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# THE MODERN HISTORY OF EXCHANGE RATE ARRANGEMENTS: A REINTERPRETATION

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### **ABSTRACT**

We develop a novel system of re-classifying historical exchange rate regimes. One difference between our study and previous classification efforts is that we employ an extensive data base on market-determined parallel exchange rates. Our "natural" classification algorithm leads to a stark reassessment of the post-war history of exchange rate arrangements. When the official categorization is a form of peg, roughly half the time our classification reveals the true underlying monetary regime to be something radically different, often a variant of a float. Conversely, when official classification is floating, our scheme routinely suggests that the reality was a form of de facto peg. Our new classification scheme points to a complete rethinking of economic performance under alternative exchange rate regimes. Indeed, the breakup of Bretton Woods had a far less dramatic impact on most exchange rate regimes than is popularly believed. Also, contrary to an influential empirical literature, our evidence suggests that exchange rate arraignments may be quite important for growth, trade and inflation. Our newly compiled monthly data set on market-determined exchange rates goes back to 1946 for 153 countries.

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## I. Introduction

Contemporary thinking on the costs and benefits of exchange rate flexibility is heavily influenced by the large number of studies on the empirical differences in growth, trade, inflation, business cycles, and commodity price behavior across different exchange rate arrangements. These include the influential work of Baxter and Stockman (1989) and Flood and Rose (1995), both of whom failed to detect any significant difference across fixed and floating rates, except for the volatility of real exchange rates that Mussa (1986) had already noted. Nearly all such studies have relied on the official or "standard" classification published in the IMF's Annual Report on Exchange Rate Arrangements and Exchange *Restrictions* which, until recently, asked member states to self-declare their arrangement as belonging to one of four categories (fixed, limited flexibility, managed floating, and independently floating). Yet, a closer reading of the experience suggests that these official classifications often fail to describe actual country practice, implying that the gap between de facto and de jure can be vast. A few previous studies have attempted to either extend the four-way official classification into a more informative meaningful taxonomy (see Gosh et. al., 1997), or have relied on purely statistical methods to regroup country practices (see, Levy-Yevati and Sturzenegger, 2002).<sup>1</sup> The Fund, recognizing the limitations of its former strategy, significantly revised and upgraded the standard official approach toward classifying exchange rate arrangements in 1997, though it did not re-evaluate its historical classification after the fact. Notably, all previous approaches to exchange rate regime classification,

<sup>&</sup>lt;sup>1</sup> See also Masson (2000) and Glick (2001).

whether or not they accept the country's declared regime, have been based almost solely on official exchange rate series.

One problem with the pre-1997 official classification that has received substantial attention in the recent literature is the frequency of episodes where the regime is classified as floating (independently or managed) when, in effect, the country had a *de facto* peg or crawling peg.<sup>2</sup> However, a less well known but equally serious problem, shared even by the small number of earlier efforts to reclassify regimes, is that the officially-reported exchange rate itself is often profoundly misleading. Over the course of post-World War II history, virtually every country has relied, at one time or another, on capital controls and/or multiple exchange rate systems.<sup>3</sup> By failing to look at market-determined exchange rates, one often gets a false picture of the underlying monetary policy and the ability of the economy to adjust imbalances. When there are dual or parallel markets, a regime that is officially labeled a peg might easily turn out to be a *de facto* float or a crawling band. As an illustration suppose, for example, that the parallel market rate undergoes sustained and significant depreciation but the official rate remains fixed. (Over the broad sweep of post-war history, we find this a common occurrence.) Then the underlying monetary policy is inflationary, but the effects on the official nominal exchange rate are effectively masked-at least in the short run--by an ever-increasing tariff. By far the most common outcome in these circumstances is that the

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<sup>&</sup>lt;sup>2</sup> See Calvo and Reinhart (2002), Levy-Yeyati and Sturzenegger (2002), and Wickham (2002).

<sup>&</sup>lt;sup>3</sup> Edwards (1989) stresses the inadequacy of official exchange rate data for the many Latin American economies with multiple exchange rates.

official rate is ultimately devalued, thus validating what had already transpired in the free market.

Thus when there are dual markets, it is not sufficient to just discard the official exchange rate *classification*. One very often also has to discard the official *rate*, which can be meaningless and far removed from the rate at which transactions take place. Another difference from other studies that have tackled the regime classification issue is that our approach relies on extensive historical chronologies that allow us to identify when dual or multiple rates are in place or when parallel markets are active. In the vast majority of these cases, our data set contains monthly data on dual/parallel market exchange rates from 1946 through 1998, and we use these data to assess whether, from a monetary perspective, the true *de facto* regime corresponds to the stated *de jure* regime. Very often—roughly half the time for official pegs over the post-1970 period—we find that dual/parallel rates have been used as a form of back-door floating.<sup>4</sup> Lastly, we rely on a large battery of descriptive statistics to classify exchange rate arrangements into as many as 15 categories. We argue that both pieces of information—historical chronologies and data on market-determined exchange rates--are essential to any meaningful classification algorithm.

We note also that the IMF's monthly data on exchange rates—which only includes the official rate—currently begin in 1957, whereas ours begin in 1946. Our analysis is extremely comprehensive, covering 153 countries. Since exchange rate regimes are often

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<sup>&</sup>lt;sup>4</sup> The IMF data for official exchange rates begins on January 1957 for most countries. We also compiled data on official exchange rates from 1946 through 1957; see appendix.

mixed within a given year, our methodology captures regimes changes by month; all previous approaches have used only annual classifications.<sup>5</sup>

The highlights of our findings can be summarized as follows:

*First,* dual or multiple rates, and/or parallel markets were far more commonplace that is commonly thought.<sup>6</sup> In 1950, 45 percent of the countries in our sample had dual rates, not to mention many more that had thriving illegal parallel markets! Among the industrialized economies, dual or multiple rates were the norm in the 1940s and the 1950s and, in some cases, lasted until much later. Those countries that clung to dual or multiple exchange rates were important actors on the world stage and included the United Kingdom in the 1970s, Italy in the 1980s, and Belgium and Luxembourg until 1990. <sup>7</sup> Among developing countries such practices remained relatively commonplace through the 1980s. Going back as recently as 1980, 32 percent of countries had dual rates. In the 1990s, the number still stood at approximately 20 percent, including some of the largest emerging markets.

Second, when one uses market-determined rates in place of official rates, the history of exchange rate policy suddenly begins to look very different. In particular, it becomes obvious that *de facto* floating was not uncommon during the so-called Bretton Woods era of "pegged" exchange rates. Indeed, for many countries, it is difficult to detect *any* change in exchange rate behavior between the two periods (provided one focuses on market-determined

<sup>&</sup>lt;sup>5</sup> See Côté (1994) for a survey of this literature.

<sup>&</sup>lt;sup>6</sup> When we refer multiple exchange rates in this context, we are focusing on the cases where one or more of the rates was market-determined. This is very different from the cases where the multiple official rates are all fixed and simply act as a differential tax on a variety of transactions.

<sup>&</sup>lt;sup>7</sup> Of course, over the more recent period the differences in rates was relatively trivial.

rates). The main impact of the dissolution of Bretton Woods was on G-3 currencies, the US dollar, the Yen, and the mark. Remarkably, in our "natural" classification scheme, we find that for about 45 percent of the time official pegs are better characterized as managed or freely floating arrangements, or limited flexibility. Indeed, we find that very often, an official "peg" masks an underlying 12-month inflation rate greater than 40 percent. Thus, nearly half of the official "pegs" turn out to have exhibited far more exchange rate flexibility than was reported to the IMF. Conversely, many "floats" of the post-1980s turn out to be (*de facto*) pegs, crawling pegs, or very narrow bands (often narrower than Bretton Woods period). Of countries that are listed in the standard classification as managed floating, 53 percent turned out to have *de facto* pegs, crawls or narrow bands to some anchor currency.

*Third*, next to pegs (which account for 33 percent of the observations during 1970-2001, according to our new classification scheme) the most popular exchange rate regime over modern history has been the crawling peg or narrow crawling band, which account for over 26 percent of the observations. During 1990 to 2001, this is the most common type of arrangement in emerging Asia and Western Hemisphere (excluding Canada and the United States), making up for about 36 and 42 percent of the observations, respectively.

*Fourth*, in our taxonomy, the extreme macroeconomic distresses associated with inflation over 40% per annum—we term the underlying exchange rate regimes "freely falling"—are not uncommon. In our sample, about 12½ percent of the observations are in the freely falling category—which is to say that "freely falling" is about three times as common as "freely floating", which accounts for only 4½ percent of the total observations. (In the official classification, freely floating accounts for over 30 percent of observations in the past decade, more than three times our estimate.) Our new freely falling classification

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makes up for 22 and 37 percent of the observations in Africa and Western Hemisphere (excluding Canada and the United States) during 1970-2001.<sup>8</sup> In the 1990s, freely falling accounted for 41 percent of the observations for the transition economies. Given the distortions introduced when inflation rises to 40 percent and beyond, any fixed versus flexible exchange rate regime comparisons that do not break out the freely falling episodes are meaningless, as shall confirm.

In light of the evidence we collect, we conjecture that the surprising and provocative results in Baxter and Stockman (1989) and Flood and Rose (1995)—that there are no significant differences in business cycles across exchange arrangements— may owe to the fact that the official historical groupings of exchange rates are misleading.<sup>9</sup> Similar statements could be made about the literature that has concluded that exchange rate volatility has little impact on trade, as all studies relied exclusively on the official exchange rate. At one time or another, in every region of the world, parallel/dual markets have been commonplace.

The paper proceeds as follows. In the next section, we briefly describe the evolution of the official standard annual classification scheme, that has served as the basis for so many studies. Unlike our classification, which is by month, the official classification imposes the same regime on the entire year. In Section III, we sketch our methodology for re-classifying exchange rate arrangements with details provided in an Appendix. Our approach recognizes

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<sup>&</sup>lt;sup>8</sup> We also include in the freely falling category the first six months following an exchange rate crisis (see Appendix II for definitions), but <u>only</u> for those cases where the crisis marked a transition from a peg or quasipeg to a managed or independent float.

<sup>&</sup>lt;sup>9</sup> Indeed, in light of our results, it is difficult to discern the "puzzle" that recent research is still trying to explain as in Dedola and Leduc (2001).

that an exchange rate regime is difficult to ascertain from one month's or even one-year's worth of data. Section IV compares our results to the "official history" and provides examples of how our reclassification of exchange rate arrangements may reshape the some of the existing evidence on the links between exchange rates and various facets of economic activity. The final section discusses the scope for future research, while an Appendix provides the detailed country exchange rate chronologies that underpin our analysis. Our conclusions issue a call for rethinking how the profession should look at the impact of exchange rate regimes, both at a theoretical and at an empirical level.

### **II.** The Standard Classification

Classification schemes, for anything, have always been controversial. Dating back to Aristotle, there arose two kinds of classificatory schemes for animals and plants, the so-called "artificial" and "natural" systems. Artificial systems placed organic species into well-marked groups, using a few, sometimes even a single, characteristic for the purposes of classification. Natural systems, on the other hand, aimed to bring the diverse organic species into natural families, in which there was a continuity of creatures.<sup>10</sup> The standard official classification prior to 1997, as described in various issues of the IMF's *Annual Report on Exchange Rate Arrangements and Exchange Rate Restrictions*, would seem to fall squarely into the "artificial" system category. As shown in Table 1, initially there were only two buckets, par (fixed) and "other". Later, the classification expanded to three, then four, buckets. The four-bucket classification that prevailed through most of the 1980s and 1990s

<sup>&</sup>lt;sup>10</sup> The French Naturalists of the 18<sup>th</sup> century were the strongest advocates of the "natural" classification scheme, as explained in Mason (1962).

consisted of peg, limited flexibility, more flexible arrangements, and independently floating.<sup>11</sup> Aside from the small number of buckets, the pre-1997 official categorization was also "artificial" —in the sense of Aristotle—in that it relied exclusively on a single piece of information; namely it took at face value whatever each government declared its exchange rate regime to be in any given year. The post-1997 system, though dramatically improved, is still based mainly on the official rate.

<sup>&</sup>lt;sup>11</sup> In practice, limited flexibility has, almost exclusively, been used to classify European countries (prior to the monetary union) with exchange rate arrangements vis-à-vis one another (i.e., the Snake, the Exchange Rate Mechanism, etc.).

 Table 1. Evolution of the Fund's "Exchange Arrangements and Restrictions" the Categories for the Annual Classification of Exchange Rate Regimes

### Volumes 1950-1973

- 1. Par value or central rate exists--Par value of central rate applied
- 2. Effective rate other than par value or central rate applicable to all or most transactions: fixed rate or fluctuating rate

### Volume 1974, (no mention of par values)

- 1. Exchange rate maintained within relatively narrow margins in terms of:
  - US Dollar, Sterling, French Franc, group of currencies, and average of exchange rates of main trading partners.
- 2. Exchange rate not maintained within relatively narrow margins

### Volumes 1975-1978

- 1. Exchange rate maintained within relatively narrow margins in terms of:
  - US Dollar, Sterling, French Franc, South African Rand or Spanish Peseta, group of currencies (under mutual intervention arrangements), and composite of currencies.
- 2. Exchange rate not maintained within narrow margins

### Volumes 1979-1982

- 1. Exchange rate maintained within relatively narrow margins in terms of
  - US Dollar, Sterling, French Franc, Australian Dollar, Portuguese Escudo, South African Rand or Spanish peseta, a group of currencies (under mutual intervention arrangements), a composite of currencies, and a set of indicators.
- 2. Exchange rate not maintained within relatively narrow margins

### Volumes 1983-1996

Exchange rate determined on the basis of :

- 1. a peg to: the US Dollar, Sterling, the French Franc, other currencies, and composite of currencies
- 2. limited flexibility with respect to: a single currency, cooperative arrangement
- 3. More flexible arrangements: adjusted according to a set of indicators, other managed floating, and 4. independently floating
- 4. independently floating.

### Volumes 1997-1998

- 1. Pegged to: single currency, composite of currencies
- 2. Flexibility limited
- 3. Managed floating
- 4. Independent floating

#### Volumes 1999-2001

- 1. Exchange arrangement with no separate legal tender
- 2. Currency board arrangement
- 3. Conventional pegged arrangement
- 4. Pegged exchange rate within horizontal bands
- 5. Crawling peg
- 6. Crawling band
- 7. Managed floating with no pre-announced path for the exchange rate
- 8. Independently floating

Sources: International Monetary Fund, *Annual Report on Exchange Restrictions*, 1950-1978 and *Annual Report on Exchange Arrangements and Exchange Restrictions*, 1970-2001.

The critical importance of taking into account dual/parallel rates can be seen in Chart 1, which gives the distribution of regimes, with and without stripping out cases of dual/parallel markets. The light bars are the official classification; the dark bars separate out dual markets.<sup>12</sup> Note, for example, that according to the official classification, pegs reigned supreme in the early 1970s, accounting for over 90 percent of all exchange rate arrangements. But, in fact, over half of these "pegs" masked dual/parallel markets that, as we shall, quite often exhibited quite different behavior.

## III. The "Natural" Classification Code: A Guide

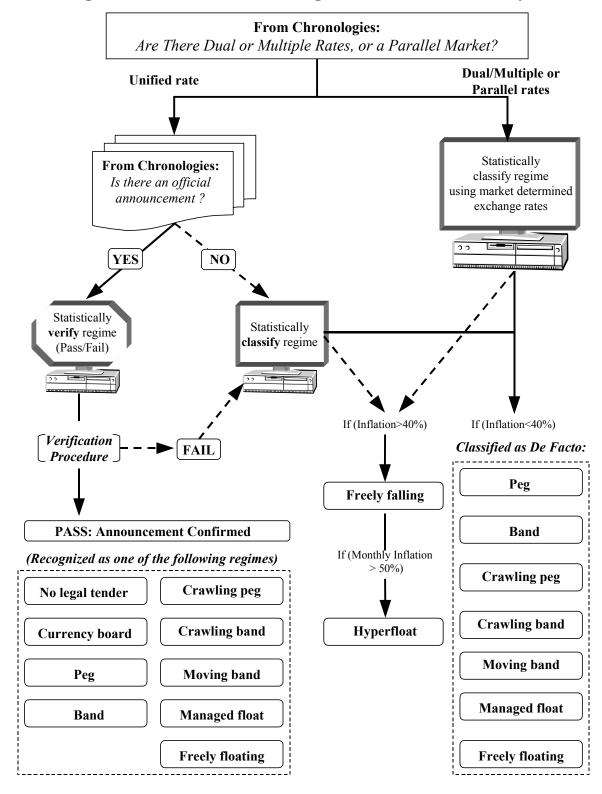
In contrast to the "artificial" official classification of exchange rate arrangements, we would describe our classification scheme as a "natural" system. Our algorithm relies on a broad variety of descriptive statistics and chronologies, and we group episodes into a much finer grid of regimes, rather than just three or four buckets. The most important new piece of information we bring to bear, of course, is our extensive data series on market-determined dual or parallel rates. The data, its sources, and country coverage are described in Appendix I, while the chronologies that map the history of exchange rate arrangements for each country are reported in Appendix III. To verify and classify regimes, we also rely on a variety of descriptive statistics based on exchange rate and inflation data from 1946 onwards; these statistics and how they are used are described in detail in Appendix II.

<sup>&</sup>lt;sup>12</sup> In Chart I, the dark bars treat dual rates separately, the unified rate regimes are classified according to our "natural algorithm," discussed below.

# 1. The algorithm

Figure 1 is a schematic summarizing our natural classification algorithm. *First*, we use the chronologies (see Appendix III) to sort out for separate treatment countries with either official dual or multiple rates or active parallel (black) markets. *Second*, if there is no dual or black market, we check to see if there is an official pre-announced arrangement, such a peg or band, etc. If there is, we examine summary statistics to verify the announced regime, going forward from the date of the announcement. If the regime is verified (i.e., exchange rate behavior accords with the pre-announced policy), it is then classified accordingly as a peg, crawling peg, etc. If the announcement fails verification (which is the most common outcome), we then seek a *de facto* statistical classification using the algorithm described below, and discussed in greater detail in Appendix II.

*Third*, if there is no pre-announced path for the exchange rate, or the announced regime fails to be verified by the data and the twelve-month rate of inflation is below 40 percent, we classify the regime on the basis of actual exchange rate behavior.



# Figure 1. A Natural Exchange Rate Classification System

Our statistical measures include rolling two-year and five-year moving average measures of volatility (see Appendix II). The longer five-year window has priority, in order that the monthly exchange rate behavior is appropriately viewed as part of a larger regime. (We also examined the graphical evidence as a check on the classification. In practice, the main effect is to allow one to more reliably separate pegs from crawling pegs or bands, and to mark more finely the latter between moving pegs or crawling bands.)

*Fourth,* as discussed below, an important departure from all previous classification schemes is that we create a new separate category for countries whose twelve-month rate of inflation is above 40 percent. These episodes are classified as **freely falling**.<sup>13</sup> If the country is in a hyperinflation (according to the classic Cagan definition of 50 percent or more *monthly* inflation), we categorize the exchange rate as a **hyperfloat**, a sub-species of freely falling. In Chart 2, exchange rates are plotted for two countries that were classified officially as floating over much of that period—Canada and Argentina. <sup>14</sup> Argentina experienced a bout of hyperinflation and as Chart 2 illustrates, freely floating regimes look rather different from freely falling regimes—witness the orders of magnitude difference in the range of the Yscales between Canada (top of page) and Argentina (bottom). This difference is highlighted in the middle panel, which plots the Canadian dollar-US dollar rate against Argentina's Yscale; from this perspective it looks like a fixed rate! The exchange rate profile of other

<sup>&</sup>lt;sup>13</sup> In the highly exceptional cases where, despite inflation over 40%, the market rate nevertheless follows a confirmed, pre-announced band or crawl, the pre-announced regime takes precedence.

<sup>&</sup>lt;sup>14</sup> For Argentina, this of course, refers to the period before the Convertibility Plan was introduced in April 1991.

countries which experienced chronic high inflation bouts—even if these did not reach the hyperinflation stage--look more similar to Argentina in Chart 2, than to Canada. In our view, regimes associated with the myriad of problems that result from very high inflation should not be lumped under the same exchange rate arrangement as low inflation floating regimes, certainly not if one wants to contrast the macroeconomic implications of alternative exchange rate regimes.

In step five, we take up those residual regimes that have not already been classified by steps one through four. These regimes become candidates for "managed" or "freely" floating.<sup>15</sup> To distinguish between the two, we perform some simple tests (described in detail in Appendix II) that look at the likelihood the exchange rate will move within a narrow range, as well as the mean absolute value of exchange rate changes.

When there are dual or parallel markets, we apply steps one through five to our data on parallel exchange rates and reclassify accordingly, though in our finer grid, dual rates as a whole also constitute a separate "species."

# 2. Using the chronologies

The 153 individual country chronologies in Appendix II are the central point of departure from all previous efforts. In the first instance, the data are constructed by culling information from annual issues of various secondary sources, including *Pick's Currency Yearbook, Pick's World Currency Report, Pick's Black Market Yearbook, International Financial Statistics*, the IMF's *Annual Report on Exchange Rate Arrangements and Exchange Restrictions*, and the *United Nations Yearbook*. Generally speaking, constructing

<sup>&</sup>lt;sup>15</sup> Our classification of "freely floating" is the analogue of "independently floating" in the official classification.

our data set required us to sort and interpret information for every year from every publication above. In addition, however, we draw on national sources to investigate apparent data errors or inconsistencies. More generally, we rely on the broader economics literature to include pertinent information not to be found in our secondary sources, such as the dates of Tablita episodes in Latin America.

The chronologies allow us to date dual or multiple exchange rate episodes, as well as to differentiate between pre-announced pegs, crawling pegs, and bands from their *de facto* counterparts. We think it is important to distinguish between, say, *de facto* pegs and announced (confirmed) pegs, because their properties are potentially different. <sup>16</sup> At the very least, we want to provide future researchers with the data needed to ask the question. The chronologies also flag the dates for important turning points, such as when the exchange rate was allowed to float or a currency was repegged from one anchor currency to another.

Table 2 gives an example of one of our 153 chronologies shown in Appendix III, for the case of Chile. The first column gives critical dates. Note that where possible, we extend our chronologies back before 1946 (even though we can only classify from 1946 onwards); in the case of Chile we go back to 1932. The second column gives the arrangement, *according to our natural classification algorithm*, which may or (much more often) not correspond to the official classification. As one can see, although Chile unified rates on September 1999, it previously had some form of dual or multiple rates throughout most of its

<sup>&</sup>lt;sup>16</sup> Policymakers may not be indifferent between the two. In theory, at least, announcements of pegs, bands, and so on can act as a coordinating device which, by virtue of being more transparent, could invite speculative attacks.

history.<sup>17</sup> In these circumstances, our classification algorithm relies on the marketdetermined, rather than the official rate. In some instances, the discrepancy proved to be small. For example, from September 1998-December 1998, the official regime was a preannounced crawling band to the dollar; our statistical algorithm confirms this band even for the dual rate. Chile has also experienced several periods where the twelve-month monthly inflation exceeded 40 percent. Our algorithm automatically categorizes these as freely falling exchange rate regimes—unless there is a pre-announced peg crawling peg or narrow band that is verified, as was the case when the Tablita program was introduced on February 1978. For the freely falling cases, the second column also notes whether there was a dual market and how our algorithm would categorize the regime absent knowledge of the inflation rate. The third column in our chronology gives further sundry information on the regime information we believe to be particularly important, e.g., the width of the announced and de *facto* bands. For Chile, which followed a crawling band policy over many sub-periods, it is particularly interesting to note the changes over time in the width of the bands. Information on the performance of the parallel market premia is also presented in the third column, as is information on currency reform. As an example of the former, we note that since 1992 the parallel premium slipped into single digits. An example of the latter is given for Chile when the peso replaced the escudo in 1975.

<sup>&</sup>lt;sup>17</sup> Of course, since 1992 the difference between the official and parallel rate has been trivial.

Date	Classification Primary/Secondary/Tertiary	Comments	
September 16, 1925- April 20, 1932	Peg	Gold standard. Foreign exchange controls are introduced in on July 30,1931.	
April 20, 1932–1937	Dual Market	Pound Sterling is reference currency. Suspension of gold standard.	
1937-February, 1946	Managed floating/Multiple rates	US Dollar is the reference currency	
March 1946-May 1947	Freely falling/Managed floating/Multiple rates	US Dollar is the reference currency	
June 1947-October 1952	Managed floating/Multiple rates		
November 1952–April 16, 1956	Freely falling/Managed floating/Multiple rates	US Dollar is the reference currency	
April 16, 1956-August 1957	Freely falling/Managed floating/Dual Market		
September 1957–June 1958	Managed floating/Dual Market		
July 1958-January 1, 1960	Freely falling/Managed floating/Dual Market		
January 1, 1960–January 15, 1962	Peg to US Dollar	The Escudo replaces the peso.	
January 15, 1962–April 1964	Freely falling/Managed floating/Multiple rates		
January 15, 1962–June 1971	Managed floating/Multiple rates		
July 1971-June 29, 1976	Freely falling/Multiple exchange rates	On September 29, 1975 the Peso replaced the Escudo. October 1973 classifies as a hyperfloat.	
June 29, 1976–January 1978	Freely falling/Crawling peg to US Dollar		
February 1978–June 1978	Pre announced crawling peg to US Dollar/Freely falling	The Tablita Plan	
July 1978–June 30, 1979	Pre announced crawling peg to US Dollar	The Tablita Plan	
June 30, 1979–June 15, 1982	Peg to US Dollar	The second phase of the Tablita Plan	
June 15, 1982–December, 1982	Freely falling/Managed floating/Dual Market		
December 1982–December 8, 1984	Managed floating/Dual Market	Parallel market premium reaches 102% in early 1983. On March 1983 the intentions to follow a PPP rule was announced.	
December 8, 1984–January 1988	Managed floating/Dual Market	PPP rule. The official rate is kept within a $+/-2\%$ crawling band to US Dollar the June 1985. Yet, while the official rate remains within the band, parallel market premia remain in the 20–40% range and scores as managed floating.	
January 1988–January 1, 1989	De facto crawling band around US Dollar/Dual Market	PPP rule. Band width is +/-5%. Official pre– announced crawling band to US Dollar. Band width is +/- 3%. While the official rate remains within the band narrower band, parallel market premia remain in double digits.	
June 1, 1989–January 22, 1992	Pre announced crawling band around US Dollar/Dual Market	PPP rule. Band width is +/- 5%.	
January 22, 1992– January 20, 1997	De facto crawling band around US Dollar/Dual Market	PPP rule. Band is +/-5%. Official pre–announced crawling band to US Dollar. Band width is +/- 10%. Parallel premium declines to below 15 percent and into single digits.	
January 20, 1997–June 25, 1998	De facto crawling band to US Dollar/Dual Market	Official pre–announced crawling band to US Dollar. Band width is $+/-$ 12.5%, de facto band is $+/-5\%$ for the official rate and $+/-2\%$ for the parallel rate.	
June 25, 1998-September 16, 1998	Pre-announced crawling band to US Dollar/Dual Market	Band width is, +/- 2.75%.	
September 16, 1998–December 22, 1998	Pre announced crawling band to US Dollar/Dual Market	Band width is +/- 3.5%.	
December 22, 1998–September 2, 1999	Pre announced crawling band to US Dollar/Dual Market	Band width is +/- 8%.	
September 2, 1999–December 2001	Managed floating	Rates are unified.	

Table 2. A Sample Chronology in the Natural Classification Scheme: Chile, 1932-2001

Notes: Reference currency is the US Dollar.

The top panel of Chart 3 plots the path of exchange rate for Chile. It is evident that through much of the period shown the arrangement was one of a crawling peg or a crawling band with the rate of crawl varying through time and notably slowing as inflation began to stabilize following the Tablita plan of the early 1980s. As we will discuss in the next Section crawling pegs or bands are not at all unusual and, indeed, quite commonplace. The two bottom panels of Chart 3, which show the path of the exchange rate for India and Greece provide other examples of the many crawling pegs or bands in our sample.

# 3. About the data

As noted, we use monthly data on official and market-determined exchange rates for the period 1946-1998. In some instances, the data for the market-determined rate is available for a shorter period and Appendix I provides the particulars on a country-bycountry basis. The market-determined exchange rate data comes from various issues *Pick's Currency Yearbook*, *Pick's Black Market Yearbooks*, and *Pick's World Currency Report* and the official rate comes from the same sources and as well as the IMF. The quotes are end of month exchange rates and are not subject to revisions. For the countries that had one ore more monetary reforms, involving changes in the units in which the exchange rate is expressed, the data has been converted as necessary to ensure continuity.

While the quality of data on market-determined rates is likely to vary across countries and time, we believe these data to be reliable and generally far better indicators of the underlying monetary policy than are official rates. For instance, if monetary policy is more lax than is consistent with maintaining the official exchange rate unchanged one would expect the market-determined rate to start depreciating ahead of the official realignment. When the official realignment occurs—it is simply a validation of what had previously transpired in the free market. Indeed, this is the pattern shown in the three panels of Chart 4 for the cases of Bolivia, Indonesia, and Iran. This pattern also emerges in the developed European economies and Japan in the years following World War II; it is quite typical.

To illustrate more formally that the market-based exchange rate is a better indicator of the monetary policy stance than the official rate and that changes in the former systematically predict changes in the latter, we regressed for each of the developing countries in our sample a currency crash dummy on the parallel market premia lagged one to six months.<sup>18</sup> If the market rate consistently anticipates devaluations of the official rate, its coefficient should be positive and significant. If, in turn, the official exchange rate does not validate the market rate then, the coefficient on the lagged market exchange rate will be negative. As shown in Table 3, in the overwhelming number of cases (97 percent), the coefficient on the market-determined exchange rate is positive and consistent with the view that the monetary policy stance is better reflected in market rates. In about 81 percent of the cases, the sign on the coefficient was positive and statistically significant. Indeed, for Western Hemisphere as a region the coefficient on the parallel premia was significant I all the cases.

<sup>&</sup>lt;sup>18</sup> Two definitions of currency crashes are used. A severe currency crash refers to a 25% or higher monthly depreciation which is at least 10% higher than the previous month's depreciation. The "milder" version represents a 12.5% monthly depreciation which is at least 10% above the preceding month's depreciation; see details in Appendix II. To put in perspective the monthly depreciations annualized are 1, 355% and 310%, respectively.

# Table 3. Is the Parallel Market a Good Predictor of Crashes in the Official Rate?Summary of the Results

	"Milder" crash	"Severe" crash
Percent of countries for which the coefficient is positive	97.1	97.1
Percent for which the coefficient is positive and significant <sup>1</sup>	81.4	80.0
Percent for which the coefficient is negative	2.9	2.9
Percent for which the coefficient is negative and significant <sup>1</sup>	1.4	1.4

Notes: Two definitions of currency crashes are used. A "severe" currency crash refers to a 25% or higher monthly depreciation which is at least 10% higher than the previous month's depreciation. The "milder" version represents a 12.5% monthly depreciation which is at least 10% above the preceding month's depreciation. To put in perspective the monthly depreciations annualized are 1, 355% and 310%, respectively.

At the ten percent confidence level or higher.

## IV. The "Artificial" and "Natural" Taxonomies of Exchange Rate Arrangements

We are now prepared to offer some broad descriptive statistics about our "natural"

classification scheme and how it compares to the standard "artificial" one.

### 1. Alternative taxonomies: comparing the basic categories

Altogether, our taxonomy of exchange rate arrangements includes the 14

classifications sketched in Table 4 (15 if hyperfloats are treated as a separate category). Because we sometimes want to compare our classification regime with the official one, we can also collapse our 14 types of arrangements into 5 broader categories. The least flexible arrangements are assigned lower values in our scale as shown in the second column of Table

4.

In the finer grid, we distinguish between pre-announced policies and the less transparent *de facto* regimes. Since the former involve an explicit announcement while the latter leaves it to financial market analysts to figure out what the implicit exchange rate policy is, in the finer classification we treat pre-announcement as less flexible than de facto and accordingly assign it a lower number in our scale. For those not interested in testing whether announcements serve as a coordinating device (say to make a speculative attack more likely) and are exclusively interested in sorting out the degree of observed exchange rate flexibility, the bottom panel of Table 4 presents a coarser ranking according to the degree of flexibility from one to five. However, in both the coarse and fine grid, it is imperative to treat freely falling as a separate category. These sorting strategies categorize cover the period January 1946-December 2001 for those with unified rates, and January 1946-December 1998 for those countries with dual markets.

Natural Classification Bucket	Number assigned to	Number assigned to
	category in fine grid	category in coarse grid
No separate legal tender	1	1
Pre announced peg or currency board	2	1
arrangement		
Pre announced horizontal band that is narrower	3	1
than or equal to $+/-2\%$		
De facto peg	4	1
Pre announced crawling peg	5	2
Pre announced crawling band that is narrower	6	2
than or equal to $+/-2\%$		
De facto crawling peg	7	2
De facto crawling band that is narrower than or	8	2
equal to +/- 2%		
Pre announced crawling band that is wide than	9	2
or equal to $+/-2\%$		
De facto crawling band that is narrower than or	10	3
equal to $+/-5\%$		
Moving band that is narrower than or equal to	11	3
+/- 2%		
(i.e., allows for both appreciation and		
depreciation over time)		
Managed floating	12	3
Freely floating	13	4
Freely falling	14	5
Source: The outhors		

 Table 4. The Fine and Coarser Grids of the Natural Classification Scheme

Source: The authors.

