Forex Medium-Term Outlook



April 30, 2021

Overview of Outlook

Although USD/JPY underwent a stronger correction in April, I do not feel the need to revise my forecast. U.S. 10-year interest rates have nearly doubled in the three months since the beginnin of the year, with USD's nominal effective exchange rate (NEER) increasing as much as +4.6%. In this period, USD/JPY has achieved a movement range of 8.12, which is similar in magnitude to the yearly movement range seen in recent years. Indeed, it may be that this pace of rate change necessitated a correction. I do anticipate that U.S. interest rates and USD will spur each other on and remain on an upward trend for the rest of this year based on the assumption of vaccine rollouts→slower infection rates→normalization of economic activities→normalization of monetary policy. The threat from new variants is certainly a cause for concern, but vaccinating is the single best strategy for an exit from this pandemic, and this means that the economic forecasts are brighter for economies that are successfully implementing the strategy (i.e., economies that have high vaccination rates), their market interest rates are higher, and as a result, their currencies are likely to be preferred by investors. The year-to-date NEER-based power dynamics between G7 currencies shows GBP > USD ≥ CAD > EUR > JPY, which is perfectly consistent with the respective countries' vaccination rates. Countries such as the U.S. and Canada also benefit from being oil producers. By contrast, Japan has none of these things – good vaccination rates, crude oil, or high interest rates. JPY may be evaluated more positively if supply/demand factors become the basis for evaluation again, should vaccines prove to be ineffective or other risks emerge, but the risk of a monetary policy turmoil in the U.S. resulting from a capital drain from emerging economies with an increase in U.S. interest rates seems more likely.

Meanwhile, EUR remains strong. With the across-the-board appreciation of USD, EUR/USD temporarily fell to 1.17 dollars, but soon recovered the 1.20-dollar level again. I believe the euro area's abundant current account and trade surpluses are to be thanked for this. The fact that the ECB did not expand asset purchases as much as expected could also trigger rumors of monetary policy tapering within the year, which would be another reason for investors to buy EUR. However, in contrast to the Fed's basic stance of tolerating a rise in U.S. interest rates, the ECB is clearly intent on suppressing any increase in regional interest rates by accelerating asset purchases and so on. This being the case, it seems highly likely that investors, conscious of the divergence in the stances of the two central banks, will sell EUR and buy USD this year. Another factor that could very possibly lead to a weakening of EUR rates is vaccination rates (one of the key factors influencing my rate forecasts). In this regard, the euro area, though far ahead of Japan, is significantly behind the U.S. and UK, which is bound to directly affect growth rates and interest rates. Given the strong demand for the currency, I doubt it will weaken more than 1.15 dollars to the euro, but it may be wise to be prepared for that level of depreciation within the year.

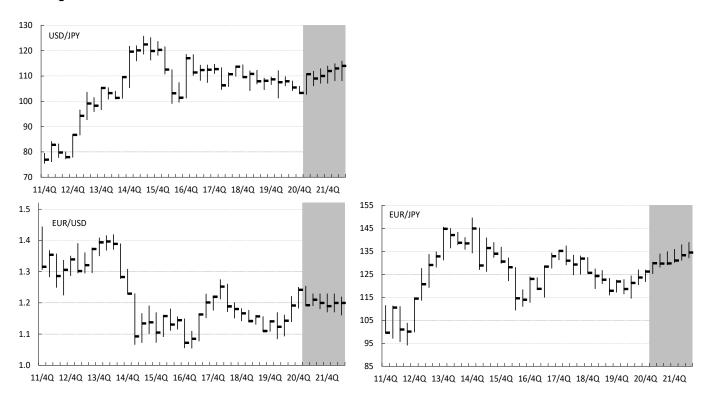
Summary Table of Forecasts

	2021				2022	
	Jan -Apr (actual)	May-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun
USD/JPY	102.60 ~ 110.85 (108.85)	106 \sim 112 (109)	107 \sim 113 (110)	107 \sim 114 (112)	108 ~ 115 (113)	108 \sim 116 (114)
EUR/USD	1.1704 ~ 1.2349 (1.2125)	1.17 ~ 1.21 (1.19)	1.16 \sim 1.21 (1.18)	1.15 ~ 1.21 (1.17)	1.15 ~ 1.21 (1.18)	1.14 ~ 1.20 (1.18)
EUR/JPY	125.10 \sim 132.35 (132.00)	128 ~ 134 (130)	129 \sim 135 (130)	130 ~ 136 (131)	131 ~ 138 (133)	132 ~ 139 (135)

(Notes) 1. Actual results released around 10 am TKY time on 30 APR 2021. 2. Source by Bloomberg 3. Forecasts in parentheses are quarter-end levels 3. Forecasts in parentheses are quarter-end levels

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Exchange Rate Trends & Forecasts

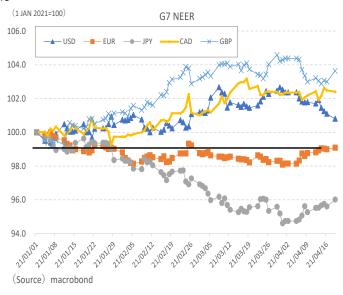


USD/JPY Outlook – Currency Strength Still Determined by Vaccination Rates

Current State and Future Outlook of Forex Markets - Key Points Remain Unchanged

Key Points Remain Unchanged Despite Market Corrections

The forex markets in April saw an even stronger trend of corrections. Amid a lull in the rise in U.S. interest rates, there was also a break in the USD appreciation trend, with USD/JPY slipping back from the 110 level to the 107 level at one point, and also sliding to around 1.17 dollars against EUR temporarily. However, the currency immediately recovered, and now seems to be at a turning point that could well be the start of a new phase of USD appreciation. In the previous month's issue of this report, I argued that interest rates, COVID-control status (mainly vaccination rates), and crude oil were the three key factors based on which current market trends could be understood. In particular, I emphasized that the currencies of countries with high vaccination rates are likely to be preferred by investors, as these countries can be predicted to lift restrictions on movement and behavior earlier, thereby achieving higher growth rates and interest rates. My basic understanding is that the importance of these standpoints has not changed at all.



It is true that new variants of the virus have been causing a new wave of infections around the world, and one senses that this poses a significant risk to my basic scenario that "the global economy will begin to look up starting the April-June quarter so long as vaccines are available." However, vaccinating is the single best strategy for an exit from this pandemic, irrespective of original or new variants of the virus, and this means that the economic forecasts are brighter for economies that are succeeding in implementing the strategy (i.e., economies that have the highest vaccination rates), their market interest rates are higher, and as a result, their currencies are likely to be preferred by investors. As the figure shows, the year-to-date NEER-based power dynamics between currencies shows GBP > USD ≥ CAD > EUR > JPY, which is perfectly consistent with the respective countries' vaccination rates.

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Incidentally, the 2021 real GDP growth rate forecast also follows the U.K. > U.S. > Canada > euro area > Japan sequence, thereby coinciding perfectly with currency strength. This is not a coincidence. It is a simple case of countries with successful vaccination drives having stronger real economies and being better viewed by the markets. Naturally, such countries have relatively higher interest rates, which gives investors a good reason to buy them. Additionally, countries such as the U.S. and Canada are likely also to benefit from being oil producers. By contrast, Japan has none of these things – good vaccination rates, crude oil, or high interest rates. Given the current state of affairs in Tokyo, a city with a population of just under 14 million and a

G7 growth ratio trajectory from 2021 to 2022

	2021	2022	Vaccination rates (*)
US	5.1	3.6	42.67
Euro-zone	4.4	3.8	22.93
Germany	3.6	3.4	25.74
France	5.8	4.2	21.43
Italy	4.2	3.6	22.10
Japan	3.3	2.5	1.80
Canada	5.0	4.7	31.17
UK	5.3	5.1	50.22

(Source) IMF "World Economic Outlook" (APR 2021)

Our World in Data: as of 28APR, Japan & France: as of 27APR

medical system (reportedly) on the brink of collapse as a result of a mere 58 serious cases (as of April 29), it is impossible to strengthen the real economy without vaccinations. Of course, given the current strong risk-avoidance stance in the financial markets as a whole, JPY may be evaluated more positively if current account balance and other supply/demand factors become the basis for evaluation. However, despite concerns from variants, vaccinations are progressing smoothly in countries other than Japan. Financial market trends are unlikely to be affected by the state of confusion in Japan alone, and JPY seems unlikely to be viewed positively by investors any time soon.

