

AIRCRAFT FINANCING:  
THE INTERNATIONAL  
EQUIPMENT TRUST

A Proposal

# **AIRCRAFT FINANCING: THE INTERNATIONAL EQUIPMENT TRUST**

## **A Proposal**

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# THE NEED FOR A NEW APPROACH TO AIRCRAFT FINANCING

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## The Impact of Export Credit Subsidies

**The resolution of questions concerning officially subsidized export financing for aircraft is vital to airlines, the commercial aircraft manufacturers and their governments.**

The open market for new jet transports in the 1980s has been estimated at some \$120 billion. About 60% of the sales made by U.S. manufacturers will be in the export market. An even larger portion of total sales made by European manufacturers will be exports from their home countries.

**The current and planned expansion of product lines of major aircraft manufacturers and the increasing development of international production consortiums have created, or are about to create, direct international competition for nearly all models of U.S.- and European-manufactured commercial jet aircraft.**

The operating performances of directly competitive aircraft types are very close. A small difference in operating cost can be more than offset by attractive financing. As a result, substantial, officially supported export credits at below market rates can cause airlines to purchase the most easily financed aircraft and not the most suitable. For example, a 1% difference in interest rates can mean a 4% difference in before-tax income over 10 years; subsidies offered by some governments have been far more than 1% below market rates.

## The Standstill Agreement

**Officially sponsored aircraft export credit subsidies are governed by the Standstill Agreement.**

The Standstill was designed to avert an export credit war among the major commercial aircraft exporting countries by insuring no one offers terms more favorable than those agreed upon.

Through the Standstill, the major commercial aircraft exporting countries agreed that officially supported export credits for aircraft would not be offered with repayment terms longer than 10 years and would not cover more than 90% of the equip-

ment price. Although the Standstill is silent on interest rates, recent typical transactions under the Standstill have been financed at rates around 9.5%.

A proposed interim agreement would require interest rates no lower than 12% for dollar denominated loans. In addition, it would limit direct loan coverage to 42.5% of aircraft price for Eximbank loans, 62.5% for European credits. (This difference is necessary to achieve parity due to the different repayment schedules used by the U.S. and European export credit agencies.) Official participation in credits in excess of these percentages would be limited to guarantees. Repayment terms would remain at 10 years. However, the interim agreement calls upon the Europeans to seriously consider a U.S. proposal to extend the term to 15 years while simultaneously eliminating interest rate subsidies.

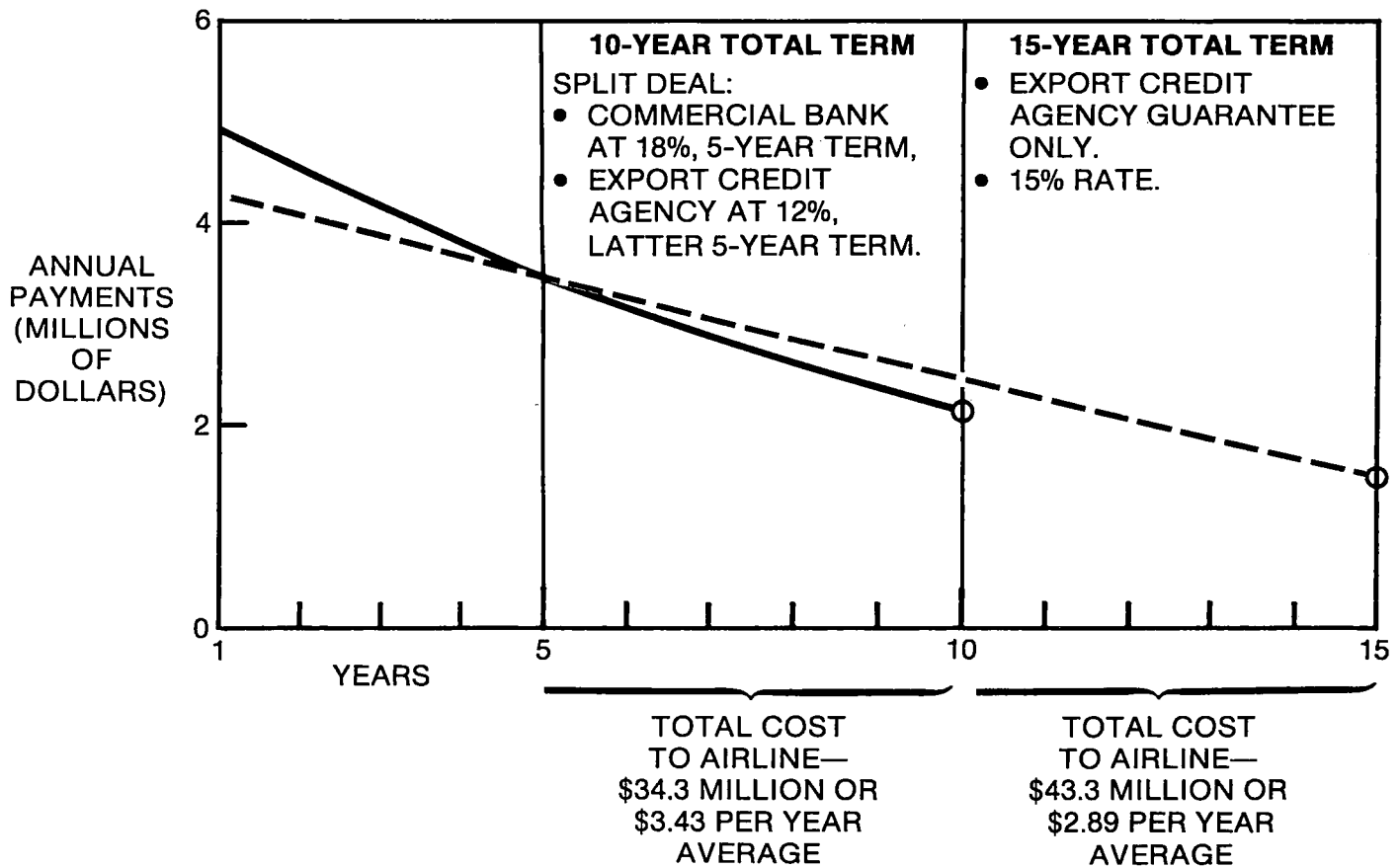
## Problems Unresolved by the Standstill

**The Standstill has not as yet resolved one central problem: it does not permit the term of officially supported export credits to exceed 10 years (12 years for leases) while jet aircraft useful life exceeds 15 years. This requirement of maturities shorter than aircraft useful life creates dislocations between an airline's debt service and the cash-generating characteristics of jet aircraft. The proposed agreement would solve this problem by permitting loan repayment terms of up to 15 years.**

The long-term capital market has been prepared to offer aircraft financing to qualified airlines with repayment terms matched to the useful life of the asset. This long-term money is available at market rates in excess of officially subsidized rates. However, given continually high market rates, service of long-term debt is more manageable and is more realistically related to the asset's ability to produce revenue. **Longer term at private market rates is the tradeoff for subsidized export financing restricted to a 10-year maximum term (Figure 1).**

FIGURE 1

**TWO FINANCING ALTERNATIVES  
(\$20 Million Package)**



While the Standstill Agreement has to a certain extent limited the further spread of subsidized export financing, it has nevertheless sanctioned the widespread use of such subsidies. It has contributed to an environment in which national treasuries compete with each other in the transfer of their nations' wealth to the customers of their respective manufacturers.

