Ecu-Denominated Insurance Contracts: Issues and Potential

by Gerard M. Dickinson*

1. Introduction

During the second half of the 1980s there has been a discernible growth in the use of ecus in the commercial transactions of the private sector. Eurobonds have been issued in ecus; bank loans, deposits, travellers cheques and credit cards have been denominated in ecus; futures and options contracts have been priced and traded in ecus; and inter-EC trade has been invoiced and financed in ecus. Nevertheless, the transactions still only form a minor part of their respective markets.

In 1989 the San Paolo Bank¹ and IAFEI carried out a survey of 227 companies across seven Community countries (excluding the UK). This survey revealed that there was a growing use of the ecu, not just in respect of inter-EC trade but in more general financing and treasury management.

This private sector use of the ecu has also extended to insurance. Italian, French and Swiss insurers have issued life insurance contracts denominated in ecus. The Assicurazioni Generali has developed business interruption policies for the European hotel industry. In 1988, the European Space Agency switched a major part of their satellite insurance programme from dollars into ecus, placing these risks both at Lloyd's and within the European company market. In reinsurance, SCOR (France) and UNAT, the continental European group of American International Underwriters, have arranged contracts in ecus.

It is too early to say whether these instances of the use of the ecu in insurance represent the beginning of a trend, although I would consider this likely. Whether a market for ecu-denominated insurance does develop, and how strong this development is, will depend mainly on a perceived need by consumers.

But there is little doubt that the wider monetary and economic context within which commercial transactions currently take place in Europe will have an important effect on consumer preference. If European monetary integration develops quickly, this is likely to

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¹ San Paolo Bank of Turin "The Commercial Use of the Ecu: Invoicing and Import-Export Practices", IAFEI XX Congress, Paris, September 1989.

encourage a greater use of the ecu for financial transactions, including insurance. In the longer term, if a European central bank emerges, and the ecu becomes the official European currency, then this will clearly have a dramatic effect in stimulating demand.

2. Nature of the ecu

The ecu is a basket of the currencies of all the member states of the Community. The weights in the basket are determined at five yearly intervals by the European Commission. The criteria that the Commission uses to determine the weights depend on a number of factors, economic and political. Of the economic factors, the most important are the level of an individual country's trade within the Community and the size of its official reserves. The political factors are less clearly defined, but are primarily concerned with the determination of the government to keep the national currency as stable as possible. Below are the weights that were assigned to the various currencies in September 1984 and September 1989.

Ecu Weights		
	Sept. 1989	Sept. 1984
DMark	30.1	32.1
French Franc	19.0	19.1
Sterling	13.0	15.0
Italian Lira	10.2	10.0
Dutch Guilder	9.4	10.1
Belgium / Luxembourg Franc	7.6	8.6
Spanish Peseta	5.5	—
Danish Krone	2.5	2.7
Irish Punt	1.1	1.2
Greek Drachma	0.8	1.2
Portuguese Escudo	0.8	—

The main reason for the emergence of the ecu in private sector transactions arises from its perceived stability as a currency. It should be noted that this stability arises from two separate causes. Firstly, most of the currencies which constitute the ecu are those of countries that have joined the Exchange Rate Mechanism of the EMS. Hence the stability imparted to individual currencies becomes reflected in the basket as a whole. Secondly, this stability arises from a purely statistical factor. When individual currencies change over time they do not move in perfect correlation with each other, thus imparting a further source of stability. This statistical characteristic is the law of large numbers.

Empirical studies have confirmed the stability properties of the ecu compared not only with most of the constituent currencies making up the ecu but also with international currencies such as the US dollar and yen. This stability has been confirmed both in nominal terms and in real terms, i. e. when allowance is made for local inflation rates. It will be apparent that when one is considering the ecu in real terms, one should consider the ecu relative to the inflation rates associated with particular planned receipts and payments of a given decision situation. Such differences in the receipts and payments flows cannot be

easily captured in a general empirical analysis. Nevertheless, it is likely that the stability of the ecu would extend to a wide range of particular decision situations.

Moreover, when assessing the likely future value of the ecu in real terms, one must take into account the dynamic relationship between the currency and inflation rates within a group of countries that are being subject to increasingly common macro-economic forces. With greater economic and monetary integration, one can expect an even greater level of stability in the real value of the ecu over time.

