

Private Use of Official Currency Cocktails: The Relative Success of the ECU and the SDR

1. Introduction

Since major currencies started floating in the early 1970s, the world economy has been characterized by considerable volatility and uncertainty in interest rates and exchange rates. Borrowers and investors, in search for ways of minimizing the risks created by unforeseen swings in money markets and foreign exchange markets, have in recent years started to use currency composites as an efficient and low cost solution. Two currency cocktails that were first developed for government use, the European Currency Unit (ECU) and the Special Drawing Right (SDR), now have very active markets that have evolved to meet the needs of the private sector. Although the private use of both currency cocktails emerged in the wholesale banking market, currency cocktails are now also rapidly becoming important in the area of retail banking.

One reason for the increased private use of currency cocktails such as the ECU and the SDR has been the increasing need to hedge foreign exchange risk. As Table 1 shows, the volatility of most exchange rates as measured by their standard deviation and coefficient of variation have increased significantly in recent years. Since currency cocktails provide some stability, the private use of the ECU and SDR is expected to grow even further.

2. Origin, composition, and valuation of the ECU and SDR

Origin: Both currency cocktails, the ECU and the SDR served initially as official instruments created respectively by the European Community (EC) and the International Monetary Fund (IMF). The official ECU is designed to support the exchange rate arrangements of

TABLE 1

VOLATILITY OF MAJOR CURRENCIES
(Mean, Std. Dev. and Coefficient of Variation of their Monthly US Dollar Values)

	CAN	FRA	GER	ITA	JAP	NED	SWI	UK	SDR	ECU
1970-72										
MEAN	1.01427	5.3538	3.4348	609.21	335.56	3.4359	4.0773	0.4093		
SD	0.02694	0.2280	0.2054	19.45	25.12	0.1847	0.2231	0.0125		
COV	0.02656	0.0426	0.0598	0.0319	0.0749	0.0538	0.0547	0.0304		
1973-75										
MEAN	0.99844	4.5055	2.5664	629.54	286.99	2.6637	2.8928	0.4293	0.8286*	
SD	0.01840	0.2793	0.1812	36.51	14.16	0.1750	0.2806	0.0280	0.0155	
COV	0.01843	0.0620	0.0706	0.0580	0.0493	0.0657	0.0970	0.0653	0.0187	
1976-79										
MEAN	1.09206	4.5973	2.1382	848.88	286.03	2.3055	2.0728	0.5294	0.8225	
SD	0.07473	0.3080	0.3221	31.41	25.75	0.2631	0.3881	0.0474	0.0417	
COV	0.06843	0.0670	0.1506	0.0370	0.08942	0.1141	0.1872	0.0895	0.0507	
1980-83										
MEAN	1.20978	6.0006	2.2750	1224.50	233.70	2.5151	1.9078	0.5405	0.8667	1.1131*
SD	0.03126	1.3364	0.2939	239.37	16.09	0.3421	0.2322	0.0928	0.0667	0.0532
COV	0.02584	0.2227	0.1292	0.2118	0.0688	0.1360	0.1217	0.1717	0.0769	0.0470
1984-86										
MEAN	1.35191	8.1538	2.6321	1709.39	213.62	2.9773	2.1848	0.7340	0.9349	1.1936
SD	0.04450	1.0963	0.3986	200.09	36.09	0.4459	0.3417	0.0680	0.0687	0.1553
COV	0.03292	0.1344	0.1514	0.1171	0.1690	0.1498	0.1564	0.0926	0.0734	0.1301
1970-86										
MEAN	1.13337	5.6724	2.5619	1008.12	269.85	2.7361	2.5522	0.5293	0.8615	1.1677
SD	0.13415	1.5231	0.5319	424.93	132.55	0.4930	0.8354	0.1236	0.0690	0.1368
COV	0.11816	0.2685	0.2076	0.4215	0.4912	0.1802	0.3273	0.2334	0.0801	0.1171

NOTES:

CAN - Canadian Dollar/USD
 FRA - French Francs/USD
 GER - German Marks/USD
 ITA - Italian Lira/USD
 JAP - Japanese Yen/USD
 NED - Dutch Guilders/USD
 SWI - Swiss Francs/USD
 UK - British Pound/USD

* See other Table

Mean - Average value of the Currency
 SD - Standard Deviation of Monthly Changes
 COV - Coefficient of Variation (SD/Mean)

the European Monetary System (EMS).¹ It is used as *numéraire* for expressing central rates, as the unit of denomination of credit extended through the European Monetary Cooperation Fund (EMCF) in connection with the EMS intervention mechanism, and as a reference unit for the operation of the EMS divergence indicator.² ECUs are distributed through the swap mechanism of the EMCF in proportion to participants' gold and U.S. dollar holdings.

