World Economic Trends II
<The 2019 Autumn/Winter Report>
- World Economy amid Continuing U.S.-China Trade Tension, and Monetary Policy -

(Summary)

February 2020
Cabinet Office Government of Japan
The world economy is slowing down amid the continuing trade tension between the U.S. and China.
- Characterized by shrinking trade of goods and stagnation of manufacturing.

Moves toward further monetary easing are observed all around the world.
- As part of what they should address, major central banks have an issue of what policy measure and/or framework they should adopt to respond to changes in the structure of the economy and the financial sector.
1. Current state of U.S.-China trade tension (1)

(U.S.) (1) Additional tariff measures by U.S. and China (China)

<table>
<thead>
<tr>
<th>List</th>
<th>Date for imposing additional tariffs</th>
<th>What to do</th>
<th>Examples of items subject to tariffs</th>
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<th>What to do</th>
<th>Examples of items subject to tariffs</th>
</tr>
</thead>
<tbody>
<tr>
<td>List 1</td>
<td>July 6, 2018</td>
<td>Additional 25% tariffs on $34 billion worth of goods</td>
<td>Industrial machines, Electronic parts</td>
<td>List 1</td>
<td>July 6, 2018</td>
<td>Additional 25% tariffs on $34 billion worth of goods</td>
</tr>
<tr>
<td>List 2</td>
<td>Aug 23, 2018</td>
<td>Additional 25% tariffs on $16 billion worth of goods</td>
<td>Plastic products, Integrated circuits</td>
<td>List 2</td>
<td>Aug 23, 2018</td>
<td>Additional 25% tariffs on $16 billion worth of goods</td>
</tr>
<tr>
<td>List 3</td>
<td>Sep 24, 2018</td>
<td>Additional 10% tariffs &amp; additional 25% tariffs on $200 billion worth of goods</td>
<td>Food products, Furniture</td>
<td>List 3</td>
<td>Sep 24, 2018</td>
<td>Additional 5-10% tariffs &amp; additional 5-25% tariffs on $60 billion worth of goods</td>
</tr>
<tr>
<td>List 4</td>
<td>Sep 1, 2019</td>
<td>Additional 15% tariffs &amp; additional 7.5% tariffs on $120 billion worth of goods</td>
<td>Clothing, Television</td>
<td>List 4</td>
<td>Sep 1, 2019</td>
<td>5.0-10% &amp; additional 5-10% tariffs on $75 billion worth of goods*</td>
</tr>
<tr>
<td>Dec 15, 2019</td>
<td>Postponed</td>
<td>Additional 15% tariffs on $160 billion worth of goods</td>
<td>Mobile phones, Laptop computers</td>
<td>Dec 15, 2019</td>
<td>Postponed</td>
<td>5.0-10%</td>
</tr>
</tbody>
</table>

(*) Goods for the List 4 overlap with those for the List 2 and List 3 in 4% and almost 60%, respectively. Breakdowns between the starting months (Sep and Dec) are unavailable in value terms (1,717 and 3,361 items from Sep and Dec, respectively).

2. Current state of U.S.-China trade tension (2)

(3) Scale of additional tariffs imposed by the US on China

<table>
<thead>
<tr>
<th>($100 million)</th>
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</thead>
<tbody>
<tr>
<td>1,500</td>
</tr>
<tr>
<td>1,200</td>
</tr>
<tr>
<td>900</td>
</tr>
<tr>
<td>600</td>
</tr>
<tr>
<td>300</td>
</tr>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

- Implemented in 2018 List 3: Rate increase (10% to 25%) (May 10, 2019)
- List 3 (10%)
- List 4: Partially implemented (September 1)
- List 4 (15%)
- List 4 (Lowered from 15% to 7.5%)
- 0.09% of GDP
- 0.04% of GDP
- 0.06% of GDP
- 0.16% of GDP

(Note) Adapted from U.S. Department of Commerce. On the chart, ratios of GDP represent those of goods covered by additional tariffs to GDP of the US (2018).

4. 1st phase agreement

- The agreement states actions the US and China must take in 7 areas below:
  1. Intellectual property
  2. Technical transfer
  3. Agriculture
  4. Financial services
  5. Macroeconomic policies and exchange rate matters
  6. Expanding trade
  7. Dispute resolution

- For (6), they agreed China would increase imports of goods and services from the US by not less than $200 billion (*) in two years.

