

Forex Medium-Term Outlook

30 September 2019

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Derivatives & Forex Department

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Overview of Outlook

USD/JPY in September regained what it had lost in August. Although the Fed implemented its second rate cut in September, both USD and U.S. interest rates increased following the temporary break in tensions surrounding the U.S.-China trade war. Further, interest rate projections (the dot plot) by FOMC members revealed that about half the members assume a return to rate hikes in 2020, so a consensus appears to be forming regarding an early end to the current phase of rate cuts. However, the U.S. employment and wage markets have already matured, so it would be safe to assume that a deterioration in these markets is on the cards going forward. I do not believe that the Fed can return to raising the rates too soon. Again, in terms of the real effective exchange rate (REER), USD overvaluation is approaching its peak level of the past five years. One must keep in mind the significant USD depreciation in 2017, when the currency's REER was similarly overvalued. Meanwhile, there are also JPY depreciation risks. In particular, the U.S. government is interested in fiscal mobilization, with the Treasury considering the issue of super-long government bonds, and this could potentially result in an economic upswing. Fiscal mobilization is also the key phrase in reading the future of the Chinese and German economies. If both these regions show clear economic recovery, the mood in the markets will brighten, which could result in JPY depreciation. Having said that and while also taking into account the various kinds of noise related to political developments, there seems a strong likelihood that U.S. interest rates will not increase during the current forecasting period. The USD/JPY range ceiling will inevitably be heavy, causing the currency pair to gradually decline.

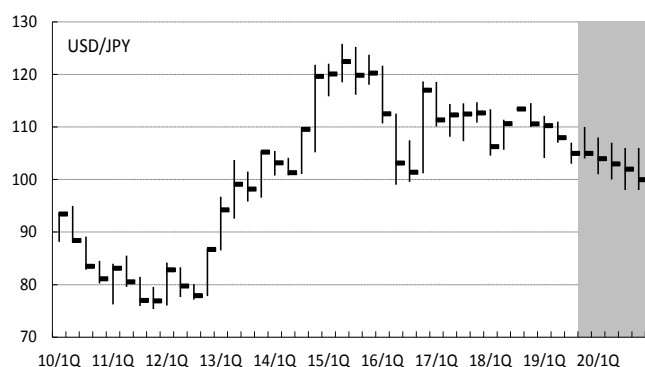
Meanwhile, EUR continues weak. Because USD remains strong despite successive rate cuts by the Fed, EUR is bound to be relatively weak. Again, the ECB lowered the interest rate on its deposit facility to -0.50% in September. It also simultaneously introduced a tiered interest rate system, which is thought to have created the policy space for multiple rate cuts. Even if the tiered rate system mitigates the real impact from negative interest rates, the currency depreciation effect that it denotes is nothing to be taken lightly, so, taking the future of euro area monetary policies into account, many investors will find it difficult to buy EUR. Having said that, it also seems rather improbable that USD will continue to appreciate at its current pace without undergoing any corrections. In September, the ECB decided to restart net purchases under the expanded asset purchase programme (APP) based on a majority vote. However, with the markets exhausted from a surfeit of new developments, this latest did not result in much EUR selling. The correction (depreciation) of USD, which has significant scope for further rate cuts, will continue to be the main theme for some time to come, and I am not ready yet to let go of my prediction that the funds invested in USD could be channeled into EUR, causing the latter to strengthen in relation of USD.

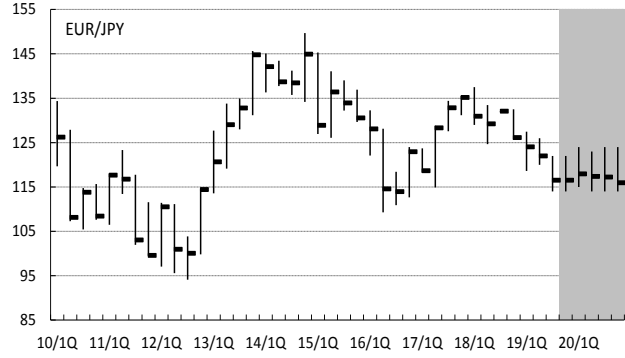
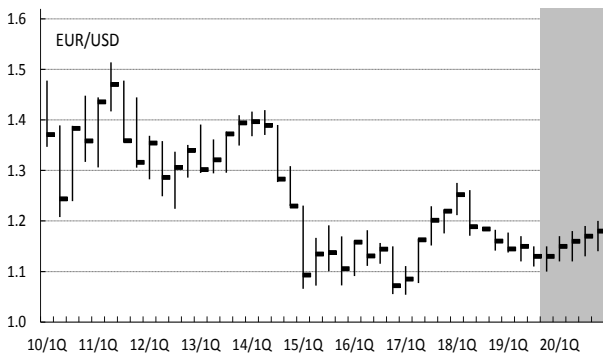
Summary Table of Forecasts

	2019		2020			
	Jan -Sep (actual)	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
USD/JPY	104.10 ~ 112.40 (107.89)	104 ~ 110 (105)	101 ~ 108 (104)	100 ~ 107 (103)	98 ~ 106 (102)	98 ~ 106 (100)
EUR/USD	1.0904 ~ 1.1570 (1.0937)	1.08 ~ 1.13 (1.11)	1.10 ~ 1.15 (1.13)	1.10 ~ 1.16 (1.14)	1.11 ~ 1.17 (1.15)	1.12 ~ 1.18 (1.16)
EUR/JPY	115.87 ~ 127.50 (117.98)	114 ~ 122 (117)	115 ~ 124 (118)	114 ~ 123 (117)	114 ~ 124 (117)	114 ~ 124 (116)

(Notes) 1. Actual results released around 10 am TKY time on 30 September 2019. 2. Source by Bloomberg 3. Forecasts in parentheses are quarter-end levels

Exchange Rate Trends & Forecasts



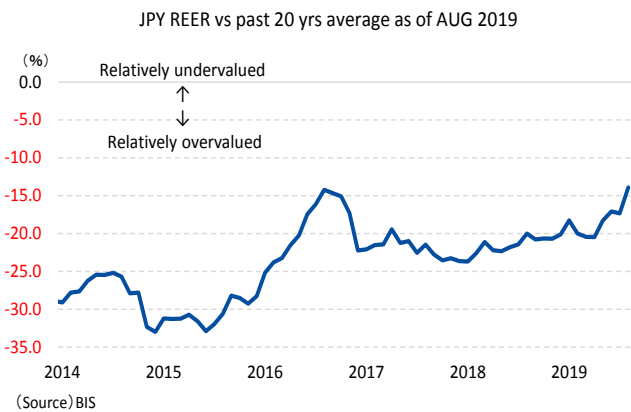
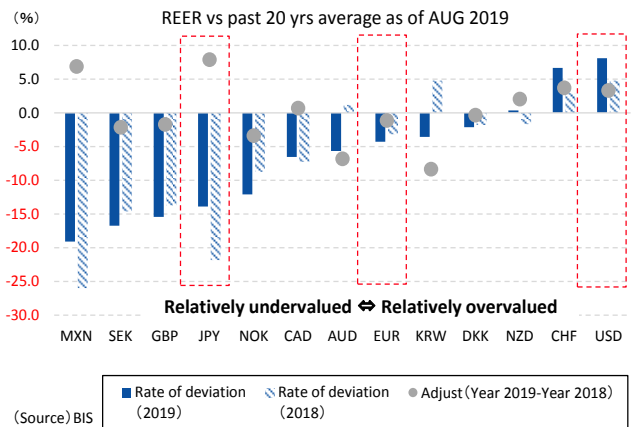


USD/JPY Outlook – USD More Overvalued than at Any Time Since 2017

Overview of the Forex Markets – G3 Currencies vs. Other Currencies in Terms of REER

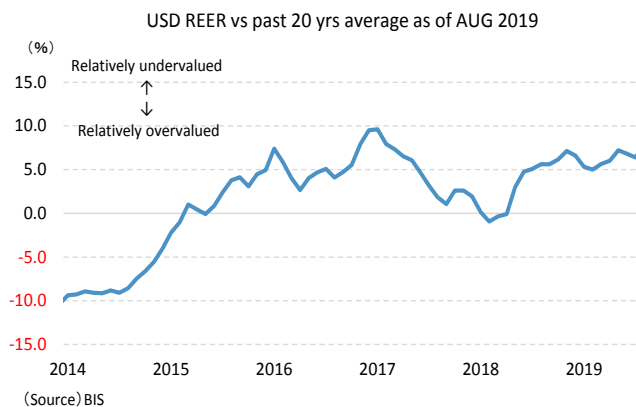
Current Status of G3 Currencies in Terms of REER

In this report, I monitor the monthly report on REER movements published by the Bank for International Settlements (BIS) in order to get an overview of the forex markets. Specifically, I look at each currency's REER level for the relevant month in relation to its long-term average (20-year average), and focus on the divergence rate, which I use to estimate the direction of and scope for correction. As of the writing of this report, REER levels as of the end of August have been published, and the figure to the right (top) shows the comparison of this level to the long-term average. Reviewing the past year from the perspective of the G3 currencies, a few things can be pointed out, such as that (1) JPY continues to be undervalued but has undergone significant correction, that (2) the sense of USD overvaluation seems to be spreading, and that (3) EUR's undervaluation has not changed much. Point (1), in particular, caught my attention. JPY's rate of divergence from the long-term average was -13.9% as of the end of August, which is as much as 7.9% less than last year's divergence rate (-21.8%). As indicated by the figure to the right (top), among the key currencies, JPY has undergone the greatest change in divergence rate over the past year. Incidentally, although a -13.9% undervaluation is not small by any means, it is the smallest for JPY in the past five years (see figure to the right, bottom). While JPY's weakness against USD, as seen from the USD/JPY rate, remains quite limited, one must be aware that in terms of REER, JPY has appreciated quite a bit.