The official SDR is created by the IMF as a means of supplementing the quantity of official reserves in the international monetary system. SDRs are allocated (or cancelled) by the Fund in proportion to each participating member country's quota, if and when it is determined by members representing at least 85 percent of the Fund's voting power that there is a global need to supplement (or reduce) international liquidity. The official SDR serves no *numéraire* or settlement function as does the ECU. It does, however, serve as a unit of account and denomination for all the IMF's transactions and operations.

The use of the ECU for denominating financial and commercial transactions has created a growing demand for financial instruments denominated in ECUs. Similarly, the adoption of the SDR by a number of international organizations as their unit of account and denominator of their financial dealings has created demand for financial instruments denominated in SDRs. These uses of the two currency cocktails have encouraged the development of markets in "private ECUs" and to a smaller extent "private SDRs". Private ECUs and SDRs are usually created by changing the denomination of assets already in existence. A private ECU deposit, for example, can be created by a bank accepting currency and recording the value of the deposit in ECUs. The bank will generally wish to cover its newly created ECU liability by exchanging the currency deposited in a way that establishes an asset of the same

¹ The central element of the EMS is a system of fixed but adjustable exchange rates in which each participating currency is tied to each of the other participating currencies by bilateral central rates. Within this parity grid, the EMS permits a currency to deviate plus or minus 2¼ percent from its cross-rates with other currencies (with the exception of the Italian lira, which is allowed 6 percent). Movements outside these limits require bilateral foreign exchange intervention by the respective partner central banks.

² The divergence indicator for an EMS currency measures the divergence in its market rate from its central rate, both expressed in ECU, adjusted by a factor neutralizing the weight of the currency in the ECU basket. When the market rate of a given currency reaches 75 percent of its maximum allowed deviation from the central rate, that currency has reached its divergence threshold and the indicator "flashes". The ECU divergence indicator is meant to serve as an early warning system for bilateral misalignments. Therefore, the countries involved are invited to take corrective measures (often discount rate adjustments) to bring the exchange rate back within limits.

value in terms of the ECU. If no true ECU asset were available or suitable, the bank may exchange the currency deposited for the ten EC-currencies in the ECU valuation basket in the same proportions (a process referred to as "unbundling").

Composition: The private SDR and ECU are composed of the same currencies in the same proportions as their official counterparts. But, instead of being governed by the rules of the IMF or EC both private currency cocktails are subject to the conventions of the marketplace.

The standard basket for the SDR was initially (July 1, 1974) defined as fixed amounts of the 16 leading currencies in international trade. The large number of currencies in the cocktail was perceived as cumbersome and possibly a handicap for the private use of the SDR and the IMF decided as of January 1, 1981 to reduce the number of currencies in the SDR basket to the 5 most important currencies in world trade. The Fund also established procedures for subsequent revisions every 5 years. The initial and revised 5-currency basket, are shown in Table 2.

The ECU is a cocktail of 10 EC member states' currencies mixed in proportion to the relative size of each country's economy. Although Spain and Portugal joined the EC on January 1, 1986, the peseta and escudo have not yet been included in the ECU basket. The weights of the currencies in the ECU are re-examined and if necessary revised every 5 years or, on request, if the weight of any currency has changed by more than 25%. The only revision so far was in September, 1984 when the Greek drachma was brought into the basket. It is expected that the Spanish peseta and Portuguese escudo will be included in the ECU on the occasion of the next scheduled review in 1989. The initial and revised composition of the ECU are also shown in Table 2.