As competition increases among the European manufacturers, the U.S. manufacturers and the emerging international production consortiums, pressure increases upon the treasuries of their respective countries to reduce subsidies. Avoidance of direct subsidized funding of exports to qualified airlines would eliminate those subsidy costs to the taxpayers. Depending upon private market perceptions, these public resources might be dedicated more effectively to the aviation needs of developing nations, where air transportation is vital to economic development.

Widespread subsidized export financing and the 10-year limitation on term have discouraged development of innovative alternatives based upon the full use of the long-term capital markets which can match maturities to the useful life of the asset.

**The Role of Private Capital**

**To maintain a free and fair competitive environment, government-supported financing should be a neutral element in the equipment selection process.**

This long-term objective can largely be met by developing worldwide financing through private capital markets at market interest rates for loan terms commensurate with the useful lives of the assets.

# THE INTERNATIONAL EQUIPMENT TRUST

## A Generic Concept

The International Equipment Trust (IET) is a proposal designed to aid in achieving this long-term goal. It is derived directly from practical financing tools developed in the U.S. and European capital markets.

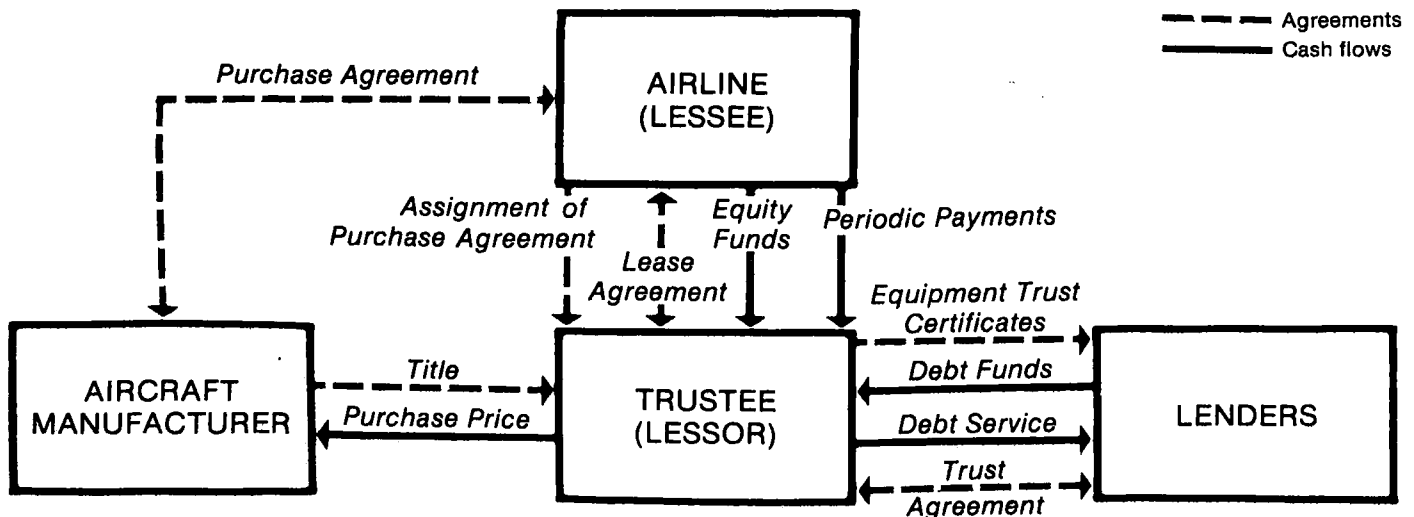
The IET would help replace officially supported export credits with private capital through a program that supplants direct credits with guarantees of private capital loans. In appropriate cases, guarantees would be replaced by asset security combined with government-issued political risk insurance.

The International Equipment Trust would encompass a range of financing mechanisms, of which the equipment trust is, at least in the United States, a highly developed and flexible format particularly well suited for this financing concept. However, an equipment trust format is not required. The principle behind the IET is flexible enough to permit adaptation to the needs of a specific transaction and the requirements of local law.

In one form, the IET would work much like an ordinary equipment trust. A trustee sells equipment trust certificates to financial institutions and uses the proceeds to purchase the equipment to be financed. The trustee then leases the equipment to the airline, whose periodic payments are sufficient to pay principal, interest, and fees. Through a trust agreement, the lenders are secured by their beneficial interest in the asset owned by the trustee (Figure 2).

The equipment trust format need not be imposed upon legal systems to which it would be alien. Other legal concepts might be used to permit the desired result—beneficial ownership of the asset by numerous lenders who act through a single party. The financial transaction might involve, in place of a trustee, the use of an agent, a manager, a partnership, or other arrangements more convenient or with perhaps favorable tax consequences under the law that applies to the transaction. In what follows, "IET" and "equipment trust" are used as generic terms and refer to all types of arrangements that produce the desired result, regardless of form.

FIGURE 2  
EQUIPMENT TRUST FINANCING  
Generic Concept



## **ROLE OF THE TRUSTEE (OR AGENT, ETC.)**

**The central feature of the IET is the role of the trustee (or agent, manager, etc. depending upon the particular format chosen). This party gives the IET its flexibility.**

First, the trustee permits the borrower to combine loans from many sources into one package governed by one consistent set of instruments.

Second, the fiduciary relationship of the trustee, agent, etc. to the lenders allows institutional lenders to leave the loan administration to the trustee, but is flexible enough to allow bank or other shorter term lenders to take an active part in administration should they wish to do so.

Third, under certain circumstances the trust arrangement may permit the tax benefits allowed beneficial owners in the applicable jurisdiction to be flowed through to airlines who could not otherwise enjoy them.