3. Attributes of the ecu

Since the potential growth of ecu-denominated insurance contracts will depend on the commercial benefits that they can provide to consumers, it is useful to try to isolate the particular characteristics of the ecu which might give rise to these benefits. Three particular attributes are isolated for consideration below.

3.1. Transaction costs saving

Since the ecu is a basket of currencies, it can provide consumers with savings in transaction costs in situations where they wish to package their European insurance needs in contracts with payments settled in a number of European currencies. These transaction costs would include not only the management expenses associated with handling multi-currency contracts but also with currency spreads and other dealing costs which have to be incurred when using a variety of currencies. Moreover, if the use of a single composite currency such as the ecu makes it easier for insurers to supply more integrated insurance packages, then the use of the ecu may afford additional benefits more indirectly by allowing consumers to gain any economies that may exist from further packaging of their insurance needs.

3.2. Built-in currency hedge

The ecu contains a built-in currency hedge suitable for situations where the consumer does not know precisely in which European currency an insurable loss might arise. Consumers, of course, must be fairly certain in such situations that the loss would occur in a Community currency, or at least one closely correlated with a Community currency.

If a consumer is faced with a situation in which he is uncertain of the currency in which an insurable loss might occur, the rational response would be for him to diversify across a range of relevant currencies. An insurance contract in ecus provides such a hedge in a cost-effective way, although it will be apparent that the particular weights making up the ecu may not match those preferred by the consumer in a given decision situation.

3.3. Stability value

The stability of the ecu, in nominal and real terms, is a more general characteristic than the two attributes just mentioned. It confers benefits on consumers by providing them with a more predictable environment in which to undertake their financial planning and control decisions. From an insurance purchasing standpoint, this attribute of the ecu will only confer a benefit if the consumer has decided to use the ecu as a currency in this wider financial context. The reason for this is that insurance purchasing decisions, either for the firm or the individual, are derivative of more general financial decisions.

If pan-European corporations move towards having their financial planning and control systems based on the ecu, then this will render ecu-denominated insurance contracts more attractive – at least for small to medium size risk exposures.

4. Potential value of these ecu attributes

How beneficial these attributes of the ecu will be to the consumer will depend mainly on two factors. Firstly, it will depend on the degree of divergence between the preferred currency weighting of the consumer and the currency weighting in the ecu. Secondly, it will depend on the transaction costs associated with creating a tailor-made basket of currencies (either by an insurer or the consumer himself) or on the transaction costs required to adjust the currency weighting in an ecu contract through the use of currency tools such as swaps, forwards or options. When the divergence between the preferred weighting and the ecu weighting is small and transaction costs are high, the benefits of using the ecu will tend to out-weight its costs. The reverse will be the case when the divergence is large and the transaction costs are low. It should be noted that there are scale economies in transaction costs, both in relation to currency dealings and in using financial instruments for currency risk management purposes. Large corporate customers can be expected to be in a position to exploit these economies more easily than personal and small commercial customers. Similarly, where the tailor-made currency weighting is done by the insurer on behalf of the customer, larger insurers will have an advantage over smaller ones.

5. The ecu and insurance contract indemnification

In considering the role of the ecu as a built-in currency hedge, cognizance needs to be taken of the nature of the indemnification implicit in insurance or reinsurance contracts. Where the underlying currency risk is assumed by the supplying insurer or reinsurer,² then this built-in hedge affords little benefit. This would be the case if there were no upper limit on indemnification or if indemnification was based on a replacement value basis. In contrast, it would afford a benefit where there is an upper limit fixed in money terms in a particular currency. In the former case where the insurer or reinsurer assumes the currency risk, the customer would be expected to pay for this indirectly through the insurance pricing mechanism, providing the insurer has the internal financial systems to cost its policies accurately, and competition allows.

6. Potential scope for ecu-denominated insurances

Let us explore briefly how the above attributes of the ecu might give rise to insurance demand.

6.1. Non-Life insurance

Transaction costs savings afforded by the ecu in the packaging of insurance covers will relate mainly to those of commercial enterprises. Such contracts would be relevant to large corporations with a good spread of risk exposures across the European market. They need not relate only to situations where the corporation has a preference for packaging its European insurance programmes. It could also relate to situations where global insurance programmes exist and where the ecu is used as a broad-based currency alongside other major currencies, such as the US dollar and yen. In other words it could reduce the number of currencies that exist in multi-currency global programmes.