The compositions of the ECU and SDR differ in two important respects. First, the SDR is more global in scope as it is composed of the five leading world currencies, while the ECU has a regional role in fostering monetary and economic integration among EC member states. Second, with the exception of the pound sterling and Greek drachma, the currencies participating in the ECU are part of the EMS exchange rate arrangement mechanism that limits their movements against one another and the ECU. The currencies in the SDR basket float independently except for the bilateral exchange rate between the French franc and Deutsche Mark whose fluctuations are limited to 2¼% as members of the EMS. These differences in composition have consequences for the behavior of each cocktail's value in terms of a base-currency, which affects their stability and hence usefulness in various situations.

TABLE 2

COMPOSITION OF THE SDR AND THE ECU

Currency	The SDR			
	January 1, 1981-December 31, 1985		From January 1, 1986	
	Percentage weight at 1/1/1981*	Currency Units	Percentage weight at 1/1/86*	Currency Units
U.S. dollar	42	0.54	42	0.452
Deutsche Mark	19	0.46	19	0.527
Japanese yen	13	34.0	15	33.4
French franc	13	0.74	12	1.02
Pound sterling	13	0.071	12	0.0893
	100		100	
Currency	The ECU			
	March 13, 1979-September 16, 1984		September 17, 1984 - Present	
	Percentage weight at 3/13/79*	Currency Units	Percentage weight at 9/17/84*	Currency Units
Belgian franc	9.3	3.66	8.2	3.71
Danish kroner	3.1	0.217	2.7	0.219
French franc	19.8	1.15	19.0	1.31
Deutsche Mark	33.0	0.828	32.0	0.719
Irish punt	1.1	0.00759	1.2	0.00871
Italian lira	9.5	109	10.2	140
Luxemburg franc	0.4	0.14	0.3	0.14
Netherlands guilder	10.5	0.286	10.1	0.256
Pound sterling	13.3	0.0885	15.0	0.0878
Greek drachma	—	—	1.3	1.15
	100.0		100.0	

* The percentage contribution of each component currency to the values of the SDR and the ECU varies depending upon fluctuations in the bilateral exchange rates with the *numéraire* currency.

Valuation: Since the ECU and SDR are standard baskets of currencies, their values may be expressed in terms of any individual currency by simply summing up the values of the specific currency amounts using the bilateral exchange rates for the currency desired. The calculation of valuation of both currency cocktails in terms of U.S. dollars is illustrated in Table 3 using Banker's Trust and Co. offer

exchange rates for October, 1987.³ For both cocktails, movements in the exchange rates over time result in changes in the weight of each component currency as compared with the weights originally assigned. The relative weights are computed in Table 3 as of October, 1987 which could be compared to the initial weights as reported in Table 2.

TABLE 3
VALUATION OF THE ECU AND SDR
(in U.S. Dollars on October 9, 1987)

Currency	Amount	ECU		Weight (%)
		Exchange rate*	Value Added	
Belgian franc	3.71	0.02653	0.0984	8.6
Danish kroner	0.219	0.1437	0.0315	2.8
French franc	1.31	0.1659	0.2173	18.9
Deutsche Mark	0.719	0.5528	0.3975	34.6
Irish punt	0.00871	1.4805	0.0129	1.1
Italian lira	140	0.0007657	0.1072	9.3
Luxemburg franc	0.14	0.02653	0.0037	0.3
Netherlands guilder	0.256	0.4909	0.1257	11.0
Pound sterling	0.0878	1.6545	0.1453	12.7
Greek drachma	1.15	0.007159	0.0083	0.7
			\$1.1478	100.0%
SDR				
Currency	Amount	Exchange rate*	Value Added	Weight (%)
U.S. dollar	0.452	1.0	0.4520	35.0
Deutsche Mark	0.527	0.5528	0.2913	22.5
Japanese yen	33.4	0.006966	0.2327	18.0
French franc	1.02	0.1659	0.1692	13.1
Pound sterling	0.0893	1.6545	0.1477	11.4
			\$1.2929	100.0%

* Exchange rate data are taken from the *Wall Street Journal*.

Comparing the weights of the ECU-currencies with those prevailing on September 17, 1984, illustrates a general trend of strengthening of the Deutsche Mark and Dutch guilder *versus* all other component currencies. The change in the relative composition of the SDR with respect to its latest revision (January 1, 1986) reflects the weakening of the U.S. dollar especially *versus* the Deutsche Mark and Japanese yen.

