Aircraft Financing: Perspectives for Small and Emerging Economies

by

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ABSTRACT

The worst recession that affected the world's economy since the Great Depression has had an even more devastating effect on the aviation industry. Following such a crisis, one of the most significant challenges awaiting airlines worldwide in the coming decade is the financing of their enormous fleet replacement and expansion activities. And this demands a tremendous effort, given that airline earnings are cyclical and, industry returns on capital investments have traditionally been poor.

As international markets develop, especially in the emerging economies, there is a need for a constant search for new sources and methods to finance and acquire new equipment. Aircraft financiers and investors have always been wary to invest in developing countries. Aircraft are highly movable assets that can travel to various jurisdictions and this faculty has always posed a threat on lessors and owners' property interest, the more so, in small and emerging countries in Africa, Asia and Latin America. The challenges are obvious and seem insurmountable.

Aircraft financing legal structures and practices that have worked in developed countries may be structured to apply to the benefit of States of small emerging economies. The point has been made for several years now in numerous international conferences that there is a lacuna in this area. This thesis seeks to address some of the legal aspects of aircraft financing generally and, in these small and emerging economies.

RESUME

La pire des récessions qu'ait connu le monde depuis la grande dépression des années trente a eu un effet encore plus dévastatrice sur l'industrie aéronautique. Après une crise de cette ampleur, le défi de taille auquel doivent faire face les compagnies aériennes de par le monde dans la prochaine décennie est le financement du renouvellement et de l'expansion de leur flotte d'aéronefs. Et ceci demande un effort colossal, vu la nature aléatoire et incertaine des recettes des compagnies aériennes. Aussi, le retour sur les investissements capitaux ont été traditionnellement bien moindres.

En ligne avec le développement continuel des marchés internationaux, particulièrement dans les pays émergents, il y a un besoin pour une recherche constante de nouvelles sources et de nouveaux modes de financement et d'acquisition d'aéronefs. Les investisseurs ont été très réticents à investir dans les pays en développement. Les avions sont des biens mobiliers et ceux-ci peuvent donc aisément passer d'une juridiction à l'autre. Ce caractère particulier a constamment posé une menace aux droits de propriété des bailleurs et propriétaires de l'avion, et c'est encore plus prononcé dans des pays émergents en Afrique, Asie ou Amérique Latine. Les défis sont évidents et apparaissent insurmontables.

Des structures légales de financement d'aéronefs et des pratiques qui ont fait leurs preuves dans les pays développés peuvent être remodelées pour le bénéfice des petits états émergents. C'est un point qui a été constamment débattu dans des conférences internationales et il y a un manquement dans ce domaine. Cette présente thèse est une tentative d'adresser quelques uns des aspects légaux relatif au financement d'aéronefs en général, et dans ces pays émergents.

INTRODUCTION

International Air transport plays an important role in the economic development of any nation but even more in the case of small and emerging economies. It contributes to employment and foreign exchange income by transporting business passengers, tourists, and cargo to and from regions of the world that would otherwise be inaccessible or not easily or quickly accessible. In many islands with tourism-based economies, air travel helps the island to compete at long range with other destinations that are much closer to the sources of tourists.

Similarly, cargo transport by air now allows these small economies to compete in markets, such as fish, flowers, fruits, or other equally valuable perishables. Air transport becomes thus an essential part of the infrastructure required for economic development. A healthy transportation system offering reasonable prices and ubiquitous service to the public is vitally important to the health of the small emerging economy it serves.[1]

Any such economy with a safe and reliable airline service gets an edge over its competitors in the world market. Aircraft becomes an important economic tool and, ideally, a fleet at its disposition puts it in an advantageous position. New demand creates the need for more aircraft which needs to be acquired and financed.

The interesting part of a study on aircraft financing is that it is of an interdisciplinary nature which requires one to understand the overall industry. Law is important, but one has to get an understanding of the different aspects of management including

[1] See generally Paul S. Dempsey & Laurence Gesell, *Airline Management: Strategies for the 21st Century* (Chandler, AZ: Coast Aire, 2006) .

international finance, economics, marketing, strategy, and so on. Some chapters in this thesis are viewed from the perspective of the airline from a small and emerging economy, but a couple others are from the financier's[2] view. Any airline which is an aircraft buyer now will be in the seller's seat someday. The legal aspects of both sides of the bargain are useful.

The first chapter provides an overview of the small and emerging economies. There are many recent events that have left their marks on them; the end of the Cold War, the fall of the Berlin Wall, Gorbatchev's perestroika, liberalisation policies in India and around the world, China's embrace of the market economy are all events that have marked these developing countries. These events together, with globalization, have, in their own way, helped quickened the pace of development, and triggered many new projects in these countries. The growing acceptance, and hence, importance of international institutions like the World Bank, the International Monetary Fund (IMF) and now, the World Trade Organisation (WTO) and other OECD, G20 or the climate change conferences, all have had a significant impact on small economies and made them aware of the new environment around them.

A very important point that needs to be mentioned right from the beginning is that not all small and emerging economies are alike. Some have reached the plateau on their way to development; some others are still struggling to keep their balance on this new path. This is an important caveat which needs to be kept in mind throughout, because the present study speaks about small and emerging economies in

[2] For convenience, the term "financier", when used alone throughout the thesis, is meant to include lenders, investors, and lessors.

a general way, like a common thread running through them and in their development. The study is on aircraft financing generally with a focus on small and emerging economies and not the other way round. So, the aviation industry and airlines are our main concerns here.

There is an ongoing debate among scholars and in public air law circles questioning the role of some countries who keep on with their ailing airline industry. There are economic concerns about this rationale and the necessity to pump more funds into their flag carriers. Do they really need them or can the service be better provided by well managed and equipped air carriers from other countries? Ghana, for example, feels happy to be serviced almost entirely by the legacy carriers. The present study, while raising these issues, is not meant to answer them, and starts from the assumption that the small and emerging economy does need an airline service, not only for strengthening its aviation industry, but also for the development of its overall economy.

So, the first chapter depicts the importance of the aviation industry to their economy. The acquisition of aircraft and its financing requirements are discussed together with other important aspects like the fleet planning process, and aircraft valuation. Once the need for new or replacement aircraft has been identified by small and emerging economies, with its aircraft type, range, and other features, then the logical sequence is where to find the source of the funds and how to finance the acquisition. This is done in chapter 2 which deals with the legal aspects relating to aviation finance, such as the various methods of acquisition of aircraft and the modes of financing that can be used by small and emerging economies.

Equipment leasing has, over the years, become the most important method available to an airline to finance its fleet and a whole chapter is devoted to this subject (chapter 3). Insurance may be high on creditors' agenda but it also forms part of international air treaty requirements (Chicago Convention[3]). This legal issue is also touched upon in chapter 3, together with maintenance reserves, return conditions, and repossession insurance. Another important part of the chapter is on the accounting and tax treatment of leases.

Accounting is not law, but tax is. The item of "depreciation" is highly important in aircraft financing. One of the main objectives while drafting and structuring an aircraft lease has been trying to figure out to whom and how will be allocated the benefits of "depreciation" (capital cost allowance against tax). No doubt, over the years, a number of leasing structures have been drafted to take the benefit from this particular item. Some structures have worked for a number of years, some others for lesser time, depending on the timing that the Revenue Departments try to close, what they consider as, loopholes in the legislation. It is obvious that tax evasion is an offence, but tax avoidance is not. Lawyers continue to be creative in spearheading new structures for the benefit of the financially ailing airline industry. A good number of these structures are no longer possible on the international market, but they may well be used in some small and emerging economies, which would be wise enough to consider them as part of their aviation policy. Thus, "depreciation", along with some other incentives must remain their top priority.

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[3] *Convention on International Civil Aviation* signed at Chicago, 7 December 1944. 15 U.N.T.S. 295, ICAO Doc 7300/7 (7th ed. 1997) [Chicago Convention].

As could have transpired from the previous paragraphs, there are some key legal problems in aircraft financing, among others, the non-recognition of the creditor's title or security interest, different forms of security interests and their ranking, repossession risks, deficiency in bankruptcy law (unlike the safeguards provided for under US chapter 1110), deregistration risks, conflict of laws and so on. The most important ones will be discussed in this study. Thus, chapter 4 deals with an important legal aspect of aviation finance, namely the concept of security, security interests and related issues. The discussion centers on UK and US security laws, because these are the two legal systems that are most prevalent in the industry. It would have been impossible to include, in this short study, all the major trends prevailing in small and emerging economies. But it is hoped that one can find the link or significance of the rules discussed to small and emerging economies within the purview of aircraft financing. The Cape Town Convention[4] is expected to play a pivotal role in the international aircraft financing world and a good part of this chapter is also devoted to this aspect of financial law.

The last chapter views bankruptcy laws in its relation to aviation finance and discusses another important issue, namely aircraft repossession and enforcement. This topic would be of particular interest to investors, financiers, and other creditors especially in the present post-recession era, and there are numerous warnings of the pitfalls that they may get into in the business of aircraft financing in small and emerging economies.

[4] *Convention on International Interests in Mobile Equipment*, 11 November 2001, ICAO Doc 9793 (entered into force 1 March 2004) [Cape Town Convention].

The sequence throughout the thesis could be summarized by the following questions:

1) Who are the small and emerging economies and why is it vital for them to have a safe and reliable airline service? What do they need to realize this project? How far is their legal infrastructure convenient for international aircraft financing?

2) Where can they find the funds? What are the financing methods prevalent on the market and that can work for them?

3) How can they create the necessary legal environment to provide the proper incentives for attracting financiers/investors to finance their fleet requirements?

4) What are the legal provisions that can protect the creditors' interests? Are they sufficient and market responsive?

5) What legal impediments may deter aircraft financiers to invest into small and emerging economies?

CHAPTER ONE

SMALL AND EMERGING ECONOMIES AND THE AIR TRANSPORT INDUSTRY

A study on aircraft financing and its ensuing legal implications for small and emerging economies[5] is not carried out in a vacuum. Aircraft financing cannot remain impervious to the recent developments in civil aviation. New aircraft acquisitions and the methods in which they are financed are largely conditioned by the prevailing state of the air transport industry.

This chapter starts by examining the crucial role of air transport in the economic development of small and emerging economies. It introduces this group of countries, and sets the scene for such economies to develop a safe and reliable airline service which will help them in gaining an edge in the competitive world market.

Aircraft become an important economic tool for the small and emerging economy and, a significant fleet at its disposition creates an advantageous position. Replacement of aircraft, due to ageing and other considerations like fuel efficiency and environmental concerns are discussed, followed by a short analysis of fleet planning and aircraft valuation which finally brings us to the topic of aircraft financing.

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[5] *Emerging Markets Economies may be classified as Algeria, Angola, Argentina, Bahrain, Bangladesh, Bolivia, Botswana, Brazil, Bulgaria, Cameroon, Chile, China, Colombia, Costa Rica, Cote d'Ivoire, Croatia, Czech Republic, Czechoslovakia, Ecuador, Egypt, Estonia, Ethiopia, Ghana, Hong Kong, Hungary, India, Indonesia, Iran, Israel, Jordan, Kazakhstan, Kenya, Korea, Kuwait, Latvia, Lithuania, Madagascar, Malaysia, Mauritania, Mauritius, Mexico, Morocco, Nigeria, Pakistan, Peru, Philippines, Poland, Romania, Russia, Saudi Arabia, Senegal, Serbia, Serbia and Montenegro, Sierra Leone, Singapore, Slovak Republic, South Africa, Sri Lanka, Taiwan, Tanzania, Thailand, Togo, Trinidad and Tobago, Tunisia, Turkey, Uganda, Ukraine, United Arab Emirates, Uruguay, Venezuela, Vietnam*
Source: The Economist Intelligence Unit. (The Economist Intelligence Unit is the business information arm of The Economist Group, publisher of *The Economist*).

I. Small and Emerging Economies

During the past fifteen years or so, the concept of globalization has acquired a great deal of currency, relevance, acceptance, and emotive force. Globalization represents a process of increasing international division of labour, on the one hand and, growing integration of national economies through trade in goods and services, cross-border corporate investment, and capital flows on the other.[6]

As globalization progressed over the preceding three decades, a new group of economies made its presence felt in the global economy. It was christened the emerging economies. Several of them benefited from globalization. These economies tried to establish a framework for long-term economic growth which requires changes that reduce government spending, lower trade barriers, and make their economy and financial market more attractive to global investment. The liberalization, deregulation and reform-related gains in these economies were at the cost of some reform-induced pain. These economies are better integrated in the global economy than the rest of the developing world. They have succeeded in benefiting from the synergy that the onward march of globalization provides.

The term "emerging economies" is of recent vintage but the phenomenon itself is centuries old. All the industrial economies of today were the emerging economies in one period of their economic history or the other. Britain, the US, Japan and Argentina were all emerging economies at one point in time. The US emerged two centuries ago to attain the status of matured industrial economy whereas Australia

[6] Dilip K. Das, *Financial Globalization and the Emerging Market Economies* (London: Routledge, 2004) at 1.

and Japan did so in the twentieth century. For them, the emergence stage of growth has been crossed. So also are nearly most of the members of the Organisation for Economic Cooperation and Development (OECD).[7]

Countries that can be classified as emerging economies are those whose economies are gradually developing and approaching an advanced stage in structural reforms. These countries have been liberalizing their economies for so long that a qualitative transformation is either about to take place or has already set in. This qualitative transformation enables them to integrate the global economy and to take advantage of global factors (particularly capital) and trade flows.[8] The terms emerging market and emerging economy will be used interchangeably in this study. One needs to be careful in using the terms emerging and developing – all emerging economies are developing, but the reverse is not true.

There is little agreement as to which country is an emerging economy so that different international institutions include slightly different sets of countries. A conservative list would include countries like:

(a) Algeria, Egypt, Israel, Morocco, South Africa, Tunisia from the Africa/Middle East bloc;

(b) China, India, Indonesia, Malaysia, Philippines, Hong Kong, Singapore, Taiwan, South Korea, Thailand and Vietnam from the Asia-Pacific;

(c) Bulgaria, Czech Republic, Hungary, Poland, Romania, Russian Federation, Slovakia from Europe;

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[7] See Dilip K. Das, *Financial Globalization and the Emerging Market Economies* (London: Routledge, 2004) .

[8] *Ibid.*

(d) Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Peru, Uruguay, from Latin America.

In a nutshell, the newly industrialized economies (NIEs) and middle-income developing countries where governments and corporations have access to private international capital markets and/or can attract institutional portfolios investment are generally considered as emerging economies. Singapore and Hong Kong are world cities that fit uneasily in this group.

But a less restrictive list would also include countries like: Botswana, Cameroon, Ivory Coast, Ghana, Mauritius, Nigeria, Senegal, Uganda, Tanzania from the African bloc, and, the Gulf countries and Saudi Arabia, Iran and Jordan from the Arab world; Venezuela and Trinidad and Tobago from Latin America; Croatia and Ukraine may be added in the Europe and CIS bloc; and lastly, Pakistan, Bangladesh and Sri Lanka in the Asia Pacific group.

II. Emerging Economies and Air Transport

The air transport industry has long been treated as a special case in international business and subjected to different rules and held to different standards, due mostly to its economic contribution. The most important economic contribution is through its impact on the performance of other industries and as a facilitator of their growth. These "catalytic" or "spin-off" benefits of air transport affect industries across the whole spectrum of economic activity. Indeed, as the airline economist Melvin Brenner puts it, "transportation is a basic part of the economic/social/cultural

infrastructure, which affects the efficiency of all business activities in a community and the quality of life of its residents".[9]

Air transport throughout the world is constantly changing in response to market opportunities and challenges. The rise of new airline business models and rapid growth of air travel in the world's emerging economies are stabilizing worldwide demand for aircraft. Even during times of general slowing, some markets gain through regional economic growth and reduced market regulation. Demand is also stimulated as regulations governing market access are lifted. This phenomenon is well established in many regions and continues to spread into the fast-growing regions of Latin America, Russia, Africa and Asia Pacific. At the same time, airlines use new innovative business strategies to create opportunities and stimulate passenger demand.

Some regions already have large traffic volumes and are growing relatively slowly, although their airline participants are continually evolving, introducing new markets and new passenger service concepts. Other regions are smaller but growing more rapidly with higher airplane growth opportunities but lower airplane replacement opportunities.[10]

Travel volumes in Asia Pacific overall are large and growing rapidly. According to Boeing's forecast, Asia Pacific will account for 41 percent of travel in 20 years' time, up from around 32 percent today.[11]

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[9] Melvin Brenner, "Airline Deregulation: A Case Study in Public Policy Failure" (1988) 16 Transportation Law Journal 189.

[10] See "Long Term Market: Current Matket Outlook 2009 - 2028", *Boeing*; (11 June 2009) online: boeing.com <http://www.boeing.com/commercial/cmo//>.

[11] See *ibid*.

The following sections overview developments in the emerging economies in three of the four blocs, namely, Latin America and the Caribbean, the Asia Pacific and Middle East/Africa.

A. Latin America and the Caribbean

Latin America is showing the world a face with attractive new features: more stability in its macroeconomic environments, and greater pragmatism in policy and institutional reform. Regional success, measured in terms of economic growth, foreign investment inflows or export dynamism, may not yet be as impressive as in parts of Asia, but many significant developments are quietly under way.[12]

Latin America matters. Through a sound combination of fiscal orthodoxy and social progressiveness, many Latin American governments are following a "political economy of the possible", far from short-cut solutions based on rigid models and paradigms.[13]

1. Prosperous Latin American Carriers and Prosperous Operations

Air traffic growth rates for Latin American carriers are among the highest in the world. In South America, economic growth of 3.9 percent per year is predicted to drive air traffic to grow at 7 percent per year for the next 20 years. In Central America, 3.6 percent economic growth will drive 5.6 percent annual growth in air traffic.[14]

Latin America is home to some of the most profitable airlines in the world. Many carriers in the region have worked hard in recent years to improve their product

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[12] OECD, *Latin American Economic Outlook 2008* by Development Centre OECD: (Paris: OECD, 2007)
[13] *Ibid*.
[14] "Long Term Market: Current Matket Outlook 2009 - 2028", *Boeing*; (11 June 2009) online: boeing.com <http://www.boeing.com/commercial/cmo//>.

offerings, their brand and their quality of service. Latin American carriers are also enhancing their fleets with new and efficient aircraft, having placed more than twice as many new aircraft orders in the past four years as in the previous 10 years. Many of these recent orders have been in the twin-aisle category for use in international markets. Since the beginning of 2006, Latin American airlines have ordered approximately 115 twin-aisle aircraft, which is nearly one-quarter of the total aircraft ordered in the region.[15]

2. Potential for Market Expansion

Growing fleets of new aircraft are providing the region's carriers with economies of scale and increased ability to expand route networks. These are important factors that will help Latin American airlines compete with their international counterparts, which provide the majority of service in and out of the region. Only 19 percent of traffic to Europe and 26 percent of traffic to North America is currently carried by Latin American airlines. Although tourism has driven a significant increase in air travel between Europe and Latin America, nearly all of the traffic added since 2005 has been aboard European airlines. Latin American airlines have reduced their capacity on these routes.[16]

Economics and demographics suggest significant potential for air travel growth. Brazil, with its population of nearly 200 million, is the largest country in the region and fifth largest in the world, behind China, India, the United States and Indonesia. The next section overviews the Caribbean region.

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[15] *Ibid*.
[16] *Ibid*.

3. The Open Caribbean Economies

Caribbean economies have historically been among the most open in the world. While this has allowed the Caribbean to garner the benefits of trade integration and globalization, it also poses challenges, particularly given the small size of many of these island countries. Strengthened regional cooperation has enabled Caribbean countries to compete more effectively for productive foreign investment, and adjust more readily to changing patterns in global trade. In recent years the Caribbean has made substantial progress in implementing economic reforms, both at the national and regional level.[17] The benefits of such reforms are being realized, as over the last decade the Caribbean has seen accelerating economic growth, robust increases in foreign direct investment flows, continued low inflation, and sustained reductions in poverty. Nonetheless, the Caribbean continues to be buffeted by adverse external shocks, chiefly declining terms of trade and trade preferences, frequent natural disasters, and the collapse in official development assistance, and economic and financial fragility emanating from major trading partners.

a. The Caribbean and Regional Integration

The Caribbean region consists of a mixture of island chains and states in relatively close geographical proximity situated between the large continental land masses of North and South America. They are generally but not exclusively separated by expanses of sea large enough to make air transport the most practical mode for the vast majority of the region's travel needs. This is certainly the case for the 15 member states making up the Caribbean Community (Caricom), originally an anglophile

[17] International Monetary Fund, *The Caribbean: Enhancing Economic Integration* (Washington: IMF, 2008)

customs union established in 1973 to standardise trade negotiations between each other and with third countries,[18] but later expanded to include the non-English speaking jurisdictions of Haiti (French) and Suriname (Dutch).

The challenges facing the Caribbean are still many but in the short term, efforts to strengthen public finances, upgrade the investment climate, and advance regional integration and policy coordination will be key to durably raising the Caribbean's growth performance. Caribbean integration efforts have been focused on three areas that are currently high on policymakers' agendas: 1) regional financial integration, 2) tax incentives and investment, where harmonized regional action is key to overcoming collective action problems, 3) devising strategies to manage the erosion of trade preferences in key export markets.[19]

Integrating national capital markets is an explicit objective of the Caribbean Community, as part of its drive to create a common economic space. The revised treaty of Chaguaramas, establishing the Caribbean Single Market and Economy (CSME), stipulates the removal of restrictions on the provision of banking, insurance and financial services as well as on the movement of capital across national boundaries.[20] The single-market component of the CSME had a target date of 2008 for its full establishment, while the single economy was expected to be phased in gradually over a longer horizon.

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[18] A.D.Ball et al., *International Business: the Challenge of Global Competition*, 9th ed. (Irwin: McGraw-Hill, 2004) .

[19] *Ibid*.

[20] The treaty was finalized in 2001 and has so far been ratified by 12 out of the 15 members of CARICOM, which consists of 14 countries (Barbados, The Bahamas, Belize, Guyana, Haiti, Jamaica, Suriname, Trinidad and Tobago, and six Eastern Caribbean Currency Union countries) and the U.K. overseas territory of Montserrat. The Bahamas has opted out of some of the provisions of the treaty; in particular, protocol II dealing with rights of establishment, provision of services, and movement of capital.

b. The Caribbean and Tourism Industry

Caricom states are heterogeneous in size and economic structure. Notwithstanding this diversity, the services sector is for the majority, the linchpin for economic growth. The region's tourism industry attracted approximately 6 million visitors in 2005,[21] a modest 2.2% growth over 2004. It is estimated that only 31% of Caribbean visitors chose Caricom destinations. This is primarily because of the increasing popularity of the Hispanic island destinations of Cuba, Puerto Rico and the Dominican Republic that lie outside the Community. Despite differences in performance, all Caricom countries participate in what is essentially a homogenous "Caribbean tourism product" but it also encompasses jurisdictions that have developed, due to their wide-ranging historical, political and cultural ties, strong, and distinctive national identities.[22]

B. Asia Pacific

According to ICAO regional classification, the Asia-Pacific is composed of 34 nations covering 16,000 kilometres. It extends from Afghanistan in the west to Tahiti in the east and, from Mongolia in the north to New Zealand in the south. It accounts for roughly 50 percent of the total world population and was responsible for 27 percent of the world's international passenger traffic in 2007.[23]

But for practical purposes, the Asia-Pacific can be divided into five categories:[24]

(1) China

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[21] *Caribbean Tourism Statistical Report 1999-2004*: Caribbean Tourism Organisation, 2005)

[22] David Warnock-Smith & Peter Morrell, "Air Transport Liberalisation and Traffic Growth in Tourism-dependent Economies: A case History of some US-Caribbean Markets" (2008) 14:2 Journal of Air Transportation 82

[23] International Civil Aviation Organization (ICAO), *Annual Report of the Council 2007* (Montreal: ICAO, 2008) at 7.

[24] Graham B, *Geography and Air Transport* (New York: John Wiley & Sons, 1995) .

(2) The wealthy States of the West-Pacific Rim – Japan, Brunei, South Korea, Singapore, Taiwan and Hong Kong - along with Thailand, Malaysia, Indonesia, The Philippines and Vietnam

(3) The East Asian low-income nations of Laos, Cambodia and Myanmar

(4) Australia, New Zealand, and the Southwest Pacific Islands, and

(5) The South Asian nations of India and Pakistan.

1. The Thriving Air Commerce Region

Asia Pacific covers a broad geographic expanse, which presents unique challenges and opportunities for airlines. The region is served by a variety of airline types, including established network carriers, emerging low-cost airlines, and airlines that specialize in short-haul networks. Some of the largest and most efficient cargo operators in the world also serve the region, capitalizing on the significant trade among Asia Pacific nations and trade with other regions.

Whether privately or governmentally owned, Asian carriers continue to be treated as flag carriers by and large, receiving preferential government treatment in matters of international aviation. International routes tend to be highly competitive both within the region and to Europe and North America.[25]

2. Weathering the Crisis

The spillovers from the global crisis affected Asia with considerable speed and force. GDP in emerging Asia excluding China and India plummeted by no less than 15 percent on a seasonally adjusted annualized basis in the last quarter of 2008, and a further decline was seen for the first quarter of 2009. In many ways, this severe

[25] Dawna L. Rhoades, *Evolution of International Aviation: Phoenix Rising* (Aldershot: Ashgate, 2003) at 59.

impact was unexpected. Asia is far from the epicentre of the crisis, not just geographically but also in the sense that it did not indulge in the financial practices that led to serious problems in the banking systems of advanced economies.

Moreover, before the crisis the region was in sound macroeconomic shape, and thus in a strong position to resist the pressures emanating from advanced economies. In the event, however, the impact on Asia has been even swifter and sharper than in other regions.[26] Both passenger travel and air cargo traffic slowed and many of the region's airlines had suffered. But during the recovery, Asia is also emerging better than some other regions, as is witnessed by its growth in premium air traffic for the first quarter of 2010 (24% over that of 2009). However, figures are still 15% lower than pre-recession levels.[27]

3. Modern, Efficient Fleets

Economic growth is expected to average 4.4 percent per year during the next 20 years, expanding the region's share of world GDP to 33 percent, from 25 percent today. Continued economic growth will drive demand for air transport, creating a requirement for more than 8,900 new airplanes, valued at $1.1 trillion.[28] Delivery of these new, efficient airplanes ensures that the region's fleets will remain among the youngest in the world.

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[26] International Monetary Fund, *Regional Economic Outloook: Asia and Pacific: Global Crisis: The Asian Context* (Washington: IMF, May 2009) .

[27] "Worldwide Air Traffic Recovering", *Centre for Asia Pacific Aviation*; (18 May 2010): online, Centre for Asia Pacific Aviation <http://www.centreforaviation.com/news/2010/05/18/worldwide-premium-air-traffic-recovering-but-still-15-below-pre-recession-levels/page1?utm_source=Aviation+Analyst&utm_campaign=c6b8f50f9a-Aviation_Analyst_20_May_20105_20_2010&utm_medium=email>.

[28] "Long Term Market: Current Matket Outlook 2009 - 2028", *Boeing*; (11 June 2009) online: boeing.com <http://www.boeing.com/commercial/cmo//>.

4. Emerging Tourism from the Giant Emerging Countries.

Airports in the region are expanding to match growing demand for aviation services from its many large population centers. Rising wages and broadening distribution of wealth in rapidly developing countries such as China and India are indications of the potential of a larger percentage of the population travelling by air. This setup, in conjunction with the relaxation of regulatory restrictions and infrastructure improvements, may further stimulate air travel within the region.

In 2000, it was reported that about 95 million Chinese had incomes between $18,000 and $20,000. Chinese tourists made 45.8 million outbound tours in 2008, up 11.9 percent from 2007.[29] The World Trade Organisation estimates that there will be 100 million outbound Chinese travellers by the year 2020.[30]

India is the 5th largest economy in the world with a middle class population well above 250 million. Its per capita income is growing at a rate of 5% per year. Outbound tourism from India is expected to reach 50 million by 2025.[31]

Travel volumes in Asia Pacific overall are large and growing rapidly. Asia Pacific will account for 41 percent of travel in 20 years' time, up from around 32 percent today. In fact, in less than 10 years, Asia Pacific will easily be the largest air travel market in the world. Overall, air travel for the Asia Pacific region is expected to grow

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[29] Jao. "China Tourism hits $170 bn in 2008", *China View*; (29 January 2009), online: China View <http://news.xinhuanet.com/english/2009-01/29/content_10733178.htm>.

[30] Michael Tretheway & Doris Mak, "Emerging Tourism Markets: Ageing and Developing Economies" (2006) 12:1 Journal of Air Transport and Management at 21.

