

Aircraft Financing (US): Overview

PRACTICAL LAW FINANCE WITH RICHARD FUREY, HOLLAND & KNIGHT LLP, BASED ON AN ORIGINAL ARTICLE BY MARA ABOLS, DARCY BINDER, JAMES HAYDEN AND CHRISTIAN HANSEN OF WHITE & CASE LLP

Search the [Resource ID numbers in blue](#) on Westlaw for more.

An overview of aircraft financing and the challenges posed by these transactions. This Note also discusses the parties typically involved in aircraft financing transactions and their roles, including manufacturers, owner trustees, lessees, export credit agencies, and development banks.

Aircraft or aviation financing is the financing of the purchase and operation of one or more aircraft and related assets, by an airline, aircraft lessor or other entity using one of a variety of financing structures. Depending on the needs of the participants, the financing may be structured as a secured loan, a debt offering, or a lease (whether an operating lease or finance lease). Unless specified otherwise, references to aircraft in this Note should be read to include helicopters.

AIRCRAFT FINANCING CHALLENGES

Aircraft financing presents unique challenges that may not exist in the financing of other types of assets. These challenges include:

- The high cost and mobility of aircraft. Commercial airplanes can cost hundreds of millions of dollars and often travel in multiple jurisdictions during the term of a financing transaction. These factors raise important issues for financiers including:
 - the amount they are willing to commit in the transaction given the large amounts of capital required to purchase aircraft;
 - how to structure their investment and participation in the aircraft financing transaction to minimize their credit exposure and risk; and
 - how to protect their investment and enforce their security interests in the aircraft and related assets in the different jurisdictions where the aircraft is expected to be located from time to time.

- The different national and sub-national laws and regulations and international treaties and conventions that must be taken into account when structuring and documenting aircraft financing transactions. The interrelationship among these different laws, regulations, and treaties create significant complexity that must be considered when negotiating these transactions. For more information on these issues, see Practice Note, Aircraft Financing: US and International Laws, Regulations and Registration Requirements ([W-001-6310](#)).
- The potential liability for participants involved in aircraft financing transactions in case of an accident or other loss event.
- The illiquid nature of the aviation market. There are not many potential buyers of the aircraft if there is a default under the loan agreement, indenture or lease, as applicable. Even if a buyer can be secured:
 - the cost of transferring ownership to that buyer may be significant; and
 - the transfer of ownership is a time consuming process.
- Aircraft are expensive to maintain with high variable operating costs. This limits the number of participants that have the requisite expertise to participate in these projects and may put significant pressure on aircraft operators' cash flows.

DOMESTIC AND INTERNATIONAL EFFORTS TO REDUCE THESE CHALLENGES

There are efforts in both the US and internationally to address some of these challenges and complexities and to ensure that lenders remain willing to participate in aircraft finance transactions, and airlines and leasing companies are able to finance their aircraft fleets. These domestic efforts include:

- The Bankruptcy Code (11 U.S.C. § 1110).
- The Transportation Code (49 U.S.C. § 40101 to § 50105).
- The Uniform Commercial Code.

These international efforts include:

- The 1948 Convention on the International Recognition of Rights in Aircraft (19 June 1948, 4 UST 1830, TIAS 2847, 310 UNTS 151) (the Geneva Convention).

- 2001 Convention on International Interests in Mobile Equipment (Nov. 16, 2001, S. Treaty Doc. No. 108-10, 2001 WL 34360428) (the Cape Town Convention and the Protocol on Matters Specific to Aircraft Equipment (S. Treaty Doc. No. 108-10, 2001 WL 34360428) (the Aircraft Protocol, and together with the Cape Town Convention, the Cape Town Treaty).
- The 1933 Convention for the Unification of Certain Rules Relating to the Precautionary Attachment of Aircraft (the Rome Convention).

For a discussion of these efforts, see Practice Note, Aircraft Financing: US and International Laws, Regulations and Registration Requirements ([W-001-6310](#)).

PRINCIPAL AIRCRAFT FINANCING PARTICIPANTS

Aircraft financing structures often involve several parties, including airlines, manufacturers, leasing companies and lenders. The parties involved in any given transaction, however, depend on the financing structure used.