**Finally and most importantly, the trustee or agent holds the security and thus allows multiple lenders to be equally secured through beneficial ownership of the asset being financed.**

## **The Use of Government Guarantees**

**In the initial stages of its development, the most important difference between the IET and traditional equipment trusts is the IET's use of the full faith and credit guarantee of the exporter's government (Figure 3).**

The guarantee might run (a) directly from the export credit agency to the trustee for the benefit of all, or only some, of the lenders. Or, the guarantee might run (b) directly to the lenders.

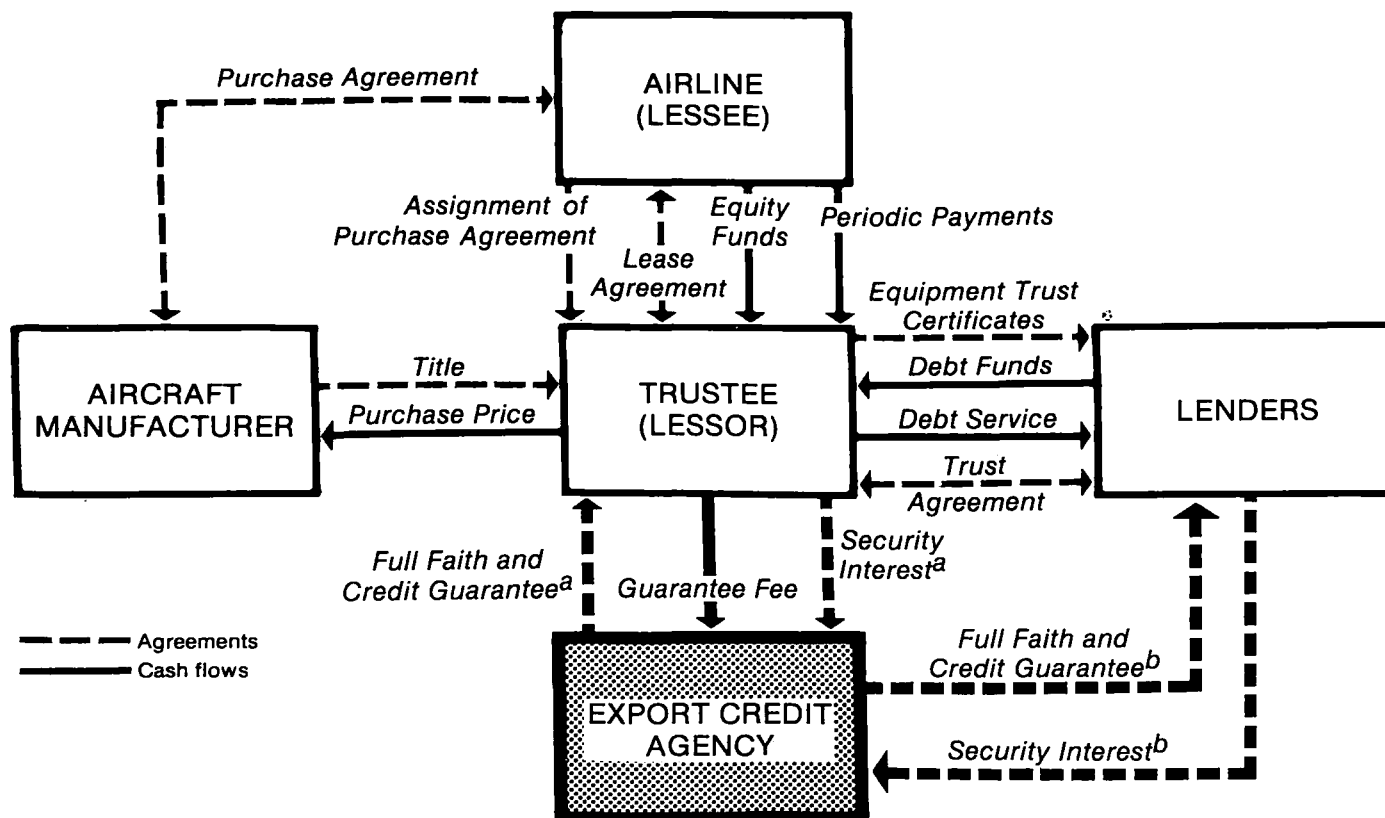
Although lenders may not insist upon security in addition to a full faith and credit guarantee, all parties will benefit if the export credit agencies build equipment trusts, or their equivalents, into their guarantee programs. This will make possible the development of the IET's later stages.

**The export credit agency guarantee is important because it will play a key role in opening access to the institutional market.**

U.S. institutional lenders such as insurance companies and pension funds are typically either limited or prohibited from making foreign loans. In the U.S. market, an Eximbank guarantee of the debt of a foreign airline generally converts the loan to a domestic risk, indeed, a high quality risk. However, in the format currently in general use by Eximbank, such a guarantee leaves significant problems unsolved. Eximbank guarantees are usually not assignable by their terms without the express consent of Eximbank. On the other hand, most U.S. fiduciaries are required by law to invest in instruments that can be liquidated. Thus, while Eximbank can domesticate an investment for the purposes of a long-term institutional lender, the terms of the domestication may not be acceptable without substantially revising the existing form of the Eximbank guarantee.

FIGURE 3

**INTERNATIONAL EQUIPMENT TRUST FINANCING  
Using Full Faith and Credit Guarantee of Exporter's Government**



**The Need for Parity**

However, even if Eximbank could domesticate foreign loans on acceptable terms, additional problems would remain. One of the chief purposes of the IET is to provide to the customers of all aircraft manufacturers equal access to the private long-term market. Since this market is at present centered in the U.S. (although Euro-money is available), the rules governing IET financing must permit loans to European manufacturers' customers on terms equal to customers of Boeing, McDonnell Douglas, and Lockheed. This requirement is dictated by basic fairness and the Europeans would never accept less.

**Commercial Bank Letter of Credit To Domesticate Foreign Guarantees and To Solve the Parity Issue**

**U.S. Commercial Bank Letters of Credit can be used to domesticate guarantees given by European export credit agencies.**

A guarantee issued by ECGD, HERMES, or COFACE does not domesticate a foreign credit for the purposes of a U.S. financial institution. Nevertheless, such credits can be domesticated through a U.S. commercial bank's standby letter of credit. The letter of credit runs to the equipment trustee for the benefit of the holders of the equipment trust certificates. These institutional lenders can look to the credit of the U.S. commercial bank and not to the credit of the foreign airline or foreign export credit agency. The commercial bank, which is not as restricted in extending foreign credits as an institutional lender with fiduciary responsibilities,

looks to the export credit agency for repayment in the event payment is required under the letter of credit (Figure 4).

