Outlook for Japanese Economy & Stock Market

Monthly comments & views by Sumitomo Mitsui DS Asset Management (SMDAM)

-June 2020-
Executive summary

- Japanese Economy
  Global economy is gradually starting again according to SMDAM’s GDP simulation using Apple’s Mobility Index. People’s mobility and estimated GDP are recovering comparatively faster in countries such as France, Germany and US, which experienced severe impact from COVID-19 and also started lifting of lockdowns relatively early. Japan has been forming a bottom from late April and the bottom level, -7.9% was noticeably milder than double digits in other countries, which was because lockdown in Japan was softer than other countries. Recovery of Japan’s mobility and GDP is forecast to gather pace going forward since easing of lockdowns has just started from late May. (Page 4)

  - In April, Japan once looked destined for a burst of infection similar to US, however, number of infection cases significantly calmed down in May and number of fatalities per 100 thousand population is less than 1, which is in a league of the smallest in world comparison. Japan has achieved this without strong compulsory lockdowns but request based soft lockdowns. (Page 7)
  
  - BOJ held extraordinary monetary policy committee meeting on 22nd May and decided to add measures for providing funding to businesses through banks. When banks make government initiated zero-interest-rate-unsecured-loans to small & mid businesses, BOJ will give 0.1% interest to each bank and also increase exemption amount from charging negative interest rate. (Page 5)

- Japanese Stock Market
  Soft lockdown in Japan is going to be lifted from the remaining 5 prefectures including Tokyo at the end of May and gradually improving economic activities will support the stock market. Stock valuation has rebounded to a mid point of the historical range in PE Ratio and considering further down-revision in earnings forecast, stock market has got a little optimistic, which could limit further upside for a while. (Page 19)

  - SMDAM simulated 12M forward EPS forecast to bottom in December 2020 at 96.2 for TOPIX. Given 12 times PE ratio as the lower end of the stock valuation, around 1200 in TOPIX, which was the latest bottom hit in March seems reasonable as a solid supporting level. (Page 19,22)
Outlook for Japanese Economy
Outlook for the global economy

- SMDAM down-revised global real GDP forecast for 2020 from -2.1% to -3.0% as a main scenario, due mainly to worse than expected emerging economies and lower than expected medical consumption as medical services other than COVID-19 were put aside.
- GDP forecast for 2021 was up-revised from 5.0% to 5.6%.
- Life with COVID-19 continues until effective vaccine is developed and become available worldwide. Global economy is expected to show recovery from June, however, the pace of recovery is going to be mild and with some setbacks when COVID-19 infection sporadically increases.

Notes: Data is from 2008 to 2021 and forecasts by SMDAM as of 22nd May 2020. (Source) IMF, National statistics of each country, compiled by SMDAM.
Global economy is gradually restarting by lifting of lockdowns

- Apple provides Mobility Index Data, which tracks level of peoples mobility. SMDAM made analysis between this Mobility Index and each nation’s released GDP, which is used for estimating the latest GDP status corresponding to the latest Mobility Index Data.

- In this estimation, GDP for top 30 countries (excluding China) hit bottom in 13th April deviating -11.9% from the baseline, and then recovered by +4.5% to -7.4% by 19th May, the latest date of available Mobility Index.

- People’s mobility and estimated GDP are recovering comparatively faster in countries such as France, Germany and US, which experienced severe impact from COVID-19 and also started lifting of lockdowns relatively early.

- Japan has been forming a bottom from late April and the bottom level, -7.9% was noticeably milder than double digits in other countries, which was because lockdown in Japan was softer than other countries. Recovery of Japan’s mobility and GDP is forecast to gather pace going forward since easing of lockdowns has just started from late May.