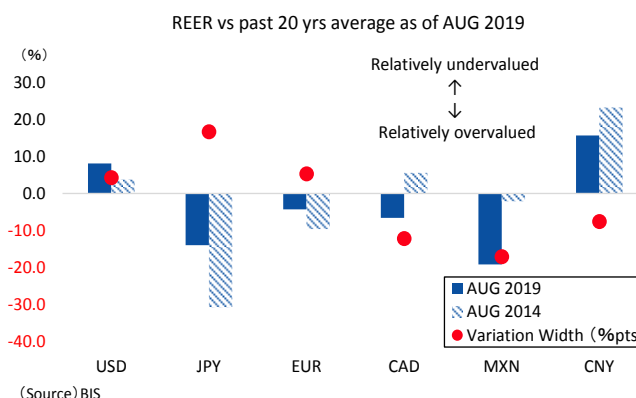
USD's Overvaluation is Extremely Large

Moving on, USD's REER as of the end of August was +8.1% higher than its long-term average, having expanded by +3.3 pp compared with last year's +4.8%. During this period, the Fed has implemented two rate hikes (September and December last year) and two rate cuts (June and September this year), displaying a sudden sharp change in policy. Intuitively, one would expect USD's REER to have depreciated, but in fact, it has been appreciating even more strongly. Perhaps, amid the deterioration of economic and financial conditions and a decline in interest rates around the world, the world's investment refugees have descended in force on USD-denominated assets, which are still attractive due to their absolute interest rate levels. At any rate, the forex markets in the past year have been characterized by a significant increase in the REERs of both JPY and USD, with the inevitable consequence that the USD/JPY rate range remains as low as ever. Note, further, that the +8.1% overvaluation of USD is close to its highest rate of overvaluation over the past five years, in 2017, and that USD depreciated significantly in 2017.



G3 Currencies vs. Other Currencies

EUR's REER has not changed much over the past year. As of the end of August, its divergence rate from the long-term average was -4.3%, a -1.1-pp expansion of the undervaluation compared with last year's 3.2%. Less than a year after the ECB finally managed to terminate its expanded APP at the end of 2018, it recently decided on another rate cut and the restart of APP purchases, but EUR does not seem to have depreciated as much as one would think going by this sharp change in policy. Having said that, amid the surfacing of recession risks in Germany, which one had not expected at the start of this year, the only conceivable reason for investors to want to buy EUR is because "USD has been over-bought."



However, even in the case of EUR, which remains weak in terms of REER, the undervaluation has clearly been corrected compared with five years ago. This is true not just of EUR but also of USD and JPY – restricting ourselves to the last five years, the REERs of all the G3 currencies have appreciated (see figure). Of course, this means that the REERs of the other currencies have depreciated. For instance, currencies such as CAD, MXN, and CNY, which have a significant weight in the calculation of USD's REER, have expanded their level of undervaluation anywhere from -7% to -17% over the past five years. Forex movements involving the G3 currencies tend to attract the greatest attention, but it is important to note that all three of these currencies have appreciated in REER terms. This is why, thanks to the "G3 currencies vs. Other currencies" structure, the rate range for key-currency pairs, led by USD/JPY, remains so low.

There could be a variety of factors behind this state of affairs, but in the case of USD, one reason is the fact that its absolute interest rate level remains quite high is viewed favorably by investors. But what are the reasons for currencies like JPY and EUR, which have low absolute interest rate levels, to be bought? Perhaps the fact that the interest rates of emerging economies have even more scope for decreasing, and that these interest rates have strongly depended, especially over the past five years, on forex movements (the interest rates for currencies like JPY and EUR have already reached rock-bottom and are, therefore, unlikely to be sold due to further decline). However, as emerging economies are also rapidly using up their remaining scope for interest rate decline, it would be dangerous to assume that this structure of G3 currencies vs. Other currencies will continue over the next five years too. If the portion of forex rate movements that can be explained by interest rate movements becomes smaller, REER distortion, which reflects the scope for correction when seen from the perspective of prices, could become more key to predicting forex rates. One must not forget that there remains considerable scope for correction of undervaluation in the case of JPY and overvaluation in the case of USD.

JPY Supply-Demand Balance Now and Going Forward – Balanced Supply and Demand & Small Rate Range

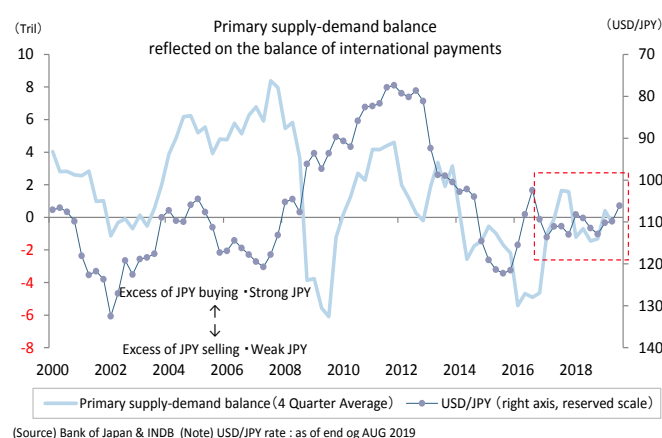
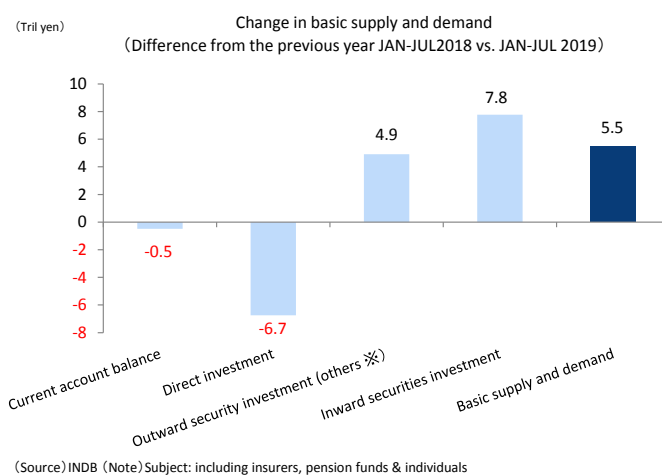
JPY Supply-Demand Balance and USD/JPY Range

USD/JPY since August has given the impression of considerable volatility but, in fact, it has remained within a range of ± 1.50 from 106. This is quite apparent also from the JPY supply-demand balance, an indicator I prepare for this report based on the Balance of Payment statistics and use as a guide for predicting forex rates. The cumulative JPY supply-demand balance for the period from January to July this year (the latest) is about -2.8 trillion, indicating a modest net sale of JPY, but supply and demand still remain more-or-less balanced, as they have been in the past few years. However, the break-down of that balance has been changing gradually. The figure compares the results for each category for the January-July 2019 period with the same period (January-July) of the previous year. While direct investment drives JPY selling amid robust cross-border M&A activity, JPY selling resulting from foreign securities investment seems to be dwindling (the sign is positive because JPY selling, which indicates a negative flow of funds, has dwindled).

With the Fed's increasingly dovish stance, Japanese investors' appetite for foreign investment is probably waning. The big picture involves a simultaneous increase in direct investment and decline in foreign securities investment, while inbound securities investment, driven by bonds, increases – all of these causing the JPY supply-demand balance to tilt in the direction of JPY buying over the past year. Until 2018, based on the assumption that the Fed would continue with its normalization process, foreign securities investment was assumed to continue increasing at a commensurate pace, but the trend began to decline this year. It is only because direct investment retains its vigor that the balance has not tilted to net JPY buying, but one cannot say for sure that this equilibrium can be maintained going forward. Given the political and economic circumstances in which the Fed is currently placed, I would not be surprised to see foreign securities investment continue to decline for some time to come, but as the U.S.-China trade war intensifies and the fate of the global supply chain becomes unpredictable, it is doubtful whether direct investment will continue to increase.

