INTERNATIONAL MONETARY FUND

Review of Exchange Arrangements, Restrictions, and Controls

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GLOSSARY

AREAER	*Annual Report on Exchange Arrangements and Exchange Restrictions*
CAEMC	Central African Economic and Monetary Community
CFA	Communauté Financière d'Afrique and Coopération Financière en Afrique Centrale
ECCU	Eastern Caribbean Currency Union
ERM II	Exchange Rate Mechanism (of the former European Monetary System)
FDI	Foreign Direct Investment
MCP	Multiple currency practice
OECD	Organization for Economic Cooperation and Development
PDR	Policy Development and Review Department
URR	Unremunerated reserve requirement
WAEMU	West African Economic and Monetary Union

I. OVERVIEW

A. Background

1. **This review reports on trends, developments, and issues in exchange rate arrangements and currency convertibility**.[1,2] This section presents a summary of the overall findings. Section II provides an overview of key trends and developments in exchange rate arrangements. Section III outlines key trends and developments in current and capital account restrictions. The present paper uses the existing methodology for the classification of exchange rate arrangements.

B. Exchange Rate Arrangements: Key Trends and Developments

2. **A breakdown of de facto exchange rate arrangements into three broad categories, as of end-April 2007, shows that 23 countries have hard pegs, 82 countries have soft pegs, and 83 countries float**.[3] Most of the soft pegs are conventional fixed pegs (70) and most of the floating arrangements are managed floats (48).

3. **The broad distribution of exchange rate arrangements across these three categories has remained basically stable since 2001**. The previously observed polarization of exchange rate arrangements toward either hard pegs or floats and away from soft pegs has come to a halt since 2001. Rather, there has been a tendency for countries to move toward more heavily managed arrangements, specifically:

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[1] Unless otherwise noted, data on current and capital account convertibility issues are as at end-2006, while the exchange arrangement classifications are as at end-April 2007; data generally refer to the 185 IMF members plus Aruba, Hong Kong SAR, and the Netherlands Antilles.

[2] The last report in this series was published in 2003 as *Exchange Arrangements and Foreign Exchange Markets: Developments and Issues,* in the IMF's World Economic and Financial Survey series. These periodic reviews provide an analytical complement to the *Annual Report on Exchange Arrangements and Exchange Restrictions* (AREAER). The AREAER itself is prepared each year in consultation with national authorities pursuant to the provisions of Article XIV, Section 3 of the IMF's Articles of Agreement. It provides a comprehensive dataset on countries' exchange rate arrangements, exchange and trade restrictions, and, to a limited extent, trade and prudential measures.

[3] The classification methodology used by Fund staff since 1998 is based on the staff's assessment of the observed (de facto) exchange rate arrangement rather than that exchange arrangement a member notifies to the Fund in accordance with Article IV, Section 2(b) of the Fund's Articles of Agreement (de jure arrangement). It broadly distinguishes three groups of arrangements: hard pegs (arrangements with fixed exchange rates that are difficult to modify, such as currency boards), soft pegs (arrangements with exchange rates based around a central rate or bandwidth that may be adjusted, such as conventional fixed pegs and crawling pegs), and floating arrangements (arrangements without exchange rate anchors, such as managed floating and independently floating). It is important to note that classifications represent solely the views of the staff.

- there has been a net increase of one in the number of hard pegs;

- the number of soft pegs has increased by about 15 percent, and the *composition* of the group has changed due to countries moving from intermediate pegs—pegs within bands, crawling pegs, and crawling bands—to conventional pegs; and

- the overall number of floaters has decreased substantially, and within the category there has been a shift from independent floating to managed floating.

4. **Other noticeable trends include**: **a shift away from currency baskets, and a reduction in the volatility of floating currencies**. Since the last review in 2002, countries with pegs have shown an increased preference for simple anchors, notably the U.S. dollar or the euro. The volatility of the exchange rates of floating arrangements (especially managed floating arrangements) has declined, while international reserves have greatly increased. Moreover, the shift toward more tightly managed arrangements is a reflection of large capital inflows and of attempts to dampen or prevent appreciation.

C. Exchange Restrictions and Current and Capital Controls: Key Trends and Developments

5. **Countries have continued to liberalize current and capital account transactions**. This has been facilitated by the benign global environment, a rapid accumulation of reserves, and stronger prudential frameworks. The effort was especially noticeable among countries that were in the process of accepting the obligations of Article VIII, Sections 2(a), 3, and 4 of the IMF's Articles of Agreement, and in emerging market economies.

6. **Liberalization of current account transactions shows the following trends**:

- **166 Fund members have now formally accepted the obligations of Article VIII, Sections 2(a), 3, and 4, up from 150 at end-2001**.[4] Most of the remaining 19 members who continue to avail themselves of the transitional arrangements under Article XIV have done so for many decades, reflecting a tendency to rely on direct controls in managing their economies. However, some countries that have accepted the obligations of Article VIII appear to have imposed new exchange restrictions, multiple currency practices (MCPs) (jointly referred to in some parts of this paper as "exchange measures") without the approval of the Fund. In most cases, this trend does not reflect a widespread reimposition of restrictions, but rather relate to the introduction of specific exchange restrictions and MCPs or even improved reporting of such exchange measures.

[4] See *Article VIII Acceptance by IMF Members—Recent Trends and Implications for the Fund*, May 26, 2006.

- **Controls on current account payments, receipts, and transfers continued to decline in the generally favorable external environment facing many countries**. Liberalization was more forceful in the substantive areas (notably repatriation and surrender requirements) than in the often less material aspects such as documentation and administrative requirements. In high-income countries, exchange controls on current transactions virtually disappeared, but in low-income countries, controls remain pervasive, with an intensification of controls by some countries on payments for certain invisible transactions.

7. **An important trend in capital controls is the liberalization of outflows**. This trend is particularly strong in higher-income countries, reflecting buoyant external positions. Despite the upward exchange rate pressures, relatively few countries resorted to controls on capital inflows. However, some new EU member states have resorted to prudential measures that differentiate between residents and nonresidents mainly because they have limited scope to impose capital controls in light of EU accession commitments and are facing macroeconomic stresses and risks from high credit growth fueled by capital inflows.

8. **Capital controls and prudential controls are becoming increasingly intertwined owing to the interaction of capital account liberalization and financial sector deregulation**. This has been accompanied by the emergence of new intermediaries and a more complex matrix of capital flows between industrial and emerging market country economies. As a result, there has been a greater focus by countries on prudential regulation and supervision of cross-border financial activities.

II. TRENDS IN EXCHANGE RATE ARRANGEMENTS

9. **Obtaining a proper overview of the developments in exchange rate arrangements is a key element of Fund surveillance over members' exchange rate policies**.[5] This section documents global trends in the evolution of exchange rate arrangements focusing on the period end-2001 to April 2007.[6] It discusses the movement toward simple exchange rate anchors and reviews some consequences of the choice of arrangement, including the accumulation of foreign exchange reserves.

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[5] See Article IV, Section 3 of the Articles of Agreement; *Surveillance over Exchange Rate Policies*, Decision No. 5392-(77/63), 4/29/77, as amended; and *Bilateral Surveillance Over Members' Policies*, Decision No. 13919-(07/51).

[6] The description is based on the current de facto classification methodology. See also Appendix Tables 6, 7, and 8 for details.

A. Trends and Developments

10. **Since 1998, Fund staff has been using a de facto system for classifying exchange rate arrangements as an empirical basis for analyzing trends and developments**.[7] The taxonomy for this de facto classification is presented in Figure 1 and distinguishes three broad groups of arrangements: hard pegs, soft pegs, and floating arrangements. Hard pegs are subdivided into those with no separate legal tender (countries with full "dollarization" or "euroization") and currency board arrangements. Soft pegs include conventional fixed pegs and various intermediate pegs. Floating arrangements are divided into managed and independent floats. Box 1 provides an overview of the classification system.[8]

11. **In terms of size, two types of exchange rate arrangements dominate: conventional fixed pegs (70 countries) and managed floating arrangements (48 countries)**. However, the category independently floating arrangements (35 countries) is also important, and includes about half as many countries as are classified as conventional fixed pegs. While managed floats are found across the Fund membership, conventional fixed pegs are mostly observed in the Middle East, Sub-Saharan Africa, and parts of Asia. Hard pegs are concentrated primarily in Europe and small island economies (e.g., in the eastern Caribbean).

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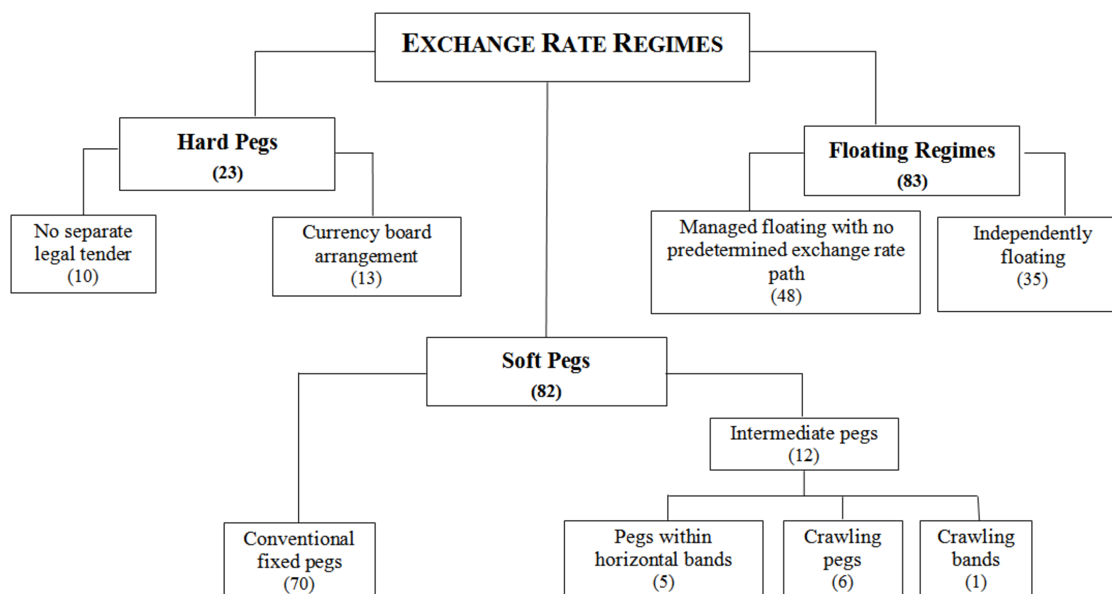
[7] The classification was published until 2002 in the *International Financial Statistic*s (IFS), when the publication of the IFS was moved to an electronic system. The classification then began to be published in the *Annual Report on Exchange Arrangements and Exchange Restrictions* (AREAER) in 2001. The de facto classification has also been published in the Fund's *Annual Report* since 1999.