³ The U.S. dollar value of the SDR is computed daily on the basis of the noon mid-rates in London, which are supplied to the IMF by the Bank of England.

The value of the ECU in terms of the U.S. dollar and EC member currencies is calculated daily by the Commission of the EC on the basis of market exchange rates of the component currencies as reported by member central banks in a 2:30 p.m. (Brussels) conference call.

3. The development of private ECU and SDR markets

The private ECU banking market

The use of the ECU for denominating financial obligations and traded goods in Europe has created a growing demand for financial instruments denominated in ECUs. These uses have encouraged the development of markets in private ECUs, *i.e.*, ECU denominated financial instruments outside the context of the EMS.

ECU Bank Deposits: The first EUA (the ECU's predecessor) bank deposit was placed by the European Commission in March 1976. In the early stages of the ECU's development, commercial banks were reluctant to open ECU accounts for their clients because it was difficult to lend the deposits directly in ECUs since ECU assets had to be composed putting together the ECU's component currencies in appropriate proportions (*i.e.* unbundling) thereby raising the cost of investing such funds. Similarly an excess of banks ECU assets over ECU deposits must be financed by creating ECUs from its components. This makes financing ECU costly (particularly for currencies whose asset markets are thin) for other Eurocurrency loans. The European Commission encouraged central banks and several other community institutions such as the EEC, EIB, European Coal and Steel Community, Euratom to establish ECU-denominated accounts. The subsequent growth of ECU-denominated security issues, syndicated bank loans, and trade credit (especially in Italy), changed the situation. By 1983, bank credits in ECUs already exceeded deposits (see Table 4).

The private ECU banking market has grown very significantly compared with other currency sectors of the international banking market with ECU assets and liabilities more than doubling on average each year (see Table 5).

By the end of 1985 the ECU ranked fifth among all currencies. This rapid expansion was mainly the result of borrowing by nonbank residents in Italy and France; expecting broad exchange rate stability within the EMS, they were attracted by the lower interest cost of ECU borrowing.⁴

⁴ For a more detailed analysis see, for example, MASERA, R.S., "An Increasing Role for the ECU: A Character in Search of a Script", *Essays in International Finance*, No. 167 (June 1987), Princeton University, N.J.; and WINKLER, M. "You Can't Hold an ECU in Your Hand, But it Does Just Fine Against the Dollar", *The Wall Street Journal*, March 7, 1985, p. 31.

TABLE 4

THE STRUCTURE OF THE ECU BANKING MARKET
(in billions of U.S. dollars)

	Dec. 1983	Dec. 1985	Dec. 1987
<i>ECU - assets of the banks reporting to the BIS:</i>			
total amount outstanding	11,9	54,3	79,8
of which: vis-à-vis non-residents	6,9	38,1	52,2
vis-à-vis residents	5,0	16,2	27,6
of which: vis-à-vis banks (incl. off. mon. inst.)	8,0	41,9	66,5
vis-à-vis non-banks	3,9	12,4	15,3
<i>ECU - liabilities of the banks reporting to the BIS:</i>			
total amount outstanding	10,0	48,6	70,4
of which: vis-à-vis non-residents	7,0	34,5	50,1
vis-à-vis residents	3,0	14,1	20,3
of which: vis-à-vis banks (incl. off. mon. inst.)	8,9	42,2	65,7
vis-à-vis non-banks	1,1	6,4	4,7

Source: BANK FOR INTERNATIONAL SETTLEMENTS, Quarterly Report on *International Banking and Financial Market Developments*, August 1988.

TABLE 5

DEVELOPMENT OF THE ECU BANKING MARKET IN COMPARISON WITH OTHER
CURRENCY SECTORS OF THE INTERNATIONAL BANKING MARKET
(in billions of U.S. dollars)

Currencies	Dec. 1982		Dec. 1987		1983-87 Annual growth rate (in %)	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
U.S. dollar	832.4	869.5	1564.8	1600.3	13.45	12.97
Deutsche Mark	155.9	141.6	407.5	414.1	21.18	23.94
Swiss franc	79.0	71.5	232.8	231.9	24.13	26.53
Japanese yen	30.6	31.8	188.7	177.8	43.88	41.09
ECU	6.5 ^e	5.5 ^e	107.4	90.7	75.23	75.16
Pound sterling	15.5	18.0	60.9	79.3	31.48	34.52
Others	63.8	67.4	139.1	176.4	16.87	21.22
TOTAL	1,183.7	1,205.3	2,701.2	2,770.5	17.94	18.11

Source: BANK FOR INTERNATIONAL SETTLEMENTS, *Quarterly Statistics on International Banking Developments*, various issues.

