

International reserves

Total international reserves, including gold, stood at SDR 4.9 trillion at the end of 2008 (Appendix Table I.1). They grew by 7.7 percent during the year, a much slower pace than the average annual growth rate of nearly 17 percent they registered during the previous five years. This slowdown in the evolution of international reserves was related to the sharp deterioration in the global economic environment, particularly in late 2008, which was accompanied by a sharp decline in cross-border capital flows.

Foreign exchange reserves, which constitute nearly 90 percent of total international reserves, increased by 7.6 percent to SDR 4.4 trillion in 2008. IMF-related assets (that is, reserve positions in the IMF and SDRs), which account for the balance of nongold reserves, grew by 37.1 percent to SDR 44 billion, reflecting the first substantial increase in outstanding Fund credit to member countries in the wake of the ongoing financial crisis and a departure from the multiyear decline in IMF lending during the earlier period of strong global economic growth. The market value of gold held by monetary authorities¹ increased by 6.5 percent to SDR 479 billion, reflecting smaller gold price increases than in the previous three years.

Foreign exchange reserves

Foreign exchange reserves accounted for 99 percent of nongold international reserves at the end of 2008. Emerging and developing economies (under the new classification²) held SDR 2.8 trillion in reserves (63.3 percent of the total), an increase of 8.8 percent since the end of 2007, while advanced economies held SDR 1.6 trillion, an increase of 5.6 percent since the end of 2007.

IMF-related assets

During 2008, members' reserve positions in the IMF—which consist of members' reserve tranche and creditor positions—increased by 83.2 percent to SDR 25.1 billion, while the SDR holdings of IMF members was higher by 2.7 percent at SDR 18.9 billion. Increased Fund lending raised the reserve position of advanced as well as emerging and developing economies in 2008.

Gold reserves

The market value of gold reserves increased by 6.5 percent in 2008, as higher gold prices more than offset the 1 percent decline in the physical stock of official gold. The share of gold in reserves in 2008 (9.8 percent)

continued to be much lower than in the early 1980s, when gold accounted for about half of all reserves. At the end of 2008, gold constituted 19.6 percent of the total reserves of advanced economies, which hold 82.9 percent of the world's gold reserves, and 2.9 percent of the total reserves of emerging and developing economies.

Developments during the first quarter of 2009

During the first quarter of 2009, reserves continued to grow at a slow pace—total reserve assets rose by SDR 70 billion and foreign exchange reserves by SDR 26.9 billion. Reflecting rising gold prices in the first quarter, the market value of gold reserves increased by SDR 40.6 billion, while holdings of IMF-related assets were marginally higher.

Currency composition of foreign exchange reserves

Information about the currency composition of foreign exchange reserves is available for about 63 percent of total reserves—about 87 percent of advanced economies' reserves and just under 50 percent of emerging and developing economies' reserves (Appendix Table I.2). Currency composition has changed gradually over the past decade. In particular:

The share of U.S.-dollar holdings in foreign exchange reserves peaked at 71.5 percent at end-2001, coinciding with the dollar peak in March 2002. It has since declined to 64 percent in 2008, driven largely by a depreciation of the U.S. dollar vis-à-vis most other reserve currencies over the same period, which offset robust purchases of dollar assets until 2007 (Appendix Table I.3). In 2008 purchases of dollar assets by countries reporting their reserve composition declined to their lowest level in a decade; the dollar share held up at 64 percent largely due to positive valuation changes that reflected the strengthening of the dollar during the second half of the year.

The share of the euro, which replaced 11 European currencies and the European currency unit (ECU) on January 1, 1999, increased sharply between 1999 and 2003, and after a period of relative stability it increased further to over 26 percent of total foreign exchange reserves at end-2008, despite a weakening currency. The share of the euro in total foreign exchange reserves from 1999 onwards is not directly comparable with the combined share in previous years of the deutsche mark, French franc, Netherlands guilder, and private ECU, since the reserves formerly denominated in euro-legacy currencies³ became domestic assets of the euro area when the euro was introduced.

The share of foreign exchange reserves denominated in Japanese yen turned higher to 3.3 percent after a number of years of steady decline,

¹Official monetary authorities include central banks as well as currency boards, exchange stabilization funds, and treasuries, to the extent that the latter group of entities perform monetary authorities' functions.

