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Japan's Economy: Monthly Outlook (Apr 2018)

How will Japan's economy and corporate performance fare in US-China tariff dispute? Root cause of turmoil in the financial markets

Economic Research Dept.
Shunsuke Kobayashi
Yota Hirono

Summary

- The Trump administration has further strengthened its hardline stance in regard to trade policy. The most constructive thing that countries holding large trade surpluses with the US can do is to make concessions either by further liberalizing their markets so as to increase imports, or by increasing import substitution production at their facilities in the US accompanying investment in the US. Measures such as these provide at least some hope that negative scenarios for the global economy associated with trade negotiations can be avoided. However, considering the fact that US political intentions may be given priority over economic rationality (for instance the importance of showing that progress has been made during the midterm elections, and the importance of preventing the rise of China as a means of maintaining US hegemony), the possibility can't be denied that the game of chicken currently playing itself out under US leadership could continue.
- In this report, we thoroughly examine the impact of trade policies which are currently planned on Japan's economy and on Japanese corporate earnings. Largely speaking, the ways in which impact could be felt include (1) exports of Japanese corporations to the US (iron & steel, aluminum, etc.), (2) exports of Japanese corporations located overseas (China→US and US→China), (3) side effects associated with slowdown in US and Chinese economies related to introduction of tariffs, and (4) substitution exports from Japan associated with reduction in US-China trade (i.e. Japan profiting from US-China dispute). According to the results of our calculations, impact associated with all four of the above factors on Japan's economy and Japanese corporate performance is expected to be limited overall.
- The impact of whatever trade policies the US and China may put into motion on the economy and on corporate earnings will be limited, whether in the case of Japan, the US, or China. Even so, the reaction on the financial markets is major. There are three factors at play here: (1) uncertainty as regards the outlook for US policy (what is the real intention of the White House?), (2) downward revision of the global economy's growth rate due to expectations which were too high, and (3) the requirements of central banks' exit strategies (reduction in supply of liquidity). In order for the appetite for risk to return, one of the following catalysts would be required: (1) uncertainty surrounding trade policy recedes, (2) downward revision of outlooks for the global economy becomes scarcer, and (3) fears of an interest rate hike in October 2018 or later are done away with.

1. How will Japan's economy and corporate earnings fare in US-China tariff dispute?

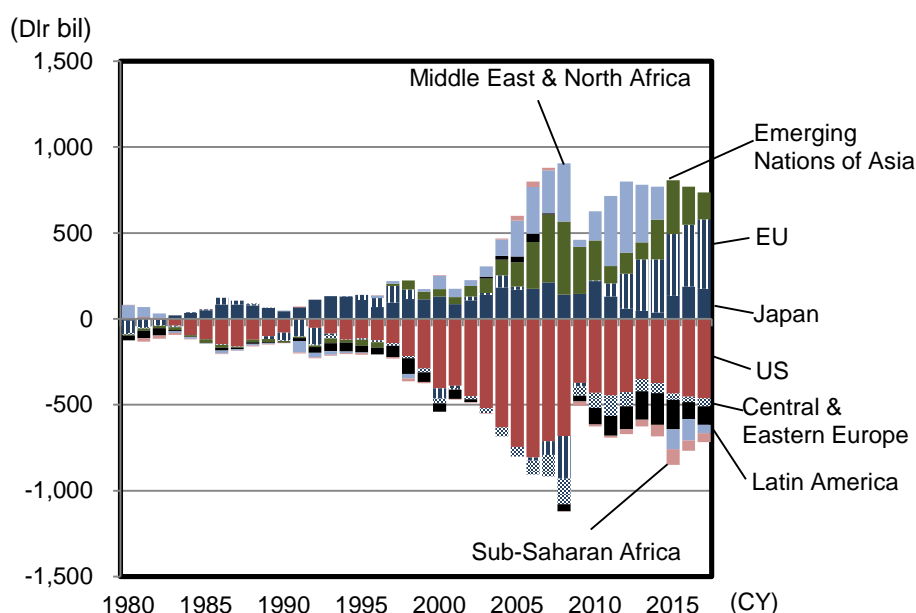
The Trump administration has further strengthened its hardline stance in regard to trade policy. At the beginning of March the increase in imports of iron & steel and aluminum was declared to be a threat to national security, and plans to place additional tariffs of 25% and 10% respectively these items, in other words import restrictions, were announced. But this was only the beginning. By the end of March, citing infringement of intellectual property rights, Trump had signed executive orders placing trade sanctions in the form of tariffs of 50-60 billion dollars on Chinese products including telecommunications, communications equipment, and household electronic goods. Then between early to mid-April the US Trade Representative drafted a motion to place tariffs of 25% on a list of around 1,300 items centering on industrial robots and other production machinery.