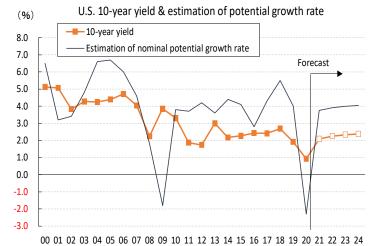
Though I repeat myself, it is obvious that vaccination is the only exit strategy available to us, and the economies, interest rates, and currencies of countries that rise to the challenge are likely to be viewed more positively. To be very honest, the UK and the U.S. are the only such countries right now and possibly for the rest of the year, and my basic understanding is that it may be necessary to take this into account in formulating my forex outlook.

USD/JPY Pace of Appreciation Necessitated Correction

Based on the above, this report predicts the possibility of USD/JPY posting a new high or EUR/USD posting a new low within the year. I think it is not too far-fetched to assume that the correction of USD strength seen in April was simply a matter of investors selling off some of the excessive USD purchased earlier. The U.S. 10-year interest rate nearly doubled in the first three months of the year (from around 0.90% to around 1.70%), and USD's NEER increased by as much as +4.6% at one point. In this period, USD/JPY achieved a movement range of 8.12 (between 110.72 and 102.60), which is similar in magnitude to the movement range for all of 2019 (8.30). The average yearly movement range for the three years before the pandemic struck (2017 through 2019) was 9.86, with some saying that USD/JPY had entered a phase of extremely small movement ranges of less than 10. Even last year, despite all the turmoil caused by the pandemic, the movement range was no more than 11.28. In fact, in recent years, it has been quite rare for any movement at all to be seen in USD/JPY rates. Taking all this into account, a movement range of over 8 in the first three months of the year is bound to seem quite dramatic to market participants who have become accustomed to the movement ranges of recent years.

U.S. 10-Year Interest Rates - The Significance of 2.0%

Going forward, USD/JPY remains likely to be influenced by the trend of U.S. 10-year interest rates as it always has been. It is true that U.S. interest rates are not rising as strongly as they previously were, but the trend is not reversing – it would be more accurate to say that interest rates have plateaued at a high level. Given that the rates nearly doubled in the space of three months, it is not that surprising to see a small lull in the trend. Looking back at U.S. stats for the 10 years (2010-2019) before COVID, the average nominal GDP growth rate was +4.0% and the average 10-year interest rate was +2.4%. The above ten years includes the period of recession following the global financial crisis as well as a phase of rate hikes starting 2015, so it witnessed a great deal of fluctuation, but the 10-year interest rate appears to have been guided to around -170bps lower than the nominal GDP growth rate through this period of both economic growth and recession, and it must be noted that this has supported the real economy. According to the latest release of the IMF's World



(Notes) The potential growth rate is estimated by the U.S. CBO.

The 10 year interest rate is calculated by taking an average of the difference between the potential growth rate for the past 3 years and the 10 year interest rate, and then calculating it backwards by taking this into account the CBO estimates.

(Source) macrobond

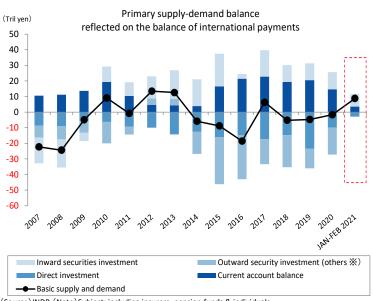
Economic Outlook (WEO), the U.S. is forecast to post a nominal growth rate of +8.3% for 2021. However, this is mostly the recovery from last year's dire situation, so it would be inappropriate to take this high rate of growth into

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account in determining the level of Treasury yields. According to the Congressional Budget Office (CBO), the potential growth rate for 2021 is around +3.8%, which is the same as the long-term growth rate as forecast by the Fed's Summary of Economic Projections in March (derived by adding the real long-term growth rate [1.8%] and the inflation rate [2.0%]). And 10-year interest rates guided to -170bps lower than the growth rate would be just over 2.0% (see figure). Market participants are bound to have set their sites on the 2.0% level as the next milestone for the U.S. 10-year interest rate, and as shown above, this is a level that is not impossible to explain.

On the flip side, one could say that a rate higher than that may be difficult to achieve given the underlying strength of the U.S. economy. Even between 2015 and 2018, when the Fed raised its rates nine times, U.S. 10-year interest rates were only around 3.2% at their highest. The average rate was 2.2% for December 2015, when the Fed raised interest rates for the first time in nine and a half years following the financial crisis, 2.5% for December 2017, when the Fed implemented its fifth rate hike, and 2.8% for December 2018, when the Fed implemented its ninth rate hike. Given how terrible the current employment and wage situations are, and how unrealistic a rate hike seems at this moment, it is difficult to imagine that the 10-year interest rate could surpass the 2.0% level and remain there for any length of time.

JPY Supply & Demand Balance Remains Neutral This report predicts a 114 rate for the upper bound of USD/JPY over the next year or so. This is a rate level derived on the basis of my assumption that the U.S. 10-year interest rate will rise to no more than 2.0% at the most. Apart from this, it also seems unlikely that JPY would weaken against USD any more than the above level from a supply & demand perspective. Let us take a look at this in more detail. Data pertaining to the current year is still scarce, but there is no indication so far of supply & demand being inclined more toward either JPY selling or JPY buying. The trade balance tends to be closely watched as an indicator influencing the forex markets. In 2020, the huge trade deficit (-JPY 2.2 trillion) posted for 1H (January-June) was completely cancelled out by the huge trade surplus (+JPY 2.8 trillion) posted for 2H (July-December). So far this year, there is a slight deficit of around -JPY 110 billion for January and February combined, but as of the writing of this report, it appears that a trade surplus of around +JPY 260 billion was posted for the first 20 days of March,



(Source) INDB (Note) Subject: including insurers, pension funds & individuals, excluding deposit taking finance instructions & government

which seems likely to neutralize the overall trade balance for the January-March quarter.

The basic JPY supply-demand balance, a statistic I derive from the Balance of Payments statistics to guide my forecasts, indicates net JPY buying of just over +JPY 8.8 trillion for January-February, signaling JPY strength. However, this is a result caused by the small foreign securities investment. Looking at the March International Transactions in Securities (based on reports from designated major investors), which was released ahead of the Balance of Payments, Portfolio Investment Assets posted a net selling of +JPY 24.7 billion, while Portfolio Investment Liabilities posted a net selling of -JPY 8.0835 trillion, resulting in an enormous net outflow of -JPY 8.0588 trillion. The net selling of Portfolio Investment Liabilities is thought to reflect dispositions of Japanese securities by non-residents in response to the rise in interest rates around the world. At any rate, the basic JPY supply-demand balance derived from Japan's March Balance of Payments (which will be released in May) can be expected to reflect this net selling of Japanese securities and see a significant swing in the direction of net JPY selling. Ultimately, there seems to be no overall bias either toward JPY selling or JPY buying for the entire January-March period.