²Starting with this issue, the classification of countries as advanced economies or emerging and developing economies has replaced that of industrial countries or developing countries, consistent with a recent change in country classification in *International Financial Statistics*. Therefore, historical group totals do not match those in earlier reports.

³Those foreign exchange reserves that, up to December 31, 1998, were denominated in the euro area's former national currencies as well as private ECUs.

with the increase reflecting entirely yen appreciation. The share of reserves denominated in pound sterling declined to 4.1 percent in 2008 as a result of the pound sterling's depreciation, continued robust purchases of sterling assets notwithstanding. The share of Swiss francs remained well below 1 percent, while the share of other currencies has remained close to 2 percent since 2003.

"Unallocated" reserves, on the currency composition of which no information is available, represent an increasing share of global reserves since 2000 (over 37 percent in 2008).

The share of U.S.-dollar holdings by advanced economies moved higher by 1.2 percentage points to 68.1 percent, while the share of euro holdings fell by 1 percentage point to 22.1 percent. The share of yen holdings increased to 4.6 percent, while the share of pound sterling declined to 2.9 percent and Swiss franc holdings remained stable.

The share of U.S.-dollar holdings in emerging and developing economies' foreign exchange reserves declined by 1.5 percentage points to under 60 percent in 2008, significantly lower than in earlier years. It is important to note that this calculation does not include unallocated reserves, which now

account for more than half of all official foreign exchange reserves held by emerging and developing countries. Euro holdings increased by 1.5 percentage points to 31 percent of total identified reserves, more than 10 percentage points higher than in 1999–2000. Over the past decade, the share of the yen has gradually decreased by about 3 percentage points, to under 2 percent at the end of 2008, while the share of pound sterling has increased by more than 3 percentage points, to more than 5 percent in 2008, despite a small reversal in 2008 in both cases. The share of the Swiss franc has remained well below 1 percent over the same period.

Changes in the SDR value of foreign exchange reserves can be decomposed into quantity and valuation (price) changes (Appendix Table I.3). Official reserves held in U.S.-dollars increased by SDR 79.9 billion in 2008, reflecting largely a valuation increase in U.S.-dollar holdings of SDR 47.8 billion and a quantity increase of SDR 32.1 billion. Euro holdings increased by SDR 40.2 billion, as a quantity increase of SDR 63 billion dominated a valuation decrease of SDR 22.8 billion. As for other currencies, Japanese yen holdings increased by SDR 13.2 billion and pound sterling holdings fell by SDR 10.3 billion, largely reflecting the effect of valuation changes.

Appendix Table I.1 Official holdings of reserve assets¹

(In billions of SDRs, except as otherwise noted)