[31] *Ibid*.

at an average annual rate of 6.5 percent over the next 20 years. The Asia-Pacific fleet will follow suit from 3,910 to 11,170.[32]

C. Africa

The African continent is the second largest continent in terms of land mass and population, comprising 54 culturally diverse countries, many with distinct histories and identities. The continent is about three times the size of the United States, roughly the size of Argentina, China, India, Kazakhstan, Mexico, and the United States combined. African countries are politically varied, ranging from dictatorships to emerging democracies. African countries also vary in the types and quantities of natural resources they control and in the size and strength of their economies. For example, the GDP of African countries ranged from about $145 million to $277 billion in 2007, with countries rich in natural resources, such as petroleum and diamonds, generally having larger economies. In comparison, the GDP of the United States was almost $14 trillion in 2007.

Despite Africa's size, diversity, and wealth of resources, many African countries remain economically underdeveloped. Improving airline connectivity between a developing country and the rest of the world has the potential to create economic benefits both locally and globally. In particular, the remoteness and size of some African countries, coupled with underdeveloped--and sometimes unsafe--road networks, makes air transport critical for connecting some African markets to other African markets, the United States, and the rest of the world.

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[32]See "Long Term Market: Current Matket Outlook 2009 - 2028", *Boeing*; (11 June 2009) online: boeing.com <http://www.boeing.com/commercial/cmo//>..

Safe aviation could increase connectivity and potentially create economic and social benefits for a country. For example, aviation can contribute to sustainable development by facilitating tourism and trade. Such development, in turn, generates economic growth, provides jobs, and can improve living standards, alleviate poverty, contribute to social stability, and increase tax revenues. Similarly, when a developing country creates additional airline connections with other countries, it may derive potential economic benefits in the form of increased exports, as well as tourism and business opportunities.

Africa's air transport industry has always been a relatively small player. Intercontinental air traffic in Africa is dominated by a few entry points: 1) Morocco, Algeria and Tunisia, mainly with flights to and from France; 2) Egypt, which acts as a gateway to the Middle East and, it has also a dominant European connection from its Egypt-Germany route. 3) Johannesburg in South Africa, Nairobi in Kenya and Addis Ababa in Ethiopia 4) Dakar in Senegal plays an important role in West Africa with its connection to Europe and also to the fact that flights between South Africa and the US need to make a technical stop in Dakar.

After this overview of the air transport industry and emerging economies, we now have a look at aircraft long term forecast.

III. Airline Industry Forecasts

The air transport industry is more fortunate than most in being very well documented in terms of its activities – whether it be passengers and cargo carried by airlines, passengers and cargo passing through airports or countries, or aircraft orders and deliveries. While airlines may produce their own internal forecasts (rarely published),

and airports sometimes produce long-term forecasts, it is manufacturers who mostly undertake the most far-reaching forecasts. Their motivation is clear. They want to sell aircraft and they want to demonstrate to potential customers the likely rates of growth in different regions to enable airlines to reach the right decision about which aircraft to acquire. Airbus and Boeing produce annually updated industry forecasts – while Airbus calls theirs Global Market Forecast (GMF), Boeing calls theirs Current Market Outlook (CMO).[33]

Manufacturers' Outlook 2009 - 2028

Boeing's long-term forecast purports to reflect the present market realities, acknowledging the extremely dynamic situation faced by the commercial aviation industry. The near-term challenges include a global economic recession, declining passenger and cargo traffic and unpredictable fuel prices. Boeing argue that their 2009 - 2028 CMO is rooted not only in these near-term realities, but also recognizes the nature of a long-term forecast.[34]

Similarly, Airbus' GMF 2009 – 2028, while acknowledging the present cycle in the industry which has given cause to reassess the business in light of the prevailing competitive and operational environment, also realizes that such cycles are short lived, compared to the timescales considered for aircraft investment and fleet turnovers.[35]

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[33] For a detailed view of their forecasts, please refer to their respective reports noted at *infra* notes 34 and 35.

[34] "Long Term Market: Current Matket Outlook 2009 - 2028", *Boeing*; (11 June 2009) online: boeing.com <http://www.boeing.com/commercial/cmo//>. [Boeing CMO 2009-2028].

[35] "Flying Smart, Thinking Big: Global Market Forecast 2009 - 2028", *Airbus*; (September 2009) online: airbus.com <http://www.airbus.com/en/corporate/gmf2009/>. [Airbus GMF 2009-2028].

Thus, both of them depict the temporal nature of things and play on the cyclicality of the industry which has a long history of declines and upturns. They believe that the industry is resilient, demonstrated by the 5% annual traffic growth over the past 30 years, through tough and good times. Boeing predicts world passenger traffic to grow at a rate of 4.9% p.a. in the next 20 years and Airbus follows close at 4.7%.[36] Boeing forecasts a market for 29,000 new commercial passenger and freighter aircraft by 2028, valued at USD3.2 trillion. According to them, the Asia Pacific region is expected to be the largest market in both units and value with 31% (8,960) of the units and 36% of the value (USD1.1 trillion), including 40% of widebody demand. The Asia Pacific region is expected to increase its share of the world air travel market from 32% to 41% over the 20-year period.[37]

The US and European markets will see more replacement airplanes as less efficient jets are retired. Robust growth in China, the Middle East, India and other emerging markets with dynamic populations and growing incomes is expected to lead toward a more balanced airplane demand worldwide.

After an analysis of their reports, a striking feature in their presentation is apparent. Both of them tend to emphasize the forecast in the light of their product range, type and offerings while downplaying the competitor's flagship. Thus Boeing's literature hints on the need of an aircraft like the B787, while Airbus overplays the necessity for a very large aircraft (VLA) like its A380 for busy and congested airports. No doubt, over the years, despite there is not a major difference on their numbers relating to new aircraft demand, (29,000 for Boeing and 24,951 for Airbus, over the next 20

[36] See Boeing CMO 2009-2028 and Airbus GMF 2009-2028, *supra* notes 34 and 35.
[37] See Boeing CMO 2009-2028, *supra* note 34.

years) their figures in the VLA market contrast significantly. While Airbus has a figure of 1,318 to be needed to link 32 hub cities, with more than 50% of these to be used by airlines in the Asia-Pacific region, Boeing's forecast is almost half that of its competitor, that is, 740 (out of its 29,000 new aircraft demand). It may be said that different view of the market are leading them to different strategies.[38]

After this global view on new demand forecast, it is worth turning our attention inwardly to an important aspect of the airline industry, very closely related to its aircraft financing needs, which is fleet planning.

IV. Fleet Planning[39]

An airline is nothing more than a portfolio of assets – some tangible, many intangible – brought together in pursuit of a mission. The three major assets of any carrier are its aircraft fleet, its routes and its human resources.[40] A fleet, then, is simply a portfolio of assets constructed to fulfill a number of payload-range missions.

Fleet planning is an investment decision which depends for its efficacy on assumptions made regarding future revenues and costs. Considerable effort might go into making these assumptions as robust as possible, and sophisticated discounting techniques can be used to evaluate the cash flows. But in the final analysis, airlines are investing hundreds of millions of dollars based on forecasts of demand, and assumptions about input costs, utilization, yields and seating densities, as far into the

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[38] See Boeing CMO 2009-2028 and Airbus GMF 2009-2028, *supra* notes 34 and 35; See especially Paul Stephen Dempsey, *Air Transportation: Foundations for the 21st Century*, 2nd ed. (Chandler: Coast Aire, 2005) at 140-143.

[39] For a comprehensive study on the subject, see Donald H. Bunker, *International Aircraft Financing*, 1st ed. (Montreal: International Air Transport Association, 2005) , Chapter 3; Paul Clark, *Buying the Big Jets: Fleet Planning for Airlines*, 2nd ed. (Aldershot: Ashgate Publishing Ltd, 2007) .

[40] Donald H. Bunker, *International Aircraft Financing*, 1st ed. (Montreal: International Air Transport Association, 2005) vol. 1 at 125 [Bunker, *International Aircraft Financing*].

future as 15 to 20 years.[41] The production time-lag between an airline ordering a new aircraft and the manufacturer delivering it creates a need for accurate forecasts of demand so far into the future that the risk of error is substantial.

This has brought Paul Clark to consider whether fleet planning is a science or an art. He has observed that fleet planning requires luck, because this forecasting of market and economic conditions with sufficient accuracy for the long term is asking a great deal.[42]

The primary objective of fleet planning is to equate production capacity and the output that capacity is able to produce if efficiently utilized with forecast demand, given certain price (and other marketing) assumptions. New equipment might be considered necessary to accommodate demand growth arising from either an expanding market or an improved market share or both.[43]

Alternatively, it might be necessary to replace part of the current fleet because of high operating costs, high noise, limited remaining structural life, inadequate passenger appeal, type rationalization, or an ongoing rollover policy intended to maintain a low average fleet age. Before deciding that additional aircraft are required in order to fulfill marketing objectives, an airline must be confident that no further output can be extracted from the existing fleet by obtaining higher utilization.[44]

A. The Selection Process

In any airline, various people will want to have their say in fleet planning decisions. Sometimes the influences are balanced. On other occasions discussions might be

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[41] William E. O'Connor, *An Introduction to Airline Economics*, 5th ed. (Westport: Praeger, 1995)
[42] Paul Clark, *Buying the Big Jets: Fleet Planning for Airlines*, 2nd ed. (Aldershot: Ashgate Publishing Ltd, 2007) at 229.
[43] O'Connor, *supra* note 41.
[44] *Ibid*.

oriented towards the interests of operations personnel concerned about aircraft performance and maintainability, marketing personnel preoccupied with product design, or finance people focussed on operating costs and the appeal of the different types to financiers. Alternatively, the willingness of respective manufacturers, and possibly their export credit agencies might influence in providing finance or credit support. Political factors sometimes come into play, and government interference in decision-making processes of national carriers is not uncommon.[45]

An airline's management approaching a decision on aircraft purchase will consider many factors. First, the price of the aircraft, which may be a matter for negotiation with the manufacturer, especially if there is a single commitment to purchase a substantial number of planes. Credit costs must be reckoned. There are then break-in costs whenever a new model is introduced into the airline's fleet – notably initial crew training costs.

Final decisions call forth all the skills of modern management. Fleet planning models, with an elaborate mathematical balancing of goals and constraints, are prepared by research personnel of the airlines through sophisticated use of computers, often with assistance from the manufacturers.[46]

The shift on today's airlines from the commercially, rather than technically-orientated business has brought the commercial teams and the financial controllers to the forefront in fleet planning. The former determine the route structures, fare

[45] *Ibid*.
[46] *Ibid*.

policies and brands while the latter seek the investment levels, sources of funds and whether any money can be spent at all.[47]

But in small and emerging economies with national carriers which are state-run, responding to rapidly changing market conditions may not be obvious. Similarly, some argue that countries that have a centralised planning structure akin to China may be hamstrung,[48] but this assumption should not be generalised. It has been witnessed that airlines that have an entrepreneurial spirit and are run by a strong personality may have an edge, even though such airlines are found in centrally planned economies, for example, Vietnam, which, as a matter of fact, has some privatised airlines. Mauritius is an island with a parliamentary democracy in the Westminsterian style in the middle of the Indian Ocean. Its national flag carrier, Air Mauritius, is an example of an airline where the State is the majority stakeholder (51%) but yet is a success story which many African nations want to emulate.

B. Used Aircraft

An airline's evaluation of a used aircraft against a new model will focus, inter alia, on relative capital and operating costs. Despite higher operating costs, older aircraft often have attractive economics relative to new models because of the high capital costs of the latter.

There are a number of reasons why used aircraft have higher operating costs. Aircraft performances decline as the airframe ages because deterioration increases drag. Furthermore, weight will gradually rise with engineering modifications and the accumulation of moisture, the accretion of dirt in places which are not readily

[47] Clark, *supra* note 42 at 3.
[48] See *ibid* at 229.

washed, and the addition of paint layers. The specific fuel consumption of engines tends to increase as they age, and more modern engines are anyway designed for improved consumption over their predecessors. Maintenance costs associated with older aircraft obviously increase over time.[49]

Thus, older aircraft may seem less attractive to operate as fuel and maintenance costs rise. There are also environmental pressures on noise and emissions. Nevertheless, since the mid 80's, trade in the secondary market for aircraft has grown steadily and today the number of transactions on the used market is about three times the number of purchases of new aircraft. A large share of these transactions is due to leasing.[50]

The market for used aircraft has three main institutional characteristics.[51] First, it is a worldwide single market, where aircraft are often transferred from an operator in one country to an operator in another country. Second, the market is dominated by privately negotiated transactions. Most major carriers have staff devoted to the acquisition and disposition of aircraft and sometimes independent brokers are used to match buyers and sellers. Third, sometimes aircraft are purchased by governments and air cargo companies, but the major players are airlines and lessors.

C. Aircraft Values

Generally, aircraft form a relatively liquid and transparent market. A small number of industry-standard appraisers (such as Avitas, BK, AISI, Ascend, MBA and others)

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[49] See Stephen Holloway, *Straight and Level: Practical Airline Economics*, 3rd ed. (Aldershot: Ashgate, 2008) .

[50] Alessandro Gavazza. "Leasing and Secondary Markets: Theory and Evidence from Commercial Aircraft" (February 2009), online: http://pages.stern.nyu.edu/~agavazza/.

[51] T Pulvino, "Do Assets Fire Sales Exist? An Empirical Investigation of Commercial Aircraft Transactions" (1998) 53:2 Journal of Finance 939

give transparency to asset values. Avitas publishes an annual "blue book" of aircraft values, creating a common pricing point for the market for reference.[52]

Independently of the market, aircraft are a depreciating asset, and individual prices fall over time. This depreciation has historically averaged around 5% year-over-year (in nominal dollars, otherwise factoring out inflation may show a drop around 7%). But, of course, the market itself is cyclical. In strong markets (1990-91, 1997-98, 2004-07), demand has so outstripped supply that prices for the same models have even risen year-over-year. But, at the other end of the spectrum, after September 11, 2001, aircraft values fell by about 25%.

Avitas uses a blend of approaches to derive their future value opinions which include Future Base Values and Future Market Values.[53] The primary difference between Base and Market is that Base Value is the underlying economic value of an aircraft, assuming balanced supply and demand, while Market Value is the actual trading price of the aircraft under market conditions that exist at that time. Value definitions conform to those of the International Society of Transport Aircraft Trading ("ISTAT") adopted in January 1994.[54] Avitas uses two primary methodologies to

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[52] Elizabeth D. Mann, "Aviation Finance: An Overview" (2009) 15:1 Journal of Structured Finance 109 at 110.

[53] Douglas B. Kelly, "Forecasting Aircraft Values: an Appraiser's Perspective" (2008) Airfinance Annual 24

[54] **Base Value** is the appraiser's opinion of the underlying economic value of an aircraft in an open, unrestricted, table market environment with a reasonable balance of supply and demand and assumes full consideration of its "highest and best use". An aircraft's Base Value is founded in the historical trend of values and in the projection of value trends and presumes an arm's-length, single-unit, cash transaction between willing and knowledgeable parties, acting prudently, with an absence of duress and with a reasonable period of time for marketing. Base Value typically assumes that an aircraft's physical condition is average for an aircraft of its type and age, and its maintenance time status is at mid-life, mid-time (or benefiting from an above-average maintenance status if it is new or nearly new). **Market Value** (or **Current Market Value** if the value pertains to the time of the analysis) is the appraiser's opinion of the most likely trading price that may be generated for an aircraft under the market conditions that are perceived to exist at the time in question. Market Value assumes that the

forecast aircraft values. These complementary methodologies are referred to as the "traditional approach" and the "econometric modelling approach".

1. The Traditional Approach

All other things being equal, aircraft values depreciate over time due to ageing structures that require an increasing amount of maintenance. Also, an aircraft will suffer from increased weight and drag due to dirt and repairs over its life. These things along with a growing obsolescence due to the introduction of new technologies and improvements in fuel consumption and other operating costs will contribute to the depreciation process and limit an aircraft's economic useful life. Although an aircraft's structural life is indefinite (as long as it is maintained properly), its economic life ends when it can no longer generate a positive discounted cash flow (in other words, it is cheaper to replace or scrap the aircraft than to continue maintaining it). Avitas keeps an aircraft historical transaction data as support of this concept of depreciating value.[55] Based on thousands of actual market transactions, the model sets forth a series of value curves which describe the value behaviours of aircraft under different circumstances.

2. The Econometric Approach

While the traditional approach is helpful in forecasting Future Base Values, it lacks the capability to forecast Future Market Values. The "Econometric Approach"

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aircraft is valued for its highest, best use, that the parties to the hypothetical transaction are willing, able, prudent and knowledgeable, and under no unusual pressure for a prompt sale, and that the transaction would be negotiated in an open and unrestricted market on an arm's-length basis, for a single unit, for cash or equivalent consideration, and given an adequate amount of time for effective exposure to prospective buyers. Market Value assumes that an aircraft's physical condition is average for an aircraft of its type and age, and its maintenance time status is at midlife, mid-time (or benefiting from an above-average maintenance status if it is new or nearly new). Market Value is synonymous with Fair Market Value in that both reflect the state of supply and demand in the market that exists at the time.

[55] *Supra*, note 53 at 26.

allows for the introduction of additional independent variables into the model and incorporates the effect of the cycle on Avitas' future value opinions. This approach was especially useful in extreme market conditions, for example, after 9/11 when values changed significantly and customers wanted to know the answers to the following questions:

(a) how far have values fallen?; and (b) when will the values recover?

Since there were no secondary market transactions for months after 9/11 (other than for part-out or deals that originated before 9/11), the traditional approaches used by appraisers were not very helpful.[56]

The econometric approach can provide an alternative method of obtaining residual values. It is a multi-regression model that allows the incorporation of the effect of the cycle on values. Econometric modelling is well suited for scenario analysis such as the unprecedented economic downturn situation and volatility analysis. It also has other advantages such as objectivity, transparency and reproducibility.

While these are alternative approaches, they are also complementary. Both approaches can be useful to the appraiser in forecasting values but require sound judgment, analytical rigour and a solid understanding of the airline industry.

3. Aircraft Values during Recovery – Opportunities for Small and Emerging Economies

The economic climate and softening market has taken its toll on aircraft values and market lease rentals. The values of the newer aircraft may not be experiencing a fall of the magnitude experienced by some types during this and other downturns, but it

[56] *Ibid.*

has been argued that the trend is clearly negative and may remain so for at least until mid-2010.[57]

The values of older aircraft were the first to suffer but as traffic has dropped and operations have been contracted, values of even the most popular narrowbodies were facing fresh challenges. With the peak in values having generally occurred in the third quarter of 2007, the values of the more modern aircraft initially held firm before starting to experience a more obvious fall as from the start of the third quarter of 2008.[58]

Engine Values

In recent downturns engines have generally outperformed aircraft as assets, with values falling by only half as much. Although this downturn is quite different in nature to the post-September 11 slump, when values dropped relatively steeply, the effect on the market looks likely to be similar. Lease rates are falling on some older engine types, but the core narrow-body models are holding up strongly. This may change if newer aircraft are parked and airlines continue to reduce capacity.

Stephen O'Donnell, senior vice-president, Maples Finance Dublin declared that there is tremendous value to be had in respect of certain airframes and engines. He believes that for some airlines, particularly those in the developing nations, there is an opportunity to replenish and gear up their fleets at a cost which is substantially lower than it would have been to do so two or three years ago.[59] Thus cyclicality and volatility are important considerations in a discussion on aircraft values.

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[57] "Aircraft Values Experience Appreciable Fall" *Aircraft Value News* (May 11, 2009),
[58] *Ibid*.
[59] *Ibid*.

Africa and Latin America, just like the rest of the developing world, are markets of enormous potential for used aircraft. If all the stakeholders in the market accept their responsibilities and work together, that potential may become reality:

a) Aircraft manufacturers need to realise that they will gain more sales if African and Latin American carriers become profitable while they grow. It is in their interest to help airlines expand through purchase of used aircraft and providing full service support to sales of their used equipment. Every sale of a used aircraft from the industrialised world to a developing country creates a replacement need at the selling airline, which the aircraft manufacturers benefit in turn.

b) Financiers may try to develop their own business opportunities in line with the manufacturers' salesmen. They can sell their skills and services to the airlines, and provide them with comprehensive support, which in the course of time may help them in achieving optimum performance as borrowers.

c) Government officials and politicians in the developing world must avoid imposing political decisions on airline executives. The latter need the proper environment to make good commercial judgements which will guarantee operational and financial success. The more undue interference from government, the greater the financier's misgivings about political risk.[60]

d) International airlines who dispose of used equipment to the developing countries must back their sales with good support of maintenance training, spare parts and other services, all at realistic prices. Poor support of used

[60] See Richard Bouma, "Financing National Airlines in Developing Countries" in Andrew Littlejohns & Stephen McGairl, ed., *Aircraft Financing* (London: Euromoney Publications, 1998) at 214.

> equipment makes a powerful argument for buying new aircraft only. If airlines stop buying used aircraft, disposal value will fall dramatically.[61]

A final note on fleet planning - much of it is devoted to structuring and compiling out a fleet plan and building up a dossier based upon quantifying performance and economics. Building a successful fleet plan requires a blend of engineering and commercial know-how, the ability to predict the future, a good deal of intuition, plus a lot of luck.[62] Paul Clark argues that fleet planning decisions are being based more and more on intangibles such as trust and relationships with people. Developing the right chemistry between the parties is of equal importance.[63]

Chapter 1 introduced small and emerging economies and some aspects of their air transport industry, in the process, hinting its importance for their economic survival. Then the fleet planning requirements of an airline have been discussed. The logical sequence to all this would be for these economies to find the means and the methods to acquire aircraft. In the next chapter, legal aspects of aviation finance are discussed, namely various methods of aircraft acquisition and the modes of financing that can be used by small and emerging economies

[61] *Ibid*, at 220.
[62] Clark, *supra* note 42 at 1.
[63] *Ibid* at 231.

CHAPTER TWO

AIRCRAFT ACQUISITION METHODS AND SOURCES OF FINANCE FOR SMALL AND EMERGING ECONOMIES

The forecasted figures for new aircraft demand in the first chapter gives one an indication of the massive fleet augmentation plans of airlines in the small and emerging economies. The intriguing question that then comes to mind is how they are going to finance their fleet acquisition and expansion programs. There used to be traditional methods of financing but lately non-traditional methods have come to the forefront due to funding gaps in the industry. In this financing environment, relying on conventional aviation markets may not prove to be sufficient. Emerging economy airlines need to follow these new developments in order to access new sources of capital.

I. Methods of Acquisition of Aircraft

A. Aircraft Purchase

An airline can acquire an aircraft by outright purchase or lease. This will largely depend on the airline's requirements, cost of the aircraft and availability of capital, legal constraints and taxation issues. The ordinary sale of goods law generally governs the purchase and sale of aircraft and engines.[64] Article 2(e) of the Vienna Convention on Contracts for the International Sale of Goods, 1980, stipulates that the Convention does not apply to the sale of aircraft, but it is arguable whether it applies to engines and individual components. Parties to an agreement may however

[64] Examples are the UK Sale of Goods Act 1979, Art 2 of the Uniform Commercial Code (UCC) in New York and Articles 1582 to 1701 of The Civil Code in France.

exclude the application of the Convention (provided under Article 6) by written agreement.

For new aircraft, over the years, manufacturer's purchase agreements have evolved into three basic sections: a) commercial terms and conditions; b) general terms and conditions; and, c) other incidental agreements, like side letters, amendments, appendices and other exhibits attached to the main document.[65] Used aircraft agreements tend to be less standardised and are more negotiable.[66]

As mentioned above in chapter 1, there is a huge potential for used aircraft in the developing world. African leaders take great pride in their airlines, recognise their importance to the economy, and value their aircraft as national assets. One of the important issues facing airline executives and their bankers in developing countries, including Africa, is the need for foreign exchange. If airline management uses foreign exchange considerations as a guide, they will rarely justify the purchase of a new aircraft. Financing may be available but the lack of credit of the airline is at the root of the problem. Also, there needs to be a change in the mindset of the African airline management. A positive attitude towards creditors may go a long way in reaping the expected rewards for the continent. Another drawback is that African airlines can rarely sell enough premium tickets compared to, for example, the neighbouring Gulf country carriers, which then limit their overall borrowing capacity.[67]

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[65] See Bunker, *International Aircraft Financing*, *supra* note 40 at 369.
[66] *Ibid* at 378.
[67] See Richard Bouma, "Financing National Airlines in Developing Countries" in Andrew Littlejohns & Stephen McGairl, ed., *Aircraft Financing* (London: Euromoney Publications, 1998) at 214.

The choice thus comes down to a used aircraft for economical reasons, or for a new one for political reasons. Because a new aircraft symbolises not only the nation's prestige, but also the skill of its leaders, it is easy for politicians to value these symbols far above mere business prudence. At present, new aircraft with greater capacity are not a guarantee of higher ticket sales to foreigners, who tend to choose European and American airlines.[68]

B. Countertrade

Another important means available to developing countries to acquire aircraft is through countertrade but, in future, it has to be seen within the purview of the principles and spirit of the World Trade Organisation. Countertrade can take several forms but the basic ones are barter and counter-purchase. Other forms are buy-back agreements and offset. The countertrade method has always played an important role in international business transactions, especially in the aviation industry, because some countries lack the cash flow or credit to guarantee such transactions. This economic policy is also relied upon to promote the development of national or local industries which, in some cases, are monopolies or in others are the main economic resource generators for local economies.[69] In fact, some countries have passed laws that require certain imports to be offset by countertrade obligations.[70] There are numerous reasons in the developing world that can justify such transactions for

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[68] See *ibid*; see also Michael E. Irrgang & John-Paul Clarke, "Strategic Regionalization of Air Carriers in the Third World " in Gail F. Butler & Martin R. Keller, ed., *Handbook of Airline Strategy* (New York: Aviation Week, 2001) at 297-298.

[69] See Ralph Haughwout Folsom et al, *International Business Transactions in a Nutshell*, 8th ed. (St Paul: West, 2009) .

[70] See Donald H. Bunker, *The Law of Aerospace Finance in Canada* (Montreal: Institute and Centre of Air and Space Law, McGill, 1988) at 68.

example, increased external debt burdens, reduced market power, exchange regulations and non convertibility of currencies, political instability and a need for new technology.[71]

The United Nations Commission on International Trade Law (UNCITRAL) has published a Legal Guide on International Countertrade Transactions covering those transactions where a party supplies goods, services, technology or other economic value to a second party and, in return, the first party purchases from the second party an agreed amount of goods, services, technology or other economic value. A distinctive characteristic of such transactions is the existence of a link between the supply contracts where the conclusion of the supply contract in one direction is conditioned upon the conclusion of the supply contract in the other direction.[72] In case there is a difference in value in the supply of goods in the two directions, the settlement of the difference may be in money or in other economic value.[73]

The emerging economies of Africa and Latin America abound in highly-coveted reserves of raw material that are presently being exploited by the developed world, China being the latest newcomer to this league. It would have been profitable for them if they could countertrade their valuable raw materials for developing their overall economic infrastructure, including their aviation industry. China is evermore present on the African continent, busy stocking up raw materials for its hungry local plants and industries. It has been negotiating numerous agreements with the African

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[71] *Ibid*.
[72] UNCITRAL, *Legal Guide on International Countertrade Transactions* (New York: United Nations, 1993) at 5.
[73] *Ibid* at 8.

leaders, autocratic or not, and, it is in the interest of these African nations and, incidentally, to the world in general, if these supplies could be traded for the good of their population, instead of perhaps arms for war. This reasoning is good for other superpowers as well.

C. Aircraft Lease

At a global level, leasing is the most important method of acquiring aircraft, and is increasingly becoming so for emerging economies.[74] In simple terms, leasing is the transfer of possession without ownership. The definition becomes somewhat longer in that a lease at law is essentially a commercial arrangement whereby a lessor conveys to the lessee, for valuable consideration in the form of rentals over a period of time specified in the lease agreement, the right to use the equipment.[75] The lessee is legally obligated to return to the lessor the equipment he leases at the expiration of the term of the lease,[76] in reasonably good order, leaving a margin for the wear and tear of normal usage.[77]

To the operator, a lease offers maximum flexibility for selective use of a product, which, in lay terms, would be equivalent of walking into a baker's shop and being able to buy a slice of pie to allay one's hunger, without having to buy the whole pie. This financial principle is of paramount importance in aircraft leasing since, it can enable an airline from an emerging economy to make use of leased aircraft to meet its seasonal demand for additional capacity, without having to incur the capital outlay

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[74] See Bunker, *International Aircraft Financing*, *supra* note 40 at 178.
[75] *Beecham Foods Ltd v. North Supplies (Edmonton) Ltd* [1959] 1 W.L.R 643.
[76] *Ballet v. Mingay* [1943] 1 K.B 281
[77] *Lang v. Brown* (1898) 34 N.B.R. 492

involved in the outright purchase of an aircraft. The lessor could be a bank or specialist leasing company, or it could be a company set up by high tax-paying investors seeking capital allowances to offset against their income, thereby reducing their tax payments.