MANUFACTURERS

Airframe, helicopter, and engine manufacturers play a role in different types of aircraft financing transactions. For example, in transactions involving:

- New assets, manufacturers must ensure that the required aircraft are delivered to the right parties and that they meet the agreed requirements and specifications. To do so, they:
 - Typically enter into asset sale and warranty agreements; and
 - May also finance their customers' purchase of their airframes, helicopters, and engines.
- Assets previously placed into service, manufacturers may be required to transfer the warranties granted to the initial purchasers to the subsequent purchasers. The manufacturers may, therefore, still have a role to play at some point during the term of these transactions (for example, correcting defects under the terms of the warranty).

CIVIL AIRCRAFT MANUFACTURERS

Today, the principal manufacturers of large civil aircraft are US-based Boeing and Europe-based Airbus. The manufacture and sale of smaller, regional jets has become increasingly competitive, however, as Bombardier (Canadian) and Embraer (Brazilian) introduce new product lines and continue to compete. Russia-based United Aircraft Corporation/Sukhoi, Japan-based Mitsubishi Aircraft Corporation and China-based COMAC have also entered the market with products of their own.

While the companies discussed above are primarily active in the manufacture of commercial aircraft, there are also many companies (for example, Gulfstream, Beechcraft, Cessna, and Dassault Falcon) that produce a significant number of corporate aircraft each year.

ENGINE MANUFACTURERS

Among the largest aircraft engine manufacturers are Pratt & Whitney, General Electric, and Rolls Royce, as well as joint ventures in which some of these participate.

HELICOPTER MANUFACTURERS

Bell, Sikorsky, Airbus Helicopters, and Leonardo Helicopters (formerly, Augusta Westland) have the largest share of the helicopter manufacturing market.

AIRLINES

There are hundreds of airlines operating in the world today occupying different parts of the market, from global to regional carriers to charter and cargo airlines, all of which need aircraft. They are involved in all types of aircraft finance transactions in a variety of roles, including as:

- Aircraft owners.
- Lessors.
- Lessees.
- Borrowers.
- Equity and debt issuers.
- Sellers.
- Purchasers.

LEASING COMPANIES OR OPERATING LESSORS

Many companies have as their primary, if not exclusive, focus the owning and leasing of aircraft. These companies purchase new aircraft direct from the manufacturer or used aircraft (either with or without a lease already attached) from an airline or other seller and lease them principally to airlines. The term of the lease depends on the airline lessee's operational needs.

While airlines may choose to own aircraft, the leasing structure is beneficial to them because:

- They must commit less upfront capital to secure access to aircraft.
- It may give them access in the short-term to aircraft which are subject to manufacturer production backlogs.
- It gives them more flexibility in managing their fleets over the medium to long-term.

Some of the principal leasing companies active in today's market include AerCap, BBAM Aircraft Management, GE Capital Aviation Services (GECAS), SMBC Aviation Capital, Avolon, Aviation Capital Group, Air Lease Corporation, BOC Aviation, Dubai Aerospace, Nordic Aviation Capital, and ICBC Leasing.

OWNER TRUSTS AND OWNER TRUSTEES

Owner trusts are established by, and owner trustees act on behalf of, one or more equity investors, also known as owner participants (see Owner Participants) in a variety of aircraft financing structures, including leveraged leases, finance leases, and operating leases. In these structures, the owner trust:

- Borrows the majority of the funds (typically 80% to 85%) needed to finance the acquisition of the aircraft.
- Leases the aircraft to the airline.
- Holds legal title to the aircraft for the benefit of the equity investors.

The owner trust structure is used to ensure that the entity holding title to the aircraft is bankruptcy remote from the equity investors.

Lenders and lessees do not want the bankruptcy or insolvency of the equity investor to jeopardize their interests in the aircraft.

In many transactions, the owner trust is also established in a tax-neutral or tax-friendly jurisdiction to reduce transaction costs. Any taxes that must be paid (including any gross-up on withholding taxes) are typically passed to the airline in the form of higher lease payments. Any reduction in these amounts, therefore, benefits the airline.

The most active trust companies filling this role in recent years in the US have been Bank of Utah, Wilmington Trust Company and TVPX. UMB Bank has also recently entered the aircraft financing market.

OWNER PARTICIPANTS

In owner trust structures, owner participants contribute equity in an amount equal to either all or a portion of an aircraft's acquisition costs, depending on the financing structure being used. In leveraged transactions, the owner participant typically contributes about 15% to 20% of the aircraft's acquisition cost.

