

## Around the Exchange Rate

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Historical Transition : After the World War II, it was the problem of dollar shortage in the world. A main reason of dollar shortage required to the fund so much in favour of the recovery on the reconstructions and productivities out of the ruins by the war damage, because all of which had to depend on an economy in the United States alones. From early 1950, however, the recovery was gradually brought up economic power in european countries, increasing productivities and most of the countries needed not to require with depending upon import and assistance out of the United States. It was economic relationship with the interdependence to happened simultaneously after the recovery of economic power in each country. In the middle of 1950s, european countries preserved considerably foreign reserves. The chronic shortage of world dollar, in the boundary of 1957, is directed to ease it, and in the end of 1958 those turned into the convertibility of the currencies in western european countries. Fear of dollar, afterthere, begun with increasing oppositly it ; what is called the dollar crisis. Therefore the chronic deficit of the balance of payments in the United States became to chiefly reasons with increasing on anxiety for dollars. As the psychological result, each countries was raised to the transformation from Dollar to Gold, and moreover there

was further brought forth the circumstance of fearness to dollars.

Dollar parities, however, were not depreciated, being United States itself announced the declaration to maintain with dollar parities, and they made great endeavour to defend it doing so. So to saying, it was declared by the government of United States that attempt to improve on the balance of payments, and is not devaluated the official \$35 per gold an ounce. But, in 1960 it increased an outflow of gold from United States. This outflow of gold was especially attributed to exchange from dollar into gold by european countries. That it was provocative of such a gold-rush came to depend upon psychorogical behaviour ; Should those be depreciated the dollars in order to improve with the chronic deficits for the balance of payments in the United States ? And, could those be carried forth the devaluation with the dollar parities, so that the appreciation with gold per an ounce ? Then, in 1961, the eight's advanced industrial countries were estimated on the agreement of gold-pool owing to support with stabilizing a price of gold. The rate of gold raised therefore to be stable until 1967. However, the gold-pool broke down in 1968 because of again the occurence with gold-rush, but seven countries associated to the participation of gold-pool are removed to turn into the adoption with the system of double rate on the gold prices ; what is called official price and flexible price in the market.

In those time, the government of United States were not intended to sacrifice for the return to those prosperity and were not brought about the practical polices of the balance of payments. Rather than it, they continued to keep up the benign neglect for the deficit of the balance of payments. The benign neglect, therefore, set up to build on the indignation in the almost industrialized countries in the light of international confidence.

The advanced countries met with the depression during 1970 to 1971. President Nixon at that time commanded eventually to stop temporarily the convertibility of dollar in August 1971 ; so to speak we call for Nixon Shock. Smithsonian Agreement were concluded in December 1971 by the ten advanced countries (Belgium, Canada, French, Germany, Italy, Japan, Netherland, Sweden, United Kingdom, and United States). Smithsonian agreement resulted from the anxiety that is decreased on the world trade and is too late for the discovery of trade cycles. According to the agreement, the advanced countries were endeavour to intend each others for the maintenance to the fixed rate system. Smithsonian system was changed to the system of the softness in compare with International Monetary Fund (IMF). The new system set up the official rate per dollar to each other currencies, and together with making upon new exchange rate the amplitude of flexible exchange expanded from plus or minus 1 percent to plus or minus 2.25 percent. Moreover, the United States decided on the depreciation to the price of gold corresponding with dollar. The depreciated rate is 7.89 percent, and the dollar per gold an ounce was given to \$38. At the same time, Yen, Deutsche mark, France franc and et cetera were oppositely the appreciation for dollar.

In 1972 there brought forth an escape from dollar to pound, and happened to the speculation into pound. The United Kingdom decided to shift with the floating exchange rate in June 1972. Canada settled further to move independently the floating exchange rate in order to corresponding with the enormous amounts of the inflow of foreign capital. Italy announced to shift into the double exchange rate in 1973; because they invited to grow with the worse of the balance of payments and the outflow of the capital in accordance with the social troubles to the continued occurrence for the strike et cetera. On the next day

Switzerland suspended to the balanced purchasing operation for dollars, substantially going forth the shift into the floating exchange rate. Therefore the United States depreciated again 10 percent for the price of dollar to the value of gold \$42.22 per an ounce. This is causal to the factors : First, the United States have had a large deficits for the current balance : Second, a great capitals were the outflow to Germany, Japan, and other countries : Last, the United States was failed to the recovery of dollar confidence for the most of industrialized countries, and so on. Japan is finally removed to the floating system in February 1973, and on next March six countries in European Economic Community (EEC) were shifted to the common floating exchange, so that the floating system are designated to Snake by us.