Estimated GDP % change from the baseline before the pandemic
(based on Apple Mobility Index)

<table>
<thead>
<tr>
<th>Date of bottom (Y/M/D)</th>
<th>Top 30 in GDP ex. China</th>
<th>United States</th>
<th>Japan</th>
<th>Germany</th>
<th>United Kingdom</th>
<th>France</th>
<th>Italy</th>
<th>Spain</th>
<th>South Korea</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Bottom (% chg.)</td>
<td>▲ 11.9</td>
<td>▲ 11.4</td>
<td>▲ 7.9</td>
<td>▲ 12.2</td>
<td>▲ 14.3</td>
<td>▲ 16.6</td>
<td>▲ 17.1</td>
<td>▲ 17.6</td>
<td>▲ 11.9</td>
</tr>
<tr>
<td>b) 19th May (% chg.)</td>
<td>▲ 7.4</td>
<td>▲ 5.0</td>
<td>▲ 7.0</td>
<td>▲ 4.4</td>
<td>▲ 10.4</td>
<td>▲ 7.8</td>
<td>▲ 12.0</td>
<td>▲ 13.5</td>
<td>▲ 9.0</td>
</tr>
<tr>
<td>b)-a)</td>
<td>+ 4.5</td>
<td>+ 6.4</td>
<td>+ 0.9</td>
<td>+ 7.8</td>
<td>+ 3.9</td>
<td>+ 8.8</td>
<td>+ 5.1</td>
<td>+ 4.1</td>
<td>+ 2.9</td>
</tr>
</tbody>
</table>

Note: SMDAM analyzed correlation between Apple’s mobility index data and released GDP data, and exponentially estimated the GDP status corresponding to the latest mobility index data in a % change from the baseline GDP, which was the trend line prior to the COVID-19 pandemic.

(Source) Apple, National statistics of each country, estimation by SMDAM
Global central banks are in emergency mode

- Central banks are determined to do almost everything they can do in order for avoiding financial meltdown stemming from COVID-19 pandemic. Another focus is on providing lifelines to households and businesses gasping for cash in the face of job losses and evaporating sales. FRB started to purchase corporate bonds and facilitated various routes for financing businesses. Governments are taking measures for helping both households and businesses.

- BOJ held extraordinary monetary policy committee meeting on 22nd May and decided to add measures for providing funding to businesses through banks. When banks make government initiated zero-interest-rate-unsecured-loans to small & mid businesses, BOJ will give 0.1% interest to each bank and also increase exemption amount from charging negative interest rate.

![Graph showing YoY change (%) of assets in central banks' B/S](image)

Note: Data is from Jan 2010 to 20th Mar 2020. (Source) Bloomberg, each central bank, compiled by SMDAM.
Volatility in long-term yields has calmed down

- Global bond markets have stabilized owing to very much pro-active monetary easing by central banks including massive quantitative easing by FRB in US.

(Source) Datastream
SMDAM Japanese economic outlook for FY20-21

- SMDAM down-revised GDP forecast from -4.8% to -6.1% as the nationwide state of emergency was extended by 3 weeks in May. Forecast for FY 2021 was revised upward from +2.7% to +3.6%.

- Until an effective vaccine is developed and become available worldwide, life with COVID-19 continues. Japan may be able to show a model case of such life as it requires social responsibilities by individuals not to spread infection.

- In April, Japan once looked destined for a burst of infection similar to US, however, number of infection cases significantly calmed down in May and number of fatalities per 100 thousand population is less than 1, which is in a league of the smallest in world comparison. Japan has achieved this without strong compulsory lockdowns but request based soft lockdowns.