The most common owner participants are leasing companies, banks, private equity funds, and hedge funds.

For examples of aircraft financing structures in which an owner participant is involved as the sole financier, see Practice Note, Structuring Aircraft Financing Transactions: Finance or Capital Lease ([W-001-6292](#)) and as a partial investor, see Leveraged Leases and ECA Loans.

REGISTRATION CONSIDERATIONS

Leasing companies and investors frequently hold their aircraft investments in entities organized outside the US. Transactions may be structured this way in order to address regulatory or liability concerns, or for tax or other reasons. As a result, owner trusts are often used to ensure eligibility for registration of an aircraft with the US Federal Aviation Administration (FAA) if either:

- The lessee is a US airline.
- The transaction otherwise requires or contemplates registration of the aircraft with the FAA registry.

The owner trust structure is subject to the scrutiny of the FAA and is reviewed by the FAA before the aircraft is registered.

For a discussion of the FAA and its registration requirements, see Practice Notes, Logistics: Federal Agencies Overview: Federal Aviation Administration (FAA) ([1-529-6883](#)) and Aircraft Financing: US and International Laws, Regulations and Registration Requirements ([W-001-6310](#)).

ADVANTAGES TO THE OWNER PARTICIPANTS

The owner trust structure is attractive to owner participants because:

- They do not have to contribute a significant amount to acquire the aircraft because it is mostly financed.
- They are the beneficial owner of the aircraft and can, therefore, use the tax credits associated with the depreciation of the aircraft.
- They can earn a return on their investment to the extent the payments under the lease with the airline are greater than the owner trust's obligations under its loan documents.
- Once the loans are repaid in full, they own the aircraft.

ADVANTAGES TO THE LENDERS

Lenders are willing to extend financing to owner trusts because:

- The loans are secured by a security interest in the aircraft.
- The lease payments the airline lessee must make are typically sized to allow the owner trust to service the debt, plus provide a cushion to cover unexpected costs and expenses.
- The owner trust structure ringfences the aircraft from the bankruptcy of the owner participants.
- The lender has many remedies in the event of a default, including foreclosing on the aircraft collateral or forcing the owner trust to lease or sell the aircraft to a third party.

ORPHAN SPVS

Orphan SPVs are single purpose companies or trusts that are established to:

- Hold legal title to an aircraft.
- Borrow the funds needed to finance the aircraft purchase.
- Lease the aircraft to an airline.

WHEN ARE ORPHAN SPVS USED?

Orphan SPVs are often used when:

- The **lessee** (for example, an airline), not a separate independent owner participant (for example, a bank or a private equity fund), is providing the 15% to 20% of the aircraft cost. In this case, the lessee on the initial closing date makes a rent prepayment in the amount of this contribution, which the orphan trust uses to purchase the aircraft, together with the proceeds of any debt the orphan trust incurs.
- The lenders or other interested parties want the borrower and owner of the aircraft to be bankruptcy remote from the airline that is leasing and operating the aircraft.

The orphan SPV is typically owned by a separate charitable trust (for example, a Delaware Statutory Trust). The beneficiary of the trust is typically a charity approved by the lenders and the airline lessee.

ORPHAN SPV VS. OWNER TRUST

Orphan SPVs are distinguishable from owner trusts in the following ways:

- The airline lessee makes the required equity contribution.
- Orphan SPVs have no economic interest in the aircraft or the lease.
- The lease is often treated as a loan for tax purposes.
- There is no difference between the lease payments the airline lessee makes to the SPV and loan payments the SPV must make to the lenders. This is to ensure that trust does not generate any income. By contrast, the lease payments in an owner trust transaction are structured to permit the owner participant to earn a return on its investment (see Advantages to the Owner Participants).
- The orphan SPV's formation documents typically prohibit the payment of any distributions to the charitable trust unless and until all obligations owing to the lenders financing the aircraft have been satisfied in full.

- Once the loans are repaid in full, the orphan SPV transfers title to the aircraft to the lessee for a nominal fee.