One would have expected the aircraft manufacturers - Boeing and Airbus – who have recently established trading/leasing divisions to be the largest lessors but, interestingly, they are not. Leasing giant ILFC, which leases the entire range of Boeing and Airbus commercial aircraft, lays claim to being the largest lessor of new aircraft and the largest lessor of widebody aircraft in the world. It also boasts of owning the world's most valuable fleet - reportedly around 955 passenger jet planes - of leasable aircraft. The other giant, GECAS owns approximately 1250 aircraft and has more than 230 airline customers. These two main companies jointly have more than 50 percent of market share. As a term of comparison, one of the largest carrier in the world, American Airlines, operates around 800 aircraft. Commercial airlines outside the US account for most of ILFC's sales; ILFC has about 145 airlines as customers and it is a subsidiary of the insurance firm American International Group (AIG). The parent company is expecting to sell it due to its ongoing financial woes.[78]

Nowadays, leasing plays a central role in aircraft financing and it is appropriate that a specific chapter has been devoted to it in this study.[79]

[78] See Alessandro Gavazza. "Leasing and Secondary Markets: Theory and Evidence from Commercial Aircraft" (February 2009), online: http://pages.stern.nyu.edu/~agavazza/.
[79] See Chapter 3.

II. Sources of Finance

Airlines, unlike in other industries, have very special requirements due to their capital intensive nature.[80] Historically, capital spending has consumed about 15% of annual airline revenues.[81] Airline finance has generally been available to the majority of airlines despite a worse record of profitability compared to many other industries, and the cyclical nature of their earnings.[82] This may be because of governments' involvement in the emerging economies, either directly through ownership of the national airlines, or through loan guarantees.

Ever since the entrance of large jet aircraft on the aviation scene, the demands for capital have often exceeded the financing capacities that are available in the emerging economies of Africa, Latin America and Caribbean, Eastern Europe and the Asia Pacific. The need for modern aircraft adapted to a changing world of transportation gives an international dimension to investment by the financing and security branches of the aviation industry into aircraft equipment.[83]

The following sections give an overview of the sources of finance in the industry. Airline capital expenditure can be financed internally from cash or retained earnings, or externally from a variety of financial instruments.

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[80] Van DuBose, "Sources of Finance" in Andrew Littlejohns & Stephen McGairl, ed., *Aircraft Financing* (London: Euromoney Publications, 1998) at 11.
[81] Gerard J. Arpey, "The Challenge of Airline Finance" in Darryl Jenkins, ed., *Handbook of Airline Economics* (New York: Aviation Week - McGraw Hill, 1995)
[82] Peter S. Morrell, *Airline Finance*, 3rd ed. (Aldershot: Ashgate, 2007) at 92.
[83] S.A Bayitch, "Aircraft Mortgage - a Study in Comparative Aviation Law of the Western Hemisphere " (1958) U. Miami L. Rev. 152 at 153.

A. Internal Sources

Internally generated funds come from the cash retained in the business, or net profits (after deductions of interest, tax, and dividends), but before depreciation provisions. Depreciation is a very important factor in aircraft financing and for many airlines, depreciation is the largest single internal source. This item is dealt with in the next chapter in the accounting and tax treatment of leases. As for retained earnings, the amount available for investment depends on the airline's dividend policy and the government's taxation policy.[84]

Deferred taxes and profits from asset sales are also internal sources of finance. Singapore Airlines generated substantial cash in the past through aircraft sales.[85] Most airlines would prefer to be self-financing but are unable to generate sufficient reserves from their depreciation charges and retained earnings.[86] Taxation for the world's scheduled airlines can be around 35% of pre-tax profits. It is not strange that few airlines pay dividends.

Sale and Leaseback

In the aviation industry, a sale and leaseback transaction involves the selling of aircraft equipment to a purchaser who immediately leases it back to the airline. In such a lease agreement, the purchaser becomes the lessor and the airline vendor acts as lessee. Thus, the airline may realise the capital value of the aircraft but, at the same time, continue to have the benefit to use it without any disruption to its operations.

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[84] Morrell, *supra* note 82 at 92.
[85] *Ibid*.
[86] Bunker, *International Aircraft Financing*, *supra* note 40 at 158.

Sale and leaseback is a type of transaction that may be used when other traditional sources of financing are considered unavailable or too expensive.[87] There are many reasons why an airline would have recourse to this transaction. It may use it either as a tax planning tool, to alleviate a poor cash flow, to meet capital requirements for new aircrafts or investments, or else, it may want to realise the current value of an aircraft to be replaced in a few years' time, when, in its opinion, the market price would have declined significantly.[88] In 1990, British Airways sold 20 B737-200s at a very advantageous price and leased them back. Varig and Canadian International did similar transactions with 10 and 11 such aircraft types respectively.

Sale and leaseback is an interesting opportunity for an airline to realize a large recovery while setting it off against prior capital losses, and thus shore up its balance sheet. But this is subject to the accounting treatment of the relevant jurisdiction, as some of them may allow only a pro rata recovery to the term of the new lease, where the capital generated has to be amortized over the life of the lease.[89]

Many airlines in the emerging economies are state-owned and, incidentally, many of them may own their aircraft fleets. They can thus have recourse to a sale and leaseback but, depending on the aircraft type they have, they will have to wait for the values of used aircraft to pick up once again (given the poor market values at the time of writing). In reality, for many airlines internal sources of funds are of very limited nature, if not inexistent. External sources are the most common methods of funding aircraft purchase.

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[87] *Ibid.*
[88] See Morrell, *supra* note 82 at 204.
[89] See Bunker, *International Aircraft Financing*, *supra* note 40 at 245.

B. External Sources

Airlines sometimes require short-term bridging finance prior to arranging long-term financing for the aircraft.[90] For short term purposes, airlines may have recourse to bank overdrafts or short term loans. This may be very helpful in case of a pre-contract deposit contained in a letter of intent or pre-delivery-payments. Additionally, sums from trade creditors may come in handy. Goods and services purchased do not have to be paid for in cash upon delivery. This short term finance from trade creditors will be available, either as free credit or there will be an implicit cost in terms of cash discount foregone. This sum must be offset against trade debtors, where the airline may be providing short-term finance to others.

But aircraft financing is much more a long term, forward looking perspective. Sources have generally been from debt financing, equity financing, securities market, lease financing, export credit agencies through guarantees and insurance, government financing organisations and other development banks. Initially, one needs to bear in mind that, while considering sources of finance and financing methods, an airline's objective is to minimise the cost of long term total cost of capital, in order to maximise the value of the business. There is thus an underlying need to come to an optimal blend of debt and equity.

But there is no panacea in finding the "right mix" of debt and equity. This is partly because the makeup of airlines' ownership differs throughout the world. Financing behaviour of state-owned airlines would be different from those abiding by the free

[90] Stephan Sayre & Stephen Gee, "Commercial Bank Lending" in Andrew Littlejohns & Stephen McGairl, ed., *Aircraft Financing* (London: Euromoney Publications, 1998) at 37.

market rules. The right mix is further confused by airlines' extensive use of off-balance sheet financing. Each airline has therefore its own comfort zone of financial gearing.[91]

1. Debt Financing

Debt may be considered as a lower-cost source of finance than equity but only during times when the rate of interest is lower than the return on equity. Debt also enables the airline's existing owners to expand the business at a fixed cost without forfeiting any value to the new providers of capital. But debt is inherently riskier to the airline than equity as it imposes on it an obligation to pay interest costs and to repay the principal.[92]

Normally, the stronger an airline's financial condition, the broader the range of debt markets it can access and the better the terms it can negotiate. In the US, the two major rating agencies, Moody's and Standard and Poor's, provide ratings on both short-term obligations (such as commercial paper) and long-term obligations (such as bond issues). A rating can in some cases broaden an airline's potential lender base.[93]

But lately, these agencies have been criticised for not meeting their defined responsibilities.[94] It is timely that government has sought to intervene and regulate this sector and this has been seen as a good sign by a number of investors. The role of government intervention in the financial sector is appropriate because of its

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[91] Van DuBose, s*upra* note 80 at 12.
[92] *Ibid*.
[93] See *ibid* at 20.
[94] Diane Francis. "Wall Street turned into Las Vegas", *The Gazette*; (23 June 2009), online: montrealgazette.com.

importance in sustaining a healthy capitalist system. Banks, brokers, insurers and others are licensed by the government to benefit society by being astute gatekeepers to success. Thanks to trillions in bank bailouts total collapse has been avoided. Millions of people have lost their jobs worldwide and governments are in hock to the tune of trillions. Innocent victims also include the world's poorest nations, and their citizens, including those small and emerging economies that ran their fiscal and monetary houses in a responsible way.[95]

a. Bonds and Debentures

In common parlance, a bond is an obligation to pay money secured by a fixed charge, usually on land, and often on other fixed assets of the issuer. It often includes a floating charge on all the other assets of the issuer not secured by the fixed charge. A debenture is similar to a bond but is often unsecured, or secured by a negative pledge or covenants. Bonds and debentures are often issued under a trust deed.[96]

They are negotiable, so that the general public can hold, buy or sell them in the same way as shares. Bonds can sometimes be traded on the Eurobond or US bond markets. They are re-paid or redeemed at par on the due date. They can be issued in various classes to finance assets, each of the classes having different rates of interest and claims on the underlying assets.

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[95] *Ibid*; see also *The Impact of the Financial Crisis on Emerging Market Economies* by Jack Boorman (Washington: Emerging Markets Forum, 2009) .
[96] Bunker, *International Aircraft Financing*, *supra* note 40 at 176.

b. Term Loans

Term Loans are generally negotiated from banks or insurance companies, and are cheaper and easier to arrange than bonds. For large amounts, a syndicated loan is arranged where a lead bank organises a number of banks to participate in the loan, with fees distributed according to the bank's share of total funds and depending on whether or not it is the lead bank. This type of financing entails a closer relationship between the lead financial institution and the airline borrower, resulting in a better monitoring of the airline's performance than for bonds or other sources of finance.[97]

c. Non-Recourse Loans

This is a type of security that bars the lender against other assets of the borrower. For example, in the case of a leveraged lease, where a lessor borrows to finance the acquisition of aircraft to be leased, the lender will only have access to the collateral assigned to satisfy the loan. This collateral comprises the lessor's rights under the lease, including the rental stream and any insurance proceeds. Thus, the lessor will only remain liable to the lenders to the extent of its equity in the aircraft. Non-recourse debt is therefore a valuable instrument for a lessor because, in the event of a lessee's default, lenders must look straight to the end-user or lessee to the exclusion of the lessor.[98]

2. Equity Financing

Equity is the ownership interest of shareholders in a corporation. These owners have the right to vote at meetings, the right to a dividend, and the right to a capital

[97] *Ibid* at 167 (Loan Syndication).
[98] *Ibid* at 177-178.

distribution on liquidation. In the emerging economies, unlike the US and many European countries, quite a number of airlines are still state-owned. Other categories of shareholder may include: other airlines; financial institutions; employees; other individuals.

Equity finance consists of various classes of shares which are issued by the airline in return for a consideration or price. They may be subsequently bought or sold, usually through a stock exchange. New equity may be considered necessary when projected future cash requirements cannot be financed entirely in the debt market without exceeding the airline's target level of gearing. The status of the equity markets themselves will also be an important determinant of timing.

Equity finance has the advantage of improving the relationship between equity and both output and existing debt, and permits further borrowing. It may, however, dilute the control of existing owners and facilitate a take-over by another company. Thus, share issues are not often used by private companies to buy aircraft. In some countries, it is possible for a company with large cash holding to buy back its own shares from shareholders. This would have the effect of improving its earnings per share, a ratio that is given some weight by some airline analysts, and possibly of strengthening its share price.[99]

An airline seeking to raise equity may do so in either a private or public transaction. Remaining private tightens control and disclosure. But a private transaction limits the number of interested investors and lowers the price they are prepared to pay. It is

[99] Morrell, *supra* note 82 at 94.

common for carriers to place minority equity stakes with other airlines in conjunction with airline alliance partnerships.[100]

There has been a trend towards the internationalisation of the equity markets. An international offering is particularly interesting for airlines of emerging economies as they do not have the benefits of a large domestic stock market. Investor interest in international equities has, in part, been fuelled by the wave of privatisations. Because of their sheer size, privatisations have of necessity been structured to tap the international markets. The privatisations of the major European, Asian and Latin American carriers during the 1980's and 1990's have been structured as international offerings.[101]

3. Privatisation

A good majority of airlines in the emerging economies are still state-owned and their respective governments are currently reviewing the possibility of accessing private markets for their capital-hungry companies. Privatisation has often been the answer, but early investigation by financiers and potential investors of issues like registration of aircraft and ownership and control for the respective countries are essential. Privatisation is the process of converting a publicly-operated entity into a privately-owned-and-operated enterprise.[102] There are several motivations for privatisations and a range of possible offering structures.

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[100] See Van DuBose, *supra* note 80 at 17.
[101] *Ibid* at 17-18.
[102] Bunker, *International Aircraft Financing*, *supra* note 40 at 170.

A government may review the privatisation of its flag-carrier in terms of fiscal, commercial and political objectives. An airline's approach to privatisation may be reviewed in terms of strategic objectives, its impact upon management and employees, as well as funding and commercial benefits. The average government stake in the largest 25 international airlines was 28 percent in 1996, 19 in 2001 and only 16 percent in 2005. British Airways is one of the early examples of a total privatisation.[103]

Methods of privatisation are one or a combination of the following:

Flotation (public subscription, e.g. British Airways).
Private placement (a number of different private investors).
Trade sale (one large investor which also operates in the industry).
Employee or management buy-out.

Privatisation has usually resulted in more liquid markets for share trading, but a better working of the market could only be possible once majority share ownership by foreign nationals is allowed, and restrictive clauses in Air Services Agreements are removed. Legal issues like registration of aircraft and ownership and control become thus very critical. The next section analyses these issues.

Substantial Ownership & Effective Control Restrictions and Impact on Financing

Article 17 of the Chicago Convention[104] attributes to every aircraft a particular nationality, namely the nationality of its place of registry. It does not directly address

[103] Morrell, *supra* note 82 at 129.
[104] *Convention on International Civil Aviation* signed at Chicago, 7 December 1944. 15 U.N.T.S. 295, ICAO Doc 7300/7 (7th ed. 1997) [Chicago Convention].

the question of who may own aircraft but rather makes it clear that the Convention considers commercial air services closely tied to a particular "home country", with airlines being regarded as "flag carriers" of such countries and aircraft having the "nationality of the State in which they are registered."[105] But *airline nationality* is nowhere addressed in the Chicago Convention.[106]

In most bilateral agreements, the general concept is that only carriers designated by the respective contracting parties may exercise the traffic rights granted and such airlines must have a clear national identity. This has led to States being able to reserve their share of the market through their own designated national carriers, precluding third parties from benefiting from the exchange of traffic rights.[107] For example, the US promulgated a nationality requirement in its airline certification requirements, and reserved cabotage to US airlines, in its Air Commerce Act of 1926. In 1938, it increased its domestic control requirement to 75% in the Civil Aeronautics Act.

Furthermore, Section 5 of the Transit agreement[108] and section 6 of the Transport Agreement[109] provide that:

> Each contracting State reserves the right to withhold or revoke a certificate or permit to an air transport enterprise of another State in any case where it is not satisfied that substantial ownership and effective control are vested in nationals of a contracting State.

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[105] Bunker, *International Aircraft Financing*, *supra* note 40 at 366- 67.
[106] See Paul Stephen Dempsey, *Public International Air Law* (Montreal: McGill University, Institute and Centre for Research in Air and Space Law, 2008) at 592-607.
[107] Bunker, *International Aircraft Financing*, *supra* note 40 at 367.
[108] *International Air Services Transit Agreement*, signed at Chicago on 7 December 1944.
[109] *International Air services Transport Agreement*, signed at Chicago on 7 December 1944.

Like their predecessors, modern 'Open Skies' bilaterals require that *substantial ownership and effective control* be vested in the nationals of the State designating the airline, and that failure to meet this requirement would entitle either nation to revoke, suspend or limit the operations of the offending airline.[110] Some countries are quite flexible in the citizenship of their airlines, permitting a percentage of ownership as low as 51% (for example Air Mauritius), and are not particularly vigorous about who controls its airlines.[111] Some others use this citizenship requirement as a lever to bargain for other rights in return, for example, to gain a slot at Heathrow airport from the UK government, as a bargain for some measure of relaxation for UK carriers in their domestic market. It has been argued that the particular aggressive stance of the US in the ownership and control issue creates challenges for the financing of airlines located in the US.

Political resistance in the US to ceding national control of its airlines was made plain by the stance adopted towards Virgin America in 2006. But resistance is not universal: cross-border ownership and control are allowed in Australia and New Zealand and tolerated in certain parts of Latin America, whilst in Britain everything seems in principle to be for sale at the right price. However, it is difficult to envisage a near-term future in which governments in the US, France, Germany, the Middle East or the larger Asia-Pacific countries (excluding Australia and New Zealand), will be willing to cede control of "their" air transport industries to foreigners. Evidence of this could be seen in the fulminations surrounding Singapore Airlines' proposed

[110] Paul Stephen Dempsey, *Public International Air Law* (Montreal: McGill University, Institute and Centre for Research in Air and Space Law, 2008) at 595.
[111] John E. Gillick, "The Impact of Citizenship Considerations on Aviation Financing" in Gail F. Butler & Martin R. Keller, ed., *Handbook of Airline Finance* (New York: Aviation week, 1999) at 42.

minority stake in China Eastern, which appeared to have been agreed in 2007, but was subsequently opposed both by Air China and certain strands of central government opinion in Beijing.[112]

As matters stand now, it is not easy for a foreign air carrier to obtain a majority interest in a national carrier which will continue to maintain its qualification as a designated air carrier of its state. It is not strange that this situation has resulted in most carriers being either state-owned or owned by a majority of their nationals.[113] The recent economic crisis has seen investments from sovereign wealth funds which has triggered protectionist feelings in the West. Apprehensions about global geopolitical imbalances are more likely to continue keeping ownership and control issues as tightened as now for some more time.[114]

But, it is suggested that, airlines from the emerging economies can reap better benefits and bring some more prosperity to their overall economy if they are prepared to forego part of the ownership to existing well managed and prosperous legacy carriers. Such a partnership may bring in the desired know-how to their home economy in all the spheres relating to the aviation industry, from finance to operations, marketing, maintenance and spare parts pooling, slot allocation and other commonalities. This may be done in an incremental way. Joining one of the big alliances is also another strategic move for an emerging market airline to help it expand the geographic scope of its network without undertaking sizeable capital

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[112] Stephen Holloway, *Straight and Level: Practical Airline Economics*, 3rd ed. (Aldershot: Ashgate, 2008) at 45.

[113] Bunker, *International Aircraft Financing*, *supra* note 40 at 367.

[114] See "Global Geopolitical Trends 2009 - 2010", *Boeing*; (2009), online: <http://www.boeing.com/commercial/geopolitical_trends.html>.

investment. These small economies can thus be connected to routes and destinations beyond their territories, access new markets and provide optimal customer service with no financial investments.

4. Islamic Funds

A recently developed source of aircraft finance is Islamic banking. It is based on the *Sharia*, which is the law of Islam applicable to Muslims and non-Muslims living in Muslim States. Islamic finance has grown considerably in importance and visibility in recent years. It is increasing at an astonishing rate and is one of the fastest growing financial markets in the world. It has made the front page of the London Financial Times,[115] and an Islamic financial institution has been licensed to conduct business in the United Kingdom.[116] One might say that Islamic finance is coming of age.

Islamic finance has its base in the need felt by devout Muslims to conduct their affairs in accordance with the *sharia*, using transaction types which, inter alia, do not contravene the prohibition of *riba* (interest, or "unacceptable profit"), *gharar* (an unacceptable level of risk), *maysir* (gambling), and forbidden things, such as wine, blood and idols. The basic principle behind such approved transactions is the construction of a transactional structure based on ownership and sale.[117]

Participation in trade, and gaining an honest profit therefrom, is acceptable, even encouraged, so methods based on it are also acceptable. Since only interest-free forms

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[115] Anon. "Islamic Financing Top Scholar Hails Boom" *Financial Times* (2 June 2006), 1

[116] The Islamic Bank of Britain plc. See http://www.islamic-bank.com.

[117] Nicholas H. D. Foster, "Islamic Finance Law as an Emergent Legal System" (2007) 21 Arab Law Quartely 170 .

of finance are considered permissible in Islamic finance, financial relationships between financiers and borrowers are not governed by capital-based investment gains but shared business risk (and returns) in lawful activities (*halal*). Any financial transaction under Islamic law implies *direct participation in asset performance*, which constitutes entrepreneurial investment that assigns to financiers clearly identifiable rights and obligations for which they are entitled to receive commensurate return in the form of state-contingent payments according to an agreed schedule and amount relative to asset performance. The *Sharia* does not object to payment for the use of an asset as long as both lender and borrower share the investment risk together and profits are not guaranteed *ex ante* but accrue only if the investment itself yields income.[118]

But Islamic banking is not simply about interest free financing, a source of confusion in the West, but rather has to be understood "in the context of Islam's teaching on the work ethic, wealth distribution, social and economic justice, and the role of the state".[119] The virtues of Islamic finance encourages risk-sharing, promotes entrepreneurship, discourages speculative behaviour and emphasizes the sanctity of contracts.[120] The positive stance on Islamic finance by IMF and World Bank researchers has undoubtedly helped to break down barriers to the acceptance of Islamic banking in the Muslim world itself.

Indeed, a large percentage of the one billion Muslims of the world's population live by the *Sharia* law, and expect to deposit their money in Islamic banks which will

[118] Andreas A. Jobst, "Derivatives in Islamic Finance" (2007) 15:1 Islamic Economic Studies
[119] Iqbal Zamir, "Islamic Financial Systems", (June 1997) Finance and Development, at 42-45.
[120] *Ibid*.

guarantee their investment in *Sharia* approved investments only. There is thus a large pool of Islamic funds, growing larger and larger, looking for approved places of investment.[121] Islamic banking has been making headway into an increasing number of Western countries. This is indeed a trend that is likely to carry on, as oil-exporting nations continue to accumulate wealth, Gulf Cooperation Council and South East Asian Islamic financial markets develop further, and companies in Western nations keep on competing to attract international investors.[122]

There is a perceived need for the Islamic institutions to match the innovation and marketing structures underpinning conventional financial services. This desire has led to the search for Islamic financial instruments that essentially replicate the characteristics of conventional financial products, while remaining within the purview of acceptability in terms of *Sharia* oversight. Examples are the adaptation of conventional hire-purchase and leasing contracts to *ijara* (Islamic leasing) structures and the development of *sukuk* by modifying and utilizing techniques developed in conventional structured finance arrangements.

a. Islamic Finance Methods and Aircraft Leasing

The fundamental structures utilised in conventional aircraft leasing transactions are compatible with Islamic finance methods, provided these structures comport with the stipulations of the *Sharia*. Three Islamic transaction structures, by virtue of the subject matter they embrace, are compatible with aircraft finance transactions. The first structure is *Bay'mu'ajjal*, or credit sale, most analogous to Western interest

[121] Bunker, *International Aircraft Financing*, *supra* note 40 at 162.
[122] Juan Sole, *Introducing Islamic Banks into Conventional Banking Systems* (Washington: International Monetary Fund, July 2007) .

finance. The second structure is *murabaha*, a form of "mark-up' contract whereby a bank purchases an asset on the buyer's behalf and sells the asset to the buyer at a price with a profit element built into it; the buyer then makes incremental payments. Under a *murabaha* arrangement, a bank's exposure to risk is mitigated because the transaction is preconditioned upon the assurance that a buyer will purchase the underlying assets from the bank, and will often furnish the bank with instructions as to how the initial purchase may be transacted. A third structure is *ijara* , or lease financing. Under an *ijara* structure, a bank undertakes to purchase an asset and then leases it to the client, charging a fee for the rental.[123]

In the context of aircraft finance transactions, the most applicable concepts in the Islamic finance milieu are a combination of *murabaha* and *ijara* methods of finance. More generally known as *ijara wa-iqtina*, the *ijara* lease is coupled with a purchase facility at the end of the lease term that allows the underlying asset to be transferred in a fashion similar to a conventional leveraged lease.[124]

The fundamental investment objectives associated with aircraft leasing are regular transactions regardless of the ideological underpinning of the transaction. Leasing constitutes a productive use of funds as the flow of capital is toward an actual asset, the productivity of which will produce benefits to the overall economy concerned. This basic concept is harmonious with the holistic approach conception of society and economy that dominates the Islamic financial modus operandi.

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[123] Angelo Luigi Rosa, "Harmonizing Risk and Religion: The Utility of *Shari'a*-Compliant Transaction Structuring in Commercial Aircraft Finance" (2004) 13:1 Minn. J. Global Trade 35 at 44-5.
[124] *Ibid* at 45.

b. Dual Islamic and Conventional Systems

There are some Muslim countries that have allowed mixed financial systems to coexist for long periods. In some instances, the results of this coexistence have been remarkably beneficial, such as in Bahrain and Malaysia. In both cases, the presence of a dual system has given these nations a substantial competitive edge to establish themselves as well-diversified international financial hubs, appealing to both Islamic and conventional investors. Furthermore, the cross-fertilization between the two systems has led institutions based in these countries to pioneer several groundbreaking initiatives in different fields of Islamic finance.

There is no doubt that Islamic finance will increasingly play a more prominent role in aircraft financing, given that Islamic funds are estimated to be over $200bn.[125] Many emerging countries in Africa and a couple others in Asia, like Malaysia, the Sultan of Brunei and Indonesia, have legal systems inspired by Islamic traditions. Some other non-Islamic states have now enacted laws that permit some form of Islamic banking, paving the way for Islamic finance to enter their aviation arena, especially during the present funding gap in the industry which contrast with the availability of funds from the Arab world.

C. Non-Traditional Sources of Finance

1. Financing Support from the Manufacturers

Airlines have come to rely heavily upon the suppliers of airframe and engines for financing support. This was not a traditional market but, since the recession, this type

[125] Mark Lessard. *Airline and Business Lecture Notes "Aircraft Acquisition, Finance & Leasing"*: (Institute of Air and Space Law, McGill University, 19 March 2010).

of financing has become capitally important. Manufacturers' involvement in financing is primarily the result of competitive pressures but also due to the industry's cyclicality. Another recent trend has been for large aircraft engine manufacturers to be drawn into the financing competition.

Manufacturer involvement has become more frequent and has taken many forms, ranging from simply agreeing to provide remarketing assistance, to giving credit support in the form of a guarantee of some or all of the airline's financial obligations. Most manufacturer involvement is specific to the particular airline and transaction concerned and consequently, it is impractical to draw any general conclusions, since no two transactions are really alike.[126]

However, manufacturers are increasingly expected to assist in the financing of aircraft, spare engines and spare parts. Indeed, a favourable package may lead or contribute to a decision to acquire that manufacturer's equipment. But manufacturers are not lenders and would prefer to support a sale through the offer of indirect finance by, for example, a provision of guarantees relating to the continued value of the aircraft equipment.[127]

These guarantees are not of the type extended by a bank, which permits the beneficiary to proceed against the guarantor upon the lessee's payment default. The manufacturer is prepared to provide asset value support in the form of either a "Deficiency Guarantee" (potentially triggered by an operator's default) or an "Asset

[126] Colin Thaine, "Role of the Manufacturer in Aircraft Financing: Asset Value Support - I" (1989) 17 Int'l Bus. Law. 212
[127] *Ibid.*

Value Guarantee" (potentially triggered by voluntary termination and return of the leased asset). Such guarantees, when aggregated with the other items in the financier's security package (title retention or mortgage), are intended to provide the financier with adequate insurance of a full payout.[128]

Manufacturer asset value support is never given lightly. The manufacturer's customer finance philosophy is normally characterised by the concern to assist in finding a structure to enable a transaction to take place as opposed to assisting an airline to find the lowest cost of funds.

Manufacturers' Role during Recovery

At the time of writing, gaps have continued to appear in delivery schedules which may allow some operators to accelerate deliveries. As India and China face new pressures, the positive influence on values provided by the extensive backlog has declined. The values of used A320 and B737NG family members have continued to be impacted by the introduction of new engine models which have essentially been viewed as the baseline rather than warranting a premium.

