
Dirty Float

AIM

Define what 'dirty float' and its varieties are and if they are likely to achieve their objectives.

Background

Shortly after the Bretton Woods system collapsed in 1973, countries were free to use expansionary monetary and fiscal policies to raise output and took advantage of the benefits of flexible rates. But in the 1980s, many countries including U.S. started to suffer from very large exchange rate swings and the dissatisfaction with flexible exchange rate regimes was generated. During this time, the major developed countries tried to manage the exchange rate to some degree by having central banks intervene in the foreign exchange markets. This was not a move to an actual fixed exchange rate regime, but is often referred to as a "managed float."

Main Argument

Managed float (Dirty Float)

Market forces set rates unless excess volatility occurs, then, central bank determines rate by buying or selling currency. Managed float is not really a single system, but describes a continuum of systems. Under a managed float exchange rate regime, market forces are the principal factors influencing the exchange rate, but the government may intervene by buying or selling its own currency in the market. This is sometimes called a dirty float because under this exchange rate system, though it is technically a free float, the government does participate in the trading of currency.

There are three different varieties of ‘dirty float’ which are explained below.

Smoothing out the daily fluctuations

Government following this route attempt to preserve an orderly pattern of exchange rate changes. They tend to bring about longer-term currency appreciation or depreciation. One variant of this approach is the “crawling peg” system used in Hungary, Poland, and Brazil.

Evidence

Hungary’s experience in the crawling peg regime: benefits and costs

The pre-announced crawling peg regime was introduced in the spring of 1995 as one of the key elements of the Hungary Government’s stabilization package.

In 1995, an exchange rate buffer was provided by the decision of the NBH to extend the floatation band to ± 2.25 percent (from ± 1.25 percent). The whole rate was devalued by almost 20 percent in the first half of that year. Indeed, the depreciation of the rate on the foreign exchange markets was over 5 percentage points less than the official devaluation of the band-centre (See Table).

Since due to the massive (close to 30 per cent) unilateral devaluation in 1995 and the high interest rate premium, the market rates slid to the lower edge of the band in April and continued to stay there for quite a while. The monthly devaluation rate announced for 1996 was based on a projected inflation rate of about 20 per cent, however the sustainability of the regime, thanks to the intervention band of 4.5 per cent, permitted higher inflation without the exchange rate significantly damaging Hungary’s competitiveness.

Objectives achieved or not

Since spring 1996 inflation has been falling steadily, although more slowly than the government had expected in their annual forecasts. Following the historic low in 1994, the current-account deficit began to decrease in 1995, and is realistically

expected to remain at a manageable level in the medium term. Economic growth also set off in 1996 after the decline of the transition years and the period of stagnation around the time of the stabilisation.

But, the narrow-band crawling peg regime had become 'overdue': for the past two years, it had not helped disinflation, and put a large burden on the budget. This happened for example in early 2000, the monetary policy, losing from its tightness in the inflexible exchange rate regime, became unable to perform the function it was originally designed for, namely to curb the inflation.

Table 2 The introduction of the crawling peg regime

	De- preciation of band- centre	Market depreciation	Difference (market – band centre)	Band centre	Market exchange rate	Difference (market rate – band centre)
	to the basket*, %		%-point	at the end of period		%
January, 95	1,4	1,01	-0,39	130,4	132,0	1,24
February	2,0	2,26	0,26	133,0	135,0	1,49
March	10,18	8,36	-1,82	146,6	147,2	0,45
April	1,75	-0,89	-2,64	149,1	145,9	-2,16
May	1,82	1,75	-0,07	151,8	148,5	-2,23
June	1,91	1,96	0,05	154,7	151,4	-2,18
First half of 1995	20,32	15,09	-5,23			
July	1,18	1,22	0,04	156,6	153,2	-2,14
August	1,44	1,41	-0,03	158,8	155,4	-2,17
September	1,18	1,3	0,12	160,7	157,4	-2,05
October	1,31	1,24	-0,07	162,8	159,3	-2,12
November	1,31	2,01	0,7	164,9	162,5	-1,44
December	1,26	0,59	-0,67	167,0	163,5	-2,10
Second half of 1995	7,93	8,02	0,09			
1995	29,86	24,32	-5,54			
1996	15,76	15,89	0,13			