The amendment schedules of International Monetary Fund convention are agreed by the temporary committee for IMF which held a council in Kingston, Jamaica, 1976. An important points of amendment on the IMF convention are followed : At the first, the members of IMF are able to freely select whether the system of fixed exchange rate, the floating exchange system, or the common floating system in EEC, etc. Furthermore, the representation of the parities in each countries are conducted with Special Drawing Right (SDR) that we shall describe it with the later, and gold or dollar is not used to represent by the IMF. The second point is the abolition for the official price of gold and the unrestricted transaction of gold for the monetary authorities in each countries. So to speak, IMF abolishes the official price of gold \$42.22 per an ounce, and each monetary authorities are able to freely buy or sale to gold. Moreover, each countries were abolished to the provision for the payments with gold as a part of the IMF contributed fund. I believe IMF shall be gradually turned to the new direction as the core of monetary aspect on the world transactions.

**Gold Standard System :** Gold standard system was officially began at the first to adopt by the United Kingdom in 1816, and had been to adopt all in the most of world countries. In 1964, the World War I was the outbreak, and, although it was temporary, each countries was separated from the gold standard. However, after the Greatest War, in spite of turning back for the gold standard, they could not maintained with gold standard system, and they was announced gradually to abolish off the gold standard system. In the early 1930s, all of each countries was the abolition on the gold standard. Gold standard system continued with extending over about a half of first centuries.

Gold standard system is the monetary system with the implication on the standard value or the unit for a certain amount of gold, so that a unit of home currency is linked with a certain amount of gold. Furthermore they are acknowledged to exchange, for example, home currency to gold and vice versa, and are permitted freely to coin and dispose. Therefore, central bank of a country is able to have freely behaviour with export of and import for gold and the convertibility into gold. When each countries are adopted with gold standard system, and permitted to freely export or import between countries participating with transaction of international economy, then the international system of gold standard are consist of them. Owing to accomplish enough with the mechanism of autonomous adjustment, and as long as each countries are content with such a necessary or sufficient conditions, the organization will drive on the best.

Each countries with the gold standard system are reckoned up the rate of exchange in each currencies as the medium of the monetary value with equivalent to gold. We are designated this as Gold Parity or Mint Par of Exchange. Therefore the exchange rate in the foreign exchange market is provided to determine within the narrow range

between the gold import point, namely gold parity minus transportation cost of gold, and the gold export point, so that gold parity plus transportation cost of gold, as in Figure 1. We are called it as

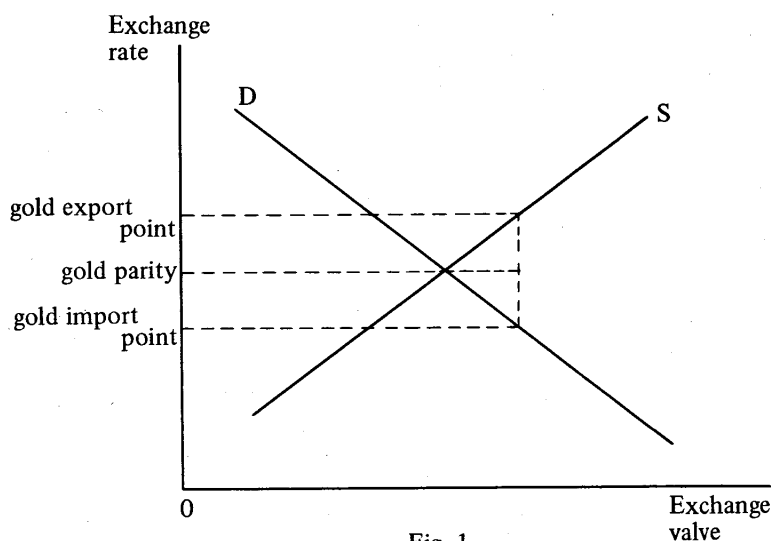


Fig. 1.

the gold transportation point. If the exchange rate exists within this limited range, then we are preferred to settle by the foreign exchange rather than we transport on gold. However, when the exchange rate decreases down this limited range, then we are more favourable to transport with gold than the settlement by the foreign exchange. Thus, under the rate of exchange in the gold standard system, as far as fluctuating only within the narrow range of gold transportation point at the centre of the gold parity, exchange rate is of stable, and foreign trades or other transactions make smoothly to be doing.

Now, let us consider to occur from the deficit of balance of payments in home country. The excess of the payments bring about the outflow of gold, and the amount of money in this country decreases

under the flow of gold. Therefore this economy turns into the deflation, and fall down the level of prices. Consequently, export increases with the falling prices and import decreases : for that reasons which are to return back the equilibrium for the balance of payments.