<table>
<thead>
<tr>
<th>(YoY %)</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
<th>FY20E</th>
<th>FY21E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP growth</td>
<td>0.9%</td>
<td>1.9%</td>
<td>0.3%</td>
<td>-0.1%</td>
<td>-6.1%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Private Consumption Expenditure</td>
<td>0.0%</td>
<td>1.1%</td>
<td>0.1%</td>
<td>-0.6%</td>
<td>-6.6%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Private Housing Investment</td>
<td>6.3%</td>
<td>-1.4%</td>
<td>-4.9%</td>
<td>0.3%</td>
<td>-9.4%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Private Capital Investment</td>
<td>-0.4%</td>
<td>4.3%</td>
<td>1.7%</td>
<td>-0.9%</td>
<td>-13.8%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Public Consumption Expenditure</td>
<td>0.7%</td>
<td>0.3%</td>
<td>0.9%</td>
<td>2.4%</td>
<td>1.8%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Public Capital Investment</td>
<td>0.6%</td>
<td>0.5%</td>
<td>0.6%</td>
<td>3.3%</td>
<td>2.1%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Net Exports (contrib. to GDP growth)</td>
<td>0.8%</td>
<td>0.5%</td>
<td>-0.1%</td>
<td>-0.2%</td>
<td>-0.6%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Exports</td>
<td>3.7%</td>
<td>6.4%</td>
<td>1.7%</td>
<td>-2.7%</td>
<td>-19.5%</td>
<td>9.0%</td>
</tr>
<tr>
<td>Imports</td>
<td>-0.9%</td>
<td>3.9%</td>
<td>2.5%</td>
<td>-1.7%</td>
<td>-15.6%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Nominal GDP</td>
<td>0.8%</td>
<td>2.0%</td>
<td>0.1%</td>
<td>0.7%</td>
<td>-4.4%</td>
<td>4.1%</td>
</tr>
<tr>
<td>GDP Deflator</td>
<td>-0.2%</td>
<td>0.1%</td>
<td>-0.2%</td>
<td>0.8%</td>
<td>1.7%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Industrial Production</td>
<td>0.8%</td>
<td>2.9%</td>
<td>0.3%</td>
<td>-3.6%</td>
<td>-14.4%</td>
<td>6.7%</td>
</tr>
<tr>
<td>CPI (excl. fresh food)</td>
<td>-0.2%</td>
<td>0.7%</td>
<td>0.8%</td>
<td>0.4%</td>
<td>-0.9%</td>
<td>-0.1%</td>
</tr>
</tbody>
</table>

Note: E=SMDAM forecasts. SMDAM views are as of 22nd May 2020 and subject to updates thereafter without notice. (% YoY except Net Exports)
(Source) Cabinet Office, Bank of Japan, Ministry of Economy, Trade and Industry, Ministry of Internal Affairs and Communications, SMDAM forecasts
Japanese GDP is forecast to dip sharply in 2Q of 2020

- Japanese GDP for Jan-Mar quarter was -3.4% (QoQ % annualized), slightly better than preceding forecast. However, SMDAM’s forecast for Apr-Jun GDP was further revised-down from previous -22.5% to -29.9% (QoQ % annualized) due to underlying weakness in economic activities, followed by Jul-Sep recovery at +18.1% as restriction on peoples mobility is going to be lifted.

- Fiscal stimulus measures currently amounting to 117 trillion yen is going to be further added.

Note: SMDAM views are as of 22nd May 2020 and subject to updates thereafter without notice
(Source) Cabinet Office, Bank of Japan, Ministry of Economy, Trade and Industry, Ministry of Internal Affairs and Communications, SMDAM forecasts
Fiscal stimulus measures to combat COVID-19 pandemic amount to 117 trillion yen, among which real budget spending is also large at 48.4 trillion yen. Further top-up is expected as life with COVID-19 continues.

Most of the spending is for maintaining employment and businesses, for which budget spending size is 30.8 trillion yen. For individuals, 100 thousand yen per head is going to be distributed to all residents and also zero interest rate loans for businesses are going to be provided. However, speed of implementing measures is too slow. For many businesses, especially small ones in service industries, sales have declined typically by 80% or 90% and they are desperate for cash. Swift rescue operation is really required.