# 2. Fact and fiction: Natural and Artificial?

We are now prepared to contrast the official view of the history of exchange rate regimes with the view that emerges from employing our alternative methodology. To facilitate comparisons, we will focus mainly on the coarse grid version of the natural system.

For example, in 1950, the IMF's then two tier classification (peg and "other") had 65 percent of countries listed as pegs, as Chart 5 illustrates. As one can also see from Chart 5, according to our natural classification system, less than forty percent of all regimes at this time were pegs (since countries had dual/parallel rates which did not qualify as pegs.) In fact, this coarse comparison understates the differences between the two classification systems since some of our "pegs" were not considered pegs under the official classification; in turn, our algorithm rejects almost half of the official pegs as true pegs. It is worth noting that our reclassification of the early post-war years impacts not only on developing countries, but on industrialized countries as well; nearly all the European countries had active parallel markets after World War II.

A second (less important) reason why our scheme shows less pegs is that the IMF's pre-1997 allowed countries to declare their regimes as pegged to an undisclosed basket of currencies. This practice was especially popular during the 1980s, and it was under the umbrella of pegging to an undisclosed basket of currencies that a great deal of managed floating, freely floating and freely falling actually took place.

For the period 1974-1990, the official classification has roughly 60 percent of all regimes as pegs; our classification has only half as many. Again, as we shall see shortly, this comparison understates the differences since some of our pegs are not official pegs. For the years 1974-1990, and 1991-2001, one can see two major trends. First, "freely falling"

continues to be a significant category, accounting for 12 percent of all regimes from 1974-1990, and 13 percent of all regimes from 1991-2001. For the transition economies in the 1990s, over 40 percent of the observations are in the freely falling category. Table 5 looks at what kinds of official exchange rate regimes are most closely associated with our freely falling category. We find that peg, managed floating and independently floating contribute in almost equal measure to our freely falling category. Only limited flexibility–a relatively small group of mostly European countries in the official classification–is not associated with freely falling. The last item in the table shows that 62 percent of all freely falling exchange rate systems took place under the guise of dual rates.

Table 5. Behind Freely Falling: Exchange Rate Official Arrangements in Place during Freely Falling Episodes 1970-2001 (Percent of Total Cases)

Peg	Limited Flexibility	Managed Floating	Independently Floating	(Dual or parallel rates)
28.2	0.0	35.7	36.1	(61.8)

Sources: International Monetary Fund, Annual Report on Exchange Arrangements and Exchange Restrictions and International Financial Statistics, Pick and Sédillot (1971), International Currency Analysis, World Currency Report, various issues.

Second, the natural classification scheme reveals a bunching to the middle in terms of exchange rate flexibility, when compared to the official monetary history of the world. Limited flexibility – which under the natural classification is dominated by *de facto* crawling pegs – becomes notably more important. From being a very small class under the official scheme, the natural classification algorithm elevates limited flexibility to the second most important grouping over the past decade, just behind pegs. Another startling difference is the reduced importance of freely floating. According to the official classification, more than 30 percent of countries were independently floating during 1991-2001. According to the natural classification, less than 10 percent were freely floating. This is partly a manifestation of what Calvo and Reinhart (2002) term "fear of floating", but equally because we assign high inflation floats to our new freely falling category. Indeed, more countries had freely falling exchange rates than had freely floating exchange rates!

The contrast between the old and new classification systems becomes even more striking when one sees just now small the overlap is between the two classifications country by country, month by month. As we can see from Table 6, if the official designation of the regime is a peg (1970-2001), there is a 44 percent chance our algorithm will categorize it into a more flexible arrangement. If the official regime is a float, there is a 31 percent chance we will categorize it as a peg or limited flexibility. If the official regime is a managed float, there is 53 percent chance our algorithm will categorize it as a peg or limited flexibility. Whether the official regime is a float or peg, it is virtually a coin toss whether the natural algorithm will yield the same result. The bottom of the table gives the pairwise correlation between the two classifications, with the official classification running from 1 (peg) to 4 (independently floating), and the natural classification running from 1 (peg) to 5 (freely falling). The simple correlation coefficient is only .42. As one can confirm from the chronologies, the greatest overlap occurs in the classification of the G3 currencies and of the limited flexibility European arrangements. Elsewhere, and especially in developing countries, the two classifications differ significantly, as we shall see.

Conditional probability	In percent
Probability that the regime is dual, managed or independently floating according to natural classification conditional on being classified as a peg in the official standard classification	40.2
Probability that the regime is limited flexibility, managed or independently floating or freely falling cording to natural classification conditional on being classified as a peg in the official standard classification	44.5
Probability that the regime is peg or limited flexibility according to natural classification conditional on being classified as managed floating by the official standard classification	53.2
Probability that the regime is peg or limited flexibility according to natural classification conditional on being classified as independently floating by the official standard classification	31.5
Pairwise correlation between the Standard and Natural classification	42.0

Table 6.	Floating Pe	gs and Pegged	Floats: Revisiting	the Past, 1970-2001
	0	0 00	0	,

Source: The authors' calculations.

### 3. The pegs that float

Chart 6 plots the parallel market premium since January 1946, in percent, for Africa, Asia, Europe and Western Hemisphere. As is evident from the Chart, for all the regions except Europe, it would be difficult to make the case that the breakdown of Bretton Woods was a singular event, let alone a sea change. The levels of pre- and post-1973 volatilities in the market determined exchange rate—as revealed by the parallel market premia are remarkably similar for the developing world. Note that for all regions, we exclude the freely falling episodes which would significantly increase the volatility but also distort the scale.

As regards Europe, the story told by Chart 6 is even more surprising. From 1946 until the arrival of the 1960s, Europe was *de facto* floating under the guise of pegged official exchange rates. Each time official rates were realigned, the story had already unfolded in the parallel market. While the volatility of the gap between the official rate and the market exchange rate is not quite in the order of magnitude observed in the developing world, the volatility of the parallel rate is quite similar to the volatility of today's managed or freely floating exchange rates. The disappearance of the premia at such a late stage—the 1960s--suggests that the duration of the "true" Bretton Woods system of pegged exchange rates was much shorter lived than most textbooks suggest. As show earlier for Chile and India in the top two panels of Chart 2, there are many interesting country examples that illustrate visually just how little changed before and after the breakup of Bretton Woods. Clearly, more careful statistical testing is required to make categorical statements about when a structural break took place; but it is obvious from the charts that whatever break might have taken place must be relatively minor quantitatively compared to usual image of the move from fixed to flexible rates.

# 4. The floats that peg

Chart 7 provides a more general flavor of how exchange rate flexibility has evolved over time and across regions. The chart plots five-year moving averages of the probability that the monthly percent change in the exchange rate remains within a two percent band for Africa, Asia, Europe and Western Hemisphere (excluding only the United States). Hence, under a pegged arrangement, assuming no adjustments to the parity are made, these probabilities should equal 100 percent. As before, we exclude the freely falling episodes. For comparison purposes, the figures plot the unweighted regional averages against the unweighted averages for the "committed floaters". (The committed floaters group include the following exchange rates against the dollar: Yen, DM (Euro), Australian dollar, and the Pound Sterling.) It is evident for all regions (this applies the least to Africa) that the monthly percent variation in the exchange rate has typically been kept to a minimum—there is a great deal of smoothing of exchange rate fluctuations in all regions when compared to the usual monthly variations of the committed floaters. The smoothing is most evident in Asia where the index hovers around 90 percent for most of the period, versus 60-70 percent for the floaters.

Hence, over time, the nature of the classification problem has evolved from labeling something as a peg when it is not, to labeling something as floating when the degree of exchange rate flexibility has in fact been very limited.

# 5. Reflections on the choice of nominal anchor

The data set underlying our analysis offers a number of potential insights about how the choice of exchange rate regime impacts on macroeconomic performance. A very basic one is inflation. Many developing countries today are faced with the question of whether to use the exchange rate as an explicit or implicit nominal anchor. It is widely recognized that fixing to a strong major currency can pose problems if the developing country lags in productivity growth, or if it experiences recessions at different times from the anchor. How big is this problem quantitatively? It is very instructive to look at the CFA franc zone countries in Africa, a group of more than a dozen nations that have pegged more or less continuously to the French franc since 1946 (with the notable exception of a one time 50 percent devaluation in 1994). Although these countries have (by and large) enjoyed a relatively high degree of exchange rate stability, they also constitute the region of the world that has had experienced by far the most frequent bouts of deflation. During 1970 to 2001, as shown in the top panel of Chart 8, these countries, on average had deflations (as measured by a decline in the twelve-month percent change in the consumer price index) about 28 percent of the time! This can be interpreted as "a cost" of having the exchange rate as the nominal anchor and requiring that all adjustment in the real exchange rate to be borne by the price level. It merits analysis to explore to what extent these prolonged bouts of deflation have contractionary consequences for output.

Of course, the flip side having such a "tight" nominal anchor is not having a nominal anchor at all. As shown in the bottom panel of Chart 8, freely falling is endemic particularly in Western Hemisphere (i.e., Latin America) and in the transition economies, which include the republics that made up the former Soviet Union. Freely falling, as we discuss in the next subsection, is not only problematic from the point of view of having no price stability and the resultant high degree of uncertainty about nominal magnitudes. It is also a main stumbling block to economic growth.

## 6. Does the exchange rate regime matter?

The question of whether the exchange rate arrangement matters for various facets of economic activity is, indeed, a far-reaching and significant question that has been tackled over the years in the literature on international trade and finance, and is beyond the scope and aims of this paper. However, a few simple exercises are illustrative of the potential usefulness of our Natural classification. First consider Table 7 below, the top row of which is the same as the first four entries in Table 8 which follows. Recall that if the official regime classification is a peg, the probability that the regime is actually "freely falling" is **28 percent**. The probability that an exchange rate regime with an official classification of independently floating is one the natural algorithm would label as freely falling is 36 percent. Simply taking out treating dual arrangements separately drastically alters the picture. Pegs

with unified rates accounted for only 3 percent of freely falling, though independently floating still accounts for 25 percent.

Percent of Total Cases						
Period	Peg	Limited Flexibility	Managed Floating	Independently Floating	Dual or Multiple Exchange Rates	
Standard Dual rates	28.3	0.0	35.6	36.1	0.0	
treated separately	3.2	2.2	20.9	25.3	24.5	

Table 7. Probability of Freely Falling Across Regimes: 1970-2001

Sources: International Monetary Fund, Annual Report on Exchange Arrangements and Exchange Restrictions and International Financial Statistics, Pick and Sédillot (1971), International Currency Analysis, World Currency Report, various issues.

In a similar vein, we compare the average annual inflation rate and the average annual per capita GDP growth rate across exchange rate regimes under (a) the standard classification and (b) a modified standard classification that simply separates dual markets into a different bucket. The results are shown in Table 8 for the entire sample. As Table 8 highlights, there are significant differences in the inflation averages across the two classification schemes. The standard classification shows very high average inflation rates in three of the four "standard" categories; only limited flexibility exhibits moderate inflation. The difference is particularly stark when the independently floating cases are assessed, with the standard official classification showing average annual inflation rate of 174 percent versus 46 percent for the classification that separates out dual rates. Similarly, annual real per capita GDP growth is twice as large for the freely floating cases under our classification. These discrepancies are in a large part owing to our extra category of dual rates, which houses a

disproportionately large number of the high inflation cases—notice the average inflation rate for dual rates is 167 percent.

Average Annual Inflation						
Classification scheme	Peg	Limited Flexibility	Managed Floating	Freely Floating	Dual or Multiple Exchange Rates	
Standard Dual rates as a	38.8	5.3	74.8	173.9	n.a.	
separate category	20.7	10.1	29.7	45.5	167.4	
		Average Annua	al Per Capita G	DP Growth		
Standard Dual rates as a	1.4	2.2	1.9	0.5	n.a.	
separate category	1.7	2.6	1.5	1.1	0.8	

Table 8. Do Classifications Matter? Growth and Inflation across Regimes: 1970 to 2001

Source: International Monetary Fund, World Economic Outlook.

However, simply modifying the standard classification is far less revealing than the Natural classification. The contrast is stark both in terms of the level of per capital GDP, growth, and inflation averages; see Charts 9-12. The implications for trade volume are also interesting. Not surprisingly, freely falling regimes (including the subcategory "hyperfloat") exhibit an average annual inflation rate 443 percent versus an inflation average in the 6 to15 percent range for the other categories (Chart 7). As shown in Chart 10, freely falling has the lowest per capita income (US \$3,476) of any category, while freely floating has the highest (US \$13,602)—a difference that is clouded in the original standard classification when freely falling cases are included in the freely (independently) floating category for lack of a better alternative. In the official IMF historical classification, limited flexibility, which was almost entirely comprised of European countries, showed the largest per capita income.

Stark differences in average per capita real GDP growth also emerge. In particular, growth is negative for freely falling, -2.5%, versus positive growth rates in the 1.6-2.4 range for the other categories (Chart 11). Once freely falling is treated as a separate category, the differences between our other classifications pale relative to the differences between freely falling and not freely falling. In the standard classification, freely floating shows a meager average growth rate of 0.5 percent for the independently floating cases. In the natural classification, which purges the freely floating category from its freely floating counterparts, the average growth rate quadruples for the floaters to 2.3 percent. Clearly, this exercise highlights the importance of treating as a separate classification the freely falling episodes.

On trade volume (i.e., exports plus imports as a share of GDP), Chart 12 reveals that for the Natural classification, the differences between fix and flex are noticeably greater than for the official classification. Trade volume is the highest for pegs and for limited flexibility, and it is lowest for freely floating; the gap between these is about 36 percent. Obviously, we cannot assess causation here, but the striking differences merit further exploration.

### **VI. Concluding Remarks**

We have argued that the official classification has serious flaws. Systems with extensive dual or parallel markets, which accounted for about half of all exchange rate arrangements in our sample in the 1950s and 1960s and early 1970s, are not treated as a separate category. Most often, these regimes have been labeled pegs by all other classifications, notably including the official classification. Given that a very significant share of these "pegs" masked high inflation and large parallel/dual market premiums, it is clear the standard categorization can be highly misleading. According to our new "natural" classification scheme, across all countries and all months, 45 percent of all post-1970 observations officially labeled as a "peg" should, in fact, have been classified as limited flexibility, managed or freely floating—or worse, "freely falling". In the 1980s and 1990s, a new type of misclassification problem emerged and the odds of being officially labeled a "managed float" when there was a *de facto* peg or crawling peg was about 53 percent. We thus find that the official history of exchange rates can be profoundly misleading, as a striking number of pegs are much better described as floats, and vice-versa.

These misclassification problems deeply cloud our view of history along some very basic dimensions. Using the official classification for the period 1970-2001, one would conclude that a freely floating exchange rate is not a very attractive option—it produces an average annual inflation rate of 174 and a paltry average per capita growth rate of 0.5 percent. This is the worst performance of any arrangement. Our classification presents a very different picture: free floats deliver an average inflation which is less than 10 percent (the lowest of any exchange rate arrangement), and an average per capita growth rate of 2.3 percent. We believe that the new view of exchange rate history offered here may well lead to a significant reassessment of how different regimes perform.

In light of the dramatic revision of exchange rate classifications presented here, Milton Friedman's (1953) oft-ridiculed depiction of floating exchange rates no longer looks so foolish. Friedman, of course, argued that flexible exchange rates were preferable to fixed rates because they prevented small inflation differentials from cumulating and eventually forcing a big devaluation. Most commentators have suggested that Friedman was completely wrong in his prediction of how flexible rates would work, and that post-1973 flexible rates would prove far more volatile than he had ever imagined. It is true that exchange rates across

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the dollar, yen and DM (now euro) did become notably more volatile after the breakup of Bretton Woods in 1971, at least in comparison with the 1960s. But for most other countries, the main trend is that after 1973, more countries effectively adopted crawling pegs vis-à-vis their anchor, with very little volatility – much as Friedman had envisioned. If one wants to criticize Friedman (1953), it is perhaps better to focus on his depiction of fixed exchange rates, which he portrayed as making occasional big moves instead of frequent small adjustments. In practice, much *de facto* floating was done through the back door of parallel markets. As a result, the effective adjustment of exchange rates under "pegging" was in many respects far smoother than Friedman described. Indeed, for many developing countries, the market-determined exchange rate looks remarkably similar during and after the Bretton Woods system--they were *de facto* crawling pegs both before and after the break up. The remarkable and durable popularity of crawling pegs is indeed a new fact that needs to be better understood and rationalized. So, not only is it important to rethink the empirical literature on exchange rate regimes, our new stylized facts make it important to rethink theoretical comparisons of exchange rates as well.

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## Appendix I. The Data

Table AI.1. Country Coverage

Country	Official exchange rate	Parallel market exchange rate
Albania	1954:12-2001:12	1954:12-1998:12
Algeria	1946:1-2001:12	1955:1-1998:12
Argentina	1946:1-2001:12	1946:1-1998:12
Armenia	1992:4-2001:12	n.a.
Australia	1946:1-2001:12	1946:1-1998:12
Austria	1946:1-2001:12	1946:1-1998:12
Azerbaijan	1992:12-2001:12	n.a.
Belarus	1992:1-2001:12	1991:8-1998:12
Belgium	1946:1-2001:12	1946:1-1998:12
Benin	1946:1-2001:12	1970:7-1998:12
Bolivia	1946:1-2001:12	1948:1-1998:12
Bosnia-Herzegovina	1997:1-2001:12	n.a.
Botswana	1946:1-2001:12	1989:1-1998:12
Brazil	1946:1-2001:12	1946:1-1998:12
Bulgaria	1946:7-2001:12	1946:7-1998:12
Burkina Faso		1940.7-1998.12 1970:7-1998:12
	1946:1-2001:12	
Burundi	1946:1-2001:12	1983:1-1998:12
Cameroon	1946:1-2001:12	1970:7-1998:12
Canada	1946:1-2001:12	1947:1-1998:12
Central African	1946:1-2001:12	1970:7-1998:12
Republic		
Chad	1946:1-2001:12	1970:7-1998:12
Chile	1946:1-2001:12	1948:1-1998:12
China	1951:1-2001:12	1949:9-1998:12
Colombia	1946:1-2001:12	1952:1-1998:12
Congo, Democratic	1946:1-2001:12	1962:1-1996:12
Republic of		
Congo, Republic of	1946:1-2001:12	1970:7-1998:12
Costa Rica	1946:1-2001:12	1948:1-1998:12
Cote D'Ivoire	1946:1-2001:12	1970:7-1998:12
Croatia	1992:12-2001:12	1991:12-1998:12
Cyprus	1955:1-2001:12	1970:7-1998:12
Czech Republic	1946:1-2001:12	1946:1-1998:12
Denmark	1946:1-2001:12	1946:1-1998:12
Dominican Republic	1946:1-2001:12	1960:3-1998:12
Ecuador	1946:1-2001:12	1947:1-1998:12
Egypt	1946:1-2001:12	1946:1-1998:12
El Salvador	1946:1-2001:12	1961:1-1998:12
Equatorial Guinea	1946:1-2001:12	1970:7-1998:12
Estonia	1992:62001:12	1991:8-1998:12
Finland	1946:1-2001:12	1946:1-1998:12
France	1946:1-2001:12	1946:1-1998:12
Gabon	1946:1-2001:12	1940.1-1998.12 1970:7-1998:12
Gambia	1946:1-2001:12	1970.7-1998.12 1985:1-1998:12
Georgia	1995:10-2001:12	n.a.
Germany	1946:1-2001:12	1946:1-1998:12
Ghana	1946:1-2001:12	1962:3-1998:12
Greece	1946:1-2001:12	1946:1-1998:12

Country	Official exchange rate	Parallel market exchange rate
Guatemala	1946:1-2001:12	1985:1-1998:12
Guinea	1949:1-2001:12	1970:7-1998:12
Guinea-Bissau	1946:1-2001:12	1970:7-1998:12
Guyana	1946:1-2001:12	1985:1-1998:12
Haiti	1946:1-2001:12	1985:1-1998:12
Honduras	1946:1-2001:12	1985:1-1998:12
Hong Kong	1946:1-2001:12	1946:1-1998:12
Hungary	1946:8-2001:12	1946:8-1998:12
Iceland	1946:1-2001:12	1949:1-1998:12
India	1946:1-2001:12	1946:1-1998:12
Indonesia	1946:1-2001:12	1947:1-1998:12
Iran	1946:1-2001:12	1947:1-1998:12
Iraq	1946:1-2001:12	1947:2-1998:12
Ireland	1946:1-2001:12	1946:1-1998:12
Israel	1948:5-2001:12	1946:1-1998:12
Italy	1946:3-2001:12	1946:1-1998:12
Jamaica	1946:1-2001:12	1974:1-1998:12
Japan	1946:3-2001:12	1946:3-1998:12
Jordan	1950:7-2001:12	1955:1-1998:12
Kazakhstan	1993:11-2001:12	n.a.
Kenya	1946:12-2001:12	1966:12-1998:12
Kuwait	1949:9-2001:12	1970:7-1998:12
Kyrgyz Republic	1993:5-2001:12	n.a.
Laos	1946:1-2001:12	1959:1-1998:12
Latvia	1992:2-2001:12	1991:8-1998:12
Lebanon	1946:1-2001:12	1946:1-1998:12
Lesotho	1946:1-2001:12	1985:1-1998:12
Liberia	1946:1-2001:12	1989:1-1998:12
Libyan Arab Republic	1952:1-2001:12	1955:1-1998:12
Lithuania	1992:1-2001:12	1991:9-1998:12
Luxembourg	1946:1-2001:12	1946:1-1998:12
Macedonia	1993:12-2001:12	1997:6-1998:12
Madagascar	1946:1-2001:12	1985:1-1998:12
Malawi	1946:1 2001:12	1970:7-1998:12
Malaysia	1946:1-2001:12	1946:1-1998:12
Mali	1946:1-2001:12	1970:7-1998:12
Malta	1946:1-2001:12	1985:1-1998:12
Mauritania	1946:1-2001:12	1974:1-1998:12
Mauritius	1946:1-2001:12	1985:1-1998:12
Mexico	1946:1-2001:12	1947:1-1998:12
Moldova	1991:12-2001:12	n.a.
Mongolia	1970:3-2001:12	1970:3-1998:12
Morocco	1976:10-2001:12	1959:1-1998:12
Myanmar	1946:1-2001:12	1955:1-1998:12
Nepal	1940.1-2001.12	1970:7-1998:12
Netherlands	1955:12-2001:12	1970:7-1998:12 1946:1-1998:12
New Zealand		
	1946:1-2001:12	1948:1-1998:12
Nicaragua	1946:1-2001:12	1947:1-1998:12
Niger	1946:1-2001:12	1970:7-1998:12
Nigeria	1946:1-2001:12	1970:7-1998:12

Table AI.1. Country Coverage (continued)

Country	Official exchange rate	Parallel market exchange rate
Norway	1946:1-2001:12	1946:1-1998:12
Pakistan	1946:1-2001:12	1948:4-1998:12
Panama	1946:1-2001:12	n.a.
Paraguay	1946:1-2001:12	1951:3-1998:12
Peru	1946:1-2001:12	1946:1-1998:12
Philippines	1946:1-2001:12	1949:8-1998:12
Poland	1946:1-2001:12	1946:1-1998:12
Portugal	1946:1-2001:12	1946:1-1998:12
Romania	1957:1-2001:12	1946:7-1998:12
Russian Federation	1992:6-2001:12	1946:1-1998:12
Saudi Arabia	1952:10-2001:12	1959:12-1998:12
Senegal	1946:1-2001:12	1970:7-1998:12
Singapore	1946:4-2001:12	1973:5-1998:12
Slovak Republic	1993:1-2001:12	1993:1-1998:12
Slovenia	1991:12-2001:12	n.a.
South Africa	1946:1-2001:12	1946:1-1998:12
South Korea	1946:1-2001:12	1946:1-1998:12
Spain	1946:1-2001:12	1946:1-1998:12
Sri Lanka	1946:1-2001:12	1956:1-1998:12
Suriname	1949:9-2001:12	1970:7-1998:12
Swaziland	1946:1-2001:12	1985:1-1998:12
Sweden	1946:1-2001:12	1946:6-1998:12
Switzerland	1946:1-2001:12	1946:1-1998:12
Syrian Arab Republic	1947:7-2001:12	1970:7-1998:12
Tajikistan	1992:1-2001:12	n.a.
Tanzania	1946:12-2001:12	1970:7-1998:12
Thailand	1946:5-2001:12	1948:1-1998:12
Togo	1946:1-2001:12	1970:7-1998:12
Tunisia	1956:3-2001:12	1960:1-1998:12
Turkey	1946:1-2001:12	1946:1-1998:12
Turkmenistan	1993:11-2001:12	n.a.
Uganda	1946:12-2001:12	1970:7-1998:12
Ukraine	1992:12-2001:12	1991:8-1998:12
United Kingdom	1946:1-2001:12	1946:1-1998:12
United States	1946:1-2001:12	n.a.
Uruguay	1946:12-2001:12	1946:1-1998:12
Venezuela	1946:1-2001:12	1960:11-1998:12
Zambia	1946:12-2001:12	1970:7-1998:12
Zimbabwe	1946:12-2001:12	1970:7-1998:12

Table AI.1. Country Coverage (concluded)

Table AI.2. Data Sources

Source
Pick's Currency Yearbook and Pick's World Currency
Report, various issues.
IMF, International Financial Statistics
Pick's Currency Yearbook, Pick's Black Market Yearbooks, and Pick's World Currency Report, various issues.
World Currency Yearbook, various issues.
IMF, International Financial Statistics

#### Appendix II. The Details of the "Natural" Classification

This appendix describes in greater detail our classification algorithm, which is outlined in Section III if the text and summarized in Figure 1 of the text. Table 4 of the text gives the different categories in our "fine" and "coarse" grids; this appendix concentrates on the fine grid.

#### 1. Exchange rate flexibility indices and probability analysis

Our judgment about the appropriate exchange rate classification is shaped importantly by the time-series of several measures of exchange rate variability, based on monthly observations and averages over twenty-four month and five-year rolling windows. The first of these is the absolute percent change in the monthly nominal exchange rate. We prefer mean absolute deviations to variance to minimize the impact of outliers. These arise when, for example, there are long periods in which the exchange rate is fixed but subject to periodic large devaluations. The presence of a few outliers would imply that the variance or standard deviation would overstate the extent of exchange rate flexibility in the period around the devaluation.<sup>19</sup>

To assess whether exchange rates are kept within a band, we calculate the probabilities that the exchange rate remains within a one, two, and five percent-wide band over any given period. As with the mean absolute deviation, these probabilities are calculated over two-year and five-year rolling windows. Unless otherwise noted in Appendix II, we use the 5-year rolling windows as our primary source in the analysis. These probabilities supplement the analysis in an important manner. While pre-announced explicit exchange rate bands are not rare—implicit unannounced bands are positively commonplace.

#### 2. De jure and de facto pegs and bands: definition issues

Where the chronologies show the authorities explicitly announcing a peg, we shortcut the *de facto* dating scheme described below and zero in on the date announced as the start of the peg. We then see if we can confirm the peg by examining the mean absolute monthly change over the period *following* the announcement. Obviously, the chronologies we develop, which give the day, month and year when a peg becomes operative are essential to our algorithm. There are two cases where we need to go beyond simply verifying the announced peg. The first of these is the case where our chronologies indicate that the pegged rate is only an official rate and that there is an **active dual market** (official or illegal). As we describe in the text, essentially, we apply the same battery of tests to the parallel market rate as we do to the official rate in a unified market. Secondly, there are the cases where policy is announced as pegging to a basket of currencies, often without disclosing of the weights or the currencies included in the basket. In these cases, we attempt look to see if the "basket" peg is really a *de facto* peg to a single dominant currency (or to the SDR). If no dominant currency cannot be identified, we do not label the episode as a peg.<sup>20</sup> Potentially, of course, we may be missing some *de facto* basket pegs, though in practice, this is almost certainly not a major issue.

We have described our procedure for confirming *de jure* pegs; we now proceed to elaborate how we use our measures of exchange rate volatility to detect *de facto* pegs. If authorities have not announced that their currency is pegged, we test for a "*de facto*" peg in two manners: First, we examine the monthly absolute percent changes. If the absolute monthly percent change in the exchange rate is equal to zero for four consecutive months or more, that episode is classified (for however long its lasts) as a *de facto* peg **if** there are no dual or multiple exchange rates in place. This allows us to identify relatively short-lived *de facto* pegs as well as those with a longer duration. For instance, this exercise allowed us to identify the Philippines *de facto* pegs to the US Dollar during 1995-1997 in the run-up to the Asian crisis as well as the numerous European *de facto* pegs to the DM well ahead of the Euro. Second, we compute the probability that the monthly exchange rate change remains within a one percent band over a rolling 5-year period

<sup>&</sup>lt;sup>19</sup> This is a problem with the Levy-Sturzeneger (2002) reclassification strategy. For instance, in 1994 all CFA Franc Zone countries are listed as managed floating. In effect, this is the result of a one-time 100% devaluation in January of 1994.

<sup>&</sup>lt;sup>20</sup> Pegs to the SDR are readily verifiable so they are treated in the same manner as pegs to any other currency.

#### P( $\varepsilon < 1\%$ ).

where  $\varepsilon$  is the monthly **absolute** percentage change in the exchange rate. If this probability is **80 percent or higher**, then the regime is classified as a *de facto* peg or crawling peg over the entire 5-year period. If the exchange rate has no drift, it is classified as a fixed parity; if a positive drift is present, it is labeled a **crawling** peg; and, if the exchange rate also goes through periods of both appreciation and depreciation it is a **moving** peg. Our choice of an 80 percent threshold is not accidental, but rather we chose this value because it appears to do a very good job at detecting regimes one would want to label as pegs, without drawing in a significant number of "false positives."

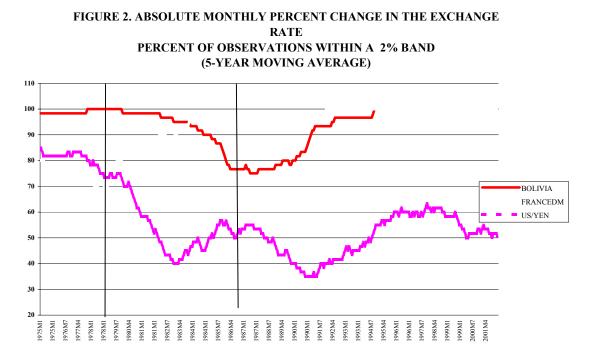
Chart A.1 plots this rolling five-year probability for the US Dollar-Yen (the dashed line), for the Bolivian Peso-US Dollar (the dark solid line) and for the French Franc-DM rate (the pale solid line). The two vertical lines indicate the beginning and the end of the period during which Bolivia had an annual inflation rate above 40 percent—these inflationary episodes will be dubbed freely falling.

As is evident from Chart A.1, the probability that monthly exchange rate change falls within a +/- 1% band is far lower for the Yen-US Dollar rate than for the Bolivian peso-US Dollar rate. The period during which these rolling probabilities were declining for the Bolivian peso-US Dollar rate corresponds to the time of Bolivia's hyperinflation of the mid 1980s and its immediate aftermath. The rolling probability also captures the French Franc's strengthening ties to the DM over the course of the sample.

Our approach regarding pre-announced and *de facto* **bands** follows a parallel two-step process. If a band is explicitly announced and the chronologies show a unified exchange market, we label the episode as a band **unless** it had already been identified as a *de facto* peg by the criteria described earlier. But we also verify whether the announced and *de facto* bands coincide. There are several cases where the announced (*de jure*) band is much wider than the *de facto* band.<sup>21</sup> Thus, as before, we calculate the probability that the monthly exchange rate change remains within a +/-2 % band over a rolling 5-year period. If this probability is **80 percent or higher**, then the regime is classified as a *de facto* **narrow band**, narrow crawling or moving band over the period through which it remains continuously above the 80 percent threshold.

Figure A.2 plots the probability that the monthly percent change in the exchange rate will be within a +/-2% band for the same three bilateral exchange rates as before. The contrast between the behavior of the Dollar-Yen rate with the other two bilateral rates is now even more stark—as in both the case of the Bolivian Peso-Dollar rate and the French Franc-DM 100 percent of the observations fall within a +/-2% band through most of the 1990s. For the Dollar-Yen only between 45 and 60 percent of the observations fall in this narrow band.

<sup>&</sup>lt;sup>21</sup> Mexico's exchange rate policy prior to the December 1994 crisis is one of numerous examples, despite the fact that the band was widening over time, as the floor of the band was fixed and the ceiling was crawling, the peso remained virtually pegged to the US dollar for extended periods of time.