Clearly, the use of the ecu as the reference currency in a non-life insurance package would not be suitable for all risk exposures. Large potential risk exposures would require

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² This would occur under those reinsurance treaties where the supplying reinsurer contracts to pay claims at the spot exchange rate existing at the date of the settlement.

a more precise currency matching, in situations where the currency risk is being borne by the consumer rather than by the insurer. For example, if a UK company has a large property risk exposure that might entail a DMark loss, it would be prudent to ensure that the insurance contract is payable in DMarks rather than in ecus. This is because the DMark could appreciate in relation to the ecu basket before any claim payment is received. Indeed for longer-tailed insurances, such as liability insurances, then the greater will be the need for more precise currency matching, because of the higher probability that a strong currency, such as the DMark, might appreciate against the ecu basket over a longer period.

The built-in currency hedge attribute of the ecu could also have potential benefits for consumers. In relation to corporate buyers of insurance, product liability and transportation insurances are two classes of business that suggest themselves. Similarly, individuals who are engaged in significant travel or business activity across the Community might benefit from ecu policies for motor, personal accident and health or personal property covers.

As noted earlier, the stability benefit afforded by the ecu in relation to insurance buying depends on whether or not the consumer operates within a wider financial planning and control system that employs the ecu. There is some evidence that there is small but growing number of corporations with pan-European structures that are moving towards internal accounting systems based on the ecu. In such instances, there is a greater potential for having property and liability insurance programmes denominated in ecus, at least for the small to medium-size risk exposures.

6.2. Life Insurance and Pensions

In the context of the packaging of insurances, the potential use of the ecu in life and pensions relates to group schemes, either in the context of employee benefits or affinity groups. One would expect potential demand only to arise from large companies with a network of European operations, especially those whose business entails significant relocation of staff from country to country. *Prima facie*, one would consider the potential for ecu-denominated life insurances to be less than that for non-life insurances. The main reason for this stems from the fact that life and pension schemes are less likely to consist of integrated packages, since the benefit structures under these schemes must allow for differing local tax, social security and other national regulatory conditions.

The built-in currency hedge attribute of the ecu would appear to have more potential for the individual consumer. It is likely that there will be a segment of the population that will become more and more mobile across the Community, as economic and political integration increases. Hence there will be greater uncertainty for these individuals regarding their location of residency both in work and during retirement. The use of the ecu as a hedge to cover this uncertainty could prove attractive, particularly in life insurance in view of the long term nature of the contract.

Personal pensions and savings plans in ecus may also have appeal to some segments of the European population. But unlike life insurance contracts, these personal saving plans would not in general lead to ecu-denominated contracts in view of the unbundling of saving and protection in many of these arrangements. The reduction of currency uncertainty here relates more directly to the purpose of the saving: deferred consumption, mainly during retirement. More particularly, this uncertainty is concerned with the long

term purchasing power of these savings for consumers who are likely to be spending an increasing proportion of their future income and wealth on European-produced goods and services. Viewed this way, it is apparent that the need for such a currency hedge is not restricted to individuals who are physically mobile across the Community. It also applies, if to a lesser degree, to individuals that remain at home, since they will be likely to consume more imported goods and services from the rest of Europe. Of course, if in the very long term full monetary and economic union takes place, and the ecu becomes a standard medium of exchange, then this currency risk concern will disappear.

Further consideration of the above leads to an interesting observation about the nature of ecu investments. An ecu-denominated bond is easily defined. It is simply the weighted sum of the interest rates across the various component currencies. This is not the case for shares or property investments. An ecu share or ecu property investment is one where the underlying corporate profit or rental flow has an ecu weighting. Whether a share is quoted on a Stock Exchange in ecus is irrelevant, and so too is whether dividends are paid in ecus. To be more precise, an ecu share is one where the revenues and costs emanate in ecus or in a mix of currencies reflecting the ecu weighting, hence resulting in the profit flow being effectively in ecus. Thus it will be apparent that no ecu shares or property investments exist as such³. A consumer wishing to save in ecus in the form of shares and property will necessarily have to create his own investment portfolio, or have it created for him. Since in these situations, the consumer cannot obtain any transaction cost savings from the use of the ecu, he may as well choose a currency weighting that reflects his own particular preferences. Notwithstanding, there could be some growth of ecu-denominated saving programmes where the investment emphasis is on shares and property. This would be where an insurance company wishes to develop and sell a standardised product either because consumers are not capable of creating and managing a more international investment portfolio, or because it can pass onto consumers the lower transactions costs which it possesses in dealing in a range of currencies and investments.

