# Foreign Exchange Management in Japan: 10 Episodes 

Haruhiko Kuroda<br>Former Governor, Bank of Japan

Japan has experienced large fluctuations in yen exchange rates since 1971, when the Bretton Woods System collapsed. Thereafter, foreign exchange management in Japan has become complicated. I have been directly or indirectly involved in it, so I would like to explain foreign exchange management in Japan through 10 episodes, based on my personal experience at the Ministry of Finance, the Bank of Japan, and elsewhere over the last half century.

## Episode 1: Nixon Shock in 1971

President Nixon announced on 15 August 1971 that the United States (US) would discontinue gold convertibility of the dollar, which had been the cornerstone of the Bretton Woods System since 1946. Under the Bretton Woods System, the US maintained gold convertibility of the dollar at its official price ( $\$ 35$ per ounce), while all other members of the International Monetary Fund (IMF) were required to maintain their exchange rates within plus-minus $1 \%$ of their par-values in terms of the gold-convertible dollar. After the Nixon shock, all major currencies floated, but Japan maintained the par-value of 360 yen to the dollar for about two weeks which required a huge currency intervention. However, the yen was eventually floated and rapidly appreciated toward 310 yen to the dollar.

At that time, I was a section chief in the National Debt Division of the Financial Bureau, after coming back from Oxford University, where I studied monetary theory under John Hicks and international economics under Max Corden. I immediately understood that yen appreciation was inevitable and the economy would be severely hit by substantial reduction of exports. That was the case and the Government of Japan decided to increase public works expenditure substantially, so that the Division became busy, tripling Japanese government bonds (JGB) issuance. Also, I thought the fixed exchange rate system was impossible to resurrect as well as inappropriate under increased international trade and capital flows, and so, I published a related article in the Ministry of Finance magazine in October 1971. But, of course, the Group of Ten (G10) countries agreed to re-establish the fixed exchange rate system without gold convertibility of the dollar (the Smithsonian System) in December 1971. The yen was fixed at 308 yen to the dollar. This system collapsed due to the floating of major currencies in spring 1973 (the general float has continued until now) and the yen appreciated toward 260 yen to
the dollar in a matter of months.

## Episode 2: Oil Shocks in 1973 and 1979

Rapid depreciation of the dollar against many currencies made oil quite cheap for non-dollar countries, since oil prices were quoted in dollars. Then, after the Yom Kippur war, the Organization of Arab Petroleum Exporting Countries (OAPEC) decided to raise oil prices from $\$ 3$ per barrel to $\$ 5$ and then a short time later to $\$ 12$ (a 4 -times increase). Since Japan was almost $100 \%$ dependent on imported oil, it suffered huge balance of payments deficits and yen depreciation. As an assistant director in the Legal Division of the International Finance Bureau, I made a 180 -degree change of capital control from "free outflow and restricted inflow" policy to "free inflow and restricted outflow" policy, and Japan borrowed $\$ 3$ billion from Saudi Arabia. Yet, the yen depreciated to 300 yen to the dollar, raising the inflation rate to more than 20\% in 1973-74.

However, Japan's economy gradually adjusted to the high oil prices, and oil money moved into Germany and Japan. When Henry Kissinger proposed to establish an "OECD Financial Support Fund" to help heavily affected oil-importing Organisation for Economic Cooperation and Development (OECD) countries in 1975, the US as well as Germany and Japan were supposed to provide financial assistance through the Fund. At that time, I was an assistant director in the International Organizations Division of the International Finance Bureau, and in charge of OECD matters. The Fund's charter was signed by OECD members in May 1975 and approved by the Japan National Diet quickly, but the US Congress did not approve, so the Fund was not created after all.

The yen appreciated toward less than 200 yen to the dollar in the second half of 1970s. But then, the second oil crisis erupted in 1979 after the Iranian Revolution, and the yen depreciated to around 250 yen to the dollar, staying there during the first half of the 1980s. This time, however, inflation was well-contained and Japan had huge current account surpluses, creating trade frictions with the US, since the dollar strengthened due to very high short-term interest rates around $20 \%$ to contain its high inflation rate.

## Episode 3: Plaza Accord in 1985 and Louvre Agreement in 1987

Japan and Germany were afraid of US trade protectionism, so they agreed to appreciate their currencies significantly by selling the dollar and purchasing their respective currencies as a result of the Plaza Accord on 22 September 1985. The yen immediately appreciated to 200 yen to the dollar by the end of 1985 , from 240 yen to the dollar before the Plaza agreement,
and continued to appreciate toward 150 yen to the dollar by the summer of 1986. This large yen appreciation put Japan's economy into a recession, so the Government introduced fiscal stimulus measures several times. When I was a counselor in the Research and Planning Division of the Minister's Secretariat in 1986-1987, the Group of Seven (G7) Finance Ministers and Central Bank Governors' Meeting was created at the time of the Tokyo Summit of June 1986 to discuss policy coordination, and I was assigned to prepare for G7 meetings. But policy coordination was difficult, and the dollar continued to depreciate toward 140 yen.