In response, China has adopted retaliatory tariffs of 25% on 128 US products, including pork and wine, and is preparing retaliatory tariffs of 25% on an additional 106 items including soy beans, beef, automobiles, and aircraft. In response, US President Trump ordered the US Trade Representative to levy an additional 100 billion dollars in tariffs on Chinese products.

Correcting the trade imbalance (the US trade deficit) has been a major part of the Trump dogma ever since the presidential campaign, so it is not surprising that he would choose to take a hardline policy on trade now so as to fulfill his promise. However, the major factor behind the huge trade deficit the US carries (reaching 796.2 billion dollars in 2017) is US overconsumption. Despite the fact that the energy self-sufficiency rate has improved greatly in recent years due to the shale gas revolution, the US trade deficit has continued to grow. This is due to the fact that demand exceeds supply in the US, which is a sign of overheating. In addition, a major tax cut is planned, which will make expansion of the fiscal deficit unavoidable. Attempting to resolve a trade imbalance which has expanded because of the US's own situation is not exactly hitting the mark.

Global Imbalance (Current Account Balance by Region)

Chart 1



Source: IMF; compiled by DIR.

Notes: Figures for 2017 are estimates.

On the other side of the US trade deficit are the many countries which have jacked up a large trade surplus in the process of making lots of money, so it's not as if to say they don't have issues of their own. For instance, in Europe, fiscal austerity measures centering on the Euro peripheral countries caused a reduction in domestic demand, then when monetary easing was introduced a bit belatedly following the US example the euro weakened, encouraging an expansion of exports from the principle EU countries. These two factors worked together closely to bring about continued expansion of trade surplus in these countries. As for China, stimulus measures (the "4 trillion yuan measures") had already achieved a track record, but though they may be able to avoid the charge that this caused a reduction in domestic demand like the Euro peripheral countries, on the other hand they began manipulating the Chinese renminbi rate in order to maintain international competitiveness in the regional areas. This obviously caused major fluctuations in their balance of foreign exchange reserves. Japan can probably be positioned somewhere in between Europe and China.

Best case scenario may be China making some concessions, including liberalizing its domestic market and increasing investments in the US

The most constructive and appropriate thing that countries holding large trade surpluses with the US can do is to make concessions either by further liberalizing their markets so as to increase imports, or by increasing import substitution production at their facilities in the US accompanying investment in the US. Conversely, the tariff option currently being advocated by President Trump could merely cause the obvious problem of increasing the cost of moving goods around, thereby causing business to stagnate. In this sense his policies are globally negative and undesirable. Meanwhile, in the first place the problem is that the government collects tariffs from importers, and the cost is passed on to consumers. Hence it is American citizens who ultimately bear the burden. It is rather difficult to imagine that this could be considered a desirable outcome by the Trump administration.

So now the question is can a peaceful and constructive conclusion be reached by virtue of countries with trade surpluses making concessions in trade negotiations? Ultimately that possibility cannot be denied, but nor can the possibility be denied that two political factors (explained in more detail below) suggest that the US will continue to play chicken with the tariff option for some time to come.

US Trade Balance by Major Trading Partner and by Item

Chart 2

(Unit: Mil Dtrs)	Sum Total	China	Japan	Eurozone	Canada	Mexico
Total	-796,172	-375,228	-68,848	-132,558	-17,504	-71,057
Beverages, Spirits and Vinegar	-15,307	81	153	-10,052	1,517	-4,590
Mineral Fuel/Oil/Bitumin Substances/Mineral Wax	-57,015	7,949	4,951	6,221	-54,336	15,032
Pharmaceutical Products	-50,846	994	1,413	-30,590	-153	853
Rubber and Articles Thereof	-13,142	-2,770	-1,772	-1,331	1,341	992
Leather Articles/Saddlery/Handbags/Gut Articles	-11,423	-7,272	117	-1,900	539	-5
Wood and Articles of Wood, Wood Charcoal	-10,260	-739	690	-676	-8,314	427
Apparel Articles and Accessories/Knit Or Crochet	-112,725	-49,304	171	-3,633	2,099	-3,723
Iron and Steel	-11,399	434	-1,136	-2,909	-296	2,830
Articles of Iron or Steel	-18,645	-10,776	-1,264	-3,066	2,178	736
Aluminum and Articles Thereof	-11,091	-1,855	29	-969	-5,393	2,819
Nuclear Reactors, Boilers, Machinery & Parts	-140,115	-96,762	-23,250	-31,795	20,796	-11,119
Electric Machinery/Sound Equipment/Tv Equipment	-177,154	-134,864	-12,316	-3,346	17,680	-20,652
Vehicles [ex Railway/Tramway], Parts, Etc	-159,838	-1,477	-49,265	-28,758	-4,534	-62,500
Aircraft, Spacecraft, and Parts Thereof	100,407	15,758	2,544	16,522	2,952	2,641
Furniture/Bedding/Lamps/Prefabricated Buildings	-51,935	-31,639	-15	-2,589	240	-8,592
Toys/Games/Sport Equipment/Parts & Accessories	-24,414	-25,333	87	60	1,805	-254