It will be apparent that in the area of saving products, consumers may well choose more internationally diversified investment portfolios and not restrict themselves just to those investments with a European emphasis, because their future spending will not be restricted to European goods and services.

6.3. Reinsurance

Reinsurance treaties being by nature packages of cover could lend themselves to being denominated in ecus. This needs not be restricted to reinsurance treaties embracing European risks only, it could also relate to global treaties where the ecu is one of a limited number of currencies specified under a reinsurance contract arrangement.

The built-in currency hedge of the ecu may have some independent attraction to ceding reinsurers. Because of the loss of information in the chain of risk transfer, reinsurers do not always know the ultimate currency or currencies in which a loss occurs. By having retrocession protection in ecus, this could be a way for a ceding reinsurer to reduce this uncertainty. Nevertheless, it would be prudent for large potential risk exposures to be more precisely matched, since the currency in which losses are ultimately paid may well appreciate against an ecu basket, especially when settlement delays are long. In other

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³ This raises the more general issue of what is an international equity investment.

words, in such cases, it is better for the ceding reinsurer to incur the information costs associated with identifying the currency of loss in order to be able to hedge more precisely, rather than to try to exploit the built-in currency hedge afforded by the ecu.

The stability characteristic of the ecu may also have some potential benefit in re-insurance. In contrast to direct insurances, reinsurance transactions take place within a market context which is more separable from the wider commercial environment. Thus reinsurers could agree among themselves on the use of the ecu as a currency in which re-insurances are arranged. Indeed this need apply not just to reinsurances that pertain the European market. It could extend to international reinsurance arrangements more generally, by virtue of the fact that the ecu is perceived to afford a more stable medium of exchange than other major international currencies such as the dollar. Since any move towards the use of the ecu in this way would involve achieving a consensus among reinsurers, this would take time to organise; market conventions and accounting systems would have to change.

7. Financial issues arising from the supply of ecu insurance contracts

Let us now turn to some of the financial management issues that insurers would face in supplying ecu-denominated contracts. Attention will be limited to two particular areas: currency matching of technical reserves and the maintenance of appropriate capital support.

7.1. Currency matching of technical reserves

If insurers issue ecu-denominated insurance contracts, life or non-life, then we will need to consider the currency risks that they thereby create for themselves. Prudent financial management suggests currency matching (congruence) of assets and those liabilities representing technical reserves. Indeed under EC Establishment and Services Directives this currency matching is a requirement.

If an insurer assumes ecu liabilities, he would need to hold ecu-denominated investments to match these. Hence the first question to be addressed is what sort of investments would he hold. For most insurers, it is the practice to hold funds representing these technical reserves in bonds matched in maturity to the average time duration of claim and policy maturity payments. In life and annuity contracts, the bonds used for matching purposes need to have fixed rate coupons in order to immunise the interest rate risk implicit in the contract guarantees. This contrasts with non-life insurance, where no such guarantees exist and so there is more flexibility about whether the matching bonds have fixed or floating rates. We noted earlier that there has been a significant growth in recent years in the ecu-bond markets, as governments, European agencies and the private sector have sought to raise capital in this way. But the variety and depth of the ecu bond markets still do not compare favourable with those of more conventional bonds. There have been very few ecu bond issues with maturities beyond ten years and this would pose matching problems for life insurers issuing ecu contracts. Similarly, on the non-life insurance side, the lack of liquidity in the ecu-bond markets could impose costs on an insurer needing to sell assets at short notice to pay claims. Nevertheless, current trends suggest that ecu-bond markets will continue to develop and so these problems are likely to diminish over time.

But an insurer can create his own quasi-ecu bonds, if he cannot find suitable investments in the market place. This can be done by acquiring bonds in the underlying European

currencies, and assembling them with the same weights as those in the ecu. It will be clear that if an insurer has to create his own ecu bonds for matching purposes, it will add to transaction costs. Ironically, if this process of having to create one's own ecu-denominated investments entails significant transaction costs, and competitive conditions require this cost to be passed on to consumers, this might negate some of the transaction cost saving the consumer himself would have gained from having ecu-denominated insurance contracts in the first place. Even so, scale economies pertaining to these transaction costs are more likely to favour the insurer rather than the consumer, especially the individual consumer.