To stop further depreciation of the dollar, G7 countries agreed to "maintain exchange rates around the current levels." That was the Louvre Agreement on 22 February 1987. But, unlike the Plaza Accord which quickly and substantially depreciated the dollar, the Louvre Agreement did not stop dollar depreciation. The dollar depreciated to less than 130 yen by 1987-88. Japan's economy experienced a recession, so Japan implemented fiscal stimulus and monetary easing. These policies helped the economy recover while inflation remained less than $2 \%$, but created an asset bubble in the late 1980s. During that time, I was a Director in the International Finance Bureau and in the Tax Bureau. I understood the need for expansionary macroeconomic policies, but was afraid that the asset bubble would become too big in the euphoria of "Japan as Number One."

## Episode 4: Bursting of the Asset Bubble in the Early 1990s

The stock market collapsed in 1990 and land prices sharply declined in 1991-93, i.e., the asset bubble burst, which created a financial crisis and economic recession in Japan. In these periods, I was working mostly for the Tax Bureau and Tax Administration, and was not directly involved in foreign exchange management. But what I could not understand was that the yen appreciated so much after the bubble burst, reaching less than 100 yen to the dollar by the middle of 1995 . Of course, there were proximate courses of yen appreciation: i) faced with huge domestic losses, Japanese financial institutions repatriated their foreign investment (leading to large capital inflows); ii) the US executed "Japan Bashing" through trade restrictions and weak dollar policy; and iii) the Bank of Japan, under Governor Yasushi Mieno, tightened monetary policy in 1989 to burst the asset bubble and maintained relatively tight monetary conditions until 1994.

From 1994 to 1996, I was Deputy Director-General of the International Finance Bureau, and directly involved in foreign exchange management. Under Director-General Sakakibara, we made much larger market interventions to change the course of exchange rate movement, which was called the "Sakakibara Intervention." Particularly impressive interventions were
made on 2 August and 8 September 1995. The yen had appreciated from around 100 yen to the dollar to less than 80 yen since the Great Hanshin-Awaji Earthquake of January 1995, and then, induced by these two huge interventions, the yen depreciated to 100 yen to the dollar. Of course, there were a few other contributing factors, such as the G7 communiqué in April 1995, arguing for "orderly reversal" of exchange rate movements, and the reduction of the policy rate to the historic low level of $0.5 \%$ by Bank of Japan Governor Yasuo Matsushita on 8 September 1995. Thereafter, the yen gradually depreciated toward 120 yen to the dollar by 1997 without much intervention. At the same time, Japan's economy recovered and thereafter grew about $3 \%$ annually.

## Episode 5: Asian Currency Crisis and Domestic Financial Crisis in 1997-1999

The Asian Currency Crisis erupted in July 1997 in Thailand, which had to float its currency under heavy currency attack. The crisis thereafter spread to other East Asian countries. After becoming Director-General of the International Finance Bureau in 1997, I organized the Friends of Thailand meeting in Tokyo in August that year, together with Vice-Minister of Finance Eisuke Sakakibara. On top of $\$ 4$ billion in IMF support, regional countries secured an additional $\$ 11$ billion (including $\$ 4$ billion from Japan) for Thailand. But the currency crisis did not stop and spilled over to Indonesia and the Republic of Korea. So, during the IMF-World Bank Annual Meeting in Hong Kong, China in September 1997, Japan proposed to establish an Asian Monetary Fund (AMF) to complement IMF support. This idea came from the conviction I felt when I visited Thailand in early 1997. East Asian countries like Thailand, which had enjoyed strong growth financed by capital inflow under dollar pegs, might face a currency crisis as Mexico did in 1995, and IMF support for them would be insufficient since their IMF quotas were small relative to their economies and their potential financing needs. Unfortunately, the IMF and the US strongly opposed the idea, so the AMF was not created, and Asian countries fell into financial and economic crisis.

Almost at the same time, a domestic financial crisis erupted in Japan in November 1997, with four financial institutions collapsing in successive weeks. But Japan's financial crisis was unrelated to the Asian Financial Crisis. Rather, it was the result of the bubble bursting in the early 1990s and failure to quickly solve bad asset problems. The yen depreciated from around 120 yen to the dollar to 140 yen by 1998, so the "Sakakibara Intervention" was mobilized, but this time, to shore up the yen, selling dollars in the order of $\$ 20$ billion on one day in April 1998. Again, it was effective, and the yen recovered to around 120 yen to the dollar. Incidentally, it was Vice-Minister Sakakibara's initiative to disclose the amount of currency intervention every month.