[8] To identify better the nature of the de facto exchange arrangements of currency unions, countries in these unions have been classified as of April 1, 2007 based on the exchange rate policies of the union, rather than the country, to reflect the external exchange arrangement of the union. In other words, the classification is driven by policies of the union, including the degree of flexibility of the single currency vis-à-vis other currencies, rather than by the relation of the individual country members to the currency union. The latter is a relation of no separate legal tender whereas the former can vary, and provides insight into the policies of the union as a whole. Based on current information, this means that the Communauté Financière d'Afrique and Coopèration Financière en Afrique Centrale (CFA) franc zone countries are since April 1, 2007, classified as fixed pegs (to the euro), the euro countries are classified as an independent float, and the Eastern Caribbean Currency Union (ECCU) countries as a currency board arrangement. Countries using the currencies of other countries are not included in this reclassification since (i) they have no direct influence on the monetary policy of the adopted currency (specifically, they have no treaty with the issuing country that provides for a common monetary policy); and (ii) these countries are usually not permitted to print banknotes in the adopted currency. Countries have been alerted of these changes in the context of the updates for the 2007 AREAER.

Figure 1. De Facto Exchange Rate Arrangements 1/

(Number of countries, end-April 2007)



Source: *Annual Report on Exchange Arrangements and Exchange Restrictions* database.

1/ See also Appendix I, which provides a list of the countries in each category and includes the various additional tables and figures referenced in the text.

12. **The distribution of exchange rate arrangements has since 2001 shifted somewhat towards soft pegs (Figure 2)**. During the 1990s, exchange rate arrangements tended to become polarized, with many countries adopting either hard pegs or floats. This trend has come to a halt, and has even been partly reversed. There is thus little recent evidence of the "vanishing middle" view of exchange rate arrangements, in which conventional pegs gradually decline and eventually even disappear.[9, 10]

13. **There has been a very small net increase in the number of hard pegs**. After a wave of activity in the late 1990s, there has been little net movement within this category (Table 1). Timor-Leste, which joined the Fund in 2002, has added to the number of countries with hard pegs since 2001, while Argentina abandoned its currency board at the end

[9] See Fischer, 2001. Eichengreen and Razo-Garcia, 2006, find that the polarization is complete in advanced countries. However, while most high-income countries have either hard pegs or independently floating arrangements, there is a more mixed picture among emerging market and developing countries.

[10] See Table 8 for an overview of the various changes in classifications of individual countries that took place during January 2002–April 2007.

Box 1. An Overview of the Classification System

The de facto classification system groups exchange rate arrangements based on the degree of observed exchange rate variability and past official actions affecting the exchange rate over the time period in question. This differs significantly from the pre-1998 procedure, under which members were classified based on their formally announced arrangements, with staff typically not verifying whether de jure classifications coincided with de facto practices.

Hard pegs

- Arrangement with no separate legal tender: The currency of another country circulates as the sole legal tender. Monetary unions were previously also classified as hard pegs (see footnote 8).
- Currency board arrangement: Based on a legislative commitment, the domestic currency is exchanged for a specified foreign currency at a fixed exchange rate.

Soft pegs

- Conventional fixed peg: The currency fluctuates for at least three months within a band of less than 2 percent (or ±1 percent) against another currency or a basket of currencies.
- Intermediate pegs:
    - Peg within horizontal bands: The currency fluctuates within margins of more than ±1 percent around a fixed central rate.
    - Crawling peg: The currency is adjusted periodically at a fixed rate or in response to changes in selective quantitative macroeconomic indicators, with a range of fluctuation of less than 2 percent.
    - Crawling band: The currency is adjusted periodically at a fixed rate or in response to changes in selective quantitative macroeconomic indicators, with a range of fluctuation of 2 percent or more.

Under all soft pegs, the exchange rate must remain stable as a result of official action, such as foreign exchange intervention.

Floating arrangements

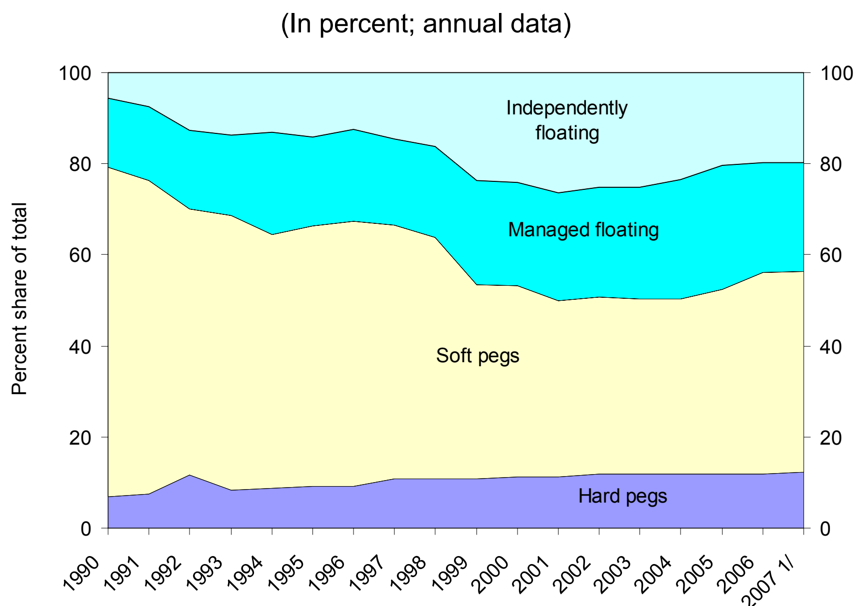
- Managed floating with no predetermined path for the exchange rate: The monetary authority influences a market determined exchange rate without having a specific exchange rate path or target.
- Independently floating: The exchange rate is market determined, with limited intervention.

of 2001.[11] The small net increase in the number of hard pegs is due to Montenegro, which joined the Fund in January 2007 and is euroized.

[11] Adoption of hard pegs is often driven by long-term optimal currency area motives (for example, for small economies) and broader concerns of economic cooperation. Other reasons include political economy considerations (creating a stronger monetary policy commitment than might otherwise be feasible) and the relative operational simplicity of hard pegs, which can make them suitable for countries lacking a strong capacity to implement monetary policy.

Figure 2. Evolution of De Facto Exchange Rate Arrangements, 1990–2007 1/

(In percent; annual data)



Sources: Staff reports; and *Annual Report on Exchange Arrangements and Exchange Restrictions* database.

1/ As at end-April 2007.

14. **There has been a noticeable decrease in the total number of floaters**. While quite a few countries (20) have moved from a soft peg to a float during the past five years, this has been offset by a slightly higher number of other countries (28) abandoning floating arrangements in favor of soft pegs. The substantial movement between soft pegs and floating arrangements suggests that floating is not necessarily a durable state, particularly for lower- and middle-income countries, where there appears to be a greater flux between managed floating and pegged arrangements than in high-income economies. The frequency with which countries move back to pegs after a relatively short spell of floating suggests that many countries face institutional and operational constraints to floating.[12] Persistent inflows may lead to a perceived need to cap appreciation and an apparent tighter management of the exchange rate.

15. **Examining the movements across subcategories reveals that there has been a significant shift toward more tightly managed arrangements by countries with floating arrangements or soft pegs**. A closer look suggests that, instead of vanishing, the middle has actually become more important.

[12] See *From Fixed to Float—Operational Aspects of Moving Toward Exchange Rate Flexibility*, November 19, 2004. See also Goldstein, 2002.

16. **The share of countries with managed floats within the floating arrangements category has increased to 58 percent at end-April 2007 (Figure 3)**. While this is higher than in 2001 (46 percent), the share of managed floats has stabilized in the most recent period. In the course of this period, 14 countries moved from independent floats to managed floats.

Table 1. Evolution of De Facto Exchange Arrangements, 1996–April 2007 1/

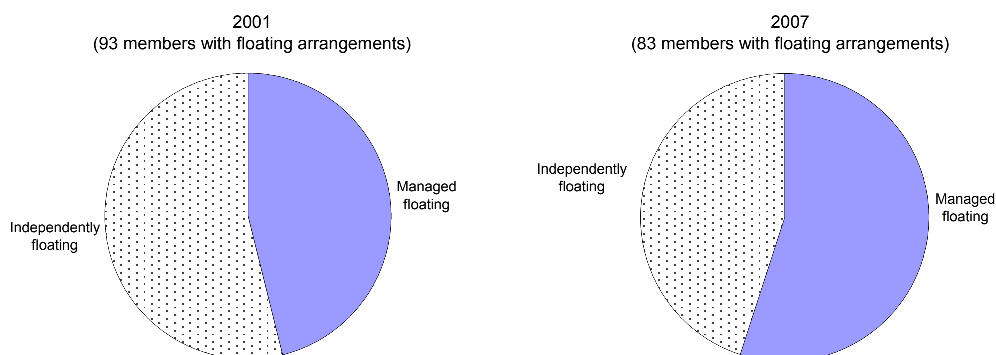
(Number of countries; end-of-period data)

	1996	2001	2002	2003	2004	2005	2006	2007 April
Hard pegs	**17**	**21**	**22**	**22**	**22**	**22**	**22**	**23**
No separate legal tender	5	8	9	9	9	9	9	10
Currency board arrangements	12	13	13	13	13	13	13	13
Soft pegs	**107**	**72**	**73**	**72**	**72**	**76**	**83**	**82**
Conventional pegged arrangements	63	55	60	60	63	63	73	70
Pegs to a single currency	49	45	50	52	55	58	68	63
Pegs to a composite	14	10	10	8	8	5	5	7
Intermediate pegs	44	17	13	12	9	13	10	12
Pegged exchange rates within horizontal bands	18	6	5	4	4	5	5	5
Crawling pegs	14	6	5	5	5	8	5	6
Crawling bands	12	5	3	3	...	...	...	1
Floating arrangements	**60**	**93**	**92**	**93**	**93**	**89**	**82**	**83**
Managed floating	37	43	45	46	49	51	45	48
Independently floating	23	50	47	47	44	38	37	35

Source: *Annual Report on Exchange Arrangements and Exchange Restrictions* database.

1/ All data are based on the current de facto methodology; for 1996, the methodology is applied retroactively.

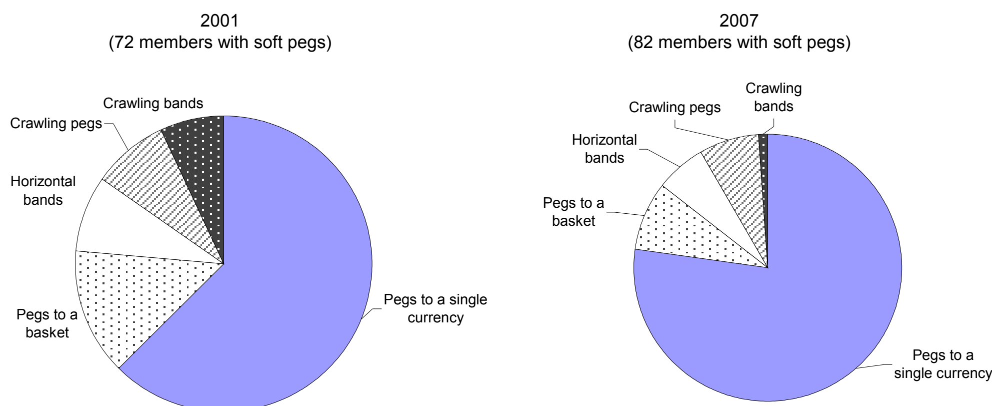
Figure 3. Evolution of Floating Exchange Rate Arrangements, 2001–07



Source: *Annual Report on Exchange Arrangements and Exchange Restrictions* database.