In the case where the pre-announced bands are wide we also verify  $\pm -5\%$  bands. The specifics for each case are discussed in Appendix III. For instance in the case of Chile we found that the *de facto* band during 1992-1998 was narrower ( $\pm -5\%$ ) than that which was announced ( $\pm -10\%$  and  $\pm -12.5\%$ ). In the case of Libya, which had an announced a 77% wide band along a fixed central parity pegged to the SDR over the March 1986-December 2001, we were able to detect a  $\pm -5\%$  crawling band to the US Dollar.<sup>22</sup>

#### 3. The essential distinction between freely falling and freely floating

As we emphasize in the text, there are situations, almost invariably due to high inflation, in which large downward shifts in the exchange rate occur on a routine basis for extended periods of time. Given the many well-known problems that high inflation can cause, we believe that it is inappropriate and misleading to lump these cases in with other floating rate regimes – even though that is essentially what all previous classifications algorithms have done.<sup>23</sup> A more apt characterization would be to label episodes as *freely falling*.<sup>24</sup> To identify the freely falling episodes we rely on two criteria: First, periods where the 12-month rate of inflation equals or exceeds 40 percent are classified as freely falling **unless** they have been identified as some form of **pre-announced** peg or pre-announced narrow band by the above criteria.<sup>25</sup> The 40 percent inflation threshold is not entirely arbitrary, as it has been

 $<sup>^{22}</sup>$  Though we incorporate these wider band regimes, narrow +/-2% crawling bands are the most common. Again, our chronologies are absolutely essential to detecting these subtleties.

<sup>&</sup>lt;sup>23</sup> As we shall see, many of our freely falling regimes are labeled as peg in the official and other classifications, because these earlier efforts did not employ data on parallel or dual markets.

<sup>&</sup>lt;sup>24</sup> Our classification scheme is the first to make the fundamental distinction between floats and hyperfloats (freely falling). In previous classifications, freely falling cases are usually included in the managed or freely floating categories in the IMF's classification and also in the Levy-Yeyati and Sturzenegger (2000) scheme.

<sup>&</sup>lt;sup>25</sup> It is critical that the peg criteria supersede the inflation criteria in the classification strategy, since historically a majority of inflation stabilization efforts have used the exchange rate as the nominal anchor and in many of these episodes inflation rates at the outset of the peg were well above our 40 percent threshold.

identified as an important benchmark in the literature on the determinants of growth.<sup>26</sup> In effect, as we discuss later, the average annual inflation rate for the countries that are grouped under this category is 453 percent. Borderline freely falling, which we do not classify as a separate regime, refers to inflation rates in the 20-39 percent range. We note these episodes on the commentary in Appendix II. As a special sub-category of freely falling, we include those episodes that meet Cagan's (1956) classic definition of hyperinflation (50% or more inflation per *month*). We label this subcategory as **hyperfloats**.

A second situation where we label an exchange rate as freely falling are the six months immediately following a currency crisis—but **only** for those cases where the crisis marks a sudden transition from a fixed or quasi fixed regime to a managed or independently floating regime.<sup>27</sup> Such episodes are typically characterized by exchange rate overshooting. This is another situation where a large change in the exchange rate is not obviously connected to a deliberate intent to float the currency, rather the decline is the result of a large speculative attack. To date these crisis episodes we follow a variant of the approach suggested by Frankel and Rose (1996). Namely, any month where the depreciation exceeds or equals twelve and one-half percent **and** also exceeds the preceding month's depreciation by at least 10 percent is identified as a crisis.<sup>28</sup> To make sure that this approach yields plausible crisis dates, we supplement the analysis with our extensive country chronologies, which also shed light on balance of payments difficulties.<sup>29</sup> As noted, cases where a large devaluation took place but the exchange rate was re-pegged are **not** included in the freely falling episodes. Again, our choice of thresholds (six months) is the one that seems to give reasonable and robust results.

Whereas the distinction between freely floating and freely falling has not been previously made in the literature, it is clearly essential if one wants to understand anything about exchange rate regimes. Table 3 shows the cumulative change in the exchange rate vis-à-vis the US dollar from January 1970 to December 2001 for selected countries. As there is great divergence across currencies' in their capacity to retain value vis-à-vis the US dollar, the figures shown in this Table A.1 anticipate which countries are candidates for having one or more episodes that come under the heading of freely falling.

<sup>&</sup>lt;sup>26</sup> See Easterly (2001).

<sup>&</sup>lt;sup>27</sup> This rules out cases where there was a devaluation and a re-peg and cases where the large exchange rate swing occurred in the context of an already floating rate.

<sup>&</sup>lt;sup>28</sup> Frankel and Rose (1996) do not date the specific month of the crisis but the year and the F-R criteria calls for a twenty-five (or higher) depreciation over the year.

<sup>&</sup>lt;sup>29</sup> For instance, the Thai crisis of July 1997 does not meet the modified Frankel-Rose criteria. While the depreciation in July exceeded that of the preceding month by more than 10 percent, the depreciation of the Thai Baht in that month did not exceed 25 percent. For these cases, we rely on the chronologies of events.

Country	Cumulative percent change
Congo, Democratic Republic of	9,924,011,976,047,800
Brazil	124,316,767,667,574
Argentina	2,855,714,286,430
Nicaragua	933,784,495,428
Peru	9,129,198,866
Bolivia	54,040,304
Turkey	7,500,585
Chile	5,636,100
Mexico	77,249
Malawi	9,512
Indonesia	2,798
Egypt	783
Italy <sup>1</sup>	480
Korea	312
Australia	104
United Kingdom	64
Canada	39
Malaysia	23
Panama	0
Saudi Arabia	-16
Germany	-54
Japan	-59
Switzerland	-65

Table A.1. Cumulative Change in the Currency's Value versus the US Dollar:Selected Cases, January, 1970-December, 2001

Source: International Monetary Fund, International Financial Statistics.

<sup>1</sup> Versus the DM.

Notes: A negative entry denotes an appreciation.

Since, as a rule, freely falling is not typically an explicit arrangement of choice, our classification also provide for all the freely falling cases, the underlying *de jure* or *de facto* arrangement (for example, dual markets, independently floating, etc.).

#### 4. Managed and freely floating

In reality, "pure" floating exchange rates are an artifact of economics textbooks. Even in countries where the exchange rate is not an explicit target of policy, there are typically occasional (if relatively rare) instances where there is unilateral or coordinated intervention in the foreign exchange market. Similarly, it is hard to come up with a pure concept of "managed floating" that translates meaningfully into practice.

Our approach here to identifying managed and freely floating episodes is basically to create these classes out of the **residual** pool of episodes that, after comprehensive application of our algorithm, have not been identified as an explicit or implicit peg or narrow band, **and** that are not included in the freely falling category. To proxy the degree of exchange rate flexibility under freely floating and managed floats, we construct a composite statistic,

 $\epsilon / P(\epsilon < 1\%).$ 

Here, the numerator is the mean absolute monthly percent change in the exchange rate over a rolling five-year period, while the denominator flags the likelihood of small changes. For *de jure* or *de facto* pegs, this index will be very low, while for the free falling cases it will be very large. At any rate, we only focus on this index for those countries and periods which are candidates for freely or managed floating labels. We tabulate the frequency distribution of our index for the currencies that are most transparently floating, these include: US Dollar/DM-Euro, US Dollar/Ven, US Dollar/UK Pound, US Dollar/Australian Dollar, and US Dollar/New Zealand Dollar over the

post 1973 period (the exact subperiod for each currency can be ascertained from the chronologies). We have many of these observations, as we tabulate the ratio for rolling 5-year averages for all the floaters.<sup>30</sup> So, for example, Brazil floated the real in January 1999—hence, we would calculate the ratio only from that date forward. If the Brazil's ratio falls inside the 99 percent confidence interval or is in the upper tail of the distribution of the floater's group, the episode is characterized as freely floating. If that ratio falls in the lower one percent tail, the null hypothesis of freely floating is rejected in favor of the alternative hypothesis of managed float.

It is important to note that managed in this context does not necessarily imply active or frequent foreign exchange market intervention—it refers to the fact that for whatever reason our composite exchange rate variability index,  $\epsilon / P(\epsilon < 1\%)$ , does not behave like the indices for the "clean" floaters (freely floating).

#### 5. Dual or multiple exchange rate regimes and parallel markets

Dual rates are, possibly the most hybrid of arrangements. There are cases or periods in which the premium is nil and stable so that the official rate is representative of the underlying monetary policy. The official rate could be pegged, crawling or maintained within some bands, or in a few cases allowed to float. But there are countless episodes where the divergence between the official an parallel rate is so large, that the picture is incomplete without knowledge of what the parallel market rate is doing.

The country chronologies shown in Appendix III are critical in identifying these episodes. In the cases where dual or multiple rates are present or parallel markets are active, we focus on the market-determined rates instead of the official exchange rates. We subject the market-determined rate (dual, multiple or parallel) to the battery of tests described in the preceding sections. <sup>31</sup> This particular category will especially re-shape how we view the 1940s to the 1960s, where about half the cases in the sample involve dual markets. Our classification scheme treats dual rates as a sister species, with a set of classifications parallel to those for unified rate.

<sup>&</sup>lt;sup>30</sup> For instance, Australia floated on December 12, 1983, so the first five-year moving average of the ratio that we would include in the frequency distribution for the floaters would be the one ending December 1988—since that would include only observations during the floating regime. The distribution would include all subsequent 5-year moving averages.

<sup>&</sup>lt;sup>31</sup> There are a few such cases in the sample, where only government transactions take place at the official rate.

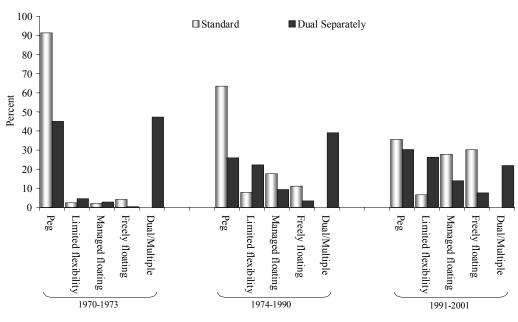
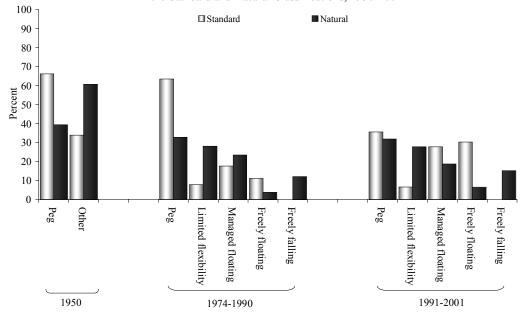
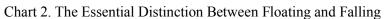


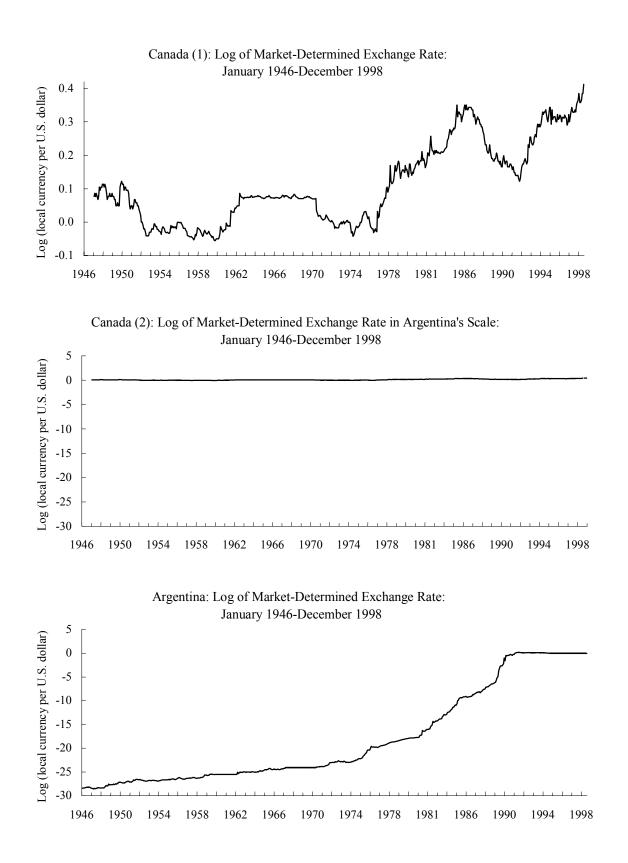
Chart 1. Distribution of Exchange Rate Arrangements with Dual Rate Regimes as a Separate Category, 1970-2001

Chart 5. Distribution of Exchange Rate Arrangements According to the Standard and Natural Classifications, 1950-2001



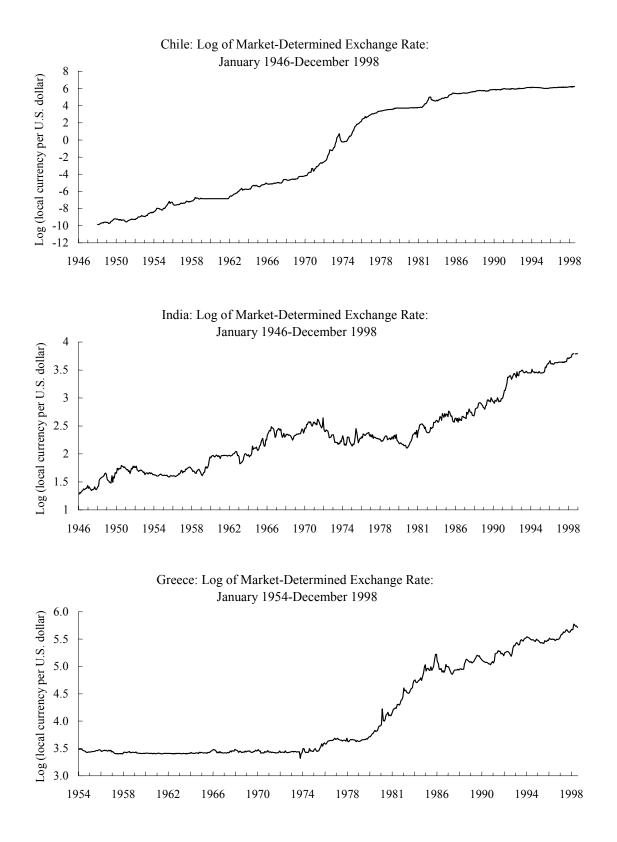
Sources: International Monetary Fund, Annual Report on Exchange Arrangements and Exchange Restrictions and International Financial Statistics, Pick and Sedillot (1971), International Currency Analysis, World Currency Report, various issues.





Sources: Pick's Currency Yearbook, World Currency Report, various issues.

Chart 3. The Prevalence of Crawling Pegs and Bands



Sources: Pick's Currency Yearbook, World Currency Report, various issues.

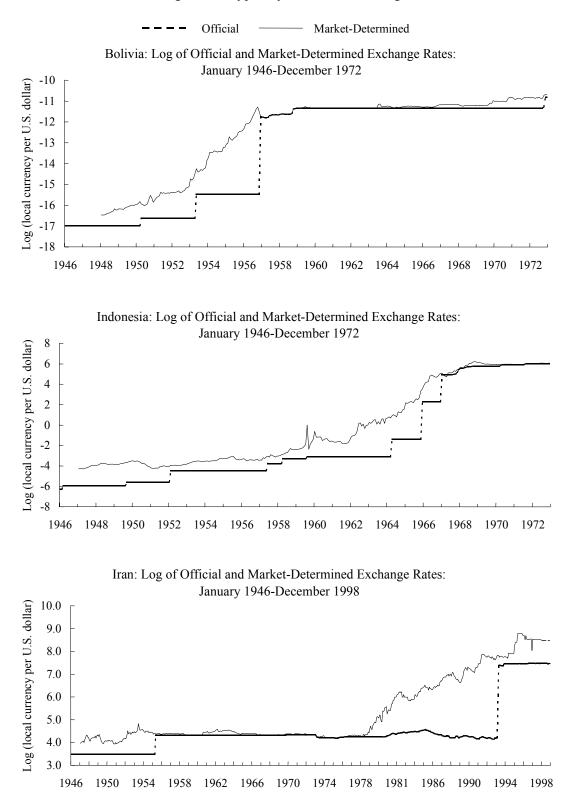


Chart 4. Official Exchange Rates Typically Validate the Changes in The Market Rates

Sources: Pick's Currency Yearbook, World Currency Report, various issues.

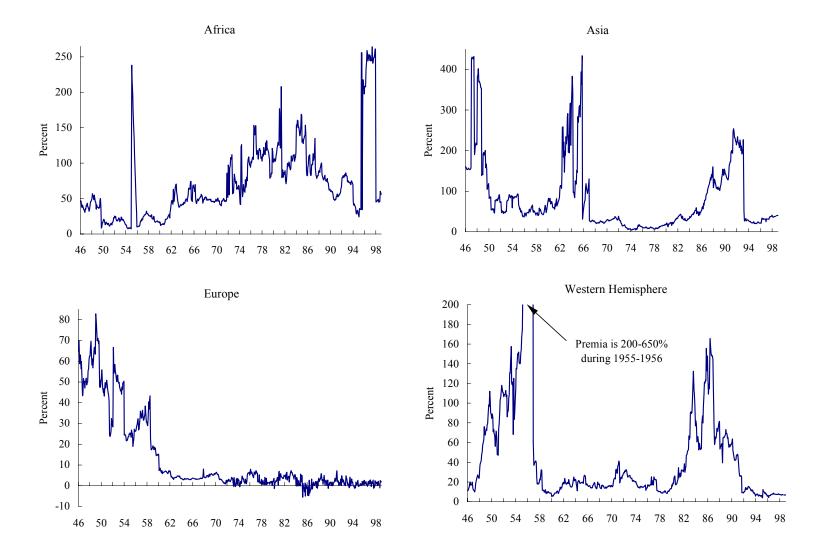


Chart 6. Average Monthly Parallel Market Premium: 1946-1998

Sources: International Monetary Fund, Annual Report on Exchange Arrangements and Exchange Restrictions and International Financial Statistics, Pick and Sedillot (1971), International Currency Analysis, World Currency Report, various issues.



Chart 7. Absolute Monthly Percent Change in the Exchange Rate: Percent of Observations within a +/- 2 Percent Band (5-year moving average)

Sources: International Monetary Fund, Annual Report on Exchange Arrangements and Exchange Restrictions and International Financial Statistics, Pick and Sedillot (1971), International Currency Analysis, World Currency Report, various issues.

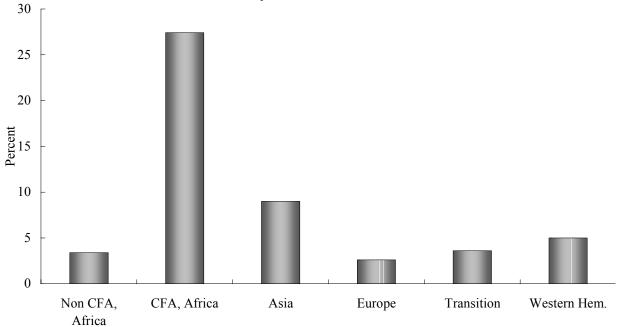
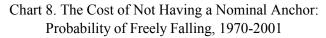
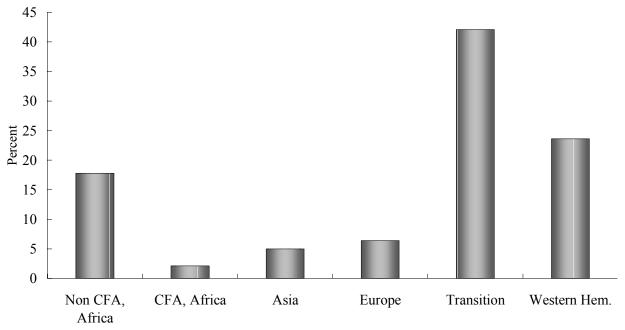
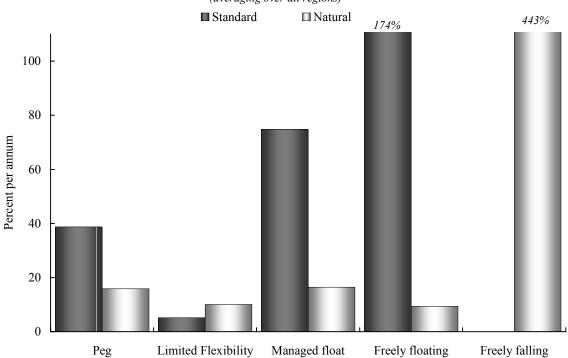


Chart 8. The Cost of Having the Exchange Rate as the Nominal Anchor: Probability of Deflation, 1970-2001





Source: IMF staff calculations.



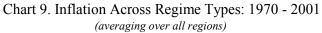
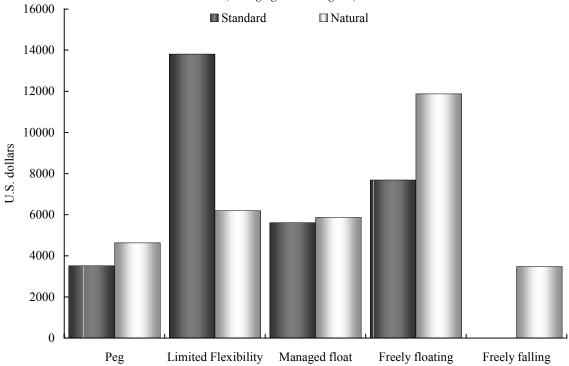


Chart 10. PPP Adjusted GDP Per Capita Across Regime Types: 1970-2001 (averaging over all regions)



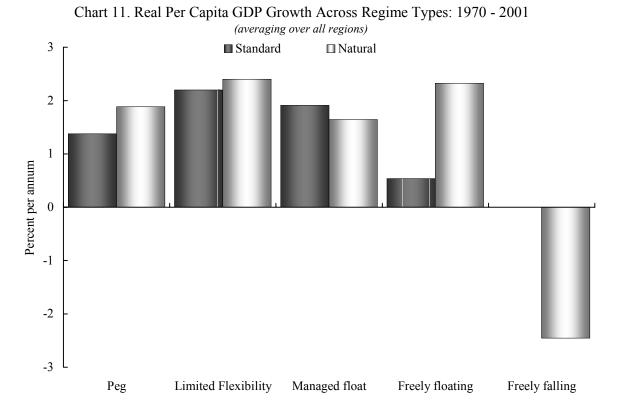
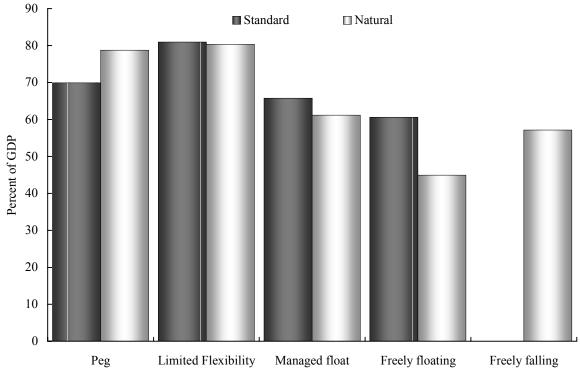


Chart 12. Exports and Imports as a Percent of GDP Across Regime Types: 1970-2001 (averaging over all regions)



Sources: International Monetary Fund, Annual Report on Exchange Arrangements and Exchange Restrictions and International Financial Statistics, Pick and Sedillot (1971), International Currency Analysis, World Currency Report, various issues.

### This draft: May 13, 2002

### Appendix III. Exchange Rate Arrangements: Country Histories

### Carmen M. Reinhart and Kenneth S. Rogoff

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
January 1991–July 1, 1992	Freely falling/Dual Market	Officially pegged to the ECU
July 1, 1992–September 1993	Freely falling/Freely floating	Markets are unified.
October 1993–December 1996	Freely floating	
January 1997–January 1998	Freely falling/Freely floating	
February 1998–December 2001	Freely floating	
Notes: Reference currencies are the US	Dollar and DM.	•
Algeria		
Date	Classification:	Comments
	Primary/Secondary/Tertiary	
1878–November 1942	Peg to French Franc	Algerian Franc is introduced. French Franc is legal tende
		alongside Algerian Franc after August 8, 1920. On May
		20, 1940 foreign exchange controls are introduced.
November 1942–December 6, 1944	Peg to US Dollar and Pound Sterling	Incorporated into Sterling Area.
December 6, 1944–December 1946	Peg to French Franc	Return to Franc Zone.
January 1947–December 1948	Peg to French Franc/Freely falling	
January 1949–April 10, 1964	Peg to French Franc	
April 10, 1964–August 1, 1972	Band around French Franc/Parallel	Horizontal band, width is +/-5%. Dinar replaces Algerian
	market	Franc. Introduction of foreign exchange controls in 1967
		Parallel market premium in the 30–70% range.
August 1, 1972–January 21, 1974	Managed floating/Dual Market	Officially pegged to French Franc.
January 21, 1974–December 1987	De facto crawling band around US	Band width is +/-5%. Parallel market premium reaches
	Dollar/Dual Market	469% on April 1985. Officially pegged to a basket of
		undisclosed currencies.
January 1988–March 1994	Managed floating/Parallel Market	
April 1994–January 1995	Freely falling/Managed floating	
February 1995–January 1, 1999	De facto crawling band around French	Band width is +/-2%.
5	Franc	
January 1, 1999–December 2001	De facto crawling band around Euro	Band width is $+/-2\%$ .

Notes: Reference currencies are the US Dollar, French Franc, and Euro.

Antigua and Barbuda

East Caribbean Central Bank States are: Anguilla, Antigua and Barbuda, Dominica, Grenada, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
1935-October 6, 1965	Peg to Pound Sterling	British West Indies Dollar is introduced. It is issued by the
		East Caribbean Monetary Authority.
October 6, 1965-July 7, 1976	Peg to Pound Sterling	East Caribbean Dollar replaces British West Indies Dollar.
July 7, 1976-December 2001	Peg to US Dollar	On October 1, 1983 the East Caribbean Central Bank
		replaces the East Caribbean Monetary Authority.

Date	Classification: Primary/Secondary/Tertiary	Comments
October 10, 1931–1933	De facto peg to US Dollar	Capital controls, convertibility into gold suspended on December 16, 1929
1933–January 20, 1934	Peg to French Franc	
January 20, 1934–August 1939	Peg to Pound Sterling	
August 1939–June 1950	Managed floating/Multiple rates	US Dollar is reference currency and one rate is market determined. Most transactions take place at the free rate.
July 1950-May 1952	Freely falling/Managed floating/Multiple rates	US Dollar is reference currency and one rate is market determined. Most transactions take place at the free rate.
June 1952-November 1957	Managed floating/Multiple rates	US Dollar is reference currency and one rate is market determined. Most transactions take place at the free rate.
December 1957–March 1960	Freely falling–Managed floating/Multiple rates	
April 1960–March 1964	Managed floating/Multiple rates	
April 1964–March 13, 1967	Peg to US Dollar	Re introduction of widespread controls
March 13, 1967–May 1970	Peg to US Dollar	Inflation stabilization plan, one devaluation in June 1970. Controls were largely eliminated. Parallel premium is nil during this period.
June 1970–March 1971	Peg to US Dollar/Freely falling	
April 6, 1971–March 6, 1976	Freely falling/ Freely floating/Dual Market	Parallel market premium hits 372 % in November 1974.
March 6, 1976–December 21, 1978	Freely falling/Freely floating	Premium is consistently above 20%.
December 21, 1978–February 1981	Pre-announced crawling peg to US Dollar/Freely falling	The Tablita Plan. Parallel market premia is in single digits during this period.
March 1981–December 1981	Freely falling/Freely floating Dual Market	
January 1982–July 1982	Freely falling/Freely floating	
July 1982–June 14, 1985	Freely falling/Freely floating/Dual Market	
June 14 1985–March, 1986	Peg to US Dollar/Freely falling	The Austral Plan.
April 1986–December 20 1990	Freely falling/Freely floating/Dual Market	The Austral Plan's second phase was a crawling peg which lasted until September 1986 but by the then, there was a dual market. For May 1989–March 1990 the regime is a "hyperfloat"
December 20, 1990–January 29, 1991	Freely falling/Freely floating	
January 29, 1991–March 1991	Freely falling/Freely floating	A "Target zone"—broad band is introduced.
April 1991–February 1992	Currency Board/Peg to US Dollar/Freely falling	The Convertibility Plan, no adjustments to central parity.
March 1992–December 1, 2001	Currency Board/Peg to US Dollar	
December 1 2001–December 2001	De facto Dual Market	Capital controls are introduced.

Notes: Reference currency is the US Dollar. Armenia

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
December 31, 1991–November 1995	Freely falling/Freely floating/Dual	There is no price data before this date. Until the
	Market	introduction of the Dram on November 22, 1993 the
		Russian Ruble was legal tender.
		October 1993–December 1994 regime is a "hyperfloat"
December 1995–December 2001	De facto crawling band around US	Band width is +/-2%.
	Dollar	

#### Australia

Classification: Primary/Secondary/Tertiary	Comments
Peg	Gold Standard
Suspension of gold shipments	
Peg	Gold Standard
Peg to Pound Sterling	Suspension of gold standard and devaluation. Foreign exchange controls introduced on August 28, 1939.
Peg to Pound Sterling	There is an active black market for US Dollars. Through 1957 the premium remains in double digits.
Peg Pound Sterling	Australian Dollar replaces the Australian Pound
Peg to US Dollar	
De facto band around US Dollar	Horizontal band width is +/- 2%. Officially pegged to a basket of currencies.
Managed floating	
Freely floating	
	Primary/Secondary/Tertiary         Peg         Suspension of gold shipments         Peg         Peg to Pound Sterling         Peg to Pound Sterling         Peg Pound Sterling         Peg to US Dollar         De facto band around US Dollar         Managed floating

Notes: Reference currencies are the US Dollar and the Pound Sterling. Austria

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
October 9, 1931	Foreign exchange controls	
October 9, 1931–April 25, 1938	Peg	Gold Standard, various adjustments.
April 25, 1938–December 1945	Exchange rate arrangement with no separate legal tender	Reischmark is legal tender until 1945. Military exchange rates are introduced in 1945. In December the Austrian Schilling is reinstated. In 1947 inflation was 96%.
October 28, 1946–June 1948	Freely falling/Managed floating/Multiple exchange rates	Adoption of military exchange rates for commercial transactions. Parallel market premium hits 1,150% in November 1947. Exchange controls are tightened on July 25, 1946.
July 1949–July 1950	Managed floating/Multiple exchange rates	
August 1950-October 6, 1950	Freely falling/Managed floating/Multiple exchange rates	
October 6, 1950–August 1951	Freely falling/Managed floating/Dual Market	Parallel market premium remains in two digits throughout this period.
September 1951-May 4, 1953	Managed floating/Dual Market	Parallel market premium remains in two digits throughout this period.
May 4, 1953–February 17, 1959	Peg to US Dollar	Black market dealings come to an end in late 1950s.
February 17, 1959–August 24, 1971	Peg to DM	
August 24, 1971–July 1980	De facto moving peg to DM	
December 31, 1998–January 1, 1999	De facto peg to DM	March 1991 registers as a currency crash versus US dollar—none versus DM.
January 1, 1999–December 2001	Currency union	Euro

Notes: Specifics on the common margins (snake) agreement, EMS, etc. are available from the detailed chronologies. Reference currencies are the US Dollar, the Euro and the DM.

Azerbaijan

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
December 31, 1992–January 1996	Freely falling/Freely floating/Dual	There is no price data before this date. December 1992-
	Market	December 1994 regime is a "hyper float."
February 1996–December 2001	De facto crawling peg to US dollar	

Reference currencies are the US Dollar and the Ruble. Belarus

Classification	Comments
Primary/Secondary/Tertiary	
Freely falling/Freely floating/Multiple	There is no price data before this date.
rates	
Freely falling/Freely floating	
Freely falling/Freely floating	There are multiple rates.
	Primary/Secondary/Tertiary Freely falling/Freely floating/Multiple rates Freely falling/Freely floating

Reference currencies are the US Dollar and the Ruble.

#### Belgium

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
October 25, 1926–March 18, 1935	Peg	Gold Standard
March 18, 1935–March 31, 1936	Foreign exchange controls and suspension of convertibility	
March 31, 1936–May 10, 1940	Peg	Gold Standard
May 10, 1940–October 5, 1944	Peg to Reichsmark	Capital controls
October 5, 1944– April 1954	Managed floating/Parallel market	Officially pegged to US Dollar. The official foreign exchange market was re opened on November 1949, after this the parallel market premium fell to single digits.
April 1954–July 18, 1955	Peg to US Dollar	
July 18,1955–October 1971	De facto peg to DM/Dual Market	Small parallel market premium.
November 1971–March 5, 1990	De facto peg to DM/Dual Market	
March 5, 1990–December 31, 1998	De facto peg to DM	
January 1, 1999–December 2001	Currency union	Euro

Notes: Specifics on the common margins (snake) agreement, EMS, etc. are available from the detailed chronologies. Reference currencies are US Dollar, DM, and Euro

#### Benin

### Central Bank of West African States: Benin, Burkina Faso, Cote D'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, and Togo<sup>1</sup>

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
June 29, 1901–February 2, 1943	Peg to French Franc	Banque de l'Afrique Occidentale is allowed to issue bank
		notes. Exchange controls are introduced within Franc zone
		on September 9, 1939.
February 2, 1943– December 26. 1945	Peg to US Dollar and Pound Sterling	On December 1942 incorporated in the Sterling Area.
December 26. 1945–May 12, 1962	Peg to French Franc	Return to Franc Zone. The CFA Franc is introduced.
May 12, 1962–September 9, 1971	Peg to French Franc	Creation of the Central Bank of West African States
September 9, 1971–March 21, 1974	De facto peg to French Franc/Dual	The premium is in low single digits.
•	Market	
March 21, 1974–December 1993	Peg to French Franc	
January 1994–December 1994.	Peg to French Franc/Freely falling	One 100% devaluation.
January 1995–January 1, 1999	Peg to French Franc	
January 1, 1999–December 2001	Peg to Euro	
<sup>1</sup> Moli joined the currency arrangement at	a latar data	

<sup>1</sup> Mali joined the currency arrangement at a later date.