COMMERCIAL BANKS

Commercial banks provide direct loans to aircraft purchasers either with or without guarantees or insurance from export credit agencies (ECAs), multilateral institutions or other sources (see ECA Loans). Depending on many factors including the creditworthiness of the borrower, the amount of the commercial bank loan typically ranges from 70% to 85% of the acquisition cost of an aircraft. Commercial banks also often participate in aircraft finance transactions as interest rate swap counterparties (see Practice Notes, Derivatives: Commercial Uses: Managing Interest Rate Risk: Interest Rate Swaps ([6-386-9004](#))).

Depending on the structure of the financing, commercial banks may extend loans to enable a leasing company, an orphan SPV, or an equity investor (whether in an SPV or an owner trust) to purchase an aircraft from a manufacturer.

Among the most active commercial banks in this sector are Deutsche Bank, BNP Paribas, Citibank, Credit Agricole, JP Morgan Chase, DVB Bank, PK AirFinance, Natixis, and CIT Bank.

ISLAMIC BANKS

Islamic banks are increasingly involved in Sharia-compliant aircraft finance transactions. Depending on the particular transaction structure, they may finance all or a portion of the acquisition cost of an aircraft. Some of the Islamic banks that have been involved in aircraft finance transactions in recent years include Abu Dhabi Islamic Bank, Arab National Bank, Bank Nizwa, First Gulf Bank, Sharjah Islamic Bank, Commercial Bank International, AmlInvestment Bank, and Bank Islam Malaysia.

For an introduction to Islamic finance, see Practice Note, Islamic Finance (US) Overview.

EXPORT CREDIT AGENCIES

ECAs are governmental or quasi-governmental entities with a mandate to promote exports from their respective home countries by:

- Providing direct loans at competitive interest rates to foreign buyers of domestically manufactured aircraft.
- Guaranteeing loans made by commercial lenders to foreign buyers of domestically manufactured aircraft.
- Guaranteeing bonds held by bondholders of bonds issued directly or indirectly by foreign buyers of domestically manufactured aircraft.
- Providing export credit insurance to protect exporters against the failure of foreign buyers to pay under their agreements (see Practice Note, Export Credit Insurance ([W-002-2659](#))).

Many ECAs (including the most active listed below) voluntarily adhere to the 2011 Aircraft Sector Understanding (ASU) which was developed under the direction of the Organization for Economic Cooperation and Development and originally adopted in 2007 and then amended in 2011. The ASU's goals are to:

- Level the playing field among aircraft manufacturers by standardizing the financing terms from which they may benefit.
- Ensure that these terms are consistent with what commercial banks may offer so as not to drive these banks out of the market.

There are many benefits to ECA financing including better borrowing terms and longer tenors. But the ECA financing structure is not without its critics. Many object to ECA financing and view it as an illegal subsidy or corporate welfare (see US Ex-Im Bank Bank).

For more information on ECAs and the services they provide, see Practice Note, Project Finance: Sources of Available Financing ([8-422-4846](#)).

ACTIVE AIRCRAFT FINANCING ECAS

Among the most active ECAs in the aircraft finance space are:

- The Export-Import Bank of the US (Ex-Im Bank) which supports US aircraft and engine manufacturers, such as Boeing, Gulfstream, Pratt & Whitney, and General Electric.
- Compagnie Française d'Assurance pour le Commerce Extérieur (COFACE, France), Euler Hermes (Germany), and the UK Export Finance acting on behalf of the Export Credits Guarantee Department (United Kingdom) which supports Airbus.
- Export Development Canada (Canada) which supports Bombardier.
- Banco Nacional de Desenvolvimento Econômico e Social (BNDES, Brazil) which supports Embraer.

US EX-IM BANK

In mid-2015, the US Congress permitted the Ex-Im Bank's charter to expire which prevented it from participating in any financing transactions other than those that had been approved before the date of the expiration of its charter (though it was able to continue to manage its existing portfolio). Many members of Congress viewed the Ex-Im Bank's work as corporate welfare and an improper use of taxpayer money (see Legal Update, Export-Import Bank Authorization Lapses ([2-616-9671](#))).

The bank's charter was reauthorized in late 2015 through September 30, 2019 as part of the comprehensive transportation bill (EXIM Bank Reform and Reauthorization Act of 2015 (12 U.S.C. §635 to § 635t)). However, the bank's operations were limited because it is subject to new restrictions that changed the way the bank does business. In addition, the board of directors of the Ex-Im Bank had been operating without a quorum since July 2015, which meant that the bank could not consider medium- and long-term transactions exceeding \$10 million. Quorum was restored in May 2019 when the US Senate confirmed three nominees to Ex-Im Bank's board of directors.

