Outlook for
Japanese Economy & Stock Market

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

-May 2020-
Executive summary

> **Japanese Economy**

SMDAM down-revised global real GDP forecast for 2020 from +1.6% to -2.1% as a main scenario. Lockdowns in order for containing COVID-19 pandemic are causing severe disruption in the global economy. For Japan, forecast for Apr-Jun GDP was significantly revised-down from previous +0.7% to -22.5% (QoQ % annualized) as Japanese government has called a state of emergency and soft lockdown was implemented nationwide. Attempts to loosen lockdowns led by US and Europe will have most influential developments in the coming months. (Page 3,7,8)

- SMDAM made a simulation how global GDP develops in various cases. Most influential factor is how long and how strictly lockdowns continues. SMDAM estimates that one month extra hard lockdown would cut global GDP by 2 to 3 %. (Page 4)
- 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” and “Individual services” severely affected by people staying at home. On the other hand, “Communication was a positive example, for which increase in remote-working is beneficial. (Page 10)

> **Japanese Stock Market**

Japanese stock market is going to stay volatile on changing outlooks for COVID-19 pandemic situation. Nationwide soft lockdown in Japan is making large negative impact on economy and causing deep uncertainties on corporate earnings. Japanese stock valuation has reached a lower end of the historical valuation range even assuming mild EPS decline and recently reached trough below 1300 in TOPIX will provide a support level if gradual lockdown loosening proves successful. (Page 18)

- 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 can be contained in Apr-Jun quarter and economic recovery can be expected from July. Result of the simulation could vary widely depending on the applied economic scenario, however, as an example, 12M-EPS is estimated to decline to 109.2 in December 2020 and then start to make recovery. Simulated 12M-EPS is 130.1 for Dec 2021. (Page 21)

Notes: Macro and market views are as of 24th Apr. 2020, and subject to updates thereafter without notice.
Outlook for Japanese Economy
Outlook for the global economy

- SMDAM down-revised global real GDP forecast for 2020 from +1.6% to -2.1% as a main scenario. Lockdowns in order for containing COVID-19 pandemic are causing severe disruption in the global economy.

- China is expected to show recovery from Apr-Jun quarter, however, US, UK, Europe, Japan are all expected to see sharp decline in private consumption, industrial production and also private capital investments in Apr-Jun quarter. The pace of economic recovery will start from Jul-Sep quarter, however, real GDP for these advanced economy is forecast to show severe contraction in 2020.

- GDP forecast for 2021 was up-revised from 3.8% to 5.0%.

Notes: Data is from 2008 to 2021 and forecasts by SMDAM as of 24th Apr. 2020. (Source) IMF, National statistics of each country, compiled by SMDAM.
SMDAM made a simulation how global GDP develops in various cases. Common assumptions are that China starts recovering from 2Q. Impact of lockdown for all areas were assumed to be the same as experienced in China. Varying assumptions are the length of lockdown period. Case 1 assumes lockdown other than China ends in June and case 2 assumes lockdown ending in August. SMDAM assumes that 1 month extra lockdown cuts global GDP by 2 to 3 %.

Black dotted line on the chart is what happened at the last global financial crisis (GFC) started from 2008. Negative impact is deeper this time than GFC, however, speed of recovery after the lifting of lockdown is also faster than GFC.

