

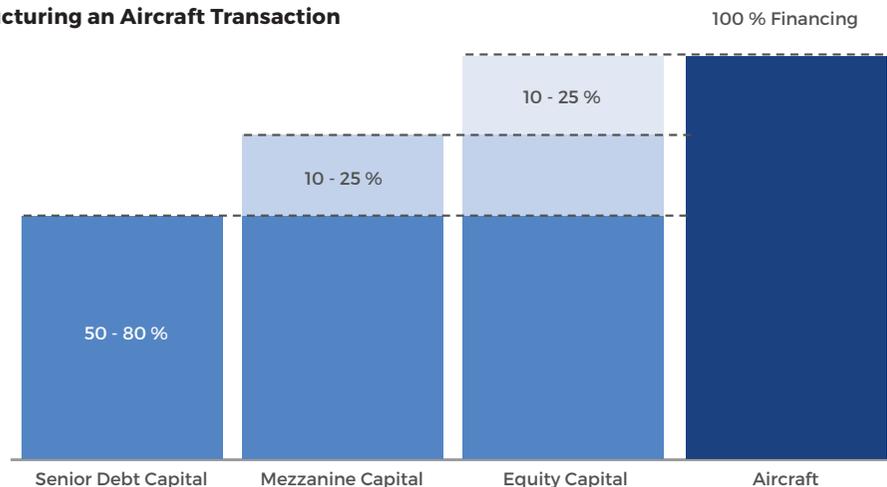
AVIATION FINANCE

structuring a typical transaction for purchasing an aircraft

Investments in aircraft can be structured in many ways with regard to achieving specific risk-return profiles. A typical transaction for financing an aircraft would involve senior debt, mezzanine and equity capital, adding layer over layer un-

til 100% financing is achieved. While there is no hard and fast rule for optimizing the capital structure, the efficient combination of the three main elements would seek to minimize the overall cost of capital and maximize the return for the investors.

Structuring an Aircraft Transaction



Source: EastMerchant Capital

Senior Debt Capital

The level of senior debt within the financing mix usually represents 50% to 80% of the necessary capital and depends on the value of the aircraft, which in turn is inter alia a function of aircraft age, population, model. Usually, as the aircraft ages, the ability to borrow as well as the typical leverage rate decline - for new aircraft a typical leverage rate can be in the range of 80%, for midlife and older aircraft the gearing is potentially lower and may require additional collateralization. Furthermore, the ability to borrow depends on the credit, the financial stability and the reputation of the airline flying the aircraft.

As a result, the cost of senior debt is not only a function of the condition of the aircraft but also of the creditworthiness of the operating airline. Access to low cost financing is a critical element for the success of the business model of an airline lessor. It is also essential for achieving attractive returns for providers of subordinated financing like mezzanine and equity capital.

As mentioned above, senior debt has traditionally been provided by banks and this still applies to a large portion of the aircraft financing market. A commercial bank loan for aircraft is similar to a mortgage on a house for which the bank supplies the necessary funds for acquiring the asset and is paid back by the operator or the lessor over time with added interest. Other than real estate the collateral of an aircraft financing can be remarketed globally subject to the status and documentation of the aircraft and regulatory requirements. Bank loans for commercial aircraft can be highly sophisticated and structured financial instruments. Subject to size and risk assessment, commercial banks also pool their resources in order to spread the risk among a syndicate of different financial institutions.

In case a leasing company is using senior debt to finance an aircraft, the lease rental covers at least the debt service, matching scheduled principal and interest payments, thus mitigating certain lessor related risks for the lenders.

Mezzanine Capital

Mezzanine capital generally refers to the layer of financing between senior debt and equity. Structurally, it is subordinated in priority of payment and security to the senior debt, but greater in ranking to an equity investment. Although it usually makes up a smaller portion of the total investment volume, mezzanine capital is an important source of capital, filling the gap between debt and equity (see chart above).

A mezzanine provider is often a non-bank institution and will be generally seeking absolute return with a risk profile, as mentioned above, between that of senior debt and equity. A mezzanine investor's goal is not to be a shareholder, but rather to achieve a target rate of return over a selected period of time, higher than a standard senior loan return.

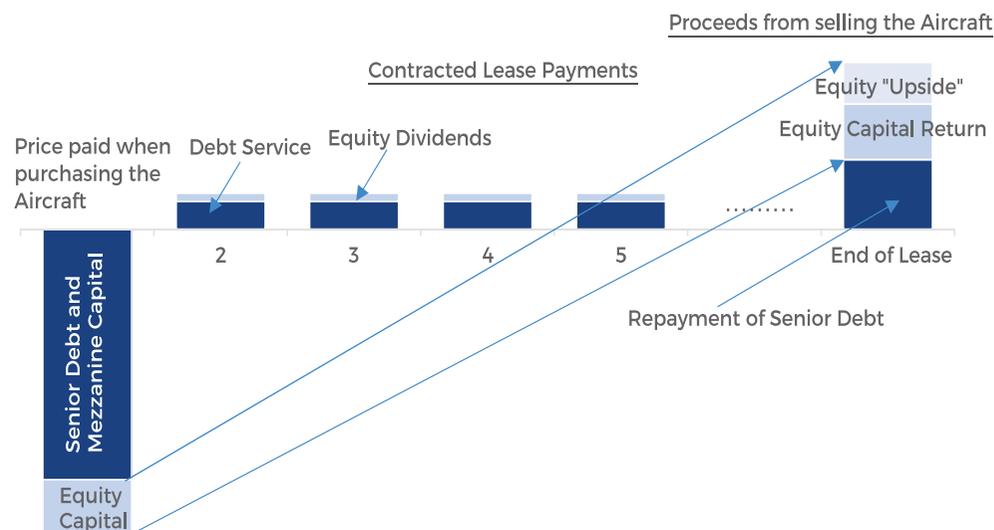
In a broader sense, mezzanine capital may take for example the form of convertible debt, junior debt, subordinated debt, etc. and it is sometimes referred to as quasi-equity. Given the nature of aviation investments, these investments should provide for a low correlation with other asset clas-

ses and some diversification benefits at a broader portfolio level.

Equity Capital

The equity provider is (essentially) the economic owner of the aircraft (aircraft lessor) and is exposed to the residual value risk of the asset (the equity risk). For taking the highest level of risk, the equity holder is appropriately compensated with the highest rate of return compared to senior and mezzanine capital providers. As the debt profile usually amortizes faster than the amortization of the aircraft, the equity investor is provided with additional return potential. As the following chart illustrates, the contracted lease payments serve to repay the debt as well as to distribute dividends to the equity investors. At the end of the lease the debt is usually amortized to zero or a certain balloon but the residual value of the aircraft allows for returning the equity capital and for realizing additional income in case of sale of the aircraft. Another option at the end of the lease term would be to subsequently lease the aircraft to the same or another operator. In this case, the lessor will continue to receive lease rentals and provide dividends to the equity holders.

Cash Flows in a Typical Operating Lease with Sale at the End of the Lease



Source: EastMerchant Capital

The necessity to be supported by a skillful manager with broad arranging skills as well as strong asset management and remarketing capabilities, who is nimble and well

established in this dynamic market, is essential for achieving attractive returns from investing in aircraft and being able to secure the maximum upside potential for equity investors.

- Bond Capital, Mezzanine Finance White Paper, 2nd Edition, Corry Silbernagel, Davis Vaitkunas, NYU Stern School of Business, 2012

- Morten Beyer & Agnew, A Look at Aircraft Finance, Part I, February 2018