This explosive growth in the private role of the ECU has taken place in spite of the fact that the ability of banks to attract ECU deposits is restrained by various national restrictions on the holding of foreign currencies by resident individuals. In all EC-countries, with the exception of Germany, the EC is treated as a foreign currency. The ECU is now quoted officially in Amsterdam, Athens, Brussels, Copenhagen, Lisbon, Milan, Oslo, Paris, and Rome. ECU transactions are permitted,

but they fall under foreign exchange restrictions against capital outflows. According to Masera (1987) the existence of such exchange controls in Denmark, France, Greece, Ireland and Italy impede the ability of residents to establish ECU deposits with banks in other countries. Germany's Currency Law of 1948⁵ effectively prohibits residents to hold ECU deposits domestically, though they may acquire them with banks not domiciled in Germany.

ECU deposits have traditionally come from Belgium and Luxembourg. It is worth noting that in 1985 Dutch residents were major suppliers of funds — an important development since it refutes the argument that the ECU cannot be attractive to residents of strong currency countries. At the end of 1985 banks in Belgium and Luxembourg accounted for ECU 3.2 billion (or 44%) of total nonbank deposits in ECUs (see Masera, 1987, p. 9), but nearly two-thirds of these deposits came from nonresidents, mainly of Dutch and German nationality.

The ECU-denominated deposit market encompasses a broad spectrum ranging from ECU savings and demand deposits at the retail level to 5-year deposits in the interbank market. According to a recent IMF publication (March, 1987) about 1,000 financial institutions are estimated to be participants in the ECU-denominated deposit market. Currently this market is still predominantly (for about 90%) an interbank market but retail use is growing more rapidly. At the early stages interbank ECU transfers posed problems because, in the absence of an official issuer of ECUs it was necessary to transfer each of the currencies making up the ECU. Today, seven European banks,⁶ particularly active in offering ECU deposits, have overcome this difficulty by establishing an ECU clearing system. An estimated 1,000 correspondent banks maintain ECU-denominated clearing accounts with these seven banks. The clearing banks maintain a Mutual ECU Settlement Account (MESA) for each of the other six clearing banks. Once each day, the net balances or overdrafts between these seven banks are settled by paying out the component currencies. In addition, the Bank for International Settlements (BIS) now also operates an ECU clearing facility and offers swaps denominated in ECUs to further improve liquidity in the private ECU market.

⁵ Under the Currency of 1948, residents must be authorized by the Bundesbank if they wish to use currencies other than the Deutsche Mark.

⁶ The ECU clearing system is handled by: Lloyds Bank, London; Credit Lyonnais, Paris; Kreditbank, Brussels; Kreditbank, Luxembourg; Société Générale de Banque, Brussels; Banque Bruxelles Lambert, Brussels; and Istituto Bancario San Paolo di Torino, Turin.

ECU Syndicated Loans: The first ECU-denominated syndicated bank loan was extended in June 1980. As shown in Table 6, the amounts of such loans have grown substantially since then with an average compounded growth rate of over 50% *per annum*. The market has been characterized by a notable increase in the geographical distribution of borrowers especially since 1983. One hundred international banks from 20 countries have been involved as lead managers or co-lead managers.⁷

TABLE 6

SYNDICATED ECU LOANS AND ECU BONDS

Year	Syndicated Loans	Bond issues	Number of bond issues	ECU Total Syndicated Bond Issues and Syndicated Loans
1981	230	202	6	432
1982	367	1,942	19	2,309
1983	812	2,547	46	3,359
1984	2,780	4,895	66	7,675
1985	2,525	12,199	138	14,724
1986	1,853	9,381	85	11,234
1987	5,091	7,966	72	13,057
Annual growth rate (1981-1987)	68%	84%	51%	76%

Source: ISTITUTO BANCARIO SAN PAOLO DI TORINO, *ECU Newsletter*, No. 20, April 1987. Amounts in millions of ECUs.