Aircraft manufacturers are expected to play a more important role in financing deliveries in the recession, according to Kostya Zolotusky at Boeing and Nigel Taylor at Airbus. The European manufacturer has not stated the amount it expects or could afford to finance but has declared that it would support its customers as the company has done in the past. Boeing, on the other hand, has suggested that it was expecting to finance about $1 billion-worth of deliveries in 2009. The US manufacturer filed a

[128] *Ibid.*

shelf registration with the Securities and Exchange Commission for $5 billion towards the end of 2008, which would allow the company to raise money in the capital markets on a rolling basis without having to file documents every time.[129]

2. Export Credit Agencies (ECAs)

ECA-supported finance is a conduit through which a number of countries encourage the export of their goods and services, particularly to emerging economies (and the CIS), generally by guarantees or insurance, rather than direct loans. Thus, they are there to provide support or complement bank lending, for example in cases where banks would be reluctant to assume 100 percent of the risk. The following are ECAs in the countries which have some aircraft or aircraft manufacturing capability, and could therefore be involved in aircraft financing: Ex-Im Bank (US) which supports the export of Boeing and US manufactured equipment; Export Credit Guarantee Department (ECGD) of the UK; COFACE of France; Euler HERMES of Germany; NEXI of Japan; Export Development Corporation (EDC) of Canada; ESACE of Italy.[130]

This form of credit has also come to the forefront lately due to the funding gaps in the industry and is fast becoming a normal form of financing.[131] Traditionally, this alternative was contemplated by only the weaker credits but it has since been developed and adapted to serve a wider market. There has been a notable development in structuring its use to support debt-into-finance leases, leveraged

[129] Anon., "Managing the Airfinance Gap" (February 2009) Airfinance Journal
[130] See Bunker, *International Aircraft Financing*, *supra* note 40 at 321-28.
[131] See Elizabeth D. Mann, "Aviation Finance: An Overview" (2009) 15:1 Journal of Structured Finance 109 at 115.

leases and operating leases.[132] Support by ECAs may be provided as "pure cover" (insurance and guarantees), financing support, (that is, direct credit/financing, refinancing, interest rate support), or as aid financing (credits or grants).[133]

a. Parameters for ECAs – The Consensus and the Sector Understanding

The Berne Union[134] was the first body to set parameters for the operation of export credits. The status of primary regulator now rests with the Trade Committee of the OECD. Member states of the OECD participate in the 'Arrangement on Guidelines for Officially Supported Export Credits' (the Consensus). The main purpose of the Consensus is to provide an institutional framework for an orderly export credit market and thus to prevent an export credit race in which exporting countries compete on the basis of who grants the most favourable terms, rather than on the basis of who provides the highest quality of goods and the best service for the lowest price. It is possible for an ECA to deviate or derogate from the terms of the Consensus, provided it notifies the other participants, who then are able to match that deviation or derogation.[135]

In the 'Large aircraft' sector, the conditions for export credit support were originally set down in the Large Aircraft Sector Understanding (LASU). The conditions had been updated by a new OECD 'Sector Understanding on Export Credits for Civil Aircraft' (the Sector Understanding), but the term LASU survived. The Sector

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[132] See Stephan Sayre & Stephen Gee, *supra* note 90 at 32.

[133] Bunker, *International Aircraft Financing*, *supra* note 40 at 322-23. Competition between States has led to multilateral attempts to limit the level of such official assistance. For a detailed view, see Bunker, *ibid* at 328-43.

[134] The Berne Union was established in 1934 in reaction to accusations of unfair and anti-competitive conduct among countries scrambling to win exports for their domestic industries.

[135] Robert Murphy, "Export Credit Agency Support" in Andrew Littlejohns & Stephen McGairl, ed., *Aircraft Financing* (London: Euromoney Publications, 1998) at 47-48.

Understanding complements and is part of the Consensus. It sets out the particular guidelines to export credit supports for the sale and lease of new and used civil aircraft, as well as aero engines, spares, spare engines and maintenance and service contracts.

Thus, as an example, in the case of the European ECA support, it takes the basic form of fixed or floating rate (pure cover) finance, guaranteed for financing periods covering 10 or 12 years. The terms and conditions of fixed rate support are determined by LASU. The fixed rate finance provision provides for a no-cost interest rate option. An airline may, for example, receive an offer to finance up to 85% of the cost of an aircraft for up to 90 days. The airline is then free to accept this rate at any time during the period of the offer. This can be done for deliveries up to three years in advance. If the airline chooses not to exercise the option, the offer lapses, but if does exercise, it is under an obligation to use this rate if it decides to finance the aircraft using export finance.[136]

International export credit rules have been a principal feature of the airfinance landscape for the last thirty years. In 2007, they were revised through work on a new Aircraft Sector Understanding (ASU) negotiated at the OECD and agreed on by the OECD countries and Brazil. It is effective as from 1 July 2007.[137] The dual aims of the new ASU are to ensure a level playing field among manufacturers and to

[136] Stephan Sayre & Stephen Gee, "Commercial Bank Lending" in Andrew Littlejohns & Stephen McGairl, ed., *Aircraft Financing* (London: Euromoney Publications, 1998) at 33.
[137] For a detailed view of the new ASU, see the website of the Aviation Working Group, online at < http://www.awg.aero/export_credit_rules.htm>.

establish a balanced and dynamic relation between export credit and commercial markets.

b. ECAs Managing the Airfinance Gap

The weight of expectation on export credit-backed financing in 2009 - 2010 is daunting. Export credit agencies globally were expected to guarantee about $20 billion of the estimated $68 billion required for aircraft deliveries in 2009. The major export credit agencies in Europe, North America and Brazil anticipate a sizeable surge in demand. Oliver Wendland, head of aircraft finance at Germany's Euler Hermes, declared that the agency has guaranteed double the number of deliveries in 2008 than it did in 2007 and was expecting 2009 to be a record year for ECA financing. He sees demand growing constantly. Pascale Lefevre of Coface confirms the rise in demand in Europe. Sergio Schmitt, head of aircraft financing, Brazilian Development Bank, was expecting his bank's participation to double from $500 million in 2008 to almost $1 billion in 2009.[138]

According to estimates agreed to by Boeing's Kostya Zolotusky and Airbus's Nigel Taylor, European export credit agencies would back some $10 billion-worth of financing in 2009. Regional agencies would guarantee about $2.5 billion, leaving $1.5 billion for Export Credit Canada and others after taking out Brazil's $1 billion. Ex-Im Bank in the US was estimated to guarantee $8 billion. Bob Roy, system vice-president at Ex-Im Bank declared that, while the bank has guaranteed on average $4.3 billion for 75 aircraft annually in recent years, this figure increased to $5.5 billion in 2008 for 97 aircraft. Airlines that had not used Ex-Im for a while are back

[138] Anon., "Managing the Airfinance Gap" (February 2009) Airfinance Journal

knocking on the door, as well as operating lessors. According to Bob Roy, aviation accounts for about 27% of the bank's portfolio at present and is expected to rise to almost half in 2010.[139]

The export credit agencies are taking steps to meet this demand. The three European companies - the Export Credits Guarantee Department (ECGD) in Britain, along with Euler Hermes and Coface - are conducting trials using a single team when arranging deals. Usually each agency sends a separate team and all three are involved in negotiations. But it is unclear where the funding for export credit-backed deals will come from. Marc Bourgade, senior vice-president and chief financial officer, Natixis Transport Finance, said that European banks would provide no more than $5 billion in 2009.[140]

This raises the prospect of direct funding. But the agencies maintain that their position has not changed. Direct lending would only be done in a *force majeure* situation where the commercial lender could not fund the deal. The European agencies take a similar stance. Brazilian Development Bank already provides direct lending, and Schmitt says that it is considering widening its activities to include commercial banks as co- or junior lenders. As it stands, there are restrictions on the bank's lending remit, limiting deals by size and to single debtors.

3. Aviation Banks – China's Entry in 2009

In the 1970s, US banks dominated the international aircraft finance market. In the early 1980s, British, French and German banks were the key leaders. In the late

[139] *Ibid.*
[140] *Ibid.*

1980s and early 1990s Japanese banks led the Airfinance market. In the late 1990s it was the Germans. French banks have dominated much of the start of this century. In the years to come, we will look back on 2009 as the year when Chinese banks really became international finance banks.[141]

Apart from one-off deals with top tier clients like Qantas, British Airways and a few Taiwanese firms, Chinese banks have focused on their local carriers. This makes perfect sense as Chinese airlines have been growing fast and have needed capital. But now they are looking abroad. Bank of China led with its acquisition of Singapore Aircraft Leasing Enterprise. The bank beat strong bids from Allco, DAE Capital and Standard Chartered.[142]

Thankfully, for airlines, this has turned out to be a great deal for the bank. In fact, BOC Aviation has performed well, unlike some other Chinese overseas investments into US financial institutions and funds. With a strong parent funding it, BOC Aviation is one of the few leasing companies capable of closing large sale/leasebacks, as its recent deals for Air France and Southwest show. Bank of China's success has encouraged other Chinese institutions into aircraft finance. In November 2009, ICBC Leasing closed its first foreign aircraft leasing transaction for two Boeing 777-200ERs in its deal in a sale and leaseback with British Airways.[143]

It is not just leasing that interest Chinese banks. ICBC's New York branch is expected to take a significant part in Southwest Airlines' bank facility. Chinese banks have also

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[141] Alasdair Whyte, "China Will Help Funding Gap" (2009) AirFinance Journal
[142] *Ibid*.
[143] JoAnn de Luna, "BA Closes Milestone Sale/leaseback in China" (Dec 2009) Airfinance Journal

agreed to join a $500 million syndicate to bid for ILFC. One carrier from the Middle East has revealed that China was their key focus for funding in 2009. Finance managers and treasurers at many of the leading European carriers are busy in China meeting banks and leasing companies. Foreign lessors and banks are welcoming Chinese financiers into the market. Calyon has a joint venture with Dragon Aircraft Leasing.

Chinese banks have long been talked about as a new source of capital, and to some airlines, it is great news that they have arrived just as they need them most. But this may not be good news to everybody, just like potential foreign investment in traditionally strategic and politically sensitive sectors raises significant concerns. The increased prominence of sovereign wealth funds have drawn criticisms for the lack of transparency and potential political intentions because the money is owned, and sometimes managed directly by governments (often in non-democratic states). The Dubai Ports debate of 2007 bears witness to these concerns over the rising prominence of sovereign wealth funds.[144]

Aviation Banks' Perceived Political Risks in Africa – the African Airline's Perspective

[144]Ken Belson. "Port Authority Now Accepts Dubai Deal, Easing Debate, *New York Times*; (17 February 2007), online: <http://www.nytimes.com/2007/02/17/nyregion/17dubai.html>.; see also "Global Geopolitical Trends 2009 - 2010", *Boeing*; (2009), online: <http://www.boeing.com/commercial/geopolitical_trends.html>.

Aviation banks impose some major restrictions on African airlines in seeking to eliminate political risk: [145]

a) They require ownership outside the country, in order to avoid local mortgage registration.

b) They require foreign registration, effectively "de-Africanising" the country risk. It poses a serious issue as the national asset is under the influence and possibly control of a foreign government. Also, it complicates the executives' task of management, as they have to spend money to maintain foreign licences for pilots, comply with foreign certificate requirements and ensure that bilateral rights are not affected.

c) They demand comprehensive political risk or deprivation-of-use insurance.

d) They usually insist on foreign maintenance standards and use of foreign maintenance contractors, regardless of the quality of local standards and service. This gives the lender more frequent opportunities to repossess, should the borrower default. This also helps in upholding asset value which is welcome for any repossession or resale. But for the airline, however, this means more foreign exchange costs.

e) They lend only to finance aircraft to be used in international service, because of the ease of repossession without political interference.

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[145] See Richard Bouma, "Financing National Airlines in Developing Countries" in Andrew Littlejohns & Stephen McGairl, ed., *Aircraft Financing* (London: Euromoney Publications, 1998) at 214.

CHAPTER THREE

LEASING OF AIRCRAFT EQUIPMENT FOR SMALL AND EMERGING ECONOMIES

This chapter deals with a central theme in aircraft financing which is aircraft equipment leasing. From the preceding chapter, the view that one gets of the airline business is of a huge and complicated enterprise which is capital-intensive, and that requires significant investment in aircraft and associated facilities. It has been argued that a blend of owned and leased aircraft in an airline's fleet is ideal. Outright purchase may not always be possible for airlines from developing countries. Thus, leasing plays an important function in placing capacity in these airlines who would not otherwise be in a position to purchase. Also, the market and environment in which an airline operates is truly predictable only in the relatively short term, while uncertainty expands with time. Leasing is a flexible option to deal with uncertainty.

Aircraft financing is an international business and aircraft purchase are mainly denominated in US dollars. A small and emerging economy airline may not have this huge amount of foreign currency upfront to purchase an aircraft, and it may also be subject to foreign currency restrictions in its own country. The poor credit ratings of many emerging countries, mainly in Africa, are also another drawback that does not help on the international borrowing market. The sums required are indeed relatively huge for many of them. Some countries, for example Mauritius, have to spread the price paid for an aircraft over a number of years in their national budget. Again, leasing remains the best possible option for the short term and considering the cyclicality of the airline industry.

I. Types of Leasing

There are two basic types of lease, the operating lease and the capital lease, and they have important differences. Generally speaking, if ownership of the leased asset transfers to the lessee at the end of the lease term following payments that represent the full value of the asset, it is a capital lease; otherwise, it is an operating lease. The precise classification changes slightly for legal, taxation, and accounting purposes, but the main idea is that the more the lessee acquires control and residual claims on the asset, the more the lease is classified as a capital lease.

A. Capital Lease

A capital lease is a contract where almost all the risks and rewards of ownership are borne by the lessee and the lease payments are sufficient to cover the lessor's costs and provide its profit. The lease period normally covers the economic life of the aircraft and at the end, or during the term of the lease, the lessee may purchase the aircraft because of an option to purchase at the end or throughout. Such purchases may be exercised at pre-determined prices or at fair market value.[146]

The lifetime of a capital lease can be between 10-26 years, but more likely for a period of at least 10-12 years. Because the lease period is for the major part of the aircraft's life, capital leases are often called "full pay-out" leases. Capital leases accounted for around 30% of all the newer jet aircraft financing in 1997 worldwide, with the rest distributed among operating leases and purchases. But this has

[146] See Bunker, *International Aircraft Financing*, *supra* note 40 at 183; See generally Morrell, *supra* note 82 at 195.

decreased significantly since the lower profile of the Japanese Leverage Leases (JLL) and the decline of the US tax leases.[147]

B. Operating Lease

The purpose of an operating lease is to facilitate usage of the asset rather than transfer of any ownership interest. It is of shorter term, usually between one and seven years, or an average of five years, and can be returned to the lessor at short notice without major penalty. At the term of the lease, the lessor re-leases the aircraft or sells it.[148] Major airlines are capitalizing on the financial benefits and fleet flexibility afforded by the operating lease. In 2002, operating leases accounted for 22% of the world's fleet and it has grown on steadily since.[149]

The airline industry all over the world has been increasingly relying on aircraft leasing. It has been shown that short-term operating leases provide a vehicle for risk shifting or risk sharing between the airlines and the leasing companies. Operating lease of aircraft gives the airlines flexibility in capacity management when demand for air transportation service is uncertain and cyclical. As the demand for air service increases, the airlines will be able to quickly expand capacity through aircraft leasing. However, if the demand takes a downturn, the leasing companies which supply the aircraft will suffer from excess capacity. Leasing companies compensate this risk by

[147] Morrell, *supra* note 82 at 198.
[148] *Ibid*, at 200-201.
[149] Bunker, *International Aircraft Financing*, *supra* note 40 at 184.

charging a premium on operating leases. Thus, the airlines are facing a trade-off between flexibility of capacity and higher costs.[150]

II. Benefits of Leasing

Traditionally, leasing has been a means of achieving "off-balance sheet financing" and "tax benefit transfers" which enabled lessees to finance equipment at costs below those of conventional borrowing. But today, the financial benefits of leasing in the Western world have diminished considerably due to restrictive tax legislation in these countries.[151] Nevertheless, leasing is a fluid and extensively used product and its relevance transform tax efficiency. Some benefits to lessees include: the preservation of working capital; the mitigation of risk that equipment becomes obsolescent; often 100% financing; the matching of rental profiles to income streams; a quiet enjoyment of the equipment leased, provided rentals are paid according to contract.[152] It is thus inherent in a lease contract that the lessee receives both possession and the right to use the equipment.

Other advantages of leasing to a small and emerging country airline includes: volume discounts for aircraft purchase by the lessor can be passed on to the airline; no aircraft trading experience may be needed. As for financiers and investors, the biggest incentive the government of a small and emerging economy can create for them to be interested in financing their flag carrier's fleet requirements, would be the

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[150] Tae Hoon Oum Anming Zhang & Yimin Zhang, "Optimal Demand for Operating Lease of Aircraft" (2000) 34:1 Transportation Research

[151] Bunker, *International Aircraft Financing*, *supra* note 40, at 178.

[152] Vic Lock, "Review of the Leasing and Asset Finance Industry" in Chris Boobyer, ed., *Leasing and Asset Finance* (London: Euromoney Books, 2003)

establishment of a proper legal environment for structuring deals which allows for tax benefits transfers. Depreciation is a very important item.

In the following section, accounting and tax are viewed under the laws applied in the two major aircraft financing centres, New York and London.

III. Accounting and Tax Treatment for Leases

A. The United States

In the US, the Statement of Financial Accounting Standards No. 13 (SFAS No. 13)[153] sets forth the basic principles of accounting for leases and distinguishes between a capital lease and an operating lease. SFAS No. 13 provides that, if a lease meets any of the following criteria at its inception, the lessee must record the lease as a capital lease; otherwise, it is classified as an operating lease:[154]

a) The lease transfers ownership of the property to the lessee by the end of the lease term;

b) The lease contains a bargain purchase option;[155]

c) The lease term is equal to 75% or more of the estimated economic life of the leased property;[156]

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[153] *Accounting for Leases* (US), Financial Accounting Board, Statement of Financial Accounting Standards No. 13, (Norwalk: FASB, 1976), Original Pronouncements as amended, online: FASB http://www.fasb.org/pdf/fas13.pdf [*FAS 13*].

[154] Henry M. Phillips & Nancy R. Little, "Accounting Considerations" in Nancy R. Little, ed., *Synthetic Lease Financing: Keeping Debt Off the Balance Sheet* (Chicago: ABA Publishing, 2002) at 26.

[155] *Bargain purchase option.* A provision allowing the lessee, at his option, to purchase the leased property for a price which is sufficiently lower than the expected fair value of the property at the date the option becomes exercisable that exercise of the option appears, at the inception of the lease, to be reasonably assured. *FAS 13, supra* note 153 at para 5(d).

d) The present value of the minimum lease payments equals or exceeds 90% of the fair value of the leased property.[157]

In most Western countries, financial reports are prepared in accordance with the generally accepted accounting practices (GAAP) determined by the relevant governing body. Under GAAP, the aggregate outstanding repayment obligations under a capital lease must be listed as a liability on the balance sheet of the lessee and the leased property must be listed as an asset on the lessee's balance sheet. In the case of the US, if the lease fails any of the four characteristics listed in SFAS No. 13 above, the lease is properly treated as a capital lease, and the lessee is required to record the leased property or the corresponding liability on its balance sheet.[158]

In taxation, the most important consequence to be taken into account in considering leasing is that of capital allowances (Depreciation allowed for tax purposes). One need to distinguish between a lease (true lease) and a conditional sale contract, but the distinction is blurred. In 1975, the Internal Revenue Service (IRS) issued the Revenue Procedure 75-21 setting forth guidelines for obtaining favourable rulings on leveraged lease transactions.[159] The Revenue Procedure 75-21 has been superseded by

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[156] *Estimated economic life of leased property.* The estimated remaining period during which the property is expected to be economically usable by one or more users, with normal repairs and maintenance, for the purpose for which it was intended at the inception of the lease, without limitation by the lease term. *Ibid* at para 5(g). However, if the beginning of the lease term falls within the last 25 percent of the total estimated economic life of the leased property, including earlier years of use, this criterion shall not be used for purposes of classifying the lease. *Ibid* at para 7(c).

[157] *Fair value of the leased property.* The price for which the property could be sold in an arm's length transaction between unrelated parties. *Ibid* at para 5(c).

[158] Michael C. Mulitz and Robert Kiesel, "Synthetic Lease Structures in the Aircraft Industry" in Nancy R. Little, ed., *Synthetic Lease Financing: Keeping Debt off the Balance Sheet* (Chicago: ABA Publishing, 2002) at 138.

[159] Bunker, *International Aircraft Financing*, *supra* note 40 at 190-91.

the Revenue Procedure 2001-28,[160] according to which, in a leveraged lease, a lessor will be regarded as the owner and the transaction will be a valid lease if all the conditions described below are satisfied, unless the facts and circumstances of the case indicate otherwise:[161]

(a) The lessor is required to make at the beginning of the lease term a minimum unconditional 'at risk' equity investment of at least 20% of the cost in the asset, and to maintain it throughout the lease term;

(b) The lessor must show that it would be reasonable to expect that the fair market value of the asset at the end of the lease term would be at least 20% of the cost of the asset. Additionally, the remaining useful life of the asset at the end of the lease term must be shown to be one year or 20% of the originally estimated useful life of the asset, whichever is longer;

(c) A member of the lessee group may not have a right to purchase the asset at a price less than its fair market value (determined at the time of when such right is exercised). When the asset is first placed in the service of or used by the lessee, the lessor may not have a right under the contract to cause the asset to be purchased by lessee or nominee thereof, which includes the right to abandon the asset in favour of such party;

[160] US Revenue Procedure 2001-28, 26 CFR 601 , Internal Revenue Service, Bulletin 2001-19 , (7 May 2001) at 1156-1160, online: Internal Revenue Service http://www.irs.gov/pub/irs-irbs/irb01-19.pdf.
[161] See *Ibid*.

(d) Except as provided for in the guidelines, a member of the lessee group may not provide for any part of the cost of the asset or the costs of improvements, modifications or additions to the asset;

(e) A member of the lessee group may not loan to the lessor any portion of the acquisition price of the asset or provide a guarantee for any debt incurred by the lessor for the same; and

(f) The lessor must show that it expects to derive a profit from the transaction, excluding any tax benefits.

B. The United Kingdom

In the UK, the accounting treatment of lease transactions has been conducted on an established basis since the introduction of SSAP 21[162] in 1984. In determining an operating lease from a capital lease, SSAP 21 introduced the '90 percent test'. This is based on a discounting of the minimum lease payments due from the lessee and comparing this to the fair market value of the aircraft. If the present value of the minimum lease payments, discounted back at the interest rate implicit in the lease, exceeds 90% of the fair market value, it is presumed to be a capital lease. All other leases are classified as operating leases.[163]

This single 'pass or fail test' led to creative lease structuring to enable companies to avoid capitalising assets in their balance sheets. In 1994, FRS5 was introduced in an

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[162] *Statement of Standard Accounting Practice No. 21 – Accounting for Leases and hire Purchase Contracts* (UK), Accounting Standard Board, August 1984, online: ASB http://www.frc.org.uk/asb/technical/standards/pub0391.html.

[163] Chris Boobyer., "UK Leasing" in Andrew Littlejohns & Stephen McGairl, ed., *Aircraft Financing, 3r ed.* (London: Euromoney Publications 1998) at 155-56.

attempt to more properly recognise the commercial substance of a transaction, rather than its pure legal form.

For the purposes of taxation, the legal form of capital lease is recognised, that is, it is considered as a transaction of hire akin to an operating lease and not a loan. The lessor is regarded as the owner despite the fact that the economic ownership may vest in the lessee.[164] The tax treatment of hire purchase transactions is different and the hirer is treated as the owner of the asset.[165]

IV. Other Types of Leases

A. The Leveraged Lease

There exist many forms and variations of leveraged leases. This is a lease where the aircraft is acquired using a large amount of debt finance and a small amount of equity finance. The lessor (the equity participant) provides only a small proportion from its own funds, between 20 and 40% of the total value of the aircraft and the rest is borrowed from a lender or syndicate of lenders (the debt participant) on a non-recourse basis. The lessor is able to claim 100% depreciation and tax claims and can be said to have 'leveraged its equity investment' by utilising the non-recourse loan.

The loan is paid through the lease rentals, which are assigned to the lender, together with the insurance proceeds, and is secured by a first mortgage on the aircraft. In case of default, the lender has no recourse against the lessor for any amount in excess of

[164] *Finance Leasing Manual* (UK), HM Revenue and Custom, online: HM Revenue and Custom http://www.hmrc.gov.uk.
[165] *Capital Allowances Manual* (UK), HM Revenue and Custom, online: HM Revenue and Custom http://www.hmrc.gov.uk.

what might be realised pursuant to the enforcement of the mortgage or receipt of the insurance proceeds for the repayment of its loan.[166]

B. Wet Lease

There has traditionally been a distinction between 'dry leasing' of aircraft only, and wet leasing of aircraft and flight-crews. Wet leasing an aircraft under an ACMI contract (aircraft, crew, maintenance and insurance) can help a lessee achieve the maximum in airline operational flexibility. When an airline wants to add a new aircraft type to its fleet, or is planning an expansion of capacity or route structure, wet leasing can often be a highly effective solution.[167] But this comes at a high premium which may be prohibitive to some developing country airlines.

A wet lease is a leasing arrangement whereby one airline (lessor) provides an aircraft, complete with crew, maintenance, and insurance (ACMI) to another airline (lessee), which pays on the basis of hours operated. The lessee provides fuel, covers airport fees, and any other duties, taxes, and so on. The flight uses the flight number of the lessee. A wet lease generally lasts one month to two years; anything less would be considered an ad-hoc charter. A wet lease has traditionally been utilized during peak traffic seasons or annual heavy maintenance checks, or to initiate new routes. Other specific circumstances would include situations resulting from a mechanical failure of existing fleet aircraft – "aircraft on ground" (AOG); interim lift prior to taking delivery of new fleet aircraft; temporary replacement in the case of a total loss or of a

[166] Morrell, *supra* note 82 at 198.
[167] See Clark, *supra* note 42.

partly damaged aircraft. A wet leased aircraft may be used to fly services into countries where the lessee is banned from operating.

Wet leases are occasionally used for political reasons; for instance, EgyptAir, an Egyptian government enterprise, cannot fly to Israel under its own name, as a matter of Egyptian government policy. Therefore, Egyptian flights from Cairo to Tel Aviv are operated by Air Sinai, which wet-leases aircraft from EgyptAir to get around the political issue.

Thus, a wet lease may be compared to an aircraft charter but in the latter case any individual or organisation may hire the aircraft and it will be flown under the licenses, permits and authorities of the charter operator. In a wet lease, the lessee must be an airline having its own operating licenses and permits and the aircraft must be operated under the lessee's flight designated code and route authorities.

During the term of the lease, the lessee decides what flights are to be flown, but the lessor retains excusive operational control over all flights. It is the sole responsibility of the lessor to decide whether a flight may be safely operated, which crew members to be assigned to a particular flight, to dispatch and release flights, to direct cockpit crewmembers and to initiate and terminate flights. The lessee must also accept the decisions of the commander of the aircraft who maintains control of the aircraft at all times, and has full authority over the cockpit and cabin crews, whether provided by the lessee or the lessor, and their duties during flight. The cockpit crew remain the employees of the lessor.

When an air carrier provides less than an entire aircraft crew, the wet lease is also sometimes referred to as a damp lease, especially in the UK. A wet lease without a full crew is occasionally referred to as a "moist lease". In January 2010, following the renewed strike threat by its flight attendants, British Airways was looking at options to keep its passengers from suffering disruption to flights. It was considering wet-leasing aircraft, and even providing additional training to enable other staff to fill cabin crew positions.[168]

Wet-leasing of aircraft has been around for almost as many years as airlines have been flying. What is different in today's competitive environment is the number of carriers that focus entirely or almost entirely on providing a full wet-lease service. All but one has come into existence since 1990 and, according to ACMI specialist Air Atlanta Icelandic, traffic carried by wet-lease providers since then has been growing by 18% a year.[169]

Recent Examples of Wet Leases: During the recent economic crisis a number of airlines have reduced capacity and grounded aircraft. Or else, they may not have the right type of aircraft for their re-scheduled present flights. This parked fleet can be wetleased to other airlines in areas where the capacity is needed.