At any rate, taking the various trends into account – USD/JPY already achieving a movement range equivalent to recent yearly movement ranges, but U.S. 10-year interest rates (the driver of such rate movements) hitting a ceiling, and the lack of buying/selling bias in JPY supply & demand – it seems very likely that USD/JPY rate movements this year will remain within a similar range as in recent years. Of course, given this report's prediction of a slight increase/plateauing of U.S. 10-year interest rates, there could be a resurgence in the trend of selling JPY for USD by margin traders targeting the U.S.-Japan interest rate gap. My forecast of an around 114 upper bound for USD/JPY this year takes the above into account.

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¹ Positive and negative signs indicate the direction of movement of funds from Japan. A positive sign indicates an inflow of funds into Japan, while a negative sign indicates an outflow of funds from Japan.

Current State and Future Outlook of U.S. Currency Policy - Yellen Not Drawing Much Interest Yet

Biden-Yellen Team's First Semiannual Report

The U.S. Department of the Treasury published its semiannual Macroeconomic and Foreign Exchange Policies of Major Trading Partners of the United States (hereafter: "the Report") on April 16. This is the first issue of this Report released under the Biden administration, and is of interest to market participants in terms of assessing the tone of the U.S. currency policy under Treasury Secretary Janet Yellen. To provide a brief recap, the three key criteria this report uses to determine whether a country is a "currency manipulator" and whether it should be put on the Monitoring List are (1) a significant bilateral trade surplus with the U.S. (at least USD 20 billion over a 12-month period), (2) a material current account surplus of at least 2% of GDP over a 12-month period, and (3) persistent, one-sided intervention in the foreign exchange market (net purchases of foreign currency totaling at least 2% of GDP, conducted in at least 6 months over a 12-month period).

Any country that meets two of these three criteria is put on the Monitoring List, while countries that meet all three criteria are declared "currency manipulators." Also, China, as always, is placed on the Monitoring List despite meeting only the first criteria for the reason that it "accounts for a large and disproportionate share of the overall U.S. trade deficit." It is worth noting that the order of the three criteria mentioned above has been reversed in the recent Report, although this may not have any particular significance. The sequence (from left to right) of the evaluation criteria in the chart listing major trading partners by evaluation criteria has also been accordingly reversed (see chart). Perhaps the intent is to suggest that currency intervention is a greater sin than bilateral trade surplus?

The 11 countries highlighted in green in the chart are the ones that have been placed on the Monitoring List this time. When the Democratic Party Barak Obama administration introduced the Monitoring List in April 2016, only five countries were added to the list, so the number of countries on the list has more than doubled in the past five years. While it is true that criteria (2) and (3) were made slightly stricter along the way, criterion (1), which relates to the bilateral trade surplus, has not changed. It is interesting, therefore, that the number of countries meeting criteria (1) has increased from 7 in April 2016 to 13 this time. Meanwhile, criterion (2), which relates to the current account surplus (note that this does not indicate a bilateral surplus with the U.S., but rather a country's overall current account surplus), was less stringent in April 2016 ("at least 3% of GDP") but the number of countries meeting this criterion has only increased from 5 to 12. From the U.S. perspective, it is not difficult to understand if this seems like an increase in global trade imbalances centering on a U.S. deficit.

Monitoring list 3 conditions (Highlighted countries are on the monitoring list as of APR 2021)

	Buying USD & selling own ccy intervention	Current balance			
	vs GDP	vs GDP (%)	Change in last 3 yrs (% pts)	Amount (Bil dollar)	Trade surplus vis-à- vis the U.S. (Bil dollar)
Singapore	28.3%	17.6%	-0.3%	157	4
Switzerland	15.3%	3.7%	1.9%	-2	57
Taiwan	5.8%	14.1%	-0.9%	253	30
India	5.0%	1.3%	6.5%	15	24
Vietnam	4.4%	3.7%	-0.8%	158	70
Thailand	1.9%	3.2%	6.4%	-22	26
China	-0.1-1.2%	1.9%	-0.3%	64	311
Malaysia	0.6%	4.4%	0.4%	55	32
S.Korea	0.3%	4.6%	-0.2%	9	25
Japan	0.0%	3.3%	-1.5%	68	55
Canada	0.0%	-1.9%	0.7%	-31	15
UK	0.0%	-3.5%	-3.1%	33	-9
Mexico	-0.2%	2.4%	1.6%	10	113
Brazil	-2.6%	-0.9%	-1.3%	57	-12
Netherland	-	7.8%	-0.7%	-41	-18
Germany	-	6.9%	-1.1%	56	57
Ireland	_	4.8%	1.9%	-76	56
Itay	-	3.7%	0.9%	3	30
Belgium	-	-0.2%	-1.9%	-47	-7
France	-	-2.3%	-0.2%	83	16
Euro-zone	0.0%	2.2%	-0.5%	271	156

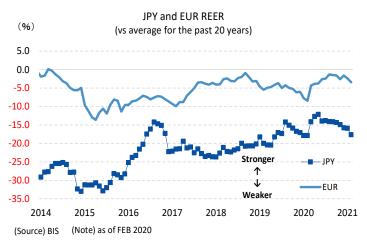
(Notes) Trade surplus vis-à-vis the U.S., current balance & intervention amount cover for 1 year until DEC 2020 (4 Quarter)

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Yellow Card Offenders Inching Closer to Red – Switzerland, Vietnam, Taiwan

In addition to the above 11 countries, Switzerland and Vietnam were declared "currency manipulators" as of December last year, and Taiwan is meeting all three criteria. However, this time, the Report states that "there is insufficient evidence" to make a finding that any of these economies manipulates its exchange rate, and that "enhanced engagements (...) as well as a more thorough assessment of developments in the global economy as a result of the COVID-19 pandemic" will enable Treasury to better determine whether any of these economies intervened in currency markets. The phrases "enhanced engagement," "enhanced bilateral engagement," and "enhanced analysis" are used with reference to trading partners seen as problematic in laws such as the Omnibus Trade and Competitiveness Act of 1988 and the Trade Facilitation and Trade Enforcement Act of 2015, which form the legal foundation of the Report, but they do not seem to call for any specific action. They are merely symbolic phrases calling for specific action with regard to undervalued currencies or the hitherto neglected imbalances in the United States' international balance of payments (it must be noted, however, that while the Omnibus Trade and Competitiveness Act of 1988 merely calls for action, the Trade Facilitation and Trade Enforcement Act of 2015 has provisions for sanctions in the event of a failure to act). In other words, taking a "currency manipulator" tag to be a red card and being placed on the Monitoring List to be a yellow card, one could say that the three aforementioned countries have been warned that their yellow card offences are extremely close to becoming red card offences. This is something we have not seen before. Taiwan is a country that the U.S. is likely to want to avoid a confrontation with at this time, but perhaps the Report simply delivered an objective judgement from a currency policy perspective. Having said that, Switzerland, Taiwan, and Vietnam are all small, open economies, and it is understandable if they needed to manipulate their currencies for survival. They are bound to put up considerable resistance to sanctions. Even if not as obviously as the administration of former President Donald Trump, the Biden administration appears in part to be continuing the "Buy American" policy path. From the perspective of the countries being pointed a finger at, it is understandable that they feel the criticism is unjustified.

References to Individual Currencies – JPY, EUR, CNY I would like to briefly take a look at the evaluation of individual currencies in this section. With regard to JPY, it was common to see references to its undervaluation in terms of REER until the previous Report. For instance, the December Report noted that "Despite the recent appreciation, the real effective yen remains weaker than average historical levels," while it was pointed out in January 2020 that JPY "remained weaker than average historical levels over the last six years." Essentially, the Report's consistent message with regard to JPY has been that its REER is weaker than warranted by long-term average levels. This time, however, similar language was missing from the Report. Instead, it acknowledged that "The IMF assessed in its 2020 External Sector Report that the yen was broadly in line with fundamentals in 2019."



