Business Aircraft – Gaining Altitude

FROM RECESSION TO RECOVERY: AIRCRAFT TRANSACTIONS BUILD MOMENTUM DESPITE INDUSTRY CHALLENGES

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Mr. Mayer focuses on buying, selling, financing, and other transactions pertaining to a wide range of equipment, with special attention on business aircraft. He also devotes substantial efforts on energy, technology, manufacturing equipment, trucks and trailers, and "yellow iron;" and syndications, vendor programs and portfolio/equipment purchase and sale transactions.

Mr. Mayer has regularly written articles and spoken frequently at conferences since 2001 when his book, *Business Leasing for Dummies*, was published. He is the founder of an online newsletter, *Business Leasing and Finance News*, which has been published for more than a decade and read in 33 countries as of 2011 (originally titled *Business Leasing News*).

He wrote the 2005 Article of the Year, titled "True Leases Under Attack: Lessors Face Persistent Challenges to True Lease Transactions," published in a special Fall 2005 issue of the *Journal of Equipment Lease Financing*. During this last decade, he has written or edited an estimated 160 articles published in the U.S., Canada, and the United Kingdom.

Mr. Mayer is a member of the National Aircraft Finance Association, the National Business Aviation Association, the Equipment Leasing and Finance Association, the Dallas Bar Association, and the American Bar Association.

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Introduction: Study Purpose and Methodology

Purpose of This Study

The purpose of this business aircraft study is to reveal and analyze the collective thinking of business aircraft lenders, lessors, and investors (financiers) about the future of their industry in 2013 through 2016. It aims to identify the most significant global challenges, opportunities, threats, and trends that will affect business aviation during that period. In doing so, this study discusses the worries, skepticism, and optimism of financiers. It reflects deeply on the trauma they have endured since the great recession and the significant influence of the recession on their organizations today. Fundamentally, the goal of this study is to provide the reader with content so he or she feels the pulse and the trends in the business aviation market in 2013 through 2016. If this study evokes conversation by readers about the future, its ultimate goal will have been achieved.

Study Methodology

The researcher developed original surveys for this study (surveys) designed to achieve a balanced assessment of study topics. The Equipment Leasing & Finance Foundation (Foundation) and National Business Aviation Association (NBAA) distributed surveys to thousands of business aircraft financiers, borrowers, lessees, flight departments, original equipment manufacturers (OEMs), end users, owners and operators (customers), and various consultants, appraisers, analysts, and brokers (service providers). Most questions – structured from a strategic, industry, legal or business perspective – focused on business aircraft purchase, sale, lending, leasing, renting, investing, and sales transactions. Approximately 80 customers (referred to as customer survey respondents), financiers (financier survey respondents) and service providers (service provider respondents) returned surveys during a three-week open period starting in mid-August 2012 and ending in the first week of September 2012. All survey respondents, who will be anonymous, have more than 10 years of relevant experience starting before and continuing through the recession.

During a period from mid-August 2012 through the end of November 2012, the researcher conducted interviews/discussions on a confidential basis with a specific cross section of senior executives and industry leaders. All interviewees had at least 10 years of active transactional, organizational, or operations experience, including financiers (financier interview respondents), customers (customer interview respondents) and service providers (service provider interview respondents).

Using the respective survey questions as a basis for interviews, the researcher engaged in more than 20 hours of frank and open dialogue with more than 26 respondents (interview respondents). This approach produced corresponding and corroborating information and insights from survey respondents and interview respondents. The interviews also greatly enriched the study content.

Forward-Looking Statements and Disclaimers

This study includes forward-looking statements. Forward-looking statements generally can be identified by the use of terminology such as “may,” “will,” “expect,” “intend,” “anticipate,” “plan,” “foresee,” “believe,” “suggest,” “indicate” or “continue”; as well as the negative of these terms, variations of them, or similar terminology. By their nature, forward-looking statements require the researcher to make assumptions and are subject to important known and unknown risks and uncertainties, which may cause the actual results in future periods to differ materially from forecasted results.

While the researcher considers his assumptions to be reasonable and appropriate based on information currently available, there is a risk that the assumptions may not be accurate. Certain factors that could cause actual results to differ materially from those anticipated in the forward-looking statements include risks associated with general economic conditions, risks associated with the business environment, financing risks (such as risks related to liquidity and access to capital markets, certain country risk, financing support provided for the benefit of certain customers, and reliance on government support), and market risks (such as risks related to foreign currency fluctuations, changing interest rates, decreases in residual value, and increases in commodity prices).

This study offers "best practices" and other suggested actions to consider when engaging in business aircraft transactions and related matters discussed in this study. None of these best practices or related suggestions or actions should be construed as legal, business or other advice. Consultation with knowledgeable advisors familiar with the reader's particular situation or transaction is necessary and appropriate.

This study includes endnotes with extensive research material available through Internet links. The researcher has endeavored to provide links with available resources that he believes enhances the value and utility of this study. The reader should ensure that the linked information is appropriate, accurate and current for his or her purposes and not rely solely on the linked sites without careful consideration and verification of the sources.

Calculations, tables and figures supply data, historical background and other information that may vary when provided by different experts, associations or government agencies due to, among other things, varied sources, timing and calculations pertaining to the data. The study reflects some of those differences on the same or related topics. For purposes of any using such information contained in this study, the reader should update all such data, calculations, historical background and other information, as appropriate.

The opinions expressed in this study are solely those of the researcher and do not represent any assurance of future events, occurrences or other outcomes during the study period – 2013 through 2016 – or thereafter. This study relies on data and information from third parties, the accuracy and completeness of which must be judged by the reader.

Executive Summary

Financiers express cautious optimism about business aviation financing in 2013 through 2016. At the same time, they worry about the challenges before them that may derail recovery from the great recession that began in 2007.

What will the future hold for lessors, lenders, and investors? Will more customers come off the sidelines soon? If they do, will they pay cash for aircraft or elect to finance them? If they do finance, will they ask their own bank first or will they seek financing from other sources that do not readily appear as top competitors for business today? Are lessors out of the business because of likely accounting changes by the Financial Accounting Standards Board (FASB) and International Accounting Standards Board (IASB) or possible changes in federal tax policy?

This study will answer these questions and others from the unique view of financiers and customers. It considers the issues affecting customers' desire to return to the market and to fulfill a significant pent-up demand to replace their aircraft. For the first time, financiers and customers share inherently confidential, competitive, and proprietary material with the researcher – information that forms the backbone of this study.

Study Goals

Using surveys and interviews, data and forecasts from top industry analysts, this study has the following goals:

1. To examine what financiers have collectively experienced and learned, or may have failed to learn, since the start of the recession;
2. To analyze the collective thinking of financiers, through its findings and discussion, on specific issues such as financing product mix in the future, corporate policymaking, accounting, economic, tax, regulatory, international, and legal issues affecting business aviation generally and business aircraft financing transactions specifically;
3. To capture the collective insights of industry business leaders about the future of aircraft financing in 2013 through 2016; and
4. To propose best practices in various aspects of financing transactions.

The business aviation industry widely views the years 2003 to 2007 as a boom time. However, much has changed in business aircraft financing since the recession and 2008 financial crisis. Financiers have seen a permanent shift away from the prerecession market, which was marked by a frenzy of buying, selling, and financing built on a foundation of rising aircraft values.

Financiers witnessed or experienced firsthand the changes by value of smaller and large business aircraft. This phenomenon has continued since the recession and reverberates in the business aircraft transactions today. Specifically, smaller aircraft (generally under super-midsize) with a new-build value of less than $25 million dropped 56.4% (by value) between 2008 and 2011[1] (bottom-half jets). Conversely, the more expensive, new-build aircraft exceeding $25 million (top-half jets) remained relatively stable. Even the most disciplined and conservative financiers, customers, and service providers were surprised. This study discusses their collective views and whether this change is here to stay.

A Flight to Safety

This phenomenon partially explains why more than a majority of financier survey respondents have taken a flight to safety in expressing a single-minded focus for 2013 through 2016 on financing young top-half jets. Many of those respondents say they will refuse to finance the bottom-half jets or any aircraft more than 10 years old, but they realize that competition exerts pressure to do otherwise. Most financiers say that, despite this top-half jets financing strategy, customers can find financing for all segments of business aircraft. The study discusses what products and types of financiers that customers will prefer in 2013 through 2016 as well as where traditional financiers will face new competition.

Residual value concerns hold such a high degree of interest that approximately 86% of financier interview respondents say that stabilization of new and preowned aircraft values of all aircraft sizes is a "top five" factor to "facilitate significant growth of business aviation purchase and financing transactions" in 2013 through 2016. The shifts in strategy provide

clear evidence that residual/collateral values will, next to credit analysis, be the most important pricing element in financing transactions in 2013 through 2016.

Changing Global Markets

As U.S. financiers move away from the recession, they generally appreciate that the U.S. dominates the business aircraft market with 60% of the world's business aircraft fleet. The U.S., Canada, and Mexico provide the home base for 70% of the world's fleet. But as the global economy shifts in the next few years, interview respondents (original equipment manufacturers, analysts, and consultants) agree that international transactions will offer valuable opportunities to U.S.-based financiers in 2013 through 2016. However, U.S.-based financiers generally do not, and for the most part will not, venture beyond U.S. borders to fund international transactions.

Leading-Edge Issues

This study examines other leading-edge issues with implications in 2013 through 2016. For example, a cross section of respondents worry that the forthcoming FAA refinement of the noncitizen trust rules (i.e., a "clarification") will lock out multinational companies and other noncitizens from registering with the Federal Aviation Administration (FAA). If noncitizens migrate to foreign registries due to untenable restrictions on noncitizen trusts, U.S.-centric financiers may have to forgo these opportunities because they did not have a "mandate" to fund non-FAA registered transactions. Ironically, that situation may test their resistance to, and their mandate's definition of, international transactions. This action may become necessary to avert a loss of quality transactions to internationally active financiers.

This study identifies and analyzes the top issues this researcher believes will affect business aviation and business aircraft financing in 2013 through 2016. It is a working document comprising the facts, figures, opinions, and collective thinking of top players among both lessors (banks and financiers) and lessees (owner/operators). It is designed to help each reader think deeply about his or her future in business aircraft transactions in the next several years.

Financiers think the worst effects of the recession and financial crisis in 2008 are behind them and that business is picking up. While they remain somewhat skeptical of growth opportunities, their pulse is strong, and they generally believe the future for the industry will be good in 2013 through 2016.

Chapter 1. Make, Model and Value Proposition

BUSINESS AVIATION AT A GLANCE

Business aviation inspires notions of stylish travel in comfort. But as this study will discuss, it delivers far more in enterprise value, philanthropy, and opportunity. The full history of business aviation, told elsewhere, extends beyond the scope of this study. This section briefly describes aspects of business aviation relevant to the content of this study.

Dating back to 1947,[2] the U.S. business aviation industry[3] has provided aircraft for private and specific commercial use in businesses that now cover the globe. During its history, business aviation has grown from few models of aircraft into hundreds of models. Millions of dollars in aircraft deliveries have turned into billions of dollars. The Teal Group forecasts that, from 2012 to 2021, OEMs will produce 13,879 aircraft worth $310 billion compared to the last 10 years (2002–2011) of 10,886 aircraft worth $198.6 billion (both in 2012 dollars).[4] Since 2001, the industry has weathered economic cycles of peril and progress.[5]

The U.S. acts as home base for approximately 223,000 aircraft. It dominates the business jet market with 60% of the world's fleet as of December 31, 2012 according to JETNET iQ. In the U.S., general aviation (GA) aircraft fly more than 25 million hours and carry more than 166,000 passengers in the U.S. GA airports in the U.S. outnumber commercial aviation airports by a factor of approximately 10:1.

Numerically, 5,000 GA airports with paved runways exist, whereas less than 500 airports serve commercial aviation. Business aviation flights account for approximately 16,667 million hours flown by GA (i.e., two-thirds of all 25 million GA flight hours).[6]

According to the General Aviation Manufacturers Association (GAMA), based on global manufacturing data, turboprop airplanes ended 2012 at 580 deliveries, a 10.3% increase from 2011, compared to 526 deliveries in 2011. Business jets did not fare as well, with 672 deliveries in 2012, approximately a 3.5% drop from 696 deliveries in 2011.[7] GAMA estimates that the billings for GA airplane shipments by type of airplane manufactured worldwide in 2012 amounts to $17,105 billion compared to $17,235 billion in 2011.[8]

The NBAA testified in hearings conducted by the U.S. International Trade Commission in 2012 that piston engine aircraft, helicopters, turboprops, and light jets represent approximately 80% of the registered fleet, out of over 30,000 business aircraft. The size of the business aviation turbine fleet, including turbine helicopters, rose to more than 70,000 aircraft as of the end of 2011. As of 2012, the U.S. leads the world in production and acquisition of business aircraft despite the severe strain of the great recession.[9]

In the Federal Aviation Administration's (FAA) Aerospace Forecast 2012–2032,[10] it states that, as depicted in Figure 1.1, the active general aviation fleet is projected to increase at an average annual rate of 0.6% over the 21-year forecast period, growing from an estimated 222,520 aircraft in 2011 to 253,205 aircraft by 2032. The more expensive and sophisticated turbine-powered fleet (including rotorcraft) is projected to grow at an average of 2.9% a year over the forecast period, with the turbine jet portion increasing at 4.0% a year.

Table 1.1 shows the annual growth of all GA aircraft fleet and turbine fleet growth forecast. It also presents the relative small proportion of turbine aircraft relative to all GA aircraft.

International markets continue to increase in percentage of worldwide deliveries of business jets relative to North America as summarized as follows in the 2012 General Aviation Statistical Databook & Industry Outlook: "North America accounted for 49.7 percent of the business jet deliveries in 2012. Europe's share of deliveries was 20.8 percent. The third largest share of deliveries was to customers in Asia-Pacific at 11.8 percent which was closely followed by the Latin-America region at 11.6 percent of the total. Middle-East and Africa accounted for 6.1 percent, which is that region's lowest share of the market since 2007."[11]

Table 1.1: FAA Historical and Forecast Fleet of General Aviation Aircraft

ANNUAL NUMBERS AS OF DEC. 31, 2012	TOTAL GENERAL AVIATION FLEET	TOTAL TURBINES
Historical*		
2000	217,533	17,233
2005	224,257	23,454
2006	221,942	24,337
2007	231,606	26,697
2008	228,664	26,327
2009	223,876	26,808
2010	223,370	27,367
2011E	222,520	27,915
Forecast		
2012	222,690	28,495
2013	222,985	29,145
2014	223,465	29,895
2015	224,070	30,735
2016	224,720	31,605
2017	225,490	32,520
2018	226,340	33,445
2019	227,305	34,365
2020	228,430	35,325
2021	229,695	36,320
2022	231,145	37,385
2023	232,740	38,515
2024	234,510	39,725
2025	236,435	40,990
2026	238,430	42,255
2027	240,570	43,585
2028	242,820	44,950
2029	245,200	46,370
2030	247,720	47,840

ANNUAL NUMBERS AS OF DEC. 31, 2012	TOTAL GENERAL AVIATION FLEET	TOTAL TURBINES
2031	250,380	49,350
2032	253,205	50,930
Average Annual Growth		
2000-11	0.2%	4.5%
2011-12	0.1%	2.1%
2011-21	0.3%	2.7%
2011-32	0.6%	2.9%

Source: FAA 2012-2032 Aerospace Forecast, Table 28.

To provide some perspective of the diminishing size of the North American market, in 2000, the U.S. accounted for 67% of the global fleet, but it dropped to 60% as of December 31, 2012, according to JETNET data, with more shifts to non-U.S. demand being likely in 2013 through 2016. In 2007, the U.S. accounted for 58.3% of worldwide deliveries of business jets, but has dropped nearly 10% in the last five years.[12]

The Q4 2012 JETNET iQ forecast says that the U.S. and Canada will account for about 50% of new business jet deliveries in 2013–2022. It has dropped from 55% of deliveries that occurred in 2003–2012. The trend clear: The business aircraft fleet is shifting from the U.S. to emerging markets and other countries around the globe.

ORIGINAL EQUIPMENT MANUFACTURERS

To achieve their business objectives, organizations necessarily and extensively evaluate OEM aircraft models that fit their missions (as discussed more fully below). The world's six leading OEMs are headquartered in the U.S., Canada, France, and Brazil.[13] From the inception of the industry, the U.S. has dominated the market demand and use of business aircraft.

By market share in 2011,[14] Cessna led the other OEMs at 26%, with Gulfstream Aerospace Corporation,[15] Embraer S.A.,[16] and Bombardier Business Jets[17] in a cluster at 18%, 17%, and 16%, respectively. The bankruptcy filing by the old Hawker Beechcraft Corporation[18] changed the game for the company (and the industry), but it held 10% of market share in 2011, while Dassault Aviation[19] controlled 11% of the market. Following in the distance, Boeing Business Jets[20] and Airbus S.A.S.,[21] each with 1%. See Appendix B, Original Equipment Manufacturers.

The reorganized Beechcraft Corporation has emerged from bankruptcy in what it says is a stronger operational and financial position. It expects to have the working capital and flexibility to execute a strategy built around its core products like the King Air twin engine turboprop and the T-6 military training aircraft. The exiting of jet aircraft production, among other factors, should enable the company to compete on a well-known platform.[22]

BUSINESS AIRCRAFT SEGMENTS OR TYPES

GAMA divides GA aircraft into five segments: piston, helicopters, turboprops, light aircraft, and business jets (ranging from very light jet aircraft (VLJs) to super long-range jet aircraft). These aircraft segments further divide into categories as described briefly below and in more detail in Appendix C, Aircraft Segments, and in the GAMA 2012 Aircraft Shipment Year-End Report, which shows changes in deliveries by manufacturers worldwide by type and segment of aircraft.[23]

The vast majority of business aircraft seat six passengers in a cabin roughly the size of a large sport utility vehicle and fly an average stage length of less than 1,000 miles. Depending on their capability, these aircraft may fly at altitudes below the airlines (under 20,000 feet) or above the airlines (above 40,000 feet)."[24]

BUSINESS AIRCRAFT COST

Regardless of the type of aircraft, each end user calculates the cost of acquisition, maintenance, and operation, just as for any other complex item of equipment. The out-of-pocket costs of a business jet trip invariably exceed the purchase price of a commercial airline ticket. However, as shown below, those who evaluate this comparison alone miss the whole value proposition of using business aircraft.

Customer interview respondents confirm that companies routinely conduct extensive analysis of economic issues with respect to business aircraft. They create or conform to travel policies to match the company's needs pertaining to the acquisition and use of business aircraft. These respondents suggest that in the last few years, flight departments have right-sized their team to serve the needs of their companies. When, as often occurs, an individual flies his or her own aircraft, customer interview respondents make clear that decisions about the acquisition of the aircraft include a large component of cost analysis. But they also appreciate the benefits and advantages the aircraft can offer.