* Specifically, not less than $76.7 billion and $123.3 billion in 2020 and 2021, respectively, from the 2017 level. (In trade of goods & services with China, the US is expected to see a decline in the ratio of deficit to GDP (1.7% in 2017) by 0.4% and 0.6% in 2020 and 2021, respectively, from the 2017 level.)
Chapter 1 Section 1 World Economy amid Continuing U.S.-China Trade Tension

3. Slowdown of the World Economy (1) (Growth rate & Trade)

(1) Global real economic growth rate

In the current phase of slowing down, the growth rate stands almost at the same level as in the days of the European sovereign debt crisis and the Shanghai stock exchange crash.

(2) Global trade volume

A larger decline and a slower recovery than in the latest two slowdown phases.

4. Slowdown of the World Economy(2) (Business Confidence & Industrial Production)

(3) Global business confidence

A remarkably larger decline in manufacturing than in the latest two slowdown phases.

(4) Global industrial production

A smaller increase than in the latest two slowdown phases. A slower recovery as well.
Chapter 1 Section 1  World Economy amid Continuing U.S.-China Trade Tension

5. Outlook of the World Economy

(1) Outlook: Global growth rate

Growth rate forecasts for 2020 have been revised down as those for 2019. Recovery is slower than originally expected.

(2) Outlook: Global trade volume

In 2019, trade volume grew much slower than the economy. A slower growth is expected again for 2020.


(1) No. of countries & regions that changed the policy interest rate (G20)

Since April 2018, many countries and regions had been in a phase of interest-rate increase, before most of them started rate cuts in 2019.

(2) Risk factors in the global economy

- Developments of trade issues
  - Between US & China and US & Europe (aircraft, automobile, digital services tax)

- Outlook of the Chinese economy
  - Economic stimulus measures, the issue of excessive debt, and impact of the spread of novel coronavirus infection.

- Withdrawal of the U.K. from the EU
  - FTA negotiations between the U.K. and the EU during the transition period through the end of 2020.

- Fluctuations in financial & capital markets
  - Stock price & situation in the Middle East (crude oil price)
Chapter 1 Section 2  Developments of Monetary Policy and Its Challenges [The United States]

1. Developments of Monetary Policy and Its Challenges: The United States (1)

After so-called quantitative easing, the regime of "scarce reserves" regime was replaced by that of "ample reserves".

Fluctuations in the FF and repo rates in September 2019

With rapid increases in short-term interests rate in mid-September 2019, the FF rate went above the target range. The FRB engaged in repo transactions to supply funds and purchased treasury bills.

The floor (and sub-floor) system for guiding the operational target rate

With the shift to rate cuts in July 2019, the Fed stopped unwinding its balance sheet. Rates were cut again in Sep & Oct 2019, unchanged in Dec 2019 and Jan 2020.

2. Developments of Monetary Policy and Its Challenges: The United States (2)

Changes of methods for controlling interest rates

Challenge 1: Ways to control short-term interest rates

(Notes) 1. Adapted from FRB.

2. The repo rate represents interest rates for repo transactions with undesignated items of bonds (overnight). A repo transaction refers to borrowing (lending) of short-term funds by selling (buying) bonds with buy-back (sell-back) conditions.

3. On September 17, interest rates reportedly went above 10% at some repo transactions.
Developments of Monetary Policy and Its Challenges: The United States (3)

3. Developments of Monetary Policy and Its Challenges: The United States (3)

(5) Natural rate of interest

The natural rate of interest fell sharply in the late 2000s. In this situation, the policy interest rate is more likely to reach the effective lower bound (ELB).

(6) Phillips curve

The Phillips curve flattened after the global financial crisis. Stabilizing the expected inflation rate has become more critical.

(7) Challenge 2: Reconsidering the framework for monetary policy

- To respond to the "New Normal," characterized by low interest rate, low inflation, and low growth, reconsider strategies, methodologies, and communication for monetary policy.
  - Since Feb 2019, events called "Fed Listens" have been given by Federal Reserve Banks.
  - The FOMC also started discussions in mid-2019, targeting at releasing conclusions around mid-2020.