The figure to the right shows the JPY supply-demand balance trend vs. the USD/JPY trend since 2000. As USD/JPY volatility has declined, so has JPY supply-demand balance volatility, and I feel that this is not a coincidence. Since around 2017 or so, when the USD/JPY rate trend became unclear, the JPY supply-demand balance has also been close to neutral. If things continue this way for the rest of this year, the USD/JPY range for 2019 will be 8.30, an all-time low for the second year in a row – which is not normal. The increasing popularity of AI transactions, the stabilization of global economic conditions, and various other factors are surmised as being behind this, but I believe it could also be due to the supply-demand balance not being clearly tilted in one or other direction.

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Japanese and U.S. Monetary Policies Now and Going Forward – Difficult Times Continue for the BOJ Even Beyond September

BOJ Need Not Take Action Before USD/JPY Sinks Below JPY100

From September 17 through 19, both an FOMC meeting and a BOJ Monetary Policy Meeting were held one after the other. The latter was uneventful as expected, but one noteworthy point was the attention drawn by the addition of the phrase “the Bank will reexamine economic and price developments at the next Meeting,” which is scheduled for the end of October and at which the Outlook for Economic Activity and Prices Report (Outlook Report) will be updated. Some appear to have interpreted this as a hint of an additional monetary easing (a deepening of the negative interest rate) at the next meeting or beyond, but in fact, there can be no Monetary Policy Meeting without a reexamination of economic and price developments, so it may be unwise to read too much into the addition of this phrase. It was probably just an attempt to be seen as doing something to follow up on the addition of the phrase “without hesitation” in the July Monetary Policy statement.

Given that USD/JPY, which is the most important of the BOJ's monetary policy reaction functions, is at a short-term high, there is no chance that the BOJ, which has few options remaining to it, will make a move this time, and this stance is essentially unlikely to change going forward. According to the Cabinet Office's FY 2018 Annual Survey of Corporate Behavior, the break-even USD/JPY rate for export companies was 99.80, and according to the BOJ's June Tankan survey report, the predicted exchange rate of companies is JPY109.40. Taking such reports into account, therefore, a rate of 99.08 to 109.40 is nothing for the monetary authorities to worry much about in terms of corporate sector profitability. In other words, the BOJ may begin to consider deepening negative interest rates if USD/JPY were to fall and stay stably below 100. However, whether deepening the negative interest rate will help to change the trend once USD has depreciated to that extent, is a different question.

Close to Half the Members Believe the Fed will Return to Raising Rates in 2020

FOMC meetings, meanwhile, are becoming extremely difficult to predict. The -25-bp rate cut (from 2.00-2.25% to 1.75-2.00%) followed by abuse from President Trump (he tweeted that Fed Chair Jerome Powell was a "coward") were as expected, but apart from this, the interest rate projections of Committee members (the dot plot) were quite divided. The (median of) projections regarding the year-end levels of federal funds (FF) rates for 2019 through 2022 were 1.875%→1.875%→2.125%→2.375% (see table). In other words, successive rate cuts are not being considered. Looking at the breakdown of the projections, 7 members predicted the FF rate to be 1.625% (one rate cut) at the end of 2019, 5 members predicted 1.875% (no change), while another 5 members predicted 2.125% (one rate hike), indicating a more or less even split between the three factions.

Policy interest rate outlook as of each year end (median estimate)

FOMC Date	2019	2020	2021	2022	Longer run
Sep-16	2.625%	n.a.	n.a.	n.a.	2.875%
Dec-16	2.875%	n.a.	n.a.	n.a.	3.000%
Mar-17	3.000%	n.a.	n.a.	n.a.	3.000%
Jun-17	2.938%	n.a.	n.a.	n.a.	3.000%
Sep-17	2.688%	2.875%	n.a.	n.a.	2.750%
Dec-17	2.688%	3.063%	n.a.	n.a.	2.750%
Mar-18	2.875%	3.375%	n.a.	n.a.	2.875%
Jun-18	3.125%	3.375%	n.a.	n.a.	2.875%
Sep-18	3.125%	3.375%	3.375%	n.a.	3.000%
Dec-18	2.875%	3.125%	3.125%	n.a.	2.750%
Mar-19	2.375%	2.625%	2.625%	n.a.	2.750%
Jun-19	2.375%	2.125%	2.375%	n.a.	2.500%
Sep-19	1.875%	1.875%	2.125%	2.375%	2.500%

(Source)FRB

As for the end of 2020, 8 members predicted 1.625%, 2 members predicted 1.875%, 6 members 2.125%, and 1 member 2.375%. In other words, as of the current time, FOMC members seem more or less united in the view that there will be at most one rate cut, if any, from now through 2020, and close to half the members are of the view that the Fed may be able to return to increasing interest rates thanks to the effectiveness of the recent "as insurance" rate cuts. It may be that Committee members feel the Fed cannot justify successive rate hikes given that the recent rate cuts were ostensibly to "insure against downside risks from weak global growth and trade policy uncertainty" while noting that "the outlook for the U.S. economy remains favorable" (in fact, 2 members voted against the recent rate cut).

As for the policy rate considered desirable in the long term (the "neutral interest rate"), the median itself remained unchanged from the previous time at 2.50%, but, significantly, the distribution of the figures has clearly shifted downward. Specifically, the number of members considering the neutral interest rate to be 3.25% fell from 2 to 1, as did those considering it to be 3.00%, while those considering it to be 2.25% or 2.00% both increased from 0 to 1. In other words, even as fewer members predict a need for further rate cuts in the near future, members who predict a lower desirable FF rate after the resumption of rate hikes have also increased. It is not necessarily appropriate, therefore, to declare the recent dot plot to be hawkish.

Misunderstandings Regarding the Resumption of QE

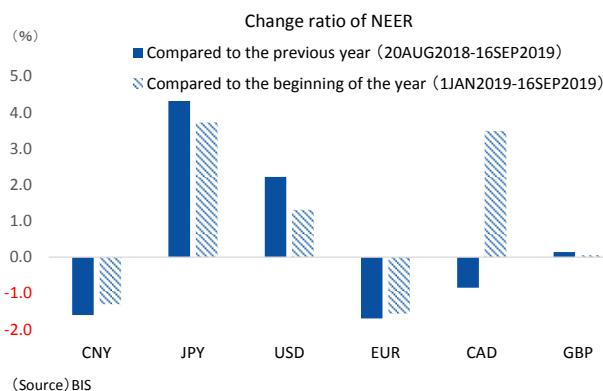
Mr. Powell's press conference was also not as hawkish as the dot plot and gave the impression, rather, of having been conducted with a view to neutralizing the latter's effect. The press conference both hinted at the possibility of successive rate cuts in the event that downside risks become apparent and mentioned the possibility of an early resumption of asset purchases. While maintaining that the U.S. economy was strong, Mr. Powell also did not shy away from warning that "global growth has continued to weaken. I think it's weakened since our last meeting."

Incidentally, the resumption of asset purchases (QE) is a technical measure in response to the sharp rise in short-term financial market interest rates in recent days. As reports in recent days have pointed out, demand for funds in the short-term financial markets has been even stronger than the Fed had anticipated, as the level of reserve deposits at which short-term interest rates begin to rise was higher than assumed (interest rates ended up increasing as a result of over-doing balance sheet normalization). In response to this situation, the Fed lowered its interest on excess reserves (IOER) by -30 bps to 1.80%, and the overnight reverse repurchase (ON RPP) rate by -30 bps to 1.70% in an attempt to lessen the incentive for banks to invest in their holdings with the Fed and expand the liquidity of transactions within the market, thereby bringing down the short-term interest rates.

These are simply measures to address the current situation, in which it has become difficult to understand what the appropriate reserve requirement level is. Even if the decision to resume (liquidity provisioning through) QE is made going forward, that would not be for the purpose of economic stimulation but rather for the technical purpose of restoring reserve deposit levels in an attempt to stabilize short-term interest rates. However, if QE is resumed, it may be misinterpreted as "QE for the purposes of economic stimulation" thanks to President Trump's criticisms of the Fed and persistent expectations of monetary easing, in which case it may result in a further depreciation of USD and decline in U.S. interest rates. In fact, it may not be a bad thing for the Fed if this could buy it some political favor.

Having Overcome its September Challenge...

In August, when USD/JPY seemed to be stabilizing at the level of 104 amid the U.S.-China trade-friction chaos, many believed that the BOJ's September meeting, coming right in the midst of monetary easing in both the U.S. and Europe, would be pandemonium. However, in the event, it turned out that the ECB had exhausted the markets with a surfeit of new developments and its policy decision ended up inviting EUR buying. Meanwhile, USD depreciation did not continue as expected thanks to the Fed indicating that rate cuts would be limited (only one more). As a result, the BOJ got away with merely mentioning that it would "reexamine" developments at the next and subsequent Meetings. Considering the pessimism of a month ago, one gets the impression that the BOJ managed to get through September without a scratch.