As Meg Whitman, CEO of Hewlett-Packard, said recently in response to a media inquiry on keeping business aircraft amid budget cuts and employee layoffs, "We operate in more than 170 countries. … It's important that our teams be able to reach customers efficiently and securely. While corporate aircraft are an expense to operate, they create time savings and other advantages."[25]

Interview respondents acknowledge that to justify the use or acquisition of private aircraft, a cost-benefit analysis necessarily requires the inclusion of various intangibles – elements not subject to easy calculation on a spreadsheet. For example, it is difficult to establish how much money a company saves or makes when its top executives accomplish more business in a day because they travel efficiently on business aircraft to several meetings.[26]

Controversy about the acquisition of private aircraft–whether initiated by boards of directors, executives, shareholders, the media, or even employees–affects decisions on whether a company can justify the use of aircraft, as discussed below. Financiers fully understand that the decision of whether to purchase or lease an aircraft entails complex economic and other variables for most customers. While financiers can help, they uniformly prefer to wait for customers to reach their own decisions and settle on their own unique value proposition of using business aircraft.

VALUE PROPOSITION OF BUSINESS AIRCRAFT

FINDING: Interview respondents say, and other studies confirm,[27] that business jets, when used properly, significantly enhance employee productivity, safety, privacy and security.

Studies Support Respondents' Views

Business aircraft perform a wide variety of missions and demonstrate their value to business enterprises every day. They vary in size, model, technology, capacity, and range. Viewed as a business tool like a truck or a railcar that carries people and cargo, business aircraft can travel regionally or fly across the globe to advance the interests of an enterprise.

Consistent with this notion, a 2009 poll by Harris Interactive Inc. shows that private aircraft travelers achieve a higher degree of productivity than those on commercial airline flights. The poll says that travelers work on board business jets and commercial aircraft for roughly the same percentage of time: about 38% and 36%, respectively. However, the similarity stops there. According to most interview respondents, commercial aircraft work time is not quality work time such as travelers can achieve on private aircraft. The Harris report supports this point in citing some key differences in commercial and private travel.

Commercial aircraft passengers attend "meetings" on board for 3% of their travel time, whereas private aircraft travelers meet for 36% of the time.[28] The report also finds travelers on commercial aircraft relax and enjoy non-work entertainment 36% of their time, whereas private aircraft travelers relax for 14% of air travel time. In addition, employees rest on commercial aircraft 25% of the time, but rest on private jets for 12% of the time.

Time Value of Business Aircraft

Virtually all respondents described instances in their own experience where private business travel helped them make money and enjoy doing so. As one financier interview respondent shared with the researcher that, once one has traveled to different cities to meet with five customers in one day, a trip that would have taken days longer by commercial airline, he would find it very difficult to return to the commercial airline route. The value of getting home to family and reaching a prospect ahead of the competition in the same day measures well against commercial airline trips that would take two or even three days.

Like this interview respondent, business aircraft travelers quickly appreciate that they can achieve a competitive advantage by reaching customers faster, entertaining customers in a private (captive) setting, and making deals without the delays or difficulties that are typical today when using commercial airlines. Regardless of advances in communication technology, meeting in person via private aircraft can help relationships develop that no videoconference or commercial airline trip can accomplish.

The use of business aircraft saves and optimizes these travelers' most valuable resource – time.[29] A service provider interview respondent made this point in explaining to the researcher the value of business jet travel from the point of view of a wide range of his clients. He said that whether one is a head of state or a middle-level manager, we all have in common only 24 hours in a day and only one chance to make the most of each hour. In a global economy, companies have to use their time wisely to increase or maintain earnings and profits. Respondents consistently reiterate in their own way that, as Benjamin Franklin said, time is money.[30]

Best Companies: The Business Aircraft Factor

NBAA commissioned NEXA Advisors, LLC to conduct several quality studies on the use of business aircraft in the private sector.[31] They all consistently support the findings in this study, as discussed below.

Speaking at NBAA2012 (NBAA's annual convention) in October 2012, NEXA summarized its key findings in its latest study,[32] titled "Business Aviation: Maintaining Shareholder Value Through Turbulent Times".[33] NEXA found that users of business aircraft in the S&P 500-listed companies demonstrated superior resiliency[34] in responding to the severe economic downturn. Stated another way, in general, NEXA explained that users of business aircraft during the recession returned to growth and profitability faster than nonusers. The users of business aircraft have also won accolades for outperforming their peers that do not use business jets.[35]

Chapter 2. Recession's Force: Sea Changes in Business Aircraft Transactions

FINDING: The steep fall of aircraft residual/collateral values during the 2008 financial crisis stunned most financiers and flipped many of their assumed transaction residual/collateral value ratios "upside down." The recession and 2008 financial crisis disrupted or shut off the anticipated cash flow of some customers, which contributed to losses, workouts, and write-downs. Financiers thereafter mandated a deeper credit analysis as a fundamental part of approving transactions. This approach is expected to remain substantially the same in 2013 through 2016.

BEFORE THE RECESSION: BUSINESS AIRCRAFT SOAR

The business jet industry has experienced two periods of very high growth. The first occurred in the second half of the 1990s, and the second, which is highly relevant to this study, in 2003–2007.[36]

Whole Aircraft Shipments: No Fear of Record Highs

From 2003 through 2008, shipments of all segments of aircraft rose from 2,686 to 3,970 aircraft, a 47.80% increase over the five years. In 2009–2010, the world changed for business aviation. A global economic wind shear put deliveries in a nosedive. Total shipments dropped year over year from 2009 through 2011. This second high growth period was fueled by aircraft demand from Europe, Asia, and the Middle East; the launch of new innovations in aircraft design and avionics; and robust corporate profits.

One prominent analyst portrayed the business aircraft industry as poised for substantial growth after 2007 with an expectation of a market dip in 2009.[37] In 2003–2007, the market experienced a frenzy of transaction activity. That environment fostered confidence that financiers and customers could close transactions with a rational degree of risk in prevailing market conditions. In 2007, financiers enjoyed the fruits of that market.

Financier interview respondents recall that the market psychology pushed demand, purchase pricing, trading of order positions, and residual/collateral values to higher levels than the participants in the market had ever seen or could recall.

According to one financier interview respondent, his organization took a scorched-earth approach: funding virtually every transaction, for all sizes of aircraft, based on the elevated residual/collateral values in 2007 and positive market conditions. A minority of financiers won business by assuming unrealistically high aircraft residual values, coupled with offering then very low financing rates and 100% plus advances on a single aircraft. Their approach reflected exuberance for prerecession transactional activity rather than risk-adjusted practicality.

Fractional Share Sponsors: Steady Down

When introduced in 1986 by NetJets,[38] fractional share programs offered a new and intriguing way for companies and individuals to acquire private jet services without purchasing or leasing a "whole" aircraft.[39] In 1995 to 2011, customers gravitated to this private travel product, and the industry grew rapidly.[40] In 2013, NetJets,[41] Flight Options, LLC,[42] and Flexjet[43] lead the industry.

How Fractional Share Programs Work

In a fractional share program, sponsors purchase a whole aircraft so their customers can make a capital investment in the form of purchasing a share of the whole aircraft. The share size can range from one-sixteenth up to one-half or even greater of an aircraft.

The fractional share entitles its owner to use the selected type of aircraft for a specific number of hours. For example, a customer that purchases as little as a one-sixteenth share of a business jet can fly for 50 hours. When a fractional

owner purchases a larger share, the owner receives certain additional privileges. For example, sponsors typically agree to deliver aircraft for flights to the owner of a larger share faster than they would to owners of a smaller share.

LARGE PURCHASES BEFORE THE DOWNTURN

Before the downturn, all sponsors, including NetJets, Flight Options and Flexjet, purchased an average of 10% to 15% of business jets delivered each year. From 1995 to 2011, fractional operators took delivery of more than 1,150 business jets.[44] However, fractional share programs started to pull back on aircraft purchases as the credit markets sank due to the 2008 financial crisis that began in September 2008 and ended June 30, 2009.[45] The slowing of purchases shrank the entire market of business jet sales.

Until the last few years, financiers provided financing for the purchase or leasing of fractional shares. The recession dampened the interest and opportunities of financiers just as it forced sponsors to pull back on sales. The transaction volume for financiers fell to such low levels that most highly active financiers would not sustain their business investment in fractional share financing and, according to certain financier interview respondents, exited most, if not all, of this business.

FINANCIAL CRISIS HITS: DIVERGENT EXPERIENCE OF FINANCIERS

Recession and Financial Crisis Suddenly Halt Good Times

FINDING: When the 2008 financial crisis hit, most financiers experienced paralysis in transaction flow as well as unavailability of capital and a nearly total freeze on credit approvals.

History made a dramatic shift from the post-2007 forecast.[46] Bank failures and a massive credit crisis thrust the global economy to the precipice of catastrophic failure in early 2009. Customers defaulted and canceled orders for new aircraft. Transactions ground to a near halt as preowned inventories swelled to 17.8% in Q2 2009.[47]

To put this percentage increase in perspective, the preowned inventory at the end of 2007 shrunk to 10.5% of the business aircraft fleet. As preowned inventory increased rapidly, so did the realization that the business aircraft market would soon encounter a serious downturn. Among the financier survey respondents, 25% of financiers experienced a shortage of capital, which both reduced the number of transactions they could close and increased their attention to compliance with credit approval criteria.

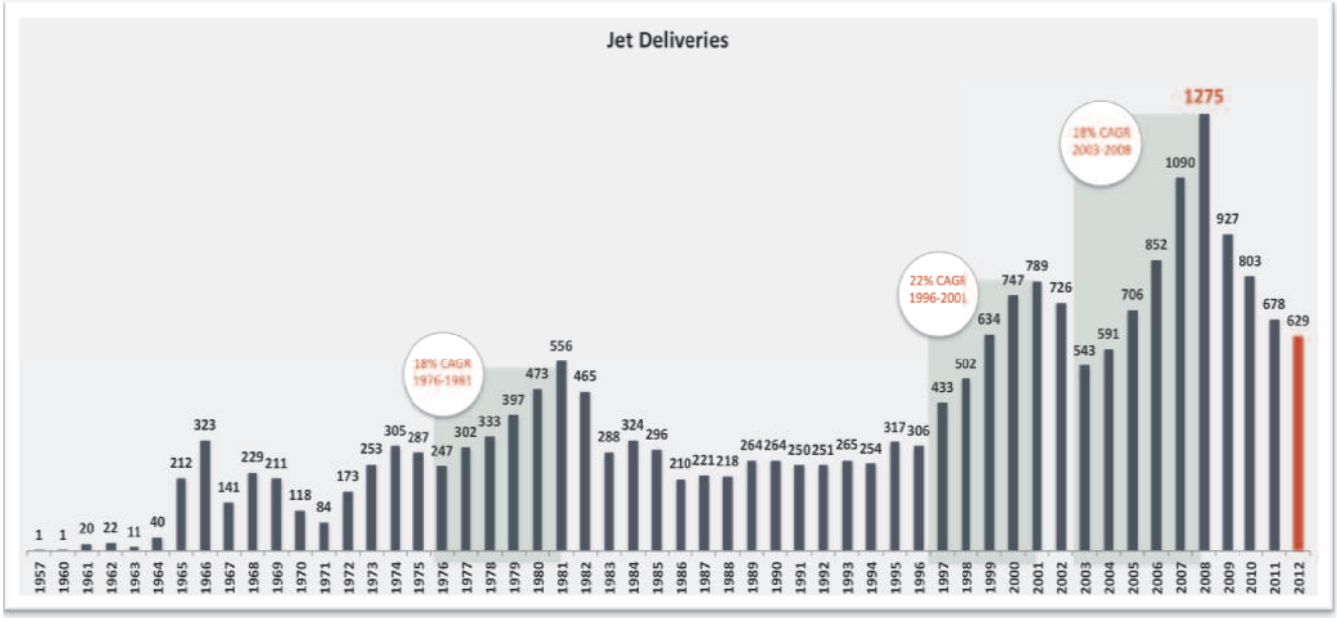
During the height of the 2007 frenzy, the market heated up to where it created a false high in values. Appraisals could support those values because they took a snapshot at the time. Thus, even discounting the appraised values for purposes of setting residual/collateral value in transactions built assumptions on quicksand.

When the credit downturn took hold in 2009–2010, prices of business aircraft experienced a frightening downward spiral that, in general, disproportionately hurt aircraft under the super-midsize category. A sales consultant shared an indicative experience in an interview of how rapid the decline in values occurred. He and his colleagues passed up a sale at the 2008 NBAA Annual Convention of a large business jet, believing they could get a $2 million higher purchase price from another buyer under then buoyant market conditions. Instead, they took a multimillion dollar loss several months later as the bottom fell out of the market.

Almost all financiers experienced near paralysis in deal flow during the period when a credit collapse hit all markets.[48]

In 2009 and for the next couple of years, conditions turned worse in other respects.[49] Shipments declined from 1,275 aircraft deliveries in 2008 to 927 aircraft in 2009, to 803 aircraft in 2010, to 678 aircraft in 2011 and to 629 aircraft in 2012. From the peak in 2008 of 1,275 aircraft, shipments fell by 50.66% to 629 aircraft. Clearly, aggregate deliveries plummeted by any measure during this period.[50] Figure 2.1 depicts this JETNET iQ data in the form of the long term cyclicality in market activity.

Figure 2.1. Historical Jet Deliveries



Source: JETNET iQ, Q4 2012.

Business Unusual: Defaults and Workouts
FINDINGS: As a consequence of the recession:

1. When defaults occurred, financiers exercised remedies in their transactions, by percentage of all their transactions in default, for payment defaults (56%), violations of loan-to-value requirements (12.5%), breaches of financial covenant (6.3%), failures to meet aircraft maintenance requirements (6.3%), and other (18.9%).

2. Although financiers restructured 50% of their transactions in default, by percentage of all their transactions in default, they either repossessed aircraft (38%) or, in cases where they could not agree to a restructure, accepted a voluntary surrender of the aircraft from customers (44%).

In retrospect, financiers respondents discovered that, when subjected to the rapid economic downturn, the transactions they believed presented acceptable risk could not withstand the drop in aircraft residual/collateral values or the crushing blow to financial viability of some customers. When financiers experienced transaction defaults at this point, they scrambled to avert losses through restructuring and other short-term solutions such as short-term leases or subleases (Table 2.1).

However, when the values declined so much from assumed values (supported by appraisals in 2007) that, as stated in the finding above, many transactions values made a pronounced shift from assumed jet values in excess of customer debt to a value shortfall relative to such debt. In other words, the aircraft lost so much market value in the spiral that the financier's credit risk exceeded the asset value, leaving financiers exposed to losses that no respondent could ever have expected.

In some cases, financiers took even greater risk. Expecting aircraft values to continue to rise during the financing term, they accepted even greater residual/collateral value risk by advancing sums equal to, or greater than, 100% of the appraised value or taking very low to no down payments in financings.

Approximately 18% of financier respondents dedicated most of their time to workouts while others maintained marketing efforts to the extent possible despite extremely weak deal volume. Certain of the larger financiers largely relegated workouts to special teams created to address distressed credit situations.

Table 2.1. Solutions or Outcomes for Customer Defaults

The most common solutions or outcomes to customer defaults:	
Answer Options (Select all the options that apply)	**Response**
We repossessed the aircraft.	37.5%
We restructured the transaction (e.g., by deferring payments, forgiving payments, raising rates and/or imposing fees on our customer).	50.0%
We required the lessee to provide additional collateral.	25.0%
The customer voluntarily "handed us the keys."	43.8%
We sued lessees and borrowers and their guarantors for non-payment and/or other defaults.	31.3%
Other (please specify)	6.3%

Source: Financier survey.

Table 2.2. Business Situation During Recession

Describe your business situation and operations during the recession.	
Answer Options (Select all the options that apply)	**Response**
Business continued with few material credit issues or changes.	42.9%
We placed almost all of our attention on workouts and repossessions as our first priority. We had no urgent directives or time to find new deals.	17.9%
We lacked capital for all but the highest quality transactions.	25.0%
Syndication buyers dried up, which prevented us from closing deals we could not or would not keep in their entirety (i.e., with no sell down).	10.7%
Our cost of funds rose to a level where we were often not competitive.	10.7%
We reduced overhead by cutting members of our aircraft finance team.	14.3%
We made changes in senior management to select those who could guide us through, and help us recover from, the recession.	14.3%
Other (please specify)	14.3%

Source: Financier survey.

Business as Usual: Few Workouts or Events of Default

FINDING: Approximately 43% of financier survey respondents stated that they conducted business as usual during the recession, suggesting that 57% of other financiers made potentially costly errors in approving transactions prior to the recession.

Financier interview respondents generally refuted these numbers, stating that they did not capture the real situation. They said that 60% of financiers or more suffered substantial portfolio workouts, credit losses, or write-downs.[51] The 57%, in their view, did not take into account those financiers that left the business entirely after incurring major losses.

Nonetheless, many financing transactions survived the downturn unscathed; they remained current on payments and performance (Table 2.2 and Table 2.3). In these transactions, financiers demonstrated the significance of insisting on a thorough credit approval process separately from the analysis of residual value. Financier interview respondents confirmed this point in describing their proprietary pricing, diligence, and other standards for approving transactions.

Table 2.3. Characteristics of Normal Operations During Recession

Did your business continued operations with few material credit issues or changes during the recession?	
Answer Options (Select all the options that apply)	**Response**
We did not close deals with a "buy the deal" low pricing strategy; that is, we refused to close deals with super "skinny" margins or without appropriate risk-adjusted returns.	45.5%
We did not close deals that used unrealistically high residual or collateral value assumptions.	54.5%
We did not waive our credit standards or policies to build up our deal closings or for other reasons.	59.1%
We avoided leases to minimize our residual value risk and other risks associated with owning an aircraft.	4.5%
We generally provided loans with down payments of approximately 35% or more to minimize collateral value risk.	18.2%
We limited our deals to existing customers.	9.1%
We limited our financing to aircraft that had relatively stable value (i.e., selected large cabin or super-midsize aircraft).	27.3%

Source: Financier survey.

None of these precautions is likely to ease much, if at all, in 2013 through 2016, even if residual/collateral values stabilize. Prudent financiers will generally follow a long-term trend of applying strict approval criteria to transactions, adjusted to compete in prevailing market conditions within established company policy guidelines. As discussed below, financiers feel increasing pressure to push the limits and ease up on guidelines to win business.

RECESSION FRACTURES HISTORICAL PATTERN OF JET DELIVERIES

FINDING 1: Many bank financiers abruptly pulled out of financing bottom-half jets in favor of financing top-half jets when the severe economic downturn fractured the tandem price movements of new-build deliveries. This reaction likely contributed to the fall in the value of bottom-half jets.

FINDING 2: Financiers generally believe that bottom-half jets will not recover much, if any, of their prerecession value. However, they are highly likely to finance more young midsize and super-midsize aircraft in 2013 through 2016, especially when they believe they can more accurately set their residual/collateral values.