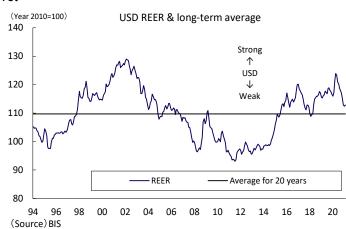
However, as of February 2021, JPY's REER was -17.6% weaker than its 20-year average, with no significant change compared with January 2020 (-17.9% weaker) or December 2020 (-15.8% weaker). It would not be surprising, therefore, to see the judgement change again at any time.

Moving on to EUR, while there was no specific reference to EUR rates, the Report mentioned the region's large current account surplus, noting that "The IMF's most recent assessment judged the euro area's external position to be moderately stronger than the level implied by medium-term economic fundamentals and desirable policies." The euro area is unlikely to receive harsh criticism, as its current account surplus is only +2.2% of its GDP, but if Germany is viewed in isolation, the situation becomes graver. The Report mentions that Germany's current account surplus is +6.9% of its GDP, and the largest in the world, amounting to USD 284.3 billion dollars. While the current account surplus itself has declined from +7.7% to +6.9%, and the Report is somewhat positive in mentioning the contribution from German domestic demand, it nevertheless points out that this "was not sufficient to reduce external imbalances appreciably." Further, as in the case of the euro area overall, the Report bases its evaluation of Germany on the IMF's analysis, but uses somewhat strong language, saying, "The IMF's most recent assessment judged Germany's external position to be stronger than warranted by medium-term economic fundamentals and desirable policies." As for CNY, the currency that appreciated the most against USD in 2020, the Report starts out mentioning China's currency intervention record and criticizing the country's lack of transparency, as usual, but goes no further. As I have mentioned several times in past issues of the Mizuho Medium-Term Forex Outlook Report, while there are references to COVID-related special demand (medical equipment, personal protective clothing, work-from-home office equipment, etc.) boosting China's exports and, thereby, its trade surplus, this has been viewed as beyond human control and not been targeted for criticism. Also, given that this trade surplus was accompanied by a rapid appreciation of CNY last year, this time's Report may have no choice but to take a lenient view of the matter.

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Treasury Secretary Yellen – Not Drawing Much Interest Yet

On the occasion of the Report's release, Treasury Secretary Yellen put out a statement saying, "Treasury is working tirelessly to address efforts by foreign economies to artificially manipulate their currency values that put American workers at an unfair disadvantage." This could be simply a platitude uttered as secretary of the Treasury, but it must be noted that Ms. Yellen refrained, during her confirmation hearing on January 19 this year, from stating that a strong dollar is an advantage to the U.S., as is conventionally expected. Coming as it did soon on the heels of the storming of the U.S. Capitol, it was assumed that perhaps Ms. Yellen was being considerate to Trump supporters. It now seems, however, that a weak USD may be viewed as more desirable than a strong one



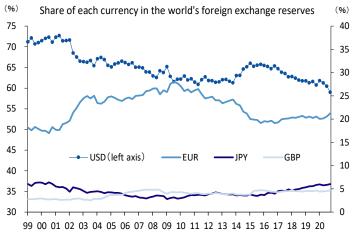
even for a Democrat-led currency policy when seeking economic recovery following a recession.

Going forward, interest in the Fed's policy normalization process is bound to increase, leaving aside its pace. Given that the direction of monetary policy and currency policy necessarily coincide, USD can be forecast to appreciate in the natural course of things. For instance, in the previous phase of policy normalization, USD appreciation began to accelerate starting June 2014, four months before tapering ended in October 2014 (see figure). Although no such trend seems conspicuous at the current time, if USD begins to accelerate as it did starting June 2014, Ms. Yellen is bound to encounter questions seeking her opinion on the trend. Having an excessively strong domestic currency essentially amounts to importing a recession from abroad, so it is bound to be the target of restraining action. In her talk in September 2016, when USD appreciation was at its height, Fed Governor Lael Brainard drew attention by saying that the level of USD appreciation seen at that time could "be having an effect on U.S. economic activity roughly equivalent to a 200 basis point increase in the federal funds rate." Janet Yellen was Fed chair at that time. Looking back at the situation in 2016, the global economic slowdown had become more marked, thanks to the "China shock" of the previous year, and the USD appreciation during 1H of the year was seen in a harshly critical light. This time around, the global economy remains stable despite sustaining severe damage due to the pandemic. It is still too early for Ms. Yellen's views regarding USD rates to draw much attention, but the market's interest in her currency policies will increase if (when) the Fed's policy normalization process causes USD to appreciate.

Forex Reserve Diversification – "A Move Away from USD" the Trend of a Quarter Century

USD Ratio Falls Almost to All-Time Low Level Although it was not taken much note of by the financial markets, the IMF's Currency Composition of Official Foreign Exchange Reserves (COFER) released on March 31 showed some very interesting results in terms of their implications for the medium- to long-term forex outlook. As of the end of December 2020, the world had a total of USD 12.7 trillion in forex reserves, an increase of +USD 454.4 billion from the end of September the same year. In terms of the level, this is the largest ever seen, but given that 2020 was a year of USD weakness, a large part of this could be due to the increase in the USD value of assets reflecting currency rate fluctuations (details follow). Of particular note this time is the decline in the composition ratio of USD (USD ratio). The USD ratio as of the end of December 2020 was 59.02%, a

-1.47pp decline compared with the previous quarter.



(Source) Datastream (Note) up to DEC 2020

The ratio was the lowest it had been in 25 years since 1995,² when it posted 58.96%. Moreover, this time, there have been movements (including in USD) for the first time in several years, and one can trace these movements back to their beginnings by looking at figures up to the second decimal place. Ordinarily, discussions center around figures up to the first decimal place, but this time, I would like to take the second decimal place into consideration too. What could be behind the USD ratio sinking almost to the all-time low level? I would like to use the recent COFER report as an opportunity to take stock of the current state and future outlook of the world's forex reserves. To begin with the conclusion, my guess is that a large part of the decline in USD ratio this time is owing to USD depreciation. Looking back at all the available quarterly data since 1999, there have been only two times when the decline in the USD ratio over a period of three months has been greater than the current time. The first was at the end of June 2002, when the

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² COFER began publishing composition ratios on a quarterly basis starting 1999, before which only yearly data is available.

ratio posted a qoq decline of -3.14 pp, and the second was at the end of June 2009, when a -2.37 pp qoq decline was posted. Both these times also coincided with significant USD depreciation. In NEER terms, USD declined by -2.6 pp during April-June 2002, and by -4.2 pp during April-June 2009. This time, it declined by -3.4 pp during October-December 2020. Incidentally, USD declined by a total of -3.6 pp for the entire year 2020, so one can tell that the decline during October-December was especially significant.

Taking such forex movements into account, it seems quite likely that one of the major reasons for the marked decline in the USD ratio is the significant depreciation of USD, as there is no actual evidence of an increase in USD sell-offs by reserve players such as central banks, finance ministries, or sovereign wealth funds (SWFs). However, whether due to price factors such as forex evaluations or due to volume factors based on transactions, the fact that said reserve players have made no move to correct this change in the USD ratio within their portfolios seems to suggest a decline in USD's importance for them. If they are of the opinion that USD's relative importance has not changed, they are likely to attempt to rebalance their portfolios at some point.

JPY Valued as the Currency of the World's Largest Net External Creditor?