However, as the trend of monetary easing continues on a global scale, some currency or the other in the forex markets has to bear the burden of currency strength. Among the emerging economies, there are some that have already squandered the policy space they created by raising interest rates last year, and funds that have become available by "selling" those currencies are in need of a new investment destination. Going by recent nominal effective exchange rate (NEER) trends, it appears that JPY, CAD, and USD have been functioning as said "investment destinations" (see figure). Under such circumstances, although JPY has been strengthening against USD since the beginning of the year, in the bigger picture, a situation of simultaneous USD and JPY strength has been continuing, and it seems correct to assume that this is the reason behind the narrow USD/JPY rate range. Having said that, it will remain easy for JPY to appreciate on an effective basis, thanks to its strong external economic sector and small scope for further monetary easing.

The Fed and the ECB still have considerable scope for monetary easing. The Fed, the hawkish tone of its dot plot notwithstanding, will find it difficult to correct interest rates on the higher side so long as the U.S.-China trade friction is not fully resolved. Its assertion of "at the most one more rate cut" is not fully believable. Given the sudden change in its posture from four rate hikes last year to two rate cuts this year, the Fed's projections regarding future rate cuts should be taken with a large grain of salt. Meanwhile, it is universally admitted that the ECB has very little scope for further lowering its interest rate on the deposit facility from the current -0.50%. However, based on the tiered deposit rate system, which will be applied starting October 31, some suspect that the Euro Overnight Index Average (EONIA) rate will rather increase from the current -0.45% to -0.25% (this view is, indeed, corroborated by calculations). I will go into the details of this later, but it would not be surprising if, encouraged by the usefulness of the tiered deposit rate system, the ECB were to consider further lowering the interest rate on its deposit facility without a thought for the side effects.

Under such circumstances, even though the BOJ managed to scrape by September, there are bound to be other phases in which the Bank's abilities will be put to the test. In that sense, the recent decision to emphasize "reexamining developments" with a view to acting flexibly going forward was not a bad move, but one wonders whether it would really be possible for the BOJ to deepen its negative interest rate margin a few more times, given Japan's already-low market interest rates and its -0.10% reversal rate (rate at which rate cuts by the central bank could hurt the economy). At any rate, in forecasting forex market developments, it is important to remember that the lack of scope for much monetary easing makes JPY an easy currency to purchase, and that this situation is bound to continue for some time to come.

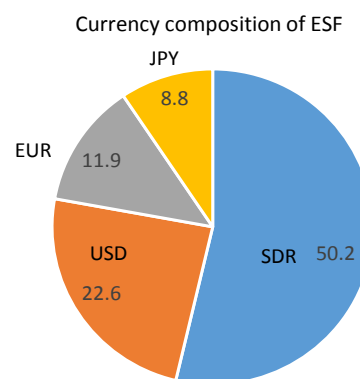
U.S. Currency Policies – The Risk of USD-Selling Intervention

Concern Over the Potential Use of Force

Despite President Trump's constant verbal interventions and the Fed's sudden sharp switch to a dovish stance, USD remains stubbornly strong. At the end of August, President Trump tweeted, "The Euro is dropping against the Dollar "like crazy,"" He also commented sarcastically, "Our Dollar is now the strongest in history. Sounds good, doesn't it? Except to those (manufacturers) that make product for sale outside the U.S." However, forex market trends did not budge. It would appear that Mr. Trump's views regarding forex rates and monetary policies are no longer of much interest to the markets.

Under such circumstances, one cannot but be concerned, given the President's nature, that he may decide on the use of force to get his way if words alone do not work. As I mentioned at the start, USD has continued to soar despite President Trump's criticisms of the Fed and even actual rate cuts. JPY and CAD are the only currencies that have strengthened against USD. Add to this the fact that the U.S. economy is slowing down. Knowing all this, President Trump could become interested in a USD-selling currency intervention, a fact that cannot be taken lightly. On August 28, U.S. Treasury Secretary Steven Mnuchin said the Treasury Department had "no intention of intervention at this time. Situations could change in the future but right now we are not contemplating an intervention." However, the fact that the treasury secretary has to explain his intentions regarding a currency intervention is in itself an unusual situation, and one cannot rest easy given that "situations could change in the future."

Any currency intervention by the U.S. would be implemented by the Federal Reserve Bank of New York based on discussions between the Treasury Department and the Fed (incidentally, in the case of Japan, it would be implemented by the BOJ based on a decision by the Ministry of Finance, with the BOJ mainly acting as an agent for implementing the decision). As reported widely, the source of funds for a currency intervention in the U.S. is the Exchange Stabilization Fund (ESF). The latest published ESF balance is that as of the end of August 2019, and according to it, USD 22.6 billion worth of U.S. government bonds and USD 50.2 billion worth of IMF special drawing right (SDR) are available for use for the purpose of selling USD.



(Source) U.S. Treasury Department
(Notes) ESF=Exchange stabilization fund

Incidentally, apart from USD funds, foreign currency funds available for selling (buying USD) include USD 11.9 billion worth of EUR and USD 8.8 billion worth of JPY (see figure on previous page). The total of USD funds for selling (U.S. government bonds and the SDR) is USD 73 billion or so (USD 22.6 billion + USD 50.4 billion), which amounts to JPY 7.7 trillion at the rate of 105 yen to the dollar. Note that the value of the JPY selling/USD buying currency intervention implemented on March 18, 2011, in the wake of JPY's steep appreciation following the Tohoku earthquake disaster was about JPY 6.9 trillion. Further, on October 31 the same year, when JPY hit a historical high of 75.25 to the dollar, around JPY 8.1 trillion was sold in a single day. It is obvious from this how small the scale of the ESF is as a fund to be used for currency intervention.

Power is a Double-Edged Sword

However, currency intervention by the country that wields the world's key currency is not comparable to that implemented by any other country. The very intent of USD-selling currency intervention by the U.S. could have tremendous destructive power and an impact far greater than that suggested by the ESF's funds. In fact, even before an intervention takes place, any hint of one, such as expanding the ESF limit, would result in an intuitive reaction on the part of the forex markets, causing USD to take a large downward swing. In the first place, a country can theoretically sell an unlimited amount of its own currency, so setting a limit on this amount is technically meaningless. However, going forward, the U.S. will have three stages of the process available to it, namely, "considering an expansion of the ESF → actually expanding the ESF → actual currency intervention," which will help it buy time. As I repeatedly say in this report, the floating exchange rate system is at the mercy of U.S. currency and monetary policy intents to a great extent. One can easily estimate the power of the country that runs the world's key currency expressing the intent of taking the extreme measure of a currency intervention.

Meanwhile, even if USD were to depreciate, it is not clear whether this would be a good thing for the U.S., economically and financially. If President Trump brushes aside notions of international coordination and attempts to forcibly guide USD weaker by means of a unilateral currency intervention, my intuition says that more funds will be diverted to assets denominated in other currencies with high expected returns that also adhere to a floating exchange rate system. This trend could be reflected, symbolically, in the NY Dow Jones Industrial Average crashing. Such power, therefore, is a double-edged sword that is rationally unthinkable. What is more, one of the criteria for putting a country on the Monitoring List or declaring it a Currency Manipulator in the Macroeconomic and Foreign Exchange Policies of Major Trading Partners of the United States is whether that country has implemented currency interventions. So for the U.S. itself to implement currency intervention does not seem like a policy decision consistent with this.

However, "rational" and "consistent" are words that seem to have nothing to do with the Trump administration, and if you consider that the President leads with emotion uninhibited by his surroundings, it is easy to understand why the forex markets would want to consider the possibility of a USD-selling intervention by the U.S. as a tail risk. In the event that the Treasury Department implements a currency intervention and this results in domestic economic, financial and political chaos, I can already see President Trump blaming the Fed for not doing its job, thereby forcing the Treasury Department to step in and take action.

Risks to My Main Scenario – Upside Risk of Fiscal Stimulus Policies

Ultra-Long-Term Bond Issuance and U.S. Fiscal Stimulus Measures

At this point, I would like to review the risk factors related to my main forecast scenario. This article's main scenario anticipates "a correction of the USD appreciation that has occurred over past five years", and this correction is expected to cause appreciation of JPY and EUR. As mentioned above, USD has continued to appreciate on an effective basis, and it is not apparent that this trend will inevitably change going forward. In light of this and the fact that the most important risk scenarios are those related to JPY depreciation, I think it important to focus here mainly

on JPY depreciation risks.