Large Jets Stay Aloft

Not all aircraft deliveries descended at the same pace or to the same low place in shipments and dollar (or equivalent currency) value. Considering business jets only, from 2003 through 2008, deliveries leaped from 518 aircraft to 1,313, an increase of 153.47%. From 2003 through 2011, business jet deliveries increased from 518 to 681 deliveries, which is a 31.47% increase.[52] On that basis, business jets traversed the recession and actually increased total deliveries during one of the worst global economic downturns since the depression. However, business jet deliveries as a whole segment did fall rapidly by 2011.[53]

Despite the significant decline in the recession years of jet deliveries, large-jet deliveries remained relatively high compared to medium and light jets. The strength of the larger jet purchases emanated from demand from the emerging markets[54] and from cash purchasers, including many of the world's 1,226 billionaires[55] located in the U.S. and in emerging markets.[56] As a group, these purchasers helped save top-half jets from a significant decline in values during the 2008 financial crisis.

The apparent stability or growth of the large jet market masked some of the real challenges experienced by large jet OEMs at the time. They received cancellations of advance orders[57] and were forced to juggle manufacturing schedules to adapt to the massive shift in their market in 2009–2010.[58] However, their plight seemed far less severe than for smaller aircraft and their potential customers.

Midsize and Smaller Aircraft Suffer

Light and medium jets suffered dramatic losses in values. None of the stakeholders avoided the pain associated with these losses, whether they were OEMs producing light and medium business jets, customers that owned or leased them, or financiers using them as collateral or owning aircraft under lease. According to customer survey respondents, approximately 20% of purchasers that typically needed financing to purchase or lease aircraft during 2008 could not find it, or could not get a credit approval when credit dried up during and after the recession and credit crisis. This finding is indicative but not conclusive, due to insufficient survey data. However, financier interview respondents did confirm that financiers greatly reduced approvals during the 2008 financial crisis.

To exacerbate the problem, owners of bottom-half aircraft began to delay replacements of their aircraft. They took the brunt of market fluctuations, including the disrupted replacement cycle caused in part by the reduction in deliveries to fractional ownership companies that eased back on purchasing aircraft due to uncertainty about demand for their products.[59] This phenomenon depressed values of smaller jets.[60] Very light jet deliveries dropped 71% in 2008 to 2011. Super-midsize business jets fell 52% over the period.[61] Like large jets, these segments experienced significant order cancellations and postponements.

THE BIFURCATION OF AIRCRAFT SALES AND VALUE

FINDING: When bottom-half jet values began their precipitous fall, financiers pulled back from financing these aircraft. This arguably accelerated the loss in value of the whole segment due to severe reductions of financing to close transactions.

Before the recession, bottom-half jets (jet aircraft with original new-build price of $4 million to $25 million) and top-half jets (jet aircraft with original new-build price more than $25 million)[62] moved in tandem, but the changes described

above fractured the two market segments. An unprecedented bifurcation occurred in the market in 2008 that has not changed as of the date of this study.

The bottom-half jets experienced a huge drop of 56.4% in new-build orders while the top-half jets, in a Teal Group analysis, grew slightly (0.3%) during the 2008–2011 downturn.[63] The affected aircraft, by OEM and model, break out as shown in Table 2.4.

Table 2.4. Recession's Bifurcation of Top-half and Bottom-half Jets

Top And Bottom Half Jets By Model

- **Top Half:**
  - **Bombardier: all Global Series models; Challenger 605.**
  - **All Dassault models.**
  - **Gulfstream: G300/400/500/600 Series models.**
- **Bottom Half:**
  - **Bombardier: all Learjet models; Challenger 300.**
  - **All Cessna models.**
  - **Gulfstream: G150, G200/280.**
  - **All Hawker Beechcraft models.**
  - **All Embraer models.**
  - **Eclipse, Sino-Swearingen, HondaJet.**

Source: Teal Group, 2013.

The lack of funding also contributed to the collapse of bottom-half jets values and, as discussed below, caused financiers where feasible to take a flight to safety by focusing on new large jet transactions. At this top-half demarcation point, extremely high-wealth individuals and corporations could proceed with aircraft planning and purchasing with far less concern about accessing credit or with finding cash to purchase the aircraft.

The top-half jets of the market experienced far less decline in value or transaction volume than midsize and smaller cabin aircraft. In testimony before the International Trade Commission, Richard Aboulafia of the Teal Group observed: "The market for all business jets exhibited a marked bifurcation in deliveries over 2006–2011, with [large cabin] jets … experiencing a slight increase in deliveries during the economic downturn. These purchases represented 80% to 85% of all purchases of aircraft during the downturn."

Purchasers in China also propped up the demand for large-cabin aircraft."[64] It is not surprising that, in the slow U.S. economy with little demand for smaller jets, the tandem movement had not realigned as of December 10, 2012.[65] The bifurcation with respect to bottom-half jets more than 10 years old will very likely persist in 2013 through 2016. These aircraft may need to be updated for the newest technological, environmental controls, and other attributes of newer aircraft. One financier interview respondent opined that bottom-half jets will never recover their lost value because of the blow they suffered during the great recession, and few respondents disagreed. Generally, these aircraft will sell, but according to interview respondents, at a price well below that sought by current owners.

FINANCIERS CLAMP DOWN

FINDING: Financiers quickly tightened their credit and approval criteria as the 2008 financial crisis set in, just as they also began to question what steps they needed to take to survive the downturn.

Financier respondents said that financiers generally put the brakes on the prerecession business pattern of easy credit or less disciplined credit analysis than may have applied in a less robust market. They quickly shifted to a defensive posture. In a traumatized market, financiers concentrated on the few relatively stable residual/collateral value aircraft found primarily in super-midsize, large-cabin, and super long-range aircraft segments. In 2013 through 2016, none of the financiers expect to alter their approval criteria.

Seventy percent of financiers tightened their credit and approval criteria during and after the recession, for the dual purposes of approving only the most highly qualified customers and preserving limited capital for lending or leasing (20%). Thirty percent (30%) did so to comply with new federal regulatory requirements and to tighten criteria to take as little residual/collateral value risk as possible.

The severity of the downturn highlighted the need for new or more effective leadership in some organizations. It also forced companies and banks to look hard at whether they should lay off unproductive marketing or staff employees. Consequently, 14% made changes in management and reduced head count to weather the recession and redirect their efforts for the post-recessionary period.

FLIGHT TO SAFETY: A CRISIS OF CONFIDENCE

FINDING: The huge drop in values of business aircraft, evidenced by the bifurcation in aircraft new-build deliveries (by value), set off a crisis of confidence that financiers have not entirely overcome as it relates to setting residual/collateral values.

Many financiers took a flight for safety for several reasons, including their observation of this bifurcation in values. It caused them to hone in on residual/collateral value and mitigate that risk by avoiding any material financing volume (or dollar cost) in bottom-half jets. The damage done during the recession and debt credit crisis not only fractured the relationship of aircraft segments but also fueled a crisis of confidence among financiers.

Although the confidence[66] crisis has dissipated (based on discussions with financier interview respondents), financiers still feel a pronounced uncertainty about the risks of the fragile global economy, political jousting in Washington, and the expansion of new bank regulations. It has left them with a sense of uncertainty about the future as they try to overcome the lasting strain of the recession.

Consequently, the effects of the bifurcation reverberate in 2013, and financiers generally seem unwilling to deviate from approving the safest transactions since 2011. If, as customer survey respondents indicate, super-midsize jets gain market acceptance and purchasing activity lifts, financiers are likely to move rapidly to provide financing for that type of aircraft. Experience, market information, and intellectual capital of financiers will be crucial in navigating cautiously in the marketplace generally and in approving and closing transactions specifically in 2013 through 2016.

LESSONS LEARNED: AN OPEN QUESTION

FINDING: Despite intense competition in the U.S. to finance business aircraft, financiers are unlikely in 2013 through 2016 to make mistakes similar to those they made before the recession.

Financiers readily admit that in 2013 intense competition blankets the U.S. market to finance large-cabin, super long-range, and super-midsize aircraft. This situation has compressed pricing margins and increased the amount of residual/collateral value assumed in pricing. Does this competitive environment pose a risk that financiers will make mistakes similar to those they made before the recession? The answer in 2013 through 2016 differs from years thereafter. Financiers lack confidence in the long-term stability, predictability, and reliability of residual/collateral values (with exceptions for certain top-half jets). They generally think that setting an appropriate residual/collateral value of aircraft is the most important element of pricing and risk analysis for financiers (aside from credit approvals).

Yet, financier respondents cannot escape the relentless pressure to "make their numbers" (i.e., quotas) in the current market. Financiers experience a push-pull existence: that is, to push out the best, lowest bid on a financing and pull back when the competition crosses the safety line. That behavior is likely to continue even if a sustainable recovery for financing transactions becomes evident. That some financiers bid such low margins certainly hints that at least some financiers will repeat or make similar mistakes to those they or other financiers made before the recession.

Consequently, financier interview respondents warn that financiers may bid rates down to the point that they do not reflect the transaction risk. They may also use higher (aggressive) residual/collateral value assumptions that may not be prudent, especially while, as noted, residual/collateral values remain unreliable or somewhat unpredictable.

One financier with very broad knowledge of financing resources mentioned that a financier in 2012 bid 103% of the cost of the aircraft to win the financing opportunity. Such an approach may work for the right "credit," but it can also go down into default, much as occurred in the economic downturn. Another financier survey respondent commented that the most significant challenges are "tough competition," unsustainable "portfolio concentrations," and "rate compression."

However, for most financiers, bad experience from the economic downturn, coupled with increased organizational accountability, expansive regulatory scrutiny and vastly different market conditions than in 2003-2008 force them to face a new reality and process. In 2013 through 2016, their transaction approval practices should be supported by, among other things, intensive due diligence, deep credit reviews, strict policy compliance, and independent residual/collateral value appraisals.

Moreover, financiers typically apply their own proprietary pricing methodologies that produce yield and residual/collateral value thresholds, supported by the appropriate transaction structures designed to achieve their economics. Financiers also intend to require documentation that fits the complexity of the transaction. Best practices in 2013 through 2016 will require no less.

It would be easy to suggest that financiers show signs of testing the limits and finding out yet again, as they did in the 2006–2008 timeframe, the significant cost of making poor financing decisions. Some inevitably will err, but, on balance, most financiers seem unlikely to veer much from the steady path of prudent and responsible actions in 2013 through 2016 despite highly competitive market conditions in the U.S.

Most financier respondents believe that, after 2016, financiers will be likely, once again, to repeat history in its fundamental respects. The situation remains to be seen, of course. However, the researcher's view is that organizations, in the exercise of best practices, will need to build or enhance durable approval and marketing practices that, on balance, allows them to compete vigorously while thwarting tendencies to forget the past. Financiers generally expect that, in the long term, old behaviors will inevitably reappear in some new form and manner to test the limits in aircraft transactions just as they did before the recession in late 2007.

Chapter 3. The Nascent Recovery: Drivers to Take Off

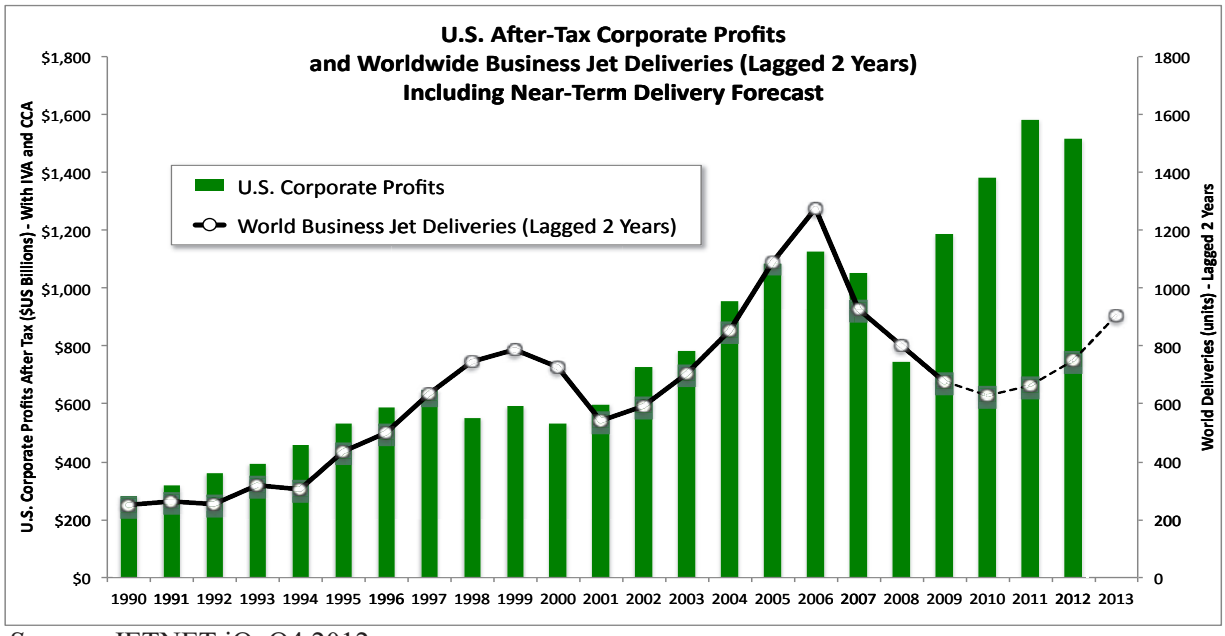
FINDING: Financiers seem a bit skeptical of analysts' forecasts of a decade of growth in business aircraft deliveries from 2012 to 2022. Yet they also express cautious optimism about potential transaction opportunities in 2013 through 2016. On balance, it is likely that optimism will win the day if the volume of transactions continues to rise in 2013, as seems to be occurring for many financiers in the opinion of financier interview respondents.

MIXED SIGNS OF RECOVERY

Whole Aircraft Recovery

Although 2011 appeared to be a year of recovery, it did not[67] materialize. By the end of 2012, new business jet deliveries dropped from 678 jets to 629 jets, as shown previously in Figure 2.1. During 2009–2012, corporate profits started to rise again. Corporations accumulated cash on their balance sheets. However, business jet transactions, prices, and deliveries barely seemed to get off the ground. The correlation of profits and deliveries (typically lagged by two years) failed to measure up to traditional movement in 2009–2012, as illustrated in Figure 3.1[68]

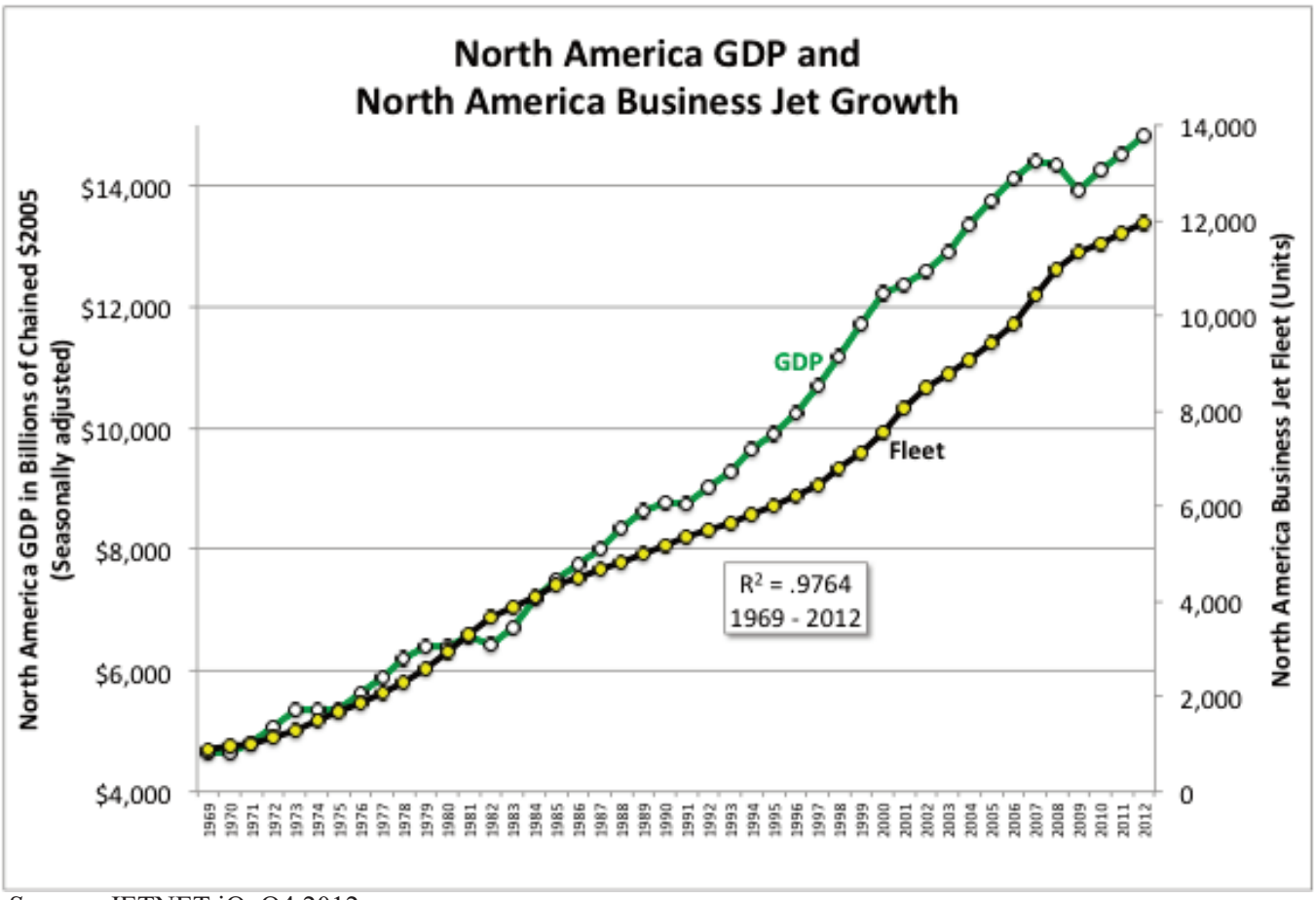
Figure 3.1. Corporate Profits and Business Jet Deliveries



Source: JETNET iQ, Q4 2012.