Source: Haver Analytics; compiled by DIR.

The first of the political factors mentioned previously is the question of midterm elections. As is shown in Chart 2, the share of the trade deficit accounted for by iron & steel and aluminum is extremely small. Even so, it was tariffs on these items that were announced first and foremost. Not surprisingly, a special election was about to take place in the state of Pennsylvania where much related industry is concentrated. Next, the all-important midterm elections will take place in November. Hence there will likely continue to be a display of a hardline stance on trade policy in order for President Trump to show that he is keeping his campaign promises.

The key is the power struggle between American hegemony and the rise of China

With President Trump's hardline stance on trade policy expected to continue, what items are likely to become subject to tariffs in the future as the tendency spreads? In considering this question, it is important that we be aware of the second political factor. Of those advocating a hardline approach on trade policy at the White House, there are individuals concerned not only with the question of economic rationality, but the question of national security. China is an emerging force challenging American hegemony, and is increasing its national power and wealth in both the economic and military fields. Meanwhile, the recent revision in the constitution has allowed Xi Jinping to strengthen his power base, as well as bringing the possibility that he may be holding the reins of government for the long-term. As long as hardline trade policies have as their purpose to maintain American hegemony, it will not be possible to do away with concerns that this question will take priority over economic rationality. And as long as trade policy is implemented based on a political purpose, there is always a possibility that the trade war could intensify depending on how China handles it. If this is the case, there is a strong possibility that even stricter tariff measures may be taken in regard to items for which China holds a large trade surplus in its trade with the US.¹ In this context, it is truly good news for the global economy that China is taking a stance in which it is open to negotiations and concessions.

Conversely, if it turns out that the US is not so serious about containing China's ambitions of establishing a new Chinese hegemony, and is merely concerned about midterm elections, carrying out these trade policies as a kind of political performance, then risk of a trade war will decrease. However, if this political performance is aimed elsewhere than China, in other words at other countries carrying a large trade surplus with the US, including Japan, Europe, and Mexico, then we can expect additional tariffs to be put in place on products regarding which these countries have an advantage. At this time we cannot ignore the possibility that this scenario could also come into play.

Multifaceted analysis of effects of US-China dispute on Japan's economy

A level of uncertainty therefore remains regarding how things may develop in the future. However, at this point it is still meaningful to perform a quantitative analysis of the effects that trade policies now planned may have. In this report we perform an exhaustive analysis of the possible effects on Japan's economy and on Japanese corporate earnings. Largely speaking, the ways in which impact could be felt include (1) exports of Japanese corporations to the US (iron & steel, aluminum), (2) exports of Japanese corporations located overseas (China→US and US→China), (3) side effects associated with slowdown in US and Chinese economies related to introduction of tariffs, and (4) substitution exports from Japan associated with reduction in US-China trade (i.e. Japan profiting from US-China fight).

¹ On the other hand, the resuscitation of the TPP, which is a diplomatic means of containing China, may also be reconsidered.

Direct effects on Japanese corporation should be extremely limited overall

First we examine the facts associated with (1) in the above list. Japan exports 213.4 billion yen in iron & steel to the US annually, and 25 billion yen in aluminum and aluminum alloys (based on 2017 performance). If an additional 25% and 10% respectively in tariffs are added to these amounts, the increase in amounts due to tax would be 53.5 billion yen and 2.5 billion yen respectively. It will be primarily American importers who will have to carry this burden, and assuming that price pass-through to the final consumer is carried out, the burden will ultimately fall on corporations and households, and will hence become a drag on the US economy. On the other hand, if Japan's steel and metal industries accept a price cut associated with the tariff measures, it will bring downward pressure on corporate earnings. The type of steel and metal products which Japan exports to the US are for the most part specialty products so there is low probability that replacements can be found. Hence the opinion is that there is not much danger of these products losing their profitability as far as price is concerned. Of course, a price hike may bring a decline in demand in the US, and if that happens, Japanese corporations will not be able to avoid taking a hit on the volume side as well. However, the maximum amount in damage incurred would not be more than the figures noted above.