17. **The number of conventional pegs has increased again from 55 in 2001 to 70 in April 2007 after a long period of decline (Figure 4)**. This reflects mainly countries that reverted back to a conventional peg from floating.

Figure 4. Evolution of Soft Pegs, 2001–07



Source: *Annual Report on Exchange Arrangements and Exchange Restrictions* database.

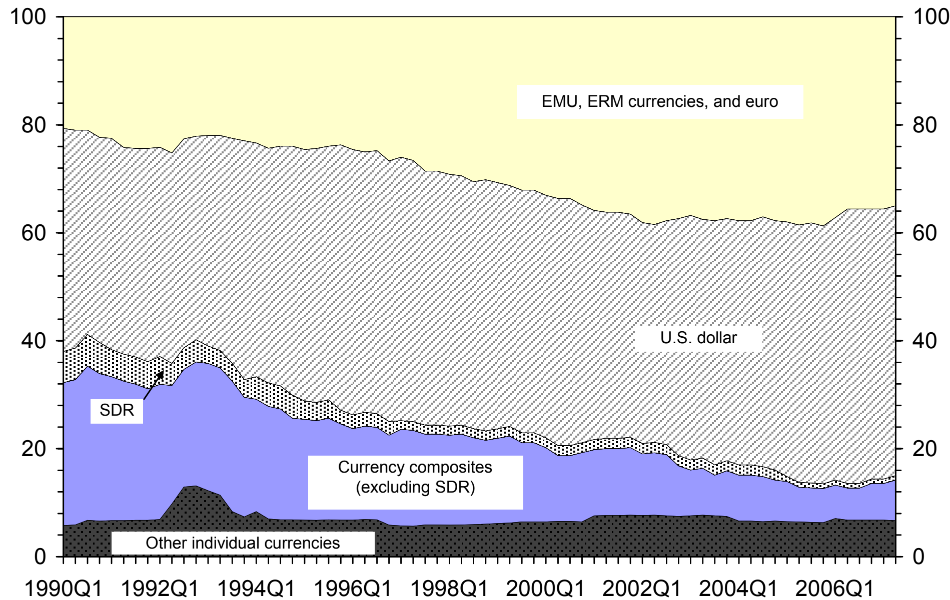
18. **Intermediate pegs—pegs within bands, crawling pegs, and crawling bands—have thinned out. Only 12 countries remain now in this subcategory, down from 44 in 1996 and 17 in 2001**. Of the exits from intermediate pegs, 10 have been a result of countries moving to floating arrangements, whereas 5 were to conventional pegs. On the other hand, 10 countries have adopted intermediate arrangements during the period under review, with 6 moving from fixed pegs and 4 from floating; 2 of the latter were in the context of membership in the European Economic and Monetary Union.

19. **Since the last review, countries with pegs have shown a preference for simple anchors**. The emergence of the euro and the move away from intermediate pegs, which frequently make use of baskets, contributed to this trend. The number of countries that adjust or peg their currencies with reference to a basket of currencies (excluding the SDR) has declined from 36 in 1990 to 8 at the end of April 2007, while the number of countries using the SDR as reference has likewise dropped from 6 to 1 (Figure 5).[13]

[13] In 1990, the Islamic Republic of Iran, Jordan, Libya, Myanmar, Rwanda, and Syria had arrangements with the SDR as anchor currency; only Libya continues to have one now.

Figure 5. Evolution of Currency Anchors, 1990–2007 1/

(Quarterly data; in percent of total)



Source: *Annual Report on Exchange Arrangements and Exchange Restrictions* database.

1/ Currency anchors used by countries classified as hard pegs or soft pegs, as at end-April 2007.

20. **The U.S. dollar remains the prevailing international currency anchor**. A diverse set of countries uses the U.S. dollar: one-third of the dollar pegs are hard pegs and the rest soft pegs. For countries with soft pegs, the U.S. dollar remains the currency of choice, possibly reflecting its continued importance as an invoice currency and a high share of trade with the U.S. or other countries that peg to the U.S. dollar.[14] The role of the euro has expanded significantly. It serves as the exchange rate anchor for the CFA franc zone in Africa and for most countries in Europe. The bulk (two-thirds) of the 30 countries that target or use the euro have conventional pegs.[15]

[14] Many countries that peg to the U.S. dollar are not in close proximity to the United States. Of the countries using the U.S. dollar as an anchor, only 53 percent are in the Americas or are Pacific islands.

[15] Excluding the CFA franc zone, only six of the countries that have the euro as sole exchange rate anchor are not in the ERM II.

21. **The use of a basket of currencies to anchor the exchange rate has virtually disappeared**. Despite its advantages in stabilizing the nominal effective exchange rate,[16] the reasons for its virtual disappearance may lie in its reduced transparency compared to simple anchors, the growing dominance of the major currency blocs, and the growth in hedging instruments allowing traders and investors to easily swap currency risks.[17]

B. Implications of Recent Trends in Exchange Rate Arrangements

22. **The tendency to limit appreciation has resulted in what appears to be tighter exchange rate management, as a number of countries have enjoyed strong external demand and capital inflows**. Since 2002, strong global demand and commodity prices have strengthened the external positions of a number of countries (mirroring to a large extent the U.S. current account deficit), and have created nominal appreciation pressures. In this environment, the desire to stem rapid real appreciation and apprehension about the loss of competitiveness has been manifested in persistent intervention in the foreign exchange markets and a large build-up of reserves.

23. **The capping of appreciation has been reflected in a relative lack of volatility of currencies under floating arrangements, especially vis-à-vis the U.S. dollar**. In fact, since the early 1990s, there has been a decrease in volatility vis-à-vis the U.S. dollar. This has been concentrated in managed floats, as more and more countries with these arrangements have come under pressure to appreciate (Figure 6).

Rising foreign exchange reserves

24. **The period under review has also been characterized by the significant growth of foreign exchange reserves in many countries (Figure 7)**. During December 2002 to December 2006, overall world reserves (measured in U.S. dollars) more than doubled. The increase in reserves in countries with soft pegs and managed floating arrangements has been substantial. The total reserves of countries with soft pegs increased from 23 percent of the world stock in 2000 to 32 percent in December 2006, and the average monthly change in reserves in these countries rose steadily from US$38 million to US$838 million over the same period. Similarly, total reserves in countries classified as managed floating increased from 14 percent to 19 percent. These changes are indicative of significant asymmetric intervention by managed floaters to dampen appreciation pressures. Some countries, notably in Asia, also intervened in order to build larger reserves as a cushion against external shocks. Rising reserves have also been associated with the increasing importance of sovereign wealth funds.

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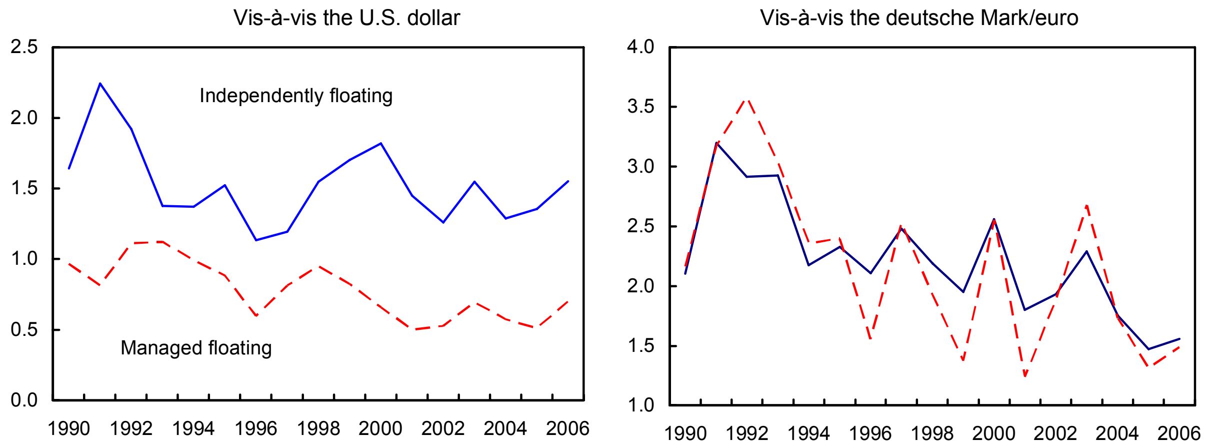
[16] See Ito, Ogawa, and Sasaki (1998); Rajan (2002); Bird and Rajan (2002); and Lipschitz and Sundararajan (1980). See also Mussa and others, 2000, *Exchange Rate Regimes in an Increasingly Integrated World Economy*, IMF Occasional Paper No. 193 (Washington: International Monetary Fund).

[17] See Frankel and others., 2000, and McKinnon and Schnabl, 2004.

Figure 6. Floating Currencies: Volatility, 1990–2006

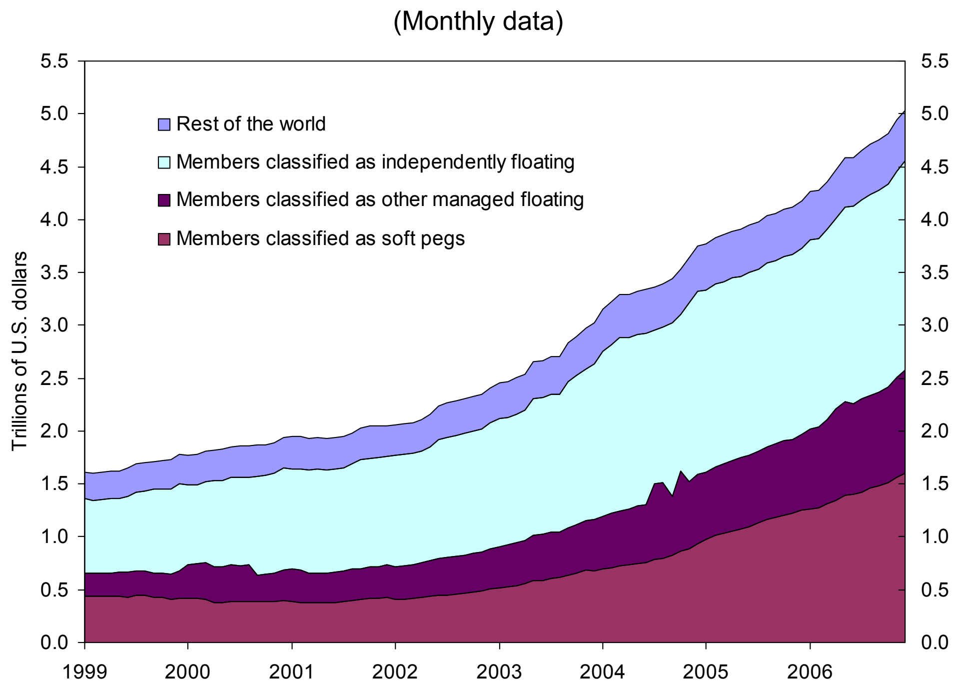
(Median absolute percent change in monthly exchange rates)



Sources: *International Financial Statistics*; and *Annual Report on Exchange Arrangements and Exchange Restrictions* database.

Figure 7. World International Reserves, January 1999–December 2006 1/ 2/

(Monthly data)



Sources: *International Financial Statistics* and *Annual Report on Exchange Arrangements and Exchange Restrictions* database.