<table>
<thead>
<tr>
<th>(Trillion yen)</th>
<th>Fiscal stimulus measures in Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total size of the project</td>
</tr>
<tr>
<td>1) Enhancing quarantine &amp; medical treatment, and developing drug &amp; vaccine</td>
<td>2.5</td>
</tr>
<tr>
<td>2) Maintaining employment and businesses</td>
<td>80.8</td>
</tr>
<tr>
<td>3) Spending for boosting economic recovery</td>
<td>8.5</td>
</tr>
<tr>
<td>4) Enhancing economic &amp; social platform</td>
<td>15.7</td>
</tr>
<tr>
<td>5) Reserve for additional measures</td>
<td>1.5</td>
</tr>
<tr>
<td>Total</td>
<td>117.1</td>
</tr>
</tbody>
</table>

Note: As of 24th Apr. 2020
(Source) Cabinet Office, compiled by SMDAM
Business sentiments show varied impact and future prospects

- Non-manufacturing PMI rebounded in May though still at much depressed level. May 2020 survey was made between 12th and 19th May and prospect of lockdown lifting should have supported this rebound.

- Manufacturing PMI continued to decline in May. Looking into components, supply chain disruption has eased, probably due to manufacturing activities restarted in Main Land China and Taiwan. However, New orders showed large decline as well as production.

- Demand from overseas is still depressed and it will take a while until exports start to come back.

Note: Data is from Jun. 2017 to May. 2020.
Source: IHS Markit, BOJ, compiled by SMDAM.
BOJ Tankan Business Survey shows varying impact of COVID-19

The BOJ Tankan Business Survey in March showed clear impact of COVID-19 pandemic on various industries’ business sentiments. Worst affected were such as “Accommodation, restaurants & bars”, “Individual services”, “Transport” and “Textiles” all severely affected by people staying at home. On the other hand, “Communication” and “Information services” were positive examples, for which increase in remote-working is beneficial.

(Source) Bank of Japan
Economy Watcher Survey hit historical low

- Economy Watcher Survey covers people working at economic sensitive jobs. April current condition DI sharply deteriorated from the previous month and renewed a historical low at 7.9 point.

- Future condition DI was 16.6, higher than the current condition DI, which probably implies that people are expecting the worst to be over in the coming 2 to 3 months when COVID-19 pandemic gradually eases.

- The state of emergency was lifted in many areas and still continuing Tokyo & surrounding prefectures as well as Hokkaido will also see lifting of the state of emergency and loosening of restrictions on peoples mobility soon.

Note: Data is from Jan. 2012 to Apr. 2020. DI above 50 means condition is better than preceding 2 to 3 months. (Source) Cabinet Office
Employment in Japan is still holding

- As a long-term trend, total wage payment in Japan keeps growing due mainly to increasing number of employees. Number of female workers are further increasing and also elder people are extending retirement age. This picture has not changed so far until March despite the fact that Japan has been in an economic contraction since October last year due to consumption tax hike and natural disasters.

- However, COVID-19 has caused a severe economic contraction and employment is under a strong stress. Job vacancy/applicants ratio further declined in March as a worrying sign.

- More than 40% are working on a short-term contract basis and vulnerable to current difficult economic environment.
COVID-19 pandemic is overwhelming other events

- Attempts to loosen lockdowns will have most influential developments in the coming months.
- At the National People’s Congress, China announced its intention of tightening governance on Hong Kong, which is worrying. Political conflicts surrounding China could see a resurgence.

### Upcoming key events

<table>
<thead>
<tr>
<th>Month</th>
<th>Region/Country</th>
<th>Events</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>China</td>
<td>22- National People’s Congress</td>
<td></td>
</tr>
<tr>
<td></td>
<td>US</td>
<td>Loosening lockdown begins.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Japan</td>
<td>Cash payment is made to all residents in Japan</td>
<td></td>
</tr>
<tr>
<td>June</td>
<td>Japan</td>
<td>1 Lockdowns are lifted and people's activities gradually come back. End of the government led incentive program for cash-less payments. 15-16 BOJ Monetary Policy Committee Meeting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>US</td>
<td>9-10 FOMC meeting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>G7</td>
<td>G7 summit meeting in US</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Middle East</td>
<td>OPEC meeting</td>
<td></td>
</tr>
<tr>
<td>July</td>
<td>Japan</td>
<td>1 BOJ TANKAN business survey (June survey)  Election for Tokyo Metropolitan Governor</td>
<td></td>
</tr>
<tr>
<td>August</td>
<td>US</td>
<td>National Convention (17-20 Democrats, 24-27 Republicans)</td>
<td></td>
</tr>
<tr>
<td>September</td>
<td>US</td>
<td>Debates begin between US presidential candidates</td>
<td></td>
</tr>
<tr>
<td>November</td>
<td>US</td>
<td>US presidential election</td>
<td></td>
</tr>
</tbody>
</table>