Next we consider number (2) in our list of impacts. As is shown in Chart 3, Japanese subsidiaries located in China export 47.2 billion yen in electrical machinery and 52.9 billion yen in information & communications equipment to North America. Meanwhile, the US exports 33.3 billion yen in beverage products and 300 million yen in forestry and fisheries products to Asia (2016 performance).² If a tariff of 25% is added to the above items, Japanese corporations would take on the burden of a portion of the related cost in some form, but the effect is expected to be fairly small on a per item basis at around 11.8 billion yen, 13.2 billion yen, 8.3 billion yen, and 100 million yen. Meanwhile, when we consider the fact that Japanese corporations located in the US will receive the benefit of the corporate tax cut at an estimated 341.8 billion yen, the negative effects of tariffs on Japanese corporations overall is not expected to be overwhelming.

US-China Trade Structure of Overseas Subsidiaries of Japanese Corporations (Left); Effect of US Corporate Tax Cut on Amount of Tax Paid by Subsidiaries of Japanese Corporations (Right) Chart 3

(Unit: Ybil)	China->North America	US->Asia	Current Profit	Net Profit	Corporate Tax	Effective Tax Rate	Estimated Amount of Tax Cut
Total	5,822	14,026	26,182	20,350	7,223	35%	3,418
Manufacturing Industry	3,275	4,760	12,318	9,520	3,007	32%	1,451
Beverage Products	38	333	x	889	180	20%	155
Textiles	77	0	48	45	12	27%	7
Wood, Paper & Pulp	3	51	-105	-149	12	0%	-
Chemicals	58	857	x	4,257	409	10%	316
Petroleum & Coal Products	-	14	44	28	12	44%	6
Ceramics, Stone & Clay Products	36	18	x	x	x	-	18
Iron & Steel	75	-	363	286	134	47%	51
Non-Ferrous Metals	66	76	x	x	x	-	13
Fabricated Metals	183	17	x	x	37	-	22
General Machinery	222	71	390	269	118	44%	55
Production Machinery	59	239	402	480	x	26%	56
Office Oriented Machinery	86	435	340	257	x	-	48
Electrical Machinery	472	197	115	-66	x	-	16
Information & Communications Equipment	529	411	x	x	x	-	156
Transport Equipment	1,112	796	3,463	2,520	1,135	45%	485
Other Manufacturing	261	1,244	x	x	x	-	47
Non-Manufacturing Industry	2,548	9,266	13,864	10,830	4,216	39%	1,966
Agriculture, Forestry and Fisheries	1	3	x	x	x	-	2
Mining	-	-	-110	-236	x	-	-
Construction	-	1	99	58	x	53%	14
Information Communication	3	402	65	45	47	103%	9
Transportation & Postal Activities	19	37	x	x	x	26%	49
Wholesale Trade	2,505	8,766	5,972	4,687	2,349	50%	836
Retail Trade	4	25	630	477	57	12%	88
Services	16	30	4,136	3,739	583	16%	579
Other Non-Manufacturing	0	3	2,842	1,920	x	x	398

Source: Produced by DIR using METI statistics. Estimated values reflect FY2016 performance. In some cases, figures from previous fiscal year are used.

² In cases where manufacturers consign export of their products to a distribution and trading firm, related costs may not appear in statistics.

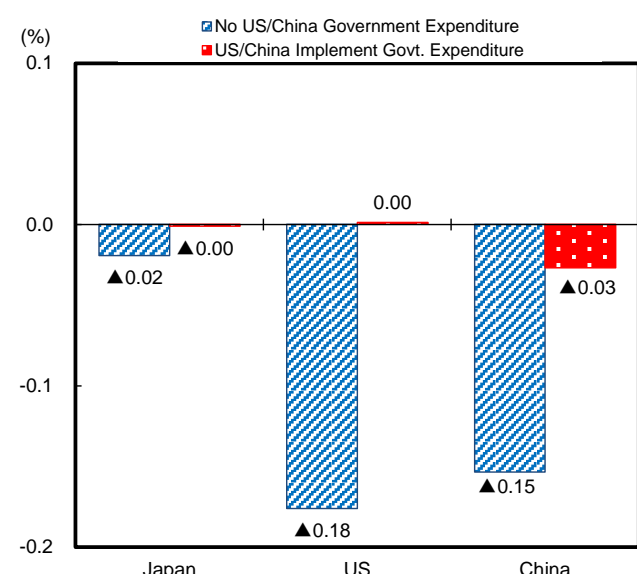
Effect of US-China tariff dispute on GDP: China -0.15%, US -0.18%, Japan -0.02%