1/ Foreign exchange reserves and gold at market prices.
2/ April 2007 data not available for many countries.

25. **Appreciation pressures have spurred exceptionally strong growth in reserves even among countries with independently floating arrangements**. The share of world reserves of independent floaters has increased from 24 percent in 1996 to 38 percent of the world total in December 2006. Countries with hard pegs have been among those with the lowest contributions to total reserve changes and median volatility. The highest volatility of reserves (measured by their standard deviation) has been among countries with intermediate pegs, indicating that an active official presence in the market is required to maintain these arrangements.

De facto and de jure classifications

26. **As in the past, actual exchange rate behavior and declared policies do not always coincide**.[18] Currently, 25 countries whose exchange rates behave like de facto conventional pegs continue to declare a different (and more flexible) arrangement. Also, 14 countries reporting independent floats de facto follow managed floats (Figure 8). However, it must be recognized that the distinction between an independent and a managed float is difficult in some cases owing to the unavailability of detailed intervention data. Earlier, many countries that de jure floated but were in fact pegged exited to de facto floats during the emerging market crises of 1997–2001.

III. Developments in Exchange Restrictions, and Current and Capital Account Controls[19]

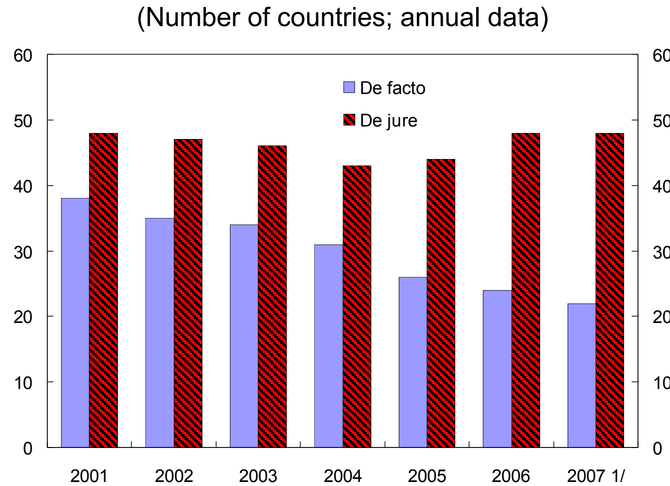
27. **This section reviews developments in current and capital account liberalization.** Considerable progress has been made in the liberalization of current accounts, for example by eliminating restrictions and controls, moving from the transitional arrangements of Article XIV toward formal acceptance of the obligations of Article VIII, Sections 2(a), 3, and 4 by Fund members, and thereafter maintaining an exchange system free of restrictions on the making of payments and transfers for current international transactions, and free of MCPs. These developments are correlated with income levels, as countries generally

[18] The data on de jure arrangements presented here are taken from an internal database maintained, in addition to notifications in accordance with Article IV, Section 2(a), on the basis of the AREAER*,* information from central bank Web sites, and staff reports.

[19] An exchange restriction entails a restriction on the making of payments and transfers for current international transactions. Such restrictions are subject to Fund approval under Article VIII, Section 2(a) of the Fund's Articles of Agreement, unless they are introduced or maintained subject to the transitional arrangements of Article XIV. In contrast, the broader concept of an exchange control includes a range of measures that for instance, regulate and monitor access to foreign exchange (e.g., foreign exchange verification requirements), but that need not give rise to exchange restrictions.

Figure 8. Evolution of De Jure and De Facto Independent Floats, 2001–2007 1/

(Number of countries; annual data)



Sources: Staff reports; and *Annual Report on Exchange Arrangements and Exchange Restrictions* database.

1/ As at end-April 2007.

liberalize as they develop. Many countries have also continued to remove capital controls, with emerging market countries spearheading the effort.[20]

A. Recent Trends in Exchange Restrictions on Current Transactions[21]

28. **A small minority of Fund membership has yet to accept the obligations of Article VIII, Sections 2(a), 3, and 4, following an acceleration in the pace of acceptance in recent years**. Sixteen members notified the Fund of their acceptance of these obligations during the period 2002–07, bringing the total number of countries that have accepted these obligations to 166.[22] The pace of acceptance doubled compared with the previous four years, when eight countries accepted the obligations (Figure 9). As a result, the number of members

[20] This is based on an analysis of data from 2001 to end-2006, as more recent data are not systematically available. Recent changes, for example the liberalizations in Korea or tightening of controls in Thailand and Colombia—have therefore not been taken into account in the data analysis.

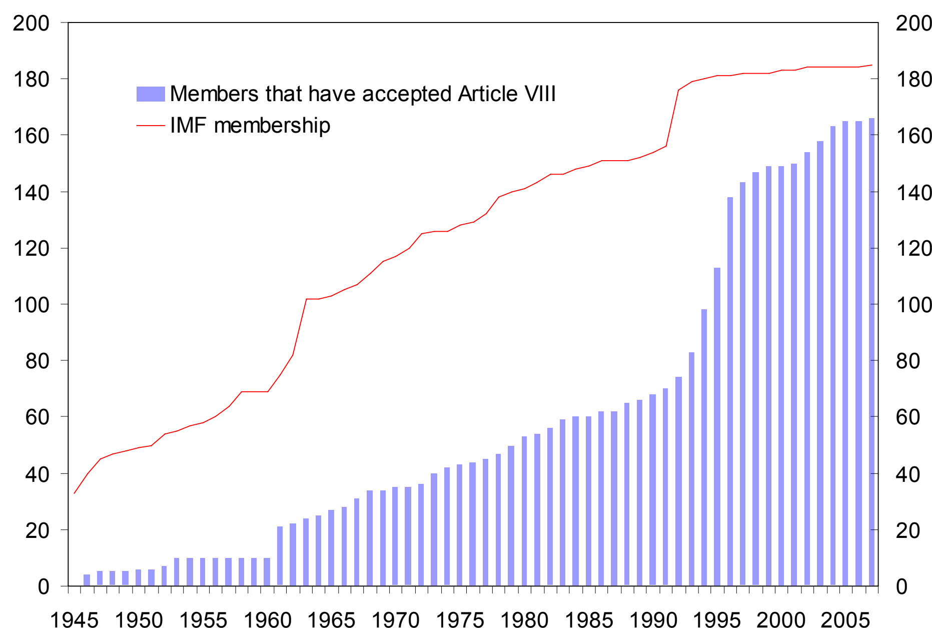
[21] See Appendix Tables 9 and 10 for further details.

[22] The 16 countries are Cambodia (January 2002), Zambia (April 2002), the Republic of Serbia (then Serbia and Montenegro) (May 2002), Timor-Leste (July 2002), Congo, DR (February 2003), Libya (June 2003), Uzbekistan (October 2003), Sudan (October 2003), Cape Verde (July 2004), Colombia (August 2004), Islamic Republic of Iran (September 2004), Azerbaijan (November 2004), Tajikistan (December 2004), Egypt (January 2005), Vietnam (November 2005), and the Republic of Montenegro (January 2007).

in transitional arrangements under Article XIV fell from 34 at end-2001 to 19 at end-2006.[23] This includes 10 members that have availed themselves of Article XIV for 40 years or more.

Figure 9. Countries Accepting the Obligations of Article VIII, Sections 2(a), 3, and 4, 1945–2007 1/

(Number of countries)



Sources: Secretary's Department; and *Annual Report on Exchange Arrangements and Exchange Restrictions* database.

1/ As at end-April 2007.

29. **The 19 countries still availing themselves of the transitional arrangements under Article XIV are at various stages of liberalization**:

- four countries maintain the exchange measures that were in place when the country became a Fund member—although three of these have also introduced new restrictions subject to Fund approval under Article VIII;

[23] When joining the Fund, a member may avail itself of the transitional arrangements of Article XIV, Section 2 of the Fund's Articles of Agreement. This provision permits the member to maintain (and adapt to changing circumstances) the exchange restrictions and MCPs that were in place on its date of membership without Fund approval. However, to the extent that a member introduces or intensifies exchange restrictions and MCPs, these measures are subject to Fund approval under Article VIII. A summary discussion of the legal framework applicable to exchange restrictions subject to Fund jurisdiction is contained in the recently issued paper, *Article VIII Acceptance by IMF Members—Recent Trends and Implications for the Fund*, op cit.

- for four countries, available information is insufficient to ascertain adequately the existence or absence of restrictions or MCPs;

- two countries actually maintain no specifically identified exchange measures; and

- the remaining nine countries no longer maintain the exchange restrictions or MCPs existing at the time they became members of the Fund, but have introduced new exchange restrictions or MCPs that are subject to Fund approval under Article VIII.

Some of these members are at varying stages of consultation with Fund staff to settle remaining issues, including whether new or revised laws and regulations or administrative practices give rise to any exchange measures, before accepting the obligations of Article VIII, Sections 2(a), 3, and 4.

30. **Many of the countries that still avail themselves of the transitional arrangements under Article XIV are reluctant to formally accept the obligations of Article VIII**. This could reflect a tendency to rely on direct controls in managing economic and financial transactions, as evidenced by the maintenance of large public sectors and restrictive trade arrangements. Also, most of these members have experienced internal or external conflict for extended periods and some have had limited interaction with the global economy.

31. **There has also been considerable progress in reducing exchange restrictions and MCPs globally**. The number of exchange restrictions and MCPs subject to Fund approval maintained by members decreased in 2006, as most of the countries that accepted the obligations of Article VIII, Sections 2(a), 3, and 4 did so after eliminating many preexisting exchange restrictions and MCPs (Table 2).

32. **Progress toward the *complete* removal of exchange measures in individual countries has, however, been somewhat less pronounced**. After dropping by 11 in 1994–97 and by 8 in 1998–2001, the number of Fund members maintaining exchange measures declined by only 4 during the period 2002–06 to 34, despite the increase in members accepting the obligations of Article VIII. This reflects several factors:

- a few countries that had formally accepted Article VIII obligations and had previously eliminated all exchange measures introduced new ones;

- some countries had exchange measures that had been in effect for prolonged periods but were only recently revealed as a result of improved reporting or a comprehensive review of their exchange system; and

- some countries accepting Article VIII obligations in the period 2002–06 did so while continuing to maintain a few preexisting exchange measures.

Table 2. Types of Exchange Measures, 1997–2006 1/

	Members Under:								
	Article XIV Status			Article VIII Status			Total		
	1997	2001	2006	1997	2001	2006	1997	2001	2006
Total number of restrictions maintained by members	**103**	**75**	**42**	**48**	**35**	**43**	**151**	**110**	**85**
Restrictions on payments for invisibles and other current transfers:	72	45	27	16	15	23	88	60	50
Foreign exchange budgets	15	12	2	3	3	4	18	15	6
Limited foreign exchange allowances for:	54	32	17	10	6	7	64	38	24
Education	8	5	2	...	...	1	8	5	3
Medical expenses	6	4	2	...	...	1	6	4	3
Remittances	19	7	4	9	6	3	28	13	7
Travel	14	11	4	...	...	1	14	11	5
Other transfers	7	5	5	1	...	3	8	5	8
Freezing of forex deposits or inconvertibility of other deposits for current payments	...	1	3	1	4	3	1	5	6
Tax clearance certification	...	...	2	1	2	3	1	2	5
Other restrictions	3	...	3	1	...	4	4	...	7
Restrictions on payments for imports	3	4	4	1	3	2	4	7	6
Advance import deposits	3	3	...	...	2	1	3	5	1
Prior import payment requirements	...	1	4	1	1	1	1	2	5
Restrictions arising from bilateral or regional payment, clearing or barter arrangements	4	5	1	1	1	3	5	6	4
Restrictions evidenced by external payment arrears	1	...	1	9	3	5	10	3	6
Arrears to commercial creditors	1	...	1	2	1	1	3	1	2
Arrears to official creditors	...	...	1	2	...	...	2	...	1
Arrears not specified	...	...	...	5	2	4	5	2	4
Multiple currency practices	23	18	5	19	12	11	42	30	16
Memorandum items:									
Average number of restrictions per member	3.7	3.8	3.2	2.7	1.9	2.0	3.3	2.9	2.5
Number of countries with restrictions	28	20	13	18	18	21	46	38	34

Sources: *Annual Report on Exchange Arrangements and Exchange Restrictions* database; and staff reports.