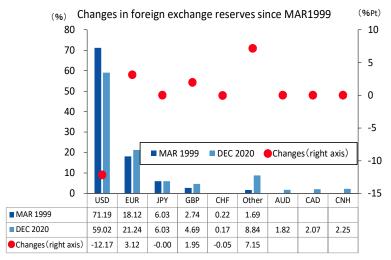
To the extent that USD's ratio has declined, reserves have been widely and universally distributed among the other currencies. EUR's ratio increased by +0.72 pp qoq, posting 21.24%, a high not seen in six years since December 2014. JPY's ratio, similarly, increased by +0.15 pp qoq, posting 6.03%, a high not seen in 22 years since the 6.24% of 1998. Apart from this, GBP's ratio also increased by +0.16 pp gog, to post 4.69%, a high not seen since December 2015, while CNY's ratio increased by +0.11 pp gog, to post an all-time high of 2.25%. Further, though the specific currencies are unknown, the "Other" category also increased by +0.17 pp gog to 2.70%. The "Other" category no longer includes CNY, CAD, AUD, so an increase in this category's ratio indicates that currencies other than all the aforementioned ones that are also being chosen for foreign reserves. The



(Source) IMF & Datastream (Note) up to DEC 2020

composition ratio of all these currencies has risen, but it must be noted that, <u>USD and EUR aside, JPY's presence as the currency with the third-largest composition ratio is quite significant</u>. Since a foreign reserve currency is a payment currency, the bare minimum conditions for a currency to be chosen as a foreign reserve currency are an unlikeliness to crash and high liquidity, and in this sense, it is appropriate that JPY, as the currency of the world's largest net external creditor, should be chosen. At the very least, this status makes it very unlikely for JPY to crash. The reason JPY's ratio declined during the years 2000-2008 was probably because the Japanese economy, having emerged from its financial crisis, had plunged right into a deflation and become the only currency in the world with a zero percent interest rate, making it easy for investors to scorn. It is, however, no longer rare for currencies to offer zero percent interest rates, and disinflation in developed economies has become a common phenomenon. That being the case, it is natural for JPY to be valued for its strength, namely net external credit and other demand-related factors.

The Age of Forex Reserve Diversification What could be the reason behind the aforementioned trends? In 2020, the U.S. posted its largest fiscal deficit since World War II. resulting in USD depreciation amid investor perception that the currency was overvalued. I admit this is a stereotypical explanation, but it seems fair to say that reserve players let go of USD amid fears of a loss of confidence in the currency due to the pandemic. However, this recently observed move is part of a larger trend seen in recent years, and cannot be brushed off as a transient development. As the figure on the previous page shows, there is a consistent pattern of decline in the USD ratio. The chart compares the composition ratios of different currencies on a quarterly basis for the period from March 1999 (the earliest date for which data is available) to December 2020. Over this 21-year-9-month period, the USD ratio has declined by as much as 12.17 pp. A move away



(Notes) AUD, CAD and CNH were not disclosed as of September 2008. "Other" in the table includes these three currencies

(Source) IMF & Datastream

from USD seems unquestionably to be a forex reserve trend that has been ongoing since 1999. 1999 was the year EUR was introduced, and one might be tempted to think that perhaps the emergence of a second key currency stole some of USD's share, but this is not the case. EUR's share since its birth has not increased by more than +3.12 pp, while GBP has increased only +1.95pp, and JPY and CHF have stayed more or less level. Which currency, then, is

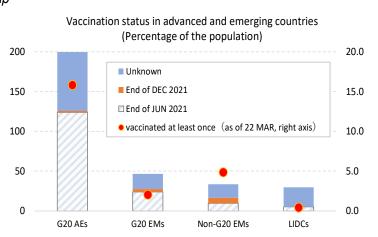
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responsible for taking USD's share? The greatest share has gone to the "Other" category, which includes currencies such as AUD, CAD, and CNY, and has increased by as much as +7.15 pp. The rate of increase in these currencies' shares is significantly greater than that of the key currencies (N.B. Individual statistics for AUD, CAD, and CNY began to be released starting the October-December 2012 quarter, so for the purposes of this discussion, I am taking them as a group, as part of the "Other" category).

In summarizing the trends in forex reserve investment over the past 20 years or more, therefore, it might be appropriate to call it a "diversification" or a "move away from USD." Going into the details, it is also important to note that the trends reflect the advent of a new age in forex reserve investment, with USD's share not being taken up by traditional key currencies such as EUR or JPY, but rather by the currencies of emerging and resource-based economies, led by CNY. Amid an across-the-board elimination of key currency interest rates, there are fewer benefits to investing in the traditional style, so it seems likely that this new trend of diversification will continue for the time being.

Risks to My Main Scenario – Global "Growing Pains" from the Latter Half of 2021

Risk of a Widening Developed-Emerging Country Gap In Japan, a state of emergency has been declared for the third time in a year, and it is certain that there will be further decline in proclivities to consume and invest in the domestic economy. However, vaccination programs are progressing steadily (albeit at varied rates of speed) in developed countries other than Japan. While lower than those of the UK and the United States, the EU vaccination rate (the percentage of the population that has received one or more dose as of April 28) has exceeded 20%, and the rates of such countries as Germany have surpassed 25%. Japan's rate is still only 1.8%, which is not high enough to be comparable. Looking around the world, one finds that there are only a few African and Latin American countries with vaccination rates lower than Japan even Zimbabwe, for example, has a higher rate. So Japan's vaccination rate is among the lowest – not



(Source) IMF (Notes) Because hit twice, the maximum is 200%.
AEs=advanced economies; EMs=emerging market economies; G20=Group of Twenty; LIDCs=low-income developing countries.

just among developed countries, but among all the world's countries.

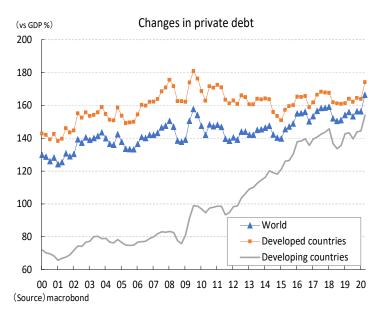
I am sometimes asked about how the situation in Japan might impact global financial markets, but one should note that even very big problems faced by the Japanese people often do not become market moving themes for global markets. It has long been evident that Japan's economic and financial situations have had almost no effect on the world's major stock indexes and USD/JPY. It is clear that Japan is lagging behind other developed countries, but looking at the world from a broader perspective, what seems likely to be particularly problematic going forward is the prospective widening of the gap between developed and emerging countries. The graph on the right shows the current and projected vaccination levels included in the spring edition of the IMF World Economic Outlook (WEO). The gap between developed countries (other than Japan) and emerging countries is expected to widen over time. It is apparent that such a vaccination rate disparity will promote disparities among growth rate and interest rate levels as well as cause forex rate fluctuations. However, the WEO forecasts that the gap between developed and emerging economies' real GDP growth rates will be narrower than ever in 2021. Specifically, 2022 real GDP growth rates are expected to be + 3.6% for developed countries as a whole and + 5.0% for emerging countries as a whole – a difference of 1.4 percentage points. As the 5-year average (2015-19) gap prior to the pandemic was 2.2 percentage points and the 10-year average (2010-19) gap was 3.1 percentage points, it is clear that the gap will be narrowing. This situation may be considered to stem from the developed-emerging vaccination rate disparity.

Lessons about "Growing Pains" Learned from the Post-Lehman-Shock Experience

Based on past experience, <u>such an increase in developed countries'</u> economic dominance is liable to pose a threat to <u>emerging economies</u>. After suggesting a gradual reduction (tapering) of quantitative easing in May 2013, former Fed Chairman Ben Bernanke began a series of interest rate hikes in December 2015, implementing the ninth such hike in December 2018. During this period, observers frequently noted that those moves to increase US interest rates were causing capital outflows from emerging countries and forcing emerging countries' central banks to follow suit by begrudgingly hiking their own interest rates. In response to the pandemic, developed countries have instituted economic stimulus and monetary easing policies of unprecedented sizes, causing financial markets to become replete with excess liquidity. If such developed countries as the United States quickly express their interest in normalizing monetary policy in light of the progress of their domestic vaccination programs, it is highly likely that there will once again be a general shift of capital from emerging countries to developed countries. There is no guarantee that it will be possible to control this shift enough to ameliorate the pain of associated problems.