Jet Airways, the Indian private airline had given out on lease aircraft as part of its network and airplane-lease restructuring exercise and had started many of its international operations deploying narrow-body jets in place of wide-body. The

[168] David Kaminski-Morrow, "BA Looks at Wet-leases and Temporary Crews to Beat Strike" (Jan 18, 2010) Air Transport Intelligence News
[169] Gunter Endres, "Surrogate Supply" (June 26, 2006) Airline Business

airline had wet-leased two Airbus A330 to Oman Air and four Boeing B777s planes to Gulf Air earlier in 2009. While the lease term with Gulf Air was to expire in October that year, the agreement with Oman Air was set to be continued until October-November. Jet Airways had also wetleased three Boeing 777s to Turkish airlines and, subsequently, had converted theses leases into dry leases, that is without staff and other frills. Another Boeing 777 was scheduled to be delivered later to Turkish Airlines on dry lease terms.[170]

There may be many reasons behind such conversions but a wet lessor's obligations are not that easy to be fulfilled. Conversion of a wet lease into a dry lease would result in rental income of Jet Airways going down by almost half on these airplanes. According to analysts, the rental income from each of such aircraft per month is in the range of $2 million, which goes down to about $1 million when converted into dry lease. Jet Airways CEO Wolfgang Prock-Schauer declared that, in terms of rental revenue, when one converts a wet lease to a dry lease, roughly about 40-45% reduction is estimated. But it is also a reality that, as a result of conversion, the costs involved also go down.[171]

Another situation where the role of the wet lease comes into play is during the ban of a country's airline from the airspace of specified countries or regions. The FAA and the EU have each a blacklist of their own depending on their own criteria and experience. For example, in 1998, the FAA implemented a policy whereby it "rates"

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[170] Anon. "Jet Airways Converts Wet Lease to Turkish Airlines", *Business Line*, 16 August 2009, online: The Hindu Business line <http://www.thehindubusinessline.com/blnus/09161405.htm>

[171] *Ibid.*

foreign governments' civil aviation authorities with respect to the authority's ability to exercise adequate oversight of the country's airline industry to guarantee minimum safety oversight standards as established by ICAO. Indeed, inferior maintenance practices or Contracting States' non-compliance with international obligations for aviation safety oversight cannot be overlooked in the air transport world. A reminder of the aviation accidents in Africa due to this shortfall is appalling.

Nigeria's civil aviation authority is not certified as category one by the FAA and has been a cause of great concern to the country's leaders. They estimate that not less than $35 billion are lost by the country each year due to repatriation by foreign airlines serving the country. In August 2009, the Nigerian Civil Aviation Authority (NCAA) declared that the main hurdle left for Nigeria to cross to attain the U.S. FAA's category one certification was in the area of compliance and enforcement. The issue of capital flight, occasioned by the number of foreign airlines coming to Nigeria without reciprocity from Nigeria has dominated discourse in recent times. There are currently, about 450 departures a day in Nigeria, with one airline, making almost 30 flights a day.[172]

Nigerian political leaders met with the American authority's officials and the answer was wet lease. The authority had granted the country the right to fly its carriers to the U.S. on wet lease option from a category one nation. So, they can get an aircraft on

[172] See Wole Shadare & Chika Ezeokoli. "Kicks over N100 billion Capital Flight through Aviation", *Guardian Newspaper (Nigeria)*; August 13, 2009.; Kenneth Ehigiator. "Nigeria Close to Attainment of FAA Category One", *The Vanguard (Nigeria)*; August 17, 2009.

wet lease, registered in another country with category one, and fly to the US.[173] Thus, an airline is a very important national asset for an emerging economy country. It brings hard currency into the country and is likely to generate new business.

Accordingly, the regulatory authorities in small and emerging economies should recognize the need for, and the airline should work towards, implementing a close cooperative arrangement. Issues like labour regulations for pilots and flight attendants, airport development, air traffic control issues may be worked on in partnership. In regulatory issues, some key points where the government should support the business needs of the airline are those relating to the implementation of new technology in air traffic control, domestic routes' regulations, training issues, and the country's inputs to international regulatory bodies like ICAO, and industry trade associations, such as IATA.

Wet Leasing - The Dilemma facing Developing Countries

Wet leases are seldom used in small and emerging economies, maybe because their potential has not been fully grasped, or more likely for its high price tag. A wet lease potentially circumvents political risk as the aircraft remains under the control of the lessor at all times. During a downturn, the parked fleets of Western legacy airlines may be used in areas of the world where air traffic demand is increasing. For the reasons mentioned above, wet leases may have a role to play in the fleet management of some airlines from small and emerging economies and can be useful in developing their business and the country's air transport industry. On the other hand, it benefits the overall air transport industry by adjusting capacity where it is really needed.

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[173] *Ibid.*

But wet leasing is a dilemma for developing country airlines. On the one hand, it is hard for them to negotiate the purchase of aircraft on relatively favourable terms as airlines from the developed world, as discussed in the preceding chapter. Also, some others find it difficult to secure a reasonable bargain for aircraft leasing, whether capital or operating lease, because of the higher overheads involved due to, among other considerations, political risk. On the other hand, the wet lease fallback position turns out to be excessively expensive for developing country airlines. The high costs associated with wet leasing operations impact their cash flow and are a severe drain on their treasury.

C. Damp Lease

Quite often the lessor provides only the aircraft and some of the operational support services, for example, the lessee may wish to use their own cabin crew because of language requirements. This can be described as a cross between a wet lease and a dry lease, that is, a damp lease.

D. Dry Lease

A dry lease is the lease of an aircraft without the crew. The aircraft is operated under the lessee's own Air Operator's Certificate (AOC) issued under the authority of the civil aviation authority of the lessee's State and the aircraft is maintained according to the maintenance program approved by the same authority. Thus, the lessee has the sole responsibility in respect of the aircraft from a technical, operational and commercial standpoint.[174]

[174] See Bunker, *International Aircraft Financing*, *supra* note 40 at 235.

Small and emerging economies represent such a diverse and disparate group, and their airlines are also at various stages of their development. Some are mature, able to emulate their counterparts in Singapore or Hong Kong in the near future, while others may only be just emerging from their developmental stage and their airlines may only be start ups. It is obvious that a blanket solution as to which type of leasing is most appropriate to them may not possible. Singapore Airlines may well be tempted, and has the means, to enter into a capital leasing structure but a private airline from Vietnam may not have the luxury to even acquire aircraft on an operating lease basis, and may have to fall back reluctantly on a wet lease situation, with its associated high premium. Thus the types of leasing used will depend, among other considerations, on the country and the airline, and at the present cycle in the airline industry at the time of acquisition.

V. Legal Issues in Aircraft Leasing

Aircraft financing and leasing raises a number of issues in which investors and financiers need to become familiar. Some legal aspects are listed below:

(a) Title and Registration

(b) Governing Law and Jurisdiction

(c) Repossession

(d) Enforcement

(e) Security Issues

(f) Insurances and Reinsurances

(g) Tax

(h) Liability Issues

(i) Liens and Potential Claims

(j) Currency Exchange Risks

(k) Government Consents

(l) Insolvency

The scope of this thesis does not allow for a discussion of each and every one of these legal aspects but important ones will be dealt in the course of this thesis.

A. Insurance

An insurance policy can be distinguished from an ordinary contract because inherent in the policy is the duty of disclosure and the underlying concept of *uberrimae fidei*.[175] In order to recover the proceeds under an insurance policy, the insured must have an insurable interest in the subject matter of the insurance. For aviation insurance, any party with a financial interest in an aircraft usually will have an insurable interest.

Aviation hull insurance provides coverage to the insured against the risks of physical loss or damage to aircraft. Aviation liability insurance protects the insured against liability resulting from loss or damage, including injury or death, to passengers or other third parties. Policies generally are written specifically to address the particular

[175] The insured is required to act in the utmost good faith in making disclosures to the insurer either directly or through its broker. Full disclosure enables the insurer to fully assess the risk it is underwriting, determine whether to accept it and, if it chooses to accept it, for what premium and on what terms (*Commercial Union Ins. Co. v. Pesante*, 459 F.3d 34 (1st Cir. 2006).

insured's needs, with terms, conditions, and exclusions being subject to negotiations between the insurer and the insured. A certificate of insurance is evidence of the placement of insurance coverage, but is not itself a policy of insurance.

Aircraft financing documentation usually requires that insurance coverage be placed with insurers of "reputable standing in international aviation insurance". But given the legitimate interest of financiers in the identity of the airlines' insurers, it would be reasonable to expect that coverage be placed with insurers reasonably satisfactory to the financier. This would permit the financier to disapprove a particular insurer for good cause.[176]

In the aviation market, insurers are generally not able to individually carry the larger risks that are attendant to the operation of commercial aircraft. The risks are spread among different underwriting entities, but also by the means of limiting exposure through reinsurance. The latter is a transaction where one party, that is the reinsurer, undertakes to indemnify or assume part or all the risks underwritten by the primary insurer (the reinsured) in exchange for a premium.

Most airlines arrange 'fleet' policies to cover any and all aircraft they own, operate or are otherwise responsible for. Since aircraft, including engines, are a collection of components that frequently change, aviation insurers consider that they are effectively insuring the collection of components that currently is operating on a particular aircraft. It therefore does not matter, for the purposes of hull coverage, whether aircraft is operating with originally installed equipment or with replacement

[176] Rod D. Margo, "Aspects of Insurance in Aviation Finance" (1996) 62 J. Air L. & Com. 423 at 434.

component parts. Once an installed component has been removed and replaced, that component is no longer part of the aircraft. If the component is then installed on another aircraft, for the purposes of hull insurance, it then becomes part of the other aircraft. Also, once a spare part has been installed on an aircraft, it is no longer a 'spare' for the purposes of spares insurance and is considered covered under the insured's hull coverage as part of the aircraft. Aircraft spare parts and aircraft-related equipment, including spare engines are routinely insured under spares and aircraft equipment insurance.

Residual Value Insurance (RVI) is a policy available to indemnify the beneficial owner of an aircraft between a previously agreed upon future value and the actual market value of an aircraft at an agreed upon future date. These policies are written in two essential ways. One of them involves the sale of the insured aircraft at a future specified date. In line with the policy, the insurers will guarantee the difference between the minimum guaranteed value of the aircraft and the actual gross proceeds derived upon the sale of the aircraft.[177]

B. Assignment of Insurances

Assignment of insurances is frequent in lease and secured financing transactions and, whether it is necessary, is a matter of some debate among professionals.[178]

In any aircraft financing transaction, the lessor will require, as a condition precedent to the commencement of the transaction, that it receives a certificate of insurance

[177] J M Balfour et al., "Aviation Insurance" in J David McLean, ed., *Shawcross and Beaumont AIR LAW* (London: LexisNexis Butterworths, 2007) vol 1 Issue 109 VIII at 282.
[178] See Jeremy Edwards, "Aircraft" in Paul U Ali, ed., *Secured Finance Transactions: Key Assets and Emerging Markets* (London: Globe Law and Business, 2007) at 144.

from acceptable insurance brokers which includes it as an additional insured party under the hull and liability policies. This has to do with the doctrine of Privity of Contract under English law which does not allow contracts to be enforced by third parties. The lessor does not acquire its rights under the policy derivatively through the original insured, but it becomes a party to an independent contract of insurance with the insurers and, in the event of a claim, the insurers will be obligated to settle the claim directly with both the lessor and the original insured. As a named additional insured party, the lessor would be able to make its own claim under the insurance policy in the event of damage to, or total loss of, the aircraft or if there is a claim covered by the liability policy. The lessor is thus fully protected under the policy up to its interest.[179]

However, it is customary for most lessors to require the airline to assign its right to recover any payments due under the insurance contract in excess of an agreed threshold and also to instigate claims on behalf of the airline, should the airline fail to do so.[180]

In some jurisdictions, airlines are legally required to place their primary insurance with an insurance company established in the same jurisdiction. Aircraft financiers venturing in developing countries should really feel concerned because the creditworthiness of these primary insurers may be questionable and they may be unable to respond to a loss. The introduction of currency exchange controls is

[179] Margo, *supra* note 176 at 450.
[180] Jeremy Edwards, "Aircraft" in Paul U Ali, ed., *Secured Finance Transactions: Key Assets and Emerging Markets* (London: Globe Law and Business, 2007) at 144-45.

another reason for concern.[181] It is thus recommended that financiers insist for the primary insurer to take out reinsurance on the principal aviation insurance markets and to insert a 'cut-through' clause in these reinsurances. This has the effect of requiring the reinsurers to pay direct in accordance with the primary insurance certificate, thereby bypassing the primary insurers. Under English law, because the financier/lessor is not a party to the reinsurance contract, he would be unable to enforce the cut-through clause. Thus, some lessors require an assignment of the proceeds of the reinsurances to be entered into and ensure that the reinsurance contract itself permits the primary insurer to assign its rights to receive payments.[182] It is good to note that, under English law, a cut-through clause could conceivably result in a voidable preference in the event of the insolvency of the primary insurer.[183]

C. Repossession Insurance

Repossession insurance, sometimes referred to as political risk insurance, is another type of security occasionally required by lessors, but in dealings with small and emerging economies' airlines, this requirement is the rule rather than the exception. The purpose of a repossession insurance policy is to provide cover for the lessor in the event that the aviation authority in the state of registration of the aircraft fails to permit the deregistration and export of the aircraft on termination or expiry of the lease. Repossession insurance policies can be expensive and frequently contain a number of exclusions and conditions which mean that the extent of cover is limited. They remain useful, however, in small and emerging economies and under certain

[181] See Margo, *supra* note 176 at 454-55.
[182] Edwards, *supra* note 17878 at 145.
[183] See *ibid*; Margo, *supra* note 176 at 455 n. 136.

political conditions where aircraft financing would not otherwise be possible.[184] But airlines in many of these countries consider it unfair for them to pay the premium for insurance that does not benefit them directly and that covers risks which are entirely beyond their control.[185]

The high premiums for repossession insurance should prompt these airlines to consider some alternatives. They could provide a certificate from their civil aviation authority, attesting that the authority will consent and assist in the deregistration and export of aircraft upon termination of the lease. They can also execute a power of attorney authorizing the lessor to take all necessary steps, on behalf of the airline, to arrange for the deregistration and export of the financed aircraft. In situations where conventional methods are unsuccessful, lessors may rely on the services of locals with high-level government contacts.[186]

D. Maintenance Reserves

The value of an aircraft is affected significantly by the maintenance status of the principal aircraft components and the cost of maintenance can be considerable. It is not uncommon, especially in an operating lease transaction, to have a requirement for the lessee to make regular monthly payments to the lessor by reference to each flight hour or cycle operated by each of the major components. These maintenance reserves are then accumulated by the lessor and released to the lessee against production of suitable invoices and evidence that the relevant maintenance event has been performed. Unused accruals are retained by an operating lessor at the end of the

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[184] Edwards, *supra* note 178 at 147.
[185] B. Moss, "Political Risk Insurance" Airfinance Annual (1993/94) at 94.
[186] See Margo, *supra* note 176 at 462.

lease term because they will be needed by the next airline operator to pay for maintenance becoming due at a later stage, but which relates to the previous operation of the aircraft. In the absence of such reserves, a lessor might find itself having to repossess an aircraft from an insolvent airline at a time when major maintenance was shortly required to be performed in order to keep the aircraft airworthy and remarketable.[187]

Maintenance reserves amount to a lot of money which should be the subject of heavy negotiation. In the beginning, when this concept was introduced, it was viewed primarily as a credit risk solution. But, in the course of time, it was quickly determined that in addition to security, the reserves could generate substantial benefits to the interested party holding them. There are other options that the airline lessee may wish to consider:

1) The provision of a bank letter of credit or bank guarantees which can be increased from time to time.

2) The placing of the reserves in escrow with a financially sound bank with a provision for withdrawal when needed by the appropriate party pursuant to the terms of the escrow agreement. [188]

E. Return Conditions

The return condition of an aircraft has a critical effect on the residual value possessed by it on redelivery, and consequently, in operating leases mainly, very detailed stipulations are commonplace. Such stipulations also appear in hybrid 'walk away'

[187] Edwards, *supra* note 178 at 146-47
[188] Bunker, *International Aircraft Financing*, *supra* note 40 at 511.

leases, that is capital leases where the lessee has an option to return the aircraft at a pre-agreed date or dates (window dates) during the lease term.

Airworthiness relates to the capability of an aircraft to perform flight operations with acceptable reliability in respect of, among other things, safety margins. Aircraft can remain airworthy despite postponement by stringent inspection of expensive structural repairs, with repairs being undertaken only when conditions become terminal. As aircraft age, the major component of their residual value simply becomes the value of the remaining service life, or else, the cost of maintaining them in service. There is a direct correlation between the remaining service life of components on the airframe and engines, and the marketability of the aircraft.[189]

Thus, it is strictly recommended that the lessor should insist upon definitive minimum hours and cycles available on engines and other life-limited components. It is also becoming quite common for minimums to be to be stated on an aggregate basis per aircraft with a further stipulation that each individual engine will have at least, say 65% to 75% of the minimum average available.[190]

It is worth stressing again that, despite that the present study started with the premise that a common thread runs through small and emerging economies' economic development, airlines in these countries fare differently depending on various factors and their business cultures and also on the treatment they receive from their respective governments. Political interference can also play in favour of national airlines and can go a long way in providing the required guarantee that will suit

[189] *Ibid* at 513.
[190] *Ibid* at 514.

investors and financiers. Thus, the requirement of maintenance reserves, or whether to impose stringent return conditions will differ from one airline to another.

For example, Air Mauritius, the national flag carrier of Mauritius, cannot be compared to some bankrupt airlines in Nigeria. Ghana, another example, has also bankrupt airlines but feels comfortable to depend almost entirely on other countries' air carriers. Mauritius is an island in the Indian Ocean and has a parliamentary democracy in the Westminster style. It has proved itself to be a success story and is used as a role model for other developing countries, especially on the African continent. The Mauritian government is well aware of its remoteness to its major markets and the importance of maintaining a sound and efficient air carrier. Despite the recent economic crisis, coupled with the airline's ill-advised speculated fuel hedging policy, the government stands by its national carrier and is itself a sound guarantee for aircraft financiers and investors. Moreover, Air Mauritius, is aware of its economic ties to Europe, and so tries to keep its rules and business practice in line with the EU's Directives and Regulations concerning the aviation industry, although it is not obligated to do so. It is therefore not a surprise that in aircraft financing deals, no maintenance reserves or repossession insurance are required from Air Mauritius. There are similar stories like this around the world.

It is believed that globalisation, liberalisation policies and the growing importance of ICTs which has helped in bringing the world closer as never before, will continue to put pressure on small and emerging countries to integrate even more into the international community and respect their international obligations. Trends found elsewhere will be replicated gradually and international air law treaties, current laws

and practices which have worked elsewhere will find even better ground to be put to test.

F. Registration of Leased Aircraft

The registration of the aircraft is a paramount legal consideration which has to be addressed when an airline uses leased aircraft. Article 17 of the Chicago Convention[191] states that aircraft have the nationality of the state in which they are registered. Also, an aircraft cannot be validly registered in more than one state, but its registration may be changed from one state to another.[192]

In a lease structure, the lessor has to satisfy itself that its title as owner will be recognised in the state of registration, and that there is no risk that the lessee is deemed to have acquired an equity interest in the aircraft. Otherwise, as the person in possession, the lessee could confer valid title on a third party, or it could assert an interest in the residual value of the aircraft against the lessor (equity build-up).[193]

1. Article 83(*bis*)

More carriers are now entering into short term lease agreements, and these dry or wet lease agreements necessitate a closer look at the requirements of registration and nationality, as dictated to by the Chicago Convention. In order to accord with these exigencies, ICAO has introduced Article 83(*bis*)[194] to the Chicago Convention which provides that, when an aircraft registered in a Contracting State is operated pursuant

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[191] *Convention on International Civil Aviation* signed at Chicago, 7 December 1944. 15 U.N.T.S. 295, ICAO Doc 7300/7 (7th ed. 1997) [Chicago convention].
[192] Article 18 of the Chicago Convention, *ibid*.
[193] Andrew Littlejohns, "Legal Issues in Aircraft Finance" in Andrew Littlejohns & Stephen McGairl, ed., *Aircraft Financing* (London: Euromoney Publications, 1998) at 282.
[194] Although introduced in 1980, it only came into force on June 20 1997, for want of the requisite number of countries to ratify the amendment.

to a contract for lease, charter or interchange of aircraft by an operator who has his principal place of business or, his principal residence in another state, the state of registry of the aircraft concerned may, by agreement with such state, transfer all or part of its duties as state of registry to such other state. Thus, a state may lease aircraft registered in another state, and, by mutual agreement, take over the responsibilities of the state of registration in respect of that aircraft.

Any transfer agreement signed between states parties to Article 83(*bis*) will be binding upon other states thereto, on condition that it has been formally registered with the Council of ICAO and made public in accordance with Article 83 of the Chicago Convention, or that any third state concerned has been officially informed by way of direct notification, normally by the state of the operator.

According to Article 17 of the Chicago Convention, a leased aircraft would be considered as bearing the nationality of the state in which it is registered. Article 12 obliges each contracting state to ensure that every aircraft entered in its register complies with the laws and regulations in force, wherever the aircraft may be at any given time.

There are three relevant provisions, Articles 30, 31 and 32(a) of the Convention which prescribe for the certification of the aircraft's airworthiness, licensing of radios as well as licensing of operating crew. These certificates are issued and validated according to the relevant Annexes to the Convention, namely, Annex 1 (Personnel Licensing), Annex 8 (Airworthiness of Aircraft), and Annex 6 pertaining to the

operation of the aircraft, and devolves the responsibility of compliance with the rules of the Annex to the state of the operator.

Article 83(bis) caters for the transfer of all or part of the state of registry's function and duties to the state of the operator in case of an agreement for lease, charter or interchange of aircraft or any similar arrangement. The state of registry is thus relieved of responsibility. Any type of commercial arrangement for crossborder lease, charter, or interchange of aircraft may give rise to a transfer agreement.

Article 83(bis) is thus calculated to tighten and ensure the more efficient operation of aircraft both in terms of safety and commercial expediency, by attaching responsibility to the state of the operator. However, the transfer of function and duties does not take effect automatically, but has to be given effect by bilateral agreement between the state of registry and the state of operation. Also, states need to ratify the Protocol implementing Article 83(bis) for the transfer to be effective. Lastly, the particular transfer of functions and duties must be registerted with ICAO. It is not surprising that aircraft financing experts have found that Article 83 (bis) does not have a practical effect on wet leasing, which require quick action, and seldom have the luxury of enough time to implement those requirements. They are more suited for long term lease situations.

Aircraft leasing is now a common practice in the airline industry and a rigid approach to leasing would indeed be counter-productive. But making the leasing agreements overtly flexible may result in impingement of safety. A balance therefore needs to be struck.

2. Regional Groupings and Substantial Ownership & Effective Control

Another issue is the current bilateral regulatory structure which calls for substantial ownership and effective control of airlines by nationals or companies of a designating State. This requirement is increasingly becoming impracticable to fulfil in various instances, for example, in the case of regional groupings.

Small states often find that regional cooperation can be highly efficient. These states can pool expertise in technical areas or, through joint investments, create air transport service companies or facilities, such as a hub airport, that are organized regionally. Central America, the Caribbean and West Africa are just a few good examples. In South America, regional branding has helped airlines establish improved service offers.

The bright thread that runs through all these regionalization efforts in the field of aviation is the principle of markets. Thus we have the African, European, and Latin American Civil Aviation Conferences. We have CARICOM in the Caribbean and COCESNA in Central America. In the Asia-Pacific, we have organisations such as APEC and ASEAN, as well as various narrower arrangements among Australia, New Zealand, Singapore, and respective neighbours, as well as the small states of the South Pacific. COMESA in Africa and MERCOSUR in Latin America are based on regional treaties of economic cooperation. Arab states have also organized plurilateral liberalisation of their aviation markets through the Arab Civil Aviation Commission (ACAC). Russia has taken the lead in an effort to maintain joint

standards among the states of the former Soviet Union by establishing an Interstate Aviation Committee (MAK).[195]

The ICAO Assembly at its 24th session adopted Resolution A24-12 which recognises the political reality of regional groupings of states into composite economic entities, forming a community of interests. The Assembly recognized that such a community of interest would require their airlines to be identified on a common basis with regard to their substantial ownership and effective control in the context of bilateral regulation of air traffic rights. The Assembly urged the contracting states to accept the designation of, and allow an airline substantially owned and effectively controlled by one or more developing state or states (or its nationals) belonging to a regional economic grouping, to exercise the route rights and other air transport rights of any developing state or states within the same grouping under mutually acceptable terms.

Thus financiers need to be aware of the multitude of possibilities of litigation for ownership and control of aircrafts financed by them and also the legal implications of aircraft leasing in the modern context.

Cross-border lease transactions in the airline industry have become customary and it involves parties from different legal jurisdictions and backgrounds. The aircraft leasing business has long since ceased to be just a Western European or American phenomenon. It caters for air carriers of almost every country and continent and this makes the legal work in this area extremely interesting and diversified.

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[195] See Erwin von den Steinen, *National Interest and International Aviation* (Alphen aan den Rijn: Kluwer Law International, 2006) .

Lessors adventuring in emerging economy countries are faced with different legal and practical issues than they would have been in leasing aircraft in the Western world. An overall knowledge of the legal system in the lessee's country is of the essence and will help in avoiding unpredicted problems.

CHAPTER FOUR

SECURITY INTERESTS AND RELATED ISSUES IN AIRCRAFT FINANCING

Any aircraft financier/investor venturing in a small and emerging economy would need to feel that his property interests are safeguarded. Legal systems differ throughout the world, whether based on civilian, common law or other jurisdictions. Financiers need to feel comfortable with the legal infrastructure on the whole, but especially as regards the protection of their title and security interests and their enforcement. The previous chapter touched on some of these interests and this present one continues on with these legal issues. In the next and last chapter, we shall look at scenarios that are not uncommon, as when the debtor/lessee defaults and the various remedies and procedures that may be open for recovery.

Aircraft by their very nature are highly mobile and may be constantly crossing political borders encountering national laws regarding the treatment of property rights and security interests in aircraft which vary across jurisdictions.[196] This in itself presents a great challenge in the financing of aircraft. An aircraft itself is not a single asset, but a series of valuable components whose marketability and value at any given time will depend upon their age and maintenance status. The value of the major aircraft components, like airframe, engines, landing gear, will fluctuate as these components are overhauled and replaced. For an older aircraft, the engines may be worth more than the airframe.[197]

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[196] Donald H. Bunker, *Canadian Aviation Finance Legislation* (Montreal: Institute and Centre of Air and Space Law, McGill University, 1989) at 766.
[197] See Edwards, *supra* note 178 at 141.

From a security perspective, the financier will need to ensure that it has taken security to the fullest extent over the major components and any manufacturer's warranties that relate to them. This desire to control the asset must always be balanced against the airline's need to operate it in as flexible a manner as possible in order to generate sufficient income to repay the financing. So, aircraft financing is a continuous struggle between two opposing requirements. In conflict is the need of the user to have as much operational freedom as possible, and the need of the financier to ensure that the equipment is preserved in a good condition and readily accessible should a default occur.[198]

Upon default or winding up, a secured creditor is in a privileged position of being amongst the first to be repaid whereas an unsecured creditor share only *pari passu* in the residue, if any. The taking of security in more than one form is normal and financing may be classified as secured lending or asset based financing, or a combination of both. Due to the legendary cyclicality and unprofitability of the airline industry, the focus in aircraft financing has shifted from reliance on corporate credit to reliance on asset value as collateral security. In addition, a financier may think of obtaining a right of recourse against a third party, for example, by taking a personal security from him in the form of a guarantee or an indemnity.

The Convention on International Interests in Mobile Equipment and the related Protocol on Matters Specific to Aircraft Equipment (the Cape Town Convention)[199]

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[198] Donald H. Bunker, *The Law of Aerospace Finance in Canada* (Montreal: Institute and Centre of Air and Space Law, McGill, 1988) at 135.

[199] *Convention on International Interests in Mobile Equipment*, 11 November 2001, ICAO Doc 9793 (entered into force 1 March 2004) [*Cape Town Convention*].

came into force on March 1, 2006. The primary purpose of the convention and protocol is to provide a method for the creation, registration, recognition, priority and enforcement of certain ownership, security and leasing interests in aircraft and aircraft engines. The Cape Town Convention creates an entirely new security interest known as an "international interest". An international interest will be created where a security agreement, conditional sale agreement, leasing agreement or contract for sale of an aircraft object is entered into in writing by a debtor/seller located in a Contracting State at the time of conclusion of the agreement or where the aircraft is registered (or agreed to be registered) in a Contracting State at that time.

It is therefore important now to consider in all new secured aircraft financing transactions, or where novating or amending existing transactions, whether the provisions of the Cape Town Convention are applicable. This subject is important, the moreso for small and emerging economies, and it is treated at length at the end of this chapter.