Figure 3.2 also illustrates the sluggish recovery of business aircraft transactions. Business jet units slowly moved upward at the end of 2012 even as GDP increased each year, as shown in Figure 3.2:

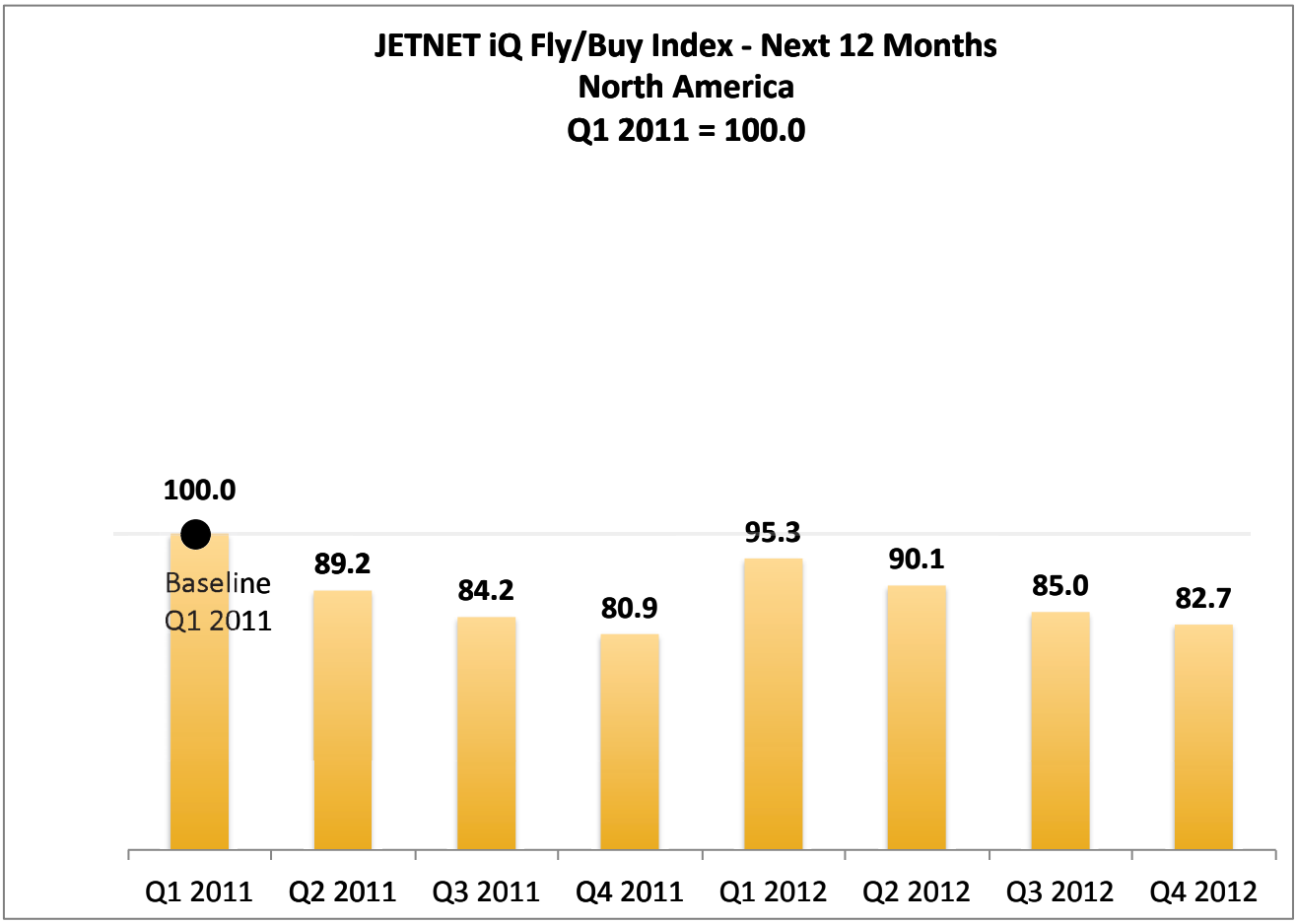
Figure 3.2. The Economy: North American GDP and North America Business Jet Growth



Source: JETNET iQ, Q4 2012.

Finally, JETNET iQ reported that aircraft utilization and new aircraft purchase intentions in North America dropped from the second quarter 2012 from 90.1 to 82.7, whereas the first quarter of 2011 was at 100.[69] Figure 3.3 shows the drop in these numbers:

Figure 3.3. JETNET iQ Fly/Buy Index Q4 2012 - North America



Source: JETNET iQ, Q4 2012.

Corporate profits can drive growth of business jet deliveries, but the world in 2013 is deeply mired in geopolitical and economic uncertainty. Nearly a majority of customer respondents acknowledge that their corporations seem inclined to hold cash reserves until they regain confidence in the economy and feel less uncertain about the future. Renewed confidence and economic growth top the list for financiers and customers of essential components to increase business aircraft transactions.

Clearly, business aviation needs a bigger lift in the near-term to accelerate business prospects, but each of these figures above shows a slight turn upward with respect to deliveries, growth and purchase intentions. For financiers and customers, these figures confirm their general view that the worst of the downturn has past, a nascent growth trend is developing, and business confidence is slowly, if not surely, starting to improve in 2013.

Fractional Share Industry: Replacements Only

FINDING: Financiers know that customers mostly pay cash for fractional shares. Other than NetJets, they believe the industry has insufficient growth potential to justify their efforts to provide customer financing.

While the upward growth curve has begun to take shape for whole aircraft, the long-term prospects for the fractional share business look problematic. As early as 2007, the Teal Group said that the bloom was off this rose. Deliveries to the fractionals have been playing a smaller role in the overall fleet of jets in the global market.[70]

In 1996 and 2001, net fleet additions reached 360 aircraft, representing as much as 15% of the world fleet. In November 2012, *Corporate Jet Investor* forecasted that fractional and branded charter operators will account for approximately 10% of the business jet deliveries over the next 20 years. Unlike the earlier net fleet additions, most purchases will replace aging aircraft rather than support sales of fractional shares.[71] Bombardier concurred that, in the near term, fractional market demand will be mainly for fleet replacements.[72]

The horizon seemed like it might improve when NetJets announced on June 11, 2012[73] that it placed orders for 425 aircraft, equating to $9.6 billion dollars in value. However, the company largely intends to replace its older aircraft, consistent with the forecast. It markets this bold move as the creation of a signature series of jets designed to win clients from competition and further solidify its position as the industry leader.

The adverse economics for sponsors derives from four factors: (1) the slowdown in demand (relative to prerecession levels and the early years); (2) stoppage of cash flow attributable to unallocated shares (i.e., no base monthly fees and variable operational fees),[74] (3) residual value downside risk of shares repurchased by the sponsors[75] and (4) high capital costs associated with unallocated shares of fleet aircraft.

Built on the idea that fractional companies make money by selling shares in aircraft, fractional companies face substantial financial risk when the market demand is soft and cash flow diminishes. Certain financier interview respondents expressed concern about several burdens on cash flows and bottom-line performance, including the high level of capital investment, the significant cost to repurchase shares (and related downside residual value risk on sponsors inventor (re)sales), and the shortfall in fees and usage revenue of repurchased shares. Specifically, these interview respondents focused on whether in the long term the fractional business could make money by generating cash flow (i.e., produce acceptable returns on assets and attract more owners).

Financier interview respondents question whether the fractional share industry has a sustainable business model. With weak sales, new types of competition (e.g., on-demand charter), and the residual value downside risk of unsold shares, they believe that the industry challenges will not be alleviated until sponsors can consistently make money on sales of shares.

Though large financiers have shied away from financing shares, it remains to be seen whether regional and local banks will step in to provide financing for their customers. Perhaps the more interesting question is whether the industry will see what financiers do and reinvent itself..

With NetJets rejuvenating its fleet with $17.6 billion in jet purchases[76] and Flight Options reporting sales up 30% in 2012,[77] perhaps this proposed overhaul may prove to be premature. In any case, financiers seem generally disinterested in financing purchases of shares for fractional customers.

DRIVERS TO GROWTH AND OPPORTUNITY

FINDING: Financier survey respondents assigned identical weight at 86% to each of the (1) growth in the U.S. gross domestic product and (2) stabilization of new and preowned aircraft values of bottom-half aircraft as the top drivers to increase opportunities to fund aircraft purchases and other financing transactions.

The primary purpose of this section is to identify and address the multiple drivers of growth of business aircraft purchases from[78] a financier's perspective.

As Table 3.1 below shows, financier survey respondents named five top factors that would facilitate significant growth of business aviation transactions in 2012 through 2016. As noted in the finding and Table 3.1, two very different factors, GDP growth and residual/collateral value stabilization, rank as the most important drivers to growth by a convincing 86% of respondents. Approximately 45% of financier survey respondents believe a permanent decrease in employment to 7% or less would help lift business aviation opportunities, while 31% recite the need for an increase in

syndication buyers and sellers. Finally, 28% indicate a need for sustained global economic stimulus to boost economies and opportunities in business aviation.

Table 3.1. Residual Value: Top Concern for Growth

Name the top five factors that will facilitate significant growth of business aviation purchase and financing transactions in 2012-2016	
Answer Options (Select all the options that apply)	**Response**
Growth in the U.S. gross domestic product at a 3.5% rate or more and staying there	86.2%
Decrease in employment to 7% or less and staying there	44.8%
Sustained economic stimulus injected into the U.S. and EU economies	27.6%
Greater investment by export credit agencies in business aviation	13.8%
Stabilization of new and pre-owned aircraft values of all aircraft sizes below large cabin aircraft	86.2%
Simplification of criteria and process to approve transactions	20.7%
Expansion of financing aircraft in international transactions	13.8%
Increase in syndication buyers and sellers	31.0%
More flexibility in documenting and structuring financings	20.7%
Other (please specify)	6.9%

Source: Financier survey.

Analysts interviewed for this study believe economic forces will lift the business aircraft deliveries for the next 10 years. They cite corporate profits, GDP, and employment as signs that the economy will grow and that transactions will follow with an upswing during that decade. Their opinions confirm the feedback from respondents, but do not reflect imbedded skepticism of financiers. Financiers openly articulate that they have seen forecasts before that did not materialize, and given the standstill of GDP at little or no growth, they seem interested in, but unwilling to trust or rely on, the forecasts.

Of the drivers mentioned in the financier survey, the one that stands out relates to the stabilization of new and pre-owned aircraft values "in aircraft sizes below large cabin." The researcher intended that this survey question would pertain primarily to the bottom-half jets. In response, 86% of financiers seemed to answer the survey question that if residual/collateral values in bottom-half jets would stabilize, that stabilization would facilitate significant growth of business aviation purchase and financing transactions in 2012–2016. The implication is that financiers have a strong interest in financing bottom-half jets, but the residual/collateral values of all jets under large cabin must stabilize first.

In response to two other survey questions, financiers reinforced this answer. First, they said they would like to finance preowned super-midsize and midsize jets of five to 10 years old. Second, they expressed interest in financing new-build factory models at super-midsize and smaller. Financier survey respondents generally, but not conclusively, have designated super-midsize and midsize jet aircraft as good targets for transactions in late 2013 and 2014. Thus financiers seem interested in financing aircraft in these segments in the next six to 18 months, but residual/collateral values must stabilize to justify the risk.

TRANSACTION DRIVERS

FINDING: Though no single driver will propel business aircraft transactions, financiers generally believe that if, as forecast, corporate profits rise, economies grow, and wealth spreads globally, transaction volume will climb to higher levels but will be well short of the 2008 peak.

Ten factors proposed by industry analysts coincide in some respects to those of survey respondents. These drivers suggest what circumstances will inspire more confidence and optimism of financiers for 2013 through 2016. The drivers consist primarily of the following:

Global Economy

The state of the global economy plays a fundamental role in boosting sales and financing of business aircraft. Economic growth of key countries is a major factor in the demand for aircraft.[79] Resolution of the debt crisis in Europe also would be a significant driver, given that Europe has typically accounted for the most activity in business aircraft transactions after the U.S. If any factor is a huge driver, and opens an umbrella over many drivers, it is confidence in the global economy. The uncertainty about the direction of the global economy and geopolitical events, coupled with contentious budget and debt issues in Washington DC, will keep most purchasers on the sidelines.[80]

Wealth Creation

According to Bombardier Aerospace Corporation, "Worldwide demand for business jets is highly correlated with wealth creation which, in turn, is largely driven by economic growth. The Morgan Stanley Capital International (MSCI) World Index is an aggregate stock market index, based on representative securities listed in major financial exchanges around the world, and a good indicator of wealth creation."[81]

Aircraft Retirements and Demand for Replacements

Many financiers express a strong preference to finance an aircraft that is 10 years old or younger. They may take an interest in a 15-year-old aircraft, but it is likely to be a large-cabin or super long-range aircraft with substantial rationale to finance it (such as accommodating an important existing customer).

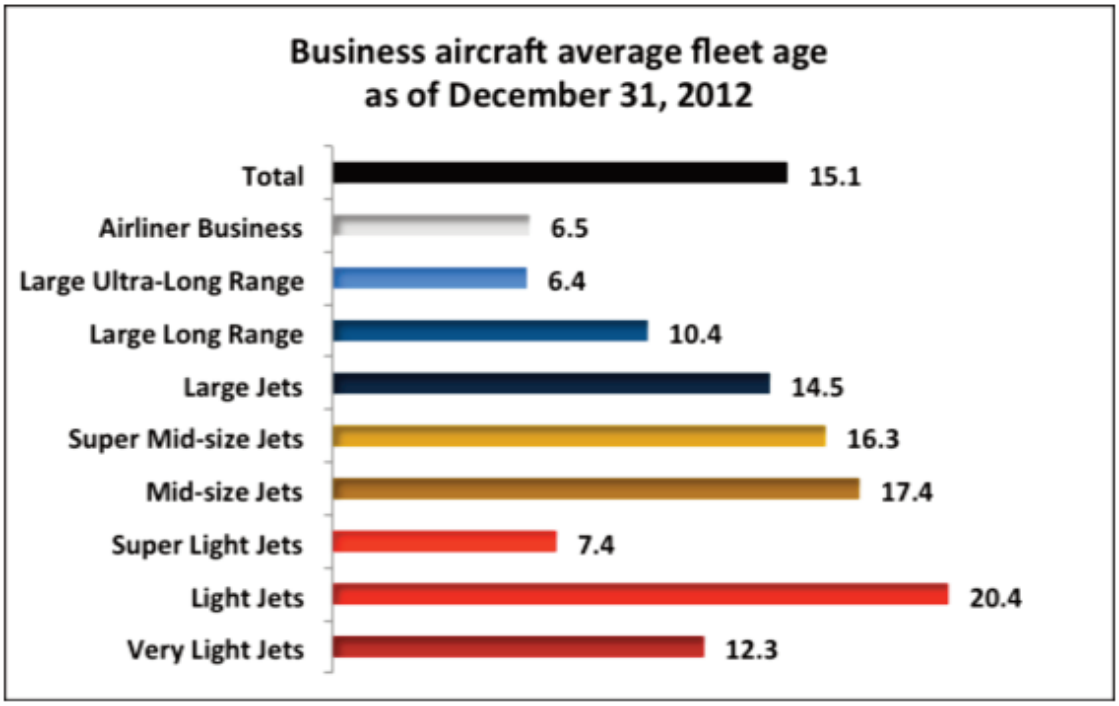
These financiers believe that aircraft older than 15 years may have substantial value for utilization (i.e., can be flown for many more years) but little, if any, value as collateral for financing. As such, any aircraft that is older than 15 years is, from the point of view of these financiers, ready for replacement. Technology updates and environmental regulations may, in theory, compel replacement or, if possible, a material upgrade.[82]

Another significant group of financiers, consisting of aircraft segment specialists, local banks, and regional banks, can assume risk on residual/collateral values and do not share the view of the first group of financiers that insist on financing young aircraft. This group of financiers expresses the willingness to finance aircraft as old as 25 years of age. They treat aircraft as the sole or primary way to maintain their customer relationship focus rather than an asset focus. In other words, for these financiers, the aircraft value as collateral is secondary or perhaps just short of irrelevant. Although this finding is not conclusive, this second group of financiers constitutes significantly less than a majority of financiers in the business aircraft market.

Scores of aircraft older than 15 years of age remain for sale but unsold, and their sellers will likely retire them and sell for scrap or replacement parts. According to JETNET iQ, the average age of the worldwide business jet fleet is now more than 15 years old, as depicted in Figure 3.4 below. This finding implies that financiers will no longer finance a large proportion of today's fleet. Financiers generally believe that a replacement of these aircraft has begun to occur, or soon will assuming no major geopolitical or economic upheaval occurs.

Other information gathered for this study suggests that demand will center on young, large jets and super-long range jets, on one hand, and young midsize jets and super-midsize jets, on the other hand. Given the continuing fragility of the U.S. economy in particular, coupled with a pent- up demand of customers to replace aging jets, these segments should offer the greatest financing opportunities by dollar value and number of deliveries, respectively.

Figure 3.4. Age of Business Aircraft Fleet



Sources: JETNET iQ, Q4 2012.

Existing Wealth

Approximately 85% of new jet orders tend to come from existing business jet owners, including billionaires. They can act regardless of the global economic conditions in most cases.[83]

Corporate Profits

Sales of business jets usually have a high correlation to corporate profits. In 2007, to a large extent before the aircraft buy-sell-finance frenzy began, corporations enjoyed robust profits and business aircraft saw increases in pricing and deliveries.

Before the recession, corporate profits and aircraft deliveries rose approximately at the same rate. During the recession, the pattern changed. Although corporate profits continued to rise dramatically over the next three years, new-build jet deliveries trailed corporate profits by more than the typical two-year lag period. Corporate profits can nevertheless provide a driver to the growth of business jet deliveries. However, as Figure 3.1 shows, deliveries have a significant gap to close to move roughly in tandem with corporate profits.

Availability of Financing

FINDING: Financiers will make funding available for financing of new or young bottom-half jets as competition forces them to finance smaller aircraft transactions. This shift is likely to be pronounced when confidence in the economy ratchets up to the point of releasing pent-up demand for new and young bottom-half jets.

Financiers expect that financing will be widely (but not easily) available in 2013 through 2016 in most aircraft segments. For most customers, standards and the process to approve and close a financing will generally be more rigorous and less certain than before the recession.

According to the JETNET iQ Report, 4th quarter 2012, restrictions/requirements for financing business aircraft purchases have not delayed their decision to purchase for 50% of survey respondents while 27% said these restrictions did delay purchase decisions. (The other 23% did not know). Customers in bottom-half jets encounter particularly stiff requirements that, with exceptions, likely account for their negative responses to the JETNET iQ survey.

Richard Aboulafia of the Teal Group starkly points out that, in January 2013, in comparing financing for commercial aircraft and business jets, "… external sources of capital have come to regard jetliners as a safe and mobile asset. They have also come to regard business jets as risky assets, in a time when risk is to be avoided in the business aircraft financing in general."[84]

The JETNET iQ data and Teal Group analysis suggest that financing will likely not be widely available for purchases of bottom-half jets. In contrast, top-half jets will likely show steady growth powered in part by cash purchases or self-funding by wealthy individuals and cash-laden corporations.

There is no doubt that financing is a key driver for purchases of bottom-half jets, far more so than for top-half jets. However, significant doubt exists among those customers in greatest need of financing whether in 2013 through 2016 financiers will realistically provide ample funding for their bottom-half jet purchases. The reluctance of financiers to finance this segment arguably pushes preowned bottom-half jets completely out of the realm of financeability instigated by the dramatic fall in aircraft values in 2008 through 2011.

New Technology, Environmental Requirements

Airports tend to favor aircraft that meet environmental standards such as reducing emissions and noise.[85] Technological improvements such as better fuel economy and updated avionics and aerodynamics bring purchasers to inquire about new aircraft.[86] Where customers cannot release their pent-up demand due to economic or other circumstances, they can (and do) refurbish aircraft to meet personal, operations and regulatory standards.