On the other hand, when there is happened to the surplus for the balance of payments in home country, then gold is inflow, and invites to appreciate on the price level. Consequently export increases, and import decreases. Eventually the balance of payments is improved the equilibrium. We designate those processes as the autonomous mechanism of adjustment or game rule around the gold standard system.

Exchange Rate Under The IMF : Monetary Financial Conference of the allied countries were held on Bretton Woods, New Hampshire of United States, in July 1944. Agreements of International Monetary Fund (IMF) and International Bank of Reconstruction and Development (IBRD) were concluded as the final protocol in this conference. IMF held the first meeting for the establishment at Savanna of United States in March 1946, and officially had the beginning out of March 1, 1947. At the same time, IBRD also set up but began with the affairs on the transaction of Bank in June 25, 1947. Both the head offices are set upon in Washington. IMF is decided one of the main objects for the stabilization and the maintenance on the exchange rate. An individual parities in the members of IMF is represented with gold or dollar ; so called gold 0.888671 grain per dollar. Therefore, the members of IMF have to perform with an exchange transaction on the basis of this parity. The members are not able to offer for the alteration of the parity to home currency except to improve on the fundamental payments imbalance. When the members alter a parity to home

currency, then, after that it was proposed this to the Fund and consulted it with the Fund, they can act to the alteration. In this case, if a parity is not exceed to 10 percents, the Fund should not be describe the inverse opinion, but when this is excess of 10 percents, then the Fund be able to express the opposite.

Thus, as the core of the parities in the IMF, the variant amplitude of exchange rates put the members under an obligation for constraint within plus (ceiling) or minus (bottom) 1 percent, as in Figure 2.

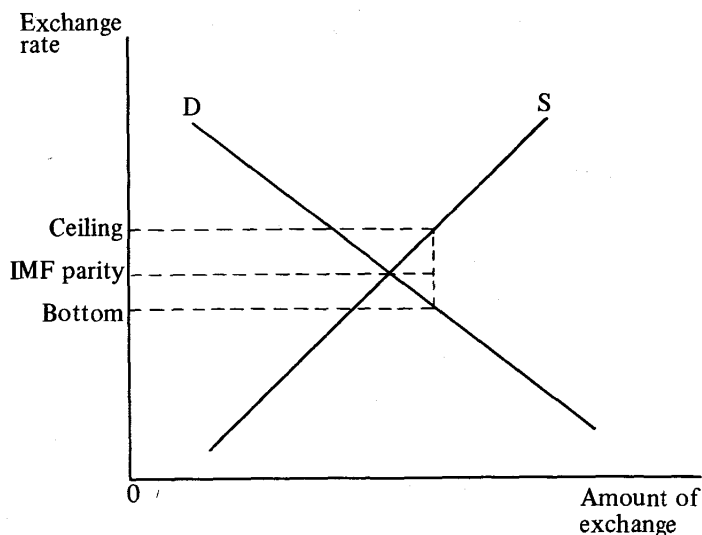


Fig. 2

Therefore, the system of IMF is restricted as a narrow range as the gold standard, and the change of parity is acknowledged only in the occasion of the occurrence on the fundamental payments imbalance. Therefore we are designated to the system of adjustable pegged exchange rates. Now, when the demand for the exchange rates increased with an increment of imports, then the demand line shifts upwards to the right. If the demand line stays on the ceiling, the problems nothing occur

by there. However, when the demand line exceeds over the ceiling, owing to support the exchange rate on the ceiling, monetary authorities have to be supplemental to the supply of exchange shortage by the sales for the reserves. Therefore, the reserves might be exhausted in this country. However, the authorities may determine to the corresponding policy.

Accordingly, in consequence of the increased imports, real balance of money is reduced, the rate of interest increased, and the aggregate spending is decreased. Consequently, output or employment and income are decreased, but imports gradually fall down. On the other hand, capital inflows out of the overseas, and the balance of payments results to improve with it. This is approximately the process of adjustment to the balance of payments or domestic equilibrium. However, such a system of IMF might be said that there was the collapse after the Smithsonian agreement, because most of industrialized countries have the floating exchange rates, but, I think, they are remained on the ways of fixed rates too.