As for number (3) in our list of impacts, results of our estimates using the DIR macro model can be found in Chart 4, with more detail in Chart 5. We estimated the effect on GDP assuming that the US places a 25% tariff on goods imported from China totaling 150 billion dollars, with retaliatory tariffs of 25% placed on US goods imported by China totaling 50 billion dollars. To give a simple summary of the model, first we assume that the increase in the tariff rate causes international competitiveness to fluctuate somewhat, and as a result, imports and exports are also caused to fluctuate. At the same time, real disposable income declines due to the rise in import prices bringing downward pressure on personal consumption. As a result of the downturn in domestic production, capex is also restrained. With these as our basic assumptions, we look at two cases – first where growth in government revenue due to the increase in tariffs does not lead to a resolution of the economic problems through increased government expenditure, and a second case where it does.

As is clear from the results of our estimates, the effects of the US-China tariff dispute on the real economy are not necessarily large. Even in the case where growth in government revenue due to the increase in tariffs does not lead to a resolution of the economic problems through increased government expenditure, downward pressure on GDP would be only -0.15% in China, -0.18% in the US, and -0.02% in Japan. If the government helps out by increasing expenditure (case 2) the effects will be even smaller, with China at -0.03%, US at +0.00%, and Japan at -0.00%. Of course, we are only looking at the immediate effects on the Japanese, US, and Chinese economies here. There is still a possibility that there could be long-term effects, or that there could be a multiplier effect that becomes larger than our estimates suggest. However, if we consider the fact that impact number (4) (substitution exports from Japan associated with reduction in US-China trade) could occur in regard to other pairs of countries in trade disputes, we cannot ignore the possibility that negative long-term multiplier effect could be offset by positives such as the substitution effect.

Considering the above arguments, the most appropriate conclusion is that the effects of tariff measures expected to be implemented soon on Japan’s economy and on Japanese corporate earnings should be limited overall.

Estimated Effects of Tariffs (Summary) Chart 4



Source: Estimates produced using the DIR short-term macro model and the Cabinet Office’s short-term macro model.
 Note: All figures are real. Rate of deviation from actual value.

Effects of Tariffs on Japan, US, and China Economies (Detailed Version) Chart 5

Effects on Chinese Economy		Real GDP	Personal Consumption	Capex	Government Expenditure	Exports	Imports
No US/China Govt. Expenditure	Deviation Rate	▲0.15	▲0.27	▲0.06	0.00	▲0.35	▲0.27
	Contribution on Rate		▲0.11	▲0.02	0.00	▲0.07	0.05
US/China Implement Govt. Expenditure	Deviation Rate	▲0.03	▲0.27	▲0.01	0.73	▲0.25	▲0.17
	Contribution on Rate		▲0.11	▲0.00	0.11	▲0.05	0.03
Effects on US Economy		Real GDP	Personal Consumption	Capex	Government Expenditure	Exports	Imports
No US/China Govt. Expenditure	Deviation Rate	▲0.18	▲0.31	▲0.23	0.00	▲0.08	▲0.54
	Contribution on Rate		▲0.22	▲0.04	0.00	▲0.01	0.09
US/China Implement Govt. Expenditure	Deviation Rate	0.00	▲0.31	0.00	1.27	▲0.06	▲0.05
	Contribution on Rate		▲0.22	0.00	0.22	▲0.01	0.01
Effects on Japan's Economy		Real GDP	Personal Consumption	Capex	Government Expenditure	Exports	Imports
No US/China Govt. Expenditure	Deviation Rate	▲0.02	▲0.01	▲0.00	▲0.02	▲0.08	▲0.01
	Contribution on Rate		▲0.00	▲0.00	▲0.00	▲0.01	0.00
US/China Implement Govt. Expenditure	Deviation Rate	▲0.00	▲0.00	▲0.00	▲0.00	▲0.00	▲0.00
	Contribution on Rate		▲0.00	▲0.00	▲0.00	▲0.00	0.00

Source: Estimates produced using the DIR short-term macro model and the Cabinet Office’s short-term macro model.
 Note: All figures are real. Rate of deviation from actual value (%) and rate of contribution to GDP (ppt).

2. Root cause of turmoil in the financial markets

The impact of trade policies which have been announced as of this point on the economy and on corporate earnings will be limited, whether in the case of Japan, the US, or China. Even so, the reaction on the financial markets is major. There are three factors at play here.