Preowned Inventory Reductions

Another measure of market health – the average number of days a preowned aircraft remained in inventory before it was sold – has remained stubbornly high throughout the last three years, according to the latest data from JETNET iQ. Through September 30, 2012, days-on-market for those aircraft that did sell averaged 379 days for business jets and 350 days for business turboprops. As of December 31, 2012, JETNET's days-on-market for business jets that sold in 2012 averaged 370 days; for turboprops, the average was 344 days. These averages account for aircraft that sold, not for those that remained for sale at the end of the year or that owners removed from the market unsold. This persistently high preowned inventory suppresses demand for new units and results in weaker pricing power.[87]

Similarly, JETNET iQ has found that jet inventory for sale as a percentage of the fleet declined to 13.5% on September 30, 2012, down from 17.1% at the same point in 2009 during the economic downturn, as shown in Figure 3.5.

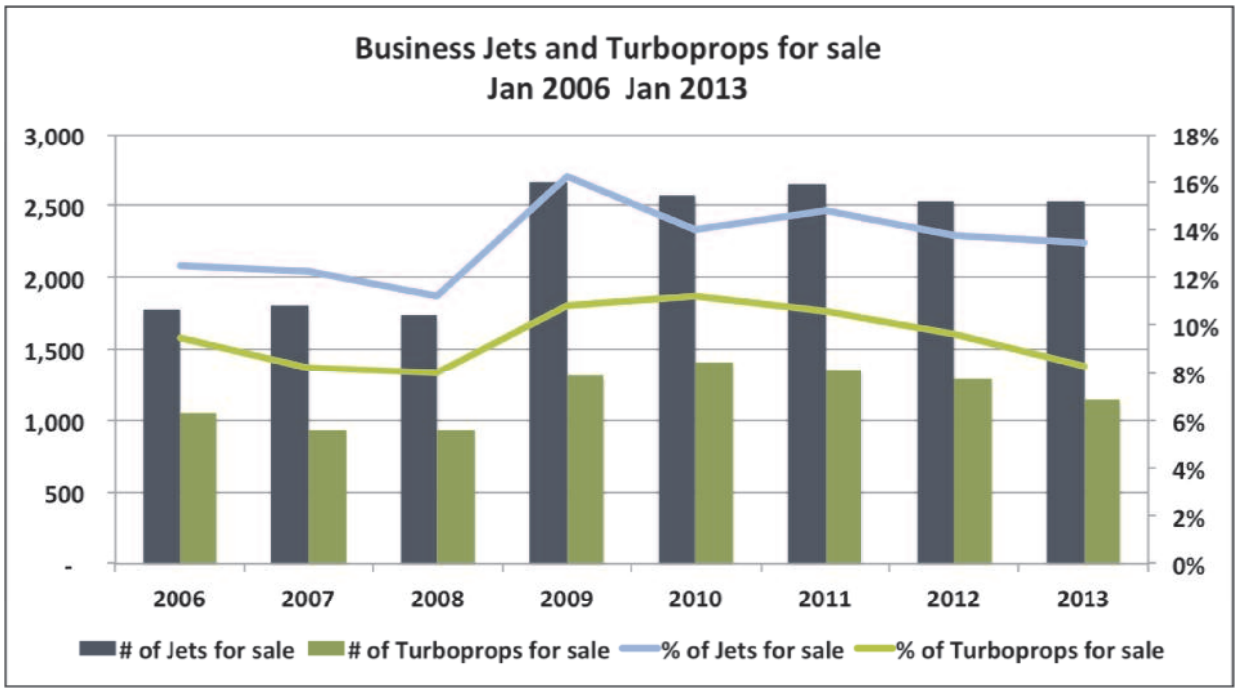
Backlogs

According to Bombardier Aerospace, "Reduced near-term deliveries combined with the progressive return to positive industry net orders should result in industry backlogs stabilizing and eventually growing."[88] Backlogs numbers, which depend on manufacturer's competitive and confidential data, have not been readily available for purposes of this study. However, certain advisors to the researcher observe that backlogs seem to be improving for certain models of aircraft while others lag far behind. For example, some but not all, large cabin aircraft enjoy substantial backlog. A more thorough discussion, while relevant here, is beyond the scope of this study.

Business Jet Utilization and New Purchase Intentions

Utilization is not expected to return to pre-crisis growth rates in the medium term, given the relative weakness of European economies.[89]

Figure 3.5. Business Jets and Turboprops for Sale, Jan 2006 – Jan 2013



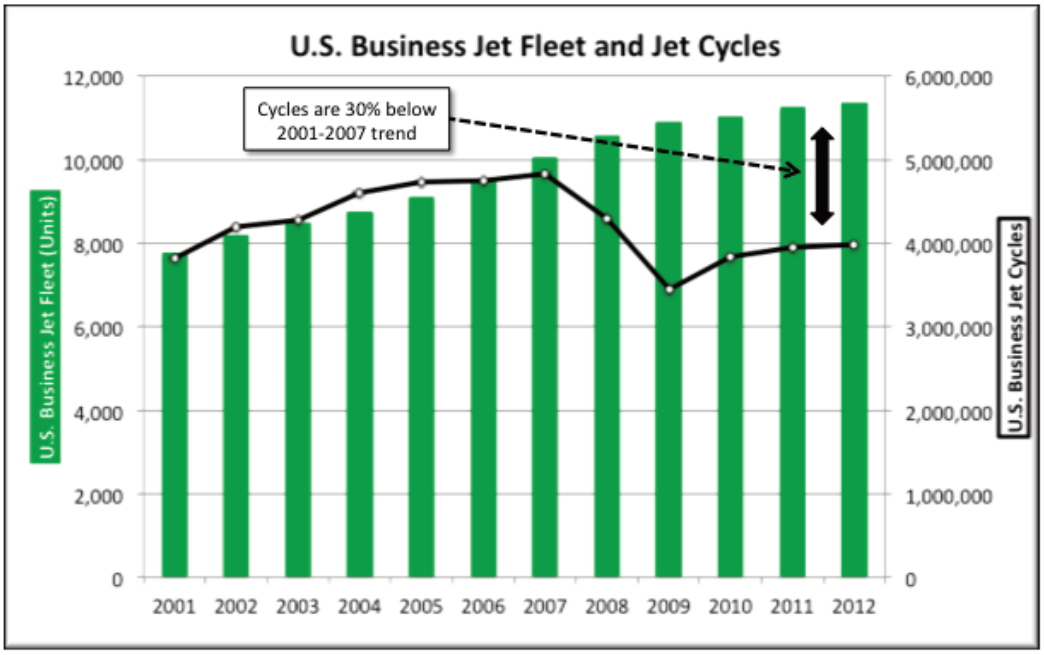
Sources: JETNET iQ, Q4 2012.

JETNET iQ reports in its JETNET iQ Fly/Buy Index that, in North America, the intention to fly dropped five points to 95.0 in Q4 2012. This index measures operators' intention to fly and to purchase new aircraft over the next 12 months relative to a baseline established in Q1 2011 of 100. See Figure 3.5 (Business Jets and Turboprops for Sale).

The FAA forecasts that hours flown by turbine aircraft (including rotorcraft) will increase 3.6% yearly from 2012–2032, compared with 0.03% for piston-powered aircraft. It also forecasts that jet aircraft will account for most of the increase, with hours flown rising at an average annual rate of 5.3% over the forecast period. The large increases in jet hours result mainly from the increasing size of the business jet fleet, along with a measured recovery in utilization rates from recession induced record lows.[90]

U.S. business jet flight cycles (a takeoff and landing) have begun a slow recovery since the depths of the great recession, up 15% from their 2009 trough, but remaining at 18% below their recent peak in 2007. Domestic flying now represents about 84% of all FAA-recorded business jet cycles, down from 90% 10 years ago.[91] The full return to health of the U.S. business jet market will await a sustained recovery in business jet operations, as well as increased pricing and shorter days-on-market of preowned aircraft. Figure 3.6 shows that utilization has fallen and needs to grow considerably to drive purchases and other transaction activity.

Figure 3.6. Business Jet Utilization



Source: JETNET iQ – February 2013.

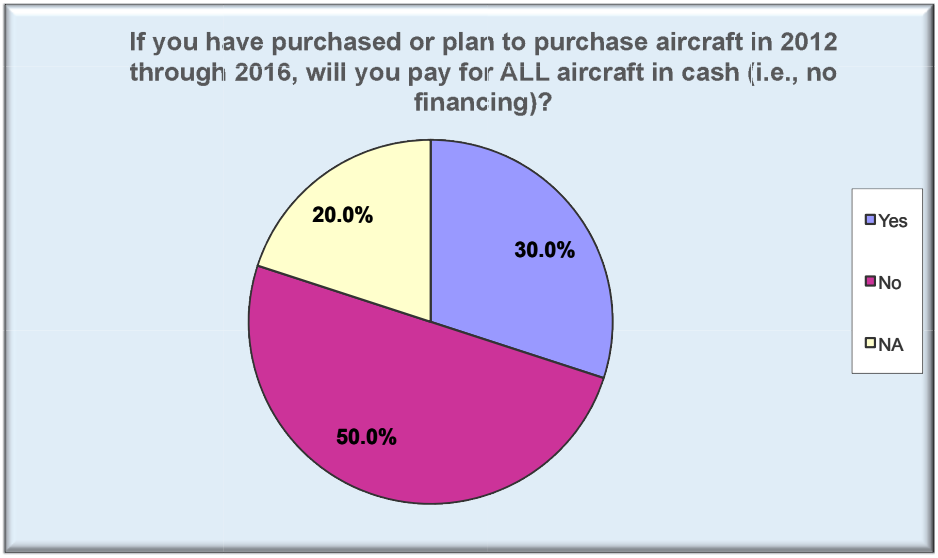
According to Bombardier Aerospace, "Reduced near-term deliveries combined with the progressive return to positive industry net orders should result in industry backlogs stabilizing and eventually growing."[92]

PURCHASING BUSINESS AIRCRAFT: IS CASH KING?

FINDING: As high as 70% of aircraft purchasers pay cash. However, the tipping point between cash and financing depends in large part on the desire of customers to preserve cash during the continuing geopolitical instability and the fragile U.S. economy. High wealth customers often do not need or want financing and will buy for cash depending on such factors as need for new or newer aircraft, cultural propensities to pay cash and growth of personal wealth.

Billionaires, high-net-worth individuals, and cash-rich corporations often pay cash to purchase aircraft. As Figure 3.7 shows, financier survey respondents believe that at least 30% of U.S. customers expect to purchase aircraft for cash (without specifying particular size or type of aircraft).

Figure 3.7 Purchase Price Paid With Cash or Financing



Source: Customer survey.

Based on the researcher's discussions with financier interview respondents, however, these respondents estimated cash sale equaled at least 50% in 2012. Cash purchases, in their general view, could potentially rise in 2013 through 2016 as the economy strengthens and cash laden corporations demonstrate their confidence in the economy and relative certainty that using cash is prudent.

Internationally, financier interview respondents believe that purchasers in China and India frequently pay cash for new aircraft, thus increasing cash transactions to approximately 70%. These customers make cash purchases arising out of new wealth and cultural influences. Internationally, customers that elect to finance acquisitions believe they can finance 50% to 80% of the cost of these aircraft. Based on researcher's experience, Indian purchasers do seek financing in the U.S.

In one specific segment, light jets, the cash payment level, according to certain financier interview respondents, accounts for approximately 70% to 80% of the transactions. This cash level occurs because few financiers accept light jets as having adequate residual/collateral value to approve as a typical financing. They do not have sufficient history of the new models and avoid these transactions for, among other reasons, conservatism in making residual/collateral value assumptions. This view is unlikely to change significantly in 2013 through 2016.

However, financier interview respondents suggest that the cost of borrowing or leasing is so low that customers can make money by putting cash on their balance sheet to work at greater returns than lease or loan rates in 2013 through 2016. Respondents' real sense of uncertainty about the world economy drives their unwillingness to part with cash, just as it inhibits their willingness to purchase business aircraft. Table 3.2 depicts the reasons why customer survey respondents decide to finance instead of use cash.

Table 3.2. Why Customers Finance Rather Than Pay Cash

If you plan to finance the purchase of business aircraft in 2012 through 2016, select ALL the reasons why you have chosen to do so:	
Answer Options (Select all the options that apply)	**Response**
We don't have the cash to make this purchase.	23.8%
We don't want to use cash we have to make this purchase.	57.1%
Our business is growing, and we need more lift.	19.0%
We cannot wait longer to replace aging aircraft or aircraft that no longer fit in our operations.	23.8%
We want to do a sale-leaseback(s) to extract money from our owned aircraft to fund our business working capital or other financial needs.	4.8%
Prices have hit bottom; it's better to purchase now than wait.	4.8%

Source: Customer survey.

As Table 3.2 shows, customers finance their purchases when they lack the cash to make the purchase (24%) or have the cash but do not want to use it (57%). This response is consistent with other answers that indicate that customers prefer to hold onto cash for fear of more problems in the U.S. economy and geopolitical instability.

While the data does not indicate the type of aircraft a customer wants, the bifurcation of the market created a distinctive group of top-half jets, where customers do not need financing as frequently as customers for the bottom-half jets. It is likely that the 57% of the survey respondents fall into the top category, indicating where financiers may find a significant demand for financing even though the purchasers/lessees can, but will not, pay cash for aircraft.

FINANCING PRODUCTS: WHAT'S IN STORE FOR 2013-2016

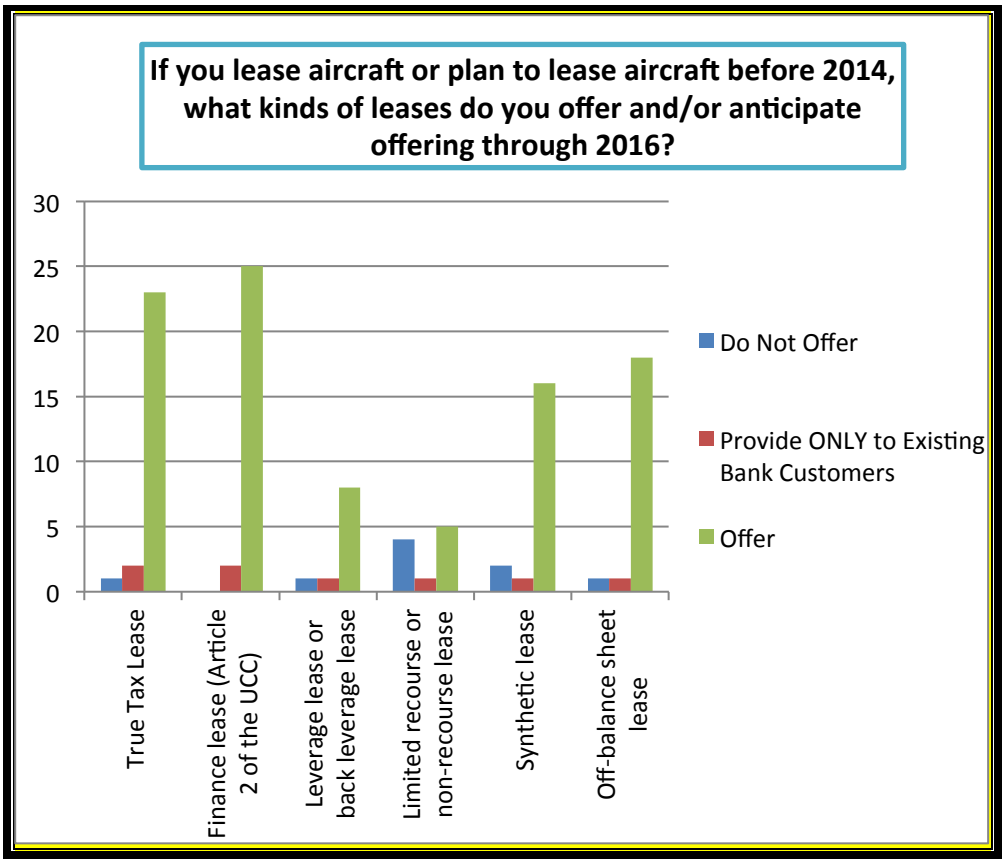
FINDING: Although leasing business aircraft may diminish somewhat in 2013 through 2016, financiers generally expect to offer true tax leases, finance leases (UCC Article 2A), synthetic leases, financing leases, secured loans, limited/recourse leases and loans, and off-balance sheet leases, especially if off-balance sheet leasing remains viable.

If, instead of paying cash, a customer decides to move forward with a financing transaction, financiers can offer different types of financing products. Financiers specialize and define the product offerings based on many factors, but they most frequently cite the scope of their "mandate" or "charter" in the organization establishes the products the financier can offer.

Customers and Financiers Somewhat Willing to Lease

Figure 3.8 depicts financial products that lessors (financiers) will offer.

Figure 3.8. Financier Lease Offerings



Note: y axis = respondents.

Source: Financier survey.

As noted in Figure 3.8, approximately 20% to 40% of financier survey respondents do offer true leases and intend to do so in 2013 through 2016. If these financier survey respondents enter into true tax leases, 73% take the tax benefits, and of that group, approximately 11% do not share the financial or after-tax benefits with their lessee. This response is merely indicative, and not conclusive, yet it is not surprising to the researcher based on experience in these transactions. Their use largely depends on the availability of off-balance sheet leasing.

A large handful of financiers offer synthetic leases with the unique characteristic of allowing a customer to claim tax benefits while also keeping the transaction off-balance sheet. These structures arguably act like loans and thus fall within the mandate of bank financing companies.

Penchant to Loan

Financier survey respondents indicated that they make loans in 60% to 80% of their transactions. Approximately 15% of the financier survey respondents stated that they make loans in more than 80% of their transactions. Again, the response rate in the surveys is too small to provide more than indicative results. However, financier interview respondents either concurred or believed the percentage of financiers that only make loans exceeds 80%.

Very few bank financiers offer nonrecourse loan products because the product requires a significant dependence on residual value and structuring that require the customer to make a large down payment that ranges from 20% to 60%. These financiers take collateral risk in these transactions even though they may also say that they will not take the mirror-image residual risk as a lessor. They minimize risk by requiring large down payments in loans, which offsets downside risk. Therein lies the difference from a lease that is a 100% financing (i.e., no down payment).

Financier interview respondents frequently rejected leasing because they define themselves as lenders, and not as lessors offering true or finance leases (as owner lessors). Rather, they think in terms of lending because they do not have, or choose not to develop, the equipment valuation capabilities nor the desire to take residual value risk. In other words, these financiers simply do not take residual value risk as occurs in true leases. They also do not wish to take the tax risk associated with true tax leases or do not have the "tax appetite" to use the tax benefits.

Of the financing products that financiers offered in 2012 and anticipate offering in 2013 through 2016, financiers provide about 75% of secured loans and disguised leases (leases intended for security or financing leases or installment sales). From 2013 to 2015, the total jumps to 86% of financiers providing loans. The limited survey data is indicative only; it does not conclusively establish the lease-loan preference.

It is important to emphasize that, from the perspective of financiers, the lease-loan decision is a multifactor analysis that considers such intrinsic and extrinsic factors as these:

1. The composition of a financier's product mix determined by its business model and "mandate" (i.e., whether it can even offer leases);
2. The status of tax and accounting policies of the financier;
3. Customer demand for leases versus loans;
4. The quality of the customer's credit;
5. The type of aircraft; and
6. The amount of residual value/collateral risk that the financier appraisal suggests is safe to take.