* Basket: 0,7*ECU+0,3*USD

Source: National Bank of Hungary

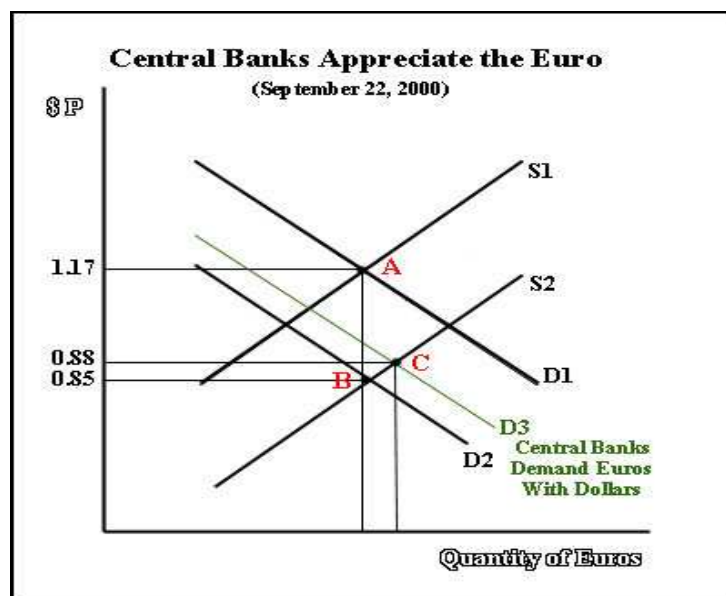
Leaning against the wind

This second method is when the Central Bank interferes in order to prevent, control or moderate a coming economical problem for a short- or medium- term, whose effect is foreseen to be temporary. This policy is “primarily aimed at delaying, rather than resisting, fundamental exchange rate adjustment-”(Shapiro 2003, pg 82). This adjusts in exchange rate is means by buying or selling foreign currency in the spot market.

Evidences

It can be assured that Central Banks around the world have intervened on their own markets “leaning against the wind” through their economical history. Evidence of this statement are: 1) Peru¹ where a hyperinflation of 7000% per annum in the late 1980’s motivated an intervention of Peruvian Central Bank. 2) Australia² from July 1986 to September 1991, when the Reserve Bank of Australia eased the strengthening of the Australian Dollar. Indeed, they are good example but we will focus on one more extended example.

The following diagram shows us in 3 steps the situation of the Euro during 1999



Source: www.worldgameofeconomics.com/EuroCurrencyIntervention.htm

- A) The Euro was introduced at \$1.17 in January of 1999.
- B) Euro value declined to \$0.85 in September 1999, mainly because Europeans investor required dollar to invest in US market.
- C) Due to this dramatically fell of the Euro, the European Central Bank, the Federal Reserve of the United State, the Bank of England, the Bank of Japan

¹ See for more details, Moron E. and Castro J.F., “*Uncovering Central Bank’s Monetary Policy Objectives: Going Beyond Fear of Floating*” (2000).

² See for more details, Kim, S.J. and Shaen J., “*The Determinants of Foreign Exchange Intervention by Central Bank: Evidence from Australia*”.

and the Bank of Canada bought Euros for approximately 2 billions of their dollar reserves. The justifications for this action were 1) This loss of value in the euro was affecting the new monetary union, 2) high oil price and euro devaluation would have brought inflation to inadmissible rate, 3) an ample gap between dollar and euro exchange would have encouraged protectionist action from United State in order to reduce the trade deficit; and 4) profit of American companies in Europe would have been affected.

Objectives achieved or not?

This action brought the Euro at \$0.887, but does “leaning against the wind” archive its objectives? This question has been argued by many expert without coming up with any clear answer.