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Of course, the Fed is not currently interested in initiating a monetary policy normalization process. It is widely believed that the Fed has a consensus among its members that it should continue zero-level interest rates until the end of 2023, although that is simply the median forecast among Fed members at this point in time rather than being an explicit commitment. If the Fed revises its policies to increase interest rates, it will probably cause a sudden shift of capital to the United States. Regarding the post-Lehman-shock period, it is worth noting that USD appreciated from June 2014. At that time, it was anticipated that the completion of tapering (the complete end of quantitative easing) would be achieved in September 2014, and it was generally considered that the completion of tapering would be the final move in preparation for the raising of interest rates. However, there had been intermittent bouts of turmoil in emerging economies since 2013, and it seems likely that the Fed's normalization process would have proceeded much more quickly if



not for those bouts of turmoil. In any case, when such developed countries as the United States begin shifting away from crisis response measures and toward more-normal policies, it is highly likely that the shift will be accompanied by turbulent conditions in emerging countries owing to capital outflows from those countries. Such turbulence could be considered a kind of "growing pain" that accompanies an economy's progress from crisis conditions to normal conditions. As the graph shows, private debt as a percentage of GDP has increased significantly in emerging countries since the Lehman shock, and the level rose still further in 2020. (The latest time point on the graph is September 30.) Moreover, much of that debt is known to be denominated in dollars. Given that, it goes without saying that US interest rate increases and USD appreciation will inevitably elicit turbulence in emerging countries.

Canada as a Leading Example of "Growing Pains" Risk

Of course, given the loss of more than 8 million jobs in the United States, the Fed is not likely to shift away from its monetary easing posture for quite some time. On the other hand, given that President Biden is no longer hiding his interest in hiking the capital gains tax rate, one cannot help but get the impression that the U.S. government is beginning to believe there is sufficient leeway to introduce measures liable to have a negative effect on financial markets. And reporters at Western central bank governors' press conferences have begun asking questions about the possibility of tapering. In fact, there was a central bank move in April that seems to make such questions relevant. Canada is known to have made rapid progress in its vaccination program since the beginning of the year and, on April 21, the Bank of Canada (BOC) responded to an unexpected degree of recovery in the country's real economy by deciding to scale-down its quantitative easing measures (from CAD4 billion to CAD3 billion a week) and hinted that it may accelerate its schedule for hiking interest rates (shifting a rate hike planned for 2023 to the latter half of 2022). As mentioned above, among G7 country currencies, the GBP is the strongest at this point, but CAD is second strongest and has remained stable against the backdrop of USD's deceleration. If such a currency's central bank is in a position to begin hinting at monetary policy normalization, it seems natural to expect to see international capital flowing into that currency. While Canada is the only developed country to show interest in monetary policy normalization so far, if such interest spreads to the United States and the United Kingdom, it would be reasonable to anticipate that the resulting capital outflows from emerging countries and the associated "growing pains" will become more severe. It seems likely that the emergence of such risks will become a hot topic in the latter half of this year at the earliest and during the first half of 2022 at the latest. On the other hand, if concerns about "growing pains" were not to emerge going forward because of a general lack of ability to exit the pandemic crisis – even in Europe and the United States, where vaccination programs are rapidly progressing - one could say that the world would be even worse off. Of course, the biggest risk facing the global economy at this time is that new coronavirus variants might become more resistant to vaccines, causing the pandemic to begin spreading again. Given that it is difficult even for epidemiologists to make rational forecasts regarding such potential scenarios, however, I think economists should refrain from spending too much time considering such possibilities. Instead, I would like to focus on evaluating asset price trends based on logical analyses of data from past experience.

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EUR Outlook – Renewed EUR Appreciation Trend?

EUR Area Monetary Policies Now and Going Forward - Emphasis on Funding Environment Issues

Maintaining the Status Quo in Light of Vaccination Programs

The ECB Governing Council meeting in April decided to maintain the policy status quo. Given that the Governing Council just included the sentence - "the Governing Council expects purchases under the PEPP over the current quarter to continue to be conducted at a significantly higher pace than during the first months of the year" - in its March meeting's statement and that conditions in the euro area's bond market continue to be reasonable, it makes sense that the status quo would be maintained. As ECB President Christine Lagarde said at the post-meeting press conference, the real economy is expected to improve within this year amid progress made in vaccination programs and the gradual lifting of behavioral restrictions, and she considers the ECB's monetary policies to be positioned to support that trend in the real economy. In other words, the decision to maintain the status quo is essentially based on expectations of the success of vaccination programs. Given that the ECB's balance sheet is by far the largest in the world, as noted below, it is also possible that the decision reflects the ECB's desire to avoid unnecessarily expending its limited number of policy cards.

The Meaning of "Significantly Higher Pace" Despite the announcements about a "significantly higher pace" of purchases, the actual pace of asset purchases through the Pandemic Emergency Purchase Program (PEPP) has not increased so much. Comparing PEEP average weekly purchases for the month-long periods before and after March 12 (the date of the previous Governing Council meeting), one finds that the purchase pace increased by about 10% - from about EUR14.5 billion to about EUR16 billion euros - compared with a purchase pace of about EUR17 billion last December. It does not seem very realistic to characterize the recent 10% acceleration of purchases as being a "significantly higher pace". It is worth noting that the balance of PEPP purchases as of April 16 was EUR976.6 billion, corresponding to 52.8% of the EUR1.85 trillion PEPP envelope. In order to completely use the EUR873.4



a simple calculation ignoring seasonal factors suggests a need for monthly purchases averaging EUR79.4 billion, corresponding to weekly purchases averaging EUR19.9 billion. So the purchase rate would have to be further accelerated at some point in order to completely use the envelope. While the "significantly higher pace" phrase does not commit the ECB to any particular numerical target, people focusing exclusively on the purchase pace may be inclined to get the impression that the ECB has significant spare PEPP resources. If an emergency situation were to arise, it is a fact that additional mitigation measures would be likely to be implemented.

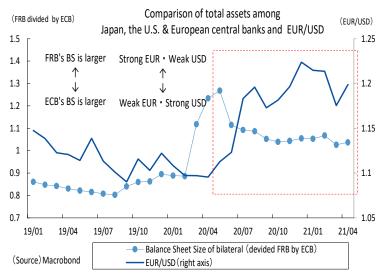
From the ECB's perspective, however, the PEPP and other asset purchase programs are means rather than goals. The goal is to induce lower market interest rates or, more precisely, to ease conditions in the funding environment. The ECB will be quite pleased if it can reduce the pace of asset purchases while continuing to attain its market-interest-rate-lowering goal. The ECB's policy management appears to have been successful in this regard, as euro area interest rates have leveled off following an uptrend seen from the start of 2021 (see graph). As explained below, President Lagarde has stated that the PEPP purchase pace was being accelerated with the aim of maintaining a favorable financing environment and that the program's results should be evaluated in light of - "the financing conditions throughout the chain, from upstream to downstream". While the financial markets tend to focus on weekly purchase volumes, Lagarde disagrees with that approach, saying - "weekly numbers are not the most relevant numbers."