First there is the issue of uncertainty. As was discussed earlier in this report, it is difficult to understand what is the real intentions of the White House are, or to predict US policy. However, America's next move will likely depend on whether the recent series of measures announced was merely political theater with an eye to upcoming midterm elections, or whether it is actually a long-term concern with maintaining US hegemony. Meanwhile, there is the question of the extent to which China is willing to make concessions. This too will likely determine the extent to which the global economy takes a hit.

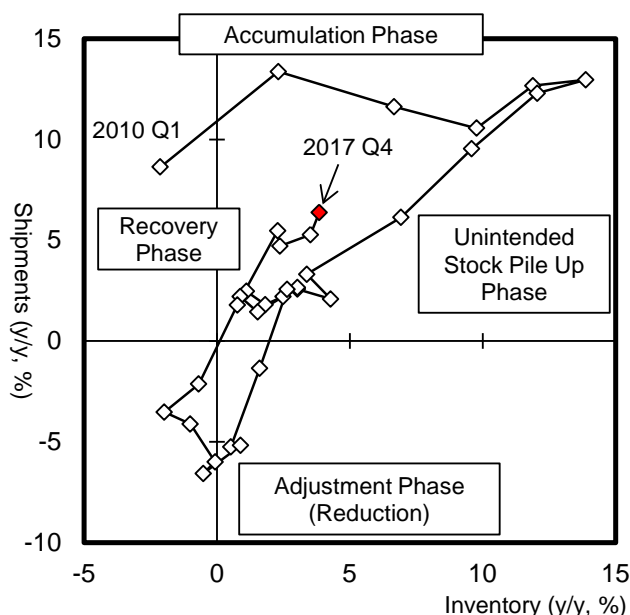
Global economy to reach maturation phase and then enter a lull³

The second factor has to do with the fundamentals of the global economy. The consensus as of the beginning of the year was that the global economy would achieve high growth led by the US accompanying the passing of legislation there to reduce taxes. In fact, the swelling cash supply is for the most part being passed along to employees, and consumption will likely become a factor supplying underlying support for the economy. Meanwhile, there is the question of immediate amortization provisions. It is highly possible that capex spending will see a major acceleration in 2018 after the restraint practiced by corporations during 2017. It goes without saying that these factors are supplying the US economy with a good tailwind.

However, this ignores factors other than the tax cut effect. In the first place, the global economy's performance in 2017 was a bit too good to be true. This is because three positive factors happened to occur all at once: (1) recovery and accumulation of inventory occurred centering on the US (the Kitchin cycle), (2) fiscal expansion was experienced centering on Europe (slowdown in pace of austerity measures), and (3) the acceleration of the Chinese economy due to being shored up by stimulus packages in anticipation of the meeting of the National Congress of the Communist Party of China.

US Inventory Cycle

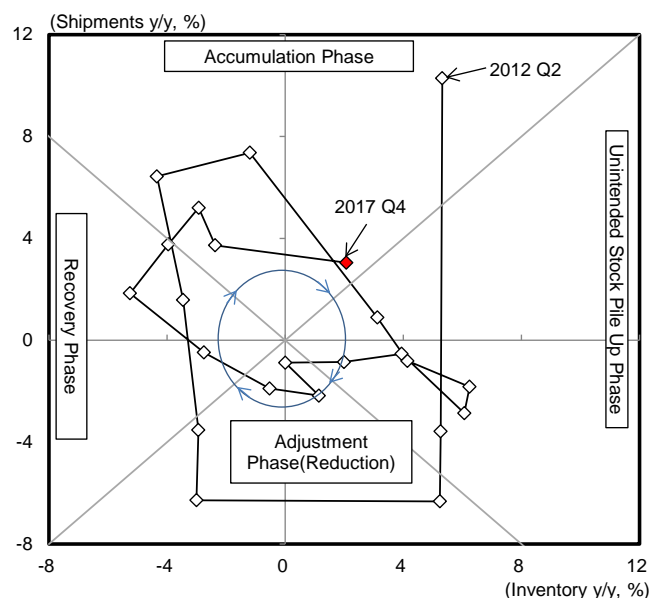
Chart 6



Source: US Department of Commerce, Haver Analytics; compiled by DIR.

Japan Inventory Cycle

Chart 7



Source: Ministry of Economy, Trade and Industry; compiled by DIR.