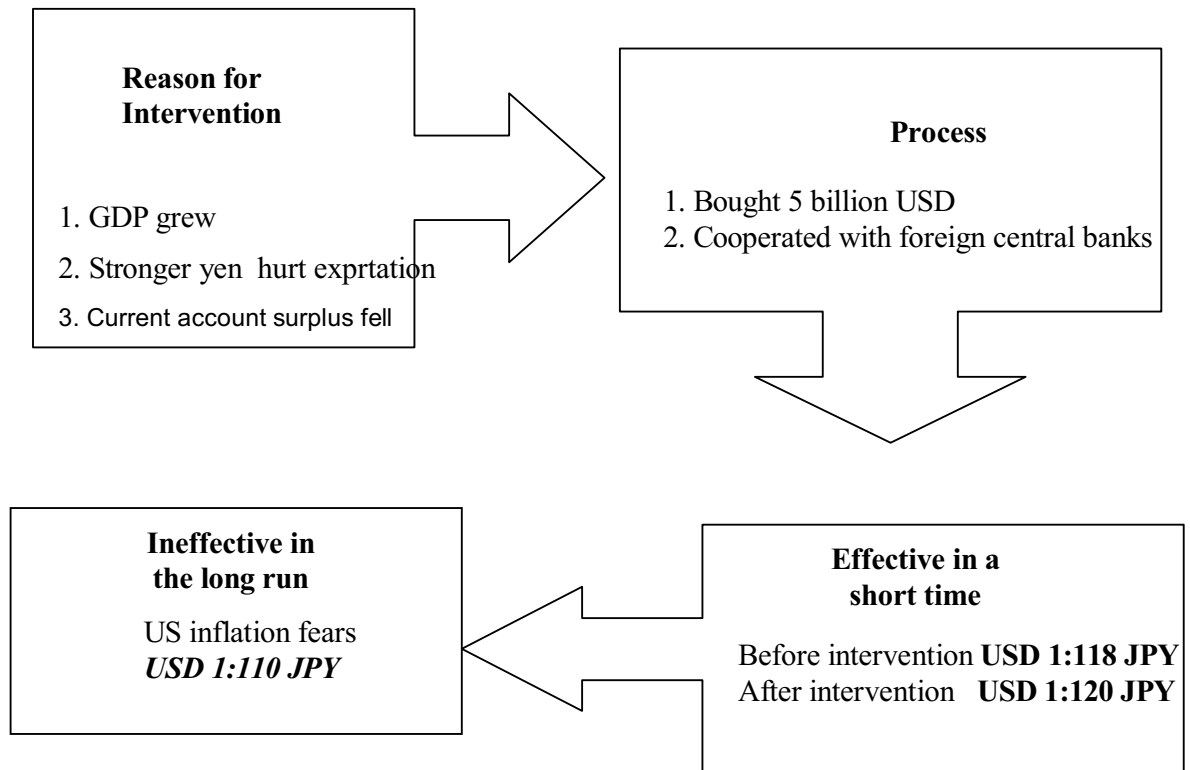
From our point of view this strategy reaches its objective in the short-term, according to Kearns J. and Rigobon R. \$100m purchase of the domestic currency will appreciate the exchange rate by 1.35 to 1.81 %. However, in the long-term is questionable because many other factors may influence on it like: 1) If this money supply are injected for a long time it may ignite inflationary pressures in the future, 2) The influence over the short-term rates, like federal funds rates in United States, affects long-term interest rate. In addition, in the Euro example many economics argued that this decision worked due to US presidential elections and a slowdown in the US stock market, both of them motivated European investor to swap dollar for Euros.

Unofficial pegging

Unofficial pegging is the government actually fixing the rate without saying so. Government has official target but no publicly announced government commitment to a given exchange rate level and enters the market as a buyer or seller to move the market rate toward the target. It involves resisting fundamental upward or downward exchange rate movements for reasons clearly unrelated to exchange market forces. The purpose is often to help exporters, importers, reduce currency volatility, or to offset temporary changes.

Evidence:

How to held the ¥ “artificially” --- Japan acts to stem rise of yen



Graph: Bank of Japan's Intervention

In June 1999, the yen rose against the dollar since the government announced that Japan's gross domestic product grew a robust 1.9% in the first quarter of the year. Japan's current account surplus fell sharply in May to ¥1.054 trillion (\$8.6bn), a decline of 23.7%, as a stronger yen reduced the competitiveness of the nation's exports.

At this moment, the Bank of Japan bought as much as 5bn worth of US dollars to stop the appreciation of Yen. It also cooperated with the European Central Bank and other foreign banks to be involved in the operation which is aimed at keeping the yen at around 120 to the US dollar. The dollar, which dipped below 118 yen, was forced higher to above 120 yen by Japan's repeated intervention.

In August 1999, the intervention of the Bank of Japan was gradually proved to be ineffective, as investors fear the consequences of higher inflation in the United States.

The dollar, and US stock markets were affected by the news announcement that wage inflation in the United States accelerated in the second quarter to 1.1%. Investors fear that the US central bank will raise interest rates later and that could make the stock market go down, which in turn could weaken the dollar further, as foreign investors shift their money out of US and into Japan and other foreign markets which results in the appreciation of Yen.

Objectives achieved or not

From June to August (1999), the Japanese government spent an estimated \$36bn to boost the dollar, and keep the yen below ¥120 to the dollar. But the exchange rate of US dollar fell below ¥110 although Japanese government responded to the foreign exchange markets actively. Thus, we could infer that actions taken by central banks would be effective at first, but there is still uncertainty about the long-term effect of the moves. Factors such as “inflation fears of foreign countries” which is not easily predictable and controllable would affect the exchange rate and force the government watch the exchange markets constantly if they want to intervene the market.

Conclusions

1. The intervention succeeds in the short term, like keeping down the inflation rate, reducing the real interest rate and stimulating the economic growth but it may not be controlled in the long- term because it might overdue and become a barrier of economic developing.
2. If the money supply is injected for a long time it may ignite inflationary pressures in the future.
3. Oppositions from other countries are likely to occur because this intervention would weaken their competitiveness.

4. To boost the economy, intervention in the exchange market is not the only way. Many experts say that a long-term monetary decision is more likely to achieve its objective. Besides, if the consumer confidence or the domestic demand do not increase, it is difficult to see the economy recovering.

Summary

In this report, the dirty float and its three different variants have been showed with the evidences and the objective achievements. Also, it can be seen how the central bank intervenes in the exchange rate by selling and buying currencies to keep their domestic currency at a rational level.

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