The main risk factors are listed in the table, and these have fundamentally not changed since last month. The most important of the risk factors is risk factor ①, and the directionality of the effects of related factors is mixed. On September 11, President Trump tweeted that a Fed interest rate cut to zero or less would lower the burden of interest expenses “while at the same time substantially lengthening the [repayment] term.” The next day, U.S. Treasury Secretary Steven Mnuchin said in an interview that

JPY depreciation risk factors

	Risk	Detail	Possibility
①	U.S. economy is surprisingly robust	Economic policy by the Trump administration such as elimination of tariffs, tax reduction	medium/high
②	Discontinuation of the Trump administration's protectionist policies	Complete resolution of US-China trade war (Complete elimination of additional tariffs)	low
③	BREXIT related	General election and 2nd referendum	low/medium
④	Additional monetary easing by BOJ	Funds supply with negative interest rates	low
⑤	Reacceleration in China & Europe	GDP acceleration	low/medium

(Source) Daisuke Karakama by Mizuho Bank

he was seriously considering the issuance of 50-year government bonds from 2020, saying – “We are going to start with 50 years, and if 50-years are successful, we’ll consider 100-year bonds.” Treasury Secretary Mnuchin has shown a strong desire to procure funds that could be used for fiscal stimulus measures. If 50-year bonds are issued in 2020, there will naturally be a need to closely monitor the likelihood of an surge in government spending associated with a consciousness of the upcoming elections. If it proves difficult to implement such fiscal stimulus measures as tax cuts that require negotiations with the U.S. Congress, then it will be worth keeping a close eye on the possibility of progressive reductions of the supplementary tariffs that have been levied based on the president’s discretionary authority. In the case that existing tariffs were eliminated or lowered, the financial markets (particularly forex markets) are quite likely to perceive that as a tax cut and respond positively. Although President Trump might be justifiably criticized for stirring up trouble to get credit for the solution, such an approach is very likely to be a successful means of boosting financial market sentiment.

In addition, given that financial markets have been strongly affected since the beginning of the year by U.S.-China trade war trends, there is good cause for paying close attention to risk factor ②. While the political bargaining factor is an important factor that cannot be rationally forecasted, this factor seems likely to be affected by the nature of progress in the Presidential impeachment inquiry that the Congress began in mid-September (in connection with the so-called Ukraine-gate issue). If an actual impeachment process begins, it is expected that the Trump administration will have to allocate considerable time and resources to dealing with it. Although it is difficult to appraise the situation at the time this article was written, it does not seem to be promoting an atmosphere that facilitates the reaching of compromises with China. In any case, financial markets are ineluctably influenced by the ups and downs of the U.S. economy, and forex market trends are probably likely to take shape in response to positive and negative U.S. economic trends. Naturally, if the U.S. economy shows more resilience than expected, there is a possibility that any moves by the Fed to cut interest rates might end up being short-lived, and this possibility was given further credence by the September FOMC meeting. If this possibility eventuates, U.S. interest rates are likely to rise, and USD/JPY should move in accordance. This JPY depreciation risk is probably the most realistic as well as the largest risk factor.

When the Global Economy Breaks Free of Fetters Created by China and Europe

The economic and financial situations in China and Europe are also important insofar as they may have a significant effect on the Fed’s policies, and this situation corresponds to risk factor ⑤. Strictly speaking, risk factor ⑤ represents the risk that the Fed will wisely chose to take the opportunity to re-begin normalizing again when it perceives a trend of economic bottoming out in China and Europe. The likelihood of this is considered to be extremely low in light of the current relationship between the Fed and political factors (≈ President Trump), but given that the September dot plot indicates that the share of FOMC members expecting interest rate hikes to resume in 2020 has risen to almost half, it is fully possible that the FRB will become more hawkish when it sees overseas economic conditions improving. In the case that benefits from China’s tax cuts become apparent and combine with the effects of RMB depreciation going forward, global economic sentiment could be greatly improved by a bottoming out of Chinese economic conditions.

If China were to begin an economic recovery, it would help brighten the outlook for Germany and other countries in the euro area to escape from their recessionary trend. There are signs that Germany, which is in a difficult situation, may finally undertake the launching of fiscal stimulus programs, and those programs along with a Chinese economic recovery might enable a sharp recovery in Germany’s economy. At the time this article was written, however, it appeared that the unexpectedly long slump of German manufacturing industries and other factors may force the ECB to simultaneously undertake interest rate cuts and quantitative expansion measures. Rather than an

unexpected economic recovery in Europe, it seems more realistic to be concerned about unexpected economic deceleration there. However, it is very important to note that when China's economy resurges, the benefits to Germany exports may well promote a general recovery in the euro area economy. It is generally believed that the global economic slowdown that has been cause for concern since the start of this year reflects the fetters created by economic weakness in China and Europe, so it is possible that signs of recovery in those regions could sharply change the mood of international financial markets. This is the JPY depreciation risk associated with risk factor ⑤. There is also a noteworthy upside risk related to the possibility of unexpected trends of economic improvement in the US, China, and Europe (Germany) that may stem from fiscal stimulus programs.

Previously Taboo Measures to Further Depress Negative Interest Rates in Japan?

As reflected in the forecasts of leading international organizations and other entities, the basic scenario is that the global economy will continue to decelerate over the next 12 months. In this scenario, JPY appreciation pressures are expected to be chronically strong, even if not quite as strong as previously, and it continues to be difficult to imagine what moves the BOJ might take to effectively counter those pressures. It will be impossible for the BOJ to do nothing in the case of significant JPY appreciation, however, so it will probably have to pursue measures in line with the easing-oriented policies of the Fed and the ECB. Not many observers expect such measures to be effective but, as discussed below, there is cause for concern about the growing momentum, especially in Europe, of the view that negative interest rates can be further depressed if a tiered rate system is introduced for central banks' reserve deposits. Even in Japan, where further depressing negative interest rates has been believed to be a semi-taboo notion, it cannot be completely denied that there is a possibility that further depressing negative interest rates may be given additional consideration. Many market players believe that whatever the BOJ might do, it is unlikely to have a big effect, and it is precisely because of this belief that one cannot completely discount the possibility that an unexpected and brilliant BOJ policy initiative might bring about major market fluctuations. For example, it is thought that such initiatives as a set of measures to further depress negative interest rates and introduce a negative lending rate will only be considered if USD/JPY descends below JPY100, but if the BOJ were to take initiatives in advance of expectations, it might help elevate USD/JPY. Basically, it seems most appropriate to categorize this possibility as a risk scenario that is considerably less likely to eventuate than other risk scenarios, but I still think it wise to keep it in mind.

Unrealistic to Anticipate Renewed U.S. Interest Rate Hikes Soon

While this article has focused primarily on worrisome JPY depreciation risk factors, the risk factor range naturally encompasses JPY appreciation risk factors also. In fact, this article will continue to argue that the number of JPY appreciation risk factors seems larger. Predictions that the United States might undertake USD-selling forex market interventions have disappeared since July but, so long as progressive JPY appreciation is insufficient to eliminate the appreciation of USD on an effective basis, one cannot completely discount the possibility that the Trump administration might become impatient and take measures to promote USD depreciation. A process aimed at impeaching President Trump is expected to start in late September and, as the risk avoidance mood increases, the impeachment situation is thought likely to become a factor promoting JPY buying. In September, almost half of the FOMC members appeared to anticipate a return to interest rate hikes in 2020, but I do not think this will actually happen. As seen in the period from 2018 to 2019, views regarding the expected path of policy interest rates may well become more pessimistic again and cause market fluctuations. At least given the apparent maturation of trends of improvement in U.S. employment and wages, my basic perception is that it is unrealistic to anticipate a renewed U.S. interest rate hikes in the near future.

Given that the United States has enjoyed a record-long period of economic expansion, there is a possibility that 'distortions' stemming from that protracted expansion could manifest themselves in innumerable problematic forms and locations. In light of current and prospective political and economic situations, most people would probably not be inclined to disagree with the view that the eventuation of JPY appreciation risk factors is more likely than that of JPY depreciation risk factors. Over the next 12 months, it is expected that the intensifying protectionist measures that are a core component of the Trump administration's policies will continue to be a destabilizing factor both inside and outside the United States. Under such circumstances, it seems reasonable to anticipate depreciation of USD, a decline in U.S. interest rates, and a greater susceptibility to softening on the part of USD/JPY. I continue to believe there is no need to adjust this article's main forecast scenario, which anticipates the possibility of USD/JPY descending to below USD1/JPY100 during the forecast period.