	2003	2004	2005	2006	2007	2008	Mar. 2009
All countries							
Total reserves excluding gold							
IMF-related assets							
Reserve positions in the IMF	66.5	55.8	28.6	17.5	13.7	25.1	27.6
SDRs	19.9	20.3	20.1	18.2	18.4	18.9	18.9
Subtotal, IMF-related assets	86.4	76.1	48.6	35.7	32.1	44.0	46.4
Foreign exchange	2,035.8	2,413.6	2,920.8	3,347.9	4,049.0	4,356.4	4,383.3
Total reserves excluding gold	2,122.4	2,489.9	2,969.6	3,384.0	4,081.6	4,400.6	4,430.0
Gold ²							
Quantity (millions of ounces)	914.6	897.6	879.0	867.7	852.6	848.3	847.6
Value at London market price	256.8	253.1	315.5	366.7	449.8	479.0	519.6
Total reserves including gold	2,379.2	2,743.0	3,285.1	3,750.7	4,531.4	4,879.6	4,949.6
Advanced economies³							
Total reserves excluding gold							
IMF-related assets							
Reserve positions in the IMF	54.0	44.8	21.6	12.4	9.3	18.0	20.1
SDRs	15.7	15.7	12.9	14.1	14.4	14.5	14.4
Subtotal, IMF-related assets	69.7	60.5	34.4	26.6	23.7	32.5	34.5
Foreign exchange	1,170.5	1,314.3	1,432.6	1,474.9	1,515.6	1,600.1	1,614.6
Total reserves excluding gold	1,240.2	1,374.8	1,467.1	1,501.5	1,539.3	1,632.6	1,649.1
Gold ²							
Quantity (millions of ounces)	770.3	756.6	739.7	728.6	712.0	703.3	701.9
Value at London market price	216.3	213.4	265.5	307.9	375.7	397.1	430.3
Total reserves including gold	1,456.5	1,588.2	1,732.6	1,809.4	1,914.9	2,029.8	2,079.3
Emerging and developing economies³							
Total reserves excluding gold							
IMF-related assets							
Reserve positions in the IMF	12.5	11.0	7.0	5.1	4.5	7.1	7.5
SDRs	4.2	4.6	7.2	4.1	3.9	4.4	4.4
Subtotal, IMF-related assets	16.7	15.6	14.2	9.2	8.4	11.5	11.9
Foreign exchange	865.3	1,099.3	1,488.2	1,873.0	2,533.5	2,756.2	2,768.8
Total reserves excluding gold	882.2	1,115.0	1,502.5	1,882.5	2,542.3	2,768.0	2,780.9
Gold ²							
Quantity (millions of ounces)	144.3	141.0	139.3	139.1	140.6	145.0	145.7
Value at London market price	40.5	39.8	50.0	58.8	74.2	81.9	89.3
Total reserves including gold	922.7	1,154.8	1,552.5	1,941.3	2,616.5	2,849.9	2,870.2

Note: Components may not sum to totals because of rounding.

Source: International Monetary Fund, *International Financial Statistics*.

¹End of year figures for all years except 2009. "IMF-related assets" comprise reserve positions in the IMF and SDR holdings of all IMF members. The entries under "Foreign exchange" and "Gold" comprise official holdings of those IMF members for which data are available and certain countries or areas.

²One troy ounce equals 31.103 grams. The market price is the afternoon price fixed in London on the last business day of each period.

³Starting with this issue, the classification of countries as advanced economies or emerging and developing economies has replaced that of industrial countries or developing countries. This change is consistent with a recent change in country classification in *International Financial Statistics*. Therefore, historical group totals do not match those in earlier reports.

Appendix Table I.2 Share of national currencies in total identified official holdings of foreign exchange, end of year¹

(In percent)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
All countries											
U.S. dollar	69.4	71.0	71.1	71.5	67.1	65.9	65.9	66.9	65.5	64.1	64.0
Japanese yen	6.2	6.4	6.1	5.0	4.4	3.9	3.8	3.6	3.1	2.9	3.3
Pound sterling	2.7	2.9	2.8	2.7	2.8	2.8	3.4	3.6	4.4	4.7	4.1
Swiss franc	0.3	0.2	0.3	0.3	0.4	0.2	0.2	0.1	0.2	0.2	0.1
Euro ²	—	17.9	18.3	19.2	23.8	25.2	24.8	24.0	25.1	26.3	26.5
Deutsche mark	13.8	—	—	—	—	—	—	—	—	—	—
French franc	1.6	—	—	—	—	—	—	—	—	—	—
Netherlands guilder	0.3	—	—	—	—	—	—	—	—	—	—
ECU ³	1.2	—	—	—	—	—	—	—	—	—	—
Other currencies ⁴	4.5	1.6	1.5	1.3	1.6	2.0	1.9	1.7	1.8	1.8	2.0
Advanced economies⁵											
U.S. dollar	67.6	70.5	70.5	71.3	67.5	68.1	68.2	70.1	68.9	66.9	68.1
Japanese yen	7.0	7.3	7.4	6.2	5.3	5.0	4.9	4.7	4.3	4.1	4.6
Pound sterling	2.9	3.1	2.8	2.7	2.9	2.4	2.7	2.8	3.3	3.6	2.9
Swiss franc	0.2	0.1	0.3	0.3	0.5	0.3	0.2	0.2	0.2	0.2	0.2
Euro	—	17.3	17.5	18.1	22.1	22.1	21.9	20.2	21.2	23.1	22.1
Deutsche mark	13.6	—	—	—	—	—	—	—	—	—	—
French franc	1.4	—	—	—	—	—	—	—	—	—	—
Netherlands guilder	0.3	—	—	—	—	—	—	—	—	—	—
ECU	1.7	—	—	—	—	—	—	—	—	—	—
Other currencies	5.2	1.7	1.5	1.4	1.6	2.1	2.2	1.9	2.0	2.2	2.1
Emerging and developing economies⁵											
U.S. dollar	73.7	72.3	72.9	72.1	66.0	61.3	61.4	61.5	60.7	61.3	59.8
Japanese yen	4.4	4.0	2.7	2.3	2.2	1.6	1.7	1.7	1.3	1.7	1.9
Pound sterling	2.2	2.4	2.5	2.7	2.6	3.6	4.7	4.9	5.8	5.8	5.3
Swiss franc	0.5	0.5	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Euro	—	19.4	20.2	21.6	27.6	31.7	30.8	30.4	30.5	29.6	31.1
Deutsche mark	14.3	—	—	—	—	—	—	—	—	—	—
French franc	2.1	—	—	—	—	—	—	—	—	—	—
Netherlands guilder	0.2	—	—	—	—	—	—	—	—	—	—
ECU	0.0	—	—	—	—	—	—	—	—	—	—
Other currencies	2.6	1.4	1.5	1.0	1.4	1.7	1.3	1.4	1.6	1.5	1.9
Memorandum items:											
Unallocated reserves ⁶											
All countries	22.1	22.6	21.6	23.4	25.4	26.5	29.2	31.9	34.2	35.6	37.2
Advanced economies	9.9	10.3	9.4	10.4	12.2	12.7	12.7	13.3	12.8	12.3	13.1
Emerging and developing economies	41.3	42.7	41.5	43.1	44.4	45.1	48.8	49.8	51.0	49.6	51.3