**Estimated impact of the pandemic on the global real GDP (YoY %)**

<table>
<thead>
<tr>
<th>Assumptions</th>
<th>Case 1</th>
<th>Case 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pandemic</td>
<td>Pandemic calms down in 1Q in China. Peak is in 2Q for other areas.</td>
<td>Pandemic flares up again in 3Q and then calms down.</td>
</tr>
<tr>
<td>Lockdown</td>
<td>Lockdown in US &amp; Europe and soft one in Japan</td>
<td>Lockdown continues until August.</td>
</tr>
<tr>
<td>Chinese economy</td>
<td>Start recovering from 2Q and further lifted by fiscal measures in 2H.</td>
<td></td>
</tr>
<tr>
<td>Global consumption</td>
<td>Consumption goes down by -37.4% during lockdown. It recovers to 60% and to 80% of the pre-lockdown level in consecutive quarters after lifting lockdown.</td>
<td></td>
</tr>
<tr>
<td>Global CAPEX</td>
<td>CAPEX goes down by 50% during lockdown and keeps subdued for the entire 2020 despite mild recovery after lockdown is lifted.</td>
<td></td>
</tr>
<tr>
<td>Global employment</td>
<td>Employment declines and negatively affect private consumption.</td>
<td></td>
</tr>
<tr>
<td>Fiscal measures</td>
<td>Globally massive fiscal measures are taken.</td>
<td></td>
</tr>
</tbody>
</table>

Note: SMDAM’s estimates of COVID-19 impact on global real GDP growth calculated by using OECD Input-Output Tables. Historical Global GDP data is from IMF. GDP trend was calculated by SMDAM. Line of the global financial crisis was added by adjusting the timing when sharp decline in GDP started. “IMF” is forecast by IMF and annual data was distributed to quarters by SMDAM. All forecast and estimates are as of 24th April 2020.

(Source) IMF, OECD, compiled 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.

Note: Data is from Jan 2010 to 20th Mar 2020. (Source) Bloomberg, each central bank, compiled by SMDAM.
Bond yields declined in US on massive easing and slump in oil price

- US bond yields fell on multiple factors such as aggressive quantitative easing by FRB and decline in inflation expectations due to deteriorating outlook for economy and slump in oil price.
- Volatility in long-term bond yields calmed down globally at least for a while supported by aggressive easing by central banks.

Note: Weekly data from 10th Jan. 2014 to 22nd Apr. 2020. (Source) Datastream
Japanese GDP is forecast to dip sharply in 2Q of 2020

- Forecast for Apr-Jun GDP was significantly revised-down from previous +0.7% to -22.5% (QoQ % annualized) due to severe global economic disruption caused by COVID-19 pandemic and worsening infection in Japan. Japanese government has called a state of emergency on major cities first and then expanded nationwide later in April. Restriction on people’s mobility has been strengthened causing serious economic disruption.

- Fiscal stimulus measures advertised at 108 trillion yen had mostly been included in SMDAM’s previous forecast. Further 9 trillion yen of extra fiscal spending was added this time.

Note: SMDAM views are as of 24th Apr. 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
SMDAM Japanese economic outlook for FY19-21

- SMDAM significantly down-revised GDP forecast from -0.9% to -4.8%, meanwhile forecast for FY 2021 was revised upward from +1.2% to +2.7%.

- Expanding lockdown in US, Europe, UK and other countries are seriously slowing down economic activities globally. Japan once looked relatively successful in containing infection, however, the government declared a state of emergency, which is now nationwide, and made a strong demand to reduce people’s mobility.

- SMDAM assumes that mobility restriction is loosened by June and then economy to start recovering, however, one month delay of such loosening would further cut Japanese GDP by more than 3% for FY 2020.