1/ Countries include member states plus Aruba, the Netherlands Antilles, and Hong Kong SAR. However, Afghanistan, Iraq, and Somalia are excluded, as recent and comprehensive information on restrictions in these countries is not available. The data do not include security-related exchange restrictions.

33. **The composition of exchange measures has also undergone noteworthy changes in recent years, with significant progress achieved in some of the categories that cause the most economic distortions**:

- The number of countries with MCPs dropped sharply to 16. Just under 9 percent of the membership now maintains MCPs, as compared with 25 percent in 1997 and 17 percent in 2001.

- Many countries that availed themselves of the transitional arrangements under Article XIV continued to eliminate restrictions on invisible transactions, notably

- restrictions on the transfer of remittances, on the availability of foreign exchange for travel, and restrictions arising from foreign exchange budgets.[24]

34. **However, the most heavily used exchange restrictions continue to relate to payments and transfers for current invisible transactions, while those related to payments for imports of goods remain rare**. More specifically, the most commonly applied exchange restrictions are binding limits on foreign exchange allowances for remittances and travel. Only a few countries still maintain exchange restrictions related to imports—such as prior import payment requirements—and exchange restrictions arising from bilateral payments arrangements.

35. **The Fund has only sparingly granted approval to the 21 members who have maintained exchange measures despite having accepted the obligations of Article VIII, Sections 2(a), 3, and 4 (Table 3)**. This is especially the case for newly introduced exchange measures: only one of the restrictions introduced in 2005–06 that were subject to Fund approval under Article VIII was approved, as the others did not meet the relevant criteria.[25] Consequently, the share of countries with unapproved restrictions in the total number of countries maintaining restrictions increased from 24 percent in 2001 to 50 percent at end-2006. It is worth noting that quite a few of these unapproved restrictions are maintained by countries that only recently accepted the obligations of Article VIII, Sections 2(a), 3, and 4.

36. **The Fund has put special emphasis on encouraging members to fully eliminate existing exchange restrictions and MCPs subject to Fund approval and accept the obligations of Article VIII, Sections 2(a), 3, and 4**. Although the Fund's present framework to address restrictions appears broadly adequate, some countries have maintained restrictions for decades, as noted above. In addition, some challenges have emerged from the recent increase in the number of Article VIII countries with unapproved restrictions, as well as from deviations from the standard Article VIII acceptance procedures.[26,27]

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[24] This reflects liberalization of access to foreign currency in several countries (for example, Burundi and Syria). By contrast, one or two rather specific restrictions were introduced or recently uncovered in countries that had already accepted Article VIII obligations.

[25] Exchange restrictions and MCPs subject to Fund jurisdiction may be legally imposed under Article VIII with the approval of the Fund. Generally, approval of an exchange measure is granted by a decision of the Executive Board when the Board is satisfied that the measure (i) is imposed for balance of payments reasons; (ii) is applied in a manner that does not discriminate between Fund members; and (iii) is temporary in the sense that there is a clear timetable for its removal. See the discussion in Article VIII Acceptance by IMF Members-Recent Trands and Implications for the Fund, op cit.

[26] See *Article VIII and Article XIV*, Decision No. 1034-(60/27), adopted 6/1/60.

[27]See *Article VIII* "Acceptance by IMF Members—Recent Trands and Implications for the Fund," op cit.

Table 3. IMF Members that have Accepted Article VIII Obligations Maintaining Exchange Measures, 2001–2006 1/

	2001	2002	2003	2004	2005	2006
Total number of Article VIII members with exchange measures:	18	19	17	18	21	21
Of which:						
Countries with unapproved exchange measures	9	9	8	11	18	17

Source: Staff reports.

1/ Based on the latest staff reports in the given year. Exchange measures include exchange restrictions and MCPs, but not security-related exchange restrictions.

B. Recent Trends in Controls on Current Transactions[28]

37. **The momentum to eliminate the substantive current account controls has also been maintained, although some low-income countries still continue to heavily regulate their current account transactions**. The number of countries maintaining such controls continued to decline during 2001–06 (Table 4). The exception to the general trend was regulations on documentation requirements for export proceeds, which were intensified.

38. **This gradual general trend toward liberalizing controls hides the more rapid progress achieved in some of the more substantive areas**. For example, repatriation and surrender requirements declined by over 10 percent and 20 percent, respectively, in 2001–06. Fewer than half of countries now impose repatriation requirements, while the share of countries imposing surrender requirements has fallen below one-third. While, the trend in liberalizing payments for invisible transactions has continued, the share of countries continuing to impose financing requirements for imports has decreased only slightly, remaining above 25 percent following a steady decline in recent years.

39. **The decline in repatriation and surrender requirements reflects the improving fundamentals in the global economy**. Factors at play include better balance of payments situations, increased effectiveness of monetary policy, and, as a result, better incentives to repatriate and convert foreign currency earnings into domestic currency.

[28] Tables in this section, which use the classification of the AREAER, were compiled on the basis that unless a country has lifted all restrictions or controls in a particular category, this category is considered to be controlled. This approach does not measure partial liberalization of transactions, as only the full liberalization of a category is registered as liberalization.

Table 4. Countries Maintaining Exchange Controls on Payments, Receipts, and Transfers for Current Transactions, 1997–2006 1/

(Countries with controls, as percent of total reporting countries)

	1997	2000	2001	2002	2003	2004	2005	2006
Areas of controls	71.9	69.9	68.8	68.4	67.4	66.8	66.8	66.8
Import payments	62.3	60.8	61.8	62.0	59.9	58.3	58.3	58.3
Financing requirements	22.8	25.3	25.8	25.1	21.9	21.4	21.9	25.1
Documentation requirements 3/	57.0	58.6	60.2	60.4	59.9	57.8	56.7	56.1
Payments for invisible transactions and current transfers	57.9	52.7	54.3	52.4	51.3	48.7	47.6	47.6
Export proceeds	65.8	60.8	60.8	59.9	59.4	58.8	59.9	59.4
Repatriation requirements	60.5	57.0	54.8	52.9	51.3	49.2	48.1	48.1
Surrender requirements	44.7	39.8	38.7	38.0	36.9	34.8	33.7	29.4
Documentation requirements 4/	37.7	43.0	44.6	45.5	45.5	46.5	47.6	47.6
Proceeds from invisible transactions and current transfers	53.5	52.7	54.3	52.4	51.3	48.7	47.6	47.6
Repatriation requirements	57.9	51.6	50.0	48.1	46.5	44.4	43.3	42.8
Surrender requirements	43.9	37.6	37.1	36.9	33.2	32.6	32.1	29.4
Memorandum item:								
Total reporting countries	185	186	186	187	187	187	187	187

Source: *Annual Report on Exchange Arrangements and Exchange Restrictions* database.

1/ Data reflect information available as of the end of each year and are subject to reporting lags. Countries include member states plus Aruba, the Netherlands Antilles, and Hong Kong SAR.

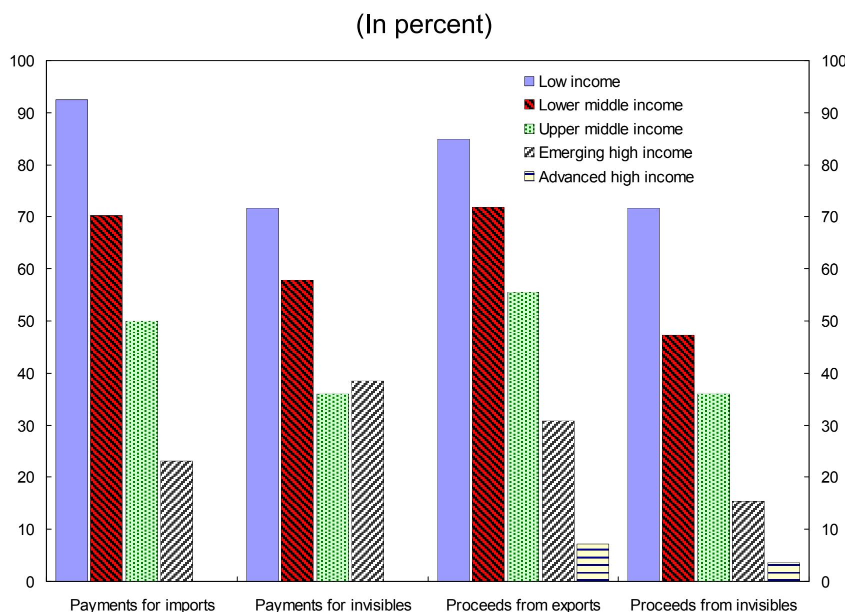
2/ Includes requirements for domiciliation, import licenses used as exchange licenses, letters of credit, and preshipment inspections.

3/ Includes requirements for domiciliation, guarantees, letters of credit and preshipment inspections.

40. **The extent of exchange controls on current transactions has continued to be closely linked to a country's level of development (Figure 10)**. While low-income countries maintained, and occasionally intensified, controls in all areas, high-income countries continued to reduce controls up to the point where none reported having controls on imports and only a few on exports. An increasing number of lower middle-income and emerging high-income countries maintain no restrictions in one or more subcategories. In middle-income countries, there was a tightening of controls in some categories and a relaxation in others.

Figure 10. Controls on Current Account Transactions, by Economic Classification, End-2006

(In percent)



Source: *Annual Report on Exchange Arrangements and Exchange Restrictions* database.

41. **Other significant trends relate to differences in the imposition of controls on payments relating to trade in goods and invisibles between the high- and low-income groups**. For example, 93 percent of the low-income group imposes controls on payments relating to goods imports, yet only 72 percent does so on invisibles. This indicates that quite a few low-income countries do not even attempt to control payments for invisibles. Emerging high-income countries, in contrast, have more controls on invisibles than on imports of goods, suggesting that they have accomplished a more rapid liberalization of trade in goods than in services. Advanced high-income countries report having no controls on either.

42. **These trends are indicative of a liberalization process that is closely related to the level of income and economic development**. In the initial stages of development, controls on imports of goods and invisibles intensify as countries seek to gain control over previously uncontrolled transactions. The growth of adequate institutions, a more resilient financial sector, and a properly functioning foreign exchange market can support the replacement of controls with market based mechanisms. In the course of economic development, controls on payments for trade in goods have tended to be liberalized before controls on trade in invisibles. At the early stages of development, payments and transfers related to exports are treated more liberally, whereas those related to imports are liberalized at later stages of development.