(Source) Various publications, assembled by SMDAM
Japan is still competitive in innovation, but has some weaknesses

According to World Economic Forum, Japan was ranked 8th in innovation among 137 economies, which is still competitive, however on a moderate declining trend. As a strength, R&D in Japan is largely led by companies and producing the largest number of patents in this ranking.

On the weak side, however, this company led R&D tends to be “progressive” rather than “innovative” and often lacks in global collaboration. Government initiative on innovation is stronger in economies such as US, Germany Singapore and China.

Facing with strong global competition in developing key technologies such as AI or Autonomous Driving Technology, Japanese companies are changing approach to more open and more collaborating with global partners.

Global Competitiveness Ranking of Innovation among 137 economies

<table>
<thead>
<tr>
<th>Innovation total</th>
<th>Switzerland</th>
<th>U.S.</th>
<th>Israel</th>
<th>Finland</th>
<th>Germany</th>
<th>Netherlands</th>
<th>Sweden</th>
<th>Japan</th>
<th>Singapore</th>
<th>Denmark</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity for innovation</td>
<td>1st</td>
<td>2nd</td>
<td>3rd</td>
<td>4th</td>
<td>5th</td>
<td>6th</td>
<td>7th</td>
<td>8th</td>
<td>9th</td>
<td>10th</td>
<td>28th</td>
</tr>
<tr>
<td>Quality of scientific research institutions</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>8</td>
<td>11</td>
<td>4</td>
<td>13</td>
<td>14</td>
<td>12</td>
<td>16</td>
<td>36</td>
</tr>
<tr>
<td>Company spending on R&amp;D</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>7</td>
<td>4</td>
<td>8</td>
<td>6</td>
<td>5</td>
<td>17</td>
<td>16</td>
<td>21</td>
</tr>
<tr>
<td>University-industry collaboration in R&amp;D</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>7</td>
<td>5</td>
<td>10</td>
<td>23</td>
<td>8</td>
<td>21</td>
<td>28</td>
</tr>
<tr>
<td>Gov't procurement of advanced technology products</td>
<td>37</td>
<td>2</td>
<td>11</td>
<td>20</td>
<td>6</td>
<td>19</td>
<td>17</td>
<td>23</td>
<td>5</td>
<td>39</td>
<td>10</td>
</tr>
<tr>
<td>Availability of scientists and engineers</td>
<td>12</td>
<td>2</td>
<td>6</td>
<td>1</td>
<td>11</td>
<td>19</td>
<td>20</td>
<td>8</td>
<td>9</td>
<td>44</td>
<td>29</td>
</tr>
<tr>
<td>PCT patents</td>
<td>3</td>
<td>10</td>
<td>6</td>
<td>4</td>
<td>7</td>
<td>9</td>
<td>2</td>
<td>1</td>
<td>12</td>
<td>8</td>
<td>30</td>
</tr>
</tbody>
</table>

Note: All numbers are rankings among 137 economies. Top 10 rankings are highlighted in green. Japan’s relative weakness is highlighted in orange.
Japanese society is changing slowly but steadily

- It may look slow or even stagnant from outside, but Japanese society is making necessary reforms.
- Many problems are stemming from deep rooted Japanese culture & social practice, which became apparent in the face of “aging population” and “innovative disruption”.
- Change of the deep rooted culture & practice should take time, however, it is making progress, and will eventually put Japan in an advantage over other advanced economies, which also have aging population lagging Japan.