**Letters of Credit should be used for Exim guarantees to achieve parity and to alleviate the guarantee problem.**

The same arrangement can be used when the loan is domesticated by an Exim guarantee. The letter of credit can bridge the gap between the

terms required by a fiduciary lender and those offered in the present Exim guarantee. A letter of credit in domestically guaranteed transactions could erase the small advantage gained by U.S. exporters' customers by avoiding the letter of credit fee. Other techniques could easily be developed to neutralize this difference to the satisfaction of all parties.

**FIGURE 4**

**INTERNATIONAL EQUIPMENT TRUST FINANCING  
U.S. Commercial Bank Letter of Credit Backed by Export Credit Agency Guarantee**

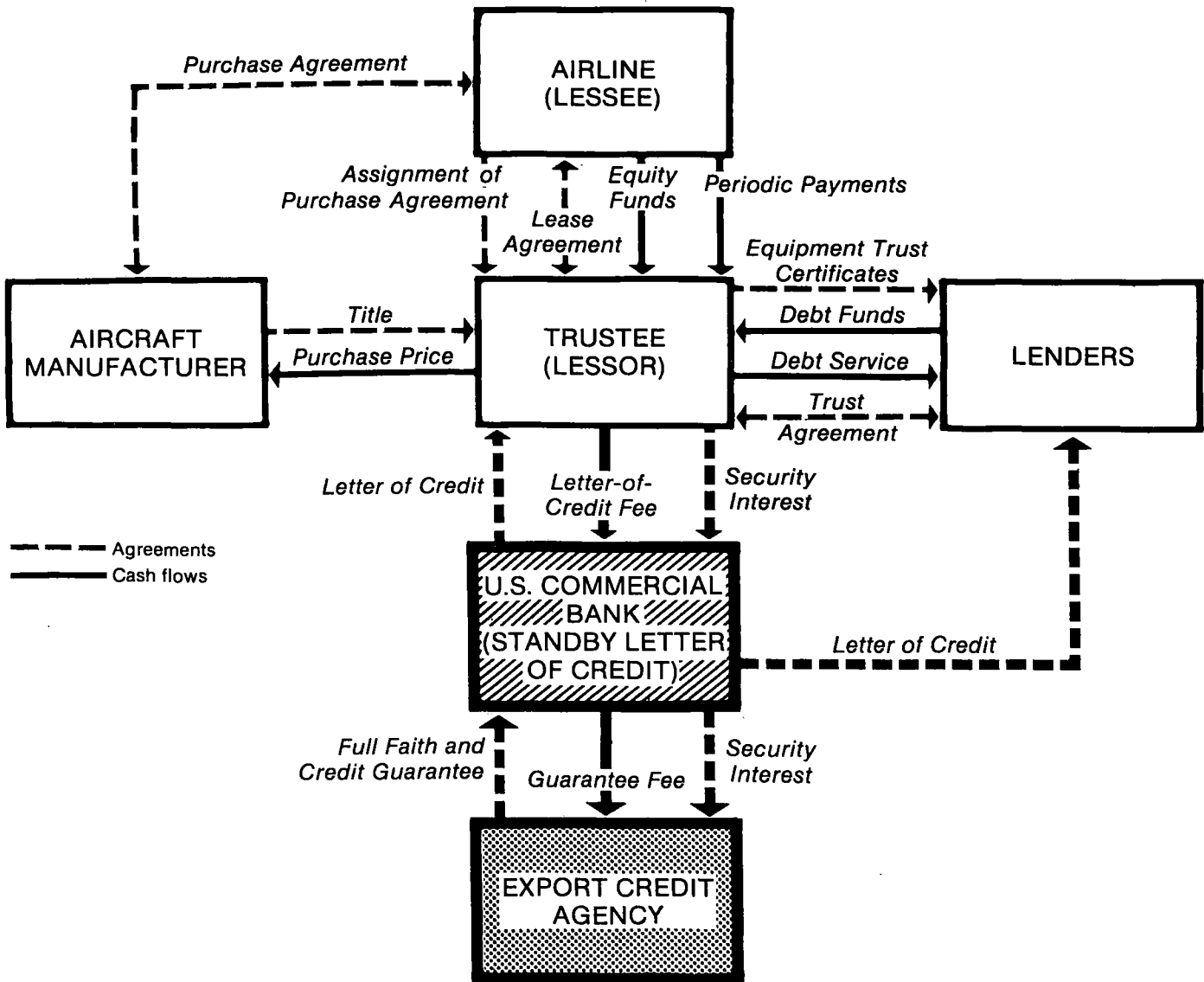
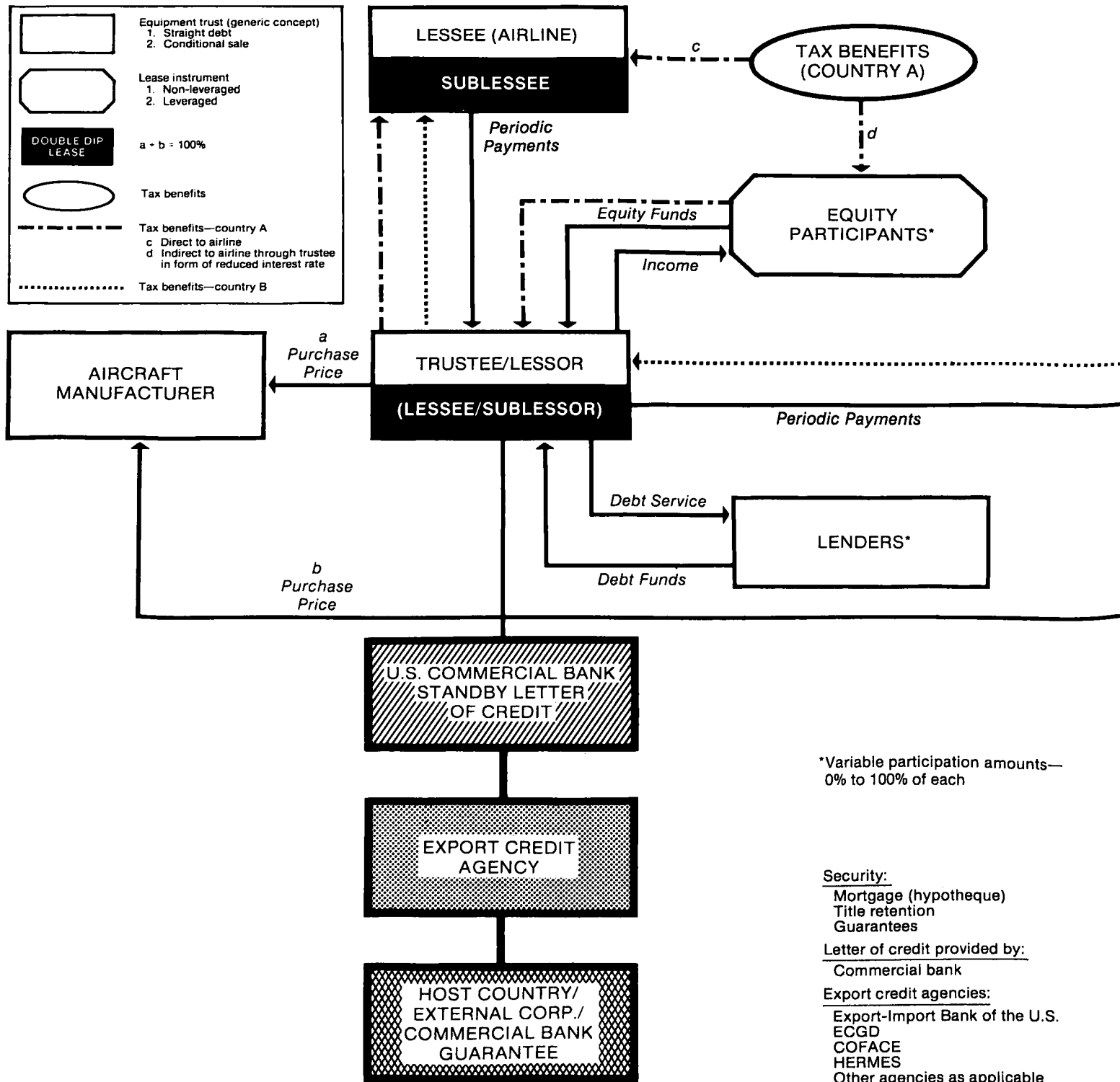
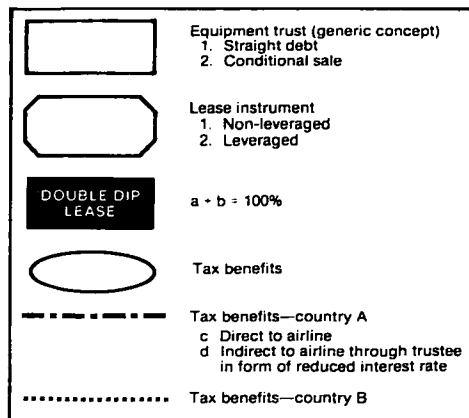