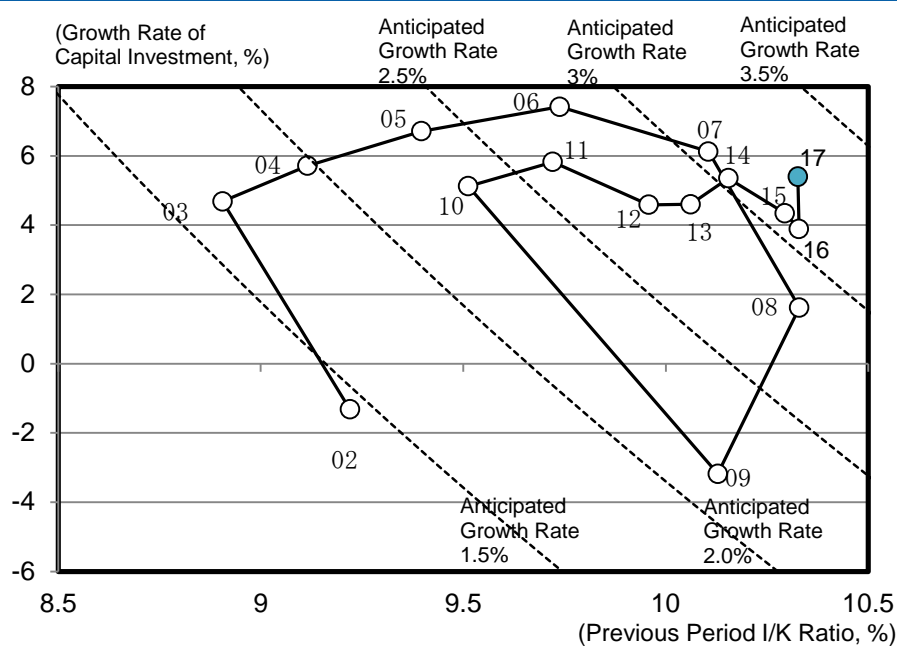
³ For details see Daiwa Institute of Research report dated September 22, 2017, Japan's Economy: Monthly Outlook (Sep 2017); Japan's economy expected to grow by +1.7% in FY2017 and +1.3% in FY2018. How far has global economic expansion come?, by Shunsuke Kobayashi

However, these factors will disappear in 2018. The inventory cycle is merely a short-term cycle, and the recovery/accumulation phase will soon near its end (Chart 6 & 7). Meanwhile, the opinion is that there is a high possibility the ECB will end its quantitative easing policy, and it is doubtful that fiscal expansion in Europe can maintain its momentum without that backup. As for the meeting of the National Congress of the Communist Party of China, the curtain fell on that event last year, and the Chinese economy is now showing signs of a gradual slowdown in growth. Moreover, when we examine economic cycles keyed to a longer term temporal axis, we see that the capital stock cycle (the Juglar cycle) suggests that we are moving into a global maturation phase (Chart 8).

Many institutions ignored these factors up till now and all too easily reported optimistic outlooks along the lines of expectations that the global economy would achieve high growth in 2018 considering the US tax cut effect added onto the 2017 growth rate performance. As of the beginning of this year the consensus was that everything was just rosy. But ultimately all these outlooks will be faced with is disappointment. The flow of negative news is forcing people to revise their economic outlooks downwards, and this is gradually bringing things back to normal. As a result, the financial markets appear to be getting increasingly sensitive. In other words, the recent turmoil in the capital markets may have been at least in part a reaction to increases which had occurred based on overly high expectations. At least that's one possible understanding.

The Capital Stock Cycle (Japan, US, Europe, and China Sum Total)

Chart 8



Source: Data from all countries; produced by DIR.

Game of musical chairs for money begins with exit strategies

The third factor is the exit strategies of central banks. The Fed began reducing its asset holdings last year, and it has decided to increase the pace in stages. The ECB has begun tapering (what it officially calls trimming), and is expected to end its quantitative easing measures this year targeting September. The BOJ is not publically carrying out an exit strategy, but purchases of government bonds have slowed quite a bit, settling at 50 trillion yen annually – considerably below the target of 80 trillion yen. Based on these assumptions, if we extend the total amount of asset purchases by the central banks of the US, Japan, and Europe into the future, the pace of growth is expected to gradually slow (amounts will get smaller) until they finally reach zero (Chart 9).