World's Largest Balance Sheet Unable to Restrain EUR Appreciation

Frankly, I am fairly confident that the ECB over the next year will primarily be maintaining the status quo while sometimes undertaking some additional easing when deemed necessary. There are two main reasons for this - the goal of maintaining a favorable funding environment and the goal of restraining EUR appreciation. It has been apparent since the March Governing Council meeting that the ECB has been particularly aware of the problem regarding maintaining a favorable funding environment. At the most recent post-Governing Council meeting press conference, a reporter posed the question – "your bank lending survey [BLS] this week showed that banks expect to tighten credit standards even further in the current quarter after they've already done that in the past three quarters. Is that a worrying sign, in your assessment [...]?" – and President Lagarde responded that – "there is moderate tightening as opposed to much stronger tightening in the two previous surveys, so while it is still tightening, that tightening is moderate." (The BLS results are important and are discussed below.) In general, President Lagarde said

Medium-Term Forex Outlook 11 / 16 that, compared to the January-March quarter, the funding environment has been stabilizing since April. The ECB has stated that maintaining a relaxed funding environment based on a "holistic and multifaceted set of indicators, spanning the entire transmission chain of monetary policy" will contribute to price stability, and it is emphasizing the acceleration of PEPP purchases and the pushing down of long-term interest rates to maintain an accommodative funding environment. In this regard, the ECB's policy response has caused euro area interest rates to stop rising, but they have not declined significantly, and it appears that the likelihood of implementing tightening measures akin to tapering is still quite distant.

Another key goal is restraining EUR appreciation. As was true with respect to the Bank of Japan in the past, the ECB is managing a currency of an economy with huge trade surpluses and is always keenly aware of a need to mitigate the negative effects of chronic currency appreciation pressures. The strong pressures promoting EUR appreciation since last year have eased during 2021 but have recently begun strengthening again. The ECB now has the world's largest balance sheet value, which has surpassed USD9 trillion and is far ahead of the Fed's second-place balance sheet value (USD7.8 trillion). The graph show that, if one believed that forex rate levels could be forecast based on comparisons of the scale of regional quantitative easing measures as reflected in central bank balance sheet values (the so-called Soros chart-like world view), one might anticipate a substantial



degree of EUR depreciation, although this does not in fact seem likely (as there is no sound theoretical reason for such depreciation). However, financial market reactions to monetary policy measures are not always symmetrical – just because EUR did not depreciate during the implementation of quantitative easing measures does not necessarily guarantee that EUR will not appreciate on the roll-back of those quantitative easing measures. Since EUR has long had a legitimate reason (trade surpluses) for appreciating, there is a possibility that decisions to tapering quantitative easing measures could encourage EUR buying. This is one of the reasons why the ECB will not find it easy to undertake tapering.

Dangers of Premature Tapering Expectations

The ECB is naturally aware of this situation, and President Lagarde has stated that talk of PEPP tapering (referred to at the press conference as "phasing out of PEPP purchases") was premature. At the March Governing Council meeting, the ECB announced a policy of reviewing the PEPP purchasing pace once every three months, so the next purchasing pace review will be at the June 10 Governing Council meeting. At the press conference, President Lagarde stated that "there is no normal pace of [PEPP] purchase[s]", and emphasized that the reviews every three months would merely determine the optimal pace for maintaining favorable financing conditions and promoting a progress toward the goal of increasing the region's inflation rate to close to but below 2%. This clearly can be considered an ideal kind of answer for a central bank to offer. Regardless of that, however, the financial markets will continue keeping a close eye on weekly data while focusing on the direction (increase or decrease) and level (amount) of asset purchases, and it remains highly likely that the markets will continue to utilize those perceived trends as market-moving themes for speculative bond and currency trading transactions.

I initially considered the PEPP's structure of having a capacious purchasing envelope but not specifying monthly

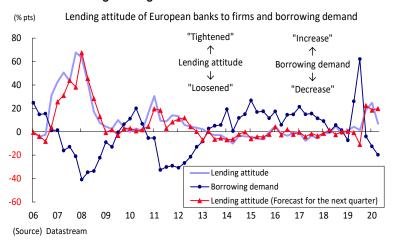
purchase levels to be particularly convenient in that it obviates the need to announce such policies as tapering via Governing Council meeting statements, but the system of reviewing the PEPP purchasing pace once every three months may cause those reviews to become overly spotlighted events going forward. At the most recent post-Governing Council-meeting press conference, a reporter asked about whether the ECB might emulate the Bank of Canada's (BOC's) decision to begin tapering, and another reporter asked whether future tapering measures by the Fed might influence the timing of similar ECB measures. President Lagarde responded by emphasizing that the timing of ECB measures would not be influenced by other central banks' measures because the situations in each country are different, but if the slight acceleration of PEPP purchasing the ECB approved in March was announced in line with an external information dissemination strategy, then it would follow that such information dissemination will also be undertaken at times when the pace of purchasing is decelerated. At that time, there is a possibility that the financial markets will focus on that information and interpret it in an exaggerated manner as a highly significant indication of tapering.

Some Governing Council members favor restraining the pace of PEPP purchases and think it unnecessary use the entire PEPP envelope, so it is not beyond the realm of possibility – depending on the situation in June – that a suggestion at that time that the pace might be restrained might be misinterpreted as an initial tapering measure, promoting EUR buying. During April, President Lagarde attracted attention for suddenly provoking the financial markets, but even aside from that situation she has widely given the impression that she lacks delicacy in her "dialog with the market" process. I think it worth keeping in mind the risk that such a weakness might – at a future point when the direction of policy management is being adjusted and optimal sensitivity is required – directly lead to sharp price movements.

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Conditions in the Funding Environment – BLS Reports Continued Tightening

The ECB released its quarterly Bank Lending Survey (BLS) in April. As mentioned above, the issue of maintaining favorable conditions in the euro area funding environment was a major topic at the post-Governing Council-meeting press conference, and one reporter noted the BLS results and asked a related question. I consider the BLS results to be an extremely important basis for projecting the ECB's "next move." Conditions in the funding environment are currently a key consideration of the ECB's monetary policy management, as can be seen from the numerous mentions of "financing" conditions" in ECB press conferences and Accounts – the phrase appears 47 times in the Account of the March Governing Council meeting.

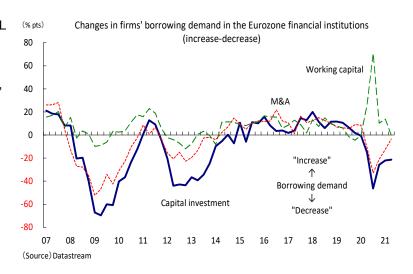


ECB Executive Board member and chief economist Philip Lane has stated that evaluating the entire monetary policy transmission chain in a "holistic and multifaceted" manner promotes a relaxed funding environment and also contributes to price stability, and the March decision to accelerate PEPP asset purchases may be primarily designed to promote a relaxed funding environment by lowering long-term interest rates.

This BLS surveyed 143 banks in the euro area between March 11 and 26 (100% response rate). A Governing Council meeting was held on March 11, and the banks' responses can be assumed to reflect their perception of the decisions made at that meeting. The April BLS included a special separate question on the impact of the ECB's asset purchase programs (APP and PEPP), which will be discussed below. Presumably reflecting the ECB's proactive asset purchases and liquidity supply measures, a deceleration of the net tightening of banks' credit standards for loans to firms (the percentage share of 'tightened' responses less the percentage share of 'eased' responses) was seen (+24.8 → +7.0). However, this only indicates a slowing of the tightening seen over the past year, and it is a rather pessimistic finding in that there remain signs of additional tightening. Moreover, the net percentage of banks reporting a continued tightening of credit standards for loans to firms is expected to remain similar in the second quarter of 2021, so the situation continues to be serious. The speed of credit standard tightening has slowed due to government debt guarantees, various monetary policy enhancements, and improved risk tolerance (in anticipation of vaccine diffusion), but pandemic-related uncertainties are still exerting a negative effect on the credit environment, so the overall situation has remained essentially unchanged.