FIGURE 5

INTERNATIONAL EQUIPMENT TRUST FLEXIBILITY

LEGEND

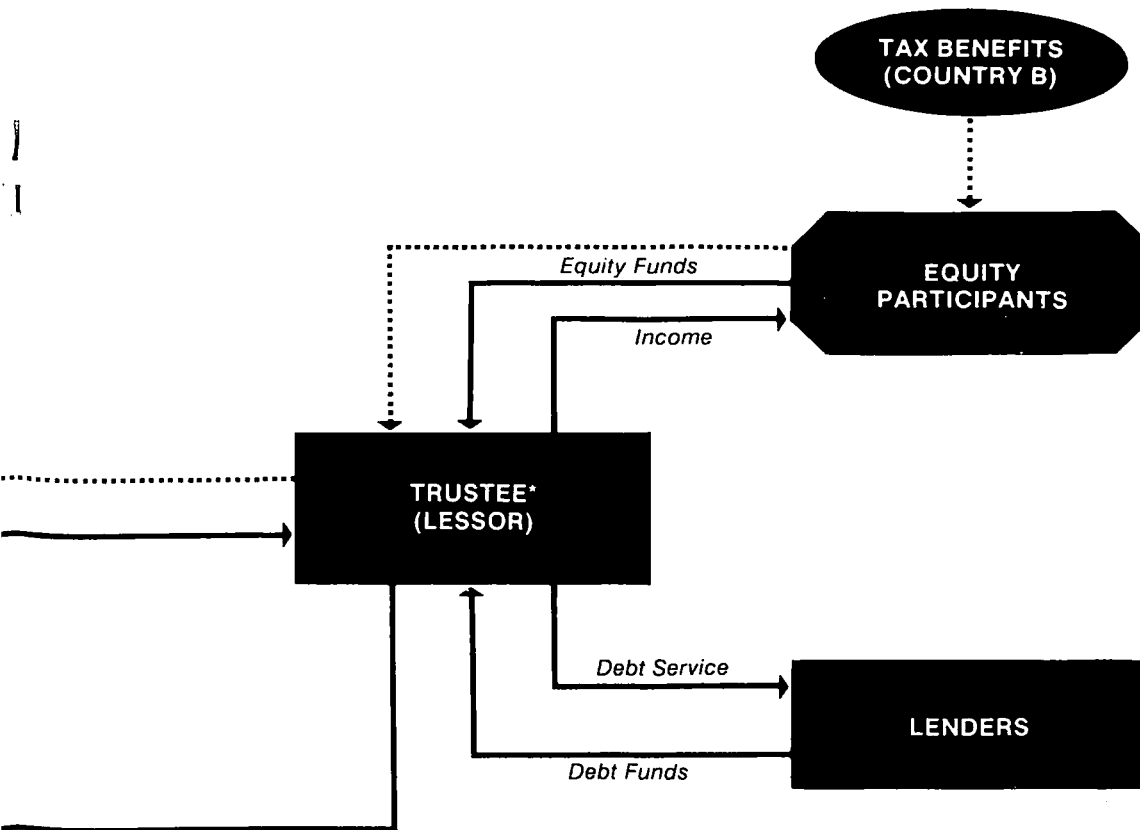


\*Variable participation amounts—0% to 100% of each

Security:  
 Mortgage (hypothèque)  
 Title retention  
 Guarantees

Letter of credit provided by:  
 Commercial bank

Export credit agencies:  
 Export-Import Bank of the U.S.  
 ECGD  
 COFACE  
 HERMES  
 Other agencies as applicable



### Funding (Debt/Equity)

Underwriters:  
 Investment banks  
 Merchant banks  
 Commercial banks

Sources:  
Medium term:  
 Commercial banks  
 Merchant banks  
 Investment banks  
Long term:  
 Insurance companies  
 Pension funds  
 Trusts  
 Savings & Loan  
 Associations

Issues:  
 Public offerings  
 Private placement  
 U.S. bonds  
 Eurobonds  
 FRN's  
 "Yankee" bonds  
 "Bulldog" issues  
 Euro-DM bonds  
 "Samurais"  
 Convertible bonds  
 Etc.