Note: Components may not sum to totals because of rounding. Country coverage changes marginally every year, but the changes were larger than usual in 2000 (narrower coverage).

¹The currency shares are calculated for the reserves of member countries that report the currency composition of their foreign exchange reserves. The data include minimal estimation undertaken mainly for late reporters. Reserves for which currency composition is not reported are shown under "Unallocated reserves."

²Not comparable with the combined share of euro legacy currencies in previous years because it excludes the euros received by euro area members when their previous holdings of other euro area members' legacy currencies were converted into euros on January 1, 1999.

³In the calculation of currency shares, the ECU is treated as a separate currency. ECU reserves held by the monetary authorities existed in the form of claims on both the private sector and the European Monetary Institute (EMI), which issued official ECUs to European Union central banks through revolving swaps against the contribution of 20 percent of their gross gold holdings and U. S. dollar reserves. On December 31, 1998, the official ECUs were unwound into gold and U.S. dollars; hence, the share of ECUs at the end of 1998 was sharply lower than a year earlier. The remaining ECU holdings reported for 1998 consisted of ECUs issued by the private sector, usually in the form of ECU deposits and bonds. On January 1, 1999, these holdings were automatically converted into euros.

⁴Foreign exchange reserves of IMF member countries and the sum of reserves that are reported to be held in currencies other than those listed above.

⁵Starting with this issue, the classification of countries as advanced economies or emerging and developing economies has replaced that of industrial countries or developing countries. This change is consistent with a recent change in country classification in *International Financial Statistics*. Therefore, historical group totals do not match those in earlier reports.

⁶Foreign exchange reserves whose currency composition information is not submitted to the IMF, in percent of total official holdings of foreign exchange reserves.