C. Recent Trends in Controls on Capital Transactions

43. **Nearly all countries reported maintaining some type of controls on capital transactions during 2001–06 (Appendix Table 10), but the extent to which controls were applied varied considerably by the type of control**.[29] The most widely reported capital controls (about 85 percent of reporting countries) were those imposed on transactions by commercial banks and other credit institutions. Other common controls were those applied to real estate transactions and capital and money market instruments (more than 70 percent each), and foreign direct investment (about 65 percent). Controls on the liquidation of direct investment (such as prior approval for the repatriation of invested capital) were the least prevalent, possibly reflecting recipient countries' concern that controls on liquidation would deter desirable foreign direct investment.

44. **Lower income countries generally maintain more capital controls than higher income countries**. Some capital controls, such as those on institutional investors, may be less relevant for low-income countries because the financial sector is not sufficiently developed. Other controls, such as those on foreign direct investment and real estate inflows, are found across all income levels. Nonetheless, many controls are clearly a function of income, such as those on personal capital movements, derivatives, credit operations, liquidation of foreign direct investments, and capital and money market instruments.

45. **As with current account restrictions, most progress has been made in liberalizing controls in the categories prevalent at middle and higher income levels, albeit at a modest pace**.[30] Middle- and higher-income developing countries also seem to have adopted modes of liberalization in which regulations have shifted from direct administrative controls on certain transactions to either qualification requirements or risk-based limits for individuals or institutions.

46. **Higher-income countries made faster progress in liberalizing controls on outflows than controls on inflows, possibly reflecting strong external positions (Table 5)**. Among the emerging high-income countries, recent EU members (for example, Malta and Slovenia) liberalized outflows, following the earlier liberalization of inflows. China and India have also taken modest steps towards outflow liberalization, but much scope remains for

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[29] Controls on capital transactions include measures affecting international capital movements that involve official action by members and impose limitations on capital account transactions or on payments and transfers related to them.

[30] In categories where controls may be more relevant at higher income levels, additional controls can be observed for some groupings. For example, more upper middle income countries introduced controls on transactions by institutional investors.

liberalizing FDI and portfolio investments.[31] Much of the progress in liberalizing capital controls in higher income countries was accounted for by Japan and Korea.

Table 5. Evolution of Controls on Capital Transactions, 2000–2006 1/

(Simple average of percent of types of transactions subject to controls across all members of each group)

	Inflows									Outflows								
	2000	2001	2002	2003	2004	2005 *	2005	2006 *	2006	2000	2001	2002	2003	2004	2005 *	2005	2006 *	2006
Low income	47.1	46.8	47.7	46.8	47.4	48.0	48.0	47.6	47.6	53.8	53.3	53.6	53.1	53.8	53.5	53.5	53.5	53.5
Lower middle income	47.1	46.2	46.2	45.8	46.6	47.5	47.5	45.0	45.0	49.5	48.2	48.7	48.0	48.2	49.0	49.0	49.0	49.0
Upper middle income	36.4	35.4	35.0	34.7	36.2	37.6	37.6	36.8	36.8	35.2	34.3	33.6	32.3	34.9	36.8	36.8	36.8	36.8
Emerging high income	41.5	41.8	40.1	39.9	37.4	37.4	38.8	38.4	38.4	35.2	34.9	31.0	30.4	27.7	27.7	28.8	28.8	28.8
Advanced high income	20.3	21.2	21.2	20.2	18.8	18.8	23.0	21.4	21.9	14.0	14.5	14.2	12.9	11.2	11.2	21.4	11.2	21.4
All reporting countries	40.9	40.5	40.6	40.0	40.3	40.6	41.7	40.4	40.5	42.0	41.4	41.3	40.4	40.7	41.0	42.8	42.8	42.8

Source: *Annual Report on Exchange Arrangements and Exchange Restrictions* database.

1/ Data for 2005 and 2006 are affected by methodological changes implemented in 2005. Two sets of data are presented; 2005/2006 and 2005*/2006* which incorporate and do not incorporate, respectively, the changes due to the new methodology which relate to the 2004 version of the Organization for Economic Cooperation and Development (OECD) Code. This includes several controls that apply to rules on insurance companies, investment funds, and/or pension funds, which previously had not been classified as capital controls and were not reported during the compilation of the AREAER as such either. In addition, the AREAER capital control entries of OECD member countries have been harmonized with the list of country "reservations" made to the OECD Codes of Liberalization of Capital Movements.

47. **Until recently, most countries seem to have weathered exchange rate pressure without imposing controls on capital inflows or outflows**. For instance, Korea responded to *upward* pressure on the exchange rate mainly by reforming and deregulating the foreign exchange market rather than imposing inflow controls. Indonesia dealt with *downward* pressure on the exchange rate in 2005 through a combination of monetary tightening and some limited administrative measures to deter speculation. However, some countries, notably Thailand (2006) and Colombia (2007) resorted to controls on inflows.

48. **Aside from these broad trends, the use and liberalization of capital controls has been quite varied across countries**. In some countries, liberalization was pronounced, while in others, even within the same income group, controls were tightened. As in the past, countries tended to liberalize capital controls after moving to a more flexible exchange rate, but with a lag. In particular, some controls on derivatives and on commercial bank transactions were liberalized soon after introducing greater exchange rate flexibility. Relaxation of controls on institutional investors and personal capital transactions, and certain capital and money market instruments, often came with a longer delay. Some notable trends and emerging market country experiences are highlighted in Box 2.

49. **Capital controls and financial prudential controls are becoming increasingly intertwined**. This, in part stems from the interaction between capital account liberalization

[31] See Reserve Bank of India, *Report of the Committee on Fuller Capital Account Convertibility*, July 31, 2006 (http://www.rbi.org.in/scripts/PublicationReportDetails.aspx?ID=468).

and financial sector deregulation, which has led to the emergence of new intermediaries and a more complex matrix of capital flows among advanced and emerging market countries. Many countries are giving greater attention to the prudential regulation and supervision of cross-border financial activities. Some prudential measures can in fact be regarded as capital controls because they discriminate between residents and nonresidents and thereby influence capital flows. Such measures include treating deposit accounts held by residents and nonresidents differently (such as, applying discriminatory reserve requirements and interest rate controls). Conversely, capital controls have also been used in lieu of prudential measures in countries with weak prudential regulation and supervision, or where the cross-border exchange of supervisory information is inadequate. Controls used in such cases have included limits on the volume or maturity of foreign borrowings, and on the activities of foreign banks or their branches.

50. **The rise of large, internationally active financial and mixed business groups has also increased linkages between prudential considerations and international capital flows.** These business groups play a major role in enabling capital flows and, in doing so, make for a much more efficient and faster transmission of external and sector-specific shocks to the wider financial system and the economy. A complicating factor is that the host country can have difficulties in assessing the consolidated risks as they cross sectoral lines, and intra-group flows may obscure the underlying nature of transactions.

51. **Data on prudential measures in the AREAER indicate that about one in eight countries has prudential controls in place that can potentially affect international capital transactions**. There is an overall trend toward liberalization that is most evident in emerging market high-income countries, which are gradually moving toward a regime similar to what is found in the advanced countries. However, several upper middle-income countries have made increased use of discriminatory prudential measures to deal with capital inflows. These includes some new EU member states, which have limited scope to impose capital controls in light of EU accession commitments, but are facing macroeconomic stresses and risks from high credit growth fueled by capital inflows.[32]

52. **The relationship between prudential measures and capital controls deserves further study**.[33] A key question is how to coordinate these policies (and their liberalization)

[32] Croatia imposed a marginal reserve requirement on banks' foreign borrowing to reduce external vulnerability in July 2004 and tightened the requirement in 2006. Romania imposed higher reserve requirements on all foreign currency denominated liabilities (mid-2004–05) and limited the exposure of credit institutions to lending in foreign currency to unhedged borrowers to 300 percent of the creditor's own funds (the latter measure was eliminated in 2006). Several countries also resorted to more indirect methods of managing the impact of foreign inflows.

[33] For instance, some prudential measures may have the effect of protecting domestic financial institutions from foreign competition.

Box 2. Emerging Market Country Trends and Examples of Liberalization and Tightening

Capital and money market instruments: There is a strong tendency toward liberalization in this category, which is consistent with the integration of emerging market countries into global capital markets. Examples include: Brazil, where the local stock market was opened to nonresidents in 2000; and Hungary and Romania, where all remaining controls on capital transactions were eliminated in 2001 and 2006, respectively. Another trend has been to ease restrictions by raising permissible ceilings. For instance: India in 2004 allowed residents to remit up to $25,000 for any permissible transaction. The trend toward liberalization was broken only by a modest spike in restrictions immediately after the Asian crisis. This effect was short lived, with Malaysia in particular, relaxing most of the restrictions imposed in 1998 by 2002. Similarly, Argentina, which imposed a series of restrictions in 2001, substantially relaxed them in 2003.

Credit operations: The aim of these restrictions is to limit destabilizing capital flows and inappropriate risk exposure of residents, including banks, by restricting their ability to undertake cross-border lending or borrowing. In recent years, cross-border credit transactions for either trade or commercial purposes have been substantially liberalized. Examples include permitting new credit activities between residents and nonresidents (Romania), relaxing approval criteria (India), or increasing permissible credit ceilings (Malaysia). Countries have also delegated approval away from the central bank to commercial banks. Only very few countries have tightened controls on credit operations, mainly in response to overheating fears.

Derivatives and other instruments: Significant easing of controls on derivatives took place in specific countries, notably Chile and Tunisia in 2001; India in 2003; Morocco and Romania in 2004; and Philippines and Ukraine in 2005. A few examples of tightening are: Indonesia in 2005, where the limit on forward and swap transactions without underlying investment related transactions was reduced to US$1 million from US$3 million; and Lebanon, where banks' derivatives transactions were limited to hedging purposes only.

Real estate transactions: Controls on cross-border real estate transactions often seek to prevent nonresidents from owning domestic real estate. There has been some liberalization in this area in recent years, for example by allowing nonresidents access to credit for real estate purchases, funded by the local banking system (Malaysia in 2006), or by allowing the remittance of the proceeds from the sale of real estate by nonresidents without time limit (as in India for nonresident Indians).

Personal capital transactions: In this category, there has been mostly liberalization and little tightening. Liberalization has mainly taken the form of raising limits on transfers, or eliminating the need for prior authorization or reporting requirements.

Transactions by commercial banks and other credit institutions: This is a very important category covering a variety of measures, including *discriminatory* prudential measures to limit banks' foreign exchange risks: net open positions, nostro account limits, differential reserve requirements, and lending to nonresidents. Although the general trend has been towards liberalization, there is evidence that some countries are using such controls as "sand in the wheels" to limit foreign fund inflows into the domestic banking system. For example: Thailand in 2003 prohibited the payment of interest on nonresident accounts of less than six months, and at the end of 2006 implemented a requirement to withhold for one year 30 percent of all foreign currency purchased or exchanged against Thai baht by financial institutions, and a 10 percent nonrefundable URR on foreign investments of less than one year duration in Thailand; Argentina imposed a 365 days mandatory holding period and 30 percent URR on foreign nontrade financing borrowing in 2005; Ukraine in 2005 required that 20 percent of the increase in foreign exchange denominated liabilities be placed in unremunerated deposits at the central bank, tightening the regulations further in 2006; Indonesia limited short-term borrowings to 30 percent of capital in 2005; Croatia in 2004 began requiring unremunerated foreign-currency deposits at the central bank as a share (now 55 percent) of the increase in banks' foreign liabilities, tightening the regulations further in 2006; and Colombia introduced a 40 percent URR on foreign borrowing in May 2007, which was later extended to portfolio inflows.