To reach the high end of this range of leasing (40%) seems to require certain of the largest lessors to stay active in the leasing of a substantial part of their transactions.

FINANCIERS PREFERRED BY CUSTOMER IN 2013-2016

FINDING: Customer survey respondents first consider their regular banks, major bank lessors, and regional and local banks to finance business aircraft. The surprise finding is that a significant trend points to regional and local banks as presenting serious competition for other financiers in the bid to win customers and finance their transactions.

Asked why financier survey respondents think they win deals, approximately 81% of financier survey respondents said they win deals because "we can structure the optimal financial solution for our customer based on our experience and team capabilities." Approximately 47% added that they win transactions because "we usually have the highest expertise and successful track record in valuing the aircraft we finance." These capabilities truly exist and make these financiers serious competitor in transactions. The trending question is: What financiers do customers want to use as the funding source for loans or leases?

As depicted in Table 3.3, approximately 43% of customers expressed a desire to equally use (1) bank leasing companies, (2) regional and local banks, and (3) their regular banks to provide funding for aircraft purchases. Independent leasing companies and money-center banks follow closely behind at 38%.

The larger multinational and bank finance and leasing companies will likely dominate the market for super long-range aircraft and large aircraft. However, their dominance is no longer assured as regional and local banks pick off transactions before they appear in the larger market, enter into creative or non-traditional structures. They can share transactions through clubs or trusted co-lenders or lessors to fund a larger aircraft transaction.

In a surprise finding, customers expressed an increasing interest in using regional and local banks for their financing transactions, fueling a fast-developing trend that brings regional and local banks more prominently into competition for transactions that they discover (or in which they are discovered) before reaching the larger market.

Table 3.3 Financiers Preferred by Customers

If you plan to finance the purchase of aircraft in 2012 through 2016, what type of financing organizations will you consider MOST CLOSELY?	
Answer Options (Select all the options that apply)	**Response**
Independent leasing company	38.1%
Bank leasing company	42.9%
Money center U.S. bank	38.1%
Non-U.S. bank affiliate or branch	9.5%
Regional or local bank	42.9%
Manufacturer (OEM)	9.5%
My regular bank	42.9%
Hedge fund or private equity fund	9.5%
Other (please specify)	4.8%

Source: Customer survey.

Customers seem interested in these financiers due in large part to the customer-centric orientation for financial services; willingness to finance new or preowned bottom-half jets and other GA aircraft; and offer of aircraft financing as "generalists." (In the last instance, the financier will enter into a financing transaction even if it does not fit within its typical lending products or if the financier lacks a dedicated business aircraft financing unit.)

The "sweet spot" for these financiers is a transaction between $2 million and $12 million for acceptable aircraft and a strong customer credit. The competition in this price range, however, may become particularly intense because the transaction profile (i.e., $2 million to $12 million) fits within the mandate, if not the primary business objective, of most financiers. Given the potential to build a larger and high-net-worth customer base, it would be less than a surprise to see new entrants in this category.

Furthermore, top-half jet financiers will very likely pay close attention both to aircraft coming to market as part of the replacement cycle and to young aircraft in this price band. Despite their affinity for top-half jets, these financiers are very unlikely to cede quality new jet or young jet opportunities to other financiers, particularly regional and local banks.

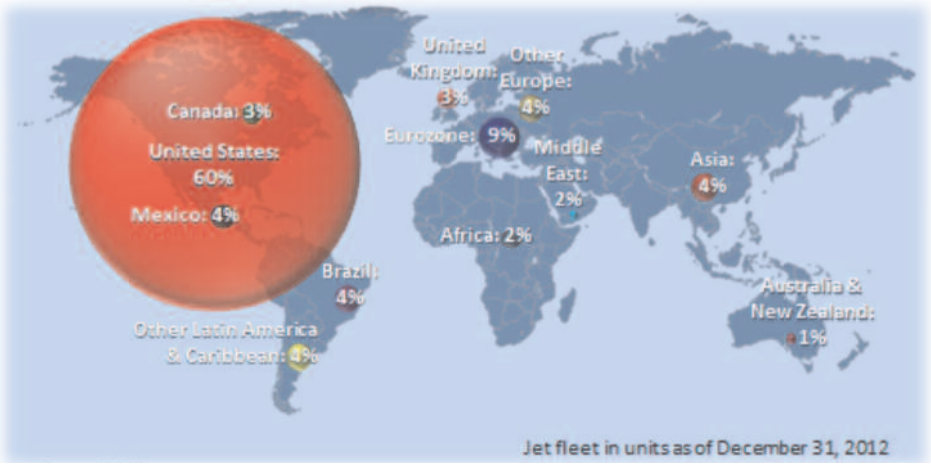
Chapter 4. Top Global Markets: Where In The World Is The Business?

A WORLD OF OPPORTUNITY WAITING

FINDING: Financier interview respondents confirm that customers outside the U.S. often present strong credit attributes, quality aircraft, and higher rates of return than in U.S. transactions. Although structuring requires additional skills and knowledge, knowledgeable interview respondents state that financiers can manage the risk in most countries with a reasonable degree of assurance including when, where, and how they can recover their aircraft after a default.

This section of the study focuses on the growth and prospects of business aircraft transactions around the world. Figure 4.1 shows where in the world jet fleets exist as of December 31, 2012.

Figure 4.1. Jet Fleet by Select Countries and Regions



Source: JETNET, Q4 2012.

In 2010–2011, the BRIC countries (Brazil, Russia, India, and China) highlighted the global potential of business aviation with promising, if somewhat unpredictable, demand for various business jets. Some of these countries acquired a high percentage of business jets relative to their own installed fleets. In other words, the BRIC countries accounted for a high percentage increase in purchases of business aircraft when compared to the number of such aircraft previously owned and based there.[93]

The BRIC countries tend to lead the growth in business aircraft sales–but not necessarily in comparison to other parts of Latin America, Eastern Europe, and the Middle East. The U.S. and Europe are mature markets with lower growth rates. Emerging markets expect to account for more than 50% of demand in the next five to 10 years. In addition, financiers expressed interest in Australia, South Africa, and Eastern Europe.[94]

CATEGORIES OF U.S. FINANCIERS IN INTERNATIONAL TRANSACTIONS

Internationally active financier respondents fall into three categories:

1. Multinational banks that have already developed international capabilities in multiple business lines and/or have footprints in particular countries or regions;
2. Nonbank financiers that develop a niche for higher risk and higher return transactions opportunistically in countries with manageable risk elements; and
3. Bank financiers that develop expertise in selected countries or regions and stick to those markets.

Their respective market strategies of these financiers differ in significant respects. This suggests that entry into international transactions does not require any particular attributes of the financier other than establishing and executing a good business plan with adequate investment to source, bid and close good quality transactions with acceptable risk and pricing.

Proprietary Structuring and Pricing: Rates and Risk

According to financier interview respondents, transaction structuring and pricing essentially mirrors those in the U.S. with some extra elements. Like U.S. transactions, the decision to pursue a transaction stems from the fundamental business model of the financier. These respondents said that the quality of the transaction may hinge on proprietary pricing and structuring that incorporate, among others, the elements discussed below.

A few financier interview respondents revealed the fundamental aspects of their individualized analytical models used to price international transactions. Appendix E discusses structuring and risk management.

This part discusses pricing parameters in the 2013 market. Assume a transaction involves the financing of a large cabin aircraft where the transaction, when properly structured, has low to moderate risk (as determined by the financier). For these deals, financier interview respondents collectively said they can price this type of transaction at 250 to 800 basis points over the index rate (typically LIBOR–London Interbank Offered Rate).

In a surprising finding for the researcher, certain U.S. financiers said that they can and do accept margins under 250 basis points to win international transactions. The common thread for the financiers that make this choice is that they have a high comfort level with the in-country risk, collateral/asset values and the quality of the customer.

The pricing can still drop further. In a different business model, financial institutions can and do accept as little as 150 basis points over their costs of funds for international transactions–but only for customers with an investment grade credit rating by a major rating agency or an extensive, quality banking relationship.

Thinking of domestic transactions, one financier interview respondent collectively say that, in the U.S. market, rates in 2013 range typically from 125 to 175 basis points over the applicable index rate. With rate compression, however, other financiers have indicated that margins for investment grade credits and special quality customers can dip below 100 basis points over the applicable index rate.

In general, international financings have (or should have) higher risk-adjusted rates of return than U.S. transactions for similar aircraft, but each transaction, as discussed below, requires the financiers to conduct a multi-factor analysis in gaging risk.

Risk Factors in International Transactions

The risk analysis of any particular transaction requires financiers to understand the attributes of the customer and transaction in great detail, including the following fundamental steps:

- a country risk assessment, including the quality of the legal system;
- detailed inspections of the particular type, age, and condition of the aircraft (but it must fit within the financier's knowledge base and comfort zone to use prudent residual/collateral value assumptions for the aircraft in the particular country);

- a thorough customer quality assessment, including credit and cash flow;
- an early determination of the financier's likelihood of achieving its return targets;
- regulatory compliance profile, including know your customer (KYC) processing;
- confirmation that of availability of proper insurance, including political risk coverage, if needed; and
- assurance of quality of structure and documentation; and
- risk mitigation techniques with respect to the transaction as a whole.

The financiers then subject all of these factors and others to an economic and other proprietary financial analysis that to determine whether they transaction works for them.

With a few notable exceptions pertaining only to specific international issues, many of the same elements listed above apply in U.S. transactions. International transactions do include additional risk assessments, regulatory/banking regulation and enhanced structuring and documentation among other requirements and realities. For example, country risk is an issue outside the U.S. and looms large to a U.S.-centric financier, and frequently for the internationally active financier. Transactions usually take longer to structure, negotiate, document and close. Consequently, professional fees usually exceed what U.S. financiers expect to pay to close financing with regarding to similar aircraft in the U.S.

One financier respondent made the point that international transactions differ in fewer respects than a U.S. financier might imagine. In expounding on his thought, he said U.S. financiers miss opportunities in the international markets that continue to expand and offer good quality transactions while the U.S. market slowly shrinks, offers thin rates, and provides virtually no chance for banks to develop new relationships with wealthy international customers.

U.S. Financiers: Aware of International Opportunities?

Financier respondents seem well aware of international opportunities even though they tend to shy away from them. However, they did not remain silent in the surveys, as indicated by an unexpected twist in the financier survey. Approximately 25% of financier survey respondents stated there is a "[p]ropensity of senior management and credit team to resist financing aircraft in international transactions because they see greater risk than reward compared to closing U.S.-only deals."

Although this statement is far from conclusive evidence of a desire to engage in international transactions, senior managers should treat it as a suggestion to take the long view of expanding their reach outside the U.S. Doing so would potentially:

- Increase financing opportunities and transaction flow;
- Minimize the potential for accepting a subpar yields in the U.S., due to fierce competition when conservative international transactions can offer higher yields and superior credits;
- Gain new high-net-worth international customers for other financial services or products; and
- Take advantage of markets that have not become as efficient and competitive as U.S. markets.

More on International Markets for Prudent Financiers

Appendix E, International Markets for Prudent Financiers, lists 10 countries that financier interview respondents say have significant potential or actual history of providing transactions with attributes a U.S. financier may consider for approval. The most promising markets for international transactions in 2013 through 2016 also depend on a financier's interest in a particular country or region and the nature of the transaction opportunity.

This appendix also describes how to enter into, and manage risk stemming from international transactions; names the top 20 international markets; and assesses the reasons for the disinterest of financiers in international markets; and it offers the rationale for engaging in these transactions. To appreciate the shift to and within international markets, GAMA devotes the entire Chapter 7 of its "2012 General Aviation Statistical Databook & Industry Outlook".[95]

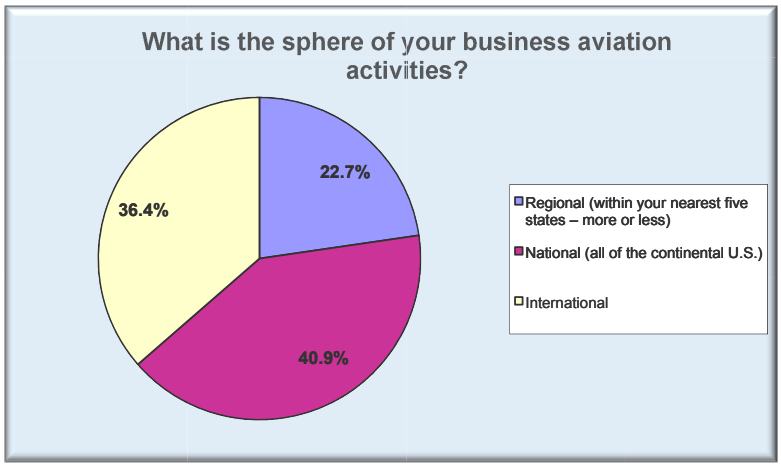
FINANCIERS STICK TO U.S.-ONLY TRANSACTIONS

FINDING: Although international opportunities represent at least 40% of the worldwide transaction market, only a small group of U.S. financiers currently engage in international transactions, and approximately 90% of financier respondents will not do so in 2013 through 2016 despite strong credits and good earnings potential.

GAMA has shown that over the past five years, many deliveries have shifted from North America to the international marketplace."[96] Where manufacturing goes, it would seem that financiers would follow, but that is not the case in the U.S.

Approximately 36% of U.S. customer survey respondents engage in international transactions and may ask for international aircraft financing. Yet, nearly all U.S. financier respondents, with a handful of exceptions, plan to confine their financing to U.S. citizens with aircraft based and registered in the U.S. Conversely, nearly 64% of customers remain U.S.-centric and do not seek such financing.

Figure 4.2. Customer Geographic Scope of Business



Source: Lessee survey.

Approximately 31% to 38% of the financier survey respondents indicate they can provide international financing. However, only 4.6% of U.S. financiers are likely to begin pursuing international transactions in 2013 through 2016, while 47.6% say it "won't happen" or it is "not likely" to happen. Surprisingly, as shown in Figure 4.2, customers indicate that 36.4% of them have an international scope of business, but few if any use the authority in aircraft financing. Most U.S.-based financier interview respondents even shy away from registering their aircraft offshore in widely accepted national registries such as Isle of Man or the Cayman Islands.

GAMA's statistics in 2012 evidence a high number of aircraft registered outside of the U.S.[97] The trend of registering outside the U.S. is developing rapidly. If the FAA adopts adverse changes in the noncitizen trust rules, as discussed later in this study, the trend is very likely, in the opinion of the researcher, to accelerate registration of aircraft outside the U.S. Thus the recalcitrance of U.S. financiers to registering aircraft they finance outside the U.S. seems to be running counter to this trend.

Doing Business with Non-U.S. Citizens – Off the Table

Surveys leave no doubt that a majority of U.S.-centric financiers prefer to avoid providing non-U.S. citizens (individuals) with financing as a part of their refusal to engage in international transactions. A majority of U.S. financiers will not finance non-citizens because it is "off strategy" or not in their "mandate." This statement represents a conclusion rather than a reason not to engage in these transactions.

The rationale seems well entrenched and consistent with the overarching theme of U.S. financiers not to transact business outside the U.S: Financiers have widely determined that they can meet budget without resorting to more difficult

and higher risk international transactions with non-citizens. They express significant concerns about recovering their aircraft in a default and other reasons described below. Again, like their disinterest in financing aircraft outside the U.S., financier interview respondents wholly concurred with this analysis pertaining to noncitizens (individuals).

A minority of financiers seem willing to finance ultra-high net worth individuals ($150MM+), high net worth individuals ($5MM+) and corporations operating under Part 91, whether a U.S. citizen or a noncitizen. To qualify for financing, these financiers may accept high net worth individuals if they have other meaningful banking or business relationships and the net worth gives them comfort that the non-citizen can and will perform; hence, a three times multiple ($450MM+) for a large aircraft financing would not be a surprising requirement.

Even though they are willing to finance these transactions, financiers may still opt out because (1) they prefer to avoid NCT issues that may yet arise, (2) cannot obtain adequate financial information from non-citizens, or (3) worry that they will not be able to recover their aircraft from non-citizens.

U.S. Financiers Stay Home

Financier respondents can readily articulate their reasons for not financing transactions outside the U.S. despite the potential value in the international markets:

- They most commonly respond that international transactions do not fit within their charters or mandates.
- They realize that international transactions demand knowledge of the culture, legal systems, language, country risk, and the aviation authority of the target country or region; and they lack the experience, skills, and in-country expertise to pursue the business.
- They do not have (and typically do not seek) a business development budget to find business in another country or region.
- From the standpoint of senior management, the time and resources they would need to devote to non-U.S. markets and the perceived risk they would have to take to engage in such business would far exceed the incremental value of the potential bump in rate, fees, or other revenue.
- Even the potential availability of superior creditworthy customers or greater volume of high-quality transactions does not seem to motivate them to seriously consider engaging in international transactions in 2013 through 2016.
- As the global economies regain their footing and begin to grow, the drivers to expand international business transactions will be more evident, along with the opportunities for transaction growth outside the U.S. Regardless of the potential, U.S. financiers expect to make budget by staying home.

Chapter 5: Risk Management In Business Aviation Transactions

FINDING: Financiers capably performed underwriting functions in transactions well before and during the recession, but the recession plainly showed that financiers did not do enough to protect their companies.

The recession and 2007 frenzied transaction period jolted financiers and, for many, changed their thinking and approval processes. Most financiers enhanced their due diligence and approval processes during and after the recession. This section discusses some of the trends and best practices that, in part, have been drawn from financier and customer respondents.

SELECTED RISK MANAGEMENT TOOLS

In evaluating a transaction, financiers plan to continue, if not expand, most of the common ways to protect against transaction risks, as suggested by, among other methods, using and relying on:

1. Proprietary pricing and risk models to prepare their bids (100%)
2. Aircraft title insurance (almost 3:1)
3. Engine service plans (12:1)
4. Independent appraisers (25:1)
5. Residual value insurance (3:1)
6. Casualty and liability insurance (100%)
7. Private investigators or background check services (almost 1.8:1)
8. Detailed and properly structured documentation (most)
9. FAA and International Registry (IR) filings and registrations, respectively, for every transaction (100%)[98]

Several of these items deserve additional discussion.