**Appendix Table I.3 Currency composition of official holdings of
foreign exchange, end of year¹**

(In millions of SDRs)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
U.S. dollar										
Change in holdings	82,675	114,987	64,294	-7,043	100,295	141,102	203,634	112,029	228,498	79,903
Quantity change	66,810	75,190	33,568	63,034	184,942	191,524	103,716	182,703	307,259	32,142
Price change	15,865	39,797	30,726	-70,077	-84,647	-50,422	99,918	-70,674	-78,760	47,761
Year-end value	713,860	828,847	893,140	886,097	986,392	1,127,494	1,331,128	1,443,157	1,671,655	1,751,558
Japanese yen										
Change in holdings	7,233	6,600	-7,658	-5,533	1,477	6,585	5,662	-3,368	8,401	13,161
Quantity change	-1,453	11,248	-963	-6,410	205	7,637	8,656	506	8,878	-9,001
Price change	8,686	-4,649	-6,695	877	1,271	-1,052	-2,993	-3,874	-477	22,161
Year-end value	64,071	70,671	63,013	57,480	58,956	65,541	71,204	67,835	76,236	89,397
Pound sterling										
Change in holdings	4,769	3,063	1,659	3,433	4,319	16,111	13,934	24,985	25,398	-10,349
Quantity change	4,867	3,888	1,409	2,465	3,805	14,489	16,075	17,958	28,896	25,159
Price change	-97	-826	249	968	514	1,622	-2,141	7,028	-3,498	-35,508
Year-end value	29,018	32,080	33,739	37,172	41,491	57,602	71,536	96,521	121,919	111,570
Swiss franc										
Change in holdings	-698	826	342	1,901	-2,005	-530	54	880	268	-466
Quantity change	-385	732	308	1,400	-2,106	-661	243	805	141	-784
Price change	-313	94	34	502	102	131	-189	75	127	318
Year-end value	2,311	3,136	3,479	5,380	3,375	2,845	2,899	3,779	4,047	3,580
Euro										
Change in holdings ²	44,304	33,206	26,401	74,788	62,030	47,684	54,399	74,578	131,863	40,183
Quantity change	64,818	36,969	30,112	48,492	28,369	34,219	81,721	44,549	92,391	62,987
Price change	-20,514	-3,762	-3,711	26,296	33,661	13,466	-27,322	30,030	39,472	-22,804
Year-end value	179,926	213,132	239,533	314,321	376,350	424,035	478,434	553,012	684,875	725,058
Sum of the above³										
Change in holdings	138,284	158,681	85,037	67,546	166,116	210,952	277,682	209,104	394,429	122,431
Quantity change	134,657	128,027	64,434	108,981	215,216	247,207	210,410	246,520	437,565	110,503
Price change	3,627	30,654	20,604	-41,434	-49,100	-36,255	67,272	-37,415	-43,137	11,927
Year-end value	989,186	1,147,866	1,232,904	1,300,450	1,466,566	1,677,518	1,955,200	2,164,304	2,558,732	2,681,163
Other currencies										
Change in holdings	-24,700	1,347	-1,431	4,566	8,963	2,610	2,204	5,252	8,370	6,435
Year-end value	16,054	17,401	15,970	20,535	29,498	32,109	34,312	39,564	47,934	54,369
Unallocated reserves⁴										
Change in holdings	17,280	27,781	61,196	68,258	89,409	164,292	227,295	212,743	298,318	178,469
Year-end value	293,073	320,854	382,049	450,309	539,717	704,009	931,305	1,144,048	1,442,367	1,620,836
Total official holdings⁵										
Change in holdings	130,864	187,809	144,802	140,370	264,488	377,854	507,181	427,099	701,117	307,335
Year-end value	1,298,313	1,486,121	1,630,923	1,771,294	2,035,781	2,413,636	2,920,817	3,347,916	4,049,033	4,356,368

Note: Components may not sum to totals because of rounding. Country usage changes marginally every year, but the changes were larger than usual in 2000 (narrower coverage).

¹The currency composition of official foreign exchange reserves as reported by countries, including minimal estimation undertaken mainly for late reporters. Reserves for which currency composition is not reported are shown under "Unallocated reserves." Quantity changes are derived by multiplying the changes in official holdings of each currency from the end of one quarter to the next by the average of the two SDR prices of that currency prevailing at the corresponding dates. This procedure converts the change in the quantity of national currency from own units to SDR units of account. Subtracting the SDR value of the quantity change so derived from the quarterly change in the SDR value of foreign exchange held at the end of two successive quarters and cumulating these differences yields the effect of price changes over the years shown.

²Represents the change from end-1998 holdings of euro legacy currencies by official institutions outside the euro area.

³Each item represents the sum of the currencies above.

⁴Foreign exchange reserves whose currency composition information is not submitted to the IMF.

⁵Includes "Unallocated reserves."