Notes: Formerly Dahomey. Reference currencies are the French Franc and the Euro.

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
July 11, 1928–October 3, 1931	Peg	Gold Standard
October 3, 1931–January 1938	Multiple rates	The Boliviano is linked to Pound Sterling. Capital controls are introduced and the gold standard is abandoned
1940–October 20, 1947	Peg to US Dollar	
October 20, 1947–December 1949	Managed floating/Multiple rates	
January 1950-April 1951	Freely falling/ Managed floating/Multiple rates	
May 1951-March 1952	Managed floating/Multiple rates	Official rate is inoperative by mid 1950s
April 1952-November 1957	Freely falling/Managed floating/Multiple rates	
December 1957–February 1971	De facto crawling band around US Dollar/Multiple rates	Band width is +/-2%. On January 1, 1963 the Peso replaces the Boliviano.
March 1971–September 1972	Managed floating/Multiple rates	The official rate is pegged to US Dollar.
October 1972–December, 1974	Freely falling/Managed floating	The official rates are pegged to US Dollar
January 1975–November 1979	Managed floating/Multiple rates	The official rate is pegged to US Dollar—there are frequent mega devaluations.
December 1979–March 24, 1982	Freely falling/Freely floating/Multiple rates	The official rates remain pegged to US Dollar.
March 24, 1982–August 29, 1985	Freely falling/Freely floating/Dual Market	The parallel market premium hits 2,023 % in August 1985. April 1984–September 1985 regime is a "hyperfloat."
August 29 1985–December, 1986	Freely falling/Freely floating/Dual Market	Markets are temporarily unified.
November 1987–December 1991	De facto crawling band around US Dollar/Dual Market	Band width is +/-2%.
January 1992–December 1994	De facto crawling peg to US Dollar/Dual Market	Parallel market premium is trivial.
January 1995–December 2001	De facto crawling peg to US Dollar	

#### Bosnia-Herzegovina

Date	Classification	Comments
	Primary/Secondary/Tertiary	
July 1994–June 22,1998	Peg to DM	Bosnian Dinar is introduced in July 1994. Electronic
		payments for the Bosnia-Herzegovina convertible Marka
		ares introduced on August 12, 1997
June 22,1998–January 1, 1999	Currency board/Peg to DM	Convertible Marka notes are introduced.
January 1, 1999–December 2001	Currency board/Peg to Euro	
Notes: Reference currencies are the Eu	ro and the DM.	

Notes: Reference currencies are the Euro and the DM. Botswana

Date	Classification Primary/Secondary/Tertiary	Comments
1920-February 14, 1961	Exchange rate arrangement with no separate legal tender	South Africa Pound is introduced, Rand Monetary Area.
February 14, 1961-August 23, 1976	Exchange rate arrangement with no separate legal tender	South African Rand replaces Pound as the legal tender.
August 23, 1976–December 1, 1976	Peg to South African Rand	The Pula is introduced and Botswana withdraws from Rand Monetary Area.
December 1, 1976–June 3, 1980	Peg to US Dollar	Two devaluations.
June 3, 1980–April 1982	De facto crawling peg to South African Rand	Official peg to a basket of SDR and South African Rand.
May 1982–June 1986	De facto crawling band around South African Rand	Band width is +/- 2%.
July 1986–January 1996	De facto crawling peg to South African Rand	There is a parallel market with premium oscillating between single digits and 30%.
January 1996–August 1998	De facto crawling peg to South African Rand/Dual Market	Premium is in single digits throughout most of this period.
September 1998–December 2001	De facto crawling band around South African Rand/Dual Market	Band width is +/- 2%.

Brazil		
Date	Classification Primary/Secondary/Tertiary	Comments
May 18, 1931	Foreign Exchange controls	
November 21, 1933–November 1, 1942	Multiple exchange rates	
November 1, 1942–July 22, 1946	Multiple exchange rates	The Cruzeiro is introduced to replace the Milreis.
July 22, 1946–May 1947	Peg to US Dollar/Freely falling	Unified rate
June 1947-October 1949	Peg to US Dollar	
October 1949–October 1960	Managed floating/Multiple exchange rates	The official rate is pegged to the US Dollar but there are large and frequent devaluations.
November 1960-November 1966	Freely falling/Managed floating/Multiple exchange rates	The official rate is pegged to the US Dollar but there are large and frequent devaluations.
December 1966–August 27 1968	Managed floating/Multiple exchange rates	The official rate is pegged to the US Dollar but there are large and frequent devaluations. An inflation stabilization plan begins in March 1964. However, the intense activity in the parallel market scores as managed floating.
August, 27,1968–March 1975	De facto crawling band around US Dollar/Multiple rates	Band width is +/-5%. A crawling peg to US Dollar—a system of mini devaluations with a PPP rule is introduced.
April 1975-June 1977	Freely falling/De facto crawling band around US Dollar/Multiple rates	
July 1977–February 28 1986	Freely falling/Managed floating	There are multiple exchange rates.
February 28,1986–September 1986	Peg to US Dollar/Freely falling	The Cruzado Plan. The Cruzado replaces the Cruzeiro. Parallel market premia remains above 30%.
September 1986–January 1989	Freely falling/Freely floating	High parallel premium throughout. There are multiple rates.
January 16, 1989–April 1989	Peg to US Dollar/Freely falling	High parallel premium throughout
April 1989–July 1, 1994	Freely falling/Freely floating/Multiple rates	On December 1989 the parallel market premium rises to 235%. December 1989–March 1990 regime is a "hyperfloat."
July 1, 1994–May 1995	Pre-announced crawling band to US Dollar/Freely falling/Dual Market	The Real Plan has a narrow band width. The Real replaces the Cruzado. There is a dual market but parallel premium during this period is trivial.
June 1995-January 18, 1999	Pre-announced crawling band to US Dollar/Dual Market	
February 1 1999–August 1999	Freely falling/Managed floating	On January 18, 1999 the two rates were unified.
September 1999–December 2001	Managed floating	

#### Bulgaria

Classification	Comments
Primary/Secondary/Tertiary	
Freely falling/Freely floating/Dual	There is no price data before this date.
Market	
Freely falling/Managed floating	
Peg to DM/Currency board/Freely	
falling	
Currency board/Peg to DM	
Currency board/Peg to Euro	
	Primary/Secondary/Tertiary           Freely falling/Freely floating/Dual           Market           Freely falling/Managed floating           Peg to DM/Currency board/Freely           falling           Currency board/Peg to DM

Notes: Reference currencies are US Dollar, DM and Euro.

#### **Burkina Faso**

### Central Bank of West African States: Benin, Burkina Faso, Cote D'Ivoire, Guinea–Bissau, Mali, Niger, Senegal, and Togo<sup>1</sup>

Date	Classification	Comments
	Primary/Secondary/Tertiary	
June 29, 1901	Peg to French Franc	Banque de l'Afrique Occidentale is allowed to issue bank
		notes.
September 9, 1939	Exchange controls are introduced in	
	Franc Zone	
February 2, 1943–December 26, 1945	Peg to US Dollar and Pound Sterling	On December 1942 incorporated in the Sterling Area
December 26, 1945–May 12, 1962	Peg to French Franc	Return to Franc Zone. The CFA Franc is introduced.
May 12, 1962–September 9, 1971	Peg to French Franc	Creation of the Central Bank of West African States
September 9, 1971–March 21, 1974	De facto peg to French Franc/Dual	The premium is in low single digits.
	Market	
March 21, 1974–January 1, 1999	Peg to French Franc	One 100% devaluation.
January 1, 1999–December 2001	Peg to Euro	
<sup>1</sup> Mali joined the ourrenew errongement of	t a latar data	

<sup>1</sup> Mali joined the currency arrangement at a later date.

Note: Formerly Upper Volta. Reference currencies are the French Franc and the Euro

Burundi		Comments
Date	Classification	Comments
<b>1</b> 1010 <b>1</b> 01 1041	Primary/Secondary/Tertiary	
June 1919–January 21, 1941	Peg to Belgian Franc	
June 7, 1940–January 21, 1941	Peg to French Franc	
January 21, 1941–October 5, 1944	Peg to Pound Sterling	Entry into Sterling Area
October 5, 1944– September 22, 1960	Peg to Belgian Franc	
September 22, 1960–May 19, 1964	Peg to Belgian Franc/Dual Market	Rwanda–Burundi Franc replaced Congolese Franc. Parallel market data not available.
May 19, 1964–January 26, 1965	Peg to Belgian Franc/Dual Market	Burundi Franc replaces Rwanda–Burundi Franc. In 1965 the link to the Belgian Franc was broken
January 26, 1965–April 21, 1970	De facto peg to US Dollar	In February 11, 1965 the multiple rate structure was terminated. Parallel market data not available.
April 21, 1970–December 1977	Peg to US Dollar	
January 1978–July 1979	Peg to US Dollar/Freely falling	
August 1979–November 23, 1983	Peg to US Dollar	
November 23, 1983–May, 1985	De facto crawling peg to US Dollar	Officially pegged to the SDR
May 1985–August 1985	De facto crawling band around US Dollar	Officially pegged to the SDR since November 23, 1983. Band width is +/-2%
September 1985–April 1, 1992	De facto crawling band around US Dollar	Officially pegged to SDR Band width is +/-5%.
April 1 1992–April 1996	De facto crawling band around US Dollar	Band width is +/-5%. Officially pegged to a basket of undisclosed currencies.
May 1996–May 1997	Freely falling/Managed floating	Officially pegged to a basket of undisclosed currencies
June 1997–November 18, 1999	De facto crawling band around US Dollar/Parallel market	Officially pegged to a basket of undisclosed currencies. On July 1, 1999 the official arrangement was reclassified as managed floating. Premium in the 10–40% range.
November 18, 1999–July 1, 2000	De facto crawling band around US Dollar/Dual Market	Managed to limit the spread between the official and parallel rates.
July 1, 2000–December 2001	De facto crawling band around US Dollar	Markets were unirfied.

Notes: Reference currencies are the Belgian Franc, US Dollar, SDR, and South African Rand.

Cameroon

#### Bank of Central African States: Central African Republic, Chad, Gabon, and Republic of Congo

Date	Classification Primary/Secondary/Tertiary	Comments
December 31, 1925	Peg to French Franc	Only notes issued by Banque de l'Afrique Occidental are legal tender. Exchange controls are introduced within Franc Zone on September 9, 1939.
December 26. 1945–January 26, 1948	Peg to French Franc/ Currency union/Freely falling	The CFA Franc is introduced.
January 26, 1948–December 1948	Freely falling/Dual Market	No parallel market data for this period.
January 1949–September 20, 1949	Dual Market	
September 20, 1949–January 17, 1962	Peg to French Franc	
January 17, 1962–September 9, 1971	Peg to French Franc	Bank of Central African States is created.
September 9, 1971–March 21, 1974	De facto peg to French Franc/Dual Market	The premium is in low single digits.
March 21, 1974–December 1995	Peg to French Franc	One 100% devaluation.
January 1994–December 1994	Peg to French Franc/ Freely falling	
January 1995–January 1, 1999	Peg to French Franc	
January 1, 1999–December 2001	Peg to Euro	
Notes: Reference currencies are the Frence	ch Franc and the Euro.	

#### Canada

Date	Classification	Comments	
	Primary/Secondary/Tertiary		
September 16, 1939–July 5, 1946	Dual Market	Foreign exchange controls	
July 5, 1946– October 1, 1950	Peg to US Dollar		
October 1, 1950–May 2, 1962	De facto peg to the US Dollar/Dual	Premium is trivial since 1949.	
	Market		
May 2, 1962–May 31, 1970	Peg to US Dollar		
May 31, 1970–December 2001	De facto moving band around US	Band width is +/-2%.	
	Dollar		

Notes: Reference currency is the US Dollar.

#### Central African Republic

#### Bank of Central African States: Central African Republic, Chad, Gabon, and Republic of Congo

Date	Classification	Comments
	Primary/Secondary/Tertiary	
June 6, 1925- February 8, 1944	Peg to French Franc	Only notes issued by Banque de l'Afrique Occidental are
		legal tender. Exchange controls are introduced within
		Franc Zone on September 9, 1939.
February 8, 1944–December 26, 1945	Peg to US Dollar and Pound Sterling	On March 19, 1941 incorporated in the Sterling Area
December 26. 1945 – January 17, 1962	Peg to French Franc	Return to Franc Zone. CFA Franc is introduced.
January 17, 1962–September 9, 1971	Peg to French Franc	Bank of Central African States is Created
September 9, 1971–March 21, 1974	De facto peg to the French Franc/Dual	The premium is in low single digits.
	Market	
March 21, 1974–December 1993	Peg to French Franc	
January 1994–January 1995	Peg to French Franc/Freely falling	One 100% devaluation.
February 1995–January 1, 1999	Peg to French Franc	
January 1, 1999–December 2001	Peg to Euro	

Notes: Previously part of Ubangi-Shari. Reference currencies are the French Franc and the Euro.

Chad

#### Bank of Central African States: Central African Republic, Chad, Gabon, and Republic of Congo

Date	Classification	Comments
	Primary/Secondary/Tertiary	
June 6, 1925- February 8, 1944	Peg to French Franc	Only notes issued by Banque de l'Afrique Occidental are
		legal tender. Exchange controls are introduced within Franc
		Zone on September 9, 1939.
February 8, 1944– December 26, 1945	Peg to US Dollar and Pound Sterling	On March 19, 1941 incorporated in the Sterling Area.
December 26. 1945 – January 17, 1962	Peg to French Franc	Return to Franc Zone. CFA Franc is introduced.
January 17, 1962–September 9, 1971	Peg to French Franc	Bank of Central African States is created.
September 9, 1971–March 21, 1974	De facto peg to French Franc/Dual	The premium is in low single digits.
	Market	
March 21, 1974–December 1993	Peg to French Franc	
January 1994–January 1995	Peg to French Franc/Freely falling	One 100% devaluation.
February 1995–January 1, 1999	Peg to French Franc	
January 1, 1999_December 2001	Peg to Euro	

Notes: Previously part of Ubangi-Shari. Reference currencies are the French Franc and the Euro.

Chile		
Date	Classification Primary/Secondary/Tertiary	Comments
September 16, 1925- April 20, 1932	Peg	Gold standard. Foreign exchange controls are introduced in on July 30,1931.
April 20, 1932–1937	Dual Market	Pound Sterling is reference currency. Suspension of gold standard.
1937-February, 1946	Managed floating/Multiple rates	US Dollar is the reference currency
March 1946-May 1947	Freely falling/Managed floating/Multiple rates	US Dollar is the reference currency
June 1947-October 1952	Managed floating/Multiple rates	
November 1952–April 16, 1956	Freely falling/Managed floating/Multiple rates	US Dollar is the reference currency
April 16, 1956-August 1957	Freely falling/Managed floating/Dual Market	
September 1957–June 1958	Managed floating/Dual Market	
July 1958-January 1, 1960	Freely falling/Managed floating/Dual Market	
January 1, 1960–January 15, 1962	Peg to US Dollar	The Escudo replaces the peso.
January 15, 1962–April 1964	Freely falling/Managed floating/Multiple rates	
January 15, 1962–June 1971	Managed floating/Multiple rates	
July 1971-June 29, 1976	Freely falling/Multiple exchange rates	On September 29, 1975 the Peso replaced the Escudo. October 1973 classifies as a hyperfloat.
June 29, 1976–January 1978	Freely falling/Crawling peg to US Dollar	
February 1978–June 1978	Pre announced crawling peg to US Dollar/Freely falling	The Tablita Plan
July 1978–June 30, 1979	Pre announced crawling peg to US Dollar	The Tablita Plan
June 30, 1979–June 15, 1982	Peg to US Dollar	The second phase of the Tablita Plan
June 15, 1982–December, 1982	Freely falling/Managed floating/Dual Market	
December 1982–December 8, 1984	Managed floating/Dual Market	Parallel market premium reaches 102% in early 1983. On March 1983 the intentions to follow a PPP rule was announced.
December 8, 1984–January 1988	Managed floating/Dual Market	PPP rule. The official rate is kept within a +/- 2% crawling band to US Dollar the June 1985. Yet, while the official rate remains within the band, parallel market premia remain in the 20–40% range and scores as managed floating.
January 1988–January 1, 1989	De facto crawling band around US Dollar/Dual Market	PPP rule. Band width is $+/-5\%$ . Official pre–announced crawling band to US Dollar. Band width is $+/-3\%$ . While the official rate remains within the band narrower band, parallel market premia remain in double digits.
June 1, 1989–January 22, 1992	Pre announced crawling band around US Dollar/Dual Market	PPP rule. Band width is +/- 5%.
January 22, 1992– January 20, 1997	De facto crawling band around US Dollar/Dual Market	PPP rule. Band is +/-5%. Official pre–announced crawling band to US Dollar. Band width is +/- 10%. Parallel premium declines to below 15% and into single digits.
January 20, 1997–June 25, 1998	De facto crawling band to US Dollar/Dual Market	Official pre–announced crawling band to US Dollar. Band width is $+/-12.5\%$ , de facto band is $+/-5\%$ for the official rate and $+/-2\%$ for the parallel rate.
June 25, 1998–September 16, 1998	Pre-announced crawling band to US Dollar/Dual Market	Band width is, +/- 2.75%.
September 16, 1998–December 22, 1998	Pre announced crawling band to US Dollar/Dual Market	Band width is +/- 3.5%.
December 22, 1998–September 2, 1999	Pre announced crawling band to US Dollar/Dual Market	Band width is +/- 8%.
September 2, 1999–December 2001	Managed floating	Rates are unified.

China

Date	Classification	Comments
	Primary/Secondary/Tertiary	
November 3, 1935–March 14, 1938	Peg to Pound Sterling	Abandoned silver standard. Monetary breakup. Canton Dollar and Northern China Dollar are created. Canton Dollar is pegged to Chinese Dollar. Northern China Dollar is not pegged to any currency until March 1, 1938 in which it pegs to the Yen.
March 14, 1938-1939	Capital controls	
1939– August 19, 1948	Freely falling/Dual Market	Most transactions take place at free market rate.
August 19, 1948–December 1951	Freely falling/Freely floating/Dual Market	Gold Yuan is introduced to replace China Dollar on September 21, 1949.
January 1952– June 1969	Managed floating/Dual Market	Jen Min Piao (Yuan) is introduced to replace Gold Yuan. Parallel market premium climbs to 347% on July 1958 and 763% on June 1962.
June 1969– December 1973	Managed floating/Dual Market/Multiple rates	Renmimbi is introduced.
January 1974–February 1981	De facto crawling band around US Dollar/Multiple rates	Band width is +/-2%.
March 1981–July 1992	Managed floating/Multiple rates	
August 1992–January 1, 1994	De facto crawling band around US Dollar/Multiple rates	Band width is +/-2%. Premium peaks at 124% on June 1991.
January 1, 1994–December 2001	De facto peg to US Dollar	Unification of markets. There is a parallel market where the premium is in single digits.
Notes: Reference currency is the US D	ollar.	
Colombia		
Data	Classification	Commonts

Date	Classification	Comments
	Primary/Secondary/Tertiary	
January 1935–April 1944	Managed float/Dual Market	Free market rate applied to most transactions
April 1944–September 1946	Peg to US Dollar	
October 1946-June 1947	Peg to US Dollar/Freely falling	
July 1947-January 1948	Peg to US Dollar	
January 1948–February 1952	De facto peg to US Dollar/Multiple rates	Parallel market premium reaches 183% on March 1957.
March 1953–September 1962	De facto crawling band around US Dollar/Multiple rates	Band width is +/-5%. PPP rule. Pre announced crawling peg to US Dollar. Premium usually in single digits.
October 1962-December 1963	Freely falling/De facto crawling band around US Dollar/Multiple rates	Band width is +/-5%. PPP rule. Pre announced crawling peg to US Dollar. Premium usually in single digits.
January 1964-April 1974	De facto crawling band around US Dollar/Multiple rates	Band width is +/-5%. PPP rule. Pre announced crawling peg to US Dollar. Premium usually in single digits.
April 1974–September 1983	De facto band around US Dollar/Multiple rates	Band width is +/- 2%. On May 1984 the premium rises to 36%.
October 1983–November 1984	Managed floating/Multiple rates	More accurately, the rate of crawl had been accelerated.
December 1984–January 24, 1994	De facto band around US Dollar/Multiple rates	Band width is +/- 5%.
January 24, 1994– June 28, 1999	De facto crawling band around US Dollar	Band width is +/-5%. Official pre announced crawling band around US Dollar, width is +/- 7.5%
June 28, 1999–September 25, 1999	De facto crawling band around US	Band width is $+/-5\%$ . There is an official pre announced
	Dollar	crawling band around US Dollar, which is +/- 10%. Parallel market premium remains below 20%.
September 25, 1999–December 2001	Managed floating	

Congo, Democratic Republic of

Date	Classification	Comments
	Primary/Secondary/Tertiary	
June 1919–June 7, 1940	Peg to Belgian Franc	
June 7, 1940–January 21, 1941	Peg to French Franc	
January 21, 1941–October 5, 1944	Peg to Pound Sterling	Entry into Sterling Area
October 5, 1944– November 6, 1962	Parallel market	The official rate is pegged to the Belgian Franc. No parallel market data available.
November 6, 1962–October 1963	Managed floating/Dual Market	
November 1963–November 9, 1963	Freely falling/Managed floating/Dual Market	The official rate is pegged to the Belgian Franc.
November 9, 1963–May 1964	Freely falling/Managed floating/Parallel market	The official rate is pegged to the Belgian Franc.
June 1965–July 23, 1967	Managed floating/Parallel Market	The official rate is pegged to the Belgian Franc.
July 23, 1967–August 24, 1971	Managed floating/Parallel market	Zaire replaces Congolese Franc. The official rate is pegged to the Belgian Franc.
August 24, 1971–December 1974	De facto Crawling band around US Dollar/Parallel market	The official rate is pegged to the US Dollar. Band width is $\pm/-5\%$ .
January 1975–March 12, 1976	Freely falling/Managed floating/Parallel market	The official rate is pegged to the US Dollar.
March 12, 1976–September 12, 1983	Freely falling/Freely floating	Official Peg to SDR
September 12, 1983–November 1997	Freely falling/Dual Markets/Managed floating	There were short–lived efforts to unify markets on March 1, 1984 and again on August 19, 1991. October 1991–September 1992 and November 1993– September 1994 regimes are "hyperfloats".
December 1997–December 2001		No inflation data post February 1998. No exchange rate data for 2001. Effective May 2001 the exchange rates were unified.

Notes: Formerly Belgian Congo and Zaire. Reference currencies are the Belgian Franc, US Dollar. SDR, and South African Rand. Congo. Republic of

Date	Classification	Comments
	Primary/Secondary/Tertiary	
June 6, 1925- February 8, 1944	Peg to French Franc	Only notes issued by Banque de l'Afrique Occidental are
		legal tender. Exchange controls are introduced in franc
		Zone on September 9, 1939.
February 8, 1944– December 26, 1945	Peg to US Dollar and Pound Sterling	On March 19, 1941 incorporated in the Sterling Area
December 26. 1945–December 1947	Peg to French Franc	Return to Franc Zone. CFA Franc is introduced.
January 1948–December 1949	Peg to French Franc/Freely falling	
January 1950–January 17, 1962	Peg to French Franc	
January 17, 1962–September 9, 1971	Peg to French Franc/Currency union	Bank of Central African States is created
September 9, 1971–March 21, 1974	Market/De facto peg to French Franc	The premium is in low single digits.
March 21, 1974–December 1993	Peg to French Franc/Currency union	
January 1994–January 1995	Peg to French Franc/Currency union/	One 100% devaluation.
	Freely falling	
February 1995–January 1, 1999	Peg to French Franc/Currency union	
January 1, 1999–December 2001	Peg to Euro	

Notes: Previously Middle Congo. Reference currencies are the French Franc and the Euro.

#### Costa Rica

Date	Classification	Comments
	Primary/Secondary/Tertiary	
October 10, 1922–October 13, 1948	Peg to US Dollar	
October 13, 1948–February 1963	De facto peg to US Dollar/Multiple	Official peg to the US Dollar. On June 1950 the parallel
	rates	market premium peaks at 64%.
March 1963–December 24, 1969	De facto crawling band around US	Band width +/-2%. Official Peg to the US Dollar
	Dollar/Multiple rates	
December 24, 1969– June 19, 1971	Peg to US Dollar	
June 19, 1971– April 25, 1974	De facto crawling band around US	Band width +/-5%. Official Peg to the US Dollar. Parallel
	Dollar/Dual Market	market premium consistently above 50%.
April 25, 1974–September 26, 1980	Peg to US Dollar	
September 26, 1980-December 1980	Managed floating	
January 1981–March, 1981	Freely falling/Managed floating	
March 9, 1981–November 11, 1983	Freely falling/Managed	Periodic attempts to fix the official rate are interspersed
	floating/Multiple rates	with frequent devaluations.
November 11, 1983–December 1990	De facto crawling band around US	De facto band width is +/- 5%., much narrower band if
	Dollar/Dual Market	official rate is used.
January 1991- December 2001	De facto crawling band around US Dollar	De facto band width is +/- 2%. Parallel market premia is
		in low single digits. De facto crawling peg to US Dollar
		since 1995 if official rate is used.

Notes: Reference currency is the US Dollar.

Cote D'Ivoire

#### Central Bank of West African States: Benin, Burkina Faso, Cote D'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, and Togo<sup>1</sup>

Date	Classification	Comments
	Primary/Secondary/Tertiary	
June 29, 1901- February 2, 1943	Peg to French Franc	Banque de l'Afrique Occidentale is allowed to issue bank notes. Exchange controls are introduced in Franc Zone on September 9, 1939.
February 2, 1943– December 26, 1945	Peg to US Dollar and Pound Sterling	On December 1942 incorporated in the Sterling Area
December 26. 1945–January 26, 1948	Peg to French Franc/Currency union	Return to Franc Zone. The CFA Franc is introduced.
January 26, 1948–September 20, 1949	Dual Market	Parallel market data is not available for this period. Linked to French Franc.
September 20, 1949–May 12, 1962	Peg to French Franc	
May 12, 1962–September 9, 1971	Peg to French Franc	Creation of the Central Bank of West African States
September 9, 1971–March 21, 1974	De facto peg to French Franc/Dual Market	The premium is in low single digits.
March 21, 1974–January 1, 1999	Peg to French Franc	One 100% devaluation.
January 1, 1999–December 2001	Peg to Euro	

<sup>1</sup> Mali joined the currency arrangement on June 1, 1984. Reference currencies are the French Franc and the Euro.

Croatia

Classification	Comments
Primary/Secondary/Tertiary	
Freely falling/Freely floating/Dual Market	There is no price data before this date.
De facto band around DM	Band width is +/- 2%.
De facto band around Euro	Band width is +/- 2%.
	Primary/Secondary/Tertiary Freely falling/Freely floating/Dual Market De facto band around DM

Notes: Reference currencies are the US Dollar, the DM and the Euro.

Cyprus		
Date	Classification	Comments
	Primary/Secondary/Tertiary	
September 5, 1917–June 29, 1972	Peg to Pound Sterling	Cyprus Pound is introduced.
June 29, 1972–July 9, 1973	Peg	Gold
July 9, 1973–March 1992	De facto crawling band around DM	Band width is +/- 2%.
April 1992–January 1, 1999	De facto peg to DM	Officially there is a $\pm -2.25\%$ band.
January 1, 1999–December 2001	De facto peg to Euro	In January 2001, it was announced that the band width
		would be widened to +/-15% to be become effective in
		August 2001.

Notes: Reference currencies are the US Dollar, the Pound Sterling, DM and the Euro.

#### **Czech Republic**

Date	Classification	Comments
	Primary/Secondary/Tertiary	
September 1990–February 28, 1996	De facto crawling band around DM	Band width is +/-2%. Officially tied to a currency basket
	_	and then changed to the ECU.
February 28, 1996–May 27, 1997	De facto crawling band around DM	Band width is +/5-%. Official pre-announced crawling
	_	band around DM. Official band width is +/-7.5%.
May 27, 1997–December 2001	Managed floating	
Notes: Reference currencies are the US	Dollar, the DM and the Euro	

Notes: Reference currencies are the US Dollar, the DM and the Euro. **Denmark** 

Date	Classification Primary/Secondary/Tertiary	Comments
December 22, 1926– September 29, 1931	Peg	Gold Standard
September 29, 1931–November 1936	Peg to Pound Sterling	Suspension of convertibility. Joined the Sterling Area. On November 18, foreign exchange controls are introduced.
November 1936–April 1940	Peg to Pound Sterling	Tightening of controls
April 1940–August 1945	Peg to Reichsmark	
August 1945-September 16, 1950	Peg to US Dollar and Pound Sterling/Parallel Markets	Parallel market premia peaks in the fall of 1948 at around 110%.
September 16, 1950–October 17, 1951	De facto band around US Dollar/Dual Market	Band width is +/-5%. Parallel market premium oscillates in the 20–60% range.
October 17, 1951–August 23, 1971	Peg to DM	
August 23, 1971–December 1978	De facto moving band around DM	Band width is +/-2%.
December 1978–January 1, 1999	De Facto moving peg to DM	
January 1, 1999–December 2001	De facto peg to Euro	Participant of ERM II. There is an official +/-2.25% band.

Notes: Specifics on the common margins (snake) agreement, EMS, etc. are available from the detailed chronologies. Reference currencies are the US Dollar, the DM and the Euro.

Dominica

East Caribbean Central Bank States are: Anguilla, Antigua and Barbuda, Dominica, Grenada, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
1935-October 6, 1965	Peg to Pound Sterling	British West Indies Dollar is introduced. It is issued by the
		East Caribbean Monetary Authority.
October 6, 1965-July 7, 1976	Peg to Pound Sterling	East Caribbean Dollar replaces British West Indies Dollar.
July 7, 1976-December 2001	Peg to US Dollar	ON October 1, 1983 the East Caribbean Central Bank
		replaces the East Caribbean Monetary Authority.

Notes: Reference currency is US Dollar.

Dominican Republic

Date	Classification	Comments
	Primary/Secondary/Tertiary	
June 21, 1905–February 1, 1948	Exchange rate arrangement with no	US Dollar is legal tender. On October 1947 Peso bank
	separate legal tender	notes began to be issued.
February 1, 1948–September 1966	Managed floating/Parallel Market	Official rate is pegged to US Dollar
October 1966–September 1978	De facto crawling band around US Dollar/Parallel Market	Band width +/-2%. Official rate is pegged to US Dollar.
October 1978–August 24, 1982	De facto crawling band around US Dollar/Parallel Market	Official rate is pegged to US Dollar.
August 24, 1982– January 23 1985	Managed floating/Dual Market	Band width +/-5%. Official rate is pegged to US Dollar.
		Parallel market premium oscillates in the 50–90% range.
		Parallel market premium climbs to 213% prior to the
		devaluation on January 1985
January 23 1985–November 1985	Freely falling/Managed floating	
December 1985-September 4, 1986	De facto crawling band around US Dollar	Band width +/-5%.
September 4, 1986–June 1987	De facto crawling band around US	Band width +/-5%.
-	Dollar/Dual Market	
July 1987–November 12, 1987	Freely falling/ De facto crawling band	
	around US Dollar/Dual Market	
November 12, 1987– February 11, 1988	Freely falling/Managed floating	
February 11, 1988–August, 1991	Freely falling/Managed floating/Dual	There was a temporary unification in 1991.
	Market	
September, 1991–October 1992	Managed floating/Dual Market	Parallel market premium oscillates and is declining.
November 1992–December 2001	De facto crawling band around US	Band width is +/-2%. Parallel market data ends December
	Dollar/Dual Market	1998—cannot verify 1999 onwards. Premium is in single
		digits during this period.

Ecuador
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Date	Classification	Comments
	Primary/Secondary/Tertiary	
March 4, 1927–February 9, 1932	Peg	Gold Standard
April 30, 1932–December 19, 1935	Dual Market	Capital controls introduced and lifted on December 1935
July 31, 1936–July 31, 1937	Controls re-introduced	
July 31, 1937– June 4, 1940	Dual Market	
June 4, 1940	Foreign exchange controls reintroduced	
April 28, 1942–June 6. 1947	Peg to US Dollar	
June 6, 1947–June 1950	Managed floating/Multiple rates/Dual Market	An official rate is pegged to the US Dollar.
July 1950–June 1957	De facto peg to US Dollar/ Multiple rates/ Dual Market	
July 1957–August 17, 1970	De facto crawling band around US Dollar/Multiple rates/Dual Market	Band width is +/-2%.
August 17, 1970–November 22, 1971	Peg to US Dollar	
November 22, 1971–February 26, 1973	Dual Market/ De facto crawling band around US Dollar	Band width is +/-2%
February 26, 1973– March 3, 1982	Peg to US Dollar	The parallel rate behaves like a crawling band. Band width is $\pm -2\%$ .
March 3, 1982–April, 1984	Freely falling/Managed floating/Dual Market	
May 1984–March 1987	Managed floating/Dual Market/Multiple rates	There was a short-lived unification on November 12, 1985
April, 1987–September, 1993	Freely falling/ Managed floating	Parallel market premium hits 150% in 1988.
October 1993–March 3, 1997	De facto crawling band around US Dollar/Dual Market	Band width is +/-5%. Parallel market premium declines into single digits during this period.
March 3, 1997–September, 1997	De facto crawling band around US Dollar/Dual Market	Pre–announced crawling band around US Dollar, official band is +/-5%, the de facto band is +/-2%.
October 1997– February 12, 1999	Freely falling/Pre–announced crawling band around US Dollar.	The band is widened to $+/-10\%$ on March 25, 1998 and $+/-15\%$ on September 14, 1998.
February 12, 1999–March 13, 2000	Freely falling/Freely floating	Markets are unified.
March 13, 2000–April, 2001	Exchange rate arrangement with no separate legal tender/Freely falling	US Dollar
May 2001–December, 2001	Exchange rate arrangement with no separate legal tender	US Dollar
Notes: Reference currency is the US Doll		
Egypt		
Date	Classification	Comments
	Primary/Secondary/Tertiary	
September 29, 1931–1950	Peg to Pound Sterling	Suspension of Gold Standard, remained in Sterling Area until July 14, 1947 but continued to be linked to the pound
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September 29, 1931–1950	Peg to Pound Sterling	Suspension of Gold Standard, remained in Sterling Area
		until July 14, 1947 but continued to be linked to the pound.
1950–May 7, 1962	Managed floating/Multiple rates	Links to US Dollar
May 7, 1962–July 25, 1971	De facto crawling band around US	Band width is +/-5%. Official rate is pegged to US Dollar
	Dollar/Multiple rates	and periodically adjusted. Parallel market premium remains
		consistently above 150%.
July 25, 1971–October 8, 1991	De facto crawling band around US	Band width is +/-5%.
	Dollar/Multiple rates	
October 8, 1991–December 2001	De facto peg to US Dollar/Multiple	Parallel market premia is in single digits through December
	rates	1998, when the data ends.