RESIDUAL/COLLATERAL VALUE RISK MANAGEMENT

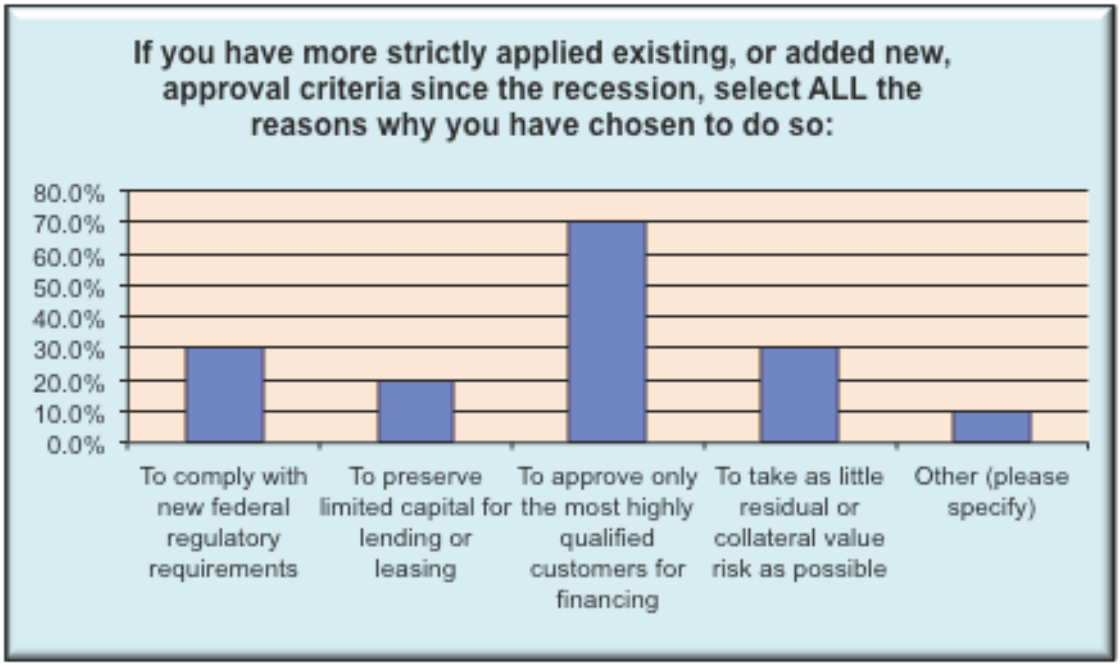
Assuming the customer credit passes muster with a financier, the most significant risk is setting assumed residual/collateral values in preowned (and to a lesser extent new) aircraft transactions by those financiers that focus on asset values as a primary part of their approval decision to fund a particular transaction.

Since the recession, 30% of financiers accept as little residual or collateral value risk as possible. As Figure 5.1 shows, residual value concerns drive stricter approval criteria to the same extent as compliance with regulatory requirements. That approach has contributed to a trend toward financiers making more aircraft loans than taking downside risk to declining residual values attendant to owning business aircraft.

Even though residual values in super long-range and large-cabin aircraft have been steady over several decades,[99] the value of almost every other aircraft conjures up greater doubts and worries for financiers. Certain financiers specialize in financing particular types of aircraft and/or have extensive asset valuation capabilities with respect to a wide range of aircraft types. This knowledge helps them feel more confident in residual/collateral values with respect to those aircraft. Appraisals still remain an essential ingredient to assessing asset risk and "papering" a file associated with the transaction. However, internal expertise can differentiate financiers and give them an advantage in winning transaction awards. The advantage derives from blending their knowledge of market values and historical market data, coupled with strict aircraft maintenance criteria in documentation. The documents frequently set limits on hours flown, impose high maintenance levels during and at the end of the term (in leases) and prohibit or permit minimal charter operations.

The major balancing act, which varies in leases and loans, involves picking a residual/collateral value that, on one hand, reasonably supports the financier's basic economics and, other the other hand, enables the financier to offer terms that win transaction awards. Considering the comments of all respondents, regulatory, organizational and best practices militate toward erring on the safe side. Market competition in the U.S., however, may require a financier to take greater risk, which leaves little room for mistakes. Hence, as discussed earlier in this study, organizations face a real concern of repeating mistakes like those that occurred before the 2007 recession began.

Figure 5.1. Approval Criteria Changes



Source: Financier survey.

TITLE INSURANCE

FINDING: Financiers increasingly require their customers to purchase aircraft title insurance to mitigate risk arising out of new financial institution regulations and credit underwriting conditions. Similarly, customers will separately consider, if not purchase, aircraft title insurance where the ownership history of an aircraft presents unknown or unquantifiable title risks and the cost of coverage is reasonable relative to the perceived title risks.

Title Insurance Fundamentals

Aircraft title insurance (ATI) responds to covered defects in title to an aircraft.[100] Stated otherwise, aircraft title insurance is a contract between the insurance company and the insured that protects the title of the insured in a specific aircraft from covered risks, as defined in the insurance policy.[101] Customers, as aircraft owners, buy the coverage for their own benefit. Loan policies also exist for, and are commonly purchased by or for the benefit of, financiers.

Defects in title can arise out of such sources as vendor liens, repair liens, purchase options, fraud, claims of joint property, unenforceable documents, unknown tax liens (federal, state, local and international), and judgment liens. ATI would normally provide coverage for the foregoing defects. It would also cover claims asserted by a lender under an invalid or unenforceable security agreement, a buyer under a bill of sale or an heir in an estate proceeding.[102]

One of the first title insurance companies, First American Transportation Title Insurance Company, which started offering aircraft title insurance in 1999, recently announced that it will no longer issue new ATI policies, effective as of March 31, 2013.[103] A new title insurance company, Avsure, Inc.,[104] began writing aircraft title insurance policies in 2012 and, as of April 1, 2013, will be the sole source of ATI for the business aviation industry. The Oklahoma Insurance Commission[105] has approved Avsure, Inc., and Lloyds of London[106] reinsures risks it underwrites.[107]

Aside from issuing the insurance itself, title insurers, through various agents,[108] perform skilled due diligence to find and assist the parties in correcting aircraft title problems. They do so, in large part, to identify title defects, minimize potential claims and present as clean a record as possible to underwriters for approval to insure title to the subject aircraft.

In the current market, title insurance policies are written solely for aircraft registered in the U.S. (including the policies for aircraft that are being imported into the U.S. for registration at the FAA). ATI is not currently offered for aircraft registered outside the U.S. However, Avsure, Inc. is developing such a product with respect to selected countries. Such additional coverage is significant in an era of increasingly internationalization of aircraft transactions.[109]

Title insurance has been gaining wider acceptance for well over five years. This acceptance has developed into a trend among financiers and customers to routinely consider whether to purchase coverage. In an uncertain and regulated financial market, ATI protects insureds against title defects, known and unknown, unless the policy excludes the defect. In a risk management assessment, customers and lenders should evaluate its options to purchase the insurance or not.

Option 1: Forego Title Insurance

Despite its inherent benefits, transaction parties often forego title insurance coverage. Two examples arguably support this decision. First, if an OEM sells a new aircraft to a Customer and warrants good title, as is customary, title defect risks are remote because the OEM (and/or an affiliate) should have been the only owner(s) of the product. A purchaser can reasonably expect its OEM to resolve any title issue in connection with the original sale of the aircraft.

Second, if an "A" rated U.S. credit (corporation) sells an aircraft it has owned since "birth" and provides a warranty bill of sale, the very low risk of a title or authority problem arguably makes insurance unnecessary assuming the purchaser conducts proper diligence and sees no title issues associated with the aircraft or material questions about the seller.

Finally, many financier interview respondents indicated that they typically, if not always, use aviation transaction counsel to perform title due diligence, which (who) may satisfy or address any title concerns in such transactions and others that exhibit little apparent risk or complexity. These transactions may include purely U.S. sales or financing where title searches at the FAA and IR produce only the expected records, the operations of the aircraft involved well-managed or few international landings, and/or the perceived risk is so minimal that the purchaser would rather take the risk than pay a premium for insurance that provides minimal value relative to such cost.

Option 2: Purchase Title Insurance

Transaction parties may alternatively elect to purchase coverage under the circumstances described above because they value the risk mitigation afforded by the title insurance company for tax and other undiscovered liens. They may also take comfort in relying on the insurance company's proficiency in conducting proper due diligence on title risks coupled with issuance of insurance – a measure of the title company's confidence in clean title or title with harmless defects.

The following examples show why title risks may motivate a purchaser to obtain title insurance. First, if an aircraft owner enters into two or more successive sales of the aircraft to purchasers, ATI can mitigate risk of a lien or other title defect that a financially troubled seller may fail to resolve or discharge. The risk of liens or other defects in title may potentially become more significant if, in these successive sales, the parties move the aircraft among different country registries, and/or the transactions involve the importation to, or exportation from, the U.S. or other countries.

Second, customers and financiers should ascertain whether affiliated companies that use the aircraft may also own an undivided interest in the aircraft (i.e., an ownership piece of the whole aircraft). This cautionary note should resonate with purchasers where a seller has affiliates with rights to use the aircraft. In one case, an international seller did not realize it should disclose that four affiliates owned an undivided interest in the aircraft in addition to its own. The affiliates acquired their interests from the original purchaser after the purchase closed for tax, operational and regulatory reasons. Title insurance would have covered this risk had the original purchaser alone purported to transfer title, but the diligence process identified the problem in time for the parties to rectify it before closing.

Third, in certain circumstances, sellers will refuse to give a full warranty of title. This situation may arise when a financier sells an aircraft after a repossession or lease expiration. In an allocation of risk to the purchase, the seller may only pro-

vide a warranty of title against liens it created. ATI can provide the purchaser protection against other title defects within the policy coverage.

Fourth, an intermediary (often a "broker") may structure a sale as a "back-to-back" transaction. In this type of structure, the broker agrees to purchase and take title to the aircraft from the original seller at an agreed price. In the same closing, the broker sells the aircraft to the intended, final purchaser at a higher price than the price it paid the original seller. The difference in the broker's purchase and sale prices is the broker's fee for representing the seller in the transaction. The bills of sale and transfer of title would move from the seller to the broker and from the broker to the ultimate purchaser.

If any lien attributable to the broker attaches to the aircraft (most commonly federal or state tax liens), a title defect arises and may require the final purchaser to defend against the lien holder. Although the broker may be obligated to remove the lien under its warranty of title, it may be unable or unwilling to do so. In that event, the title insurance should respond to the lien claim against the aircraft.

Insurers Decline Coverage; Policy Limits for Insurers

As a general principle, no ATI purchaser should assume that an underwriter can or will write insurance for any risk or any amount. Underwriters will decline coverage for various reasons that include its inability to fully assess or accept certain potential title risks. They also have limits in the amount of coverage they can write, particularly for high-priced large cabin and super-long range aircraft. However, as an insurer gains confidence in its risk assessments, it is possible to negotiate additional or different coverage, often evidenced by "endorsements" over excluded risks.

Best Practices

Purchase Decision Approach: A purchaser should, in determining whether to buy ATI, first judge its risk tolerance (and its financier's) to potential title defects against the quoted cost, amount and scope of insurance coverage. Some customers view ATI as a necessary and reasonable closing cost, just as they may would in a standard real estate purchase. Other customers strongly resist purchasing coverage because they do not see the value in doing so and can persuade their financiers not to require it.

Other factors affect a decision of whether to purchase coverage. They include an evaluation of whether the:
1. Financial strength of the seller assures the purchaser that the seller can back up its warranty of title;
2. Customer's willingness to address a title challenge;
3. Complexity of, or riskiness presented by, the transaction about unknown claims against the seller or authority of the seller to complete the transaction as agreed;
4. Number and location of owners of the aircraft that may increase the probability of title issues when the sellers could have created liens, such as from airport landing fees, to third parties such as an airport authority;
5. Age of the aircraft, which allows a lengthy exposure period to claims associated with multiple title transfers;
6. Aircraft has been registered outside the U.S; and
7. Insurer has the financial strength to defend title in favor of the insured.

Addressing item 1 above more detail, if another special purpose entity, such as a single purpose/aircraft owner company, provides a warranty of title, the warranty may be worthless. That obvious reason is that the entity will have no assets remaining in the company after the sale of the aircraft. ATI should respond to title claim that such an entity fails or is unable to pay for claims made by third parties.

An important distinction arises here. ATI is not credit insurance; the credit of the special purpose company does not alter the coverage issued. ATI pertains solely to defects in title regardless of the seller. In any case, the Hawker Beechcraft bankruptcy[110] has shaken the market enough to serve as a reminder that customers or financiers should, to the extent feasible or reasonable, check that any seller is solvent in assessing the desirability of title insurance and the real value of the seller's warranty of title.

Basic Decision Approach

In the view of the researcher, it is a best practice to purchase ATI coverage unless it can be demonstrated that there is no material title risk based on all facts and circumstances in the particular transaction. In the current market, however, the parties often approach this question in the opposite order. They assume knowledgeable aviation counsel can and should perform due diligence and will thereby render insurance coverage unnecessary.

As part of the decision process, however, the researcher also proposes that it is a best practice to decide, at the outset of a transaction, whether purchaser's counsel or the insurer will conduct the most thorough and appropriate diligence in the particular transaction because professional fees will be charged by the insurer just as counsel for the purchaser pays its own counsel or title company to conduct due diligence.

Such diligence should, if properly executed, include, in addition to searches at FAA and IR, examinations of appropriate records to find any airport, vendor, repair, UCC, judgment and federal and state tax liens together with other claims by authorities with jurisdiction over the aircraft or the seller, whether U.S. or international, or both.

If fully and competently performed, this type of due diligence should meet best practices for mitigation of title risk, whether performed by purchaser's counsel or the insurer. Yet, the ATI insurer will argue that its end product is preferable because it can then issue insurance where counsel for the prospective purchaser cannot. At this point, the parties should make a reasoned business decision on the type of protection that meets their needs.

I**nsurance Policy Review:** Before purchasing insurance, the parties should closely scrutinize and understand the insurance policy provisions, including the terms, conditions, exclusions and limitations relative to their expectations for protection from known and unknown title defects. Generally, risks will be covered if the policy does not exclude them, but it is important not to assume that a policy covers any particular risk.

A review of policy terms against a warranty of title from the seller should reveal important differences that show the warranty of title has continuing value and broader protection than ATI. Hence it is important to understand that ATI, in reality, lessens, but does not wholly protect the insured against every risk associated with any known or unknown adverse interest to good title in an aircraft. In short, ATI is not a security blanket around all title risks.

The following items illustrate a few provisions in an ATI policy that may not be obvious or expected: (1) title insurance usually has a sublimit of $250,000 for covered federal tax liens and $25,000 for covered state and local tax liens (i.e., often far less than the amount of purchased coverage); (2) the ATI premium reflects the amount of ATI, as expected, but will also include, or add, the cost of the insurer's and agent's due diligence out-of-pocket fees and expenses for outside aviation counsel and consultants, if any; (3) certain liens created by the insured purchaser may not be covered; and (4) the title insurer typically provides defense counsel to respond to claims without limit or additional cost to the insured.

Insurance Policy Amount: Purchasers should inquire whether an insurer will sell coverage for all or part of the cost of the aircraft. It is quite possible that less than full amount may more than adequately cover insured defects in title, but this discussion should include a clear understanding of limits on ATI policy payments and scope of coverage. For example, if a customer purchases a $30 million large cabin jet from a third owner in the chain of title and finances the purchase, the financier and customer should determine whether a policy for a fraction of the $30 million will provide sufficient protection against even the most unexpected title challenge and related defense professional fees.

Financiers that request or approve the purchase of title insurance may not accept partial coverage unless it insures the full amount of their credit accommodation (i.e., the insurance does not cover the customer equity or down payment in an aircraft loan). Based on feedback from all financier respondents, financiers will be highly unlikely to accept less than this amount if they believe coverage is necessary.

Trends: On balance, though aviation counsel will likely handle most title searches and related diligence requirements in U.S.-based transactions, financier respondents seem likely, in 2013 through 2016, to increasingly use title insurance as a basic risk management tool. Similarly, the development of ATI policies for selected international registries should

enhance risk management in international transactions. From the point of view of the researcher, the trend is moving in the rights direction, especially as transactions reach more international markets and demand a higher level of global due diligence.

RESIDUAL VALUE INSURANCE (RVI)

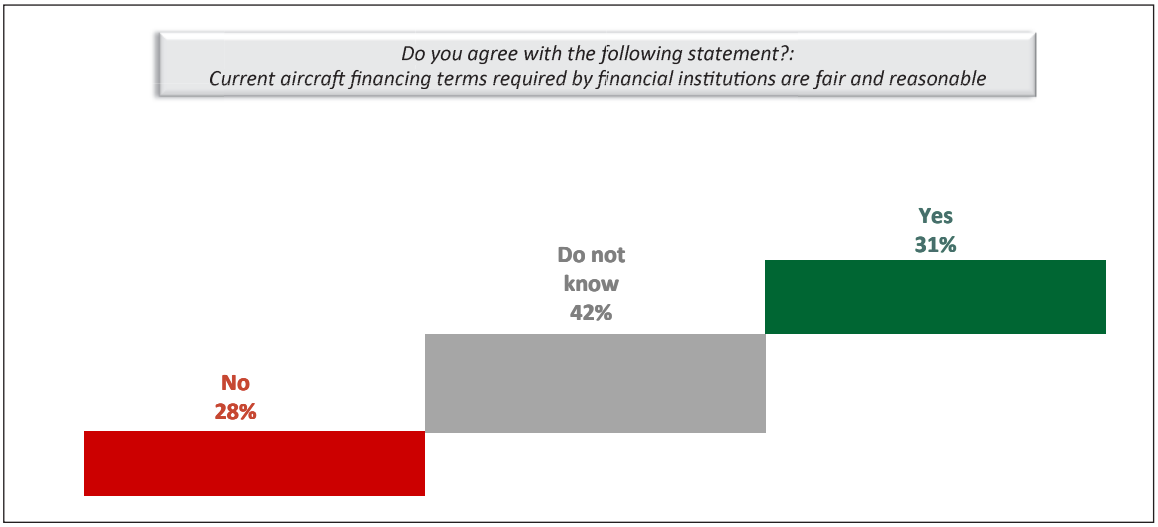
RVI[111] serves primarily as a device to obtain particular accounting treatment. Financiers can also use RVI to protect against non-accounting types of downside residual value risk. Certain companies can provide both products (i.e., true downside risk coverage and accounting coverage), but true downside risk-sharing is far less prevalent.

Moreover, downside risk is likely not to expand in the near term due to significant cost, complexity, and limited or expected demand. An interesting possibility worthy of discussion, but outside the scope of this study, is whether financiers can use RVI to shore up residual or collateral value, without imposing so much cost on the transaction that it is no longer competitive with other bidders that accept the downside value risk.

CUSTOMIZED DOCUMENTATION; REASONABLE TERMS

Financier survey respondents report that customers have not demanded that financiers shorten or simplify the financing documents. Moreover, financiers intend to hold steady on requiring documentation designed to the fit the complexity of the transaction.[112] However, financier interview respondents confirm that their standard documents contain comprehensive (if not onerous) provisions designed to preserve aircraft values and closely manage default risks. JETNET iQ confirms a "disconnect" between financiers' views of documentation and the view of customers. Despite the lack of pushback by customers, customers view terms as burdensome in many cases, but they are resigned to get the terms they can in this market. JETNET iQ illustrates their discontent in Figure 5.2.

Figure 5.2. Fair and Reasonable Financing Terms



Source: JETNET iQ, February 2013.

Best practices require that financiers use of all these risk management tools as the baseline approach, and then make exceptions after close analysis of each proposed transaction. Financier interview respondents widely suggest that competition erodes this approach as terms, conditions, and pricing all suffer dilution from real market conditions.