**New Facility :** The Special Drawing Right (SDR) which is new facilities in the IMF were officially adopted by the 22th extraordinary general conference held on Rio De Janeiro, Brazil, in September 1967. IMF announced the final draft to the correction of the Fund's agreement on the new facilities in April 1968. Afterwards, the SDRs in the IMF were established to take up in the ratification with each countries participating the members of the Fund in July 1969. This was practically began to perform with January 1970. The SDRs were created with the sum of \$9.5 billion for three years since starting in 1970. The value of 1 SDR is equivalent to a fine gold 0.88867 grain, and so 1 SDR was equilibrated to 1 dollar, but in according with Smithsonian agree-

Table 1

		weighted	amount of money	exchange rate June 28	exchange rate July 8	equivalent U.S. dollar
U. S.	dollar	33.0	0.40	1.000	1.00	0.400000
Germany	mark	12.5	0.38	2.5565	2.54450	0.149342
U. K.	pound	9.0	0.045	2.3885	2.3890	0.107505
French	franc	7.5	0.44	4.8450	4.80250	0.091619
Japan	yen	7.5	26.0	284.10	288.1000	0.090246
Canada	dollar	6.0	0.071	1.0302	1.02740	0.072945
Italy	lira	6.0	47.0	648.00	644.35000	0.072942
Holland	guilder	4.5	0.14	2.6595	2.6250	0.052780
Belgium	franc	3.5	1.6	38.030	39.96000	0.042150
Sweden	krona	2.5	0.13	4.4060	4.38750	0.029630
Australia	dollar	1.5	0.012	0.67227	0.67227	0.017850
Spain	peseta	1.5	1.1	57.250	57.09500	0.019266
Norway	krone	1.5	0.099	5.4285	5.4000	0.018333
Denmark	krone	1.5	0.11	5.9975	5.92750	0.018558
Austria	shilling	1.0	0.22	18.250	18.15500	0.012118
South Africa	rand	1.0	0.0082	0.66669	0.66669	0.029630

Resource : Finance &amp; Development, December 1974.

ment, 1 SDR raised to depreciate \$1.08571 per gold an ounce because of the devaluation of \$38 per gold in December 1971. Furthermore, in February 1973, U. S. dollars were again devaluated to \$42.22 per gold an ounce. Consequently, 1 SDR made equal to \$1.20635 or 1 dollar became equivalent to SDR 0.828948.

At the meeting of committee in 20 countries on the international monetary reformation, in June 1974, they are decided to use with the measure of new assessment on the value of SDR. This is a system of Basket ; officially the system is designated as Standard Basket. The measure of new assessment with standard basket depends upon the number of money in the basket and the weight of money in each countries, as in Table 1. Moreover, exchange rate of SDR is a value of weighting average on money in this basket, and became to be floating every day. Eventually, SDRs make up the core of the main reserve assets, and in the opposition, gold and dollar reserves decrease gradually on the placing role, and hence SDR is a value to manifest with the parities in the members. After all, an official price of gold in directe to the abolition, instead of this it must differ to be a first step shifting to the system of SDR standars, I believe.

What is called, gold was an interntional money and raised about a background on the key currency untill recent years since the adaptation of gold standard in United Kingdom, 1816. However, gold was already the end of life as a role of money ; oppositely SDRs are created as a Paper Gold, and emerged on the place as an international currency. This SDR eventually has only an illusive or shapeless power like we designated a Paper Gold, but certainly SDR is becoming to build up a position on the value of transaction in an International Monetary Fund.

**Floating System :** The system of floating exchange rate itself has a mechanism to adjust with the balance of payments through a movement by the rate of exchange in each countries. If the political authorities is quite non-intervention into the market of exchange rate, when they are devoted to adjust with perfectly free exchange rate for the equilibrium in the market, then we are designated the system of free exchange rate or perfectly floating rate. When the autohorities intervene in exchange market to some extend to raise about slightly movement for the exchange rate except to extremely unstable exchange, then they are called the system of managed exchange rate. When they intervene to keep the exchange rate from the movement toward its long-run equilibrium level, then this implies a dirty floating exchange.

Now, consider we have surplus for the balance of payments. Then, the surplus for the balance of payments manifests to increase upon

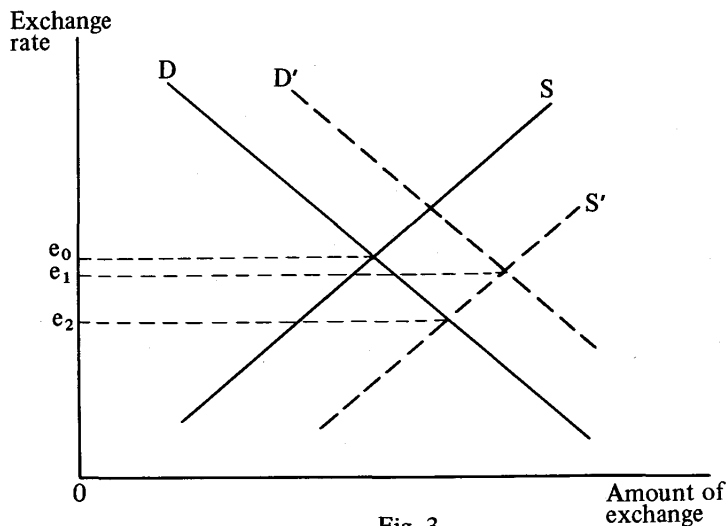


Fig. 3.

