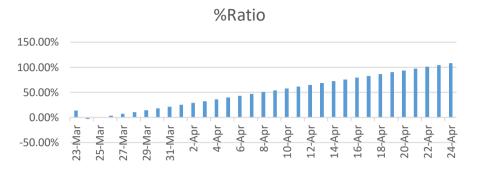
$$\frac{S \tilde{o} \text{ người được chữa khỏi trong ngày}}{S \tilde{o} \text{ người nhiễm mới trong ngày}} = R = \alpha + \beta R_{-1} + \gamma T$$

According to the previous report, the epidemic peak occurs when R = 100% and the peak epidemic estimated from that report is on August 13, 2020. However, the evolution of the COVID-19 epidemic was more positive than initially expected, when the R ratio reached over 100% quite early on February 21, and the disease worldwide from Feb 21 to March 5 also saw good changes when the number of new cases does not increase and the number of people cured is increasing day by day. But since March 6, the number of new infections has risen sharply, with the epidemic mainly located in European countries. As a result, the R rate has been reduced and the whole world started a new phase of COVID-19 epidemic. Therefore, we will now predict a new peak during this period, and the direction will be based on the peak of the first phase (from the beginning - February 21). Using the model above for that period of time, we get the following equation:

$$R = -0.04541 + 0.194048R_{-1} + 0.005816T$$

Estimate according to the above equation for the current period, we get the results R = 100% around April 22, 2020.

Forecasting the evolution of the R ratio is shown by the following graph:



Performing regression for the number of new cases (N) we obtain the following equation:

$$N = 5153.183 + 0.185712 * N_{-1} + 0.619859 * N_{-2}$$

Using the projection estimate for the above model, with a peak of epidemics on April 22, the total number of infected people that day was 1,138,279 (excluding China), if China included, it would fall into about 1.22 million.

The forecast method for this assessment has not been implemented for Vietnam yet because there is a need for the number of people to be cured during the day, while at present this figure in our country is still standing. If Vietnam starts to have more people cured, we could assess the peak of the epidemic in this way.

2. Forecast of peak epidemic COVID-19 based on event statistics

- a. Theoretical basis
- WHO declares a global emergency (PHEIC) at a time when a disease is determined to be contagious from person to person and begins to spread to the community of countries.
- Every pandemic, whether spreads quickly or slowly, has a specific breakout time and we can consider PHEIC as the time of the beginning of each outbreak and select it as a reference point. to estimate the referenced time since the epidemic was detected. 3 timeframe to be determined:
 - Time 1 (TĐ 1): The moment the outbreak began to be detected
 - Time 2 (TĐ 2): The time when WHO declared a global emergency (PHEIC)
 - Time 3 (TĐ 3): The time when the outbreak begins to be contained
- Determining the time proportion from Time 1 to Time 2 from Time 1 to Time 3 with past pandemics from which we could calculate the Time 3 of the Wuhan Flu pandemic to occur.

b. Statistics

Pandemic Name	Time 1: Pandemic began	Time 2: WHO declared a global emergency (PHEIC)	Time 3: Outbreak begins to be contained	Time proportion (Time 1-Time 2)
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					/(Time 1 to Time 3)
SARS 2003	11/02/2003	12/03/2003		28/04/2003	29/76
	Time 1 to Time	2 = 29 days	Time 1 to Time 3 = 76 days		= 38.16%
H1N1 2009	12/04/2009	11/06/2009		15/09/2009	60/156
	Time 1 to Time 2 = 60 days		Time 1 to Time 3 = 156 days		= 38.46%
Ebola 2014	18/03/2014	08/08/2014		17/07/2015	143/486
	Time 1 to Time 2 = 143 days		Time 1 to Time 3 = 486 days		= 29.42%
Zika 2015	5/2015	01/02/2016			
Ebola 2019	08/01/2018	17/07/2019			
COVID-19	08/12/2019	31/01/2020			

Mean = 35.34%

Median = 38.16%

c. Forecast

In our base case:

- Compared to the previous pandemics, the COVID-19 pandemic in 2020 has more similarities to the previous two pandemic Sars 2003 and 2009 H1N1 due to the same flu epidemic and the same mechanism of infection. Therefore, the time proportion of these 2 Pandemics is assessed to be similar to this time of the COVID-19 pandemic.
- So we can estimate the time from the time when the outbreak began until the moment WHO declared a global emergency: about 35.34% (Mean) 38% (Median) of the time since the outbreak until the epidemic is under control.
- The start of COVID-19 until when WHO declared a global medical emergency was 54 days (December 8, 2019 January 31, 2020). So the timeline for COVID-19 was determined to be about 142 153 days.

The time of COVID-19 outbreak to be under control (epidemic peak) is expected from April 28, 2020 to May 9, 2020.

In our worst case scenario:

- In the worst case scenario, the epidemic would continue for a long time. We can estimate the time from the time of epidemic start to the time when WHO declared the global emergency state accounted for 29.42% (estimated by data of Ebola 2014), from the time the outbreak occurred to the time the epidemic was controlled.
- With the above ratio, we can estimate the time period from the start of the epidemic to the time of epidemic under control is 183 days.
 - The first day of outbreak detection was 08/12/2020

The time when the epidemic under control (peak) is expected on June 8, 2020.



Disclosure

The information, statements, forecasts and projections contained herein, including any expression of opinion, are based upon sources believed to be reliable but their accuracy completeness or correctness are not quaranteed. Expressions of opinion herein were arrived at after due and careful consideration and they were based upon the best information then known to us, and in our opinion are fair and reasonable in the circumstances prevailing at the time. Expressions of opinion contained herein are subject to change without notice. This document is not, and should not be construed as, an offer or the solicitation of an offer to buy or sell any securities. BSC and other companies in the BSC and/or their officers, directors and employees may have positions and may affect transactions in securities of companies mentioned herein and may also perform or seek to perform investment banking services for these companies. This document is for private circulation only and is not for publication in the press or elsewhere. BSC accepts no liability whatsoever for any direct or consequential loss arising from any use of this or its content. The use of any information, statements forecasts and projections contained herein shall be at the sole discretion and risk of the user. No part of this material may be (i) copied, photocopied or duplicated in any form by any mean or (ii) redistributed without the prior written consent of BIDV Securities Company (BSC).

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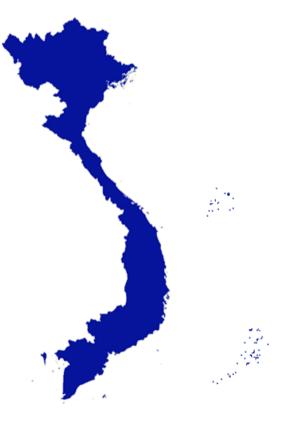
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