Transactions by institutional investors (such as pension funds and insurance companies): Only modest liberalization took place in this area. Nonetheless, a number of countries relaxed controls on nonresident investors' involvement in local markets or allowed more scope for resident institutional investors to invest abroad. Limits on the overseas activities of local investors have also been reduced by increasing ceilings on the maximum holdings of foreign assets and by relaxing the credit quality requirements for overseas assets.

Nonresident accounts: Many cross-border financial transactions, particularly portfolio investments, depend on the ability of nonresidents to open and maintain local currency or foreign exchange accounts in domestic banks. Several countries have liberalized this area. For example: Brazil in 2000 allowed authorized reinsurance companies to open foreign exchange accounts locally; limits on interest rates on foreign exchange accounts in Pakistan were lifted in 2002; blocked accounts were abolished in Cyprus in 2001, and it adopted EU regulations in 2004. Several transition economies including Kazakhstan, Romania, and Russia also relaxed this type of controls. Even so, there has been a modest uptick in controls on nonresident accounts in recent years, possibly reflecting fears of speculative capital inflows fueling asset bubbles. Examples of tightening include: Thailand in 2003 imposed a maximum daily limit on nonresident accounts; and India in 2003 stopped companies controlled by nonresident Indians from opening or renewing foreign currency accounts.

in a way that limits balance sheet risks. This requires the application of new risk assessment methods, including the analysis of currency and maturity mismatches in sectoral balance sheets, as well as of capital and liquidity cushions, and the contingent claims approach.[34] A cross-cutting approach would help to form views on whether remaining capital controls are needed. Better data on these measures would also be helpful.

[34] In a recent discussion, the Executive Board has affirmed the importance of balance sheet mismatches, particularly at the sectoral level. *IMF Executive Board Discusses Balance Sheet Approach to Analysis of Debt-Related Vulnerabilities in Emerging Markets*, Public Information Notice No. 05/36, 3/22/2005. See also Gapen, Gray, Lim, and Xiao, 2004.

Appendix I. Data Tables

Table 6. Monetary Policy Framework, De Facto Exchange Rate Arrangements, and Anchors of Monetary Policy, April 30, 2007 1/

Exchange Rate Arrangements (Number of countries)	Monetary Policy Framework				
	Exchange Rate Anchor	Monetary Aggregate Target	Inflation Targeting Framework	IMF-Supported or Other Monetary Program	Other[2]
Exchange arrangements with no separate legal tender (10)	Ecuador El Salvador[3] Kiribati Marshall Islands Micronesia, Fed. States of Montenegro Palau Panama[4] San Marino[15] Timor-Leste, Dem. Rep. of				
Currency board arrangements (13)	Bosnia and Herzegovina Brunei Darussalam Bulgaria Hong Kong SAR Djibouti Estonia[5] Lithuania[5] **ECCU** Antigua and Barbuda Dominica Grenada* St. Kitts and Nevis St. Lucia St. Vincent and the Grenadines				
Other conventional fixed peg arrangements (70)	**Against a single currency (63)** Angola[6] Argentina†[6] Aruba Bahamas, The[7] Bahrain, Kingdom of Barbados Belarus[6] Belize Bhutan Bolivia[6] Cape Verde Comoros[8] Egypt[6, 10] Eritrea Ethiopia[6] Guyana†[6, 9] Honduras[6] Jordan[6] Kuwait Latvia[5] Lebanon[6] Lesotho Macedonia, FYR*[6] Maldives Malta[5] Mauritania*[6] Mongolia[6] Namibia Nepal*[6] Netherlands Antilles Nigeria[6, 10] Oman Pakistan†[6] Qatar Rwanda*[6] Saudi Arabia Solomon Islands[6] Suriname†[6, 7, 9] Swaziland Syrian Arab Rep.[7] Trinidad and Tobago[6] Turkmenistan[6] Ukraine[6] United Arab Emirates Uzbekistan[6, 7] Venezuela[7] Vietnam[6] Yemen, Rep. of[6] Zimbabwe[7] **CFA franc zone** **WAEMU[11]** Benin* Burkina Faso* Côte d'Ivoire Guinea-Bissau Mali* Niger* Senegal Togo **CAEMC[11]** Cameroon* Central African Rep.* Chad* Congo, Rep. of* Equatorial Guinea Gabon	Argentina†[6] Guyana†[6, 9] Suriname†[6, 7, 9]			Pakistan†[6]
	Against a composite (7) Fiji Iran, I.R. of†[6] Libyan Arab Jamahiriya Morocco Samoa Seychelles Vanuatu	Iran, I.R. of†[6]			
Pegged exchange rates within horizontal bands (5)[12]	**Within a cooperative arrangement (3)** Cyprus[5] Denmark[5] Slovak Rep.†[5] **Other band arrangements (2)** Hungary† Tonga		Hungary† Slovak Rep.†[5]		
Crawling pegs (6)	Azerbaijan[6] Botswana[7] China[6] Iraq*[6] Nicaragua Sierra Leone*[6]		Botswana[7]		
Crawling bands (1)	Costa Rica				

Managed floating with no pre-determined path for the exchange rate (48)		Bangladesh* Gambia, The*[6] Haiti* Jamaica[6] Lao P.D.R.[7] Madagascar*[6] Malawi* Mauritius Moldova* Papua New Guinea[6] Sri Lanka[6] Sudan Tajikistan Tanzania Tunisia Uganda[6] Uruguay[6] Zambia*	Colombia Czech Rep. Ghana Guatemala†[6] Indonesia Peru* Romania Serbia, Rep. of[13] Thailand	Afghanistan, I.R. of*[6] Armenia*[6] Georgia* Kenya* Kyrgyz Rep.* Mozam-bique*[6]	Algeria Burundi*[6] Cambodia Croatia Dominican Rep.* Guinea[6] India Kazakhstan Liberia[6] Malaysia Myanmar[7] Paraguay* Russian Federation São Tomé and Príncipe* Singapore
Independently floating (35)		Albania* Congo, Dem. Rep. of	Australia Brazil Canada Chile Iceland Israel Korea Mexico New Zealand Norway Philippines Poland South Africa Sweden Turkey* United Kingdom		Japan Somalia[7, 14] Switzerland United States **Euro area** Austria Belgium Finland France Germany Greece Ireland Italy Luxembourg Netherlands Portugal Slovenia Spain

Sources: IMF staff reports; and IMF staff estimates.

1/ This table incorporates additional changes made since the publication of the 2007 AREAER. Data generally refer to the 185 IMF members plus Aruba, Hong Kong SAR, and the Netherlands Antilles, and are as of end-April 2007.
2/ Includes countries that have no explicitly stated nominal anchor, but rather monitor various indicators in conducting monetary policy.
3/ The printing of new colones, the domestic currency, is prohibited, but the existing stock of colones will continue to circulate along with the U.S. dollar as legal tender until all colón notes wear out physically.
4/ The currency and unit of account of Panama is the balboa, the issue of which is limited to coins. The balboa is fixed at par to the U.S. dollar, which circulates freely.
5/ The member participates in the ERM II.
6/ The staff's assessment of the de facto arrangement in the country has been different from its de jure arrangements during the period under consideration.
7/ The country maintains an exchange arrangement involving more than one foreign exchange market. The arrangement shown is that maintained in the major market.
8/ Comoros has the same arrangement with the French Treasury as the CFA franc zone countries.
9/ There is no evidence of direct intervention by the authorities in the foreign exchange market.
10/ This classification is based on the exchange rate performance up to end-April 2007. The authorities have indicated that their current policy is to pursue a managed float.
11/ WAEMU=West African Economic and Monetary Union; CAEMC=Central African Economic and Monetary Community.
12/ The bands for these countries are as follows: Cyprus ±15%, Denmark ±2.25%, Hungary ±15%, Slovak Republic ±15%, and Tonga ±6%.
13/ The current monetary framework is anchored by core inflation objectives and the National Bank of Serbia is still in the process of transition towards full-fledged inflation targeting.
14/ Insufficient information on the country is available to confirm the classification; the classification of the last official consultation is used.
15/ San Marino has a monetary agreement with Italy, on behalf of the European Community, which allows for the use of the euro as official currency, the limited issuance of coins, and the access of its financial institutions to the euro area payment system.

Table 7. Currency Anchors of Countries with Hard and Soft Pegs, April 30, 2007

Arrangement with No Separate Legal Tender			Currency Board Arrangement			Conventional Pegged Arrangement						Horizontal Bands		Crawling Peg or Band	
U.S. Dollar	Euro	Australian Dollar	U.S. Dollar	Euro	Singapore Dollar	U.S. Dollar	Euro	South African Rand	Indian Rupee	SDR	Other Currency Composites	Euro	Other Currency Composites	U.S. Dollar	Other Currency Composites
Ecuador El Salvador Marshall Islands Micronesia Palau Panama Timor-Leste	Montenegro San Marino	Kiribati	Antigua & Barbuda 1/ Djibouti Dominica 1/ Grenada 1/ Hong Kong SAR St. Kitts & Nevis 1/ St. Lucia 1/ St. Vincent & the Grenadines1/	Bosnia and Herzegovina Bulgaria Estonia 4/ Lithuania 4/	Brunei Darussalam	Angola Argentina Aruba Bahamas Bahrain Barbados Belarus Belize Bolivia Egypt Eritrea Ethiopia Guyana Honduras Jordan Kuwait Lebanon Maldives Mauritania Mongolia Netherlands Antilles Nigeria Oman Pakistan Qatar Rwanda Saudi Arabia Solomon Is. Suriname Syria Trinidad and Tobago Turkmenistan Ukraine United Arab Emirates Uzbekistan Venezuela Vietnam Yemen Zimbabwe	Cape Verde Comoros Latvia 4/ Macedonia, FYR Malta 4/ Benin 2/ Burkina F. 2/ Cameroon 3/ C. Afr. Rep. 3/ Chad 3/ Congo, R. of 3/ Cote d'Ivoire 2/ Equatorial Guinea 3/ Gabon 3/ Guinea-Bissau 2/ Mali 2/ Niger 2/ Senegal 2/ Togo 2/	Lesotho Namibia Swaziland	Bhutan Nepal	Libya	Fiji Iran Morocco Samoa Seychelles Vanuatu	Cyprus 4/ Denmark 4/ Hungary Slovak Republic 4/	Tonga	Azerbaijan China Costa Rica Iraq Nicaragua Sierra Leone	Botswana

Source: *Annual Report on Exchange Arrangements and Exchange Restrictions* database.

1/ Country participates in the ECCU.
2/ Country participates in the WAEMU.
3/ Country participates in the CAEMC.
4/ Country participates in the ERM II.