Notes: Reference currency is the US Dollar. El Salvador

El Salvador		
Date	Classification	Comments
	Primary/Secondary/Tertiary	
April 1934–April 1961	Peg to US Dollar	Parallel market becomes important in the early 1960s when
		Foreign exchange controls are reinstated.
May 1961–August 9, 1982	De facto crawling band around US	Band width is +/-2%. Official rate is pegged to the US
	Dollar/Parallel Market	Dollar.
August 9, 1982–June 1, 1990	Managed floating/Dual Market	Third illegal market exists. Premium peaks at 472 percent
		prior to the January 1986 devaluation.
March 19, 1990–June 1, 1990	De facto crawling band around US	Band width is +/-2%.
	Dollar/Multiple rates	
June 1, 1990–January 1, 2001	De facto peg to US Dollar	Parallel market premium is in the 10-20 percent range
		through most of this period.
January 1, 2001–December 2001	Peg to US Dollar	En route to full Dollarization.

#### **Equatorial Guinea**

Date	Classification	Comments
	Primary/Secondary/Tertiary	
1885–October 12, 1969	Exchange rate arrangement with no separate legal tender	Spanish Peseta
October 12, 1969–December 1973	Peg to Spanish Peseta	Spanish Peseta is replaced by Peseta Guineana
January 1974–April 19, 1979	Peg to Spanish Peseta/Dual Market	
April 19, 1979-August 6, 1979	Peg to SDR/Dual Market	
August 6, 1979– August 27, 1984	Crawling band around French Franc/Dual Market	Band width is +/-2%. For official rate no parallel market data is available.
August 27, 1984–December 2001	Peg to French Franc	Joined Central African Monetary Union. One devaluation.
January 1994–December 1994	Peg to French Franc/Freely falling	One 100% devaluation.
January 1995–January 1, 1999	Peg to French Franc	
January 1, 1999–December 2001	Peg to Euro	

Notes: Reference currencies are the Spanish Peseta, the SDR, and the French Franc.

Estonia	
Data	

Date	Classification	Comments
	Primary/Secondary/Tertiary	
January 1991–June 20, 1992	Freely falling/Managed floating	There is no price data before this date.
June 20, 1992–December 1994	Peg to DM/Currency board/Freely falling	
January 1991–January 1, 1999	Peg to DM/Currency board	
January 1, 1999–December 2001	Peg to Euro/Currency board	

Notes: Reference currencies are the US Dollar, the DM and the Euro Finland

Date	Classification	Comments
	Primary/Secondary/Tertiary	
March 1933– October 26, 1939	Peg to Pound Sterling	Foreign exchange controls are introduced.
1940-June 1944	Peg to US Dollar/Parallel	
July 1944-April 1948	Freely falling/Parallel market	Premium above 200 on July 1949. Official rate is pegged to US Dollar.
May 1948-June 11, 1951	Peg to US Dollar/Parallel market	
June 11, 1951–October 12, 1967	De facto band around US Dollar/Multiple rates	Band width is +/-5%. Premiums in 50–130% range are the norm through 1957. In June 1958 premiums reach single digits for the first time.
October 12, 1967–January, 1973	Peg to US Dollar	
January 1973-September 8, 1992	De facto band around DM	Band width is +/- 2%. Officially pegged to a basket of currencies or the ECU during this period.
September 8, 1992–March 1993	Freely falling/Managed floating	ERM crisis
April 1993–December 1994	De facto moving band around DM	Band width is +/- 2%.
January 1995–January 1, 1999	De facto peg to DM	
January 1, 1999–December 2001	Currency union	Euro

Notes: Specifics on the evolution of the currency basket, EMS, etc. are available from the detailed chronologies. Reference currencies are the US Dollar, the DM and the Euro

France

Date	Classification	Comments
	Primary/Secondary/Tertiary	
September 9, 1939- May 17, 1940	Peg	Capital controls froze the exchange rate of the Franc versus the US Dollar and Pound Sterling.
May 17, 1940–May 1944	Peg to Reichsmark	
June 1944–December 26, 1945	Peg to Reichsmark/Freely falling	
December 26, 1945–January 26, 1948	Freely falling/Managed floating/Parallel Market	Officially pegged to US Dollar. Through 1953 premiums were in the 50–200 % range.
January 26, 1948–December 1948	Freely falling/Managed floating/Parallel Market	
January 1949–June 1956	De facto crawling band around US Dollar/Multiple rates	Band width is +/- 5%.
July 1956–December 13, 1968	De facto band around US Dollar/Multiple rates	Band width is +/- 2%. Through 1957 the premium oscillated in the 10–40% range.
December 13, 1968- August 8, 1969	Peg to US Dollar	Temporary unification.
August 8, 1969–December 1970	De facto band around US Dollar/Dual market	Band width is +/- 2%. Parallel market premium in single digits.
January 1971-August 21, 1971	Peg to US Dollar	
August 21, 1971–March 19, 1973	De facto band around DM/Dual market	Band width is +/- 2%.
March 19, 1973–March 21, 1974	Pre-announced band/Dual Market	Band width is +/-2.25%. Parallel market premium in single digits. Common Margins agreement.
March 21, 1974–June 1974	Managed floating	
July, 1974–March 13, 1979	De facto moving band around DM	Band width is +/- 2%.
March 13,1979–December 1986	De facto crawling peg to DM	Officially pegged to the ECU
January 1987–January 1, 1999–	De facto peg to DM	Officially pegged to the ECU
January 1, 1999–December 2001	Currency union	Euro

Notes: Specifics on the common margins (snake) agreement, EMS, etc. are available from the detailed chronologies. Reference currencies are the US Dollar, the DM and the Euro.

#### Bank of Central African States: Cameroon, Central African Republic, Chad, and Republic of Congo

Date	Classification Primary/Secondary/Tertiary	Comments
June 6, 1925- February 8, 1944	Peg to French Franc	Only notes issued by Banque de l'Afrique Occidental are sole legal tender. Exchange controls are introduced within Franc Zone on September 9, 1939.
February 8, 1944– December 26. 1945	Peg to US Dollar and Pound Sterling	On March 19, 1941 incorporated in the Sterling Area
December 26. 1945 – January 17, 1962	Peg to French Franc	Return to Franc Zone. CFA Franc is introduced.
January 17, 1962–September 9, 1971	Peg to French Franc	Bank of Central African States is Created
September 9, 1971–March 21, 1974	De facto peg to French Franc/Dual Market	Parallel market premium in single digits.
March 21, 1974–December 1993	Peg to French Franc	
January 1994–December 1994.	Peg to French Franc/Freely falling	One 100% devaluation.
January 1995–January 1, 1999	Peg to French Franc	
January 1, 1999–December 2001	Peg to Euro	

Notes: Reference currencies are the US Dollar, the French Franc and the Euro. Gambia

Date	Classification	Comments
	Primary/Secondary/Tertiary	
1916– May 13, 1964	Currency board/ Peg to Pound Sterling	West Africa Pound is introduced by the West African
		Currency Board
May 13, 1964–July 1, 1971	Currency board/ Peg to Pound Sterling	Gambia Pound replaces West Africa Pound
July 1, 1971–December 1980	Currency board/ Peg to Pound Sterling	Dalasi replaces Gambia Pound
January 1981–December 1985	Multiple Rates/parallel market	Cannot classify, as parallel market data is not available for
		this period
January 1986–January 20, 1986	Freely falling/Multiple Rates/Freely	
	floating	
January 20, 1986–February 1987	Freely falling/freely floating	
March 1987–September 1991	Freely floating	
October, 1991–December, 2001	De facto crawling band around US	Band width is +/-2%. Maximum parallel market premium is
	Dollar	about 30%.

Notes: Reference currencies are the US Dollar and the Pound Sterling.

Gabon

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Gieo	rgia

Georgia		
Date	Classification	Comments
	Primary/Secondary/Tertiary	
January 1991–April 1993	Freely falling/Exchange arrangement	Russian Ruble
	with no separate legal tender	
April, 1993–September 1996	Freely falling/Dual Market	September 1993–September 1994 regime is a "hyper float."
October 1996–December 7, 1998	Dual Market	
December 7, 1998–December 2001	Managed floating	
Notes: Reference currencies are the US Dollar and the Ruble		

Notes: Reference currencies are the US Dollar and the Ruble. Germany

Date	Classification Primary/Secondary/Tertiary	Comments
July 13, 1931–April 1945	Multiple exchange rates	Foreign exchange controls are introduced. There are several quasi currencies in circulation. In 1936 capital flight warranted the death penalty.
April 1945–June 20, 1948	Managed floating/Multiple rates	Officially Reichsmark is pegged to the US Dollar. The parallel market premia is 2,000–3,200% during this period
June 20, 1948–March 31, 1951	De facto moving band around US Dollar/Multiple rates	Band width is +/-5%. Reference currency is the US Dollar, The Deutschemark replaces the Reichsmark. The parallel premium oscillates in the 50–500% range through 1949 and in the 20–50% range through mid–1952.
March 31, 1951–April 1,1954	De facto moving band around US Dollar/Multiple rates	Band width is +/-5%. Introduction of a quasi currency the Sperrmark.
April 1, 1954–December 29, 1958	De facto peg to US Dollar/Multiple rates	Introduction of a second quasi currency the Bekomark. Parallel market premia is trivial after mid–1955.
December 29, 1958– September 30, 1969	Peg to US Dollar/Parallel Market	The Deutschemark fully convertible Bekomark abolished. The Sperrmark had been consolidated in 1954.
September 30, 1969–October 26, 1969	Mini–Float	
October 26,1969–May 10, 1971	Peg to US Dollar	
May 10, 1971– December 21, 1971	Managed floating	
December 21, 1971–January 1973	Peg to US Dollar	
January 1973–January 1, 1999	Float	
January 1, 1999–December 2001	Currency Union	Euro

Notes: Specifics on the common margins (snake) agreement, EMS, etc. are available from the detailed chronologies. Reference currencies are the US Dollar, Yen and the Pound Sterling.

Date	Classification	Comments
	Primary/Secondary/Tertiary	
1916– July 14, 1958	Currency Board/Peg to Pound Sterling	West African Pound is introduced by the West Africa
		Currency Board.
July 14, 1958– July 19, 1965	Peg to Pound Sterling/Parallel Market	Ghana Pound replaces the West African Pound
July 19, 1965–November 4, 1971	Peg to Pound Sterling/Parallel Market	The Cedi replaced the Ghana Pound. The new Cedi was
-		introduced in 1967.
November 4, 1971–September 1973	Managed floating/Parallel market	The Cedi is officially pegged to US Dollar.
October 1973– June 19, 1978	Freely Falling/Managed	The Cedi is officially pegged to US Dollar. There are
	floating/Parallel market	multiple exchange rates.
June 19, 1978–May 1984	Freely falling/Managed	The official peg to the US Dollar is abandoned. There are
	floating/Parallel Market	multiple exchange rates.
June 1984–April 1986	Freely floating/Parallel market	There are multiple exchange rates.
May 1986–September 19, 1986	Freely falling/Freely floating/Parallel	There are multiple exchange rates.
	Market	
September 19, 1986–September 1987	Freely falling/Freely floating/Dual	There are multiple exchange rates.
	Market	
October 1987–July 1989	Freely floating/Dual Market	There are multiple exchange rates.
August 1989– April 27, 1990	Freely falling/Managed floating/Dual	There are multiple exchange rates.
	Market	
April 27, 1990–September 1990	Freely falling/Managed floating	There are multiple exchange rates.
October 1990–February 1994	Managed floating	There are multiple exchange rates. Since early 1993, the
		parallel market premia has been in single digits.
March 1994–July 1996	Freely falling/Managed floating	
August 1996–October 1999	Managed floating	
November 1999–March 2001	Freely falling/Managed floating	
April 2001–December 2001	Managed floating	

Notes: Formerly Gold Coast. Reference currencies are the US Dollar, the Pound Sterling, and the South African Rand.

Greece	<u>Classifier</u>	Comments
Date	Classification	Comments
	Primary/Secondary/Tertiary	
September 21, 1931	Foreign exchange controls are	
	introduced.	
1933–September 21, 1936	Peg to French Franc	
September 28, 1936–April 1941	Peg to Pound Sterling	
April 1941–November 11, 1944	Freely falling/Freely floating	Hyperinflation. Officially pegged to Reichsmark
November 11, 1944–January 1947	Freely falling/Managed floating	Officially pegged to the US Dollar
February 1947–September 1948	Freely falling/Managed floating/Dual	
	Market	
October 1948–April 1950	Managed floating/ Dual Market	
May 1950–May 1, 1954	De facto band around US Dollar/Dual	Band width is +/-2%. Parallel market premia dips into
	Market	single digits at the end of 1952.
May 1, 1954–December 22, 1965	Peg to US Dollar/Parallel Market	
December 22, 1965–March 8, 1975	De facto band around the US Dollar	Band width is +/-2%. Officially pegged to the US Dollar
March 8, 1975–November, 1977	De facto crawling peg to US Dollar	Officially pegged to a basket of currencies.
December 1977–June, 1981	De facto crawling band	Band width is +/- 2%. Parallel market premia rises in this
	around US dollar	period and hits 31% in early 1981.
July 1981–August 1984	Managed floating	
September 1984– August 1989	De facto band crawling band around	Band width is +/- 2%.
-	DM	
September 1989–January 1, 1999	De facto peg to DM	On March 15, 1998 the drachma entered the ERM
January 1, 1999–December 2001	Currency union	Euro

Notes: Reference currencies are the US Dollar, the Pound Sterling, and the DM and the Euro. Grenada

# East Caribbean Central Bank States are: Anguilla, Antigua and Barbuda, Dominica, Grenada, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
1935-October 6, 1965	Peg to Pound Sterling	British West Indies Dollar is introduced. It is issued by the
		East Caribbean Monetary Authority.
October 6, 1965-July 7, 1976	Peg to Pound Sterling	East Caribbean Dollar replaces British West Indies Dollar.
July 7, 1976-December 2001	Peg to US Dollar	ON October 1, 1983 the East Caribbean Central Bank
		replaces the East Caribbean Monetary Authority.

Notes: Reference currency is US Dollar. Guatemala

Classification:	Comments
Primary/Secondary/Tertiary	
Peg to US Dollar	The Quetzal replaces the Guatemalan Peso.
Multiple Rates	Foreign exchange controls were introduced. There is no
	data on the parallel rate for this period.
Peg to US Dollar/Parallel market	
Multiple exchange rates	There are three rates. There is no data on the parallel rate
	for this period.
Freely falling/Managed	Multiple exchange rates
floating/Parallel Market	
Managed floating/Multiple rates	Parallel market premium hits 400%.
De facto crawling peg to US	
Dollar/Multiple rates	
Freely falling/De facto crawling band	Band width is +/-2%. There are multiple rates.
around US Dollar	
De facto crawling peg to US Dollar	Parallel market premia is in single digits during this period.
	Primary/Secondary/Tertiary         Peg to US Dollar         Multiple Rates         Peg to US Dollar/Parallel market         Multiple exchange rates         Freely falling/Managed         floating/Parallel Market         Managed floating/Multiple rates         De facto crawling peg to US         Dollar/Multiple rates         Freely falling/De facto crawling band         around US Dollar

Guinea
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Date	Classification:	Comments
	Primary/Secondary/Tertiary	
July 21, 1934–September 9, 1939	Peg to French Franc	Controls are introduced in 1939 in the CFA Franc Zone.
February 2 1943– December 6, 1944	Peg to US Dollar and Pound Sterling	Incorporated into Sterling Area
December 6, 1944–March 1, 1960	Peg to French Franc	Return to Franc Zone.
March 1, 1960–December 1970	Peg to US Dollar	Parallel Market .The Guinea Franc replaced the CFA Franc withdrawal from CFA Franc zone. On October 2, 1972, the Syli replaced the Guinean Franc.
January 1971–June 11, 1975	De facto band around US Dollar	Band width is +/-5%. The official rate remains pegged to the US Dollar but the parallel market is active with premiums occasionally of over 1,000%.
June 11, 1975–October 1978	De facto moving peg to US Dollar	Officially pegged to the SDR. Active parallel market
November 1978 December 1, 1982-	De facto crawling band around US Dollar	Officially pegged to the SDR. Band width is +/-2% for the official rate. The parallel rate oscillates within a wider +/-5% band.
December 1, 1982–October 7, 1985	Parallel Market/De facto crawling band around US Dollar	Band width is +/-5%. There are multiple exchange rates.
October 7, 1985–June 1, 1986	Freely falling/De facto crawling band around US Dollar/Dual Market	Band width is +/-5%. Officially pegged to the SDR. On January 1986, the currency was devalued by 1, 235%. The Guinean Syli was replaced by the New Guinean Franc. On December 1985 the parallel market premia had reached 1, 423%. There are multiple exchange rates.
June 1, 1986–December 1986	Peg to US Dollar/Freely falling	· · ·
January 1987–February 1, 1991	Peg to US Dollar	Frequent adjustments
February 1, 1991–May 1991	De facto crawling band around US Dollar	Band width is +/-2%. Officially pegged to the SDR
June 1991–September, 1999	De facto crawling peg to US Dollar	
September, 1999–April, 2000	De facto crawling band around US Dollar	Band width is +/-2%.
May 2000–December 2001	Managed floating	
Notes: Formerly French Guinea.	· · · · · · · · · · · · · · · · · · ·	•
Guinea-Bissau		
Central Bank of West African States:	Benin, Burkina Faso, Cote D'Ivoire, Gui	nea–Bissau, Mali, Niger, Senegal, and Togo <sup>1</sup>
Date	Classification:	Comments
	Primary/Secondary/Tertiary	
1879-February 29, 1976	Currency arrangement with no separate legal tender	Portugese Escudo

1879-February 29, 1976	Currency arrangement with no	Portugese Escudo
	separate legal tender	
February 29, 1976-May 26, 1978	Peg to Portugese Escudo	Introduction of Guinea-Bissau Peso.
May 26, 1978-December 23, 1983	Peg to SDR	
December 23, 1983-December 1992	Crawling peg to SDR	
January 1993–May 2, 1997	Parallel Market/Dual Market	There are multiple exchange rates. No data on parallel
		market.
May 2, 1997–January 1, 1999	Peg to French Franc	Joined the CFA Franc Zone. The Guinea Bissau Peso was
		converted to the CFA Franc through July 31, 1997.
January 1, 1999–December 2001	Peg to Euro	

<sup>1</sup> Mali joined the currency arrangement on June 1, 1984. Reference currencies are the French Franc and the Euro.

Guyana
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Date	Classification: Primary/Secondary/Tertiary	Comments
1935–November 15, 1965	Exchange arrangement with no separate legal tender	British West Indies Dollar is pegged to Pound Sterling
November 15, 1965–October 9, 1975	Peg to Pound Sterling	Guyana Dollar was issued to replace British West Indies Dollar
October 9, 1975–June 2 1982	Peg to US Dollar/Parallel Market	
June 2, 1982–February 2, 1987	De facto crawling peg to the US Dollar	Officially the Guyana Dollar is repegged to a basket of currencies. Multiple exchange rates prevail except in 1985. There is an active parallel market. In effect, through 1991 it is a system where the official exchange rate is pegged to the US Dollar and devalued frequently.
January 1988–March 13, 1990	Freely falling/De facto crawling band around US Dollar/Parallel Market	Band width is +/-5%. The premium surpassed 1,100% in late 1986 on the eve of the January 1987 devaluation.
March 13, 1990–April 1, 1991	Freely falling/De facto crawling band around US Dollar/Dual Market	Band width is +/-5%. On March 13, 1990 the parallel market was legalized creating an official dual arrangement.
April 1, 1991–December 1991	Freely falling/De facto crawling band around US Dollar	Markets were unified. Band width is +/-5%.
January 1995–December, 2001	De facto crawling peg around US Dollar	Since January 1995 parallel market premia have remained in single digits.

Notes: Formerly British Guiana. Reference currency is the US Dollar. Haiti

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
September 16, 1915–December 1984	Peg to US Dollar	US Dollar also legal tender, although there was no black market, premiums in the 10–15% range were offered for payments New York post 1958.
January 1985-April 1989	De facto crawling band around US	Band width is +/-2%. The official rate is pegged to the US
	Dollar/Parallel market	Dollar
May 1989-September 16, 1991	De facto crawling band around US	Premia peaked at 300% prior to the abandonment of the
	Dollar /Parallel market	peg. Band width +/-5%. The official rate remains pegged
		to the US Dollar through September 16.
September 16, 1991–March 1992	Freely falling/Crawling band around US Dollar	Band width +/-5%.
March 1992– May 1993	Crawling band around US Dollar	Band width +/-5%.
May 1993–February 1995	Freely falling/Freely floating	
March 1995–December 2001	Freely floating	Despite its floating status the parallel premia remained near 50% through end–1998

Notes: Reference currency is the US Dollar. Honduras

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
1918– April 3, 1926	Peg to US Dollar	
April 3, 1926–March 27, 1934	Peg to US Dollar	The Lempira replaces the Honduras Peso.
March 27, 1934–June 30, 1950	Dual Market	Capital controls are introduced.
June 30, 1950– March 19, 1985	Peg to US Dollar	Controls were lifted.
March 19, 1985–March 13, 1990	De facto crawling band around US	Band width is +/-5%. There are multiple rates.
	Dollar/Parallel Market	Parallel market premium peaks at 143% just before the
		devaluation.
March 13,1990–September 3, 1990	Freely falling/De facto crawling band	In September 3, 1990 a dual market was introduced. Band
	around US Dollar	width is +/-5%.
September 3, 1990–March 1991	Freely falling/De facto crawling band	Band width is $+/-5\%$ .
	around US Dollar/Dual Market	
April 1991–June 18, 1992	De facto crawling band around US	Band width is $+/-5\%$ .
	Dollar/Dual Market	
June 18, 1992–January 1996	De facto crawling band around US	Band width is $+/-5\%$ .
	Dollar	
January 1996–December 1998	De facto crawling band around the US	Band width is +/- 5%. Parallel market premia has been in
	Dollar/Dual Market	single digits since 1993. The official rate is a de facto
		crawling peg.
January 1999–December 2001	De facto crawling peg to US Dollar	There is an official +/-7% band.

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Classification:	Comments
Primary/Secondary/Tertiary	
Peg to Pound Sterling	
Peg to Yen	
Peg to Pound Sterling	Parallel rate peaks at 79% just before the peg is abandoned.
De facto band around Pound	Band width is +/- 5%.
Sterling/Multiple Rates	
Peg to Pound Sterling	
De facto moving band around US	Band width is +/- 2%. An Official and an Effective
Dollar/Dual Markets	exchange rate were in place. Parallel market premia is trivial.
Currency board/Peg to US Dollar	
	Primary/Secondary/Tertiary         Peg to Pound Sterling         Peg to Yen         Peg to Pound Sterling         De facto band around Pound         Sterling/Multiple Rates         Peg to Pound Sterling         De facto moving band around US         Dollar/Dual Markets

Notes: Reference currencies are the Pound Sterling and the US Dollar. **Hungary** 

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
August 1, 1946–April 1, 1957	Peg/Parallel market	Hungary entered Ruble zone and the Forint replaced the
		Pengoe.
April 1, 1957–July 1, 1992	De Facto crawling band around the	Band width is +/- 5%. Officially pegged to a basket of
	DM/Multiple rates	currencies. On December 1, 1991 the basket was changed
		to comprise the ECU and the US Dollar with equal weights.
July 1, 1992–May 16, 1994	De Facto crawling band around the	Band width is +/- 5%. On August 2, 1993 the DM replaced
	DM	the ECU.
May 16, 1994 1994–January 1, 1999	De Facto crawling band around the	Band width is $+/-2\%$ . At this time the weight of the DM in
	DM	the basket was increased to 70%.
January 1, 1999–December 2001	Pre-Announced crawling band around	Band width is +/- 2.25%.
	the Euro	

Notes: Reference currencies are the DM, the Euro, the Ruble and the US Dollar.

Date	Classification: Primary/Secondary/Tertiary	Comments
October 1925–December 18, 1946	Peg to Pound Sterling	Joined Sterling Area
December 18, 1946–March 8, 1951	Peg to US Dollar/Parallel market	De facto devalued with Pound Sterling. Parallel market premia as high as 285%.
March 8, 1951–October 1968	De facto crawling band around US Dollar/Parallel Market	Band width is +/-2%. Until late 1962 premia is in high double digits. There are multiple exchange rates.
November 1968–April 1973	De facto crawling band around US Dollar/Parallel Market	Band width is +/-2%. There are multiple exchange rates.
May 1973–January 1976	Freely falling/De facto crawling band around US Dollar/Parallel Markets	Band width is +/-5%. There are multiple exchange rates.
February 1976–April 1977	De facto crawling band around US Dollar/Parallel Market	Band width is +/-5%. Officially pegged to a basket of currencies. There are multiple exchange rates
May 1977– July 29, 1983	Freely falling/Managed floating/Dual Markets	Travel Rate is abolished.
July 29, 1983–May 1984	Freely falling/De facto crawling band around DM	Band width is +/-5%.
June 1984–September 1986	De facto crawling band around DM.	Band width is +/-5% Officially pegged to a basket of currencies.
September 1986–October 2000	De facto crawling band around DM.	Band width is $\pm/-2\%$ . Officially pegged to a basket of currencies. During this period the weight attached to the US Dollar is declining. On January 3, 1992, the ECU has a weight of 76%.
October 2000–March 28, 2001	De facto managed floating	Officially pegged to a basket of currencies
March 28, 2001–December 2001	Managed floating	

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
August 1914–March 22, 1927	Peg to Pound Sterling	Convertibility into sterling is suspended.
March 22, 1927–September 24, 1931	Peg	Gold Standard
September 24, 1931–September 3, 1939	Peg to Pound Sterling	Suspension of Gold Standard adherence to Sterling Area.
September 3, 1939–October 1941	Peg to Pound Sterling	Capital controls are introduced
November 1941-October 1943	Peg to Pound Sterling/Freely falling	
November 1943-October 1, 1965	Peg to Pound Sterling	
October 1, 1965–June 6, 1966	De facto band around Pound	There are multiple exchange rates. Band width is $\pm -5\%$ .
	Sterling/Parallel Market	
June 6, 1966–August 23, 1971	Peg to Pound Sterling	
August 23, 1971–December 20, 1971	Peg to US Dollar	
December 20, 1971–September 25, 1975	Peg to Pound Sterling	
September 25, 1975–February 1979	De facto crawling band around Pound Sterling	Band width is +/- 2%. Officially pegged to a basket of currencies.
March 1979–July 1979	Managed floating	
August 1979–July 1989	De facto crawling band around US dollar.	Band width is +/- 2%. Officially pegged to a basket of currencies
August 1989–July 1991	De facto crawling peg to US dollar	
August 1991–June 1995	De facto peg to US dollar	One devaluation on March 1993—parallel market premia rose to 27% in February.
July 1995–December 2001	De facto crawling peg to US dollar	During this period the parallel market premium has been consistently in single digits.
Notes: Reference currencies are the US D Indonesia	ollar and the Pound Sterling.	
Date	Classification:	Comments
	Primary/Secondary/Tertiary	
1877– September 1940	Peg	Gold Standard
September 1940–1942	Peg to Pound Sterling	Peg to Sterling following German occupation of the Netherlands.
1942– September 1945	Peg to Yen	Military Yen (Gumpyo) is introduced.
September 1945–March 7, 1946	Peg to Pound Sterling/Parallel Market	initially for (Gumpyo) is introduced.
March 7, 1946–November 2, 1949	Peg to Netherlands Guilder	Indonesian Guilder, formerly Netherlands East Indies
	5	Guilder, re-circulates.
November 2, 1949–December 1949	Managed floating	The Rupiah replaces the Indonesian or Netherlands East Indies Guilder. Reference currency is the US Dollar. There are multiple exchange rates
October 1950–January 1952	Freely falling/Managed floating	Inflation is 68%. There are multiple exchange rates
February 1952–August 1954	Managed floating	
September 1954-November 1955	Freely falling/Managed floating	
December 1955-March 1969	Managed floating	Escalating instability in early 1960's the parallel market premium is 2,678% in July 1962, 5,100% in August 1965 and peaks at 11,100% in November 1965. There are multiple exchange rates.
April 1969–December 10, 1970	De facto crawling band to US Dollar/Parallel market	Band width is +/-5%. The official rate is pegged to US Dollar. There are multiple exchange rates. On February 1967 the premium is in single digits for the first time.
December 10, 1970–August 23, 1971	Peg to US Dollar	Temporary unification.
August 23, 1971–June 1972	De facto crawling band to US Dollar/Parallel market	Band width is +/-5%. %. The official rate is pegged to US Dollar. There are multiple exchange rates
July 1972–December 1973	Freely falling/ De facto crawling band to US Dollar/Parallel market	Band width is +/-5%. %. The official rate is pegged to US Dollar. 1973 was the last year in which multiple rates are listed by the IMF.
January 1974–June 1974	Freely falling/ De facto crawling band to US Dollar/Parallel market	Band width is +/-5%. %. The official rate is pegged to US Dollar
July 1974–November 16, 1978	De facto crawling band to US Dollar/Parallel market	Band width is +/-5%. %. The official rate is pegged to US Dollar
November 16, 1978–July 1997	De facto crawling peg to US Dollar	Officially pegged to a basket of undisclosed currencies.
November 10, 1978–July 1997		Premium consistently below 20% and mostly in single digit

Notes: Reference currencies are the US Dollar and Yen.

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Date	Classification:	Comments
	Primary/Secondary/Tertiary	
March 13, 1932–March 1, 1933	Peg	Silver standard, the Rial replaced the Kran.
March 1, 1933–1945	Peg to Pound Sterling/Parallel Market	Reestablishment of foreign exchange controls.
1945–January 1954	Dual Market	There are multiple exchange rates.
February 1954–May 27,1957	De facto band around US Dollar/Dual Market	Band width is +/-2%. The US Dollar is the reference currency.
May 27, 1957–January 14, 1974	Peg to US Dollar	
January 14, 1974–December 1976	De facto band around US Dollar/Dual Market	Band width is +/-2%. On February 12, 1975 the Rial's links to the US Dollar were officially terminated and the currency was linked to the SDR.
January 1977–January 1994	Managed floating/Parallel Market	There are multiple exchange rates during 1978–1984 and again 1990–1994. Since January 1987, the parallel market premium is consistently above 1,000%. There is a major devaluation of the official rate in early 1993.
February, 1994–February 1996	Freely falling/Managed floating/Parallel Market	There are multiple exchange rates. After hitting a peak of 3,618% on February 1993, the parallel market premium settles around 50%.
March 1996–December 2001	Managed floating/Dual Market	Three rates reduced to two on March 31, 2000. The official rate is a de facto peg to the US Dollar during this period. Parallel market premium is consistently above 150% and occasionally above 200%.

Notes: Reference currency is the US Dollar. Iraq

Iraq		
Date	Classification:	Comments
	Primary/Secondary/Tertiary	
1900–1931	Arrangement with no separate legal	Egyptian Pounds and Indian Rupees circulate as legal
	tender	tender.
April 19, 1931–April 1, 1932	Peg	Gold Standard. Iraqui Dinar is introduced
April 1, 1932–June 23, 1959	Peg to Pound Sterling	Iraq withdrew from Sterling Area but continued to peg to
-		Pound Sterling.
June 23, 1959–June 23, 1972	De facto peg to Pound Sterling/Dual	
	Market	
July 3, 1972–December 1981	Peg to US Dollar	Parallel market premia is small during this period.
January 1982–December 1998	Managed floating/Parallel Market	There are multiple rates in 1982 and 1983. The official
		rate is pegged to the US Dollar. There is no data on market
		determined rates after this date.