In this short study, it would have been impossible to describe the legal aspects of security interests and their effectiveness as they fare in the different legal systems in the small and emerging economies. Instead, these aspects will be discussed under the laws of the two major legal metropoles, London and New York. London boasts of a huge aviation insurance market which attracts aviation industries from around the world whether from civilian, common law or other jurisdictions and, most of these contracts would be drafted under English Law. Similarly, New York is the other hub for the aviation industry where all kinds of contracts are drafted. Thus, the discussion on security laws centres on UK and US security laws as these are the legal systems

that are most prevalent in the industry. Normally, Latin America uses the New York law whereas Africa and the Asia Pacific use UK law. Some parts of Africa use French law.

I. Security Interest

A security interest involves the grant of a right in an asset which the grantor owns or in which he has an interest. The very concept of security varies widely from jurisdiction to jurisdiction, depending as it does on concepts of ownership and possession which are inherently fluid. Each security system has certain peculiarities, advantages and disadvantages and often with irreconcilable solutions. One author found the US law to be 'the most comprehensible and unitary model', Canada 'the melting pot model', English law 'the compartmentalised but efficient model' and Germany 'the non-public notice-based model'.[200]

The most fundamental divide is between the formal and the functional approach. The legal systems of the UK and most of the common law countries (excluding North America and New Zealand) and the civil law family adhere to the formal approach. Throughout the US, the functional approach is adopted under Article 9 of the Uniform Commercial Code (UCC) and this article has successfully served the country for nearly half a century. Article 9 is increasingly used as a basis for legislation by Commonwealth jurisdictions including Canada under the Personal

[200] Tibor Tajdi, *Comparative Secured Transactions Law* (Budapest: Akademiai Kiado, 2002) at 21.

Property Security Acts, and New Zealand under its Personal Property Securities Act 1999 (as amended in 2001, in force since 2002).[201]

There have been extensive consultation and debates in the UK and a number of bodies have considered reform of the law along the lines of the comprehensive Article 9. The Law Commission in its last report on the matter[202] had proposed a number of reforms, but it is regretful that the Companies Act 2006 re-enacted the provisions of the 1985 Act without significant change, which would have mirrored both sides of the Atlantic in the same wavelength. In the meantime, reform in Australia is well advanced and on May 16, 2008, Australia released a draft Bill on Personal Property Securities. The harmonisation of the law on security interests is of the utmost importance, but its realisation is not in the near future. Legal advisers, however, feel comfortable with the existing precepts, and the advantages of familiarity are not easily forsaken.

A. Definition of a Security Interest

The term 'security interest' is defined in Article 1(37) of the UCC as meaning an interest in personal property that secures either the payment of money or the performance of an obligation and also the interest of a buyer of accounts.[203] There is no statutory definition of 'security interest' in England. According to Professor Sir Roy Goode's latest version, a security interest is a right given to one party in an asset

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[201] See Louise Gullifer, ed., *Goode on Legal Problems of Credit and Security* (London: Sweet & Maxwell, 2008) at 3-4;see also Tibor Tajdi, *Comparative Secured Transactions Law* (Budapest: Akademiai Kiado, 2002) .

[202] Law Commission Report 296 (2005), Company Security Interests. See also, Consultative Report no. 176, Company Security Interests.

[203] Gerard McCormack, *Secured Credit under English and American Law* (Cambridge: Cambridge University Press, 2004) at 1.

of another party to secure payment or performance by that other party or by a third party. A fixed, or specific, consensual security interest possesses the following characteristics:

(1) It is given by a debtor to a creditor in an asset;

(2) The right is by way of grant of an interest in the debtor's asset, not by way of reservation of title to the creditor;

(3) The grant is given for the purposes of securing an obligation;

(4) The asset is given in security only, not by way of outright transfer; and

(5) The agreement restricts the debtor's right to dispose of the asset free from the security interest.[204]

B. The Increasing Importance of Security Interests in Aircraft Financing

Security interests perform a vital role in more complex financing transactions like securitisation and structured finance. These transactions often involve the establishment of special purpose vehicles (SPVs) to raise funds from investors in the capital markets through the issue of tranched debt securities, with the payment obligations represented by those securities supported by the 'horizontal partitioning' of the issuing vehicle's assets. The assets are the subject of a security interest in favour of the investors and the benefit is shared by the investors in accordance with their differently ranked claims for principal and interest.

[204] Gullifer, *supra* note 201 at 11.

The role of security interests in mitigating credit risk, coupled with this ability to carve up assets for the benefit of investors and other creditors, has meant that the importance of security interests has remained undiminished, despite the fact that, in recent times, conventional secured lending has come under considerable competitive pressure from alternative forms of fundraising, in particular securitisation.

C. Classification of Security

The main types of security interests are mortgages, charges, pledges and liens. There are basic distinctions between possessory and non-possessory security interests and consensual and non-consensual. Mortgages, charges and equitable liens are non-possessory – the lender does not have possession of the items used as security- whereas the pledge and the common-law lien are possessory.[205] Forms of consensual security in English law are the mortgage, which is a security transfer of ownership, the pledge, which creates a limited legal interest by the delivery of possession, and the contractual lien. The latter differs from the pledge only in that the creditor's possession was acquired otherwise than for the purposes of security, as when goods are deposited for repair and the repairer then asserts a lien for unpaid repair charges.[206]

D. Fixed and Floating Security

Security is of two kinds, fixed and floating. Under a fixed charge, the asset is appropriated in satisfaction of the debt immediately or upon the debtor acquiring an interest in it. Under a floating charge, appropriation is deferred; the chargee's rights

[205] McCormack, *supra* note 203 at 40.
[206] Louise Gullifer, ed., *Goode on Legal Problems of Credit and Security* (London: Sweet & Maxwell, 2008) at 5.

attach to a shifting fund of assets, the debtor being left free to manage the fund in the ordinary course of business. In the event the debtor's management powers are brought to an end, the charge crystallises and fastens on the specific assets then comprised in the fund or subsequently acquired by the debtor.[207]

E. Personal Rights, Property Rights, and Insolvency

A personal right is a right which is enforceable against a person (natural or legal). An example of a personal right is a debt. In commercial practice, a personal right is only as good as one's ability to enforce it successfully against the person who owes it (the obligor). Crucially, if the obligor becomes insolvent, the value of a personal right in general is reduced and may become worthless. In contrast, a property right is a right which is enforceable directly against an asset. An example of property right is ownership; another one is mortgage.[208] Security rights in English law are rights *in rem*, that is, they are enforceable against third parties and not just *inter partes*.

II. Typical Security-based Aircraft Financing Instruments

A. The Chattel Mortgage

This is one of the most commonly used security instruments in aircraft financing. The chattel mortgage in the common law system is considered "an agreement vesting in a creditor the title to the chattel, defeasible by performance on the part of the debtor, the obligation for which is conveyed as security".[209] It is flexible, in that it may be used either for property presently owned, or after acquired property, and

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[207] *Ibid* at 7.

[208] Madeleine Yates & Gerald Montagu, *The Law of Global Custody* (Hayward Heath: Tottel Publishing, 2009) at 10.

[209] S.A. Bayitch, *Aircraft Mortgage in the Americas* (Coral Gables: University of Miami, 1960)

relevant in cases of spare and replacement parts. Also, if a lender is financing the acquisition of several aircraft by a single airline, it might be possible to take a joint mortgage over all the aircraft involved. The creation of a mortgage is discussed later in this chapter.

B. Conditional Sale Agreement

A conditional sale is one where the transfer of the title to the asset is dependent upon the performance of a condition. It is a sale, the binding effect of which, despite the asset has been delivered, is made dependent on due payment, or other performance, by the buyer, so that the title of ownership is not vested in him.[210] The use of title security provides the secured party with a powerful guarantee in the event of default. In many jurisdictions, this type of transaction may not be dealt with in any great detail in the law or may not be required to be registered. However, the conditional sale is a registrable interest under the Cape Town Convention.

C. Leases

There can be no better form of security than ownership. An equipment lease provides a high degree of security to a creditor, especially when we are dealing in highly mobile equipment like an aircraft. An owner's rights are paramount in most jurisdictions, if properly structured and perfected, subject to local creditors' rights.

Because the lessor will have retained ownership, it will not require any mortgage, but may seek additional security from the airline by requiring a security deposit (cash or letter of credit), a parent company guarantee, maintenance reserves, an assignment of

[210] Bunker, *International Aircraft Financing*, *supra* note 40 at 388.

insurances, some form of asset value support, repossession insurance, a remarketing agreement and an ability to procure the deregistration of the aircraft at the expiration or termination of the lease. When a combined loan/lease financing structure is used, it is customary for the lenders to require the lessor to assign all of its rights under the lease as security for the loan obligations.[211]

D. Liens

Liens can be classified as common law liens, equitable liens and statutory liens. The most common usage is in respect of a security interest which occurs due to the operation of law. As discussed above, contractual liens arise from the relevant agreement between the creditor and debtor, such as repairman's lien and storage liens,[212] whereas statutory liens can include a variety of types according to domestic law, such as government tax liens, government penalty liens and liens for wages.

The financier needs to be aware of certain rights over the aircraft which take preference over its ownership or mortgage. Such preferential rights and liens vary from jurisdiction to jurisdiction. In the UK the following rights take priority over the rights of an aircraft owner or mortgagee:

- statutory detention rights, including the rights of airports and air navigation authorities to detain and sell an aircraft for the payment of their charges; similar rights for customs and unpaid tax and, most significantly, the ability of the CAA to detain and sell aircraft in respect of all charges owed to

[211] Jeremy Edwards, "Aircraft" in Paul U Ali, ed., *Secured Finance Transactions: Key Assets and Emerging Markets* (London: Globe Law and Business, 2007) at 149.

[212] In the US, abundant state legislation is found providing the private or municipal aircraft repairmen with a lien for the contract price or reasonable value of his services. In UK, repairer's lien is the main type of non-statutory lien which is likely to be claimed against an aircraft.

Eurocontrol by the operator of that aircraft, not just in respect of the aircraft itself;

- contractual liens, common in maintenance and repair agreements, which authorises the maintenance shop to detain and sell an aircraft in the event that the maintenance charges are not paid when due;

- possessory liens arising as a result of labour performed on an aircraft which enhances that aircraft's value.[213]

Under the Cape Town Convention,[214] a Contracting State can make a declaration that certain rights (for example those of Eurocontrol and other air navigation services) will obtain priority without any registration requirement. The availability of such a published list will be of great assistance to aircraft financiers in better understanding potential preferred liens.

III. Creation of Aircraft Mortgage

When structuring cross-border security arrangements, it is necessary to consider not only the domestic and conflict of law rules of the lender, but also those of any other jurisdiction that may have an effect on the arrangement. As a matter of English law, the relevant law governing the creation of a security interest in property is the law of the country in which that property is situated at the time the mortgage is created (*lex situs*). In other countries, different rules may apply. For example, those countries

[213] Edwards, *supra* note 178 at 150.
[214] *Supra* note 199.

which have ratified the Geneva Convention[215] and, where it is still applicable to them, it requires security over aircraft to be constituted in accordance with the laws of the state of registration.[216]

From an English law perspective, it is primordial to determine the actual and deemed location of the aircraft at the time the mortgage will be created, and to verify what the requirements are of the local law in that jurisdiction for creating a mortgage over an aircraft. In many jurisdictions, there is no specific law relating to the creation of mortgages over aircraft. In some others, prohibitive expensive stamp duties for the creation or registration may be a deterrent. This has led to the development of a practice of purporting to create English law mortgages over aircraft located and registered in various jurisdictions.[217]

A mortgage or a charge is a security interest that is not dependent upon possession. It is for that reason that a mortgage or a charge would normally require registration, for example as in the UK, at the Companies Registry under the Companies Act or under the Bill of Sale Acts.[218] Perfection of a security interest is the step necessary to compete effectively with third parties, and in most cases, require the filing of a financing statement.[219]

Registration of Mortgage

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[215] Convention on the International Recognition of Rights in Aircraft, signed at Geneva on 19 June 1948 [The Geneva Convention].
[216] Edwards, s*upra* note 178 at 148.
[217] *Ibid*.
[218] Robin Parsons, "Fixed Charges" in Paul U Ali, ed., *Secured Finance Transactions: Key Assets and Emerging Markets* (London: Globe Law and Business, 2007) at 27.
[219] For example, UCC s. 9-303.

Registration of aircraft and security interests involve very complicated procedures as no two systems are alike. Mortgages of aircraft registered in the UK are registrable under the Mortgaging of Aircraft Order 1972 (SI 1971/1268). Under art 14:

- registered aircraft mortgages 'shall as between themselves have priority according to the times at which they were respectively entered in the Register'; and
- a registered aircraft mortgage has priority over any unregistered mortgage or charge of the aircraft.

An intending mortgagee can have a priority notice registered and, if the mortgage is registered within the priority period, its priority will relate back to the date the priority notice was registered.[220] Article 14(4)[221] makes it clear that even actual notice of a prior unregistered interest will not postpone a registered mortgagee. But registration of a mortgage does not give the mortgagee priority over possessory liens or statutory rights of detention of the aircraft.[222]

An aircraft mortgage created by an English company over any aircraft needs to be registered against the company itself in the Company House to perfect the validity of

[220] Mortgaging of Aircraft Order 1972, SI 1972/1268, art 14(2).
[221] Article 14(4) provides that: "The priorities provided for by the preceding provisions of this article shall have effect notwithstanding any express, implied or constructive notice affecting the mortagee".
[222] Mortgaging of Aircraft Order 1972, SI 1972/1268, art 14(5): the registration of a mortgage confers no priority "over any possessory lien in respect of work done on the aircraft (whether before or after the creation or registration of a mortgage) on the express or implied authority of any person lawfully entitled to possession of the aircraft under any Act of Parliament".

the mortgage. In addition, for UK registered aircraft, the mortgage will need to be registered with the Civil Aviation Authority to ensure its priority.[223]

Section 860(7) (h) of the Companies Act 2006 requires a registration of 'a charge on a ship or aircraft'. Although mortgages over aircraft are generally exempted from the requirement to register under the Bills of Sale Acts, when granted by companies they are nevertheless required to be registered under s 860(7)(h).

As mentioned above, mortgages of aircraft and also conditional sales and leases of them are subject to the Cape Town Convention and the supporting Protocol. It provides for the registration of such interest at an international registry, and for priorities to be dependent on the date of registration. The UK is expected to ratify it in the near future, this being dependent on adoption by the EC, which is imminent.

IV. Alternatives to Security

A. Guarantees and Indemnities

A creditor who wants to make a third party liable for the debtor's obligations has a choice of taking a guarantee or an indemnity. A suretyship guarantee is an undertaking to be answerable for the debt or other default of another.[224] There is a great deal of caselaw on this subject matter. In *Moschi v Lep Air Services*[225], Lord Diplock examined the nature of contracts of guarantee. He analysed a guarantee as being a promise by the guarantor to the creditor by which the guarantor accepts liability for the failure by the debtor to perform an obligation of any kind to the

[223] Edwards, *supra* note 178 at 148.
[224] Gullifer, *supra* note 201 at 345.
[225] [1973] AC 331.

creditor. The nature of the guarantor's obligation under the guarantee is to procure the performance of the debtor's obligations to the creditor. Another important aspect of this House of Lords decision is that their Lordships made it clear that the law of guarantees is part of the law of contract and that the guarantor's liability is ultimately a matter of construction of the particular contract concerned. Lord Diplock held[226] that, where there is a guarantee:

> it is open to the parties expressly to exclude or vary any of their mutual rights or obligations which would otherwise result ... Every case must depend upon the true construction of the actual words in which the promise is expressed.

In the UK, guarantees have always caused problems for creditors because many times the courts and the legislature have intervened to protect the guarantor. The main reason is that the guarantor will usually obtain no commensurate benefit for undertaking to be liable for another person's debt. These protections assume a number of different guises and some of them are statutory, like the developments of the UK Insolvency Act 1986, which has enabled guarantees and similar transactions to be set aside in certain cases of insolvency of the debtor. The courts have been very active in this area of the law and have caused many problems in the enforcement of guarantees which have been extended to indemnities and third party charges. If the guarantor is an individual, the most common instance of setting aside is as a result of the doctrine of undue influence. In the case of a company, the courts may find an

[226] [1973] AC 331 at 349.

absence of 'commercial benefit' as a result of the operation of the principles concerning directors' fiduciary duties. [227]

The most common types of security in financial transactions is a composite guarantee and debenture: a group of companies borrow money and secure it by cross-guarantees and charges over all their assets. Hence, most of the forms of guarantees used in financial transactions contract out of most of the restrictions on the rights of guarantors but it is very important for the financier to understand the underlying rules. It is vital, while drafting or negotiating a guarantee to understand the default rules in order to ensure that the guarantee does meet the requirements of the creditor and that clauses amended during negotiations do not inadvertently prevent the guarantee from being enforceable.[228]

B. Indemnities

An indemnity is an undertaking by one person to make good loss incurred by another. The indemnifier agrees to indemnify the creditor in respect of loss suffered by him as a result of a transaction with the debtor. The principal characteristic of a guarantee is that it imposes on the guarantor a secondary liability, ancillary to that of the debtor, whereas an indemnity creates a primary obligation. It is not secondary to, or dependent upon anyone else.

Both guarantees and indemnities have the usual requirements for the creation of a contract, such as the requirement for consideration. In the case of guarantees, there is an additional requirement: they are unenforceable unless evidenced in writing signed

[227] Richard Calnan, *Taking Security: Law and Practice* (Bristol: Jordan Publishing Ltd, 2006) at 388.
[228] *Ibid* at 389.

by or on behalf of the surety.[229] In practice, most guarantees given in financial transactions contain an indemnity, the purpose of which is to ensure that it is clear that the parties' intention is that the guarantor is liable to repay everything which the debtor has received from the creditor, even if the debtor itself is not liable to pay.[230] There exist numerous types of guarantees like unilateral guarantees, bilateral guarantees, continuing guarantees, limited guarantees.

The more advanced an Emerging Economy is, the greater the demand for credit and, correspondingly, the greater the pressure on legislatures and courts to find ways effectively to use non-possessory security interests.[231] The economic development under market conditions of the transitional economies of Eastern Europe, most economies in Africa, Latin America and quite a few in the Asia Pacific bloc will require vast financial means that must be raised largely by secured credits

V. Aircraft Securitisation

Securitisation is a financing technique in which the cash flow from an underlying pool of exposures is used to service at least two tranches of notes reflecting different degrees of risk. A key aspect of securitisation is that the creditworthiness of the notes is de-linked from the credit risk of the originator.[232] Aircraft securitisation is the process by which pools of leases and aircraft are packaged, underwritten, and

[229] Statute of Frauds 1677, s. 4.
[230] Calnan, *supra* note 227 at 393.
[231] See U Drobnig, "Secured Credit in International Insolvency Proceedings" (1998) 33 Tex Int'l L J 53 at 54. See also R. Goode, "Security in Cross-Border Transactions" (1998) 33 Tex Int'l L J
[232] Jan Job de Vries Robbe, *Securitization Law and Practice: In the Face of the Credit Crunch* (Alphen aan den Rijn: Kluwer Law International, 2008) at 3.

distributed to investors in the form of security instruments known as Enhanced Equipment Trust Certificates (EETCs) securitisation and portfolio securitisation.[233]

A. From ETCs to EETCs

Airline Equipment Trust Certificates (ETCs) began as an offshoot of the rolling stock ETCs in the railroad industry in US and Canada, but was for a longer period than in the railways and for larger amounts. ETCs differed from mortgage lien because the title was vested with the trustee rather than the company. The trustee would lease the equipment to the airline while selling the ETCs to the investors, using the lease payments to pay principal and interest on the certificates. The structure was favourable to investors because, from a legal standpoint, the airline did not own the equipment until the certificates were fully repaid. So, if the airline defaulted, it would be easy for the trustee to foreclose and repossess because the airline would have no legal title. A modified version of the ETC is the EETC which, rather than selling one type of certificate or bond, divides these into different categories, each of which has a different risk/reward profile in terms of security and access to lease rentals cash flows.

Within the portfolio securitisation, there are two main types which normally would be combined in a single transaction:

(i) receivable securitisation, where rentals and other revenues payable pursuant to leases are securitised; and

(ii) residual securitisation, which securitises the residual value of the aircraft.

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[233] Bunker, *International Aircraft Financing*, *supra* note 40 at 418.

B. Rating Agencies

Rating agencies play a pivotal role in securitisations. Their assessment of the credit risk associated with various tranches of notes is invariably conditional on investor participation in a transaction. The mandate of many investors is restricted to (for instance) debt instruments which carry a credit rating from one of the major three (Standard and Poor's, Moody's Investor Service and Fitch Ratings) at either the highest level (AAA or its equivalent) or at least investment grade (BBB+). The role of the rating agencies is to review the information provided on the notes by the transaction parties, and then provide an opinion on their creditworthiness, and as such, act as a conduit between originators and capital market investors. Rating agencies express an opinion only. Ratings are statements of opinion, not of fact, nor a recommendation to buy, hold or sell any securities. Rating agencies rely on the information provided to them, and, as a result, do not provide a guarantee as to the accuracy and completeness or fitness for any particular purpose.[234]

In the wake of the sub-prime and credit crises, rating agencies have faced intense scrutiny for failing to factor in the risks of securities. This may have happened due to the lack of proper means to assess the credit risk themselves, or out of complacency, or simply because the securities had become so complex. Investors have argued that the rating agencies are handsomely paid for their services, they were very much aware on the reliance placed on their ratings by groups of investors, and that the 'updating' of rating agencies methodology after the beginning of the crisis amounted

[234] Jan Job de Vries Robbe, *Securitization Law and Practice: In the Face of the Credit Crunch* (Alphen aan den Rijn: Kluwer Law International, 2008) at 45-46.

to an acknowledgement of their failure to encapsulate the risks of several products fully to begin with.

Aircraft securitisations are many and varied but the main advantages are:

(a) the risk is spread over a number of borrowers;

(b) the risk is spread over a number of geographical regions, and maybe, over a number of different airlines;

(c) the loan or asset is removed from the lessor's balance sheet;

(d) the larger the transaction, the lower its cost per unit;

(e) it plays an important role in the capital adequacy and risk weighting rules of banks.[235]

The following section looks at the Cape Town convention.

VI. The Cape Town Convention

The acquisition of aircraft requires funding from sources within capital markets across the globe and attaches many international characteristics to its transaction. Creditors have numerous concerns with regard to the protection of their interests and, a major one is, the absence of uniformity across jurisdictions in relation to secured transaction law. The legal structures of asset-based financing are largely tied to the national legal system, which has resulted in the establishment of legal interest in property, and default remedies of the creditor, differing from one State to the other. This has increased the uncertainty as to whether a creditor's interest can be

[235] Bunker, *International Aircraft Financing*, *supra* note 40 at 419.

upheld against third parties in foreign jurisdictions. Such uncertainty leads to an increase in interest charged and other forms of securities, which ultimately the small and emerging economy airline has to shoulder. Some emerging economies have adhered to the Convention which has, by now, totalised almost thirty ratifications globally. The Convention is expected to play a pivotal role in the international aircraft financing world, with its declared aim of introducing more transparency and predictability in aviation finance deals.

The Cape Town Convention and its Protocol, the Aircraft Protocol to the Convention on International Interests in Mobile Equipment on Matters Specific to Aircraft Equipment (the Protocol), are the product of close collaboration between two sponsoring organisations, the International Institute for the Unification of Private Law (UNIDROIT) and ICAO. Below are some of the highlights of the Cape Town Convention (The Convention)[236] which kept many international organisations very busy in its making, for more than a decade.[237] A thorough discussion of the Convention is outside the scope of this study but the main provisions will be discussed.

For small and emerging economies, the Convention seemed topical and the timely advent of the Cape Town regime, with its avowed objectives of aiding the airlines financially, while letting governments further disengage from subsidizing and providing fiscal safety nets for carriers, was seen as a blessing. But it is now uncertain

[236] The word "Convention" or "Cape Town Convention" refers to the combined provisions of the Convention and Protocol, unless required otherwise by the context.
[237] For a broad view of the Convention , see Professor Sir Roy Goode, *Official Commentary to Convention on International Interests in Mobile Equipment and Protocol Thereto on Matters Specific to Aircraft Equipment* (Rome: UNIDROIT, 2002) .

whether the Convention will realise the expectations of these different quarters and many criticisms have come up since. Many practitioners and scholars believe that the Convention may effectively and truly deliver its benefits to the aviation industry only if it receives worldwide acceptance.[238]

A. The Convention's Impact on Small and Emerging Economies

The Convention is expected to potentially allow emerging economy airlines access to secured debt on a commercial basis as well as to international capital markets by avoiding in whole or in part the conventional country-risk premium, and to give airlines increased and lower cost access to securitized global debt markets through enhanced debt ratings. In particular, the ability of emerging economy airlines to better access the secured debt markets is seen as a major direct benefit to these carriers, as well as to the countries in which they are based. A further, indirect source of benefit is seen to be the reduction or elimination of required sovereign debt guarantees covering airline debt in emerging market economies.

B. Latin America's Views and Africa's Expectations on the Convention

In their comments on the drafts of the Convention and the Protocol, the Latin American Association of Aeronautical and Space Law (ALADA) speculated that the adoption of the Convention might give cheaper access to financing to airlines of developing countries. Otherwise, in transactions where the country-risk has a direct impact higher interest rates prevail. Thus, they hoped for advantages stemming from

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[238]See B.J.H. Crans, "Analysing the Merits of the proposed UNIDROIT Convention on International Interests in Mobile Equipment and the Aircraft Equipment Protocol on the basis of a Fictional Scenario" (2000) 25 Air & Space L. ; Giulia Mauri, "The Cape Town Convention on Interests in Mobile Equipment as Applied to Aircraft: Are Lenders Better Off Under the Geneva Convention?" (2005):5 E.R.P.L. 641 .

potential cost reduction, for example, in legal and professional fees and lower interest rates. Cost normally varies depending on the market, efficiency in the use of legal resources, the complexity of legal structures and the lack of reliable information.[239]

Likewise, the African States took a common position and praised the usefulness of the establishment of "a uniform, commercially oriented and comprehensive international legal framework" relating to the creation, priority and enforcement of security and leasing interests in aircraft equipment.[240] They expected the Treaty to relatively reduce financial risks associated with financing and thus transfer the benefits to African carriers by way of reduced costs for aircraft financing. This international focal framework, they hoped, would reduce overall risk to the creditor and broaden the spectrum of financing alternatives available to African carriers.[241]

C. Objectives of the Cape Town Convention

The Convention follows a two-instrument approach where the basic Convention applies to all three types of equipment but does not come into force for any type of equipment until a Protocol has been entered into relating to that equipment. Article 6 of the Convention stipulates that the Convention and the Protocol are supposed to complement each other and should be construed as one document, but in case of inconsistencies between the two, the provisions of the Protocol shall override those of the Convention.

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[239] Acts and Proceedings. UNIDROIT ed., *Diplomatic Conference to Adopt a Mobile Equipment Convention and an Aircraft Protocol (Cape Town 2001)*. : UNIDROIT Rome 2006: 109. (DCME Doc. No. 8 17/10/01)

[240] *Ibid.* at 168. (DCME Doc. No. 25 19/10/01).

[241] *Ibid.* at 152. (DCME Doc. No. 17 17/10/01).

The main objectives of the Convention and its Protocols are:[242]

(a) to provide for the creation of an international interest which will be recognised in all Contracting States;

(b) to provide the creditor with a range of basic default remedies and, where there is evidence of default, a means of obtaining speedy interim relief pending final determination of its claim on the merits;

(c) to establish an electronic international register for the registration of international interests which will give notice of their existence to third parties and enable the creditor to preserve its priority against subsequently registered interests and against unregistered interests and the debtor's insolvency administrator;

(d) to ensure through the relevant Protocol that the particular needs of the industry sector concerned are met; and

(e) by these means to give intending creditors greater confidence in the decision to grant credit, enhance the credit rating of equipment receivables and reduce borrowing costs to the advantage of all interested parties.

In order to gain widespread approval, the Cape Town Convention provides for an opt-out system whereby Contracting States can decide whether, not to apply, or how to apply certain provisions. It was rightly feared that since the opt-out provisions

[242] Roy Goode, "The Cape Town Convention on Interests in Mobile Equipment: a Driving Force for International Asset-Based Financing" (2002):1 Unif. L. rev. 3

relate to the core of the Convention, its scope might be jeopardised. But some argued that it may also be a necessary evil to obtain a higher good.[243]

D. The International Registry

One of the fundamental provisions in the Convention is the creation of the International Registry where international interests in aircraft can be registered and made available to the public (perfection). The Registry is organized per asset and contains information on security and other interests pertaining to an asset. By contrast, under the Geneva Convention[244], security interests in aircraft are recorded in special registers kept in every Contracting State. Thus, lenders are obliged to check the register of each relevant State in order to determine whether a particular aircraft is subject to a security interest.