## Episode 6: 15-Year Deflation Starting in 1998

When I became Vice-Minister of Finance for International Affairs in July 1999, foreign exchange management was not a major concern, since the yen appeared stable at around 120 yen to the dollar. Instead, the most urgent task was to help Asia's crisis affected countries, and establish a regional financial safety net. Japan provided $\$ 30$ billion in financial support to those countries through the New Miyazawa Initiativ in 1998-2000, and they fully recovered before 2000. In May 2000, Japan led ASEAN+3 countries to establish the Chiang Mai Initiative, which was subsequently transformed to a multilateral mechanism, the Chiang Mai Initiative Multilateralisation Agreement (CMIM). The size of CMIM was eventually expanded to $\$ 240$ billion.

The yen started to appreciate in 1999 and reached close to 100 yen to the dollar by the end of 1999, so we intervened in the yen-dollar market intensively. The yen depreciated to 115 yen to the dollar in early 2000, but soon started to appreciate toward 105 yen to the dollar despite some intervention. Foreign exchange reserves reached $\$ 300$ billion, and dollar investment was diversified to include US agency bonds, in addition to US Treasuries.

In the meantime, the euro was created at 1 euro=\$1,1743 on 1 January 1999, but it started to weaken and reached less than $\$ 0.9$ to the euro by 2000 . Then, the US, Japan, and the European Union (EU) made a coordinated intervention to shore up the euro, particularly in September 2000, while Japan continued intervening in the yen-dollar market since the yen tended to appreciate. Incidentally, I negotiated with the European Central Bank (ECB) over depositing Japan's euro reserves at the ECB.

Japan's economy recorded negative growth in 1998 and 1999, and started its 15-year deflation in 1998. The Bank of Japan introduced a zero interest rate policy (ZIRP) in February 1999, and the economy recovered and grew by nearly $3 \%$ in 2000 , while the yen depreciated to around 125 yen to the dollar in 2000. However, the Bank prematurely abolished the ZIRP in August 2000, moving the economy into a recession in 2001. Then, the Bank had to introduce a quantitative easing (QE) policy in March 2001.

On 11 September 2001, suicide terrorist attacks were carried out by al-Qaeda against the US. On that day, US Treasury Undersecretary John Taylor was in Tokyo to prepare for a JapanUS Finance Ministers' meeting. I discussed with Undersecretary Taylor about a possible currency market intervention to avoid excessive depreciation of the dollar. Despite large-scale
interventions in the following days, the dollar depreciated to $\$ 1=¥ 116$. The dollar soon recovered and reached around $\$ 1=¥ 135$ by January 2002 . Thereafter, the yen rapidly appreciated toward 125 yen to the dollar, partly because Bank of Japan Governor Masaru Hayami insisted that a strong yen was good for Japan though its economy had been under persistent deflation since 1998 and was in recession in 2001 and 2002. The Finance Ministry purchased dollars and sold yen in large amounts in May and June 2002, and thereafter, the yen stabilized at around 120 yen to the dollar.

## Episode 7: Lehman Crisis in 2008 and Great East Japan Earthquake in 2011

I retired from the Ministry of Finance in January 2003, and was appointed as Special Adviser to Prime Minister Junichiro Koizumi's Cabinet as well as professor of economics at the Graduate School of Economics at Hitotsubashi University in 2003-2005. During this period, my successor, Vice-Minister Zenbei Mizoguchi, almost continuously intervened in the currency market, while Bank of Japan Governor Toshihiko Fukui expanded QE substantially, so that "unsterilized interventions" were executed. The yen stabilized at around 110-115 yen to the dollar and the economy grew at around $2 \%$.

I became President of the Asian Development Bank (ADB) in January 2005 and the yen continued to stay at around 100-110 yen to the dollar without any market intervention, until the Lehman crisis erupted in September 2008. During the Global Financial Crisis, ADB increased assistance to its developing member countries by tripling loans, thanks to the tripling of its capital base in May 2009. Japan's economy dived into a serious recession in 2008 and 2009 and its deflation worsened. The yen appreciated to around 90 yen to the dollar, despite substantial yen sales and dollar purchases, e.g., more than $\$ 20$ billion on 15 September 2010, $\$ 40$ billion on 21 August 2011, and $\$ 80$ billion on 31 October 2011. The Bank of Japan, under Governor Masaaki Shirakawa, expanded its QE, but it was insufficient to help the economy and avoid yen appreciation. The yen particularly appreciated after the Great East Japan Earthquake in March 2011, reaching the historic high level of $\$ 1=¥ 75$ on 31 October 2011. Deflation, of course, further worsened. The Finance Ministry intervened in the currency market to mitigate excessive yen appreciation.