  (1) Whether to adopt a “makeup strategy”
  - Examine, from the viewpoint of trust, whether to compensate for any shortfalls of inflation from a target with overshoots in future.
  - Specifically, the Fed considers whether to set the average rate of inflation over a certain period as a target (average inflation targeting) or set a target path for the level of prices (price level targeting), against which past shortfalls should be taken into evaluation.

  (2) Relevance of current tools of monetary policy, and addition
  - Among the current tools, release of the target range of the FF rate, balance sheet policy, and forward guidance are under review.
  - As additional tools, yield curve control and negative interest rate, among others, are examined. (At its meeting in October 2019, the FOMC discussed negative interest only skeptically as an option they could adopt in the current state of the economy.)

  (3) Improve communication
  - Forward guidance and economic projections of FOMC members (including dot plots representing their forecast of interest rates) are under review.
Chapter 1 Section 2  Developments of Monetary Policy and Its Challenges [Eurozone]

1. Monetary policy in the Eurozone (1)

(1) The corridor system for guiding the operational target rate

(2) Challenges

In Sep 2019, the ECB decided to lower the interest rate of deposit facility (lower limit of the corridor) further into the negative range and resume its asset purchase program.

(1) Restrictions on further lowering of negative rates
- Smaller margins that force banks into lower profitability.
- Possibility of reaching a "reversal interest rate," where monetary easing leads banks to lend less.

(2) Medium and long-term restrictions on asset purchase programs
- Shortage of Germany government bonds with its public finance getting more balanced. (Purchases are restricted out of consideration for the issue of monetary financing.)

(3) Review of monetary policy strategy
- To be performed from Jan 2020 through the year-end.
- Definition of price stability, communication, and climate change, among others, will be put on the table.

2. Monetary policy in the Eurozone (2)

(3) Bank lending in the Eurozone

So far, the negative rate policy has caused no observed decline in bank lending.

(4) Yield spreads between 10-year Germany government bond and OIS

Spreads are narrowing between the indicators, suggesting shortage of Germany government bonds available in the market.

(Notes) 1. Adapted from Bloomberg.
2. EONIA: Euro OverNight Index Average rate.
3. Excess liquidity equals to the use of the deposit facility less the use of the marginal lending facility plus excess reserves.

(Notes) 1. Adapted from Bloomberg.
2. Overnight Index Swap (OIS) refers to interest rate swap transactions where overnight and fixed rates are exchanged. Fixed rates for OIS transactions are regarded as representative yield of safe assets like yields of German national bonds.
Chapter 1 Section 2 Developments of Monetary Policy and Its Challenges [China]

1. Developments of Monetary Policy and Its Challenges: China (1)

(1) Reserve requirement ratio

In May 2019, reserve requirement ratios were consolidated into three tranches, those for large, medium, and small-sized financial institutions, with abolition of several varieties left exceptionally for smaller ones.

The reserve requirement ratios were lowered in Jan and Sep 2019 and again in Jan 2020.

(Note) Adapted from PBC. Until April 2019, several different ratios had been set exceptionally for certain types of smaller financial institutions. They are omitted on the chart above. In 2018, ratios were lowered not only for large banks but also some of the medium and small ones (in April, July, and October). So, the series of "For medium and small-sized financial institutions" from April 2018 is shown in a dotted line.

(2) Challenges

(1) Interest rate liberalization
- A state of "dual-track interest rate," where the benchmark and market rates stand together.
- Banks conventionally refer to benchmark rates.

(2) Independence of the central bank
- The People's Bank of China (PBC) reports to the State Council.
- The IMF has pointed out the PBC's lack of independence in policy decision making as a lever of monetary policy factor that leaves the Bank unable to use communication.

2. Developments of Monetary Policy and Its Challenges: China (2)

(3) Lending interest rate

In Aug 2019, the PBC started releasing a new Loan Prime Rate (LPR), calculated in a revised way to reflect market rates, allowing banks to lower lending rates.

(4) Future scheme: Operational target rate and corridor system

The PBC considers shifting to a corridor system using the weighted average of 7-day interbank repo rates as operational target rate, the standing lending facility (SLF) as ceiling, and the interest rate on excess reserves as floor.
Chapter 2  Economic Trends in Major Regions [U.S Economy]

In the U.S., despite declines in private-sector capital investment for three consecutive quarters, economic recovery continues supported by steady consumer spending in favorable employment and income conditions. However, careful watch must be kept on developments in corporate debt, fiscal and trade policies, and other issues.