According to its annual report, at the close of the Ex-Im Bank's most recent fiscal year, it had in its pipeline almost \$40 billion of pending transactions.

For more information, see Ex-Im Bank 2018 Annual Report and Legal Updates, Senate Confirms Ex-Im Bank Nominees, Restores Full Financing Authority ([W-020-3719](#)) and Export-Import Bank Reauthorized in Transportation Spending Bill ([W-001-0294](#)).

LIQUIDITY PROVIDERS

Liquidity providers are financial institutions that provide loan facilities to borrowers to give these borrowers the ability to draw down loans on short notice and with few conditions to reduce the likelihood for a default under other obligations. These entities are most commonly used in connection with enhanced equipment trust certificate (EETC) and asset-backed securitization (ABS) transactions to cover interest payable on and, in some cases, other expenses relating to the borrower's debt for a specified period.

For more information on the role of these liquidity providers, see Enhanced Equipment Trust Certificates (EETCs).

INSTITUTIONAL INVESTORS AND INSURANCE COMPANIES

Institutional investors and insurance companies generally participate in aircraft finance transactions by purchasing debt issued in the capital markets, for example in EETC or ABS transactions or in private placements.

SECURITY OR INDENTURE TRUSTEES

Security or indenture trustees act on behalf of lenders in connection with aircraft finance transactions to:

- Collect and distribute payments to the lenders.
- Manage secured accounts.
- Serve as beneficiaries of the lenders' security interests.

The role of a security or indenture trustee is typically played by a bank or trust company.

For more information on indenture trustees, see Practice Notes, Indenture and Indenture Trustee: Governing Laws ([9-386-4929](#)) and Debt Securities: Overview ([4-383-2634](#)).

RESIDUAL VALUE GUARANTORS

Residual value guarantors are either aircraft or engine manufacturers or third parties that provide residual value insurance (RVI) to aircraft or engine purchasers. Under the terms of an RVI policy, these guarantors pay the purchaser the **difference** between the forecast value of the aircraft or engine as of a specified date and the actual value of that asset as of that date. These guarantors enter into these transactions either:

- To support sales of their aircraft or engines.
- In the case of transactions with third parties, in return for a fee.

ORIGINATORS

An originator in a securitization transaction is the party that acquires or owns a collection of revenue-producing assets to be securitized, and establishes the securitization vehicle to which it transfers these assets, generally by way of a "true sale".

In lease securitizations, aircraft or engine leasing companies or manufacturers typically act as originators. By contrast, in loan securitizations, financial institutions generally play this role.

For more information on securitizations, see Practice Notes, Securitization: US Overview ([5-501-7050](#)) and Securitization: US Transaction Parties and Documents ([9-501-7345](#)).

INITIAL PURCHASERS

Initial purchasers are investors that agree to purchase notes or other debt securities directly from an issuer in a private placement transaction. These purchasers then either hold these notes for their own account or resell them to other investors exempt from registration requirements under relevant securities laws.

NATIONAL AVIATION AUTHORITIES

Most, if not all, countries have a national aviation authority (for example, the FAA in the US) that is responsible for:

- Regulating the air transport industry within its borders.
- Developing and administering the rules for registering aircraft.
- Determining the airworthiness of aircraft and the eligibility of aircraft operators.
- Performing a variety of other related functions.

In aircraft finance transactions these entities generally:

- Register aircraft.
- Issue relevant operating and other certificates.
- Accept and approve for recording documents including leases and mortgages.

For more information on the role of aviation authorities in aircraft finance transactions, see Practice Note, Aircraft Financing: US and International Laws, Regulations and Registration Requirements ([W-001-6310](#)).

ABOUT PRACTICAL LAW

Practical Law provides legal know-how that gives lawyers a better starting point. Our expert team of attorney editors creates and maintains thousands of up-to-date, practical resources across all major practice areas. We go beyond primary law and traditional legal research to give you the resources needed to practice more efficiently, improve client service and add more value.

If you are not currently a subscriber, we invite you to take a trial of our online services at legalsolutions.com/practical-law. For more information or to schedule training, call **1-800-733-2889** or e-mail referenceattorneys@tr.com.