EUR Outlook – ECB Driven to Exhaust Policy Options

Euro Area Monetary Policies Now and Going Forward – Easing Package Intensifies Concerns about ECB Policy Option Exhaustion

Easing Package Elicits Concerns about ECB Policy Option Exhaustion

The September ECB Governing Council meeting maintained the main refinancing operations interest rate (MRO; the key ECB interest rate) and the marginal lending facility interest rate (the ceiling of market interest rates) at 0.00% and 0.25%, respectively, but lowered the deposit facility interest rate (the floor of market interest rates) from -0.40% to -0.50%, thereby expanding the interest rate corridor (the difference between the ceiling and floor) to 0.75 pp. That was the first ECB interest rate reduction in three and a half years, since March 2016. The Governing Council also made a surprise decision to resume the expanded asset purchase programme (APP), which was discontinued last December, in November.

Overviewing, the five main decisions announced in the statement were to (1) cut the deposit facility interest rate (-0.40% → -0.50%), (2) resume the APP (EUR20 billion of asset purchases per month from November 1st until just before the next interest rate increase, (3) continue the reinvestment of securities redeemed at maturity under APP (during the period until just before the next interest rate increase), (4) reevaluate the terms of a third series of targeted longer-term refinancing operations (TLTRO3; lending interest rate for eligible banks set at -0.50%, and lending period extended from 2 to 3 years), and (5) introduce a two-tier reserve remuneration system for banks with excess liquidity. As explained below, although it was generally understood that the ECB was exploring the possibility of an easing package, given that several ECB senior officials expressed their opposition to the resumption of the APP until immediately before the meeting, many observers thought that decision (2) was impossible. The considerable attention that had been given to the possibility of an APP resumption seems to have reduced the noteworthiness level of the actual resumption decision. Although it can be said that the decision to provide three-year funding at -0.50% is quite specific and noteworthy, it did not spur much EUR selling in forex markets. There may be diverse reasons for this. Even though it was surprising that decision (2) was made this time, I had assumed that the ECB would eventually have to make the decision but not so early as September, and it is almost certain that many market participants had similar expectations. In other words, it was already generally expected that all five decisions including (2) would be made sometime this year, so many market participants considered the market-moving power of the announcement of the decisions to have been dissipated in advance. Immediately after the meeting, in fact, EUR was appreciating and euro area interest rates were rising.

Excessively Overlapping Miscalculations by the ECB

Since last year, the ECB has made one monetary policy management miscalculation after another. Overviewing events, the APP, the Governing Council meeting last June 14 decided to wind down the APP, which was making asset purchases at a rate of EUR30 billion per month, by limiting asset purchases to EUR15 billion per month during the October-December 2018 period and suspending purchases by some time in 2018. At that time, the policy interest rate forward guidance text was changed from the previous “for an extended period of time, and well past the horizon of our net asset purchases” to read “At least through the summer of 2019”. The predominant interpretation of this change was that there would be an interest rate hike by September 2019 and that there was an undeniable possibility of the hike being carried out as early as July 2019. This forward guidance was also applied when the decision was made at the December 13, 2018 Governing Council meeting to discontinue the APP. Later, on April 10, 2019, the Governing Council announced that it had begun studying mitigating measures (≈ a tiered system) designed to alleviate the damage financial institutions suffer from negative interest rates.

These are just the most noteworthy of the changes made at Governing Council meetings last year. Throughout last year, the ECB was considered to be dispassionately moving ahead toward policy normalization, and the expected resumption of interest rate hikes in September 2019 was the primary focus of attention. But what actually happened in September was an interest rate cut rather than a hike and the revival of the APP just nine months after its termination. When the APP was terminated, asset purchases were being made at the rate of EUR15 billion per month – these purchases will be made at a higher rate under the revived APP (and for what is effectively an indefinite period). Also, in line with concerns expressed in April, a tiered system was in fact introduced as a mitigating measure. It seems peculiar, however, that there were concerns about the need to mitigate side effects of negative interest rates in April, when the deposit facility interest rate was -0.40% and there was no talk about additional interest rate cuts, but less than a half year later it was decided to further lower the negative level of interest rates. It may be that the ECB believes it is not so obviously peculiar, in that the decision to further lower negative interest rates was made in connection with the goal of providing 3-year funding at the lower -0.50% rate, but it is undeniable that the ECB is going back and forth in its policy decisions.

Forward Guidance Language Restricting the Possibility of Interest Rate Hikes

The most recent Governing Council meeting also strengthened its forward guidance language, although this change was not included in the abovementioned five main decisions. The previous version said the ECB expected interest rates to remain at their present or lower levels – “at least through the first half of 2020, and in any case for as long as necessary to ensure the continued sustained convergence of inflation to our aim over the medium term.” – while the new version says the ECB expects interest rates to remain at their present or lower levels – “until we have seen the inflation outlook robustly converge to a level sufficiently close to, but below, 2% within our projection horizon, and such convergence has been consistently reflected in underlying inflation dynamics.” ECB President Draghi commented on the last part of this changed language at the post-meeting press conference, saying – “also important is the reference to underlying inflation that will have to increase to ensure that the pick-up in inflation is backed by a sustained build-up of domestic price pressures.” It is probably reasonable to believe that the addition of the underlined portion makes it difficult for the ECB to raise interest rates. It can be said that the new forward guidance language greatly restricts the ECB’s freedom to raise interest rates (although the language can probably be easily adjusted, like this time, if the situation changes). The same thing can be said regarding the Fed but, in any case, the sharp turns seen in the policies of the Fed and the ECB over the past year appear to have significantly undermined confidence in central banks’ forward guidance announcements.

Where the Differences in the Discussion Were and Were Not

The decision to revive the APP despite considerable opposition is unquestionably the most noteworthy aspect of the latest Governing Council meeting. At the press conference, the first reporter’s first question was – “going into the meeting we’ve seen quite a vocal opposition, especially to the restarting of the QE, so probably me and the others here would like to know how much support each of the instruments that were eventually adopted got and whether, how much support was there for it?” President Draghi’s response was very long and did not really get to the point. He did ultimately respond to the question after a lengthy overview of the Governing Council’s discussions and basic perceptions, but one got the impression that the real gist of the reporter’s question was somewhat neglected. After summarizing the meeting, President Draghi finally addressed the question. His first point was that there was unanimous agreement within the Governing Council that “fiscal policy should become the main instrument”, and he reiterated this point in his responses to other reporters’ questions. Moreover, this point was clearly articulated in one sentence within the statement – “In view of the weakening economic outlook and the continued prominence of downside risks, governments with fiscal space should act in an effective and timely manner.” The implicit meaning of the sentence is that the ability to respond to the situation by means of monetary policy is approaching its limit.

President Draghi’s second point was that – “there was a broad agreement on the parts concerning forward guidance and the rate cut and the reinvestments and the TLTRO.” The phrase “broad agreement” is the standard phrase used to describe decisions that were not unanimous. Then, regarding the key issue of the APP revival, President Draghi said – “there was of course more diversity of views as it was vastly pre-announced by statements on all newspapers, wires, television and so on, there was more diversity of views on APP, but then in the end the consensus was so broad, there was no need to take a vote.” President Draghi repeatedly emphasized that there was majority support for the APP revival decision, although everyone of course knew that there must have been some kind of majority support given that the decision was approved. To the extent discernable from pre-meeting statements, it appears that at least close to 30% of Governing Council members (7 of 25) were expressing opposition to the resumption of the APP. (As explained below, this situation was confirmed by a Bloomberg report after the meeting.) Should it be understood that the dissenters were quickly persuaded and the opposition to the APP resumption was alleviated? Or should it be understood that the dissenters were not actually brought around to the majority view and that the minority view was disregarded? In any case, one gets a strong impression that the decision reflected President Draghi’s capabilities of persuasion.

Next, President Draghi cited three points about – “about where the main differences actually lay in the discussion.” His first point is that – “there was again full agreement about the need to act, but the difference of views were about the severity of the outlook.” Specifically – “the majority of the Governing Council believed that the outlook was deteriorating as I said in a way greater than expected and the revision in the growth and inflation projections granted full action”. On the other hand – “Others viewed this deterioration with a little more caution.” His second point was that there was some disagreement – “about the need to act now.” – basically disagreement about the timing of the decision. His third and final point recognized that there was disagreement – “about the appropriateness of the APP because some think that the APP is appropriate only for risks of deflation, others thought that the level of interest rates is already so low that it doesn’t need action on the APP.” In fact, given that interest rates in the region are already so deep in the negative range, it is probably natural to question whether it is necessary to lower them still further. After overviewing the differences of opinion, President Draghi noted that – “the majority of the Governing Council believed that action [APP revival] was warranted[.]” As I mentioned above, I think there are reasonable grounds for suspecting that President Draghi probably disregarded rather than persuaded the opponents.