Currencies:  
 U.S. dollars  
 Canadian dollars  
 DM  
 Yen  
 U.K. sterling  
 Swiss Fr.  
 Guilder  
 French Fr.  
 Other FX

Interest rates:  
 Fixed  
 Floating  
 Adjustable rates:  
 • Fixed-floating  
 • Drop-lock  
 • Index-linked  
 • Etc.

Repayment:  
 Level principal plus interest  
 Level principal and interest  
 Fluctuating  
 Balloon  
 Grace period  
 Etc.

## FLEXIBILITY OF THE IET

In the IET model discussed above, the institutional lender supplies the cash and owns the asset beneficially. A commercial bank takes the credit risk and is in turn guaranteed by the full faith and credit of the exporter's government. As indicated, many variations on this basic structure are possible (Figure 5). One variation concerns the distribution of credit. For instance, medium-term lenders might supply funds for the first 5 years of the loan, while institutional lenders take the latter maturities. Moreover, funds may be provided in various currencies. Multicurrency financing offers total cross-mobility of capital and maximum flexibility to international carriers generating revenues in more than one currency.

Other variations concern the amount of risk each lender takes. Medium-term lenders may be unsecured, or unguaranteed. Some long-term lenders may be willing to trade a guarantee for a higher rate of return. Other major variations concern the structure of the loan instrument. Various parts of the loan might be offered at fixed, moving-fixed, or variable rates. Amortization of loan principal might also vary, to better coincide with airline cash flows.

Transactions might also vary in their legal form. For example, the trust format may not fit easily into civil law jurisdictions, where agency or management concepts might be more useful.

The great variation from country to country in laws relating to title, registration, tax treatment, protection of creditors, accounting practices, and the like, will make different legal forms for different transactions advisable. **Conditional sale agreements, hire purchase agreements, leases (including "double-dip" leases), chattel mortgages, as well as equipment trusts are all compatible with the fundamental principles of the IET.**

## THE CAPACITY AND AVAILABILITY OF PRIVATE CAPITAL MARKETS

The ability of the private capital market to absorb the funding requirements arising from use of the IET is a function of the many factors appearing in the preceding diagram. The impact of the IET on private capital markets will be manageable for several reasons. First, not all airlines will need to use official guarantees. An international airline, with a well-recognized credit rating and its own host-country guarantee, may avoid the added cost of the guarantee fee by going to the market in its own name. Second, carriers who need the guarantee will use it as market conditions dictate and only to the extent necessary to tap the private capital market sources which would otherwise be unavailable due to term restrictions or legal and administrative guidelines (such as the insurance companies' "basket rules"). Third, the IET structure requires the use of the guarantee device only for the latter maturities where qualification and accessibility are the key constraints.

The IET will also facilitate access to the private capital markets for developing nations which will have the greatest relative demand for new aircraft in the future. However, direct government funding of the latter maturities may be required if the private market can not respond effectively to these airlines' needs. Such direct government funding need not necessarily be subsidized, but its presence through the cross-default provision enhances the mobilization of private capital. Governments might participate through export agencies or multinational sources (such as the World Bank or various development banks). These sources may serve as direct lender, guarantor, or a combination of both.

# THE TRANSITION TO PURE ASSET FINANCING

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## Toward the Elimination of Guarantees

Equipment trusts were originally developed as a sophisticated form of asset financing. Their use in combination with governmental guarantees in the field of international aircraft financing should be viewed with this original purpose in mind.

**As institutional lenders become accustomed to making guaranteed loans in the international market, the desire for a higher return on investment will likely prompt some long-term lenders to lend without the security of a government guarantee. Domestication of the credit, when needed, could be met through the use of U.S. commercial bank letters of credit alone.**

The commercial bank which takes the credit risk will require, in addition to the guarantee of the host country, a security interest in the aircraft and adequate insurance against risk of loss on the loan due to political risks.

## The Collateral

**It is of great importance to a secured lender to be able to repossess the security in the case of a default and to realize the full amount of unpaid principal and interest if the collateral is sold. Because of their mobility and high resale value, commercial jet aircraft are particularly valuable security.**

The great mobility of commercial jets offers several benefits for secured creditors. Unlike physically fixed capital assets, aircraft are not physically bound to the country of the airline's nationality. The procedures that give the creditor possession of the aircraft and the issues associated with repossession will vary from country to country. However, once the aircraft has been repossessed, it can be removed to a jurisdiction chosen by the creditor. In addition, aircraft used in international transportation are likely to spend some time in jurisdictions that permit repossessions in a timely manner, allowing the creditor to do a limited amount of shopping for the most favorable legal system.

Once repossessed, the aircraft can be subjected to the creditor's control and used to satisfy the debt. Although it is not possible to generalize concerning the ease with which an aircraft can be repossessed under local law, the trustee's interest in an aircraft, properly recorded in the country of registration, will be accorded priority over competing interests in those countries which have signed the Convention on International Recognition of Rights in Aircraft, the Geneva Mortgage Convention. Of course, recognition of the interest does not guarantee summary enforcement of a lessor's rights in the event of a default. Moreover, in countries not party to the Geneva Convention, the validity and priority of conflicting interests in aircraft will be treated under the laws of the jurisdiction in which enforcement is sought. That jurisdiction may look to the law of the country in which the aircraft is registered, the law of the lessor's domicile, or the law of the place of enforcement. Nevertheless, in many jurisdictions, the chief obstacles to repossession are likely to be fundamentally political, not legal.