Notes: Reference currency is the US Dollar. There is no price data. Ireland

Date	Classification: Primary/Secondary/Tertiary	Comments
August 20, 1927–September 26, 1931	Peg	Gold
September 26, 1931– March 30, 1979	Peg to Pound Sterling	Adherence to the Sterling area. On September 3, 1939 foreign exchange controls are introduced. The Irish Pound remains officially pegged to Pound Sterling but the "green pound" is applied to a variety of transactions. Until 1976, the IMF records a dual rate. However, parallel market premia is nil.
March 30, 1979–October 1996	De facto moving band around DM	Band width is +/- 2%.
November, 1996–January 1, 1999	De facto peg to DM	
January 1, 1999–December 2001	Currency union	Euro

Notes: Specifics on the common margins (snake) agreement, EMS, etc. are available from the detailed chronologies. Reference currencies are the DM, the Euro, the Pound Sterling, and the US Dollar.

Israel		
Date	Classification: Primary/Secondary/Tertiary	Comments
August 16, 1948–December 1950	Peg to Pound Sterling/Parallel Market	Creation of Israel Pound to replace Palestinian Pound (on May 14 1948 Israel became an independent state).
January 1951–January 1952	Freely falling	Parallel market premia rising steadily—it peaks in February 1952 at 678%.
February 17, 1952–February 1962	Multiple Rates/Parallel Market	Parallel market premia falls into double digits on July 1955. There are multiple rates.
February 1962–August 17, 1970	Peg to Pound Sterling	Beginning November 1963 parallel market premia remained mostly in single digits until August 1968.
August 17, 1970–September 1973	Managed floating/Parallel Market	There are multiple rates. The official rate is linked to the US Dollar.
October, 1973–October 28, 1977	Freely falling/Managed floating/Parallel Market	June 17, 1975–July 8, 1976 a crawling peg policy was announced for the official rate. Premium oscillates in the 20–70% range. There are multiple rates. On July 19, 1976 the Israeli Pound was officially linked to a basket of currencies.
October 28, 1977–September, 1985	Freely falling/Managed floating	Multiple rates abolished and the peg to a basket to a basket of currencies discontinued.
October, 1985-August 1986	Pre announced crawling band around US Dollar/ Freely falling	Band width is +/-2%. Inflation stabilization plan.
September 1986–December 1986	Freely falling/De facto crawling band around US Dollar	Band width is +/-2%. Inflation stabilization plan continues. Officially the Shekel is now pegged to a basket of currencies.
January 1986–January 3, 1989	De facto crawling band around US Dollar	Band width is +/-2%. Inflation stabilization plan continues. Officially the Shekel is now pegged to a basket of currencies.
January 3, 1989–March 1, 1990	Pre announced crawling band around US Dollar	Official band is +/-3% but there is a de facto band that is narrower +/-2%
March 1, 1990–January 1991	De facto crawling band around US Dollar	Official band width is $+/-5\%$ , but de facto band remains at $+/-2\%$ .
February 1991-December 2001	De facto crawling band around US Dollar	Officially, there is a pre announced crawling band around US Dollar Since July 26 1993, the upper limit is 6% and the lower is 2% since August 6, 1998. Hence it is an ever widening band, which was 39.2 % as of December 30, 2000. There is a de facto band width of $\pm -5\%$ .

Notes: Reference currency is the US Dollar. Italy

Italy		
Date	Classification: Primary/Secondary/Tertiary	Comments
March 29, 1936–June 1943	Multiple Rates	The reference currency is the US Dollar. On May 26, 1934 capital controls are introduced and convertibility is suspended.
June 1943– March 26, 1946	Freely falling/Multiple Rates	The part of Italy occupied by the Allied forces is pegged to the US Dollar, the rest pegs to the Reichsmark.
March 26, 1946–December 1947	Freely falling/Managed floating/Dual Market	There is an active free market and multiple rates. The parallel premia peaks on May 1947 at 41%.
February 1948–September 1951	Managed floating	There are multiple rates.
October 1951–December 29, 1958	De facto Peg to US Dollar	There are multiple rates. After April 1952parallel premium remains in single digits until 1973.
December 29, 1958–June 1, 1959	De facto peg to US Dollar/Dual Market	
June 1, 1959–1969	Peg to US Dollar	
1969–January 22, 1973	Peg to US Dollar/Parallel Market	
January 22, 1973–March 22, 1974	De facto crawling band around US Dollar /Dual Market	Band width is +/-2%.
March 22, 1974–September 1975	De facto crawling band around US Dollar	Band width is +/-2%. There are dual rates.
October 1975–December 1982	Managed floating	There are Dual rates. Different exchange rates arise for outward transfers of resident-owned capital.
January 1983–September 13, 1992	De facto crawling band around DM	Band width is +/-2%.
April 1976–September 13, 1992	De facto crawling band around DM	Band width is +/-2%.
September 13, 1992–March 1993	Freely falling	
April 1993–July 1995	De facto crawling band around DM	Band width is $+/-2\%$ .
August 1995–November 1996	De facto crawling peg to DM	
December 1996–January 1, 1999	De facto peg to DM	
January 1, 1999–December 2001	Currency union	Euro

Notes: Specifics on the common margins (snake) agreement, EMS, etc. are available from the detailed chronologies. Reference currencies are the DM, the Euro, the Pound Sterling, and the US Dollar.

Date	Classification: Primary/Secondary/Tertiary	Comments
March 1920-September 8, 1959	Peg to Pound Sterling	Jamaican Dollar is introduced.
September 8, 1959-January 17, 1973	Peg to Pound Sterling	The Jamaican Dollar replaces the Jamaican Pound
January 17, 1973–April 27, 1977	Peg to US Dollar	r · · · · · · · · · · · · · · · · · · ·
April 27, 1977–December 1977	Peg to US Dollar/Dual Market	
January 1978–May 9, 1978	Freely falling/Peg to US Dollar/Dual market	Parallel market premia hits a peak of 149% on January 1978
May 9, 1978–April 1979	Freely falling/Peg to US Dollar	
May 2, 1979–January 10, 1983	Peg to US Dollar	
January 10, 1983-November 1, 1989	De facto crawling band around US Dollar/Dual Market	Band width is +/-2%. Official rate remains pegged until October 1983.
November 1, 1989–September 17, 1990	Peg to US Dollar	
September 17, 1990–May 1992	Freely falling/De facto crawling band around US Dollar	
June 1992–December 1992	Freely falling/De facto peg to US Dollar	
January 1993-April 1993	De facto peg to US Dollar	
May 1993–September 1993	De facto crawling band around US Dollar	Band width is +/-5%.
October 1993–July 1996	De facto crawling band around US Dollar	Band width is +/-2%.
August 1996–December 2001	De facto crawling peg to US Dollar	
Notes: Reference currency is the US Doll		
Japan		
Date	Classification: Primary/Secondary/Tertiary	Comments
1933–September 1939	Peg to Pound Sterling	On July 1, 1932 foreign exchange controls are introduced. The official peg ended on September 1939.
December 29, 1941–	Peg to Reischsmark	
July, 1944-August 1945	Peg to Reischsmark/Freely falling	
August 1945–June 1946	Freely falling/Managed floating/Parallel market	There are multiple rates. Military exchange rate. Black market skyrocketed. Official yen 15 to a dollar—black market 875 to the dollar on February 1946 Inflation was 513% in 1946.
July 1949–April 25, 1949	Managed floating/Parallel Market	There are multiple rates.
April 25, 1949–May 11, 1953	De facto band around US Dollar/Parallel Market	Band width is +/-5%. Military rate abolished. Multiple rates temporarily unified. Official rate is pegged to the US Dollar. Parallel market premium oscillate in the 10–75% range.
May 11, 1953-March 1959	De facto band around US Dollar/Parallel Market	Band width is +/-5%. Official rate is pegged to the US Dollar.
April 1959–August 27, 1971	De facto band around US Dollar	Band width is +/-2%. Premium in parallel market remained in double digits through the spring of 1960. Official rate is
		pegged to the US Dollar.
August 27, 1971–December 20, 1971	Managed floating	pegged to the US Dollar.
August 27, 1971–December 20, 1971 December 20, 1971–February 12, 1973	Peg to US Dollar	pegged to the US Dollar.
August 27, 1971–December 20, 1971	Managed floating Peg to US Dollar De facto moving band around US Dollar	pegged to the US Dollar. Band width is +/-2%.

Reference currencies are the DM, the Euro, the Pound Sterling, and the US Dollar.

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
November 1, 1927–September 21, 1931	Peg	Gold Standard. Palestine Pound replaces Egyptian Piastre
September 21, 1931– July 1, 1950	Peg to Pound Sterling	Foreign exchange controls are introduced on September 21, 1939.
July 1, 1950–August 17, 1971	Peg to Pound Sterling	Dinar is introduced to replace Palestine Pound.
August 17, 1971–February 22, 1975	Peg to US Dollar	
February 22, 1975–September 1988	Peg to SDR	
October 1988–April 1989	Freely falling/De facto crawling band around US Dollar	Band width +/- 5%.
May 1989–July 31, 1989	De facto crawling band around US Dollar	Band width +/- 5%. Officially pegged to a basket of currencies
July 31, 1989–February 17, 1990	De facto crawling band around US Dollar/Dual Market	Band width +/- 5%.
February 17, 1990–December 1992	De facto crawling band around US Dollar	Band width +/- 5%.
		Officially pegged to a basket of currencies
March 1993–August 1995	De facto crawling peg to US Dollar	Except for the 1988–1992 period parallel premiums have
Contambor 1005 December 2001	De feste nes te UC Dellen	been nil.
September 1995–December 2001	De facto peg to US Dollar	

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
January 1991–June 1996	Freely falling/Freely floating/Multiple	Ruble is the legal tender until November 15, 1993 when
	exchange rates	the tenge was issued as the national currency.
		There is no price data before this date.
June 1996–December 2001	De facto crawling band around US	Band width is +/-2%.
	Dollar	

Notes: Reference currency is the US Dollar. Kenva

Kenya		
Date	Classification:	Comments
	Primary/Secondary/Tertiary	
January 1, 1922–September 14, 1966	Currency Board/Union	East African Shilling
	Ped to	
September 14, 1966–October 11, 1971	Peg Pound Sterling	
October 11, 1971–October 27, 1975	Peg to US Dollar	
October 27, 1975– December 1978	Peg to SDR	
December, 1978– December 1986	Peg to SDR	There are multiple exchange rates. De facto peg to the US
		dollar until August 1981-frequent devaluations versus
		SDR afterwards.
January 1987–September 1991	Managed floating	Officially pegged to a currency basket
October 1991–May 1994	Freely falling/Managed floating/Dual	Officially pegged to a currency basket. Parallel market
-	Market	premium peaked at 110% on December 1992.
May 1994–December 1995	Managed floating	There are multiple rates.
January 1996–December 2001	Managed floating	

Notes: Tanzania and Uganda were part of this currency union. Reference currencies are the SDR, the Pound Sterling, and the US Dollar.

Kuwait		
Date	Classification: Primary/Secondary/Tertiary	Comments
1959–April 1, 1961	Peg to Pound Sterling	Persian Gulf Rupee replaces Indian Rupee
April 1, 1961–April 1969	Dual Market/Currency board	Dinar is introduced and replaces Persian Gulf Rupee. No data on parallel market available.
May 1969–June 24, 1972	De facto peg to US Dollar/Dual Market	Parallel market premia is trivial.
June 24, 1972–March 17, 1975	Peg to US Dollar	
March 17, 1975–April 19, 1984	De facto moving peg to US Dollar	Officially pegged to a basket of currencies
April 9, 1984–August 12,1984	De facto moving peg to US Dollar/Dual Market	
August 12, 1984–December 2001	De facto Moving Peg to the US Dollar	Officially pegged to a basket of currencies,.

### **Kyrgyz Republic**

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
January, 1991–November 1999	Freely falling/Managed floating	There is no price data before this date.
December 1999–December 2001	De facto crawling band around US	Band width is +/-2%.
	Dollar	

<sup>1</sup> A twenty four-month window picks up the crawling band in late 1999 none is detected if the five-year window. Notes: Reference currency is the US Dollar.

Date Classification: Primary/Secondary/Tertiary		Comments
May 31, 1930-October 2, 1936	Peg	Gold Standard
October 2, 1936–December 1942	Peg to French Franc	Abandonment of the Gold Standard
September 9, 1939	Foreign Exchange Controls within Franc–Zone framework	
January 1943–December 1945	Peg to Yen	
December 1945–May 5, 1955	Peg to French Franc/Parallel Market	
May 5, 1955–October 10, 1958	Parallel Market	Kip replaces Indochina Piaster. There are multiple rates.
October 10, 1958–January 1, 1962	Peg to US Dollar	
January 1, 1962–January 1, 1964	Managed floating/Parallel Market	The official rate is pegged and there are periodic large devaluations.
January 1, 1964–April 3, 1972	Crawling band around US Dollar/Parallel Market	There are multiple rates. There are two currencies after March 1969.
April 3, 1972– March 28, 1973	Crawling band around US Dollar/ Parallel Market	Band width is +/-2%. Temporary unification of rates.
March 28, 1973–April 1988	Managed floating/Parallel Market	There are multiple rates.
May 1988–May 1990	Freely falling/Crawling band around US Dollar/Dual Market	Band width is +/-2%.
June 1990– September 31, 1995	Crawling band around US Dollar/Dual Market	Band width is +/-2%.
September 31, 1995–December 1996	Crawling band around US Dollar/Parallel Market	Band width is +/-2%. There was a short–lived unification of the rates.
January 1997–March, 2000	Freely Falling/Crawling band around US Dollar/Dual Market	Band width is +/-5%.
April 2000–December 2001 Dual Market		If a 24-month window is used a crawling +/-2% band is detected for this period for the official rate. There is no data for the paralllel rate.

Notes: Reference currencies are the French Franc and the US Dollar. No data on parallel market is available. Latvia

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
January, 1991–January 1994	Freely falling/Managed floating	There is no price data before this date. On July 20, 1992 the Lativian Ruble replaced the Russian Ruble. On October 19, 1993the Latvian lats became sole legal tender.
February 1994–August 1994	Peg to SDR/Freely falling	
September 1994–December 2001	Peg to SDR	
Notes: Reference currencies are the SE	R and the US Dollar	

Notes: Reference currencies are the SDR and the US Dollar. **Lebanon** 

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
June 24, 1928–October 1, 1936	Peg	Gold Standard
October 1, 1936–February 1944	Peg to French Franc	Suspension of Gold standard
February 1944–October 1946	Peg to Pound Sterling	
October 1946–June 1950	De facto band around US Dollar/Dual	Band width +/-5%. The Lebanese Pound replaces the
	Market	Lebanon–Syria Pound
July 1950–August 1975	De facto band around US Dollar/Dual	Band width is +/-2%. Official rate is applied to some
	Market	government transactions only.
September 1975–February 1984	De facto band around US Dollar/Dual	Band width +/-5%.
	Market	
March 1984–July 1991	Freely falling/Freely floating	On February 1, 1985 a second rate was used for the
		purpose of customs valuation of imports.
August 1991–February 1993	De facto crawling peg to US Dollar	
March 1993–December 2001	De facto peg to US Dollar	

Lesotho

Date	Classification:	Comments	
	Primary/Secondary/Tertiary		
1910–January 22, 1980	Exchange arrangement with no separate legal tender	South African Pound—then South african Rand.	
January 22, 1980–February 7, 1983	Peg to South African Rand/Dual Market	The Loti is introduced.	
February 7, 1983–September 2, 1985	Peg to South African Rand	No adjustments	
September 2, 1985–March 13, 1995	Peg to South African Rand/Dual Market		
March 13, 1995–December 2001	Peg to South African Rand	No adjustments	

Note: Lesotho is a member of the Southern Africa Customs Union, which also includes South Africa and Swaziland. Reference currency is the South African Rand.

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Lib	eria	

Date	Classification:	Comments	
	Primary/Secondary/Tertiary		
1822–January 1, 1944	Exchange rate arrangement with no	The US Dollar and the Pound Sterling co-circulate as legal	
	separate legal tender	tender.	
January 1, 1944–1988	Exchange rate arrangement with no	US Dollar, a limited number of coins circulate as well.	
	separate legal tender	British currency ceased to be legal tender.	
1988–October 30, 1997	Parallel Market/Multiple exchange	US Dollar, there are two notes issued the Liberty notes	
	rates	introduced in 1992 and the JJ Roberts notes printed in	
		1988–1992	
October 30, 1997– August 31, 1998	Peg to US Dollar	3,925% devaluation in the official rate and a re-peg until	
		August.	
August 31, 1998–December 2001	De facto crawling peg to US Dollar		
	but it is not possible to fully classify ar		
	there is no inflation data and this		
	period is a strong candidate for freely		
	falling.		

Notes: Reference currency is the US Dollar. Price data is not available since 1991.

#### Libyan Arab Republic

Date	Classification:	Comments		
	Primary/Secondary/Tertiary			
December 1927–1942	Peg to US Dollar	The French Franc and Pound Sterling also circulate. On		
		October 1, 1930 foreign exchange controls are introduced.		
1942–March 24, 1952	Exchange rate arrangement with no	The Algerian Francs, Egyptian Pound, and Military Lira		
	separate legal tender.	co-circulate.		
March 24, 1952– March 24, 1952	Peg to Pound Sterling/Parallel Market	The Syrian pound is introduced.		
March 24, 1952–November 1955	Managed floating	Check this vs. sterling		
December 1955–December 15, 1971	Peg to Pound Sterling/Dual Market			
December 15, 1971–April 18, 1981	Managed floating/Parallel Market	Libya ceases to be a member of the Sterling Area. The		
· · · ·		official rate is pegged to the US Dollar.		
April 18, 1981–March 18, 1986	Managed floating/Parallel Market			
March 18, 1986–May 1, 1986	Managed floating/Parallel Market	Band width is +/-5%. The Syrian Pound is Officially		
, , ,	5 5	pegged to the SDR.		
May 1, 1986–March 1992	De facto crawling band around US	Band width is +/- 5%. The official regime is a pre		
5 /	Dollar/Parallel Market	announced band around a central SDR parity, width is +/-		
		3.75%		
March 1992–July 1992	De facto crawling band around US	Band width is +/- 5%. The official regime is a pre		
	Dollar/Parallel Market	announced band around a central SDR parity, width is +/-		
		5.5%		
July 1992-August 1992	De facto crawling band around US	Band width is +/- 5%. The official regime is a pre		
5 6	Dollar/Parallel Market	announced band around a central SDR parity, width is		
		+/-6.75%. The parallel market premium is consistently		
		above 400%.		
August 1992-August 19, 1993	De facto crawling band around US	Band width is +/- 5%. The official regime is a pre		
8 8 9	Dollar/Parallel Market	announced band around a central SDR parity, width is		
		+/-8%. The parallel market premium is consistently above		
		400%.		
August 19, 1993–November 1, 1994	De facto crawling band around US	Band width is +/- 5%. The official regime is a pre		
<b>-</b>	Dollar/Parallel Market	announced band around a central SDR parity, width is		
		+/-12.5%. The parallel market premium is consistently		
		above 400%.		
November 1, 1994–October 31, 1998	De facto crawling band around US	Band width is +/- 5%. The official regime is a pre		
	Dollar/Parallel Market	announced band around a central SDR parity, width is +/-		
		21.5% The parallel market premium is consistently above		
		400%.		
October 31, 1998–February 14, 1999	De facto crawling band around US	Band width is +/- 5%. The official regime is a pre		
	Dollar/Parallel Market	announced band around a central SDR parity, width is		
		+/-38.75%.		
February 14, 1999–December 2001	Dual Market	Band width is +/- 5%. The official regime is a pre		
		announced band around a central SDR parity, width is		
		+/-38.75%. The parallel market was legalized.		

Notes: Reference currency is the US Dollar. Lithuania

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
January 1991–April 1995	Freely falling/Managed floating	On May 1, 1992 the Talonas was introduced as legal tender.
May 1995–April 1, 1994	De facto peg to US Dollar	
April 1, 1994–December 2001	Peg to US Dollar/Currency board	

Notes: Reference currency is the US Dollar.

Luxembourg			
Date	Classification:	Comments	
	Primary/Secondary/Tertiary		
April 1, 1935–May 1940	Peg to Belgian Franc	Capital controls are introduced	
May 1940–January 20, 1941	Peg to Reichsmark	Capital controls intensified	
January 20, 1941–September 4, 1944	Exchange rate arrangement with no	Reichsmark	
	separate legal tender		
September 4, 1944–July 18, 1955	Peg to US Dollar		
July 18, 1955–March 5, 1990	De facto peg to DM/Dual Market	Small parallel market premium.	
March 5, 1990–December 31, 1991	De facto peg to DM		
January 1, 1999–December 2001	Currency union	Euro	

Notes: Specifics on the common margins (snake) agreement, EMS, etc. are available from the detailed chronologies.

Macedonia

Date	Classification:	Comments			
	Primary/Secondary/Tertiary				
January 1993–December 1994	Freely falling	There is no price data before this date.			
January 1995–January 1, 1999	De facto crawling peg to DM				
January 1, 1999–January 2000	De facto crawling peg to Euro				
February 2000–December 2001	De facto band around Euro	Band width +/-2%.			
Notes: Reference currencies are the US Dollar, the DM and the Euro					

Notes: Reference currencies are the US Dollar, the DM and the Euro.

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Date	Classification: Primary/Secondary/Tertiary	Comments	
January 12, 1900–June 6, 1925	Exchange rate arrangement with no separate legal tender	French Franc	
June 6, 1925– February 8, 1944–	Peg to French Franc	Only notes issued by Banque de Madagascar et des Comores are sole legal tender.	
September 9, 1939	Exchange controls are introduced within Franc zone		
February 8, 1944– December 26, 1945	Peg to US Dollar and Pound Sterling	On March 19, 1941 incorporated in the Sterling Area	
December 26, 1945–December 1946	Peg to French Franc	Return to Franc Zone. CFA Franc is introduced.	
January 1947–December 1948	Peg to French Franc/Freely falling		
January 1949–July 1, 1963	Peg to French Franc		
July 1, 1963–September 4, 1971	Peg to French Franc	Malagasy Franc is introduced.	
September 4, 1971–August 6, 1973	Dual Market	Parallel market data is not available for this period.	
August 6, 1971–April 2, 1982	Peg to French Franc		
April 2, 1982–June 1985	De facto crawling band around French Franc	Band width is +/-2%.	
July 1985–April 1994	Managed floating	Officially pegged to a basket of currencies, frequent adjustments	
May 1994–October 1995	Freely falling/Managed floating	Despite the flexibility of the official rate, there is a parallel market with premium in double digits.	
November 1995–December 2001	Freely floating	See comment above.	

Notes: Formerly Malagasy Republic. Reference currencies are the French Franc and US Dollar. Malawi

Malawi		
Date	Classification:	Comments
	Primary/Secondary/Tertiary	
1891–1940	Exchange arrangement with no	Pound Sterling
	separate legal tender.	
1940– April 1, 1956	Peg to Pound Sterling/Currency Board	Southern Rhodesia Pound replaces British Pound
April 1, 1956–November 16, 1964	Peg to Pound Sterling/Parallel Market	Rhodesia and Nyasaland Pound replace Southern Rodesia
		Pound.
November 16, 1964–February 15, 1971	Peg to Pound Sterling/Parallel Market	Malawi Pound is introduced replacing the Rhodesia and
		Nyasaland Pound.
February 15, 1971–November 19, 1973	Peg to Pound Sterling/Parallel Market	Kwacha is Introduced to replace Malawi pound.
November 19, 1973- June 9, 1975	Managed floating	Official rate is pegged to a basket of undisclosed
		currencies.
June 9, 1975–January 17, 1984	Managed floating	Officially Pegged to SDR. Parallel premiums over 100% in
		1977 and again in 1982.
January 17, 1984–January 1994	Freely floating	Officially pegged to a basket of currencies
February 1994–December 1994	Freely falling/Freely floating	
January 1995–July 1997	Peg to US Dollar/Freely falling	Since early 1996 parallel market premia is in single digits.
August 1997–August 1999	Freely falling/Managed floating	
September 1999–December 2001	Managed floating	

Notes: Formerly Nyasaland. Reference currencies are the Pound sterling, the SDR and the US Dollar.

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Date	Classification:	Comments
	Primary/Secondary/Tertiary	
June 25, 1903–February 1906	Peg	Silver
February 1906–February 15, 1942	Peg to Pound Sterling	On September 18, 1939 foreign exchange controls are introduced.
February 15, 1942–September 2, 1945	Exchange rate arrangement with no separate legal tender.	Japanese military Yen (Gumpyo) are declared legal tender.
April 1, 1946–June 12, 1967	Peg to Pound Sterling	The Straits Dollar became known as the Malayan Dollar.
June 12, 1967–September 5, 1975	Peg to Pound Sterling	Malaysian Dollar, since renamed Ringgit, is introduced.
September 5, 1975–July 1997	De facto moving band around US Dollar	Band is +/-2%. Officially the ringgit is pegged to a basket of currencies
August 1997–September 30, 1998	Freely floating	
September 30, 1998–December 2001	Peg to US Dollar	

Notes: Reference currencies are the Pound sterling and the US Dollar.

Mali

### Central Bank of West African States are: Benin, Burkina Faso, Guinea–Bissau, Mali, Niger, Senegal, and Togo<sup>1</sup>

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
June 29, 1901- February 2, 1943	Peg to French Franc	Banque de l'Afrique Occidentale is allowed to issue bank notes. Exchange controls are introduced in Franc zone on September 9, 1939.
February 2, 1943– December 26, 1945	Peg to US Dollar and Pound Sterling	On December 1942 incorporated in the Sterling Area
December 26. 1945–January 26, 1948	Peg to French Franc/Currency union	Return to Franc Zone. The CFA Franc is introduced.
January 26, 1948–September 20, 1949	Dual Market	There is no parallel market data for this period.
September 20, 1949–July 2, 1962	Peg to French Franc/Currency union	
July 2, 1962–February 1967	Peg to US Dollar	Mali Franc replaces CFA Franc with Mali Franc, withdraws from Franc zone.
February 1967–September 9, 1971	Peg to French Franc/Currency union	
September 9, 1971–March 21, 1974	De facto Peg to the French Franc/Dual Market	Small parallel market premia.
March 21, 1974–January 1, 1999	Peg to French Franc	Mali joined WAMU on June 1, 1984.
January 1, 1999-December 2001	Peg to Euro	

Notes: reference currencies are the French franc and US Dollar. Malta

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
June 16, 1915–July 1949	Exchange rate arrangement with no separate legal tender	Pound Sterling
July 1949–July 8, 1972	Peg to Pound Sterling	The Malta Pound (also known as Malta Lira) is introduced.
		Pound sterling no longer legal tender.
July 8, 1972–December 1977	Moving band around Pound sterling	Pound Sterling, narrow. Officially pegged to a basket of
		currencies
January 1978–January 1, 1999	Moving band around DM	
January 1, 1999–December 2001	Moving band around Euro	

Notes: reference currencies are the Pound Sterling, US Dollar, DM, and Euro.

**Marshall Islands** 

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
1885-1919	Exchange rate arrangement with no	German Mark
	separate legal tender	
1919-1947	Exchange rate arrangement with no	Yen
	separate legal tender	
1947-2001	Exchange rate arrangement with no	US Dollar
	separate legal tender	

Mauritania

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
December 21, 1851	Peg to French Franc	Banque du Senegal began to issue bank notes.
June 29, 1901	Peg to French Franc	Banque de l'Afrique Occidentale is allowed to issue bank notes.
September 9, 1939	Exchange controls are introduced in Franc zone	
February 2, 1943– December 26, 1945	Peg to US Dollar and Pound Sterling	On December 1942 incorporated in the Sterling Area
December 26, 1945–September 1, 1973	Peg to French Franc/Parallel Market	CFA Franc is introduced.
September 1, 1971–June 29, 1973	De facto peg to French Franc/Dual Market	Small parallel market premium.
June 29, 1973–January 22, 1974	Peg to French Franc/Parallel Market	The introduction of the Ouguiya unified the market.
January 22, 1974–October 1983	De facto crawling band around US Dollar/Parallel Market	Band width +/-2%. Officially pegged to a basket of currencies
November 1983–October 18, 1992	De facto crawling band around US Dollar/Parallel Market	Band width is +/-5%. Officially pegged to a basket of currencies. Premia in parallel market reached 257% in August 1992—prior to the October devaluation.
October 18, 1992–August 1994	De facto crawling peg to US Dollar/Dual Market	
September 1994–December 31, 1995	De facto crawling band around US Dollar/Dual Market	Band width +/-2%. Since May 1995 parallel market premium is in single digits.
December 31, 1995–December, 2001	De facto crawling band around US Dollar	Band width +/-2%. Markets are unified.

<sup>1</sup> During September 28, 1978–March 4, 1980, linked to the French Franc for banknote transactions. Notes: Formerly Senegal. Reference currencies are the French Franc and US Dollar. Mauritius\_\_\_\_\_

Iviauritius		
Date	Classification:	Comments
	Primary/Secondary/Tertiary	
1878–1934	Exchange rate arrangement with no	Indian Rupee
	separate legal tender	
1934– November 21, 1967	Peg to Pound Sterling/Currency board	The Mauritian Rupee was introduced.
November 21, 1967–January 5, 1976	Dual Markets	Link to Pound Sterling is maintained. There is no data for
		the free market rate for this period.
January 5, 1976–May 1982	De facto crawling band around US	Officially pegged to SDR until February 28, 1983. Band
	Dollar for official rate/Dual Market	width is +/-2%. Parallel market data begins in 1985.
June 1982–January 1993	De facto crawling band around US	Band width is +/-5%. Officially pegged to a basket of
-	Dollar	currencies
November 1992–December 2001	De facto crawling band around US	Band width is +/-2%
	Dollar	

Notes: Reference currencies are the Pound Sterling, the SDR and the US Dollar.