Immediately after the meeting, Bloomberg reported that officials with knowledge of the matter had said that the central bank governors of such countries as Germany, France, the Netherlands, Austria, and Estonia had opposed

the resumption of the APP along with ECB Executive Board members Sabine Lautenschläger and Benoit Cœuré. Counting these people alone, one finds that at least seven of the 25 ECB Governing Council members were opposed. So far as I remember, the ECB has previously refrained from making important decisions in the face of internal dissent even when the dissent stemmed only from Germany and the Netherlands, making this the first time that the ECB has made such an important decision despite strong internal opposition.

Decided in Advance?

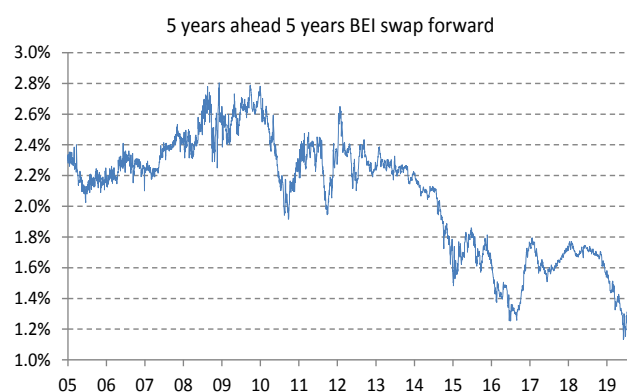
As mentioned earlier in this section, one gets a strong impression that the market-moving power of the ECB Governing Council's recent decisions was dissipated in advance. It seems reasonable to assume that the combination of a tiered system and the supply of funds with negative interest rates has made it feasible to further lower the level of negative interest rates, and there is a risk that there will in fact be additional efforts to further lower the level. At the same time, however, it appears that the main monetary policy tool from next year will involve the expansion of the APP. Given that APP asset purchases were previously conducted at a rate of EUR80 billion per month, it is clear that there is plenty of room for APP expansion. However, actually expanding the APP will require the relaxation of such APP conditions as those related to the pro rata distribution requirements in accordance with capital investment ratios (allocation among issuers from the various euro area countries on the basis of the ECB's capital key) and the 33% rule (the limit on the maximum share of an issuer's outstanding securities that the ECB can purchase). The challenge of making such adjustments will be relegated to the upcoming Lagarde-led ECB. Moreover, given the forward guidance it inherits – which essentially says “there will be no interest rate hike before the inflation outlook and underlying inflation dynamics clearly and consistently rise” and “the APP will not be terminated until interest rates are hiked” – the Lagarde-led ECB will be positioned to freely continue implementing easing policies. In this regard, there are many people inclined to assume that the Governing Council's recent decisions were “made in advance”, and the prevalence of such a perspective may well explain why the market-moving power of the recent decisions was dissipated in advance.

Negative Interest Rates in Europe and Elsewhere Now and Going Forward– “Selling Dog Meat as Mutton”

Promoting Negative Interest Rate Policies Like “Selling Dog Meat as Mutton”

Not all that glitters is gold. There is a concise Sino-Japanese phrase that expresses that same concept as “hang up a sheep head over one's market stall and proceed to sell dog meat there”, which basically means to “sell dog meat as mutton”. Currently, it seems that the negative interest rate policies being implemented in some developed countries are taking on some aspects of selling dog meat as mutton. As explained below, many people in countries adopting negative interest rate policies initially expected that the policies could not possibly be sustained for very long. At this time, however, there are a growing number of people who believe that bolstering tiered interest rate systems can limit the impact of negative interest rates on the banking sector to an extent that makes it possible to lower the level of negative interest rates still further.

If negative interest rate policies have a significant positive effect that is hard to dispense with, then they may naturally be considered acceptable even if they also have some negative effects. However, it has now been five years since the introduction of negative interest rates in Europe policy and three years since their introduction in Japan, and in neither location has the putative goal of boosting inflation rates been realized. In the euro area, inflation rate expectations have fallen considerably over the past five years (see graph), and the area's economy, particularly Germany's economy, has been verging on a recession. Moreover, financial institutions' soundness has clearly been deteriorating amid the negative



(Source) Bloomberg

interest rate environment to an extent that has led the ECB to conclude that there is a need for mitigating measures to prevent the soundness deterioration from creating systemic risks. This is apparently the reason why the ECB has decided to introduce a tiered interest rate system. Such tiered systems have previously been considered inappropriate for a common currency zone where transaction practices vary from country to country and the associated administrative costs are liable to become quite high. After the March 10, 2016, ECB Governing Council meeting, President Draghi noted two main reasons for not introducing a tiered system – (1) a desire to avoid sending a message that negative interest rates could easily be lowered to whatever extent might be desired (2) difficulty of introducing a tiered system owing to the complexity of the euro area's financial system. As explained below, reason

(1) attracted the most attention at that time, but it is also noteworthy that President Draghi mentioned reason (2). Specifically, President Draghi said it was difficult to introduce a tiering system because – “the complexity of the system is remarkable in an area like the eurozone, with many banks of different sizes, different conditions, in totally different market situations.” It should be kept in mind that the ECB’s recent decision to introduce a tiering system required it to set aside or discount President Draghi’s 2016 perspective regarding reason (2).

It is possible to consider negative interest rate policies to be still in a kind of testing/verification stage. Rather undertaking “policy effectiveness verifications”, however, countries currently employing negative interest rates are actually shifting their focus toward the issue of “policy sustainability feasibility” – the question of how they might be able to carry on without restoring positive interest rates. Following the financial crisis, there has been considerable debate about whether the effective lower bound (ELB) of nominal interest rates might actually be in the negative range, but it seems quite incongruous that the debate about whether the ELB is positive or negative should go on for so long without duly giving prior consideration to the effects of negative interest rates and how those effects compare to the objectives of negative interest rate policies. What exactly is the benefit of continuing a negative interest rate policy while reducing negative interest rates’ impact on the banking sector by expanding the exemption balance (the portion of banks’ holdings of excess liquidity exempt from the negative deposit facility rate)? If a negative interest rate policy is not exerting a positive effect on the economy or inflation trends, it seems that the policy’s proponents may be selling dog meat as mutton. As explained below, however, negative interest rate policies have an esoteric benefit. At least in the straightforwardly simple realm of forex markets, the depth of negative interest rates is likely to have a not-inconsiderable influence. Accordingly, when seeking to understand motivations to sustain negative interest rate policies, it may be useful to consider such policies to be more characteristic of currency policies than monetary policies. If multiple major countries pursue such currency policies, however, international frictions will be inevitable.

Is the Introduction of a Tiering System the Starting Gun for Successive Rate Cuts?

On September 12, the ECB announced the introduction of a tiered system at the same time as deepening negative interest rates, and put out a statement saying, “This decision (related to the tiered system) supports the spillover mechanism of bank-based transmission of monetary. It will also maintain a policy easing stance and thus contribute to the convergence of inflation targets.” Put differently, it acknowledged that the pursuit of negative interest rates without a tiered system would damage the financial intermediary function and move away from the inflation target.

In other words, while there are concerns that the negative interest rate could hit the reversal rate, introducing a tiered system will lower the reversal rate (thereby enabling the rates to be lowered further). As mentioned above, Mr. Draghi said in March 2016 that the ECB had put off the decision to introduce a tiering system out of a desire to avoid raising expectations of even lower interest rates going forward. If so, it seems logical to assume that the recent decision to introduce the tiered system indicates that measures to justify deepening the negative rates have been formulated. Under such circumstances, it is hard to believe that the lowering of the interest rate on the deposit facility will stop at -0.50%. I would not be surprised to see it lowered a few more times.

Europe Accustomed to Negative Interest Rates – 2014 was a Milestone Year

In Europe, it is the ECB’s decisions that tend to get the most attention, but as widely known, a considerable time has passed since the introduction of negative interest rates in Europe, beginning with the Northern European states. It is quite possible, therefore, that resistance to moving on to “next steps” with regard to this policy is weak. Looking back briefly at the history of the negative interest rate policy (see table), the Sveriges Riksbank (the Swedish central bank) was the first in the world to introduce it when it lowered its repo rate, i.e., the policy interest rate, to 0.25%, and its deposit rate (the interest rate on excess reserves) to -0.25% in July 2009. However, despite being the first in the world, this negative interest rate policy had virtually no impact, because the Swedish banking sector had very little excess reserves that could be subject to the negative rate at that time (the interest rate on refinancing operations, such as that applied to certificates issued by the central bank, was positive, and private banks could hold these instead of excess reserves, thereby avoiding the negative interest rate).

Global negative interest rate policy

	Target interest rate	Level	Start	Tiering	Remarks
Denmark	CD rate	-0.75	2012/7/5	○	Set a limit on the amount of central bank deposits that can be exempted for each bank
Switzerland	Sight deposit interest rate	-0.75	2014/12/18	○	Exemption up to 25 times the required preparations
Euro-zone	Deposit facility rate	-0.50	2014/6/5	○	Exemption up to six times the required preparation
Sweden	Repo rate	-0.25	2015/2/12	×(Note 1)	Charge the full amount
Japan	Current deposit interest rate	-0.10	2016/1/29	○	Exemption up to the sum of the base balance and the macro addition balance

(Source) Made by Karakama from various sources (Note 1) Sweden does not have a deposit reserve system.