Table 8. Changes in Classifications, January 2002–April 2007

Classification Post Change							
		Conventional peg	Peg within horizontal bands	Crawling peg	Crawling band	Float	Total 1/
Classification Pre-Change	Currency board arrangement	...	...	...	...	1 Argentina	**1**
	Fixed pegs		1 Sudan	6 Azerbaijan (twice) Botswana China Iraq Serbia	...	10 Azerbaijan Bangladesh Egypt Guinea Iran Malaysia Moldova Mozambique Zimbabwe (twice)	**17**
	Peg within horizontal bands	...		...	...	3 Egypt Slovenia Sudan	**3**
	Crawling peg	4 Bolivia Honduras Iran Solomon Islands	...		1 Costa Rica	3 Serbia (twice) Tunisia	**8**
	Crawling band	1 Belarus	1 Slovenia	...		4 Israel Romania Uruguay Venezuela	**6**
	Float	24 Angola Argentina Azerbaijan (twice) Egypt Ethiopia Guinea Guyana Iraq Mauritania Moldova Mongolia Mozambique Nigeria Pakistan Rwanda Trinidad and Tobago Ukraine Uzbekistan Venezuela Vietnam Yemen Zimbabwe (twice)	1 Slovak Rep.	2 Iran Sierra Leone	1 Slovenia		**28**
	Total	**29**	**3**	**8**	**2**	**21**	**63**

Source: *Annual Report on Exchange Arrangements and Exchange Restrictions* database.

1/ Excluding categories that had no changes.

Table 9. Evolution of Controls on Current Account Transactions, 2000–06 1/

(In percent of the total for each income group)

	2000	2001	2002	2003	2004	2005	2006
Payment for imports							
Low income	90.4	90.4	90.6	92.5	92.5	90.6	92.5
Lower middle income	71.9	75.4	73.7	71.9	70.2	70.2	70.2
Upper middle income	50.0	52.8	55.6	47.2	47.2	50.0	50.0
Emerging high income	38.5	38.5	38.5	30.8	23.1	23.1	23.1
Advanced high income	7.1	3.6	3.6	3.6	...	...	...
Payments for invisibles							
Low income	75.0	75.0	73.6	75.5	73.6	71.7	71.7
Lower middle income	61.4	63.2	59.6	59.6	57.9	57.9	57.9
Upper middle income	44.4	50.0	50.0	44.4	36.1	36.1	36.1
Emerging high income	46.2	46.2	46.2	46.2	46.2	38.5	38.5
Advanced high income	7.1	7.1	3.6	...	...	...	...
Payments for exports							
Low income	82.7	84.6	83.0	84.9	86.8	84.9	84.9
Lower middle income	73.7	71.9	71.9	70.2	66.7	71.9	71.9
Upper middle income	58.3	58.3	55.6	52.8	55.6	55.6	55.6
Emerging high income	23.1	30.8	30.8	30.8	30.8	30.8	30.8
Advanced high income	14.3	10.7	10.7	10.7	7.1	7.1	7.1
Proceeds from invisibles							
Low income	73.1	73.1	69.8	69.8	73.6	71.7	71.7
Lower middle income	57.9	54.4	52.6	50.9	45.6	47.4	47.4
Upper middle income	55.6	52.8	50.0	44.4	41.7	36.1	36.1
Emerging high income	23.1	23.1	23.1	23.1	15.4	15.4	15.4
Advanced high income	7.1	7.1	7.1	7.1	3.6	3.6	3.6

Sources: *World Bank Atlas*; and *Annual Report on Exchange Arrangements and Exchange Restrictions* database.

1/ Sample sizes: low-income: 52 through 2001, 53 from 2002 on; lower middle-income: 57; upper middle-income: 36; emerging high-income: 13; advanced high-income: 28.

Table 10. Countries Maintaining Controls on Capital Transactions 1/ 2/ 3/ 4/

(In percent; unless otherwise specified)

	1997	2000	2001	2002	2003	2004	2005	2005*	2006	2006*
Number of countries with controls	**180**	**182**	**182**	**183**	**184**	**185**	**184**	**184**	**184**	**184**
Areas of controls										
Capital and money market instruments	71.4	71.5	72.6	71.7	70.6	70.6	74.9	74.9	75.4	75.4
Low income	83.9	85.7	85.7	86.0	86.0	86.0	86.0	86.0	86.0	86.0
Lower middle and middle income	63.8	65.5	69.0	69.0	65.5	65.5	65.5	65.5	65.5	65.5
Upper middle income	80.6	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
Emerging high income	75.0	75.0	75.0	66.7	66.7	66.7	66.7	66.7	66.7	66.7
Advanced high income	50.0	50.0	50.0	46.4	46.4	46.4	75.0	46.4	78.6	46.4
Credit operations	63.2	63.4	62.9	61.5	61.0	62.0	67.9	52.4	65.8	51.3
Low income	85.7	85.7	83.9	84.2	86.0	86.0	86.0	56.1	86.0	57.9
Lower middle and middle income	72.4	74.1	72.4	67.2	67.2	67.2	67.2	48.3	65.5	46.6
Upper middle income	58.1	53.1	56.3	59.4	53.1	62.5	62.5	53.1	56.3	50.0
Emerging high income	33.3	33.3	33.3	33.3	33.3	25.0	25.0	41.7	25.0	33.3
Advanced high income	17.9	21.4	21.4	17.9	17.9	17.9	57.1	17.9	53.6	14.3
Derivatives and other instruments	44.9	44.6	44.6	44.4	43.9	45.5	52.4	52.4	51.3	51.3
Low income	55.4	55.4	53.6	52.6	52.6	54.4	56.1	56.1	57.9	57.9
Lower middle and middle income	41.4	44.8	44.8	46.6	44.8	46.6	48.3	48.3	46.6	46.6
Upper middle income	48.4	43.8	50.0	43.8	43.8	50.0	53.1	53.1	50.0	50.0
Emerging high income	58.3	50.0	50.0	50.0	50.0	50.0	41.7	41.7	33.3	33.3
Advanced high income	21.4	21.4	17.9	21.4	21.4	17.9	57.1	17.9	57.1	17.9
Foreign direct investment	67.0	64.5	65.6	66.8	65.2	64.7	69.5	52.4	67.4	51.3
Low income	71.4	67.9	69.6	70.2	68.4	68.4	68.4	56.1	63.2	57.9
Lower middle and middle income	55.2	53.4	55.2	55.2	55.2	55.2	56.9	48.3	58.6	46.6
Upper middle income	74.2	68.8	65.6	71.9	68.8	68.8	75.0	53.1	68.8	50.0
Emerging high income	83.3	83.3	83.3	83.3	83.3	75.0	75.0	41.7	75.0	33.3
Advanced high income	67.9	67.9	71.4	71.4	67.9	67.9	89.3	67.9	89.3	67.9
Liquidation of foreign direct investment	29.2	30.6	31.7	30.5	30.5	29.4	30.5	52.4	27.3	51.3
Low income	58.9	58.9	60.7	59.6	59.6	59.6	59.6	56.1	47.4	57.9
Lower middle and middle income	20.7	25.9	25.9	20.7	20.7	22.4	22.4	48.3	24.1	46.6
Upper middle income	19.4	18.8	18.8	21.9	21.9	21.9	25.0	53.1	21.9	50.0
Emerging high income	16.7	16.7	16.7	16.7	25.0	8.3	16.7	41.7	16.7	33.3
Advanced high income	3.6	3.6	7.1	7.1	3.6	...	...	...	3.6	...
Personal capital movements	48.6	49.5	48.9	51.9	51.9	52.9	51.9	52.4	49.2	51.3
Low income	71.4	69.6	71.4	73.7	75.4	75.4	75.4	56.1	73.7	57.9
Lower middle and middle income	51.7	55.2	53.4	53.4	51.7	51.7	50.0	48.3	46.6	46.6
Upper middle income	35.5	34.4	31.3	43.8	43.8	53.1	50.0	53.1	50.0	50.0
Emerging high income	50.0	50.0	50.0	50.0	50.0	50.0	50.0	41.7	41.7	33.3
Advanced high income	10.7	14.3	14.3	14.3	14.3	10.7	10.7	7.1	7.1	7.1
Real estate transactions	73.5	73.7	72.6	73.3	73.8	72.7	75.4	52.4	74.3	51.3
Low income	85.7	85.7	85.7	86.0	86.0	84.2	82.5	56.1	80.7	57.9
Lower middle and middle income	62.1	65.5	63.8	65.5	65.5	63.8	62.1	48.3	63.8	46.6
Upper middle income	93.5	87.5	81.3	81.3	90.6	90.6	90.6	53.1	87.5	50.0
Emerging high income	83.3	83.3	83.3	75.0	75.0	75.0	75.0	41.7	75.0	33.3
Advanced high income	46.4	46.4	50.0	53.6	46.4	46.4	71.4	46.4	67.9	42.9
Transactions by commercial banks and other credit institutions	85.4	84.4	84.4	85.6	85.0	85.6	85.6	52.4	85.6	51.3
Low income	94.6	94.6	94.6	94.7	94.7	94.7	94.7	56.1	96.5	57.9
Lower middle and middle income	84.5	82.8	82.8	82.8	82.8	84.5	84.5	48.3	82.8	46.6
Upper middle income	93.5	90.6	90.6	96.9	96.9	100.0	100.0	53.1	96.9	50.0
Emerging high income	83.3	83.3	83.3	83.3	83.3	75.0	75.0	41.7	83.3	33.3
Advanced high income	60.7	60.7	60.7	60.7	57.1	57.1	57.1	57.1	57.1	57.1
Transactions by institutional investors	44.9	44.6	46.8	48.7	50.3	50.3	54.0	52.4	60.4	51.3
Low income	35.7	37.5	37.5	38.6	42.1	42.1	43.9	56.1	50.9	57.9
Lower middle and middle income	37.9	37.9	43.1	44.8	46.6	46.6	48.3	48.3	56.9	46.6
Upper middle income	51.6	46.9	50.0	53.1	50.0	53.1	62.5	53.1	65.6	50.0
Emerging high income	50.0	41.7	41.7	41.7	50.0	41.7	41.7	41.7	50.0	33.3
Advanced high income	67.9	71.4	71.4	75.0	75.0	75.0	82.1	57.1	85.7	57.1
Memorandum item:										
Number of countries	185	185	186	186	187	187	187	187	187	187

Source: *Annual Report on Exchange Arrangements and Exchange Restrictions* database.

1/ Countries include member countries, Aruba, the Netherlands Antilles, and Hong Kong SAR.

2/ Data reflect information available as of year-end and are subject to reporting lags.

3/ Income definitions are based on the World Bank Atlas classification of economies at end-2005 and the April 2007 WEO.

4/ Data for 2005 and 2006 are affected by methodological changes implemented in 2005. Two sets of data are presented; 2005/2006 and 2005*/2006* which incorporate and do not incorporate, respectively, the changes due to the new methodology which relate to the 2004 version of the Organization for Economic Cooperation and Development (OECD) Code. This includes several controls that apply to rules on insurance companies, investment funds, and/or pension funds, which previously had not been classified as capital controls and were not reported during the compilation of the AREAER as such either. In addition, the AREAER capital control entries of OECD member countries have been harmonized with the list of country “reservations” made to the OECD Codes of Liberalization of Capital Movements.

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