The International Registry is an object-specific registry (for example, registrations are entered and searched by criteria such as the manufacturer, model, and serial number of an aircraft object).[245] This is consistent with the object-specific Federal Aviation Administration (FAA) registry in the United States. But the International Registry differs from FAA conveyance registry, in which actual transactional documentation is filed for recordation. The International Registry is a fully electronic registry, more closely resembling the state filing offices under the U.C.C. Article 9 ''notice- filing'' system. A registration contains only information describing the aircraft object, the parties, and the nature of the transaction and is available online round the clock.

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[243] Giulia Mauri, "The Cape Town Convention on Interests in Mobile Equipment as Applied to Aircraft: Are Lenders Better Off Under the Geneva Convention?" (2005):5 E.R.P.L. 641

[244] *Supra* note 215.

[245] *Cape Town Convention*, *supra* note 199 art 18(1); 22(1), (3); Aircraft Equipment Protocol art VII.

The Convention also addresses the relationship of the International Registry to national registries under the Chicago Convention, such as the US FAA Registry in Oklahoma City. A Contracting State may declare ''designated entry points'' within the State as portals for the registration of international interests.[246]

The creation of an International Registry is seen as heralding greater predictability in international financing transactions. In verifying which interests have been created for the same asset, lenders are able to assess the priority of their interests: the first registered interest takes precedence over any other subsequently recorded interests as well as over unrecorded interests.

However, lenders should be aware that Contracting States can opt to give certain non-consensual and non-recordable national rights priority over recorded international interests by filing a declaration to this effect with the International Registry and indicating, in general or specific terms, which unrecorded rights take precedence. The possibility for the Contracting States to make a generic declaration leaves great room for uncertainty, since lenders will always need to verify which rights are covered by a declaration filed with the Registry.

E. Security Interest and Priority under the Convention

"Security interest" is used as a compendious term to describe, among others, mortgages, charges, pledges, hypothecations, liens... broadly a transaction whereby a debtor, in order to secure a debt owing to a creditor, grants the latter a property

[246] Aircraft Protocol art XIX.

interest in assets owned by the debtor which entitles the creditor to sell the assets if the debtor should fail to pay the creditor.[247]

An international interest under the Convention is autonomous and international in character.[248] It is created under the Convention and is independent of security devices under applicable law. The Convention's interpretive principles are specified in its preamble; it is to be interpreted taking into account its ''international character'' and the promotion of ''uniformity and predictability".[249] The Convention provides that the applicable law is the domestic law that is ''applicable by virtue of the rules of private international law in the forum state".[250]

F. Application of the Convention

The Convention applies if the debtor is situated in a Contracting State at the time an agreement is concluded.[251] There are four non-exclusive possibilities for determining a debtor's location for this purpose. A debtor is situated in the Contracting State in which the debtor: (1) ''is incorporated or formed,'' (2) ''has its registered office or statutory seat,'' (3) ''has its centre of administration,'' or (4) ''has its place of business'' (''principal place of business,'' if it has more than one, and if none, its habitual residence).[252] Any of these is enough to bring the transaction within the scope of the Convention. The fact that the creditor is situated in a non-Contracting

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[247] Philip R Wood, *Comparative Law of Security Interests and Title Finance*, 2d ed. (London: Sweet and Maxwell, 2007)
[248] *Ibid* at 516-17.
[249] *Cape Town Convention*, *supra* note 199 Preamble, art 5(1).
[250] *Ibid* art 5(3). The Convention in general does not supplant applicable law concerning issues such as a debtor's power to contract or contractual defences, liability in tort, the authority of a debtor's agents or officers, or a debtor's existence, organization and legal characteristics. In addition, the Convention does not override governmental regulations such as those governing safety.
[251] *Cape Town Convention*, *supra* note 199, art 3(1).
[252] *Ibid* art 4(1), (2).

State does not affect the applicability of the Convention.[253] So, the lender or the lessor need not be in a Contracting State, and the financier may be anywhere.

The Convention also applies to an airframe pertaining to an aircraft registered in an aircraft register of a Contracting State which is the state of registry. Where this registration is made pursuant to an agreement for registration of the aircraft it is deemed to have been effected at the time of the agreement.[254] Thus, this extension brings within the scope of the Convention airframes registered in a Contracting State even though the debtor is located outside a Contracting State, for example, an SPV acting as lessor. In some countries the registered owner does not have to be a national. This particular extension does not apply to aircraft engines.

In general the Convention applies whether or not the characteristics of a transaction, an object, or the parties have any ''international'' aspect. In effect, the type of equipment contemplated by the Convention is inherently ''international'' in character.

The Convention provides for protection of five different categories of interest:

(1)International interests 2) Prospective international interests (3) National interests (4)Non-consensual rights or interests arising under national law and given priority without registration (5) Registrable non-consensual rights or interests arising under national law.

[253] *Cape Town Convention, supra* note 199*,* art 3(2).
[254] *Ibid* art 3(3).

1. An International Interest

An international interest is created pursuant to an ''agreement,'' which is defined to include a ''security agreement,'' ''title reservation agreement,'' or ''leasing agreement.''[255] The formal requirements for creating an international interest closely resemble the requirements for attachment of a security interest under U.C.C. Article 9.[256] First, an agreement must be in ''writing,'' which is defined so as to include records other than traditional paper-and-ink records.[257] Second, the agreement must relate to an object as to ''which the chargor, conditional seller or lessor has power to dispose.''[258] Third, a security agreement must ''enable the secured obligations to be determined'' but it need not ''state a sum or maximum sum secured.''[259]

2. Application of Convention to a Contract of Sale

Under the Protocol, the Convention also applies to a contract of sale of an aircraft object.[260] The Protocol contains similar formal requirements for a contract of sale of an aircraft object.[261] The Convention builds on property interests (''real rights'') under applicable law. The Convention in general does not supplant the applicable law concerning issues such as a debtor's property rights or power to transfer property.

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[255] *Cape Town Convention, supra* note 199 art 1(a),(ii),(ll),(q). The applicable law determines the characterization of the agreement under which an international interest is created. See art 2(4).
[256] See UCC art 9-203 (a), (b).
[257] *Cape Town Convention, supra* note 199 art 7(a), 1(nn).
[258] *Ibid* art 7(b).
[259] *Ibid* art 7(c).
[260] See *Cape Town Convention, supra* note 199 art 41; Aircraft Protocol art III.
[261] Aircraft Protocol art V(1).

''An international interest in an object also extends to proceeds of that object,'' as is the case under U.C.C. Article 9.[262]

The applicable law decides whether the agreement is a security agreement, retention of title or lease.[263] Thus in the US, a security interest would normally include a retention of title agreement and a financing lease under UCC art 9. The applicable law is the domestic law applicable by virtue of the private international law of the forum state.[264] The applicable law could thus decide this issue of characterisation according to the governing law of the agreement, or the law of the location of the asset, or the law of the forum, depending on the legal issue concerned. In the Convention, characterisation does not in fact matter much.

It should be noted that many legal issues are not covered by the Convention which is not a comprehensive Code and the excluded matters are decided by the applicable law. The Convention does not decide tax status or the liability of the parties to third parties, for example, for accidents.[265]

3. Convention Overriding National Insolvency Laws

The Convention and Protocol purports to create a modern system for secured credit (including equipment leasing) in the realm of aircraft financing and, in so doing, they may reach even further. They contain provisions intended to override the insolvency laws that otherwise would be applicable under the laws of a state that becomes a

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[262] *Cape Town Convention, supra* note 199 art 2(5);1(w), defining proceeds; UCC art 9-203(f), 9-315(a),(2).
[263] See *Cape Town Convention, supra* note 199 art 2.
[264] *Ibid* art 5(3).
[265] See Philip R Wood, *Comparative Law of Security Interests and Title Finance*, 2d ed. (London: Sweet and Maxwell, 2007) .

party to the Convention and the Protocol. And these provisions were crafted precisely for the purpose of increasing the availability and reducing the cost of credit.[266]

G. Criticisms of the Convention

For small and emerging economies, the Cape Town Convention ought to have been a major achievement. There was high expectation that this international regime which sought to provide proper protection for security interests and title-retention rights would bring reduced risks for creditors, and consequently borrowing costs for debtors, and facilitate the extension of credit for the acquisition of aircraft objects, particularly in these economies whose existing legal regimes may not be sufficiently responsive to creditors' need for a feeling of security. At the same time the Convention tried to embody a range of safeguards for debtors to ensure that remedies are exercised in a "commercially reasonable" fashion, that a debtor against whom an order for interim relief is made is protected in the event that the creditor's claim is ultimately unsuccessful, and that debtors who are honouring their obligations are given a right of quiet possession against their creditors and third parties whose rights are subordinate to their own.

After four years of operation, it is now clear that the Cape Town regime is not the panacea it has been dreamed of to be. Several weaknesses have been identified in the Convention. High on the list is political interference, which could impede the transactions. Next is the default remedy, which may not be as speedy as it promises.

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[266] Charles W Mooney Jr, "Insolvency Law as Credit Enhancement: Insolvency-related Provisions of the Cape Town Convention and The Aicraft Equipment Protocol" (2004) 13 Int. Insolv. Rev. 27 at 28.

Then, the relevant documents, which are still as lengthy and detailed as they used to be before, and the unreliable priority ranking due to the exception of "non-consensual right". Duplication of work is another issue. Moreover, there are concerns on the vague definition of "default" (article 17) coupled with the unclear terminology of "commercially reasonable" (article 19) and the disunity among the Contracting States caused by the opt-in and opt-out systems.

Indeed, political interference in the debtor's jurisdiction may continue to undermine and nullify any advantages or certainties to the financing creditor and his interest, as promised by the Convention.[267] Standardizing domestic law governing secured transactions, minimizing the administrative procedures, and providing the expeditious default remedies for the purpose of the Convention do not guarantee that the aircraft financing transaction will not be impeded by political influences. For example, there is a possibility that the local authorities may be reluctant to deregister and export an aircraft to a foreign creditor when it has been registered as its national.[268] The entire aviation industry needs to come to terms to the fact that the Convention does not, and cannot, avoid political interference and corruption, as both are external factors that influence airline economic performance.[269] But, the Convention does strive to offer some protection, by assuring the creditor that local authorities in a Contracting State are obligated to make the remedies available within five working days. Similarly, the local court of the Contracting State, in cases where a

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[267] N. O'Keefe, "Aircraft Financing in the Chinese Market" (2005) Airline Fleet & Network Management at 26 .

[268] T.P. Rodrigues, "International Regulation of Interest in Aircraft: the Brazilian Reality and the UNIDROIT Proposal" (2000) 65:279 J. Air L. & Com. at 12.

[269] See Paul S. Dempsey & Laurence Gesell, *Airline Management: Strategies for the 21st Century* (Chandler, AZ: Coast Aire, 2006) at 83.

foreign court has granted relief, is also obligated to recognize the foreign judgment within five working days.

It is clear that the opt-in and opt-out option will only create more uncertainty in the creditor's position, as the creditor's international interest will vary depending on the option chosen by the Contracting State. Additionally, this concept merely leads to disunity among Contracting States which, arguably, is the converse of one of the primary aims of the Convention: harmonization of secured transaction laws governing aircraft financing. It results in uncertainty to the creditor whose international interest is not governed by the same standard, although its transaction is under the same Convention.

The Convention needs some more time in order to portray any true potential. Small and emerging economies may then be the top beneficiaries once the Convention is universally accepted. It is interesting to note that out of the 30 countries that have ratified the Convention, apart from the US, there is none of the dominating OECD countries. Curiously, Airbus production is in Europe but it is obvious that EU states are not keen to be part of the Convention. Ireland canvassed heavily for the International Registry to be set up there and, it would have looked odd if it didn't ratify. Luxemburg may have done so for its services industry. Otherwise, the few states who have ratified the Convention are from developing countries and they have been driven to do so much more due to the US financial incentives for ratification, than any enthusiastic support for the Convention. Also, the Convention's complexity may be a reason for the poor number of ratifications.

In this chapter, we have seen that security interests are an integral feature of aircraft financing transactions as they are of contemporary financing, generally, and we have looked at the various ways the financier/creditor can secure his interests in aircraft. In the next chapter, the issues in aircraft financing perspectives in small and emerging economies flow from the present one. We thus look at different scenarios in the insolvency of a debtor/lessee, the crucial topic of aircraft repossession and enforcement, and other remedies. This chapter is seen from the perspective of the financier, the investor, the lessor, or creditor.

CHAPTER FIVE

BANKRUPTCY ISSUES, AIRCRAFT REPOSSESSION AND ENFORCEMENT

The legal infrastructure in many emerging markets remains underdeveloped. This underdevelopment may be mitigated, in the principal finance documents, by simply choosing a governing law with which the parties are familiar and which provides a higher level of certainty and predictability. When it comes to security documents, this approach may not always be possible as security would normally be granted under the law of the jurisdiction where the assets in question are located. Also, a financier/investor unfamiliar with the relevant jurisdiction will seek comfort that the security, say an aircraft mortgage, is what it expects to be. But the security may look like a mortgage, yet, it may not necessarily behave like one. It is thus important to understand what level of protection the creditor will really receive from its security interest, rather than blindly concentrate on the name of the security interest, which could well be the result of an incorrect translation.

As long as contracts are performed to the satisfaction of the parties, there is no worry, as there is none in a perfect world. But, when venturing in small and emerging markets, it is highly recommended to consider the shortfalls and the scenarios that may arise out of the innumerable potential events of default.

I. Bankruptcy Issues

In the US, the purpose of Chapter 11 of the Bankruptcy Code is to provide a debtor with the legal protection necessary to give it the opportunity to reorganize, and thereby to provide creditors with going-concern value rather than the possibility of a

more meagre satisfaction of outstanding debts through liquidation.[270] Since going-concern value may be a lot more than the value of the business on a break-up basis, reorganisation proceedings are designed to keep the business alive so that additional value can be captured.[271]

A distinction needs to be drawn, when considering corporate rescue laws, between economic distress and financial distress. Economic distress implies that the business plan is not working, maybe due to some flaws in the airline's economic model. This airline is not a good candidate for reorganisation, unlike those in financial distress. Financial distress implies liquidity problems of some sort, where an airline cannot meet its current liabilities. But the two concepts seem to shade into one another.[272]

One needs to be aware that there have been ongoing debates about the value of reorganisation, as it has been argued that preserving dying airlines or putting them on a life support and resuscitation machine may do little to benefit the overall airline industry.[273] The case of Eastern Airlines in the early 1990's bears witness to this.[274] In the US, there are strong supporters for the complete elimination of the 'stay of proceedings' provisions which, it is argued, should reduce the waste resulting from the generally unsuccessful attempts of airlines trying to revitalize themselves when it is already too late.[275]

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[270] *Canadian Pacific Forest Products Ltd v JD Irving Ltd* (1995) 66 F 3d 1436 at 1442.
[271] Gerard McCormack, *Corporate Rescue - An Anglo American Perspective* (Northampton: Edward Elgar, 2008) at 5.
[272] See *ibid* at 9.
[273] See James J White, "Death and Resurrection of Secured Credit" (2004) 12 American Bankruptcy Institute Law Review 139.
[274] See Robert K Rasmussen, "The Efficiency of Chapter 11" (1991) 8 Bankr. Dev. J. 319 at 320-21.
[275] See Bunker, *International Aircraft Financing*, *supra* note 40 at 537-38.

Some emerging economies are trying hard to harmonise their laws based on modern bankruptcy laws in order to, seemingly, provide for added legal protection of domestic and foreign investors' interests. They are putting in place legal frameworks that facilitate the tailoring of security packages to enable large-scale secured financing. For example, Brazil has enacted a new Bankruptcy law (Federal Law 11,101 of February 9, 2005), introducing a new legal regime applicable to reorganisations (both judicial and out of court) and court liquidation. The striking feature of the court reorganisation remedy is the one providing for active participation of creditors. It is arguable whether aircraft financiers would be more comfortable now, and whether the new provisions, which are largely based on modern bankruptcy laws, including Chapter 11 of the US Bankruptcy Code, would give them the necessary confidence in investing.[276]

II. Repossession and Enforcement

A. Events of Default

Aircraft financing carries an inherent risk. In order to reduce this risk, the security provided must be readily realisable upon acceleration. Moreover, this security must be enforceable, and ideally, the enforcement procedure must be transparent and swift. The current state of the aviation market is leading to an increase in defaults, workouts and repossessions.[277] A default event may arise for many other reasons than the obvious non-payment of lease rentals or lapses in insurance, licences, authorisations or registrations. A third party may claim an unexpected lien;

[276] See Silvia Rajsfeld Fiszman & Jose Ribeiro do Prado Jr, "Brazil" in Paul U Ali, ed., *Secured Finance Transactions* (London: Globe Law and Business, 2007) at 213.
[277] Sophie Segal, "Repossessions and Remarketing after the Repo" (Dec 2008/Jan 2009) Airfinance Journal

unanticipated navigation charges may suddenly appear; an aircraft may become inadvertently involved in a fleet detention; interpretations of documentation may differ among jurisdictions – the possibilities are literally endless. No contract or repossession insurance policy can list all the contingencies.[278]

As for aircraft financing creditors, they have long faced problems with inadequate and unenforceable default remedies, since their businesses essentially depends on their ability to exercise a default remedy expeditiously in the case of non-payment. Moreover, when the debtor is in a developing country plagued by political instability, uncertain legal systems, and/or unreasonable administrative procedures, the creditors' rights to default remedies may be severely limited. It may take years for the court to settle a dispute, and even longer before the remedy is enacted.

B. Remedies Available to the Lessor

For aircraft owners, financiers and operators, there are many options available to them when the bills stop being paid. With the increasing complexity of cross-border deals and new laws in emerging economies, the aircraft recovery business remains a legal and logistical minefield. The main aim of any lessor must be to recover its aircraft on a voluntary basis, but a good knowledge of its enforcement rights is fundamental. There are remedies available under English Law to an aircraft lessor upon occurrence of a termination event under the relevant lease, and addresses the impact on these remedies of an airline going into administration.[279]

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[278] See generally Berend Crans & Ravi Nath, ed., *Aircraft Repossession and Enforcement* (Alphen aan den Rijn: Kluwer Law International, 2009) .

[279] Mark Western & Mark Bisset, "Aircraft Recovery: the Options for Lessors" (2001) 20:11 International Financial Law Review at 23.

There are five remedies available to a lessor upon default by the lessee:

a) the right to repossess the aircraft;

b) the right to sell the aircraft;

c) an action for debt under the covenant to pay the lease dues contained in the aircraft lease;

d) the right to appoint a receiver of the aircraft; and

e) an action for foreclosure.[280]

In the following sections, the first remedy is considered.

1. Repossession

Repossession is one of the two self help remedies that an English law lessor enjoys. The lessor can exercise this remedy without the need for a court sanction, unlike in many other jurisdictions where the lessor would be required to instigate insolvency proceedings before repossession. This may end up to be a vicious circle for the lessor as it triggers court protection for the airline.

However, the lessor needs to consider a number of issues beforehand. Firstly, it must have solid grounds for repossession, because, otherwise the damages for wrongful taking of possession may, especially in the airline industry, be very high. Thus, the timing of the notices of termination is of critical importance. On a practical level, it may have difficulty in finding a suitably qualified crew at that particular moment, to take the aircraft away. There may be additional problems, for example, gaining

[280] *Ibid.*

access to the aircraft, especially if the aircraft is with an unpaid maintenance contractor; spare engines, parts and technical records may not be located with the aircraft.

Also, without the cooperation of the airline, the lessor may struggle to get a certificate of airworthiness and effectively deregister the aircraft from its state of registry. The advice of a local counsel might be very helpful in ascertaining the effectiveness of a deregistration power of attorney, before attempting to use it. Other pitfalls may be that the lessee may have large unpaid debts accrued in respect of the aircraft (or the airline's fleet), and which the lessor may be forced to pay. These include navigation authority fees and airport charges. It has been mentioned in earlier chapters that many aviation authorities have the right to detain and sell aircraft for unpaid fees.

Further issues include the ownership of the engines. It may well be the property of a third party. Then, insurance needs to be taken into account. The lessor will need not only insurance cover for the aircraft, but also third party insurance, for example, in respect of environmental pollution or damage caused by the aircraft. So the range of issues that the lessor needs to consider, arising in connection with the repossession of aircraft or enforcement of security interests in an aircraft, can be endless.

2. Repossession during the Recovery

Aircraft financiers planning to repossess aircraft or expecting them returned should be prepared because, according to a recent research, it is expected that aircraft will be parked for between three months to over a year on average, and cost owners more

than $780,000 before they can earn new lease rentals. Research by IBA, a leading aviation consultancy, which has tracked every repossession since 1999, suggests that it typically takes 380 days to sell an aircraft that has been repossessed and an average of 127 days to re-lease it to another airline. In a down market like in the recent global crisis, it could take a lot longer.[281]

3. Experiencing the Repossession Scenario

In the perfect repossession scenario - and it does happen - the lessee calls up, admits to having problems and asks the aircraft's owner where they would like the aircraft to be delivered. But unfriendly repossessions come with more problems. The aircraft must be deregistered, the records gathered, the aircraft ferried to a storage facility and, in the worst cases, a cannibalized aircraft, which has been dismantled by a disgruntled airline, has to be reassembled.

Tony Whitty, CEO and adviser Cabot Aviation, declares that he has more worries over the aircraft maintenance records. This is his biggest concern because these records are always kept separate from the aircraft. Generally, according to Whitty, the engine records are kept in one part of the building, the airframe records in another and the airworthiness directives service bulletins and engineering orders are yet in another building. If the airline is hostile to the repossession, getting records can be a very difficult task. Then, the last resort, he says, is creativeness.[282]

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[281] Sophie Segal, "Repossessions and Remarketing after the Repo" (Dec 2008/Jan 2009) Airfinance Journal

[282] *Ibid*.

Each of these acts comes with its own problems. Lenders believe that because they have the power of attorney to deregister the aircraft, it would be a straightforward matter for them to get the aircraft deregistered. But, according to Nick Popovich, vice-president, Sage-Popovich, a US asset management firm, in most jurisdictions this may not be possible. Popovich admits having had particular problems in India, Mexico and Brazil.[283]

In the following section, a number of questions and case situations are figured out as occurring in small and emerging economies. Most leases terminate as contracted but some do not. Repossession is a reality and there are some crucial issues that an aircraft financier would need to be aware of before embarking on any transaction.

C. Practical Repossession Scenarios for Consideration in Small and Emerging Economies

Again, in this section, it is mostly the particular interests of the lessor venturing in small and emerging economies that are taken into account. But they are interesting from a lessee's point of view as well, in order for him to become familiar with the intricacies of the system, and not just because any lessee may one day dry or wet lease its own aircraft. Reasons for subleasing are in fact similar to those relating to wetleasing.

1. The Self-Help Remedy

Repossession of aircraft as a self-help are not allowed in most civil law countries. They do exist in some countries, for example, Kenya, Nigeria, India (permitted in

[283] *Ibid.*

only limited circumstances), Pakistan (after its accession to the Cape Town Convention), Singapore, Sri Lanka, Australia, Canada (subject to special provisions under bankruptcy laws), Ireland, Japan (maybe), The Netherlands, Paraguay (but may be difficult in practice), , and, of course England and Wales and The US. But no two countries are alike in the manner they treat the subject. In some of them, consent of the debtor/lessee is primordial, in others, it is different if the repossessor is a creditor under a mortgage or is a lessor. In some others, it depends upon the construction of the contract or the nature of the event of default.[284]

A prudent owner, lessor, financier, when considering a repossession scenario, need to be aware of the availability of self-help remedies and, if so, the detailed steps required and the practical aspects of taking possession with or without the help of the regulatory authorities or other Agencies. In many instances, prior to taking self-help, notices, intimations or permissions may be required, for example, customs, airport, or other regulatory authorities' clearance before taking possession and flying the equipment out of the jurisdiction. Significant time and costs may be involved in all these matters.[285]

In case there are risks on lessors, security interest holders, the crew or others attendant on a self-help, steps need to be taken to mitigate these risks. Also, in what circumstances may a lessee or other agency stop or delay a self help remedy. The possibility of a foreign crew flying the equipment out of the jurisdiction needs to be addressed and whether any special permission is required for this. The lessor may

[284] See generally Berend Crans & Ravi Nath, ed., *Aircraft Repossession and Enforcement* (Alphen aan den Rijn: Kluwer Law International, 2009) .
[285] *Ibid*.

think of opting for the aircraft to remain on the Jurisdiction's Aircraft Register. In case this is possible, it needs then to consider for how long it would be allowed and if there is any other special conditions or (tax) implications. Rent and other fees may be outstanding and in a self help remedy situation, the lessor would also want to ascertain whether steps can be taken for the recovery of same, and what would be the fees and expenses involved, if any. Last point worth mentioning, the lessor may wish to retain any asset of the lessee which may be on board, and so, the legal or other risk in doing this needs to be considered.[286]

2. Court Proceedings Consideration in Repossession Cases

In other jurisdictions where self-help remedy is not available, the lessor/creditor may have to institute court proceedings. There may be more than one kind of proceedings possible to repossess aircraft, such as summary proceedings, bankruptcy proceedings, arrest or application to a Government or regulatory agency, and so on and, it would be helpful to be able to assess each of these implications. The next question will then be what courts have jurisdiction. For example, proceedings may have to be filed at the registered office of the lessee. Time and costs for the different proceedings are also a matter of consideration. Furthermore, some courts require a bond or other security as a condition for making an order allowing repossession and export of the aircraft. In some repossession scenarios, the lessee/grantor may be a government owned operator and there is a need to ascertain to what extent they may claim

[286] *Ibid*.

immunity from suit, execution, attachment or other legal process or even delay the same.[287]

3. Interim Measures

During court proceedings, the lessor may wish to have the aircraft grounded. He needs to ascertain in what circumstances this may be allowed and whether the court would usually pass a conditional order. Interim orders for safety, preservation and protection of aircraft may be sought and what are the facts that need to be established for seeking this or other interim orders and the costs and time these usually entail. An interim order may be made absolute depending on whether other facts or circumstances need be proved or not. The minefield is endless.[288]

4. Selling the Aircraft

Once an interim order to ground the aircraft has been obtained, pending legal resolution of the court proceedings, there is a great risk of deterioration or even cannibalisation of the aircraft. Parking charges may also become intolerable. In such circumstances, it would be relevant to ascertain whether the court would admit a further application in order to sell the aircraft, and if so, upon what conditions. These procedures need documents to be filed in court and facts must be proved. So, what are these documents and facts in order to take possession and, where permitted, sell the aircraft and at what points in time. In case the claimant is a security holder the procedure may not be the same.[289]

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[287] *Ibid.*
[288] *Ibid.*
[289] *Ibid.*

5. Foreign Currency Implications

The lessor would also like to know whether a judgment may be rendered in foreign currency. The next question then is, whether there are restrictions, exchange control or otherwise which might inhibit the remittance of the decreed amount in hard currency. And in the affirmative, the lessor would need to be aware of the procedure to get this permission. Finally, once the remittances are obtained, taxes and duties may have to be paid on them.

6. Foreign Law

As has been discussed earlier in the chapters, leases and security documents may be governed by a foreign law. There is a need to ascertain whether that particular jurisdiction's courts would enforce a foreign law and if so, would there be the need for an expert witness' evidence to establish foreign law. Other similar considerations are, whether foreign judgments, decrees and orders, including interim orders recognized in the jurisdiction. In case the foreign judgment is not recognized, then one needs to ascertain whether a suit or proceedings be may filed, based on such foreign judgment.[290]

7. Precautions in Imminence of Lessee's Bankruptcy

Jurisdictions' rules vary in case of a bankruptcy of the lessee (or grantor). There is a need to ascertain the rights of the lessor or the security holder to detain, repossess and /or sell the aircraft. There are surely some precautions to be taken when a bankruptcy of the lessee (or borrower) is imminent. What are these precautions? And also, what preferential payments would rank above unsecured money claims.

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[290] *Ibid.*

8. Deregistration Powers of Attorney, Export Permit & General Issues

The lessor or security holder would wish to know to what extent a deregistration power of attorney (DPoA), issued by the lessee to him, is useful in enforcing his rights. And also whether the DPoA require consularization or notarization and to be stamped or filed with any regulatory authority. There may be consequences for non-filing and non-stamping on the efficacy and enforceability of a DPoA. A DPoA may further attract taxes, levies, duties. It may also be granted for an indefinite period and made irrevocable. All these questions need to be ascertained for any particular jurisdiction.