Mexico
MICAICO

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
July 1933–May 1945	Peg to US Dollar	Premium in parallel market is nil.
May 1945-December 1946	Peg to US Dollar/freely falling	Premium in parallel market is nil until March 1976—by August it had reached 100%.
January 1947–September 1, 1976	Peg to US Dollar	Premium in parallel market is nil until March 1976—by August it had reached 100%.
September 1, 1976–February 1977	Managed floating	
March 1977–April 1981	De facto peg to US Dollar	
May 1981–January 1982	De facto crawling peg to US Dollar	
February 18, 1982–March 1 1988	Freely falling/Managed floating/Dual Market	The parallel market premia oscillates in the 15–100% range.
March 1, 1988–December 1988	Freely falling/Peg to US Dollar/Dual Market	Official rate is pegged during this period. Parallel market premium has declined to low single digits.
December 1988–November 11, 1991	Crawling Peg/Dual Market	
November 11, 1991–April 1992	De facto crawling peg to US Dollar	The rates were unified in November 1991. The official arrangement was an ever widening crawling band (see below).
May 1992–January 1994	De facto peg to US Dollar	Officially three is a band. The annualized rate of crawl of the upper limit of the band is 2.4% through October 20, 1992 and 4.7% through June 30, 1993.
February 1994–December 22, 1994	Pre announced crawling band around US Dollar	Pre-announced band becomes binding
December 22 1994–March 1996	Freely falling/Freely floating	In December 1994 the parallel market premia jumped to 27% from single digits.
April 1996–December 2001	Managed floating	
Notes: Reference currency is US Dolla	r.	
Moldova		r
Date	Classification:	Comments
x 1001 F1 1005	Primary/Secondary/Tertiary	
January 1991–February 1995	Multiple Rates/Freely falling	There is no price data before this date. On November 29, 1993 the Leu replaces the Ruble.
	De facto Peg	
June 1998–February 2000	Freely falling/Managed floating	
June 1998–February 2000 March 2000–December 2001	Freely falling/Managed floating De facto peg	
June 1998–February 2000 March 2000–December 2001 Notes: Reference currency is US Dolla	Freely falling/Managed floating De facto peg	
March 1995–May 1998 June 1998–February 2000 March 2000–December 2001 Notes: Reference currency is US Dolla Micronesia, Federated States	Freely falling/Managed floating De facto peg r.	
June 1998–February 2000 March 2000–December 2001 Notes: Reference currency is US Dolla	Freely falling/Managed floating De facto peg r. Classification:	Comments
June 1998–February 2000 March 2000–December 2001 Notes: Reference currency is US Dolla Micronesia, Federated States Date	Freely falling/Managed floating De facto peg r.	Comments There is no price data before this date. On November 29,
June 1998–February 2000 March 2000–December 2001 Notes: Reference currency is US Dolla Micronesia, Federated States Date January 1991–February 1995	Freely falling/Managed floating De facto peg r. Classification: Primary/Secondary/Tertiary	Comments
June 1998–February 2000 March 2000–December 2001 Notes: Reference currency is US Dolla Micronesia, Federated States Date January 1991–February 1995 March 1995–May 1998 June 1998–February 2000	Freely falling/Managed floating De facto peg r. Classification: Primary/Secondary/Tertiary Multiple Rates/Freely falling	Comments There is no price data before this date. On November 29,
June 1998–February 2000 March 2000–December 2001 Notes: Reference currency is US Dolla Micronesia, Federated States Date January 1991–February 1995 March 1995–May 1998 June 1998–February 2000 March 2000–December 2001	Freely falling/Managed floating         De facto peg         r.         Classification: Primary/Secondary/Tertiary         Multiple Rates/Freely falling         De facto Peg         Freely falling/Managed floating         De facto peg	Comments There is no price data before this date. On November 29,
June 1998–February 2000 March 2000–December 2001 Notes: Reference currency is US Dolla Micronesia, Federated States Date January 1991–February 1995 March 1995–May 1998 June 1998–February 2000 March 2000–December 2001	Freely falling/Managed floating         De facto peg         r.         Classification: Primary/Secondary/Tertiary         Multiple Rates/Freely falling         De facto Peg         Freely falling/Managed floating         De facto peg	Comments There is no price data before this date. On November 29,
June 1998–February 2000 March 2000–December 2001 Notes: Reference currency is US Dolla Micronesia, Federated States Date January 1991–February 1995 March 1995–May 1998 June 1998–February 2000 March 2000–December 2001 Notes: Reference currency is US Dolla Mongolia	Freely falling/Managed floating         De facto peg         r.         Classification: Primary/Secondary/Tertiary         Multiple Rates/Freely falling         De facto Peg         Freely falling/Managed floating         De facto peg         r.	Comments There is no price data before this date. On November 29, 1993 the Leu replaces the Ruble.
June 1998–February 2000 March 2000–December 2001 Notes: Reference currency is US Dolla Micronesia, Federated States Date January 1991–February 1995 March 1995–May 1998 June 1998–February 2000 March 2000–December 2001 Notes: Reference currency is US Dolla Mongolia Date	Freely falling/Managed floating         De facto peg         r.         Classification: Primary/Secondary/Tertiary         Multiple Rates/Freely falling         De facto Peg         Freely falling/Managed floating         De facto peg         r.         Classification: Primary/Secondary/Tertiary         Classification: Primary/Secondary/Tertiary	Comments There is no price data before this date. On November 29, 1993 the Leu replaces the Ruble. Comments
June 1998–February 2000 March 2000–December 2001 Notes: Reference currency is US Dolla Micronesia, Federated States Date January 1991–February 1995 March 1995–May 1998 June 1998–February 2000 March 2000–December 2001 Notes: Reference currency is US Dolla Mongolia Date February 1991–May 27, 1993	Freely falling/Managed floating         De facto peg         r.         Classification: Primary/Secondary/Tertiary         Multiple Rates/Freely falling         De facto Peg         Freely falling/Managed floating         De facto peg         r.         Classification: Primary/Secondary/Tertiary         Classification: Primary/Secondary/Tertiary         Freely floating/Dual Market	Comments There is no price data before this date. On November 29, 1993 the Leu replaces the Ruble.
June 1998–February 2000 March 2000–December 2001 Notes: Reference currency is US Dolla Micronesia, Federated States Date January 1991–February 1995 March 1995–May 1998 June 1998–February 2000 March 2000–December 2001 Notes: Reference currency is US Dolla Mongolia Date	Freely falling/Managed floating         De facto peg         r.         Classification: Primary/Secondary/Tertiary         Multiple Rates/Freely falling         De facto Peg         Freely falling/Managed floating         De facto peg         r.         Classification: Primary/Secondary/Tertiary         Classification: Primary/Secondary/Tertiary	Comments There is no price data before this date. On November 29, 1993 the Leu replaces the Ruble. Comments

### Monaco

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
1925-December 2001	Exchange rate arrangement with no	French Franc
	separate legal tender	

Date	Classification:	Comments
D 1 20 1024 1020	Primary/Secondary/Tertiary	
December 30,1924–1939	Peg to French Franc	Capital controls are introduced in Franc-Zone
November 1942–December 6, 1944	Peg to Pound Sterling and US Dollar	
December 6, 1944–December 1944	Peg to French Franc	Return to Franc Zone.
January 1945–December 1948	Peg to French Franc/Freely falling	
January 1949–October 17, 1959	Peg to French Franc	
October 17, 1959–May 17, 1973	Peg to French Franc	The Dirham replaced the Moroccan Franc
May 17, 1973–December 1985	Moving band around French Franc	Band width is +/-2%. Officially pegged to a basket of currencies. Dual rates, parallel market premia is trivial.
January 1986–January 1, 1999	Moving band around French Franc	Band width is +/-2%. Officially pegged to a basket of currencies.
January 1, 1999–December 2001	Moving band around Euro	Band width is +/-2%. Officially pegged to a basket of currencies.
Notes. The reference currencies are the <b>Myanmar</b>	French Franc, the US Dollar, and the Euro.	
Date	Classification:	Comments
Date	Primary/Secondary/Tertiary	Comments
April 1, 1937–1943	Peg to Pound Sterling	Burmese Rupee is introduced. Indian Rupee is no longer legal tender after 1939.
1943–1945	Peg to Yen	
1945–July,1952	Peg to Pound Sterling	
July 1952–July 1972	Peg to Pound Sterling	Kyat replaces Burmese Rupee
August 1972–July 1, 1974	Peg to Pound Sterling/Freely falling	There are multiple rates. These are taxes on the purchases of Sterling and US Dollar.
July 1, 1974–January 25, 1975	Freely falling/Managed floating/Parallel Market	
January 25, 1975–February 1976	Freely Falling/ Moving band around US Dollar/Parallel market	The official rate for the Kyat is linked to the SDR.
March 1976–April 1983	Moving band around US Dollar/Parallel market	Band width is +/-5%.
May 1983–March 1986	Managed floating/Parallel market	The official rate is pegged to the SDR. Parallel market premium oscillates in the 20–35% range.
April 1986–March 1988	Moving band around US Dollar/Parallel market	The official rate is pegged to the SDR. There is break in the data for the parallel rate from April 1987 to December 1988.
April 1988–May 1991	Freely falling/Moving band around US Dollar/Parallel market	Band width is +/-5%. Parallel market premia double during this period from about 45% to 90%. Although the official rate fas not be devalued versus the SDR since 1977 there are periodic bouts of inflation.
June 1991–December 1992	Moving band around US Dollar/Parallel market	Band width is +/-5%. Official rate is pegged to the SDR
January 1993–January, 1994	Freely falling/Moving band around US Dollar/Parallel market	Band width is +/-5%.
February 1994–July 1996	De facto moving band around US Dollar/Parallel market	Band width is +/-5%. Official rate is pegged to the SDR.
August 1996–January 1999	Freely falling/De facto moving band around US Dollar/Dual Market	The official rate remains pegged to the SDR. Parallel market premia is consistently above 100% and reached 294% in July 1997. An unofficial parallel market also exits.
February 1999–December 2001	Dual Market	There is no data for the period for the parallel rate. Officially pegged to the SDR. An unofficial parallel marke also exits.

Notes: Formerly Burma. Reference currencies are US Dollar and SDR.

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Date	Classification:	Comments
	Primary/Secondary/Tertiary	
19 <sup>th</sup> century–1945	Exchange rate arrangement with no	Indian Rupee
	separate legal tender.	
1945–August 1958	Managed floating	First issuance of the Nepalese Rupee. Indian Rupee is also
		accepted as legal tender.
August 1958–October 17, 1966	Peg to Indian Rupee	
October 17, 1966–December 1973	Peg to Indian Rupee	Indian Rupee is no longer accepted as legal tender.
January 1974–March 30, 1978	Peg to Indian Rupee	There are multiple rates.
March 30, 1978–September 19, 1981	De facto crawling band around US	Band width is +/-5%. There are multiple rates. An official
	Dollar/Dual Market	rate is pegged to the US Dollar.
September 19, 1981–March 4, 1992	De facto crawling band	Band width is $+/-2\%$ .
	Around US Dollar	
March 4, 1992–February 12, 1993	De facto crawling band around US	Band width is +/-5%. An official rate is pegged to the US
	Dollar/Dual Market	Dollar November 1992.
February 12, 1993–June 1995	Peg to US Dollar	While the official rate is pegged, parallel market premia
		oscillate in the 10–20% range.
July 1995–December 2001	De facto crawling band	Band width is +/-2%. There are sub periods where the
	around US Dollar	exchange rate is pegged interspersed with moderate
		devaluations. Since September 1997 parallel market premia
		have remained in single digits.

Notes: Reference currencies are the US Dollar and Indian Rupee. Netherlands

Netherlands		
Date	Classification:	Comments
	Primary/Secondary/Tertiary	
May 10, 1940-September 14, 1944	Peg to Reichsmark	
September 14, 1944–August 1950	Managed floating/Parallel market	The official rate is pegged to the US Dollar. Parallel market premium peaks at 154% on November 1946 and remains in double digits through early 1952.
September 1950–November 1952	De facto band around US Dollar	Band width is +/-2%.
December 1952–May 9, 1971	Peg to US Dollar	
May 9, 1971–May 1974	De facto crawling band around DM	Band width is $+/-2\%$ .
June 1974–February 1983	De facto crawling peg around DM	
March 1983–January 1, 1999	De facto peg around DM	One currency crash versus the dollar on March 1991, none versus the DM.
January 1, 1999–December 2001	Currency union	Euro

Notes: Specifics on the common margins (snake) agreement, EMS, etc. are available from the detailed chronologies. Notes: Reference currencies are the US Dollar, the DM, and the Euro.

New Zealand

Date	Classification: Primary/Secondary/Tertiary	Comments
September 21,1931–July 10, 1967	Peg to Pound Sterling	Adherence to Sterling Area, On December 1938 foreign exchange controls were introduced. Parallel market premia is trivial since the data was collected beginning in 1947.
July 10, 1967–December 23,1971	Peg to Pound Sterling	New Zealand Dollar replaces New Zealand Pound
December 23,1971–July 9, 1973	Peg to US Dollar	Parallel market premia never exceeded 4% right after WWII and has been nil since.
July 9, 1973– March 4, 1985	De facto moving band around Australian Dollar	Band width is +/-2%.
March 4, 1985–December 2001	Managed floating	

Notes: Reference currencies are the US Dollar, the Australian Dollar, and the Pound Sterling.

Nicaragua
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Date	Classification:	Comments
	Primary/Secondary/Tertiary	
January 1931–October 20, 1950	Peg to US Dollar	
October 20, 1950–March 1, 1963	De facto band around US Dollar/Dual Market	There are multiple rates. Band width is +/-5%.
March 1, 1963–December 1969	Peg to US Dollar	
January 1970–November 16, 1974	De facto band around US Dollar/Parallel market	There are multiple rates. Band width is +/-2%.
November 16, 1974–September 8, 1978	Peg to US Dollar	
September 8, 1978–April 6, 1979	De facto band around US Dollar /Dual Market	Band width is +/-2%.
April 6, 1979–August 1982	Freely floating/Dual Market	There are multiple rates. The parallel market premium oscillates between 20–300%.
September 1982–April 30, 1991	Freely falling/Freely floating/Dual Markets	There are multiple rates. The period from June 1986–July 1987 registers as a "hyperfloat." On November 1987 the parallel premium hit its historic high of 11,329%. On February 15, 1988 the new Cordoba replaced the old Cordoba. Inflation peaks at 63, 776%.
April 30, 1991–February 1992	Peg to US Dollar/Freely falling	In the early stages of the peg inflation was as high as 24,293%.
March 1992–December 1992	Peg to US Dollar	
January 1993–December 2001	Crawling peg to US Dollar	Since 1995, the parallel market premia has all but disappeared.

# Notes: Reference currency is the US Dollar. Niger Central Bank of West African States: Benin, Burkina Faso, Cote D'Ivoire, Guinea–Bissau, Mali, Niger, Senegal, and Togo<sup>1</sup>

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
June 29, 1901- February 2, 1943	Peg to French Franc	Banque de l'Afrique Occidentale is allowed to issue bank notes. Exchange controls are introduced in Franc zone on
		September 9, 1939.
February 2, 1943– December 26. 1945	Peg to US Dollar and Pound Sterling	On December 1942 incorporated in the Sterling Area
December 26. 1945– May 12, 1962	Peg to French Franc	Return to Franc Zone. The CFA Franc is introduced.
September 20, 1949–	Peg to French Franc	
May 12, 1962–September 9, 1971	Peg to French Franc	Creation of the Central Bank of West African States
September 9, 1971–March 21, 1974	De facto peg to French Franc/Dual Market	Low parallel premium.
March 21, 1974–	Peg to French Franc	
January 1994–January 1995	Peg to French Franc/Freely falling	One 100% devaluation.
January 1995–January 1, 1999	Peg to French Franc	
January 1, 1999–December 2001	Peg to Euro	

<sup>1</sup> Mali joined the currency arrangement at a later date. Note: Reference currencies are the French Franc and the Euro

Nigeria

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
1916–July 1, 1959	Peg to Pound Sterling/Currency board	West Africa Pound is introduced.
July 1, 1959– August 23, 1971	Peg to Pound Sterling	Nigerian Pound is issued to replace West Africa Pound.
August 23, 1971–November 1, 1971	Managed floating/Dual Market	The official rate is pegged to the Pound.
November 1, 1971–January 1, 1973	Managed floating/Parallel market	The link to the Pound is severed and the official rate is now pegged to the US Dollar. The official dual market was abolished but an active parallel market continued.
January 1, 1973–April 1, 1974	Managed floating/Parallel market	The Naira replaces the Nigerian Pound. The link to the US Dollar for the official rate is discontinued and the official rate is a pegged to the a basket of currencies. Parallel market premia are in the 30–100% range.
April 1, 1974–February 1983	Managed floating	The Naira is officially pegged to a basket of currencies
April 1983–September 1984	Freely falling/Managed floating/Parallel market	From August 1983 to May 1984, the official rate is pegged to the US Dollar. On December 1983 the parallel market premium reached 457%.
September 29, 1985–January 1987	Managed floating/Dual Market	The official rate applied to only some government transactions.
February 1987–December, 1989	Freely floating/Freely falling/Dual Market	
January 1990–May 1991	Managed floating/Dual Market	
June 1991–March 1996	Freely falling/Managed floating//Dual Market	The official rate is pegged to the US Dollar.
April 1996–December 2001	Managed floating/Dual Market	Through December 1998, the official rate is pegged to the US Dollar. The parallel market premium is consistently above 250% through December 1998. On January 1999 the Naira was devalued by 291%.

Notes: Reference currencies are the US Dollar and the Pound Sterling. Norway

Date	Classification: Primary/Secondary/Tertiary	Comments
September 28, 1931–August 29, 1939	Peg to Pound Sterling	Suspension of gold standard, joined the Sterling Area.
April 1940–May 16, 1945	Peg to Reichsmark	
May 16, 1945–March 1954	De facto band around US Dollar/Parallel market	Band width is +/-5%. The official rate is pegged to the US Dollar. Parallel market premium climbs to 86% on December 1948.
April 1954–April 1956	De facto band around US Dollar/Parallel market	Band width is +/-2%. Substantially lower premium in the parallel market in this period—the peak is 13%.
May 1956–1967	Peg to US Dollar	
1967– March 19, 1973	Peg to US Dollar	A second rate—the Investment Dollar Krone is introduced.
March 19, 1973–June 1982	Moving band around DM	Band width is +/-2%.
July 1982–June 1987	Managed floating	Officially pegged to a basket of currencies
July 1987–December 10, 1992	Moving band around DM	Band width is +/-2%. December 1992 does not register as a currency crash.
December 10, 1992–December 2001	Managed floating	

Notes: Specifics on the common margins (snake) agreement, EMS, etc. are available from the detailed chronologies. Reference currencies are the US Dollar, the DM, and the Euro.

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Date	Classification:	Comments
	Primary/Secondary/Tertiary	
April 1, 1948–January 15, 1959	Peg to Pound Sterling	Pakistan Rupee is introduced. On June 1954 premium in parallel market reached 103%.
January 15, 1959– September 17, 1971	Multiple rates/Parallel Market	The Rupee is linked to the Pound Sterling
September 17, 1971–January 8, 1982	Peg to US Dollar/Parallel Market	In December 1971 the parallel market premium peaks at 212%.
January 8, 1982–January 1984	De facto crawling peg to the US Dollar/Parallel Market	
February 1984–August 1989	De facto crawling band around the US Dollar/Parallel Market	Band width is $+/-2\%$ . If the parallel rate is used the band width is $+/-\%5\%$ .
September 1989–April 1991	De facto crawling peg/Parallel Market	
May 1991–April 1994	De facto crawling band around the US Dollar/Parallel Market	Band width is $\pm/-2\%$ . If the parallel rate is used the band width is $\pm/-\%5\%$ . From August 1993 through May 1998 the parallel market premium is in single digits.
May 1994–July 22, 1998	De facto crawling peg/Parallel Market	A more precise description of the post–November 1996 period is mini pegs lasting a few moths interspersed with a regular devaluation.
July 22, 1998–May 19, 1999	De facto crawling band/Dual Market	Band width is $\pm -2\%$ (on the basis of the parallel market rate). There are multiple rates.
May 19, 1999–August 2000	De facto crawling peg/Parallel Market	
September 2000–December 2001	De facto crawling band/Parallel Market	Band width is +/-2%.
Notes: Reference currency is the US Dol Panama	lar.	
Date	Classification:	Comments
Datt	Primary/Secondary/Tertiary	Comments
June 27, 1904–December, 2001	Exchange rate arrangement with no separate legal tender	US Dollar
Notes: Reference currency is the US Dol		
Paraguay		~
Date	Classification: Primary/Secondary/Tertiary	Comments
1903–March 1923	Peg to Argentine Gold Peso	
March 1923–October 5, 1943	Peg to Argentine Paper Peso	
October 5, 1943–December 18, 1946	Peg to Argentine Paper Peso	Guarani replaces Paraguayan Peso
December 18, 1946–November 5, 1949	Peg to US Dollar	Suurum replaces rungaayan ress
November 5, 1949–August 12, 1957	De facto band around US Dollar	Band width is +/-5%. There are multiple exchange rates. In September 1951 the parallel premium rose to 500%.
August 12, 1957–October 1960	De facto peg to the US Dollar/Dual Market	Parallel market premium in single digits during this period
October 1960–July 23, 1973	De facto band around US Dollar/Parallel Market	Band width is +/- 2%. The official rate is pegged to US Dollar.
July 23, 1973–August 1981	De facto band around US Dollar/Parallel Market	Band width is +/- 5%. There are multiple exchange rates.
September 1981–March 1985	Managed floating/Parallel market	Official rate is still pegged to the US Dollar. Parallel market premia begins its ascent in late 1982 and reaches 257% ion October 1983.
April 1985–April 1986	Freely falling/Freely floating/Parallel market	There are multiple exchange rates.
May 1986–February 27, 1989	De facto crawling band around US Dollar/Parallel market	There are multiple exchange rates. Band width is $+/-5\%$ . The peg of the official rate to the US Dollar is terminated.
February 27, 1989–January 1991	Freely falling/De facto crawling band around US Dollar	Unification and float. Band width is +/-5%. Despite unification parallel market premia do not decline into single digits until March 1996.
February 1991–June 1999 July 1999–December 2001	De facto crawling peg to US Dollar De facto crawling band around US	Band width is +/-5%, PPP rule

Peru Date	Classification:	Comments
Date	Primary/Secondary/Tertiary	Comments
February 1930–October 1946	Peg to US Dollar	
November 1946-September 7, 1948	Peg to US Dollar/Freely falling	
September 7, 1948–May 1959	De facto crawling band around US	Band width is +/- 5%. There are multiple exchange rates.
September 7, 19 10 10 10 19 19 09	Dollar	An official rate is pegged to the US Dollar.
May 1959–May 17, 1960	Peg to US Dollar	There are multiple exchange rates.
May 17, 1960–October 5, 1967	Peg to US Dollar	
October 5, 1967–June 1971	De facto band around US Dollar/Dual	Band width is +/- 5%. On May 16, 1970 capital controls
	Market	are reintroduced. An official rate is pegged to the US
		Dollar.
July 1971–August 1975	Dual Market/Freely floating	An official rate is pegged to the US Dollar.
September 1975–October 7, 1977	Freely falling/Freely floating	There are multiple exchange rates.
October 7, 1977–December 13, 1977	Freely falling/Freely floating	There is a short-lived unification of exchange rates.
May 10, 1978–February 29, 1984	Freely Falling/Freely floating/Parallel market	There are multiple exchange rates. There was a short–lived unification of rates in 1982. There was a pre–announced crawling peg during this period.
February 29, 1984- August 2, 1986	Freely falling/Freely floating	The crawling peg policy is abandoned. There are multiple rates. An official rate is pegged to the US Dollar from September 1985 to December 1986 and again from January 1988 to August 1988. On February 1, 1985 the Inti replaced the Sol.
August 2, 1986–December 2, 1986	Freely falling/Freely floating	Yet another short-lived unification.
December 2, 1986–August 9, 1990	Freely falling/Freely floating	There are multiple exchange rates. Parallel market
		premium hits 1, 067% in August 1988—September 1988 classifies as a "hyperfloat." The 12–month rate of inflation reaches 12, 378%.
August 9, 1990–November 1993	Freely falling/Freely floating	Unification of rates.
November 1993–March 1999	De facto crawling band around US Dollar	Band width is +/-2%. Parallel market premium in single digits.
April 1999–December 2001	De facto peg to US Dollar	
Notes: Reference currency is the US Doll <b>Philippines</b>	ar.	·
Date	Classification:	Comments
Dutt	Primary/Secondary/Tertiary	
March 2, 1903–1942	Peg to US Dollar	
1942–1945	Peg to Yen/Freely falling	Circulation of Gumpyo, or Military Yen
1945–	Managed floating	The official rate is re-pegged at the same US Dollar parity
1775	Wanaged Hoating	as in 1903.
March 1950–April 25, 1960	De facto crawling band around US Dollar	Band width is +/-5%. The official rate remains pegged to the US Dollar.
April 25, 1960–November 7, 1965	De facto peg to US Dollar	There are multiple exchange rates. After reaching a peak of 124% in January 1962, parallel market premia settles in single digits.
November 7, 1965–February 21, 1970	Peg to US Dollar	
February 21, 1971–December 31, 1972	De facto crawling band around US Dollar/Dual Market	Band width is +/-5%. The official rate is pegged to the US Dollar.
December 31, 1972–September 1983	De facto crawling band around US Dollar/Parallel Market	Band width is +/-5%. The official rate is pegged to the US Dollar.
October 1983–October 15, 1984	Freely falling/Managed floating/parallel market	The official rate remains pegged to the US Dollar. Parallel market premia reaches 50% on January 1984, From June 1984 to October there were multiple rates.
October 14, 1984–February 1985	Freely falling/Managed floating	The Philippine peso's official link with the US Dollar is ended.
March 1985–April, 1992	De facto crawling peg to US Dollar	
May 1992–April 1993	De facto band around US Dollar	Band width is +/-2%.
May 1993–August 1995	De facto band around US Dollar	Band width is +/-5%.
September, 1995–June 1997	De facto peg to US Dollar	
September, 1995–June 1997 July 1997–December 1997	De facto peg to US Dollar Freely falling/Freely floating	Parallel market premia peaked at 17% on July 1997.

Date	Classification:	Comments	
Lauran 1000 March 15 1000	Primary/Secondary/Tertiary	There are multiple acted	
January 1988– March 15, 1989	Freely falling/Freely floating	There are multiple rates.	
March 15, 1989–January 1, 1990	Freely falling/ Freely floating/Dual Market	Parallel market is legalized.	
January 1, 1990-May 17, 1991	Freely falling/Dual Market	Official rate is pegged to US Dollar.	
May 17, 1991–April 1993	Freely falling/Dual Market	Official rate is set as a pre announced crawling peg to US Dollar.	
May 1993–May 16, 1995	Dual Market	Official rate is set as a pre announced crawling peg to US Dollar. There is no parallel market data for this period.	
May 16, 1995–February, 25, 1998	De facto crawling band around Euro	De facto band width is $+/-5\%$ . There is a pre announced crawling band around the DM and US Dollar that is $+/-7\%$ .	
February 25, 1998–October 29, 1998	De facto crawling band around Euro	De facto band width is $+/-5\%$ . There is a pre announced crawling band around the DM and US Dollar that is $+/-10\%$ .	
October 29, 1998–March 24, 1999	De facto crawling band around DM/Euro	De facto band width is $+/-5\%$ . There is a pre announced crawling band around the DM and US Dollar that is $+/-12.5\%$ .	
March 24, 1999–April 12, 2000	De facto crawling band around Euro	De facto band width is $+/-5\%$ . There is a pre announced crawling band around the DM and US Dollar that is $+/-15\%$ .	
April 12, 2000–December 2001	Managed floating		
Notes: Reference currencies are the US		•	
Portugal			
Date	Classification:	Comments	
	Primary/Secondary/Tertiary		
April 28, 1928- November 14, 1939	Peg to Pound Sterling		
November 14, 1939–March 19, 1973	Peg to US Dollar		
March 19, 1973–February 1981	De facto crawling band around DM	Band width +/-5%. The parallel premia shot up in August 1975 to 67% and again in February 1977ahead of large depreciations.	
February 1981–August 1993	De facto crawling band around DM	Band width is +/-2%.	
September 1992–June 1993	De facto crawling peg to DM		
July 1993–January 1, 1999	De facto peg to DM		
January 1, 1999–December 2001	Currency union	Euro	
Notes: Reference currencies are the US <b>Romania</b>	Dollar, the DM, and the Euro.		
Date	Classification:	Comments	
	Primary/Secondary/Tertiary		
July 1957–January 1990	Dual Market	There are multiple exchange rates—25 rates were applied to exports alone. On July 1, 1983 the number of rates was reduced to two.	
February 1990–November 11, 1991	Freely falling/Freely floating/Dual Market	CPI data available only from October 1989	
November 11, 1991–March 2001	Freely falling/Freely floating		
April 2001–December 2001	De facto crawling band	Band width is +/-5%.	
Notes: Reference currencies are the DM <b>Russian Federation</b>	, the Euro, and the US Dollar.		
Date	Classification: Primary/Secondary/Tertiary	Comments	
January, 1992–June 1, 1995	Freely falling/ Market	There is no price data before this date.	
July 6, 1995–July 1996	Freely falling/ Market	Pre announced crawling band around US Dollar for the official rate.	
1 1006 1 17 1000	Dual Market	Pre announced crawling band around US Dollar for the	
August 1996–August 17, 1998		official rate.	
August 1996–August 17, 1998 August 17, 1998–November 1999 December 1999–December 2001	Freely falling/Dual Market De facto crawling band around US	The band was widened on August 17 and eliminated on September 2. On June 29, 1999 the two rates are unified temporarily. Band width +/-2%. There are multiple rates.	

Poland

#### Saint Kitts and Nevis

# East Caribbean Central Bank States are: Anguilla, Antigua and Barbuda, Dominica, Grenada, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
1935-October 6, 1965	Peg to Pound Sterling	British West Indies Dollar is introduced. It is issued by the
		East Caribbean Monetary Authority.
October 6, 1965-July 7, 1976	Peg to Pound Sterling	East Caribbean Dollar replaces British West Indies Dollar.
July 7, 1976-December 2001	Peg to US Dollar	ON October 1, 1983 the East Caribbean Central Bank
	-	replaces the East Caribbean Monetary Authority.

Notes: Reference currency is US Dollar.

#### Saint Lucia

### East Caribbean Central Bank States are: Anguilla, Antigua and Barbuda, Dominica, Grenada, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
1935-October 6, 1965	Peg to Pound Sterling	British West Indies Dollar is introduced. It is issued by the
		East Caribbean Monetary Authority.
October 6, 1965-July 7, 1976	Peg to Pound Sterling	East Caribbean Dollar replaces British West Indies Dollar.
July 7, 1976-December 2001	Peg to US Dollar	ON October 1, 1983 the East Caribbean Central Bank
		replaces the East Caribbean Monetary Authority.

Notes: Reference currency is US Dollar.

Saint Vincent and the Grenadines

## East Caribbean Central Bank States are: Antigua and Barbuda, Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
1935-October 6, 1965	Peg to Pound Sterling	British West Indies Dollar is introduced. It is issued by the
		East Caribbean Monetary Authority.
October 6, 1965-July 7, 1976	Peg to Pound Sterling	East Caribbean Dollar replaces British West Indies Dollar.
July 7, 1976-December 2001	Peg to US Dollar	ON October 1, 1983 the East Caribbean Central Bank
		replaces the East Caribbean Monetary Authority.

San Marino		
Date	Classification:	Comments
	Primary/Secondary/Tertiary	
January 1, 1999	Exchange rate arrangement with no	Italian Lira. Some local coins were minted in 186, 1898,
	separate legal tender	1925 and 1932.
January 1, 1999-December 2001	Exchange rate arrangement with no	Euro
-	separate legal tender	

	separate regar tender	
Saudi Arabia		
Date	Classification:	Comments
	Primary/Secondary/Tertiary	
January 22, 1928–June 4, 1958	Peg to British gold Sovereign	
June 4, 1958–January 8, 1960	De facto band around US Dollar/Dual Market	Band width is +/- 2%. Since December 1959 the parallel market premia is nil—prior to that time its oscillated in the 20–30% range.
January 8, 1960–March 15, 1975	Peg to US Dollar	20-5070 range.
March 15, 1975–December 2001	De facto US Dollar peg	Officially the Riyal is pegged to the SDR.
Notasi Defenence annoncias ano the US	C Dollan and the CDD	

Notes: Reference currencies are the US Dollar and the SDR. Senegal

### Central Bank of West African States: Benin, Burkina Faso, Cote D'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, and Togo<sup>1</sup>

Classification:	Comments
Primary/Secondary/Tertiary	
Peg to French Franc	Banque de l'Afrique Occidentale is allowed to issue bank
	notes. Exchange controls are introduced in Franc zone on
	September 9, 1939.
Peg to US Dollar and Pound Sterling	On December 1942 incorporated in the Sterling Area
Peg to French Franc	Return to Franc Zone. The CFA Franc is introduced.
Peg to French Franc	Creation of the Central Bank of West African States
De facto peg to French Franc/Dual	Very low parallel market premium.
Market	
Peg to French Franc	
Peg to French Franc/Freely falling	One 100% devaluation.
Peg to French Franc	
Peg to Euro	
	Primary/Secondary/Tertiary         Peg to French Franc         Peg to US Dollar and Pound Sterling         Peg to French Franc         Peg to French Franc         De facto peg to French Franc/Dual         Market         Peg to French Franc         Peg to French Franc         Peg to French Franc/Freely falling         Peg to French Franc

<sup>1</sup> Mali joined the currency arrangement at a later date.

Note: Reference currencies are the French Franc and the Euro

### Singapore

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
February 1906–June 25, 1972	Peg to Pound Sterling	Malayan/Straits Dollar
June 12, 1967–June 25, 1972	Peg to Pound Sterling	Introduction of the independent and separate currencies of
		Singapore, Malaysia, and Brunei
June 25, 1972–June 21, 1973	Peg to US Dollar	
June 21, 1973–November 1998	De facto moving band around the US	Band width is +/-2%. Officially adjusted on the basis of a
	Dollar	basket of currencies
December 1998–December 2001	Managed floating	

Notes: Reference currencies are is the US Dollar and the Yen. Slovak Republic

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Date	Classification:	Comments
	Primary/Secondary/Tertiary	
February 8, 1993–March 1993	Freely falling	The Slovak Koruna is introduced.
April, 1993–July 31,1996	De facto crawling band around DM	Band width is +/–2%
July 31, 1996–January 1, 1997		De facto band width is +/-2%. Pre announced crawling band is +/-5% wide. The official basket also includes the US Dollar with a lower weight than the DM.
January 1, 1997–September 1997	De facto crawling band around the DM	De facto band width is +/-2%. Pre announced crawling band is +/-7% wide.
September 1997–October 1, 1998	De facto crawling band around DM	De facto band width is +/-5%. Pre announced crawling band is +/-7% wide.
October 1, 1998–December 2001	Managed floating	100% of the observations remain within a +/-5% band of the DM/Euro.

Notes: Reference currencies are the DM, the Euro, and the US Dollar. Slovenia

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
October 1991–February 1992	Freely falling	There is no price data before this date. The Tolar is
		introduced to replace the Yugoslav Dinar.
March 1992–March 1993	Freely falling/De facto crawling band	Band width is +/- 2%.
	around DM	
April 1993–January 1, 1999	De facto crawling band around DM	Band width is +/- 2%.
October 1996–December 2001	De facto crawling band around Euro	Band width is +/- 2%.

Notes: Reference currency is the US Dollar.

South Africa			
Date	Classification: Primary/Secondary/Tertiary	Comments	
1920–February 14, 1961	Peg to Pound Sterling	The South African Pound is introduced.	
February 14, 1961–August 23, 1971	Peg to Pound Sterling	The Rand is introducing to replace the Pound.	
August 23, 1971–December 22, 1971	Peg to US Dollar		
December 21, 1971–October 24, 1972	Peg to Pound Sterling		
October 24, 1972–January 24, 1979	Managed floating/Parallel market	The official rate is pegged to US Dollar. The parallel premium fluctuates considerably and peaks at 62% on April 1976.	
January 24, 1979–February 7, 1983	Managed floating/Dual Rate	The official rate is de facto peg to the US Dollar until April 1981. Premium rises to a maximum of 27% in this period.	
February 7, 1983– September 2, 1985	Managed floating		
September 2, 1985–March 13, 1995	Dual Rate/Managed floating	There are several spikes in the premium including in 1985 and 1987, when the premium approached 40%.	
March 13, 1995–December 2001	Freely floating		

Notes: Reference currencies are the US Dollar, and the Pound Sterling.