the supply of foreign exchange. Therefore, the supply curve shifts toward right ; from  $S$  to  $S'$ , as in the Figure 3. In this case, exchange rate shifts downward from  $e_0$  to  $e_1$ , so that the initial equilibrium rate  $e_0$  shifts to  $e_1$ . When the authorities is no intervention in exchange market, then the rate of exchange is completely decreasing to cancel out the excess supply in the market ; so to speak, this is appreciate in this country ; for example yen appreciates and dollar depreciates. If the authorities intervene in the exchange market, then the demand curve for exchange rate shifts toward right like  $D'$ . With such a conduct by the authorities, the rate of exchange shifts up  $e_1$  to  $e_2$ . Moreover, the final exchange rate is decided on the position to cancel out the excess supply with operating by the authorities, so that under the managed exchange the rate is the point  $e_2$ .

As long as the exchange rate is removed freely, the balance of payments automatically is to equilibrate. In the country for the balance of payments deficit, the exchange rate is decreased, and in the country for the payments surplus, the exchange is increased. In other words, in the deficit countries, the value of currency is depreciated, the price of importable is increased, and as this results, the price level in domestic goods, the costs of production, and wages might be give to exert on at least those effectiveness.

Therefore, it may be difficult to constraint into the inflationary pressure like the decreasing currency, and the increasing importable price or domestic prices. In these opposite case, the surplus of the balance of payments implies to increase the rate of exchange and appreciate the value of domestic currency. Because of the increase for the exportable prices comparing with importable prices, imports easily raise to promote ; moreover, the level of domestic price should be stabilize. This is certainly one of the severe theoretical side, but a

realized fact cannot neglect to a side of speculation in the exchange market or the stock market. It would be run through the destructive activity rather than the equilibrium in such market. We contain always this trouble for the speculation under the floating rate.

Recent Tendency on the Exchange Rate : Finally, let us trace out the tendencies on exchange rate. The following actual facts could be investigate in the light of the theories described above. If hold to do so, we would enough be able to understand about rounding to the exchange rate.

- January 14, 1977 ; \$1 = ¥283 in Tokyo market.
- March 11, '77 ; Official rate decreases 0.5 percent, therefore the rate is 6.0 percent.
- March 22, '77 ; \$1 = ¥279.70 in Tokyo market.
- April 19, '77 ; Official rate again decreases 1.0 percent, so that the rate is 5.0 percent.
- May 29, '77 ; \$1 is down ¥270, furthermore in July 5 is down ¥260 in Tokyo market.
- September 3, '77 ; Official rate decreases 0.75 percent, and the rate is 4.25 percent.
- October 13, '77 ; \$1 = ¥253 in Tokyo market.
- November 1, '77 ; \$1 = ¥248 in Tokyo market.
- November 3, '77 ; Japanese government is determined to urgently import \$3 billion.
- November 15, '77 ; \$1 = ¥245 in Tokyo market.
- November 17, '77 ; Japanese government and an authority in central bank is determined to stop officially on the collection of governmental bonds in short-run by foreiner,

to rise the rate of reserves on the portion of increasing free yen held by the foreign residents, and to control the inflow of speculative funds.

November 18, '77 ; \$1 = ¥243 in Tokyo market.

November 24, '77 ; \$1 = ¥240 in Tokyo market.

January 26, 1978 ; The ministry of finance announced to the free transaction of exchange from April 1.

April 21, '78 ; Japanese government announced to determine on the corresponding policies of the surplus of the balance of payments and of the sharp appreciation of yen, but yen is gradually appreciating to U.S. dollar since this summer, and exchange rate is approximately approach to 200 yen per a dollar.

Such a increase on the large surplus of current account and a background of appreciated yen gives to consider the following ; First, automobile including manufacturing machine and scientific optical instrument make for the export so much ; Second, the import is decreased too much with the recession ; Third, the ceiling or bottom in trade cycle is different between Japan and United States ; Fourth, the price indices is the difference of the rate of increase ; Last, the rate of growth is great difference between and foreign countries. However, I believe to be able to eliminate for the our diligent innovation and to raise with greater shock of psychological deflation for business cycle.

(June 30, 1978)

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