## Episode 8: 2\% Inflation Targeting and QQE since 2013

I became Governor of the Bank of Japan in March 2013 and in April 2013, I introduced a Quantitative and Qualitative Monetary Easing (QQE) measure to "achieve the $2 \%$ inflation target at the earliest possible time." The $2 \%$ inflation target itself was agreed upon between the Government and the Bank under Governor Shirakawa in January 2013. Yet, how to
achieve it was not spelled out.

The economy responded positively to QQE and the yen depreciated to around 100 yen to the dollar, stabilizing at around 110 yen to the dollar without market intervention until 2022. The economy continued to grow, with more than 4 million new jobs created, and yet, with the core inflation rate staying at around $1 \%$, the $2 \%$ inflation target was not achieved, even by early 2020.

## Episode 9: COVID-19 Pandemic in 2020-2021

The COVID-19 pandemic started to affect Japan from early 2020. The Bank of Japan introduced a Special Funds-Supplying Operation which provided substantial liquidity through banks to small and mediumsized enterprises, and the Government implemented various fiscal measures to help companies maintain employment. Like other countries, Japan had negative growth in 2020 and then recovered and saw positive growth in 2021. But unlike other countries, Japan experience deflation again in 2020 and 2021. On the other hand, the yen exchange rate remained stable, at around 110 yen to the dollar.

## Episode 10: Russia's Invasion of Ukraine Begins in 2022

On 24 February 2022, Russia invaded Ukraine and G7 countries immediately imposed strict economic and financial sanctions against Russia. Energy prices shot up tremendously, and Japan's current account deteriorated, with the yen rapidly depreciating from 115 yen to the dollar to 150 yen to the dollar by September 2022. The Finance Ministry intervened in the currency market by selling dollars and buying yen to the amount of $¥ 2.8$ trillion on 22 September 2022. This was its first intervention since November 2011 and the Ministry announced this intervention. The Finance Ministry again intervened, selling dollars with yen purchases of $¥ 6.3$ trillion on 21 October, the largest ever intervention in one day, but the Ministry did not announce the intervention. This perhaps made the currency market suspicious about further interventions, and the yen appreciated to 130 yen to the dollar by the end of 2022.

The Finance Ministry held about $\$ 1.2$ trillion in foreign exchange reserves, and these dollar sales reduced its reserves only marginally. However, slightly more than $¥ 9$ trillion in equivalent dollar sales produced $¥ 3$ trillion in capital gains, which were transferred to the Government's General Account to finance increased defense expenditures in the coming years. An economist asked me whether the Bank of Japan objected the intervention, which would tighten monetary conditions and reduce inflation induced by currency depreciation. I
answered that foreign exchange management was the Government's responsibility, and in any case, under the Yield Curve Control (YCC), any monetary impact of currency market intervention would be neutralized automatically. In the final analysis, it was best for volatile exchange rate movements, as observed in 2022, to be corrected through market intervention.

Japan's inflation rate accelerated to $4 \%$ by early 2023, but the Bank of Japan expected it would decelerate toward less than $2 \%$ by the second half of fiscal year (FY) 2023. So, the Bank decided to maintain the current QQE with YCC for the time being, hoping that wage increases of around $3 \%$ in 2023 as well as next year could help achieve $2 \%$ inflation in a sustainable and stable manner in the near future. I retired as Governor of the Bank of Japan on 8 April 2023, with the yen-dollar rate at $\$ 1=¥ 132$.

## Some Tentative Conclusions

1) Exchange rate movements are affected by many factors, including domestic and foreign factors, in expected and unexpected ways. Policy makers cannot anticipate appropriate foreign exchange management beforehand. Therefore, foreign exchange management tends to be ad hoc and opportunistic.
2) There is no definitive theory of exchange rate determination. The only verified theory is Purchasing Power Parity (PPP) proposed by Gustav Cassel in the early 20th century; higher inflation countries would see their exchange rates depreciate in the long-run (2030 years?). But the long-run inflation prediction is as difficult as the long-run exchange rate prediction, so PPP has no predictive power.
3) Interest rate differentials certainly have some impacts on exchange rates. But it is not clear which interest rate differentials have the largest impact on the exchange rate-short-term interest rate differentials, covered or non-covered, or long-term interest rate differentials. What is the time profile? How about the third-country impact?
4) Market interventions, which change demand and supply in the currency market, do have significant impacts on exchange rates, but when and how much are uncertain. Likewise, monetary policy, which changes the supply of domestic currency, may have some impact on exchange rates, but monetary policy is used for price stability, not for exchange rate stability.
5) In any case, policy makers must have some idea of the appropriate exchange rate, justified by current economic fundamentals, to intervene in the currency market. However, that is not always so easy and interventions frequently generate international disputes. No workable guideline for managing floating exchange rates has been established internationally, even at the IMF.