A lessee may have given a DPoA in advance. The lessor would also want to know whether this may be revoked and if so, in what circumstances. In case the lessee cooperates with the repossession, the time that it takes to deregister the aircraft. In some jurisdictions it may be possible to obtain an export license/permit in advance. How is the situation in this particular jurisdiction? Once a lease has been terminated or a security interest has been enforced the lessor would want to know whether there is any restriction on the sale of the aircraft in that particular jurisdiction.[291]

9. Rights & Security Interests Generally

It is important to investigate which international conventions that the particular country has signed and ratified. Relevant conventions are the 1933 Rome Convention on the Unification of Certain rules relating to the Precautionary Arrest of Aircraft, the 1985 Hague Convention on the Law applicable to Trusts and on their Recognition, the 1948 Geneva Convention or the Cape Town Convention. In case of

[291] *Ibid.*

the latter convention, if in the affirmative, on what date the country ratified the Convention and whether that country has made any declarations pursuant to any articles of the Convention.[292]

There are innumerable questions like these that the prudent owner, lessor, financier would wish to ascertain before entering into an agreement with a small and emerging economy carrier. One gets an idea now what a minefield this can be to a carefree investor/lessor. The emphasis is on the need to proceed with caution.

[292] *Ibid*.

CONCLUSION

This thesis does not pretend to be a comprehensive study on aircraft financing in small and emerging economies but it is hoped that it has answered some concerns and one can find material scattered elsewhere compiled here. The author has also discussed some concerns with practitioners and professionals in the aviation industry and any light that has been shed from these discussions are included in the chapters.

The thesis has tried to demonstrate that a safe and reliable airline service is essential for a small and emerging economy's development and survival. Some countries, like Ghana for example, are happy to depend on the well-known legacy carriers, but most others, for various reasons, prefer to have their own flag carriers. In order to compete against world class airlines with state of the art technology-driven aircraft, new aircraft needs to be acquired and financed. A case has been made for used aircraft that can be traded in Africa and Latin America, but the trend in the past ten years is showing that most new aircraft sales have actually been to emerging market economies.

An analysis of the different sources of finance and their modes of financing, the leasing of aircraft equipment along with their treatment for accounting and tax purposes, has been mapped in the middle chapters. Increasingly, non-traditional sources of finance, like manufacturer's support and ECA financing are coming to the forefront, though it must be acknowledged that the latter is fast becoming more of a traditional source. Islamic banking has shown its possibilities and limits but it must be counted upon as a new source of aircraft financing, just like the coming of the Chinese banks in this arena in 2009. But foreign investment in traditionally strategic

and politically sensitive sectors is raising significant concerns. Indeed, the increased prominence of sovereign wealth funds have been criticised for their lack of transparency and potential political intentions as the money is owned, and sometimes managed directly by governments (often in non-democratic states). But at a time when funds are desperately needed, as in the recent economic downturn, moral values seem to give way to pragmatism and no one seems really to pay attention as to the source of the funds.

An important issue in aircraft financing remains the cyclicality of the airline industry's earnings combined with the volatility of aircraft values which makes it hard for fleet planning managers. Aircraft is ordered many years before delivery and it is really difficult to predict the state of the aviation industry at the time of delivery. This depends, apart from the growth of the global economy, on many other external factors like fuel prices, terrorist threats, pandemics and the like. Also, not all economies may be hit in the same way, and recoveries are not at all alike across the board, as witnessed in the recent economic downturn. Leasing of aircraft is becoming prominent among the world's air carriers but not all airlines have the same lee-way in deciding on the type of lease that fits their business model best. A capital lease, with an option to purchase, is a better alternative when aircraft keep their values and also, in the long run, to increase equity. Operational leasing is a more flexible means to add capacity but can turn out to be terribly expensive with the maintenance and various insurance requirements. Just like wet leasing which may be good for some developing economies and for certain particular requirements, but it is one of the most expensive types of lease financing.

Financiers' and investors' concerns about their title and security interests have been addressed and the pitfalls they may get into when the bills stop being paid have also been thoroughly analysed in the closing chapter. The accession to the Cape Town Convention by small and emerging economies may help to close many loopholes that exist in their legal regimes, namely the self-help remedy, the absence of proper registration system for security interest in aircraft, and some other interim remedies, generally. As mentioned earlier, the Convention is not the panacea it has been propagated to be, but it can go a long way in harmonising the aircraft finance and security laws of different nations around the globe. It is not going to solve the problems relating to the credit deficiency of many developing countries when approaching an aircraft financing situation, but it is a good start.

A big concern for the Convention's success is political interference. But one needs to realise that the world economy, which has been referred to as a global village some time back, is increasingly becoming integrated. Small and emerging economies are aware of the harm that can be caused to their image and economy if they do not abide by their agreements and honour their international treaty and other obligations. Sanctions, embargoes and the like may isolate them from the rest of the world, and in the process, from the much needed FDI for their economic development. But the biggest question for Cape Town remains its adoption by the developed world. Apart from the US, Luxemburg and Ireland, no other dominant economy have found it an agenda important enough to be considered among their aviation industry's policies. Cape Town needs more worldwide acceptance for its true potential to be seen.

The study started with the premise that a common thread runs through small and emerging economies' economic development. It has been stated earlier that airlines in these countries fare differently depending on various factors and their business cultures and also on the treatment that their respective governments are prepared to give them. So, political interference can also play in favour of national airlines, instead of acting as a barrier. The case of Air Mauritius has been exemplified in chapter 3. The Mauritian government is well aware of its remoteness to its major markets and the importance of maintaining a sound and efficient air carrier. The top management at Air Mauritius are aware of this tiny country's economic ties to Europe, and so tries to keep the flag carrier's rules and business practice in line with the EU's Directives and Regulations concerning the aviation industry, although it is not obligated to do so. Just like this is done in many Latin American countries which try to keep their laws and practices aligned along those of the US.

It is believed that globalisation, liberalisation policies and the growing importance of ICTs which has helped in bringing the world closer as never before, will continue to put pressure on small and emerging countries to integrate even more into the international community and respect their international obligations. The Arab world is trying hard to vulgarise its Islamic banking system as a new source of finance. China appears to be opening itself to the world and is now treading on the path of the mightiest. These geopolitical trends cannot be ignored.

The dream of many small and emerging economy air carriers is to become another Singapore Airlines, Cathay Pacific or Emirates. Existing aircraft financing laws and practices may be remodelled to accommodate their needs. But they need to be

prepared for this and proper fiscal and legal incentives need to be identified in their aviation policies and granted. The more transparent an economy becomes, with sound financial practices and predictable behaviour, the better it will attract aircraft financiers and investors that can help it develop its airline industry. Trends found elsewhere will be replicated gradually and international air law treaties, current laws and practices which have worked elsewhere will find even better ground to be put to test.

BIBLIOGRAPHY

LEGISLATION

Mortgaging of Aircraft Order 1972, SI 1972/1268

Statute of Frauds, 1677

JURISPRUDENCE

Beecham Foods Ltd v. North Supplies (Edmonton) Ltd [1959] 1 W.L.R 643.

Ballet v. Mingay [1943] 1 K.B 281

Commercial Union Ins. Co. v. Pesante, 459 F.3d 34 (1st Cir. 2006).

Lang v. Brown (1898) 34 N.B.R. 492

Moschi v Lep Air Services [1973] AC 331.

INTERNATIONAL MATERIAL

Acts and Proceedings In: UNIDROIT, ed. *Diplomatic Conference to Adopt a Mobile Equipment Convention and and Aircraft Protocol (Cape Town 2001)*. : UNIDROIT Rome 2006: 109.

Convention on International Civil Aviation signed at Chicago, 7 December 1944. 15 U.N.T.S. 295, ICAO Doc 7300/7 (7th ed. 1997).

Convention on International Interests in Mobile Equipment, 11 November 2001, ICAO Doc 9793 (entered into force 1 March 2004).

International Air Services Transit Agreement, signed at Chicago on 7 December 1944.

International Air services Transport Agreement, signed at Chicago on 7 December 1944.

BOOKS

Ball, A. D. et al. *International Business: the Challenge of Global Competition*, 9th ed. (Irwin: McGraw-Hill, 2004).

Bayitch, S.A. *Aircraft Mortgage in the Americas* (Coral Gables: University of Miami, 1960).

Bunker, Donald H. *Canadian Aviation Finance Legislation* (Montreal: Institute and Centre of Air and Space Law, McGill University, 1989).

---. *International Aircraft Financing*, 1st ed. (Montreal: International Air Transport Association, 2005).

---. *The Law of Aerospace Finance in Canada* (Montreal: Institute and Centre of Air and Space Law, McGill, 1988).

Calnan, Richard. *Taking Security: Law and Practice* (Bristol: Jordan Publishing Ltd, 2006).

Clark, Paul. *Buying the Big Jets: Fleet Planning for Airlines*, 2nd ed. (Aldershot: Ashgate Publishing Ltd, 2007).

Crans, Berend & Ravi Nath, ed. *Aircraft Repossession and Enforcement* (Alphen aan den Rijn: Kluwer Law International, 2009).

Das, Dilip K. *Financial Globalization and the Emerging Market Economies* (London: Routledge, 2004).

Dempsey, Paul Stephen. *Public International Air Law* (Montreal: McGill University, Institute and Centre for Research in Air and Space Law, 2008).
Dempsey, Paul Stephen & Laurence E. Gesell. *Air Commerce and the Law*, (Chandler: Coast Aire Publications, 2004).
---. *Aviation and the Law*, 4th ed. (Chandler: Coast Aire Publications, 2005).
---. *Air Transportation: Foundations for the 21st Century*, 2nd ed. (Chandler: Coast Aire Publications, 2005).
---. *Airline Management: Strategies for the 21st Century*, 2nd ed. (Chandler: Coast Aire Publications, 2006).
Folsom, Ralph Haughwout et al. *International Business Transactions in a Nutshell*, 8th ed. (St Paul: West, 2009).
Graham, B. *Geography and Air Transport* (New York: John Wiley & Sons, 1995).
Gullifer, Louise. ed., *Goode on Legal Problems of Credit and Security* (London: Sweet & Maxwell, 2008).
Holloway, Stephen. *Straight and Level: Practical Airline Economics*, 3rd ed. (Aldershot: Ashgate, 2008).
Kane, R.M. *Air Transportation* (Dubuque, Iowa: Kendal/Hunt Publishing Company, 1998).
Lancaster, Brian P., Glenn M. Schultz & Frank J. Fabiozzi. *Structured Products and Related Credit Derivatives* (New Jersey: John Wiley & Sons, 2008).
McCormack, Gerard. *Secured Credit under English and American Law* (Cambridge: Cambridge University Press, 2004).
---. *Corporate Rescue - An Anglo American Perspective* (Northampton: Edward Elgar, 2008).
Morrell, Peter S. *Airline Finance*, 3rd ed. (Aldershot: Ashgate, 2007).
O'Connor, William E. *An Introduction to Airline Economics*, 5th ed. (Westport: Praeger, 1995).
Rhoades, Dawna L. *Evolution of International Aviation: Phoenix Rising* (Aldershot: Ashgate, 2003).
Robbe, Jan Job de Vries. *Securitization Law and Practice: In the Face of the Credit Crunch* (Alphen aan den Rijn: Kluwer Law International, 2008).
Shaw, Stephen. *Airline Marketing and Management*, 6th ed. (Aldershot: Ashgate, 2007).
Steinen, Erwin von den. *National Interest and International Aviation* (Alphen aan den Rijn: Kluwer Law International, 2006).
Tajdi, Tibor. *Comparative Secured Transactions Law* (Budapest: Akademiai Kiado, 2002).
Wood, Philip R. *Comparative Law of Security Interests and Title Finance*, 2d ed. (London: Sweet and Maxwell, 2007).
World Bank, *Globalization, Growth and Poverty* (New York: Oxford University Press, 2002).
Yates, Madeleine & Gerlald Montagu. *The Law of Global Custody* (Hayward Heath: Tottel Publishing, 2009).

ARTICLES (From Edited Books)

Arpey, Gerard J. "The Challenge of Airline Finance" in Darryl Jenkins, ed., *Handbook of Airline Economics* (New York: Aviation Week - McGraw Hill, 1995).

Boobyer., Chris. "UK Leasing" in Andrew Littlejohns & Stephen McGairl, ed., *Aircraft Financing, 3r ed.* (London: Euromoney Publications 1998).

Bouma, Richard. "Financing National Airlines in Developing Countries" in Andrew Littlejohns & Stephen McGairl, ed., *Aircraft Financing* (London: Euromoney Publications, 1998).

DuBose, Van. "Sources of Finance" in Andrew Littlejohns & Stephen McGairl, ed., *Aircraft Financing* (London: Euromoney Publications, 1998).

Edwards, Jeremy. "Aircraft" in Paul U Ali, ed., *Secured Finance Transactions: Key Assets and Emerging Markets* (London: Globe Law and Business, 2007).

Fiszman, Silvia Rajsfeld & Jose Ribeiro do Prado Jr. "Brazil" in Paul U Ali, ed., *Secured Finance Transactions* (London: Globe Law and Business, 2007)

Gillick, John E. "The Impact of Citizenship Considerations on Aviation Financing" in Gail F. Butler & Martin R. Keller, ed., *Handbook of Airline Finance* (New York: Aviation week, 1999).

Goode, Professor Sir Roy. *Official Commentary to Convention on International Interests in Mobile Equipment and Protocol Thereto on Matters Specific to Aircraft Equipment* (Rome: UNIDROIT, 2002).

Holden. K.J. "Industry's Financing Requirements approaching the 21st Century" in Andrew Littlejohns & Stephen McGairl, ed., *Aircraft Financing* (London: Euromoney Publications, 1998).

Irrgang, Michael E. & John-Paul Clarke. "Strategic Regionalization of Air Carriers in the Third World " in Gail F. Butler & Martin R. Keller, ed., *Handbook of Airline Strategy* (New York: Aviation Week, 2001).

Littlejohns, Andrew. "Legal Issues in Aircraft Finance" in Andrew Littlejohns & Stephen McGairl, ed., *Aircraft Financing* (London: Euromoney Publications, 1998).

Lock, Vic. "Review of the Leasing and Asset Finance Industry" in Chris Boobyer, ed., *Leasing and Asset Finance* (London: Euromoney Books, 2003).

Mulitz, Michael C. and Robert Kiesel. "Synthetic Lease Structures in the Aircraft Industry" in Nancy R. Little, ed., *Synthetic Lease Financing: Keeping Debt off the Balance Sheet* (Chicago: ABA, 2002).

Murphy, Robert. "Export Credit Agency Support" in Andrew Littlejohns & Stephen McGairl, ed., *Aircraft Financing* (London: Euromoney Publications, 1998).

Parsons, Robin. "Fixed Charges" in Paul U Ali, ed., *Secured Finance Transactions: Key Assets and Emerging Markets* (London: Globe Law and Business, 2007).

Phillips, Henry M. & Nancy R. Little. "Accounting Considerations" in Nancy R. Little, ed., *Synthetic Lease Financing: Keeping Debt Off the Balance Sheet* (Chicago: ABA, 2002).

Sayre, Stephan & Stephen Gee. "Commercial Bank Lending" in Andrew Littlejohns & Stephen McGairl, ed., *Aircraft Financing* (London: Euromoney Publications, 1998).

Sylla, R. "Emerging Markets in History: United States, Japan and Argentina" in R. Sato, ed., *Global Competition and Integration* (Boston: Kluwer Academic Publishers, 1999).

Volcker, P. "A perspective on financial crisis" in J.S Little & G. Olivei, ed., *Rethinking the International Monetary System* (Boston: The Federal Reserve Bank of Boston, 1999).

THESES AND REPORTS

Cohen, Jérôme. *The Challenge of Aircraft Financing and its Legal Implications* (LLM Thesis, McGill University Institute of Air and Space Law, 1996) [unpublished].

Ghonaim, Mahmoud. *The Legal Aspects of Aviation Finance in Developing Countries* (LLM Thesis, McGill University Institute of Air and Space Law, 1991) [unpublished].

Iglesias-Badillo Eduardo J. *International Recognition of Property Interests in Leased Aircraft: the New Unidroit Convention on Mobile Equipment* (LLM Thesis, McGill University Institute of Air and Space Law, 2000) [unpublished].

Krupski, Jan A. *Conflict of Laws in Aircraft Securitisation* (LLM Thesis, McGill University Institute of Air and Space Law, 1999) [unpublished].

Pompongsuk, Prasert. *International Aircraft Leasing : Impact on International Air Law Treaties* (LLM Thesis, McGill University Institute of Air and Space Law, 1998) [unpublished].

Rosales, Rex Kenneth. *Legal Aspects of Asset Based Aircraft Financing* (LLM Thesis, McGill University Institute of Air and Space Law, 1991) [unpublished].

Yan Wang. *Evolution of Aircraft Finance Law* (LLM Thesis, McGill University Institute of Air and Space Law, 2000) [unpublished].

Accounting for Leases (US), Financial Accounting Board, Statement of Financial Accounting Standards No. 13, (Norwalk: FASB, 1976),Original Pronouncements as amended, online: FASB http://www.fasb.org/pdf/fas13.pdf.

Boorman, Jack, *The Impact of the Financial Crisis on Emerging Market Economies* (Washington: Emerging Markets Forum, 2009).

Capital Allowances Manual (UK), HM Revenue and Custom, online: HM Revenue and Custom http://www.hmrc.gov.uk.

Caribbean Tourism Statistical Report 1999-2004: Caribbean Tourism Organisation, 2005).

Finance Leasing Manual (UK), HM Revenue and Custom, online: HM Revenue and Custom http://www.hmrc.gov.uk.

"Flying Smart, Thinking Big: Global Market Forecast 2009 - 2028" *Airbus*; (September 2009) online: airbus.com <http://www.airbus.com/en/corporate/gmf2009/>.

International Civil Aviation Organization (ICAO), *Annual Report of the Council 2006* (Montreal: ICAO, 2007).

International Civil Aviation Organization (ICAO), *Annual Report of the Council 2007* (Montreal: ICAO, 2008).

International Monetary Fund, *The Caribbean: Enhancing Economic Integration* (Washington: IMF, 2008).

International Monetary Fund, *Regional Economic Outloook: Asia and Pacific: Global Crisis: The Asian Context* (Washington: IMF, May 2009).

Sole, Juan. *Introducing Islamic Banks into Conventional Banking Systems* (Washington: International Monetary Fund, July 2007).

Law Commission Report 296 (2005), Company Security Interests.

"Long Term Market: Current Matket Outlook 2009 - 2028" *Boeing*; (11 June 2009) online: boeing.com <http://www.boeing.com/commercial/cmo//>.

OECD, *Latin American Economic Outlook 2008* by OECD, Development Centre: (Paris: OECD, 2007).

Statement of Standard Accounting Practice No. 21 – Accounting for Leases and hire Purchase Contracts (UK), Accounting Standard Board, August 1984, online: ASB http://www.frc.org.uk/asb/technical/standards/pub0391.html.

US Revenue Procedure 2001-28, 26 CFR 601 , Internal Revenue Service, Bulletin 2001-19, (7 May 2001)
"The Economic and Social Benefits of Air Transport" *Air Transport Action Group*; 2008, online: The Air Transport Group <http://www.atag.org/files/ATAG>.
UNCITRAL. *Legal Guide on International Countertrade Transactions* (New York: United Nations, 1993).

JOURNAL ARTICLES AND NEWSPAPERS

Anming Zhang & Yimin Zhang, Tae Hoon Oum. "Optimal Demand for Operating Lease of Aircraft" (2000) 34:1 Transportation Research.
Anon. "An expert's perspective on aircraft orders: John Plueger, ILFC" (March 2008) Airfinance Journal.
---. "Hazy's Clear Outlook" (March 2008):308 Airfinance Journal 18.
---. "Islamic Financing Top Scholar Hails Boom" *Financial Times* (2 June 2006), 1.
---. "Managing the Airfinance Gap" (February 2009) Airfinance Journal.
Bayitch, S.A. "Aircraft Mortgage - a Study in Comparative Aviation Law of the Western Hemisphere " (1958) U. Miami L. Rev. 152 at 153.
Brenner, Melvin. "Airline Deregulation: A Case Study in Public Policy Failure" (1988) 16 Transportation Law Journal 189.
Crans, B.J.H. "Analysing the Merits of the proposed UNIDROIT Convention on International Interests in Mobile Equipment and the Aircraft Equipment Protocol on the basis of a Fictional Scenario" (2000) 25 Air & Space L.
Cuming, R.C.C. "The Draft UNIDROIT Convention in International Interests in Mobile Equipment" (1998) 30 UCC J. 365.
Drobnig, U. "Secured Credit in International Insolvency Proceedings" (1998) 33 Tex Int'l L J.
Ehigiator, Kenneth. "Nigeria Close to Attainment of FAA Category One" *The Vanguard (Nigeria)*; August 17, 2009
Endres, Gunter. "Surrogate Supply" (June 26, 2006) Airline Business.
Foster, Nicholas H. D. "Islamic Finance Law as an Emergent Legal System" (2007) 21 Arab Law Quartely 170.
Francis, Diane. "Wall Street turned into Las Vegas" *The Gazette*; (23 June 2009), online: montrealgazette.com.
Goode, R. "Security in Cross-Border Transactions" (1998) 33 Tex Int'l L J.
Jobst, Andreas A. "Derivatives in Islamic Finance" (2007) 15:1 Islamic Economic Studies.
Kaminski-Morrow, David. "BA Looks at Wet-leases and Temporary Crews to Beat Strike" (Jan 18, 2010) Air Transport Intelligence News
Kelly, Douglas B. "Forecasting Aircraft Values: an Appraiser's Perspective" (2008) Airfinance Annual 24.
Luna, JoAnn de. "BA Closes Milestone Sale/leaseback in China" (Dec 2009) Airfinance Journal.
Lowenfeld, A. "A New takeoff for International Air Transport" (1975) 54 Foreign Affairs.
Mann, Elizabeth D. "Aviation Finance: An Overview" (2009) 15:1 Journal of Structured Finance 109.
Margo, Rod D. "Aspects of Insurance in Aviation Finance" (1996) 62 J. Air L. & Com.
Mauri, Giulia. "The Cape Town Convention on Interests in Mobile Equipment as Applied to Aircraft: Are Lenders Better Off Under the Geneva Convention?" (2005):5 E.R.P.L. 641.

Maynard, Micheline. "Farnborough Air Show: The Wild Green Yonder" *New York Times* (July 17, 2008).
Mooney, Charles W Jr. "Insolvency Law as Credit Enhancement: Insolvency-related Provisions of the Cape Town Convention and The Aicraft Equipment Protocol" (2004) 13 Int. Insolv. Rev.
Morrell, David Warnock-Smith & Peter. "Air Transport Liberalisation and Traffic Growth in Tourism-dependent Economies: A case History of some US-Caribbean Markets" (2008) 14:2 Journal of Air Transportation 82.
Moss, B. "Political Risk Insurance" Airfinance Annual (1993/94).
O'Keefe, N. "Aircraft Financing in the Chinese Market" (2005) Airline Fleet & Network Management at 26.
Pulvino, T. "Do Assets Fire Sales Exist? An Empirical Investigation of Commercial Aircraft Transactions" (1998) 53:2 Journal of Finance 939.
Rasmussen, Robert K. "The Efficiency of Chapter 11" (1991) 8 Bankr. Dev. J.
Rice, Michael D. "Current Issues in Aircraft Finance", *Journal of Air Law and Commerce* 56 (Summer 1991): 1032
Rodrigues, T.P. "International Regulation of Interest in Aircraft: the Brazilian Reality and the UNIDROIT Proposal" (2000) 65:279 J. Air L. & Com
Rosa, Angelo Luigi. "Harmonizing Risk and Religion: The Utility of *Shari'a*-Compliant Transaction Structuring in Commercial Aircraft Finance" (2004) 13:1 Minn. J. Global Trade 35.
Roy Goode. "The Cape Town Convention on Interests in Mobile Equipment: a Driving Force for International Asset-Based Financing" (2002):1 Unif. L. rev. 3.
Segal, Sophie. "Repossessions and Remarketing after the Repo" (Dec 2008/Jan 2009) Airfinance Journal.
Shadare, Wole & Chika Ezeokoli. "Kicks over N100 billion Capital Flight through Aviation" *Guardian Newspaper (Nigeria)*; August 13, 2009.
Sridi, Nicolas. "China Airbus, too many Dads" *Liberation* (29 June 2009).
Thaine, Colin. "Role of the Maufacturer in Aircraft Financing: Asset Value Support - I" (1989) 17 Int'l Bus. Law. 212.
Tretheway, Michael & Doris Mak. "Emerging Tourism Markets: Ageing and Developing Economies" (2006) 12:1 Journal of Air Transport and Management.
Western, Mark & Mark Bisset. "Aircraft Recovery: the Options for Lessors" (2001) 20:11 International Financial Law Review.
White, James J. "Death and Resurrection of Secured Credit" (2004) 12 American Bankruptcy Institute Law Review
Whyte, Alasdair. "China Will Help Funding Gap" (2009) AirFinance Journal.
Zamir, Iqbal "Islamic Financial Systems", (June 1997) Finance and Development.
"Aircraft Values Experience Appreciable Fall" *Aircraft Value News* (May 11, 2009).

INTERNET ARTICLES AND WEBSITES

Belson, Ken. "Port Authority Now Accepts Dubai Deal, Easing Debate *New York Times*; (17 February 2007), online: <http://www.nytimes.com/2007/02/17/nyregion/17dubai.html>.
Chatterjee, Jean Yoon and Neil. "Airbus says 2009 tough year for orders" *Reuters News*; 8 June 2009: online Reuters http://www.reuters.com/article/newsOne/idUSTRE5571YQ20090608.

Egan, Louise. "IMF, World Bank say Recovery process still Fragile" *Reuter News*; (8 June 2009), online: Reuter <http://www.reuters.com/article/companyNewsAndPR/idUSN0832017020090608>.

Flottau, Adrian Schofield & Jens. "IATA's Industry Outlook Takes a Turn for the Worse" *Aviation Week*; (14 June 2009), online: <http://www.aviationweek.com/aw/generic/story_generic.jsp?channel=awst&id=news/aw061509p1.xml&headline=IATAs+Industry+Outlook+Takes+a+Turn+for+the+Worse>.

Gavazza, Alessandro. "Leasing and Secondary Markets: Theory and Evidence from Commercial Aircraft" (February 2009), online: http://pages.stern.nyu.edu/~agavazza/.

"Global Geopolitical Trends 2009 - 2010" *Boeing*; (2009), online: <http://www.boeing.com/commercial/geopolitical_trends.html>.

Jao. "China Tourism hits $170 bn in 2008" *China View*; (29 January 2009), online: China View <http://news.xinhuanet.com/english/2009-01/29/content_10733178.htm>.

Ray, Andrea Rothman & Susanna. "Airbus, Boeing Duel to Save Jet Orders as Airlines Park Planes" *Bloomberg.com*; (11 June 2009) online: Bloomberg News <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aXMajoxkj.CQ>.

AFP News; 9 June 2009: online AFP http://www.afp.com/afpcom/en.

Anon. "Jet Airways Converts Wet Lease to Turkish Airlines", *Business Line*, 16 August 2009, online: The Hindu Business line <http://www.thehindubusinessline.com/blnus/09161405.htm>

Bloomberg News, "Jet Fuel Costs Push Midwest Air to End Flights to 11 Cities" *New York Times* (July 21, 2008).

"G8 supports Global Sectoral Approach to Aviation" *Centre for Asia Pacific Aviation*; (10 July 2009), online: Centre for Asia Pacific Aviation <http://www.centreforaviation.com/news/rar/2009/07/10/g8-supports-global-sectoral-approach-for-aviation/page1>.

"Loss Forecast Increases to US$9 Billion" *IATA Press Releases & Briefs*; 8 June 2009 online: IATA <www.iata.org/pressroom/pr/2008-09-03-01.htm>.

"Worldwide Air Traffic Recovering" *Centre for Asia Pacific Aviation*; (18 May 2010): online, Centre for Asia Pacific Aviation <http://www.centreforaviation.com/news/2010/05/18/worldwide-premium-air-traffic-recovering-but-still-15-below-pre-recession-levels/page1?utm_source=Aviation+Analyst&utm_campaign=c6b8f50f9a-Aviation_Analyst_20_May_20105_20_2010&utm_medium=email>

The Islamic Bank of Britain plc. See http://www.islamic-bank.com.

OTHER MATERIAL

Lessard, Mark. *Airline and Business Lecture Notes "Aircraft Acquisition, Finance & Leasing"*: (Institute of Air and Space Law, McGill University, 19 March 2010).