The ECU Bond Market: Since the first ECU-denominated bond issue took place in April 1981, the ECU bond market has grown rapidly more than doubling each year on average (see Table 6).

The margins and fees for ECU bonds are fairly comparable to those in other currencies. The secondary market in ECU bonds is also fairly active and ECU bonds are as liquid as bonds in other currencies. Their use has also been promoted by the availability of interest rate and currency swaps that extend up to ten years.

The ECU recently ranked fifth worldwide among new international bond issues, following the US dollar, Swiss franc, Japanese yen and

⁷ See for example, ISTITUTO BANCARIO SAN PAOLO DI TORINO, *ECU Newsletter*, No. 20 (April 1987), p. 9; and "Salomon Will Offer \$100 Million in Notes Convertible to ECUs", *The Wall Street Journal*, January 15, 1985.

Deutsche Mark and ranking ahead of currencies such as the U.K. pound or the Dutch guilder. The ECU is the unit of denomination for more than 4 percent of all new international bond issues.⁸

Straight ECU bonds account for the bulk of the total amount of securities issued so far. As in the case of other currencies, however, modest amounts have also been issued in the form of floating rate notes, short-term notes, convertible bonds, and equity-warrants. As usual, the interest rates on floating rate notes are determined every 3 or 6 months by the underlying interbank ECU rates to which a spread is added.

ECU Money Market Instruments: The first ECU-denominated certificate of deposit was issued in 1981. Negotiable CDs have provided money center banks an opportunity to diversify the currency composition of their funding sources. In 1982, ECU retail demand and time deposits and ECU-denominated savings accounts were introduced. In September 1983, an ECU credit card appeared where payment takes place in terms of a local currency while the monthly settlement is in ECU. Since early 1985, ECU traveler's cheques have been available from Société du Chèque de Voyage and from Thomas Cook. These ECU traveler's cheques can be paid for in local currency and used in the currency of a host country.

ECU Trade Finance: In about 1982, the ECU also began to gain significance in trade finance. A number of firms, mostly multinational companies with affiliates in several EC-countries, started to use the ECU in accounting for transactions between their subsidiaries and, in some cases, for external invoicing.⁹ Pricing, invoicing and settling commercial transactions using ECUs is a means to harmonize prices of intra-company transfers, to share exchange risk among several affiliates, to reduce the number of hedging transactions in various currencies, and to lower administrative costs to run the system. The big test for corporate use of the ECU as a unit of account will be whether the ECU gains in credibility as a unit of exchange for corporations.

Currency Markets in the ECU: The ECU is officially quoted at the foreign exchange fixings of all EC-countries (with the exception of the

⁸ See R.M. LEVICH and A. SOMMARIVA, *The ECU Market* (Lexington, MA: D.C. Heath and Company, 1987), p. 41.

⁹ Examples of firms leading in the use of the ECU for invoicing purposes are: Rhone Poulenc, Lesieur, St. Gobain, Tioxide Group.

Federal Republic of Germany). The private ECU exchange market has also expanded significantly. The aggregate daily turnover in EC-countries is roughly estimated at ECU 2.5 to 3 billion.¹⁰ Forward markets in ECU are still limited because of their dependence on the development of commercial transactions in ECU.

Since December 5, 1985, an ECU 10,000 currency option against U.S. dollar has been traded on the European Options Exchange in Amsterdam. In addition, the Philadelphia Stock Exchange listed options on ECU for several days at the end of February 1986, but trading has been extremely light. The Chicago Board of Trade and the London Commodity Exchange are considering the development of an ECU option contract. Various over-the-counter options are also offered by commercial banks.

ECU futures are currently listed for trading on two futures exchanges:¹¹ the FINEX, a division of the New York Cotton Exchange, since January 7, 1986, and the International Money Market, a division of the Chicago Mercantile Exchange, in which trading started on January 15, 1986. The trading unit is ECU 100,000 on the FINEX and ECU 125,000 on the CME. The total value of ECU futures and options contracts traded on U.S. exchanges, during 1986 amounted to almost ECU 14 billion.¹²

ECU futures may be used to hedge the risk associated with a specific ECU cash position. It also allows corporations to transform a dollar risk into an ECU risk that may be easier to contain financially. ECU futures also offer a convenient means for hedging the collective exchange risk associated with a cash position involving more than one currency.