(Note) Sweden decided its deposit rate to -0.25% in July 2009. However, it is known that there was no substantial influence.

Denmark is often said to be the real first batter. In July 2012, the Denmark's Nationalbank lowered its policy interest rate, i.e., the interest rate on loans, from 0.45% to 0.20% in line with the ECB rate cut (interest rate on the main refinancing operations lowered from 1.00% to 0.75%). It simultaneously lowered the lower bound of its policy interest rate (rate on negotiable certificates of deposit, or CD) from +0.05% to -0.20%. This is often acknowledged to be the world's first real negative interest rate.

Under Denmark's negative interest rate policy, a zero percent interest rate is applied up to a certain base amount of the current account balance, and the portion exceeding the base amount is compulsorily transferred to a one-week central-bank-issued CD, to which the negative interest rate is applied. A base amount for the entire banking sector as well as base amounts for individual financial institutions are set separately and reviewed as necessary. The Danish krone, which is part of ERM II, is linked to the euro, so its entry into negative range was a passive move, the consequence of the ECB's rate cut and a measure born out of the extension of currency policy.

Denmark's policy interest rate temporarily returned to positive in April 2014, but after the ECB introduced its own negative interest rate for the first time in June 2014, the Denmark's Nationalbank switched track and reintroduced a negative interest rate in September 2014 to be in tune with the ECB. As of the current time, Denmark's interest rate on CDs is down to -0.75%. Denmark's return to a negative interest rate was followed by the introduction of negative interest rates by other banks, the Swiss National Bank (SNB) in December 2014 and the Sveriges Riksbank in February 2015. Thus, looking back, 2014 was a milestone year for European monetary policy.

The "Multiplier" has Become as Important as the Policy Interest Rate

Though several countries around the world have adopted negative interest rates, the ECB alone applies this charge (a negative interest rate amounts to a charge) fully to excess reserves. This is a feat the ECB managed to accomplish only because, at the time of the introduction of this policy in June 2014, QE was not being implemented and the region's excess reserve balance was small. The BOJ, meanwhile, was forced to consider a tiered system because its reserve deposits had ballooned following quantitative and qualitative easing (QQE). (Consequently, it is natural to consider Japan's reversal rate to be higher than that of Europe.)

However, as a result of the expanded asset purchase program (APP), implemented for close to four years starting March 2015, the ECB's balance sheet has more than doubled (from about USD 2.2 trillion to about USD 4.7 trillion). As a result, it has become necessary to consider a tiered system even for simply continuing to maintain the negative interest rate policy.

Incidentally, the SNB held a monetary policy meeting on September 19, at which it left both its policy rate (3-month LIBOR) and deposit rate at -0.75%, but announced that the negative interest rate exemption balance, which had been up to 20 times the required reserves, would be raised to 25 times the required reserves starting November 1. Thomas J. Jordan, Chairman of the Governing Board of the SNB, told local media that this was not a measure designed specifically for the sake of banks but rather based on the prediction that the current low-interest-rate environment around the world would continue over the longer term.

In other words, the SNB, anticipating the normalization of negative interest rates, felt compelled to expand measures to alleviate the burden on banks so they may survive in this climate. It seems quite likely that other central banks with negative interest rate policies will be able to consider deepening their negative interest rates by similarly revising the multipliers.

A similar multiplier is of significance in the tiered system (the "two-tier system") introduced by the ECB at its September 12 Governing Council meeting. The two tiers here stand for the "required reserves" and "the portion over and above the required reserves (excess reserves)," but in fact, the system would be easier to understand if there were three tiers, namely (1) required reserves, (2) amount up to 6 times the required reserves, and (3) amount over and above 6 times the required reserves (see chart).

Estimated EONIA after introduction of tiering (mio euro) as of 25 SEP 2019

	Apply	Balance	Applicable interest rate
	Required preparation	133,215	0%
Exemption	Six times the required preparation	799,290	0%
Non-exemption	Excess reserve	460,512	-0.50%
	Deposit facility	459,532	-0.50%
	Total reserve balance	1,852,549	-
	EONIA weighted average		-0.25%

(Source) Karakama estimates based on ECB & Bloomberg data

To tier (1), the policy interest rate, i.e., the interest rate on the MRO, which is currently 0%, will be applied, i.e., there will be no change. Tier (2) is to be the "exempt tier," to which a 0% interest rate will be applied. To tier (3), the "non-exempt" tier, either a 0% interest rate or the interest rate on the deposit facility, whichever is lower, will be applied. Currently, the -0.50% rate on the deposit facility is lower, so that will apply as a charge. In essence, the size of the "exempt" and "non-exempt" tiers is determined by the multiplier "6 times," thereby changing the burden on the banking sector overall. The recent SNB decision is similar. We are now entering a phase when, in addition to traditional policy rates such as the MRO and the interest rate on the deposit facility, the multiplier (6 times) and the interest rate applied to tier (2) will also become important policy tools for the ECB.

The same can be said of the BOJ. BOJ current account deposits are divided into (1) Basic Balance, (2) Macro Add-on Balance, and (3) Policy-Rate Balance, with the negative interest rate (i.e., a fee) charged for tier (3). If tier (2) is made larger, tier (3) will diminish, so to that extent the damage to the banking sector can be mitigated. The amount of tier (2) depends on the “Benchmark Ratio.” If the BOJ’s government-bond purchase increases, tier (3) alone will end up increasing, so raising the Benchmark Ratio enables the Bank to transfer the amount of increase in tier (3) to tier (2) instead, thereby lessening the impact of negative interest rates on banks. In fact, such adjustments are regularly made – the Benchmark Ratio, which was 0% at the time of introducing the negative interest rate, has now increased to 37%. In other words, the Benchmark Ratio is the key to balancing government-bond purchases (which expand quantity) and negative interest rates (which penalize quantity).

At the very least, it can be said that multipliers that determine the amount to which negative interest rates are applied (required reserve multipliers in the case of the SNB and ECB, and the Benchmark Ratio in the case of the BOJ) have become as important as policy interest rates themselves for the banking sectors of several countries. With the ECB joining the ranks of such central banks, this perspective on monetary policy is bound to become increasingly important.

A “Sacrificial Offering” at the Altar of Currency Depreciation?

The authorities themselves are bound to be conflicted regarding the current situation, which is inescapably open to the criticism of “selling dog meat as mutton.” At the very least, one must ask oneself, “Why is it so important to continue with a negative interest rate policy even at the expense of spending time thinking up ways to mitigate its negative effects?” There could be any number of reasons, but perhaps one of them is the desire to avoid currency appreciation pressures amid a global economic slowdown. Given the nature of the forex markets, which display knee-jerk reaction to headlines while considering the effect of a policy only as an afterthought, it is not surprising that central banks are reluctant to bring down their “negative interest rate” banners.

Especially in cases such as the euro area, where economic growth depends to a significant extent on external demand, there is an incentive to deepen negative interest rates even at the risk of burdening the banking sector. Such a monetary policy then acquires the characteristics of currency policy, but so long as this is not openly stated, it should be possible to continue deepening the negative interest rate going forward. The decline in EONIA transaction balances, in the long run, is also an indication that market functions are weakening, but this too is a “sacrificial offering” at the altar of currency depreciation. Meanwhile, Japan does not really have as much of an incentive to pursue currency weakness as the euro area does, given that there is no longer a stable correlation between a weak JPY and Japanese export volumes. However, avoiding JPY appreciation seems to have become a matter of “social justice” in some senses. Given how easy it is for JPY to appreciate for no reason other than that international economic conditions have deteriorated, it seems the resistance to deepening negative interest rates is getting weaker by the day.

The main problem is that President Trump is bound to lose his temper if this situation reaches an extreme in Japan and Europe. On September 11, right before the second rate cut by the Fed, Mr. Trump tweeted, “The Federal Reserve should get our interest rates down to ZERO, or less. (...) It is only the naïveté of Jay Powell and the Federal Reserve that doesn’t allow us to do what other countries are already doing.” It would appear that he is interested in seeing the Fed’s policy interest rates drop below zero. Going forward, if it becomes generally understood in the financial markets that the main intention behind the “dog meat” negative interest rates is to weaken the domestic currency (leaving aside the question of whether or not this is true), President Trump’s criticisms are bound to become increasingly harsh. However, it is not just the reaction of the U.S. that is of concern. If this situation continues, where a negative interest rate policy is the only monetary policy option that can be pursued despite the dubiousness of its effects, frictions may arise via the forex markets among other countries too.

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