7.2. Capital support

Most insurers extend the currency matching principle to some degree to the investment of funds covering their capital and free reserves: this is because these funds are held to cover the potential fluctuations in claim payments and to fund new business growth. There is less need to adopt a close currency matching position here, since the investment purpose has a much stronger emphasis on maximising the rate of return on these invested funds. But if there were significant ecu-denominated insurances, then some of the capital and free reserves would most likely be invested in assets of a similar currency mix.

Again, decisions over currency mix and the choice of investment are interdependent. It is common practice within the Community for insurers to hold a high proportion of funds covering capital and reserves in shares, because of their higher expected rates of return compared with bonds. But if an insurer wished to select ecu-denominated shares, he would not find any available, for reasons discussed earlier. Perforce the insurer would need to create his own ecu-equities by constructing a portfolio of shares with a similar currency weighting to the ecu.

This principle of currency matching of capital and free reserves could extend to the raising of new equity capital by an insurer. If an insurer plans to have a significant proportion of its business in ecu-denominated insurances, and indeed anticipates this to continue, he might contemplate raising some of the new equity capital needed by issuing shares payable in ecus. This transfers any currency risk back to the company's shareholder for him to manage. This is a policy that has been adopted by one or two specialist European banks recently. Such a development would require in most Community countries changes in the local company legislation, and would also require approval by the local insurance regulatory authorities. At the present time, this idea is mainly theoretical, but it may have commercial relevance in the longer term, especially for specialist insurance or reinsurance companies that wish to write mainly ecu-denominated insurance business.

8. Ecu-denominated insurances and more integrated European insurance market

At the present time not all national regulatory systems within the Community permit the issuance of ecu-denominated insurance contracts, although this is likely to be a short term problem. One can expect these restrictions to go as national insurance legislation adjusts itself to the wider economic and political trend of European integration. More speedy progress can be expected if local insurers perceiving a potential market demand put pressure on the local regulatory authorities to implement the necessary changes.

Similarly, the freedom to invest in ecu-denominated securities for currency matching or other purposes is not totally free across the Community. In part this again reflects the failure of local insurance legislation to adjust to a changing environment. To the extent these restrictions on investment have arisen because of exchange controls, these will now disappear with the progress on removing the restrictions on capital movements within the Community.

The European Commission has been keen to encourage the private use of the ecu across a wide range of financial and commercial transactions. It has not as yet made any specific recommendations with regard to the supply of ecu-denominated insurances. There has, however, been some specific encouragement with regard to ecu-denominated investments for currency matching purposes. Under the authorisation procedures in the Non-Life Services Directive, up to 50% of liabilities arising from such business can be held in ecu investments. This has been extended to the Establishment Non-Life Directives too. But the discretion still remains with the national supervisory authorities as to whether they will permit this or not. One can deduce that there has been a wider motivation behind these concessions, since they permit some degree of currency mismatching, even though the potential for significant mismatching is small, in view of the stability of the ecu vis-à-vis one or more of its constituent currencies.

There is no specific mention of the ecu in relation to matching in the draft Life Services Directive. The case for allowing the ecu to be used in a similar way is less strong, because the potential for mismatching could be significant over a long period of time, in view of the long term nature of life insurance liabilities. This is unless one assumes that the ecu will indeed become the common currency within the Community in time.

Of course, these attempts by the Commission to encourage the use of ecu investments will not in themselves cause a growth of ecu-denominated insurances. They merely remove a potential hindrance to insurers wishing to supply these contracts.

Taking a broader view, I would argue that there is a case for the ecu to be earmarked as a preferred currency within the Community, especially with regard to cross frontier transactions. The Commission could seek to put pressure on the member governments to accept a widening of the permitted classes of cross frontier business, for both life and non-life, where such business is denominated in ecus. This would not merely be putting pressure on governments to act as good Europeans. The competitive threat to existing business within national markets would be small, at least in the short run. This is because such business would be mainly tapping a new market demand, derived from the growth of inter-European commercial activity, both personal and corporate.

If the ecu were given a preferred currency status in this way, it could play a catalytic role in the further development of a common market in insurance. This can be considered part of a wider process: to encourage a greater use of the ecu in commercial transactions as a means of stimulating a greater economic and monetary integration. This is an idea which might be considered when the proposed Framework Directives are being drafted.