As this brief review shows, ECU denominated instruments and deposits are increasingly moving into the area of retail banking. This development is illustrated by the increasing number and variety of ECU-instruments introduced in the financial markets and currently all major forms of financial instruments available for national currencies are also available for the ECU.

¹⁰ See MASERA, R.S. "An Increasing Role for the ECU: A Character in Search of a Script", *Essays in International Finance*, No. 167 (June 1987), Princeton University, N.J.

¹¹ The four contracts offered are: the dollar-ECU financial futures in New York by FINEX and in Chicago by the CME; and the dollar-ECU stock options in Amsterdam by the EOE, and in Philadelphia by the PMLX.

¹² The actual total value of ECU futures and options traded on U.S. exchanges during 1986 was ECU 13.59 bi., FINEX accounted for 7.3 bi. of the total volume, IMM for 5.5 bi., and PHLX for 0.8 bi. (all ECUs).

The private SDR banking market

Similar to the ECU, the adoption of the SDR in lieu of other units by a number of international organizations as their unit of account and to denominate their financial dealings has created a demand for financial instruments and markets in the SDR. The SDR is also being used to denominate some private contracts and agreements.

Because of the sharp depreciation of the dollar in 1977-78 many dollar-holders began to seek ways to diversify the currency composition of their portfolios. In addition, the shift in United States monetary policy in October 1979 led to more variable and historically high U.S. interest rates. These developments stimulated private market interest in the SDR as a hedging and risk-reducing device.

SDR Bank Deposits: The first commercial bank deposit facility in SDRs was offered by a bank in London in June 1975. With the adoption of the simplified 5-currency basket in 1981, the volume of SDR denominated deposits increased substantially. The simplification of the SDR-basket from 16 to 5 currencies not only served to facilitate public understanding of the SDR, but more importantly it meant that commercial banks could, for the first time, fully hedge their SDR denominated exchange rate exposure. Prior to 1981, all of the currencies in the 16-currency SDR basket did not have useable forward markets. By the end of 1981, some 40 to 50 banks were prepared to accept SDR deposits and the volume of deposits grew to about SDR 5 to 7 billion net of interbank deposits.¹³ Starting in 1982, however, the volume of SDR deposits began to decline and they amounted only to about SDR 2.2 billion by September 1985.

The first certificates of deposit (CD) in SDRs were issued in June 1980 at a fixed rate of interest. In January 1981, a group of seven banks in London agreed to provide a secondary market in SDR CDs and floating rate CDs.¹⁴ The banks further agreed to try to standardize the procedures for issue and trade of SDR CDs. Although there were some new issues and some secondary market trading in the first half of 1982, interest in SDR-denominated CDs diminished after that and the SDR CD market is now believed to be insignificant.

¹³ For a more detailed analysis see G.M. von Furstenberg, ed., *International Money and Credit: The Policy Roles* (Washington, D.C.: International Monetary Fund, 1983).

¹⁴ The banks were Barclays, Chemical, Citibank Hong Kong and Shanghai, Midland, National Westminster and Standard and Chartered. See, for example, "Bankers Try Out IMF's Simpler SDR To Hedge Against U.S. Dollar's Risk", *The Wall Street Journal*, January 28, 1981; and "Major Banks Launch New Financial Market", *The Toledo Blade*, January 11, 1981.

SDR Syndicated Loans: In 1981 and 1982, there were seven syndicated bank loans totalling approximately SDR 1.2 billion. No SDR-denominated syndicated loans have been arranged since 1982.

The SDR bond market: Between 1975 and 1981, there were 13 issues of SDR-denominated bonds or notes for a total of SDR 563 million, of which SDR 60 million is currently outstanding. In January 1981, two primary European clearing institutions, Euroclear and Cedel, adapted their systems to accept assets denominated in SDRs, which at that time, consisted mainly of Eurobonds and floating rate notes. Except for two issues by private corporations, all issuers were official institutions. No SDR-bonds or notes have been issued since late 1981.¹⁵

SDR in Trade Finance: The use of SDR for pricing or invoicing has been rare. Since 1975, transit tolls payable to the Suez-Canal Authority by vessels using the waterway have been denominated in SDRs. Also, so far only a very modest forward market in SDRs against major currencies (mainly U.S. dollars) has developed. A wide range of financial instruments and services such as travelers cheques, credit cards, savings accounts, and options and futures contracts that have developed for the ECU, do not exist for the SDR.