<table>
<thead>
<tr>
<th>(YoY %)</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19E</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>-4.8%</td>
<td>2.7%</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>-4.6%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Private Housing Investment</td>
<td>6.3%</td>
<td>-1.4%</td>
<td>-4.9%</td>
<td>0.9%</td>
<td>-7.6%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Private Capital Investment</td>
<td>-0.4%</td>
<td>4.3%</td>
<td>1.7%</td>
<td>-0.8%</td>
<td>-12.8%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Public Consumption Expenditure</td>
<td>0.7%</td>
<td>0.3%</td>
<td>0.9%</td>
<td>2.5%</td>
<td>1.6%</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>3.2%</td>
<td>2.6%</td>
<td>4.9%</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>-0.4%</td>
<td>-0.0%</td>
</tr>
<tr>
<td>Exports</td>
<td>3.7%</td>
<td>6.4%</td>
<td>1.6%</td>
<td>-2.9%</td>
<td>-17.1%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Imports</td>
<td>-0.9%</td>
<td>3.9%</td>
<td>2.2%</td>
<td>-1.9%</td>
<td>-14.4%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Nominal GDP</td>
<td>0.8%</td>
<td>2.0%</td>
<td>0.1%</td>
<td>0.9%</td>
<td>-3.2%</td>
<td>3.2%</td>
</tr>
<tr>
<td>GDP Deflator</td>
<td>-0.2%</td>
<td>0.1%</td>
<td>-0.2%</td>
<td>0.9%</td>
<td>1.6%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Industrial Production</td>
<td>0.8%</td>
<td>2.9%</td>
<td>0.3%</td>
<td>-3.2%</td>
<td>-11.4%</td>
<td>4.6%</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>-1.0%</td>
<td>-0.1%</td>
</tr>
</tbody>
</table>

Note: E=SMDAM forecasts. SMDAM views are as of 24th Apr. 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
Fiscal stimulus in Japan

- 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.

- 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 and these money does not become available until mid May. 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.

### Fiscal stimulus measures in Japan

<table>
<thead>
<tr>
<th>(Trillion yen)</th>
<th>Total size of the project</th>
<th>Fiscal budget spending</th>
<th>Central &amp; local government budget</th>
<th>FY2020 supplementary budget</th>
<th>Fiscal Investment &amp; Loan Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Enhancing quarantine &amp; medical treatment, and developing drug &amp; vaccine</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>1.8</td>
<td>-</td>
</tr>
<tr>
<td>2) Maintaining employment and businesses</td>
<td>80.8</td>
<td>30.8</td>
<td>21.1</td>
<td>19.5</td>
<td>9.7</td>
</tr>
<tr>
<td>3) Spending for boosting economic recovery</td>
<td>8.5</td>
<td>3.3</td>
<td>2.8</td>
<td>1.8</td>
<td>0.5</td>
</tr>
<tr>
<td>4) Enhancing economic &amp; social platform</td>
<td>15.7</td>
<td>10.2</td>
<td>8.0</td>
<td>0.9</td>
<td>2.3</td>
</tr>
<tr>
<td>5) Reserve for additional measures</td>
<td>1.5</td>
<td>1.5</td>
<td>1.5</td>
<td>1.5</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>117.1</strong></td>
<td><strong>48.4</strong></td>
<td><strong>35.8</strong></td>
<td><strong>25.7</strong></td>
<td><strong>12.5</strong></td>
</tr>
</tbody>
</table>

Note: As of 24th Apr. 2020
(Source) Cabinet Office, compiled by SMDAM
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

(Points)
Economic Watcher Survey hit historical low

- Economy Watcher Survey covers people working at economic sensitive jobs. March current condition DI sharply deteriorated from the previous month and recorded a historical low at 14.2 point.

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

Note: Data is from Jan. 2012 to Mar. 2020. DI above 50 means condition is better than preceding 2 to 3 months. (Source) Cabinet Office
Short-term workers are vulnerable to sharp economic downturn

- As a long-term trend, total wage payment in Japan keeps growing due mainly to increasing number of employees even in such a tight labor market. Number of female workers are further increasing and also elder people are extending retirement age.

- However, COVID-19 has caused a severe economic contraction and employment is under a strong stress.

- Japan has been in an economic contraction since October last year due to consumption tax hike and natural disasters. Number of workers on short-term contracts has been declining since October except for an uptick in February, though simultaneous increase of long-term employees may indicate employment shift from short-term to long-term. Also Job vacancy/applicants ratio showed a large consecutive decline in January and February. 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.
- One positive thing is that meetings among global leaders can be set more flexibly and frequently on remote meeting basis.