## Political Risks

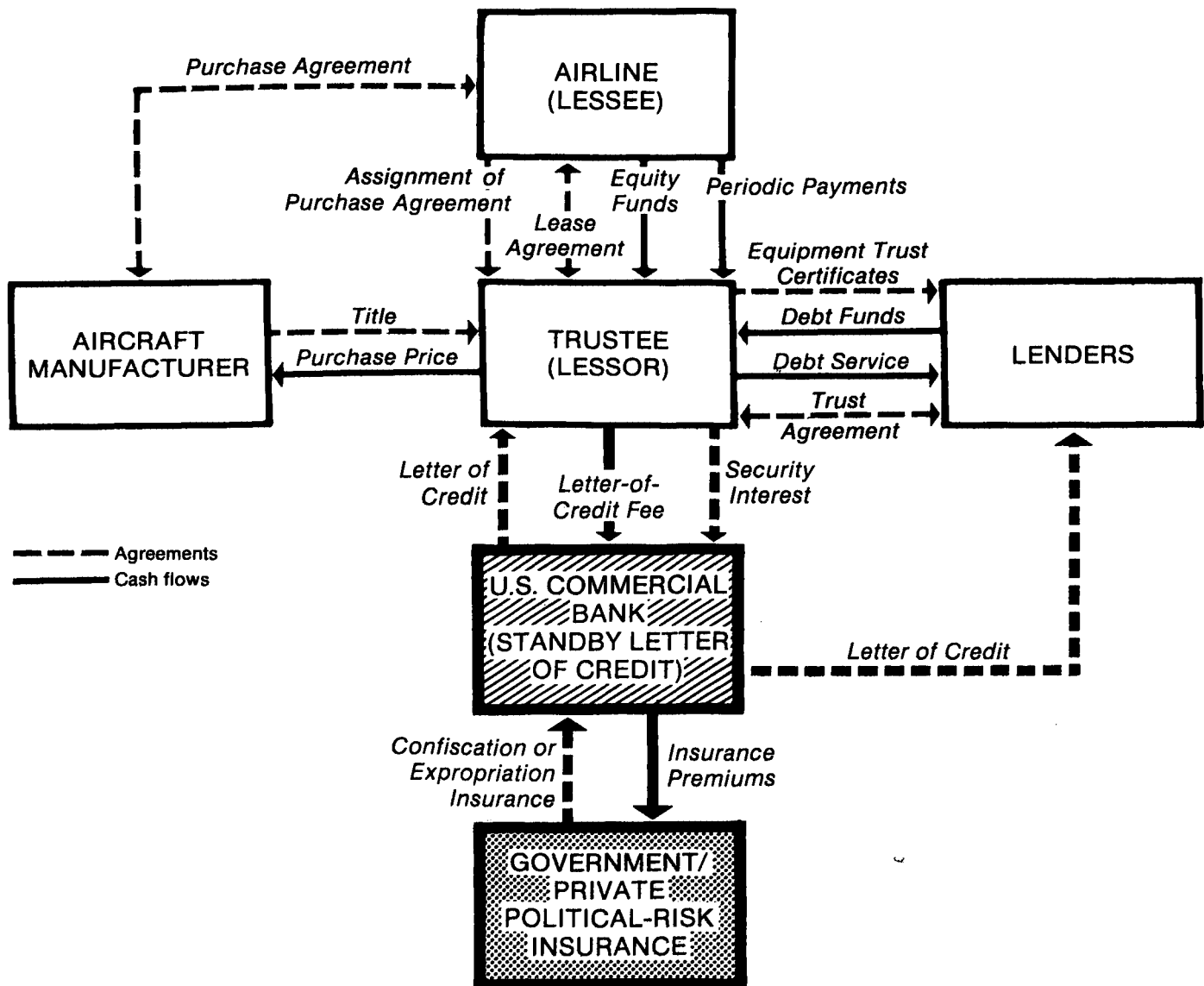
**In many jurisdictions, a risk facing the secured creditor is that the host country will prevent or delay his recovery of the asset in the event of a borrower's default. Because of this risk, export credit agencies must develop adequate political-risk insurance programs before government-guaranteed financing can change to pure asset financing (Figure 6).**

The term of the insurance must match the tenor of the loan in order to provide the necessary comfort to long-term lenders. The development of such insurance is a necessary precondition to the removal of government guarantees from international aircraft financing. Insurance would likely be preferred over guarantees by the U.S. government, if not other governments, since insurance is oriented toward political—not credit—risk and does not preempt available government resources.

Although a significant private market in long-term political risk insurance might develop, the writing of such insurance will likely remain a government preserve. In most instances, the “host country”—the airline’s home country—guarantees the airline’s obligation. The exporter’s government, as insurer, will likely have more leverage in dealing with the host country than would most financial institutions.

FIGURE 6

**INTERNATIONAL EQUIPMENT TRUST FINANCING  
With U.S. Commercial Bank Letter of Credit and Government or Private Political-Risk Insurance**



## Aircraft Asset Value Retention

When adequate legal and insurance mechanisms are in place, the long-term lender must also be assured that the asset will retain sufficient resale value over the course of the loan to be able to repay all principal and interest due at any time. It has been

well-documented that jet aircraft retain a significant fraction of their original price over long periods of time (Figures 7, 8, 9). Due to substantial secondary markets for commercial jets, it is reasonable to assume that the new generation of aircraft soon entering service will also retain their asset value.