As is illustrated in Table 7, the development of the private SDR market has differed dramatically from that of the private ECU. As a matter of fact there is even some question regarding the future official role of the SDR.¹⁶

4. Reasons for the relative success of the ECU versus the SDR

In general, composite currencies, like the ECU and SDR, have a natural handicap, *i.e.*, they are nobody's currency. They are artificial currencies, book-keeping entries, and that makes some people uncomfortable. However, the ECU is succeeding where the SDR has failed. A

¹⁵ These findings were reported in a IMF research report, *The Role of the SDR in the International Monetary System*, Washington, D.C. (March 1987).

¹⁶ For details see, for example, LANEY, LEROY O., "SDR Substitution, the Dollar, or Multiple Reserve Assets: Where Are We Bound from Here?", *FRB of Dallas Voice* (July 1980), pp. 5-19.

number of important differences have contributed to contrasting developments in the use of ECUs and SDRs in private markets.

TABLE 7
ECU AND SDR DENOMINATIONS IN PRIVATE MARKETS
(in millions of SDRs)

Instrument	End-1981		End-June 1985	
	ECU	SDR	ECU	SDR
Amounts outstanding				
Bonds and notes	188	563	11,647	60
Bank deposits	300	10,000- 14,000	33,342	1,666
Loans extended				
Publicized syndicated loans	233	908	4,114	1,208

Source: IMF, *The Role of the SDR in the International Monetary System*, Washington, D.C., March 1987, p. 37.

A major reason for the dramatic growth of the private use of the ECU are its stability and its acceptability. The ECU has become an attractive substitute for holdings in individual European currencies. As a weighted average of the exchange rates of component currencies, the ECU's value generally moves by less than that of its components. In addition, the stabilization of the bilateral exchange rates of the European Monetary System greatly adds to the stability of the ECU in terms of national currencies. In this respect, another major stabilizing step would be the re-entry of the British pound into the EMS system. The EMS has had remarkable success in achieving exchange rate stability in Europe since 1979, especially when compared with the fluctuations that have been seen in the dollar's exchange rate. Although there have been ten realignments of European central exchange rates, movements have reflected economic fundamentals; there have been no reversals in direction and total cumulative changes have been comparatively moderate.

Further, EC institutions and certain European governments have actively supported the use of the ECU private markets. The ECU is the official unit of the EC. Europeans, therefore, may have both a national and a community-wide interest in the ECU that does not exist for the SDR.

Another key reason for the ECU's appeal for U.S. firms stems from its use as a hedge against the U.S. dollar. Because the ECU excludes the U.S. dollar, the value of the ECU in terms of any of its component currencies is generally unaffected by changes in the value of the dollar. In contrast, the SDR has been perceived as an ineffective hedge against the U.S. dollar because the dollar constitutes such a large part of its construction. Deals denominated in ECUs, therefore, contain considerably less foreign exchange risk than those done in U.S. dollars or SDRs. This can often reduce the corporate need to hedge and make frequent price revisions.

In addition, multinational companies with extensive investments in Europe may be attracted to the ECU debt market. By issuing debt in ECUs, companies are able to provide a natural hedge for some of their balance sheet exposure.

Finally, we question the argument that the ECU and SDR are unnecessary because borrowers and investors can tailor their own baskets of currencies. This may occasionally be true for some institutional investors who may prefer to construct and utilize their own currency mix that matches their requirements more closely than the ECU or the SDR. However, in doing so they give up some significant advantages of using standardized composite currency units. The use of the ECU and the SDR allows the use of the now highly developed infrastructure and market mechanisms that significantly lower transaction costs. This is especially true since the markets for some individual currencies are not very liquid. Further, because of cross-border restrictions, taxes, and costs, certain capital markets are difficult or impossible to tap directly. Using standardized composite currency units such as the SDR and especially the ECU, therefore, lowers transaction costs, enables indirect access to currencies otherwise not available, and allows a wider market diversification of assets and liabilities.

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