**Aging population**

- Lifetime employment
- Seniority based compensation
- Rising social insurance costs
- Inefficient working practice
- Insufficient entrepreneurship
- Shortage of new technology professionals, etc.

**Innovative disruption**

**Forcing reform**

**Japanese companies**
Japanese society is changing slowly but steadily

### Examples of long-term social challenges and progressing solutions

<table>
<thead>
<tr>
<th>Source of problems</th>
<th>Challenges</th>
<th>Solutions</th>
</tr>
</thead>
</table>
| 1. Aging population | a) Pension system reform | ● Unconventional "macro-slide" has been implemented to curb pension payment increase referring to "low birth rate" and so on.  
● Encourage people to continue working into 70's.  
● Encourage people to shift saving to investments. (NISA*, DC) |
|                     | b) Labor shortage | ● Capital investment for enhancing labor efficiency. (FA, AI, IoT, autonomous driving car, renovating software, etc.)  
● Allowing more foreign workers.  
● Encourage people to delay retirement.  
● Support female workers. (increase nursery, etc.) |
| 2. Weak consumption propensity | c) Clearing peoples worry for the future life | ● Pension system reform.  
● Gradual adjustment of seniority based wage system to shift compensation from elderly to younger workers.  
● Increase of new generation companies.  
● Increase of young people working with non-seniority wage system. |
| 3. Rigid employment practice | d) Encouraging business structure reform | ● Elder people to retire or continue working at lower wage.  
● Gradual adjustment of seniority based wage system.  
● More fluid labor market enabling companies to make restructuring.  
● Young people are not expecting lifetime employments and focusing on building own career (already progressing). |
| 4. Inefficient working practice | e) Enhancing labor efficiency | ● Work style reform to progress. |
| 5. Insufficient entrepreneurship | f) Enhancing “challenge spirit”  
6. Shortage of new technology professionals | g) Education reform | ● Increase of successful new generation companies.  
● Increase of young people with skills of new technologies.  
● Young and talented people choose new generation companies rather than old & large firms (already progressing). |

Note: *NISA is “Nippon Individual Savings Account”. (Source) SMDAM
Outlook for Japanese Stock Market
Gradually lifting lockdowns will provide positive feelings

**SMDAM short-term view**
- Soft lockdown in Japan is going to be lifted from the remaining 5 prefectures including Tokyo at the end of May and gradually improving economic activities will support the stock market. Stock valuation has rebounded to a mid point of the historical range in PE Ratio and considering further down-revision in earnings forecast, stock market has got a little optimistic, which could limit further upside for a while.

**Longer-term outlook (6-months and beyond)**
- Lockdowns are gradually eased in advanced economies. Recovering economic activities will provide positive feelings and also massive amount of money created by monetary easing and fiscal aid is stimulating price of financial assets. SMDAM simulated 12M forward EPS forecast to bottom in December 2020 at 96.2 for TOPIX. Given 12 times PE ratio as the lower end of the stock valuation, around 1200 in TOPIX, which was the latest bottom hit in March seems reasonable as a solid supporting level.

Note: SMDAM’s projection is as of 22nd May 2020 and subject to updates without notice.
Base scenario & Upside / Downside risks for our forecasts

Our **Base Scenario** is assuming the following views:
- Lockdowns are lifted in 2Q 2020 and COVID-19 pandemic is largely contained by summer.
- Tokyo avoids hard lockdown and pandemic's impact on economic activity in Japan stays less severe than US or Europe.
- Severe tensions between US and China go on, however, US is going to avoid making a fatal blow to the global economy.
- US economy contracts in 2Q and start to make recovery from 3Q 2020.
- Japanese yen does not get extremely stronger beyond 100 yen against US$.
- Tension in the East Asia or Middle East does not get out of control.
- Central banks continue massive monetary easing and also large fiscal spending is made globally.

**Upside Risks** include:
- Outlook for COVID-19 pandemic gets brighter by such as progress in developing vaccine or drugs.
- US and China make significant concessions in the trade negotiations.
- Stronger-than-expected global growth.
- Denuclearization in Korean peninsula makes a visible progress.
- Japanese economy gets stronger than expected boosted by large fiscal spending.