Upcoming key events

<table>
<thead>
<tr>
<th>Month</th>
<th>Region/Country</th>
<th>Events</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>May</td>
<td>US-China</td>
<td>25 Report on Hong Kong Human Rights and Democracy Act</td>
<td></td>
</tr>
<tr>
<td></td>
<td>US</td>
<td>Loosening lockdown begins in some republican led states</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Japan</td>
<td>18 Jan-Mar 2020 GDP (first preliminary estimate)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cash payment is made to all residents in Japan</td>
<td></td>
</tr>
<tr>
<td>June</td>
<td>Japan</td>
<td>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)</td>
<td>Election for Tokyo Metropolitan Governor</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>a) 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>b) 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>c) 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>d) 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>e) 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>f) 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>g) 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**

**Japanese companies**

**Forcing reform**

**Hurdles for achieving business reform**
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”  
   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
How long and how hard lockdowns are going to stay?

- **SMDAM short-term view**
  - Japanese stock market is going to stay volatile on changing outlooks for COVID-19 pandemic situation. Nationwide soft lockdown in Japan is making large negative impact on economy and causing deep uncertainties on corporate earnings. US and Europe started attempts to gradually loosen lockdown and its developments will be the most influential events for stock markets. Japanese stock valuation has reached a lower end of the historical valuation range even assuming mild EPS decline and recently reached trough below 1300 in TOPIX will provide a support level if gradual lockdown loosening proves successful.

- **Longer-term outlook (6-months and beyond)**
  - If COVID-19 pandemic starts to ease and lockdowns are lifted by the end of 2Q 2020 in line with SMDAM’s main economic scenario, Japanese stock markets would make a sizable recovery afterwards. In such main scenario, 12M forward EPS forecast is simulated to bottom in December 2020 at 109 for TOPIX. Given 12 times PE ratio as the lower end of the stock valuation, 1300 level in TOPIX seems reasonable as a supporting level. If lockdown continues in 3Q and beyond, stock market outlook completely changes.
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 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.
- Global economy falls into a serious recession comparable to the last global financial crisis.
- 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 24th Apr. 2020 and subject to updates without notice.
Global stock markets have bounced on hope for loosening lockdowns

- Global stock market bounced back so far in April on a hope for loosening lockdowns. Rebounds in Europe has been relatively small.

- SMDAM assumes that one month extra lockdown would cut global GDP by as much as 2 to 3%. How long and how strongly lockdowns need to exist could completely change the scenario for global economy and stock markets.
Downward earnings revision continues

- Analysts are down-revising EPS forecast and the consensus forecast by IBES fell to 114 for TOPIX as of 16th April, 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 can be contained in Apr-Jun quarter and economic recovery can be expected from July. Result of the simulation could vary widely depending on the applied economic scenario, however, as an example, 12M-EPS is estimated to decline to 109.2 in December 2020 and then start to make recovery. Simulated 12M-EPS is 130.1 for Dec 2021.
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 moved sideways so far in April, however, PER slightly increased to mid 12’s due to decline in EPS forecast.

- Assuming the simulated 12M-EPS on the previous page and taking 109 as the bottom, and also assuming the lower end of the historical trading range of 12 times PER, corresponding TOPIX is calculated as 1308 which could be a 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 17th Apr, 2020. TOPIX was 1442.91 at the end of the period.
(Source) Tokyo Stock Exchange, Datastream and IBES, compiled by SMAM
Trust banks as a proxy of pension funds purchased Japanese equities

- Selling from foreign investors continued.
- BOJ has scaled-up purchasing via ETF. Trust banks, which are proxies of pension funds, made a sizable purchasing probably for rebalancing asset allocation after decline in equity weighting.
- Individuals made large purchasing in March and stay neutral so far in April.
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 |

Note: As of 13th Mar. 2020. (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.

*Note: All listed firms. Dividend projections are Toyo Keizai estimates, share buybacks forecast is by Daiwa Securities. Data as of Aug 2019. (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