1. Trends of the U.S. Economy (1)

1.1 Real economic growth rate

- Supported by steady consumer spending, growth continues almost at the potential growth rate.

1.2 Consumption

- Kept steady in favorable employment and income conditions.

1.3 Investment

- Declines for three consecutive quarters.

2. Trends of the U.S. Economy (2)

(1) Real economic growth rate

(QoQ contribution, % (annualized))

(2) Consumption

(YoY, %)

(3) Investment

(QoQ, (%) annualized)

(4) Corporate debt (% of GDP)

- Through the long phase of economic growth (127 months as of Jan 2020), corporate debt has reached the highest level ever.

(5) Fiscal policy

- Ceiling of expenditure under the 2019 BBA

- Ceiling of expenditure under the Budget Control Act of 2011

(6) Trade policy (Major issues except for China)

- <U.S. - Mexico - Canada Agreement (USMCA; new NAFTA)>
  - Nov 2018 • Signed by the three countries.
  - Jun 2019 • Ratified by Mexico.
  - December • Revised Agreement accepted by U.S. Democrats (more strict supervision of labor standards in Mexico, etc.), before signed by the three.
  - January 2020 • Ratified by the U.S.
- <Others>
  - Additional taxes (Oct 2019) and raised rates imposed on the EU on ground of subsidies granted to Airbus.
  - (Coming into force in March 2020)
Chapter 2  Economic Trends in Major Regions [Chinese Economy]

In China, gradual slowdown of the economy continues. Not only external but also domestic demand remains stagnant. Inflation, seen in core consumer price and producer prices, shows a downward trend. However, rising prices of food products, especially pork, work as a factor pushing up inflation.

1. Trends of the Chinese Economy (1)

(1) Real economic growth rate
(2) Consumption
(3) Passenger car sales

Fixed asset investment remains weak.

Consumption, especially passenger car sales, continued to slow down.

In late 2019, economic growth continued slowing down.

Inflation is on a downward trend, though food prices are rising amid African swine fever (ASF) epidemic.

2. Trends of the Chinese Economy (2)

(4) Fixed asset investment
(5) Consumer price inflation
(6) Producer price inflation

Fixed asset investment remains weak.

Nominal and real economic growth rates.

Inflation is on a downward trend, though food prices are rising amid African swine fever (ASF) epidemic.
Growth of the Chinese economy has been trend down on a medium and long-term basis. The IMF expects its growth rate will slow down to 4.0 - 4.5% by 2030, especially with the tertiary industry making up more of the economy. In the long term, aging population is another factor that will weigh on growth.

3. Medium & long-term growth trend of the Chinese economy (1)

- Real economic growth rate
- Shares of industries in nominal GDP
- Shares of demand items in nominal GDP
- Working-age population ratio
- Population aging ratio

- Growth of labor productivity is expected to slow down with a shift in the industrial structure from the secondary to the tertiary industry, and China's catching up with developed economies.
- China's effort to rebalance from investment to consumption after the global financial crisis was likely to help the tertiary industry grow faster.

4. Medium & long-term growth trend of the Chinese economy (2)

- Average growth rate fell sharply in the 2010s.
- Working-age population ratio
- Population aging ratio

- Working-age population is expected to start falling in 2015.

(Notes) Adapted from United Nations "World Population Prospect 2019."
2. Figures for 2021 onwards are medium variant projection.

(Year) Adapted from National Bureau of Statistics of China.
Despite relative steadiness in consumption, the Eurozone finds slowing down of external demand and stagnant manufacturing leave the economy in weak recovery. Recovery is also weak in the U.K. as uncertainty concerning its withdrawal from the EU results in fluctuations in import and export and depressed investment.

1. Trends of the Eurozone Economy

1.1 Real economic growth rate
   Consumer spending remains rather strong.

1.2 Industrial production of major countries
   Weakness is evident in Germany, dependent heavily on export and manufacturing.

1.3 Manufacturing & Services PMI
   Despite continuing falls among manufactures, the services sector remains rather strong.

2. Trends of the U.K. Economy

2.1 Real economic growth rate

2.2 Investment intentions of companies
   Uncertainty concerning withdrawal of the U.K. from the EU discourages companies to invest.

2.3 Manufacturing & Services PMI
   Uncertainty concerning withdrawal of the U.K. from the EU leaves the services sector, including financial industry, in weakness.