Of course, the expansion of balance sheets as such on the part of central banks did not in itself have a direct stimulating effect on their respective economies. As proof, we can cite the fact that at the same time banks were carrying out quantitative easing, current account was accumulating, and the monetary

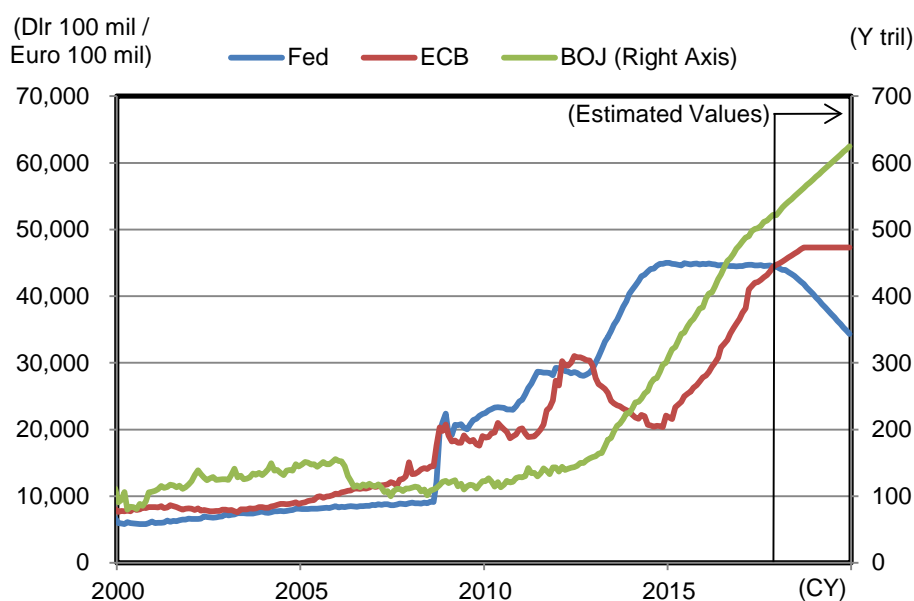
multiplier was constantly in decline. However, to ignore the effect of having kept long-term interest rates and credit spreads under control by virtue of the effect of public announcements and the stock effect is an unreasonable argument, especially when one sees how the term premium has sunk below zero.

Due to the fact that loans and capex had a limited effect on pushing up the real economy, monetary easing by virtue of adjusting interest rates also proved to have a major effect in inducing share buybacks (expansion of corporate leverage) through the issuance of corporate bonds.⁴ But since these effects led to an increase in the price of risk assets, it cannot be ignored that the end of quantitative easing whose very foundation was originally based on that fact has given investors a certain amount of unease. This factor may also have played a part in the events of early 2018 when unseasonable weather caused a temporary acceleration in the growth rate of wages in the January employment statistics, triggering an excessive reaction in the form of soaring interest rates, which in turn brought a major adjustment in the price of risk assets.

If we base our assumptions on the arguments in this section, we may be able to reach the conclusion that in order for the appetite for risk to return, one of the following catalysts would be required: (1) uncertainty surrounding trade policy would have to recede, (2) downward revision of outlooks for the global economy would become scarcer, or (3) investors would have to lose their fears of an interest rate hike in October 2018 or later.

Total Assets & Liabilities of Central Banks of Major Nations

Chart 9



Source: Haver Analytics, statistics of various countries; compiled by DIR. (Figures from March 2018 onward are preliminary.)

Notes: Estimates are based on the following assumptions:

- 1) Fed: BS reduction begins in October 2017, and pace of reduction is in accordance with FOMC announcement in June 2017.
- 2) ECB: Pace of quantitative easing is 30 billion euros per month up to September 2018, and stops after that.
- 3) BOJ: Pace of quantitative easing reduced to 50 trillion yen per year.

⁴ For details see the Daiwa Institute of Research report dated October 20, 2017: Japan's Economy: Monthly Outlook (Oct 2017); Pointers to guide through this political season; Light and shadow of the "cherry-picking" economy, by Shunsuke Kobayashi.

Economic Indicators and Interest Rates

Chart 10

Indicator	2017		2018				FY16	FY17	FY18	FY19
	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec				
	Actual		DIR estimates				Actual	DIR estimates		
Real GDP										
Q/q %, annualized	2.4	1.6	1.1	1.0	1.0	1.1				
Y/y %	1.9	2.0	1.8	1.5	1.2	1.0	1.2	1.8	1.2	0.8
Current account balance										
SAAR (Y tril)	22.9	23.2	23.7	23.8	23.7	23.7	20.4	22.7	24.1	25.2
Unemployment rate (%)										
	2.8	2.7	2.5	2.5	2.5	2.5	3.0	2.7	2.5	2.5
CPI (excl. fresh foods; 2015 prices; y/y %)										
	0.6	0.9	0.8	0.9	1.0	0.8	-0.2	0.7	0.9	1.3
10-year JGB yield										
(period average; %)	0.05	0.05	0.06	0.05	0.05	0.05	-0.05	0.05	0.05	0.05

Source: Compiled by DIR.

Note: Estimates taken from DIR's *Japan's Economic Outlook No. 196 Update (Summary)*