**Downside Risks** include:
- COVID-19 pandemic continues throughout 2020. China, once seemed to have contained the virus, forced to lockdown cities again. Resurgence of COVID-19 infection forces lockdowns globally again.
- Global economy falls into a serious depression.
- Trade negotiation between US and China completely breaks up igniting a decades of power struggle.
- Seriously escalating geo-political tensions in Middle East & East Asia.
- Political turmoil flares up in US running up to US presidential election in 2020.
- Populism gains in Europe further destabilizing EU.

Note: SMDAM's projection is as of 22nd May 2020 and subject to updates without notice.
Global stock markets have bounced on loosening lockdowns

- Global stock market bounced back in April and further edged up on loosening lockdowns.
- For the performance for May so far, there was no big difference among the stock markets depicted on the chart below.

(Source) Datastream, MSCI and Tokyo Stock Exchange, compiled by SMDAM.
Downward earnings revision continues

- Analysts are down-revising EPS forecast and the consensus forecast by IBES fell to 107 for TOPIX as of 15th May, which is shown on the left hand chart.

- On the right hand chart, SMDAM has made a top down estimation of how 12M-EPS could move until Dec 2021 based on SMDAM’s main economic scenario, which assumes that COVID-19 calms down and lockdowns are gradually lifted. The global economy starts recovering from June, however, cautious life with COVID-19 continues. Result of the simulation could vary widely depending on the applied economic scenario, however, as an example, 12M-EPS is estimated to decline to 96.2 in December 2020 and then start to make recovery. Simulated 12M-EPS is 115.2 for Dec 2021.

Note: The simulation is based on SMDAM original trade momentum index and IBES consensus 12M forward EPS forecast. Future EPS forecast was exponentially estimated by the course of future trade momentum set by SMDAM’s economists using main economic scenario. IBES data is as of 1st May 2020.

(Source) IBES, simulation by SMDAM
Japanese stock market looks fairly valued considering SMDAM’s main scenario

- PE ratio (PER) for TOPIX bounced back from the recent slump under 11 times and, at the end of March, came back to 12 times which had been the lower end of the trading range since 2013. TOPIX edged up so far in May and PER increased to mid 13’s level, which is the mid point of the historical range.

- Assuming the simulated 12M-EPS on the previous page and taking 96.2 as the bottom, and also assuming the lower end of the historical trading range of 12 times PER, corresponding TOPIX is calculated as 1154.4 and the latest bottom around 1200 in March seems solid supporting level for TOPIX. Stock prices tend to overshoot and SMDAM’s economic scenario could be wrong, but this could be of some help in thinking about stock market valuation.

Note: Data is weekly from 5th Jan., 2011 to 15th May 2020. TOPIX was 1,453.77 at the end of the period.
(Source) Tokyo Stock Exchange, Datastream and IBES, compiled by SMAM
Individuals have been active in this year

- Selling from foreign investors continued.
- BOJ has scaled-up purchasing via ETF in March and April, however, calmed down in May due to long holiday period and also solid going of the Japanese stock prices.
- Individual investors have been actively purchasing since the start of 2020.

Note: Data is for Tokyo stock exchange and Nagoya stock exchange up to 15th May 2020. BOJ ETF figure is officially released data from BOJ. (Source) Japan Exchange Group, Bank of Japan
Advancing Corporate Governance Code and Stewardship Code

- Stewardship Code (SC) was set in February 2014. Investors are taking more pro-active approach in talking to the companies and exercising proxy voting rights. Financial Services Agency discloses the name of institutional investors, which publicly accepted SC.

- After inception of Corporate Governance Code (CGC) in June 2015, pressure has been increasing on companies to improve its governance, efficiency and shareholder returns.

- These two codes have been progressively reviewed and enhanced, and making visible impact on the corporate behavior and investors’ attitudes as shareholders.