FIGURE 7

### 727 RESALE PRICE\* AS PERCENT OF ORIGINAL PRICE

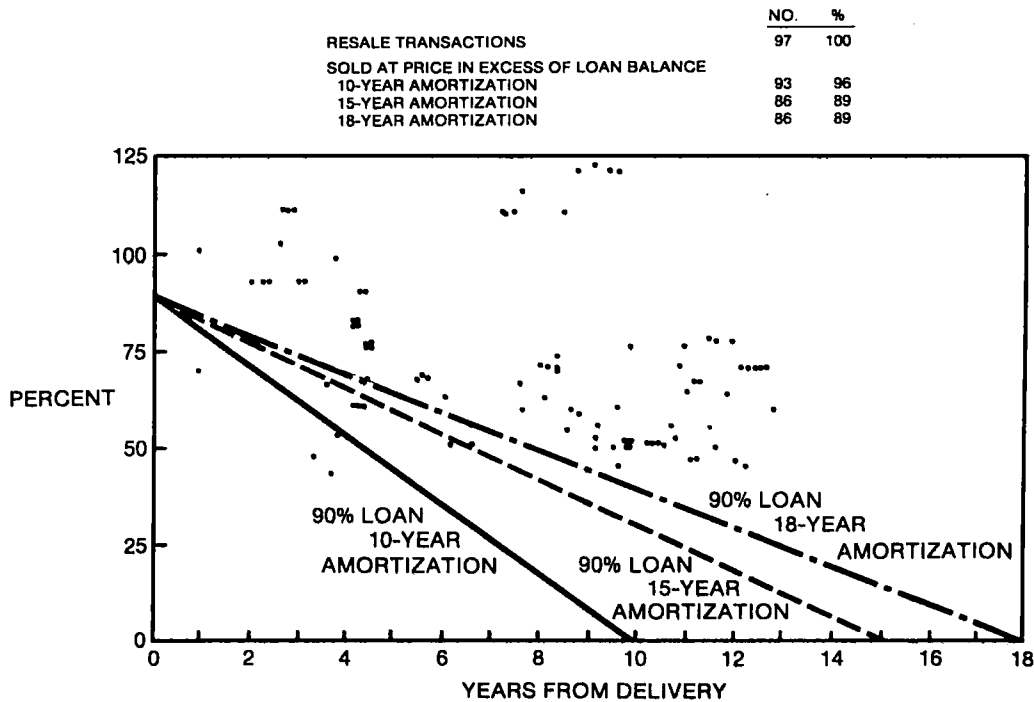
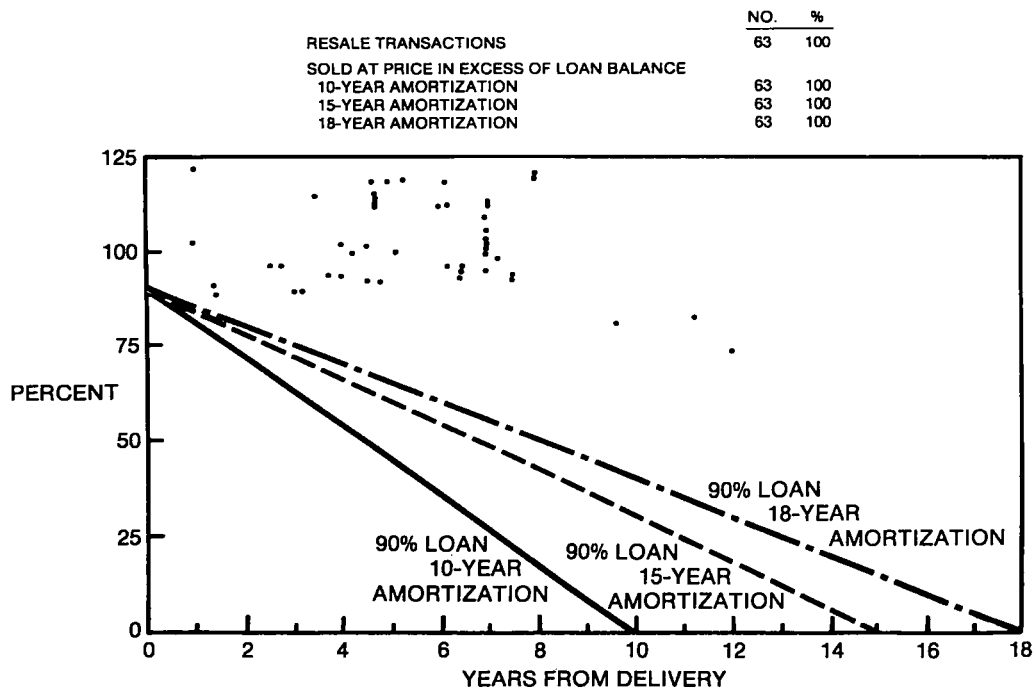


FIGURE 8

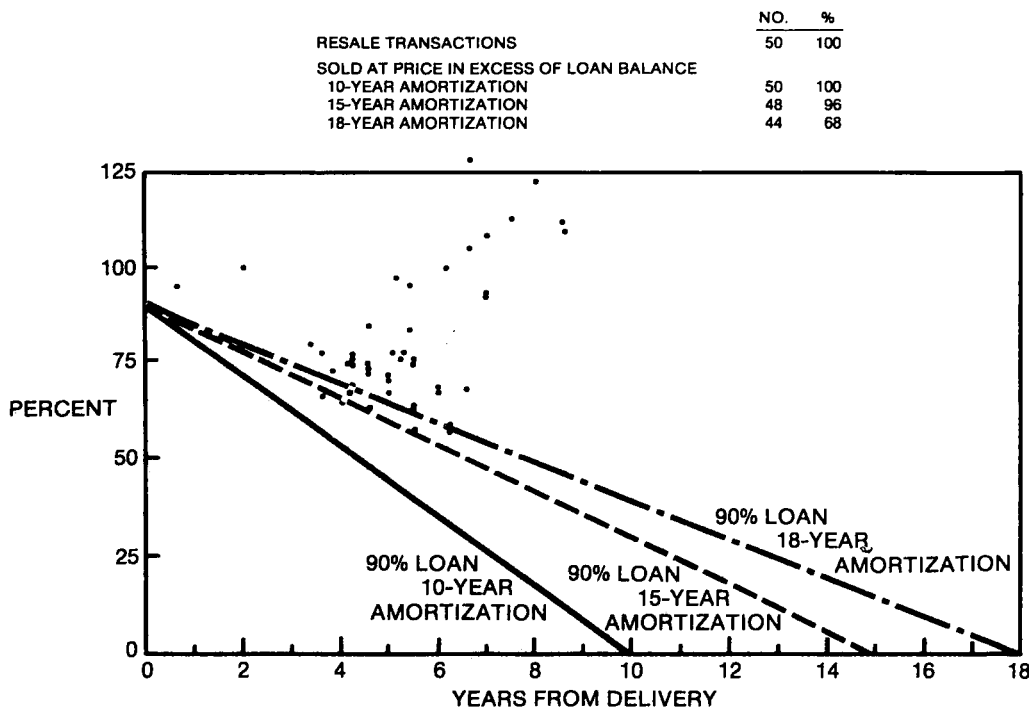
737 RESALE PRICE\* AS PERCENT OF ORIGINAL PRICE



\*Based on actual historical data, 1972-1980; all transactions known to Boeing

FIGURE 9

747 RESALE PRICE\* AS PERCENT OF ORIGINAL PRICE



\*Based on actual historical data, 1974-1980; all transactions known to Boeing

# CONCLUSION

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Commercial jet aircraft provide adequate security to justify extending long-term credit to credit-worthy airlines, without the need for direct credit participation or guarantees by the exporter's government. In the current environment created by substantial aircraft export credit subsidies, the development of long-term credit facilities has been discouraged.

**Given a satisfactory financial climate and a flexible, but temporary, government guarantee program, instruments can be developed which eliminate such subsidies and encourage innovative financial approaches to aircraft financing. The International Equipment Trust is a proposal which, when carried to its logical conclusion, will bring the benefits of free and open competition to the aircraft manufacturers (including their international production consortiums), the financial community, and the airlines. At the same time, the treasuries and taxpayers of all exporting countries can be freed from the need to continue the past practice of extensive export credit subsidies.**

**The export agencies and their governments have the ultimate responsibility for negotiating the international agreements that will permit the implementation of this proposal.**

Please address comments and requests for additional information to:

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