Sluggishness of Demand for Loans

As the graph shows, credit standards regarding the supply of loans have become stricter, and there has also been a trend of increasing weakness in demand for loans. The BLSs conducted in April and July last year found that, while economic activity was curtailed in a manner akin to a "cardiac arrest", there was a sharp expansion of demand for loans from households and companies, centered on loans for working capital, but such demand has continued to sharply shrink since then. It is worth taking closer look at the contributing factors to the loan demand situation. In light of efforts to restrain the pandemic, it is easy to imagine how difficult it would be draft capital investment plans while the population is still intermittently being subjected to various



behavioral restrictions. The latest BLS found that the main cause of the slackness of demand for loans is that industries strongly affected by the pandemic have refrained from making capital investments (see graph). The banks generally anticipate demand for loans will increase from the second quarter, but such expectations are predicated on expectations of progress of vaccination programs accompanied by progress in economic normalization. The euro area's credit environment has been affected by a tightening of credit standards regarding the supply of loans while demand for loans has slackened, causing a slow-down in lending to private sector firms. The lack of an increase in the supply of funds to the real economy theoretically suggests a situation in which commodity prices do not rise.

Ad Hoc Question about the Impact of Monetary Policies

As mentioned, the ECB now has a particularly keen awareness of conditions in the funding environment, which is a primary focus of its monetary policy management, and the latest BLS was supplemented with ad hoc questions related to the impact of the ECB's monetary policies on the funding environment. Regarding the financing environment for companies and individuals, although improvements compared to the previous quarter were reported,

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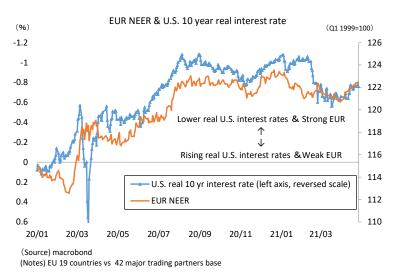
the degree of easing compared to the previous quarter is gradually decreasing. This situation seems to have caused the ECB to feel a sense of crisis and spurred it to investigate the direct and indirect impact of expanded asset purchase programme (APP) and PEPP on financial institutions' funding environment. In this regard, the BLS found that – "Euro area banks reported, in net terms, that the APP and PEPP contributed to a further improvement of their liquidity position and their market financing conditions, but to a deterioration in their profitability over the past six months [...] This was driven by the negative contribution from net interest income, while banks reported in net terms a positive effect on capital gains." These recent bank liquidity and profitability situations are unlikely to change significantly during the next six months. From the perspective of the euro area's banking sector, it appears that APP and PEPP have negative side effects but are still making a positive contribution on the whole, particularly with respect to improving the funding environment. In light of such BLS findings, it does not seem that the ECB would be inclined to judge that it has the leeway to discontinue the APP or PEPP.

Another ad hoc question in the BLS aimed to gauge the direct and indirect effects of the ECB's negative deposit facility rate (DFR) and the ECB's two-tier system. The BLS naturally found that negative interest rates have a negative impact on banks' profitability. However, the BLS also made a highly noteworthy finding that even a considerable margin of decrease in interest rates has not had a very large effect in increasing the "quantity" of lending. While it would currently be difficult for the ECB to make moves in the direction of raising interest rates, the BLS finding regarding the "quantity" of lending suggests that negative interest rate policies have a higher cost relative to their benefits than was previously recognized. In general, the BLS confirms the harshness of the euro area's credit environment and supports expectations that the ECB's current policy management posture may be reinforced but that easing policies will not be rolled back for the time being.

EUR Now and Going Forward – Renewed EUR Appreciation Trend?

Renewed EUR Appreciation Trend?

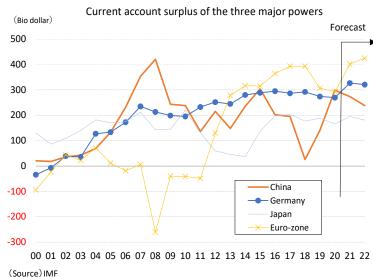
While EUR/USD had temporarily descended to close to the 1.17 level, it rose back above the 1.20 level during April. In light of this, I have been receiving a growing number of inquiries about the possibility of a renewed EUR appreciation trend. As discussed above, there appears to be leeway for a rise of roughly 20-30bps in US 10-year interest rates, so a renewed EUR appreciation trend seems unlikely, and EUR/USD may be expected to decrease later this year. On the other hand, it can also be said that there is not really so much leeway for US interest rates to rise. It is evident that the EUR nominal effective exchange rate fundamentally moves in parallel with US real 10-year interest rate (see graph), and the there are numerous statements recognizing this relationship to be found in the ECB Governing Council meeting Accounts. Therefore, if there is



limited leeway for US interest rates to rise, it is reasonable to conclude that there is also limited leeway for EUR/USD to descend.

Euro Area Supply-Demand Environment Solid in 2020

The supply-demand environment also suggests that EUR will not easily depreciate to a great extent. While Germany has recently been the country with world's largest current account surplus, special pandemic-related demand has recently generated a tailwind for China, which overtook Germany for the first time in five years to become the country with world's largest current account surplus in 2020. When considering forex trends, however, it is more important to consider the supply-demand situation of the euro area rather than that of Germany alone, and it is worth noting in this regard that the current account surpluses of China and the euro area were almost equal in 2020. From 2021, the current account surplus of euro area countries centered on Germany is expected to begin increasing again (see graph). As mentioned above, it is unlikely that the theme



of rising US interest rates will become as much of a market-moving theme as it was in the January-March quarter. As

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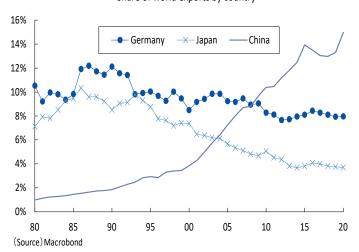
interest rates gradually lose their power to drive forex rates, the supply-demand situation is likely to be given relatively more attention. Such a trend would be likely to act as a tailwind for EUR. Despite the Europe-U.S. disparities regarding interest rate levels and vaccination rates, the supply-demand environment suggests that EUR/USD is at a reasonably appropriate level. It is also worth noting that Japan is behind only Germany and China regarding the size of its current account surplus, but Japan's current account surplus does not reflect a trade surplus but is almost completely attributable to a primary income balance surplus. Consequently, I think there is a lot of leeway for EUR to appreciate against JPY.

Chinese Economic Recovery Promoting Strength of German Economy and EUR

The top graph shows changes in the composition of Germany's exports to countries outside the euro area. The margin of negative yoy changes since the start of the pandemic has gradually narrowed, and yoy changes in exports to China – the top destination of German exports – have been positive since the July-September quarter of last year. If these trends continue, it can be expected that the German economy will benefit from them. For example, it is known that roughly a third of vehicles exported by Germany three top automakers are sold in China - in 2020, Chinese sales accounted for 35% of Mercedes-Benz's unit sales, 43% of Audi's, and 34% of BMW's (based on each company's 2020 annual report). The fact that Germany's auto industry - with its wide range of associated companies – is so dependent on the Chinese market suggests that China's economic ups and downs are likely to be directly transmitted to the German economy. It is said that, in recent years, Japanese exports are becoming less likely to be directly linked to a virtuous production-income-consumption cycle within Japan. This partly reflects the progressive transfer of Japanese manufacturing operations to overseas production bases as a result of repeated bouts of JPY appreciation and efforts to geographically disperse production bases following the 2011 Great East Japan Earthquake (of course, these are not the only factors). On the other hand, unlike Japan, Germany has a considerable amount of domestic production and export bases remaining, so the strength of external demand tends to contribute to the recovery of the domestic real economy through an increase in exports (≈ increase in trade surplus). As can be seen in the lower graph, Japan's share of world exports has been steadily declining, but the decrease in Germany's share of world exports has been relatively minor. Although the German economy is susceptible to the



Share of world exports by country



effects of fluctuations in economic conditions in China and other overseas export markets, it is expected that the trade surplus of Germany and the euro area will increase at least during the next year as economic growth rates generally improve. In light of these situations, I anticipate that during the next year, although EUR may depreciate somewhat owing to a rise in U.S. interest rates, EUR/USD will stop declining at around the 1.15 level.

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