South Korea

Date	Classification: Primary/Secondary/Tertiary	Comments
October 1945-November 1948	De facto band around US Dollar/Parallel market	Band width is +/-5%. The official rate is pegged to the US Dollar, but there are frequent and large devaluations.
December 1948–February 15, 1953	Freely falling/De facto band around US Dollar/Parallel market	Band width is +/-5%. The official rate is pegged to the US Dollar, but there are frequent and large devaluations. In 1947 the parallel market premium hit 2,400%.
February 15, 1953–December 1954	De facto crawling band around US Do/Parallel market	Band width is +/-2%. Hwan issued to replace Won. On June 10, 1962 Won is reintroduced. There are multiple exchange rates. Parallel market premium around 350%.
January 1955–December 1955	Freely falling/ De facto crawling band around US Dollar/Parallel market	Band width is +/-2%. There are multiple exchange rates.
January 1956–May 3, 1964	De facto crawling band around US Dollar/Parallel market	There are multiple exchange rates. Band width is +/-2%. Parallel market premium above 100% through 1960 and oscillating in the 20–120% range through 1965
May 3, 1964–April 1974	Crawling band to US Dollar/Parallel market	Band width is +/- 5%. Parallel market premia mostly in single digits.
May 1974–February 27, 1980	Peg to US Dollar	Parallel market premia rose to 28% in February 1980.
February 27, 1980–July, 1980	De facto crawling peg to US Dollar	Officially pegged to a basket of currencies and the SDR
March 2, 1990–September 2, 1991	Pre announced crawling band around US Dollar	Band width +/- 0.4%. This fits into our definition of crawling peg.
September 2, 1991–July 1, 1992	Pre announced crawling band around US Dollar	Band width +/- 0.6%. This fits into our definition of crawling peg.
July 1, 1992–October 1, 1993	Pre announced crawling band around US Dollar	Band width +/- 0.8%. This fits into our definition of crawling peg.
October 1, 1993–November 1, 1994	Pre announced crawling band around US Dollar	Band width +/- 0.1%. This fits into our definition of crawling peg.
November 1, 1994–December 1, 1995	De facto crawling peg to US Dollar	Pre announced band is $+/-1.5\%$ . Does not fit into our definition of peg, which stops at a $+/-1\%$ band.
December 1, 1995–November, 1997	De facto crawling peg to US Dollar	Officially the pre announced band is +/- 2.25%
December 17, 1997–June 1998	Freely falling	The won was allowed to float.
July 1998–December 2001	Freely floating	

Notes: Reference currency is the US Dollar. Spain

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
September 1939– August 25, 1946	Peg to US Dollar	
August 25, 1946–October 1948	Managed floating/Parallel market	There are multiple exchange rates
November 1948–May 1951	De facto band around US	Band width +/-5%. There are multiple exchange rates
	Dollar/Parallel market	
June 1951–July 17, 1959	De facto band around US	Band width +/-2%. There are multiple exchange rates
	Dollar/Parallel Market	
July 17, 1959–January 22, 1974	Peg to US Dollar/Parallel Market	Frequent devaluations
January 22, 1974–December 1980	De facto crawling band around US	Band width +/-2%. Until July 12, 1977 the peseta was
	Dollar	officially still pegged to the US Dollar-but with continuous
		adjustments.
January 1981–April 1994	De facto crawling band around DM	Band width +/-2%.
May 1994–January 1, 1999	De facto peg to DM	
January 1, 1999–December 2001	Currency Union	Euro

Notes: Reference currencies are the US Dollar, the DM, and the Euro.

Sri Lanka

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
December 16, 1929–June 1941	Currency board/Peg to Indian Rupee	
	which is pegged to the Pound Sterling	
July 1941-February 1943	Currency board/Peg to Indian Rupee	
	which is pegged to the Pound	
	Sterling/Freely falling	
March 1943-December 16, 1949	Currency board/Peg to Indian Rupee	
	which is pegged to the Pound Sterling	
December 16, 1949–1959	Peg to Indian Rupee which is pegged	Parallel market premium oscillates in the 25–40% range.
	to the Pound Sterling	
1959–February 1966	Peg to Pound Sterling/Parallel market	Premium peaks at 128% on August 1962.
February 1966–May 6, 1968	Peg to Pound Sterling	Parallel market premium remains above 100% and keeps
5 5 7		climbing hitting 223% in February 1965.
May 6, 1968– November 8, 1971	Managed floating/Parallel market	There are multiple exchange rates. An official rate is linked
5,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7	5 5	to Pound Sterling
November 8, 1971–July 10, 1972	De facto crawling band around US	Band width is $\pm -5\%$ . There are multiple exchange rates. An
	Dollar/Parallel market	official rate is linked to the US Dollar.
July 10, 1972–May 24, 1976	De facto crawling band around US	Band width is +/-2%. On June 1, 1973 the Ceylon Rupee
	Dollar/Dual Market	became the Sri lanka Rupee. An official rate is pegged to
		the Pound Sterling.
May 24, 1976–November 15, 1977	De facto crawling band to US	Band width is $\pm/-2\%$ . The official rate is linked to an
5, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7,	Dollar/Dual Market	undisclosed basket of currencies.
November 15, 1977–June 1981	De facto crawling band to US Dollar	Band width is +/-2%. Unification of rates.
July 1981–September 1989	De facto crawling peg to US Dollar	
October 1989–July 1990	Peg to US Dollar	
August 1990–March 20, 1995	De facto crawling peg to US Dollar	
March 20, 1995–February 1998	Pre announced crawling band around	Band width is +/-2%. Since 1994 the parallel market
	US Dollar	premium has been in single digits.
March 1998–January 12, 2000	Pre announced crawling band around	Band width is $+/-2\%$ .
,	US Dollar	
January 12, 2000– June 20, 2001	Pre announced crawling band around	Band width is $\pm/-5\%$ .
,	US Dollar	
June 20, 2000–November 3, 2000	De facto crawling band around US	The de facto band width is +/-5%. The pre-announced
	Dollar	official band is $+/-6\%$ .
November 3, 2000– December 11, 2000	De facto crawling band around US	The de facto band width is $\pm/-5\%$ . The pre–announced
-,,,,,,,,,	Dollar	official band is +/-8%.
December 11, 2000– January 22, 2001	De facto crawling band around US	The de facto band width is $\pm/-5\%$ . The pre–announced
······································	Dollar	official band is +/-10%.
January 22, 2001–December 2001	De facto crawling band around US	The de facto band width is $\pm/-5\%$ . Officially it is
	Dollar	independently floating.

Notes: Formerly Ceylon.

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
November 20, 1815–May 10, 1940	Peg to Dutch Guilder	Suriname Guilder represented a colonial issue of the Dutch Guilder
May 10, 1940–June 1974	Peg to US Dollar	Suriname Guilder is created and breaks the relation with Dutch Guilder
July 1974–March 1975	Crawling band around US Dollar/Parallel market	Band width is +/-2%. The official rate is still pegged to the US Dollar.
April 1975–April 1982	Crawling band around US Dollar/Parallel market	Band width is +/-5%. The official rate is still pegged to the US Dollar
May 1982–March 1986	Managed floating/Parallel market	The official rate is still pegged to the US Dollar but there are large oscillations in the exchange rate in the parallel market.
April 1986–December 1987	Freely falling/Managed floating/Parallel market	The official rate is still pegged to the US Dollar
January 1988–June 15, 1989	Managed floating/Parallel market	
June 15, 1989–April, 1991	Managed floating	There are multiple exchange rates.
May 1991–July 11, 1994	Freely falling/Managed floating/Parallel market	An official rate is still pegged to the US Dollar. Since March 1993 the parallel market premia is consistently in the thousands—peaking at 8,583% in April 1994—a few months ahead of the 10,387% devaluation in July of that year.
July 11, 1994–November, 1995	Freely falling/De facto crawling band around US Dollar	The official rate is no longer pegged to the US Dollar. Band width is +/-5%. The multiple exchange rate system was unified—however the informal parallel market remains extremely active.
December 1995–January 1998	De facto crawling band around US Dollar/Parallel Market	Band width is +/-5%. The official rate is re–pegged to the US Dollar.
February 1998–January 1, 1999	Freely falling/Dual Market	The official exchange is pegged to the US Dollar. There is also a parallel market premia is in single digits through December 1998. There are separate rates for some imports.
January 1, 1999–October 3, 2000	Freely falling/Crawling Band around US Dollar/Dual Market	Band width is +/-3%. There are multiple exchange rates.
October 3, 2000–December 2000	Peg to US Dollar/Freely falling	Dual market unified. There are separate rates for some imports. Inflation data for 2001 is not yet available. Following an 88% percent devaluation the Guilder was once again pegged to the US Dollar.

Notes: Reference currencies are the US Dollar and the Dutch Guilder. Swaziland

Swuzhunu		
Date	Classification:	Comments
	Primary/Secondary/Tertiary	
1920–February 14, 1961	No separate legal tender	South Africa Pound
February 14, 1961–September 6, 1974	No separate legal tender	South Africa Rand
September 6, 1974– January 24, 1979	Peg to South Africa Rand	The Ligaleni is introduced.
January 24, 1979–February 7, 1983	De facto peg to South Africa	
	Rand/Dual Market	
February 7, 1983– September 2, 1985	Peg to South Africa Rand	
September 2, 1985–March 13, 1995	De facto peg to South Africa	On May 1986 the South African Rand ceased to be legal
	Rand/Dual Market	tender. Parallel market premium peaks at 30% on May 1987.
March 13, 1995–December 2001	Peg to South Africa Rand	Parallel market premia in single digits.

Notes: Reference currencies are the US Dollar and the South African Rand.

Sweden
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Date	Classification:	Comments
	Primary/Secondary/Tertiary	
1920–April 1, 1924	Suspension of convertibility	
April 1, 1924– September 28, 1931	Peg	Gold Standard
September 28, 1931–September 1939	Peg to Pound Sterling	Suspended convertibility into gold and joined the Sterling Area.
1940–1946	Capital controls	
July 13, 1946–February 1952	De facto crawling band around US Dollar/Parallel Market	Band width is +/-5%. Official rate is pegged to the US Dollar. On March 1949, five months before the devaluation of the official rate, the parallel market premium peaked at 49%—although subsequently declining it would remain in double digits through early 1953.
March 1952–September 1954	De facto Band around US Dollar	Band width is +/-2%. Official rate is pegged to the US Dollar
October 1954–March 19, 1973	Peg to US Dollar	On July 1, 1959 Investment Dollar Krona is introduced.
March 19, 1973-November 19, 1992	De facto crawling around DM	Band width is +/-2%.
November 19, 1992–December 2001	Managed floating	

Notes: Reference currencies are the US Dollar, the DM, and the Euro.

Switzerland Date **Classification:** Comments Primary/Secondary/Tertiary November 1934–June 1935 September 27, 1936–January 19, 1942 Dual Market Peg to US Dollar January 19, 1942-June 1946 De facto band around US Dollar/Dual Band width is +/-5%. Exchange controls Market July 1946- September 25, 1949 De facto band around US Dollar/Dual Band width is +/-2%. Market September 25, 1949–January 23, 1973 Peg to US Dollar Controls are lifted. January 23, 1973– September 1981 Managed floating De facto moving band around DM September 1981–December 2001 Band width is +/-2%.

Notes: Reference currencies are the US Dollar, the DM, and the Euro.

Date	Classification: Primary/Secondary/Tertiary	Comments
1918–May 1, 1920	Exchange rate arrangement with no separate legal tender	Egyptian pound, British occupation
May 1, 1920–January 1, 1948	Peg to French Franc	Creation of Lebanon-Syrian Pound.
January 1, 1948-	Parallel Market	Split of Lebanon and Syrian monetary system. There are multiple exchange rates
January 1970–July 1973	De facto band around US Dollar	Band width is +/-2%. Data on parallel market begins.
August 1973–April 24, 1976	De facto crawling band around US Dollar/Parallel market	Band width is +/-5%.
April 24, 1976–April 22, 1981	De facto crawling band around US Dollar/Parallel market	There are multiple exchange rates. All official rates are pegged to the US Dollar,
April 22, 1981–May 24, 1982	De facto crawling band around US Dollar/Dual market	
May 24, 1982–January 1, 1988	De facto crawling band around US Dollar/Parallel market	There are multiple exchange rates All official rates are pegged to the US Dollar. In the run–up to the devaluation parallel market premia hit a record high of 1,047% on December 1987
January 1, 1988–December 2001	De facto crawling band around US Dollar/Parallel market	There are multiple exchange rates. All official rates are pegged to the US Dollar, one 186% devaluation, January 1988. Parallel premia remained in the 250–400% range through December 1998, when the data ends.

### Notes: Reference currency is the US Dollar.

1 ajikistan		
Date	Classification:	Comments
	Primary/Secondary/Tertiary	
January 1992–December 1995	Freely falling/Dual Market	The Tajik Ruble was introduced on May 10, 1995. There is
-		no price data before this date.
January 1996–October 1997	Freely falling/Freely floating	
October 1997– September 1998	Peg to US Dollar/Freely falling	
October 1998–July 2001	Freely falling/Freely floating	On October 26, 2000, the Tajik Somoni replaced the Tajuk
		Ruble. More recent inflation data is not available.

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
1906–January 1, 1922	Currency union/Peg	Pound Sterling, East African Rupee is created German
		until 1918, British subsequently
January 1, 1922–June 14, 1966	Currency union/Peg	Pound Sterling, East African Shilling is created
June 14, 1966–August 25, 1971	Peg to Pound Sterling	Tanzania Shilling is introduced
August 25, 1971–November 1973	Managed floating/Parallel market	Official rate is pegged to the US Dollar.
December 1973–March 1975	Freely falling/Managed	Official rate is pegged to the US Dollar.
	floating/Parallel market	
April 1975–October 27, 1975	Managed floating/Parallel market	Official rate is pegged to the US Dollar.
October 27, 1975–January 20, 1979	Managed floating/Parallel market	Official rate is pegged to the SDR. On June 1976 the
		parallel market premia hit 255%
January 20, 1979–August 1983	Managed floating/Parallel market	
September 1983–May 1985	Freely falling/Managed	There are multiple exchange rates. Through 1988 parallel
	floating/Parallel market	premia are over 100% without exception.
June 1985–August 1991	Managed floating market/Parallel	In the run-up to the large devaluation in early 1986 the
	market	parallel premia was over 300%.
September, 1991–August 3, 1993	Freely falling/Managed	On August 3, 1993 official and bureau rates were unified.
	floating/Parallel market	Since that time (through December 1998), parallel market
		premium have been in single digits.
January 1994–March 1996	De facto crawling band around US	There are multiple rates through 1995. Band width +/-5%.
	Dollar	
May 1995–December 2001	De facto crawling band around US	Band width +/-2%.
	Dollar	

Notes: On October 29, 1964 Tanganyika and Zanzibar were renamed Tanzania. Thailand

Date	Classification: Primary/Secondary/Tertiary	Comments
April 15, 1928–May 11, 1932	Peg	Gold, Baht replaces Tical
May 11, 1932–September 7, 1939	Peg to Pound Sterling	
1939–April 22, 1942	Exchange controls	
April 22, 1942–May 1, 1946	Peg to Yen	
May 1, 1946–1947	Peg to Pound Sterling	Parallel market premia over 100% prevail through 1949.
1947–January 1, 1956	De facto band around US Dollar/Parallel market	There are multiple exchange rates. Parallel market premia oscillate in the 50–90% range.
January 1, 1956–October 20, 1963	De facto band around US Dollar	Band width is +/-2%. Exchange rates were unified. Parallel market premia drop to single digits.
October 20, 1963–March 8, 1978	Peg to US Dollar	
March 8, 1978–July 1997	De facto peg to US Dollar	The Baht is officially pegged to a basket of currencies.
July 1997–January 1998	Freely falling/Freely floating	
January 1998–December 2001	Managed floating	
Notes: Reference currency is the US De	ollar.	

Togo

### Central Bank of West African States: Benin, Burkina Faso, Cote D'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, and Togo<sup>1</sup>

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
June 29, 1901	Peg to French Franc	Banque de l'Afrique Occidentale is allowed to issue bank
		notes.
September 9, 1939	Exchange controls are introduced in	
	Franc zone	
February 2, 1943– December 26. 1945	Peg to US Dollar and Pound Sterling	On December 1942 incorporated in the Sterling Area
December 26. 1945– May 12, 1962	Peg to French Franc	Return to Franc Zone. The CFA Franc is introduced.
September 20, 1949–	Peg to French Franc	
May 12, 1962–September 9, 1971	Peg to French Franc	Creation of the Central Bank of West African States
September 9, 1971–March 21, 1974	De facto peg to French Franc/ Dual	Low parallel market premium
	Market	
March 21, 1974–December 1993	Peg to French Franc	
January 1994–December 1994	Peg to French Franc/Freely falling	One 100% devaluation.
January 1995–January 1, 1999	Peg to French Franc	
January 1, 1999–December 2001	Peg to Euro	

<sup>1</sup> Mali joined the currency arrangement at a later date. Note: Reference currencies are the French Franc and the Euro

Tunisia		
Date	Classification:	Comments
Date	Primary/Secondary/Tertiary	comments
May 2, 1929–September 6, 1939	Peg to French Franc	Tunisian Franc on gold standard
September 6, 1939–June 1943	Capital controls	runsun rune on gold sundard
June 1943–December 6, 1944	Peg to US Dollar and Pound Sterling	
December 6, 1944–November 1945	Peg to French Franc	Return to Franc–Zone
December 1945-January 26, 1948	Peg to French Franc/Freely falling	
January 26, 1948-March 1949	Freely falling/ De facto band around	
sundary 20, 1940 March 1949	French Franc	
April 1949–November 1, 1958	De facto band around French Franc	Band width is +/-2%. There are multiple exchange rates.
November 1, 1958– March 21, 1974	Peg to French Franc	Tunisian Dinar replaces Tunisian Franc. Active parallel
···· · · · · · · · · · · · · · · · · ·		market In May 1962 parallel market premia peaks at 257%.
		It remains in three digits through mid–1963 and oscillates in the 20–90%range through 1972.
March 21, 1974– January 1, 1999	De facto crawling band around French	Band width is $+/-2\%$ . Since 1992 parallel market premia is
Water 21, 1974 Sundary 1, 1999	Franc	in single digits.
		in onigio algito.
January 1, 1999–December 2001	De facto crawling band around Euro	Band width is $+/-2\%$ .
5.7	E E	
Note: Reference currencies are the French	Franc and the Euro	
Turkey		
Date	Classification:	Comments
	Primary/Secondary/Tertiary	
September 1930–August 1931	Peg to Pound Sterling	
September 1931–September 26, 1936	Peg to French Franc	
September 26, 1936–November 28, 1939	Peg to Pound Sterling	
November 28, 1939–February 1941	Parallel market	There are multiple exchange rates.
March 1941–August 1943	Freely falling/Parallel market	There are multiple exchange rates.
September 1943-September 9, 1946	Parallel market	There are multiple exchange rates.
September 9, 1946–September 3, 1948	De facto crawling band around US	The official rate is pegged to the US Dollar. Band width is
	Dollar/Parallel market	+/-5%.
September 3, 1953–August 20, 1960	Managed floating/Parallel market	There are multiple exchange rates. Parallel market premia
		is consistently in three digits and peaks at 537% on July
		1958.
August 20, 1960–June 6, 1961	Peg to US Dollar	
June 6, 1961–August 9, 1970	De facto crawling band around US	Band width is +/-5%. Parallel market premia oscillates in
	Dollar/Dual Rates	the 30–60% range.
August 9, 1970–December 22, 1971	Peg to US Dollar	
December 22, 1971–August, 1976	De facto crawling band around US	There are multiple exchange rates. Band width is $+/-5\%$ .
	Dollar/Parallel market	The official rates are pegged but there are frequent
G ( 1 107( M 1 1001		adjustments. There is an official horizontal 4.5% band.
September 1976–March, 1981	Freely falling/De facto crawling band around US Dollar/Parallel market	There are multiple exchange rates. Band width is +/-5%.
	around US Donal/Parallel market	The official rates are pegged but there are frequent
April 1981–March 22, 1983	Managed floating/Parallel market	adjustments. There are multiple exchange rates. On May 1, 1981 the lira
April 1981–March 22, 1985	Managed moating/Faraner market	
March 22, 1983–April 1984	Managed floating	was formally de-linked from the US Dollar. Since 1984 the parallel market premia has largely remained
march 22, 1705-April 1704	Managou Hoating	in single digits.
May 1984–January 1998	Freely falling/Managed floating	
February 1998–January 1, 1999	Crawling band around DM/Freely	Band width is +/-5%. The crawling band is only detected
	falling	with the 24-month window.
January 1, 1999–January 2001	Crawling band around Euro/Freely	Band width is +/-5%
varianty 1, 1999 variatily 2001	falling	
February–2001October 2001	Freely falling/Freely floating	
	ollar the DM and the Euro	

Notes: Reference currencies are the US Dollar, the DM, and the Euro.

 Turkmenistan
 Classification: Primary/Secondary/Tertiary
 Comments

 January 1993–October 1997
 Freely falling/Dual market
 On November 1, 1993 the Manat replaced the Russian Ruble as legal tender. There is no price data before this date. There are multiple exchange rates

 November 1997–December 2001
 Dual Market
 There was a short–lived unification on April 20, 1998. Since the introduction of the Manat the official rate has been pegged to the US Dollar with periodic large devaluations.

 Notes: Reference currency is the US Dollar. Uganda

Date	Classification: Primary/Secondary/Tertiary	Comments
January 1, 1922–August 15, 1966	Peg to Pound Sterling/Currency union	East African Shilling is introduced Uganda, Kenya, and Tanzania form the East African Currency Area.
August 15, 1966–October 11, 1971	Peg to Pound Sterling/Currency union	Ugandan Shilling replaces the East African Shilling
October 11, 1971–October 27, 1975	Managed floating/Parallel market	While the official rate is linked to the US Dollar, there is an active parallel market.
October 27, 1975–June 8, 1981	Managed floating/Parallel market	The Ugandan shilling is officially pegged to the SDR. On July 1977 the East African Currency Area came to its end. From 1977 onwards, the parallel market premium is hovering close to 1,000% .On June 1981 the currency was devalued by 840%.
August 23, 1982–October 1983	Freely floating/Dual Market	Officially the Shilling is linked to a basket of currencies.
Novembert 1983–June 15, 1984	Freely falling/Freely floating/Dual Market	
June 15, 1984– May 28, 1986	Freely falling/Freely floating	The official rate is pegged to the US Dollar through May 1985. In that month the parallel market premium reached 2,109%.
May 28, 1986–August 23, 1986	Freely falling/Freely floating/Dual Market	
August 23, 1986– September 1989	Peg to US Dollar/Freely falling	Following a 329% devaluation, on May 18, 1987 a currency reform exchanged old shillings for the new shilling.
October 1989–July 2, 1992	Freely falling/De facto crawling band around US Dollar	Band width is +/-5%. On April 1987 the parallel market premium reached 1,186%.
July 2, 1992–December, 1992	Freely falling/De facto crawling band around US Dollar/Dual Market	Band width is +/-5%.
January 1993–November 1, 1993	De facto crawling band around US Dollar/Dual Market	Band width is +/-5%.
November 1, 1993—December 2001	De facto crawling band around US Dollar	Band width is +/-5%. Since 1995 parallel market premium fell to the 10–15% range and into single digits since 1996.

Ukraine		
Date	Classification: Primary/Secondary/Tertiary	Comments
January, 1991–October, 1996	Freely falling/Dual Markets	There is no price data before this date.
October 1996-September 4, 1998	Dual Markets	
September 4, 1998–November 1999	De facto crawling band around US Dollar	In September 1998 the Ukranian Hryvnia was devalued by 51% versus the US Dollar and markets were unified. There is a pre–announced official horizontal band.
February 21, 2000–December 2001	De facto peg to US Dollar	On February 2000 the central bank formally announced a floating rate policy.

### United Kingdom

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
April 25, 1925–September 21, 1931	Peg	Gold
September 21, 1931– March 1940	Managed floating	On August 25, 1939 foreign exchange controls are introduced.
March 1940–July 1948	De facto band around US Dollar/Parallel market	Band width is +/-5%. There are multiple exchange rates. The official rate is pegged to the US Dollar/Exchange controls introduced on August 25, 1939. The Pound is only convertible during July 15–August 21, 1947. In February 1946 the parallel market premium peaked at 97%.
August 1948–September 1950	De facto band around US Dollar/Parallel market	Band width is +/-2%. The official rate is pegged to the US Dollar but there are multiple rates. Through August 1949 parallel premium oscillates in the 30–90% range.
September 1950-August 19, 1970	Peg to US Dollar/Dual Market	Introduction of the Switch Pound. There are multiple rates. The Switch pound was abolished on April 1967. The Property Dollar was abolished
August 19, 1970–June 23, 1972	Peg to US Dollar/Dual Market	
June 23, 1972–October 8, 1990	Managed Floating	Until the dissolution of the Sterling Area on October 24, 1979 and the dismantling of capital controls, the UK had a dual rate system.
October 8, 1990–September 12, 1992	Pre announced band around ECU/DM	Band width +/- 6%.
September 12, 1992–December 2001	Managed floating	

Notes: Reference currencies are the US Dollar, the DM, the Euro, and the Yen. United States

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
June 30, 1919–March 9, 1933	Peg	Gold Standard
March 9, 1933–January 31, 1934	Capital controls	The US Dollar's convertibility into gold is suspended
December 19, 1946–August 15, 1971	Peg	Gold and SDR, same parity as 1934. On August 15, the
		US notified the IMF it would no longer freely buy or sell
		gold for the settlement of international transactions
August 15, 1971– February 13, 1973	Mini float	On May 8, 1972 there is further devaluation versus gold
		and other currencies
February 13, 1973 February, 1978	De facto moving band with the Yen	Further devaluation versus gold and other currencies. Band
		width +/- 2%.
February 1978–December 2001	Freely floating	On April 1, 1978 the law that required the par value of the
		US Dollar in terms of gold and SDRs is repealed.

Notes: Reference currencies are the Pound Sterling, the DM, the Euro, and the Yen.

Date	Classification:	Comments
	Primary/Secondary/Tertiary	
1931–January 10, 1941	Peg to Pound Sterling	On December 1929 the gold standard was suspended.
January 10, 1941–July 1944	Peg to US Dollar	· · ·
July 1944–July 1947	Dual Market/De facto crawling band	
	around US Dollar	
July 1947–September 1948	Peg to US Dollar	
September 1948–May 1958	De facto crawling band around US	There are multiple exchange rates. Band width is +/-5%.
	Dollar/parallel market	
June 1958–December 17, 1959	Freely falling/De facto crawling band	There are multiple exchange rates. Band width is +/-5%.
	around US Dollar/Parallel market	
December 17, 1959–October 1960	Freely falling/Managed floating	Exchange and monetary reform. Exchange rates were
		unified and fluctuating rate applied to all transactions.
November 1960–November 1962	Managed floating	
December 1962–July 19, 1963	Freely falling/Managed floating	
July 19, 1963–July 1965	Freely falling/De facto crawling band	Band width is $+/-5\%$ .
	around US Dollar/Dual Markets	
August 1965–May 1968	Freely falling/Managed floating/Dual	The official rate is pegged to the US Dollar there are
	Markets	periodic large devaluations. In October 1965 the parallel
		market premium reached 196%. The official rate was
		devalued by 150% that same month.
June 1968-January 1969	Peg to US Dollar/Freely falling	There is an inflation stabilization plan—while the official
		rate is tied to the US Dollar parallel market activity
		remains considerable in some months.
February 1969–December 1970	Peg to US Dollars	
January 1971–April 26, 1971	Freely falling/Managed floating/Dual	There are multiple exchange rates.
	Markets	
April 26, 1971–November 1974	Freely falling/Managed	On November 1971 the free market premium reached 182
	floating/Parallel market	%— on march 1972 the official rate was devalued by 100%
December 1974–October 17, 1978	Freely falling/De facto crawling band	There are multiple exchange rates. Band width is $+/-5\%$ . In
0 + 1 17 1070 N 1 0( 1000	around US Dollar/Parallel market	October 1974
October 17, 1978–November 26, 1982	Pre announced crawling peg to US	
Name 1 - 26 1082 Data - 1085	Dollar, the Tablita/Freely falling Freely falling/Freely floating	
November 26, 1982–December 1985 January 1986–December 1990	Freely falling/Freely floating	Those are multiple system as rates
		There are multiple exchange rates. Official and de facto band +/-2%
December 1990–December 1, 1991	Pre announced crawling band/Freely	Official and de facto band +/-2%
December 1, 1991–November 2, 1992	falling Freely falling/Pre announced crawling	Official +/-4%, de facto band +/-2%
December 1, 1991–November 2, 1992	band	Official $+/-4\%$ , de facto band $+/-2\%$
November 2, 1992–September 1995	Freely falling/de facto crawling band	Official +/-7%, de facto band +/-2%. Since 1994 the
November 2, 1992–September 1995	Freery ranning/de racto crawing band	parallel market premium has been in single digits.
October 1995-December 1998	De facto crawling band	Official +/-7%, de facto band +/-2%.
December, 1999–December 2001	De facto crawling band	Official +/-7%, de facto band +/-2%. Official +/-3%, de facto band +/-2%. On January 4, 2002
December, 1999–December 2001	De facto crawning band	the band was widened to $\pm/-6\%$ and the pace of
		depreciation was accelerated.
		depreciation was accelerated.

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Date	Classification:	Comments
	Primary/Secondary/Tertiary	
August 1934–July 23, 1941	Peg to US Dollar	Foreign exchange controls introduced
July 23, 1941–July 1, 1976	Peg to US Dollar	There are multiple exchange rates.
July 1, 1976–February 28, 1983	Peg to US Dollar/ Dual Market	Up until lawe 1982 free market premia is in single digits.
February 28, 1983–November 1986	Managed floating/Parallel market	There are multiple exchange rates officially linked to the US Dollar. In July 1983 parallel market premia rose to 319%.
December 1986–March 13, 1989	Freely falling/Managed floating	There are multiple exchange rates. Parallel market premia are consistently above 100%.
March 13, 1989–March 1990	Freely falling/Managed floating	
April 1990–September 1992	Managed floating	
October 1992–May 4, 1994	Freely falling/Managed floating	
May 4, 1994–April 22, 1996	Freely falling/Dual market/De facto crawling band around US Dollar	Band width is +/-5%. Parallel market premium jumped to 100% ion November 1995.
April 22, 1996–July 8, 1996	Freely falling/De facto crawling band around US Dollar	Band width is +/-5%.
July 8, 1996–July 1997	Pre announced crawling band around US Dollar/Freely falling	Official band is +/- 7.5%, de facto band is +/-2%. Parallel market premium declines to single digits during this period.
August 1997–December 2001	Pre announced crawling band around US Dollar	Official band is +/- 7.5%, de facto band is +/-2%.

Notes: reference currency is the US Dollar **Zambia** 

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Date	Classification:	Comments
	Primary/Secondary/Tertiary	
1891–1940	Exchange arrangement with no	Pound Sterling
	separate legal tender.	
1940– April 1, 1956	Peg to Pound Sterling/Currency Board	Southern Rhodesia Pound replaces British Pound
April 1, 1956– November 16, 1964	Peg to Pound Sterling	Rhodesia and Nyasaland Pound replaces Southern
		Rhodesia Pound
November 16, 1964– January 16, 1968	Peg to Pound Sterling	Zambia Pound replaces Rhodesia and Nyasaland Pound.
		Exchange controls are introduced.
January 16, 1968–December 6, 1971	Peg to Pound Sterling	Kwacha replaces Zambia Pound
December 6, 1971–July 9, 1976	Managed floating/Parallel market	Official rate is pegged to the US Dollar.
July 9, 1976–July 1983	Managed floating/Parallel market	Multiple rates are introduced in 1979. Official rate is
		pegged to SDR. Through 1979 parallel market premia is in
		three digits.
October 1985–March 17, 1987	Freely falling/Freely floating/Parallel	
	market	
March 17, 1987–May 4, 1987	Freely falling/Freely floating/Dual	
	Market	
May 2, 1987–November 9, 1988	Freely falling/Freely floating/Parallel	Official rate is pegged to US Dollar. In November 1988 the
	market	parallel market premium reached 974%.
November 9, 1988–February 19, 1990	Freely falling/Freely floating/Parallel	Official rate is pegged to SDR In May 1989 the parallel
	Market	premium reached an all-time high of 1,222%.
February 19, 1990–December 1998	Freely falling/Dual Market/Freely	There was a short-lived unification in 1997.
	floating	
January 1999–August 2001	Freely falling/Freely floating	
August 2001–December 2001	Freely floating	

Notes: Zambia was formerly northern Rhodesia. Reference currencies are the South African Rand, the SDR, the Pound Sterling and the US Dollar.

### Zimbabwe

Date	Classification: Primary/Secondary/Tertiary	Comments
March 7, 1980–June, 1983	De facto crawling band around US Dollar	The Rhodesian Dollar's peg to the South African Rand was ended. The currency was renamed the Zimbabwe Dollar. Band width is +/-2%. Officially pegged to a basket of currencies.
July 1983–April 1991	Managed floating/Dual Market	
May 1991–July 2, 1994	Freely falling/Managed floating/Dual Market	
July 2, 1994–November 1997	Managed floating	
November 1997–March 31, 1999	Freely falling/Managed floating	
March 31, 1999–December, 2001	Peg to US Dollar/Freely falling	One major devaluation in August 2000
January 2000–August 1, 2000	Peg to US Dollar	
August 1, 2000–December, 2001	Crawling peg	Officially there is a $+/-5\%$ band around the central parity.

Notes: Reference currencies are the South African Rand and the US Dollar. Zimbabwe was formerly part of Rhodesia.