- In the recent amendment of CGC, companies are required to explain the rationale of “cross holdings” or “strategic holdings” of other companies’ shares, which implicitly provide protection against takeovers and hostile shareholder actions, and is often negative for achieving shareholder value.

- SC was reinforced in March 2020 requiring investors to evaluate ESG factors.

---

| Total number of institutional investors, which publicly declared acceptance of the stewardship code |
|----------------------------------|--------|
| Trust banks                      | 6      |
| Investment management companies  | 191    |
| Insurance companies              | 23     |
| Pension funds                    | 53     |
| Others (include proxy voting advising companies) | 7      |
| **Total**                        | **280**|

(Source) Financial Services Agency
Business restructuring is progressing for Japanese companies

- Japanese companies are getting more and more willing to make positive business restructuring.

- Number of M&A deals between Japanese companies (IN-IN) rose from 2,174 in 2006 to 2,814 in 2018 and further to 2,987 in 2019, which is an evidence that business restructuring is progressing in Japan.

- Number of the deals of Japanese companies acquiring overseas businesses (IN-OUT) also rose from 421 in 2006 to 777 in 2018 and further to 824 in 2019.

Note: IN-IN means Japanese company acquiring Japanese one, OUT-IN is for Non-Japanese company acquiring Japanese company, and IN-OUT is for Japanese company acquiring non-Japanese company. (Source) RECOF and SMBC NIKKO Securities.
Behavior of Japanese companies are making positive changes

- Share buyback is getting popular among Japanese companies as one of the powerful tools for disposing of accumulated liquidity in the B/S and enhancing EPS growth as well as ROE.

- Dividends also renewed historical record in FY2018 and expected to increase further in FY2019 and onwards, however, the negative impact of COVID-19 has not yet been fully reflected.

Note: All listed firms. Dividend projections are Toyo Keizai estimates; share buybacks forecast is by Daiwa Securities. Data as of May 2020.
(Source) Toyo Keizai, QUICK, INDB, compiled by Daiwa Securities.
Please read this disclaimer carefully.

- This material is for non-Japanese institutional investors only.
- The research and analysis included in this report, and those opinions or judgments as outcomes thereof, are intended to introduce or demonstrate capabilities and expertise of Sumitomo Mitsui DS Asset Management Company, Limited (hereinafter “SMDAM”), or to provide information on investment strategies and opportunities. Therefore this material is not intended to offer or solicit investments, provide investment advice or service, or to be considered as disclosure documents under the Financial Instruments and Exchange Law of Japan.
- The expected returns or risks in this report are calculated based upon historical data and/or estimated upon the economic outlook at present, and should be construed no warrant of future returns and risks.
- Past performance is not necessarily indicative of future results.
- The simulated data or returns in this report besides the fund historical returns do not include/reflect any investment management fees, transaction costs, or re-balancing costs, etc.
- The investment products or strategies do not guarantee future results nor guarantee the principal of investments. The investments may suffer losses and the results of investments, including such losses, belong to the client.
- The recipient of this report must make its own independent decisions regarding investments.
- The opinions, outlooks and estimates in this report do not guarantee future trends or results. They constitute SMDAM’s judgment as of the date of this material and are subject to change without notice.
- The awards included in this report are based on past achievements and do not guarantee future results.
- The intellectual property and all rights of the benchmarks/indices belong to the publisher and the authorized entities/individuals.
- This material has been prepared by obtaining data from sources which are believed to be reliable but SMDAM can not and does not guarantee its completeness or accuracy.
- All rights, titles and interests in this material and any content contained herein are the exclusive properties of SMDAM, except as otherwise stated. It is strictly prohibited from using this material for investments, reproducing/copying this material without SMDAM’s authorization, or from disclosing this material to a third party.

Registration Number: The Director of Kanto Local Finance Bureau (KINSHO) No.399
Member of Japan Investment Advisers Association, The Investment Trusts Association, Japan and Type II Financial Instruments Firms Association
© Sumitomo Mitsui DS Asset Management Company, Limited