SELECTION OF AIRCRAFT: BEST PRACTICES FOR FINANCIERS

FINDING: Financiers uniformly state that they will not suggest an aircraft to their customers as the correct one for them because the customer always makes the choice. However, a trend has developed that financiers will scrutinize the selection process and the likelihood that the aircraft will meet the customer's expected missions.

In 2013 through 2016, financiers will likely advance a trend of closely scrutinizing a customer's process of choosing an aircraft. Consultants interviewed for this study strongly support this trend. The purpose of the financier review is not to suggest or veto the choice of a particular plane. Customers should always make the final decision. Several financier interview respondents emphasized that it would be unwise for any financier to do otherwise in a specialized business driven largely by relationships with OEMs, customers, and other financiers.

However, the financiers do assess whether the customer engages appropriate experts, gathers the right interdisciplinary internal team, and involves senior management to make a full analysis of the aircraft to acquire for its missions. In three separate interviews – one with a financier, a second with a customer, and a third with a consultant – a consensus emerged. It is a best practice for customers to create an interdisciplinary team, including senior executives, to evaluate choices of aircraft and make a decision that considers relevant expert advice on all material aspects of selecting, owning or leasing, operating, and maintaining the aircraft.

As one customer mentioned, in a sophisticated travel or flight department, the leaders of the department should know the travel needs of the most frequent travelers, including senior executives, better than the executives themselves, so that the interdisciplinary team selects the optimal aircraft for the company.

More broadly, the diligence in choosing the correct size and type of aircraft for the customers' missions helps financiers evaluate whether the company will use the aircraft efficiently and economically as a critical business tool. A customer that makes the wrong choice may think it should sell or return the aircraft, thus cutting short the anticipated term of the financing.

Ultimately, however, a financier's examination of the quality of the customer's management and what the customer does with its earnings, revenues, profit, and balance sheet takes precedence over the trend of a financier's making judgments about the customer's interdisciplinary process of picking the right aircraft.

ENHANCED CREDIT APPROVAL PROCESS

FINDING: Financiers that closed transactions under a market-driven approach fell victim to the swift decline in residual/collateral values. Financiers that adhered to long-term existing (pre-2007) credit policies and discipline in a company policy-driven approach generally fared better in the credit crisis and continued to conduct business without material credit issues.

Company Policy-Driven Approach versus Market-Driven Approach

Financier survey respondents indicate that many of them did not appreciate the enormity of the economic storm approaching before the recession when they established rates, residuals, and terms in their financing transactions. When residual/collateral values dropped so much and so fast during the recession with respect to many bottom-half jets (less so for top-half jets), rates of return and aircraft values perceived as rational before the recession lost any semblance of prudent financing.

The researcher observed two financier approaches in the over-heated market before 2007. In the first case, financiers maintained a company policy-driven approach, and in the second case, the financiers operated under a market-driven approach. The first group experienced fewer, if any, losses or defaults whereas the second group encountered far more

turbulence in their business characterized by defaults, workouts and losses as described below.

Market-Driven Approach

The market-driven approach entails the use of approval criteria as a guide, but not a restriction on bidding and risk-taking in transactions. It allows transaction teams to pursue and close transactions that generally comport with internal credit guidelines to approve transactions, but do not undergo rigorous analysis and due diligence. If the deal looked good at the time, it was good enough to fund and move on to the next deal rapidly, but not carelessly.

The financiers that used the market-driven approach fell victim to the aberrational market circa 2006-2008. The market intoxicated even the most seasoned veterans with the belief that residual/collateral values would continue to rise to (and remain at) higher levels. Accordingly, they reasoned, they could win transactions by reducing rates; agreeing to finance 100% to 105% (approximately) of the purchase price of an aircraft; and assuming that, when they harvested the increased residual value under leases, the "skinny" pricing would be protected and higher earnings would be assured. Moreover, the 100% plus loan advance rates would be protected by high collateral values.

In a harsh and unforgiving manner, these financiers discovered that what goes up can come down, when the steep drop in aircraft values resulted in losses, write-downs, workouts, and bankruptcies of customers. Some financiers licked their wounds and left the aircraft financing market while others pulled back to survey the damage; to change course to solve problems that, in hindsight, they caused in large part by failing to use extra caution and judgment in a market that should have seemed too good to be true.

This group arguably did not proceed with abandon to close deals, ease back on credit approval processes or make indefensible assumptions about asset values and realizable yields. According to financier interview respondents, these behaviors did, in fact, occur broadly among financiers in this group. These financiers simply did not do enough to protect their companies, and the price paid, and yet to be paid, by this group, provides continuing evidence of their questionable decisions.

Company Policy-Driven Approach

In contrast, the financiers that applied the company policy-driven approach set firm criteria that restricted excessive risk-taking in transactions. For this group, policy required that senior executives would have to evaluate the opportunity and make a reasoned judgment to take a higher degree of risk. This approach did not allow transaction teams to pursue financing deals they chose unless they comported with, and were structured to stay within, clear internal credit guidelines.

Financiers using this model exhibited all or most of the characteristics of:

1. Standing firmly on long-time credit policies (pre-2007) standards;

2. Not assigning unrealistically high residual values to aircraft supportable only by appraisals that reflected the elevated values in the pre-2007 market;

3. Not adopting a buy-the-deal, skinny margin pricing strategy, as 46% of financiers did (and a much higher percentage, according to financier interview respondents);

4. Declining transactions that did not make economic sense on a risk-adjusted basis taking into account historical market cycles relative to the values circa 2006-2008;

5. Holding to conservative and established credit underwriting standards or policies, even if they lost deals to other financiers;

6. Avoiding nonrecourse financing because financiers relied on elevating and elevated collateral/residual values;

7. Asking their customers to put more "skin the in the game" to share transaction and residual/collateral value risk with the financier; and

8. Using a "rule" (as described below) to assist in determining the maximum term of a transaction.

None of these characteristics excluded an assessment of market conditions and demands; rather, they embraced and filtered them through disciplined process and proprietary pricing models. These financiers probably enjoyed a bit of luck in financing strong creditworthy customers. Still, according to financier interview respondents, even these financiers, acting on the policy-driven approach, made residual/collateral value assumptions that ultimately proved too high. No one averted all the pain caused by the recession and 2008 financial crisis, but this group fared much better than the market-driven approach group.

In 2013 through 2016, financiers will be very likely to adhere more closely to a company policy- driven approach as the best practice, taking into account new post-recession regulations of financial institutions. However, to be realistic, in the highly competitive U.S. market, financiers will strike a balance between the two approaches in 2013 through 2016 that reflects their business mandate and likely renewed appetite for risk.

Know Your Customer Rules

Most financier interview respondents indicated, in discussing questions about diligence and changes since the recession, that their companies have adopted and enhanced "know your customer" (KYC) rules. Although the surveys did not isolate these methods used by financiers, in particular, to develop, update, and implement the KYC rules, interview respondents clearly recognized and respected the need for, and used, KYC procedures in connection with their due diligence and approval of each transaction.

In an increasingly global marketplace for transactions, KYC rules continue to take on greater importance and attention. PriceWaterhouseCoopers LLC notes in its 2013 KYC guide:[113]

> Record-breaking fines issued by regulators worldwide, notably in the US and UK, dominated the financial services landscape in 2012. This looks set to continue in 2013 if regulators identify further failings in firms' compliance with money laundering, sanctions and tax requirements. … Firms operating on a global basis will also need to demonstrate a robust compliance framework ensuring that each territory has sufficient oversight and that Anti Money Laundering … regulatory requirements are being adhered to at both a local and global level.

The KYC topic is so complex and extensive that this study touches on it only in the context of noting its role in proper due diligence and risk mitigation efforts in each transaction. Whether a financier elects to follow a company policy-driven approach or a market-driven approach, both seem to have KYC compliance practices.

For internationally active financiers, these rules can make the difference between engaging in a transaction that presents serious reputational, economic and legal risks and avoiding institutional embarrassment and financial losses. In 2013 through 2016, there is little doubt that sophisticated financiers will tune into to know their customers thoroughly. Financiers that do not rigorously enforce KYC policies may discover the perils of the increasingly complex and global nature of business aviation transactions.

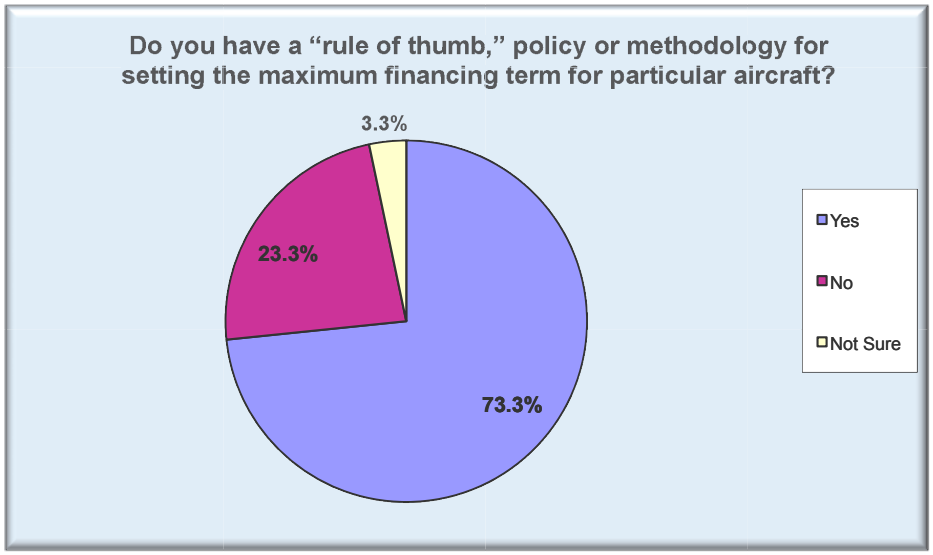
Survival of the "Rule" of the Transaction

FINDING: Financiers will continue to use a "rule of 15" or "rule of 20" (or similar rules up to a "rule of 25"), but in 2013 through 2016, the trend indicates that at least 70% of financiers will reduce their reliance on the rule to test transactions for approvals.

The "rule of 20" provides that the age of the aircraft plus the term of the financing must not exceed 20 years. The rules stem from, among other factors, a financier's investment risk policies, return hurdles, and a rational assessment of current market competition. For example, it applies to any aircraft financing such as a lease or loan with a seven-year term of a 13-year-old aircraft.

As Figure 5.3 shows, 73% of financiers use their own version of a "rule of thumb."

Figure 5.3. Rule of Thumb Used by Financiers to Set Finance Terms



Source: Financier survey.

Financier survey respondents offered these illustrative rules: "at maturity, the age of the airframe cannot be more than 25 years" or "age plus amortization not to exceed 25 years." Other financiers limited terms or ages to 10 years: "10-year max term"; "10-year max term based on age of aircraft"; or "[n]o more than 2/3 of the remaining life of the asset, based on a desktop appraisal (at worst)".

Some financiers that used such a rule before the recession discovered it did not protect them from the huge decline in values of bottom-half jets (and to a lesser extent, the top-half jets). As illustrated in Table 5.1, 24% of financier survey respondents continue to use the same rule as before the recession of up to the rule of 25. Approximately 55% of financiers apparently changed the rule they used before the recession. This finding implies that just over a majority of financiers clamped down after the recession, as discussed earlier in this study, but at least 24% have not altered their course from before the recession.

Table 5.1. Rule of Thumb Changed Since Recession

If you do have a "rule of thumb," policy or methodology, have you changed your approach since the recession to reduce, in most cases, the age of aircraft you will finance in 2012 through 2016?	
Answer Options	**Response**
NA	13.8%
Yes	55.2%
No	24.1%
Not Sure	3.4%
We do not have a rule of thumb, but we generally have reduced the age of aircraft we finance.	3.4%

Source: Financier survey.

Based on all responses from interview respondents and survey respondents, amortizations may still exceed the actual transaction term, but financiers have, since the recession, reduced a rule of 20 to a rule of 15, as a common example, and the actual term to five to seven years with respect to a 10-year old aircraft, producing a rule of 15 or a rule of 17, respectively.

As to the other financiers, the financier surveys suggest, and financier interview respondents confirm, that a minority of financiers will still offer financing amortizations of up to 25 years as they did before the recession. These financiers likely fit in a group of aircraft model specialists, regional and local banks, and other financiers staffed with highly knowledgeable appraisers/value experts.

In 2013 through 2016, the trend will likely show the continuing use of a rule as a factor in evaluating transactions, but the rule will carry less weight than before the recession. Most significantly, the changes in the rule confirm one of the shifts in thinking by financiers that clamped down on approving marginal transactions.

Chapter 6. Top Accounting, Optics, Regulatory, And Tax Issues

END OF OFF-BALANCE SHEET ACCOUNTING

FINDING: Financiers believe the loss of off-balance sheet leasing would seriously undermine the interest of customers in leasing business aircraft, but they have lost interest in the prolonged and indecisive deliberations of IASB and FASB.

The mission of the joint leasing project[114] of the International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB) is to replace Financial Accounting Standard No. 13 (FAS 13) with a standard that provides a more faithful and transparent representation of leases consistent with their conceptual framework (i.e., uniform treatment for similar transactions).[115] It is also designed to allow for improved comparability without the undue complexity arising out of today's bright-line distinction between operating and capital leases (e.g., ongoing interpretative guidance).

Respondents' Mixed Reaction to End of Off-Balance Sheet Leasing

To achieve this project objective, the boards have proposed amid highly technical provisions to put virtually all leases on lessees' balance sheets, to amortize the capitalized amounts based on the nature of the underlying asset, and to establish symmetry in lessor accounting. A lease would be defined as a contract in which the right to use a specified asset is conveyed, for a period of time, in exchange for consideration. A "specified asset" includes identifiable property, plant, and equipment and "inventory items" such as spare parts.[116] A lease of business aircraft would be treated as a lease of a specified asset under the proposed guidance. Thus the leasing project would put leases of business aircraft on the lessee's balance sheet. For more on the accounting proposals, see Appendix D, Overview of Lease Accounting Project.

The end of off-balance sheet leasing is a major concern of financier respondents. Approximately 54% of financier survey respondents rated the adverse changes in accounting as the top challenge in leasing aircraft. Financier interview respondents, represented primarily by their accounting experts, concurred that the changes in the current exposure draft would cut demand for leasing. However, financier interview respondents believe that their customers will ask for off-balance sheet leases until at least 2015, unless the boards complete new guidance well before then.

A minority of financier respondents believe that, although this issue is important, business aircraft lessors and lessees will find ways to adjust to the change. Other financiers reiterate that they do not offer leases or rarely do so. For these financiers, off-balance sheet leasing does not affect their business as currently operated.

Customer interview respondents state that the off-balance sheet element of leases is a strong driver to lease aircraft. However, more than a majority of customer interview respondents do not think the lease accounting changes will adversely affect them in any material respect in 2013 through 2016.

Only 14% of customer survey respondents knew about the IASB/FASB lease accounting project, while 24% did not. The balance of customers said off-balance leases did not apply to them. Of the customer respondents that have off-balance sheet leases, 82% said the accounting changes are among their biggest challenges.

Given the uncertainty about the outcome of the lease project, 83% of the customer respondents do not intend to seek off-balance sheet operating lease financing before the final standard becomes effective. In stark contrast, 8% seem highly likely to seek off-balance sheet treatment during that period.

Awareness of Proposals

A recent survey by Grant Thornton calls the study survey responses into question. Grant Thornton found in its 2013 global "survey of 3,450 respondents in 44 economies … that although 78% hold leases (87% in the UK); only 42% are aware of these proposed global changes (56% in the UK) that could drastically alter their balance sheet. Further,

"[a]wareness of the change was greatest in the US (75%), India (70%), Chile (60%), and the UK (56%), and was lowest in Lithuania (8%), France (13%), Brazil (13%) and mainland China (13%)."[117]

As an indication of the importance of this change, Grant Thornton's 2011 survey found that "[m]ore than half of businesses globally (54%) … [were] not aware of, and are therefore unprepared for, one the most significant global accounting changes in the past decade – moving all but short-term leases onto the balance sheet."[118]

The researcher believes, based on input from all respondents, that the awareness among financiers and large corporate customers that use leasing is at least 75%, while less than a majority of other customers are aware of or have a concern about the accounting changes. The boards' failure to publish "tentative decisions" that make sense to equipment financing and other constituents has caused fatigue among respondents. Except for companies with large pools of affected assets,[119] most other respondents have tuned out the entire accounting project to attend to more urgent economic demands.

Next Steps

The boards met on January 30, 2013[120] to discuss the identification of lease components and the classification of leases. On July 21, 2012, they decided unanimously to reexpose their proposals, which are expected to occur in the Q2 of 2013.[121] Thereafter, the boards have tentatively decided to provide for a 120 days due diligence period after they issue the revised exposure draft. This round of discussions will very likely raise the level of awareness and concern among all respondents because the content of this exposure draft is likely to morph into the final guidance with respect to aircraft and other equipment.

CRITICISM OF BUSINESS AVIATION: DIMINISHING EFFECT

FINDING: Customers are highly likely in 2013 through 2016 to disregard occasional criticism or misperceptions of their acquisition, use, and possession of business aircraft.

From time to time, the media,[122] politicians[123] and others have expressed opinions about the appropriate acquisition, possession, and operation of corporate jets.[124] Their opinions often reveal misperceptions, political motivation, or media hyperbole[125] pertaining to these aircraft. Financier interview respondents and consultant interview respondents express awareness of, and dismay at, the potentially inhibiting effect of such opinions on customers that otherwise might acquire, possess, and operate business aircraft.

Advocacy Defense and Offense

Most respondents have come to expect the NBAA and the No Plane No Gain"[126] advocacy program, created by NBAA and GAMA, to reply very quickly[127] to such misperceptions. Respondents give No Plane, No Gain high marks for doing so. They express a need for NBAA to act as their advocate to protect their business opportunities in, and commitment to, business aviation.

NBAA is not alone in these efforts. Another prominent organization, the Aircraft Owners and Pilots Association (AOPA)[128] initiated another advocacy program called General Aviation Serves America. Funded by the AOPA Foundation, this campaign pertains to all of general aviation, which includes business aviation. Although only a few financier interview respondents mentioned this program, AOPA aims to inform local, regional, and national media about the good work performed by the GA community.[129]

Other important advocacy programs or associations, such as the Alliance for Aviation Across America[130] and the National Air Transportation Association,[131] impart a similar message. In 2009, the U.S. House of Representatives and the Senate formed the GA Caucuses to inform members and staff about the importance of GA to the nation's economy and transportation system. It grew to 120 members, which ranks it among the largest caucuses in the House of Representatives.[132] Starting over in 2013 with a new Congress, NBAA has made a call to action to reconstitute congressional GA caucuses in the new term.[133]

Aircraft Not Just a Perk for Top Brass

Respondents routinely state that business aircraft travel serves as a productive, time-saving, and efficient tool of doing business regardless of who travels on board the aircraft. The NEXA studies and Harris research[134] discussed in Chapter 1 fully support this belief of respondents.

One frequent source of debate revolves around the exclusive use by top executives of business aircraft[135] as a "perquisite" – a part of their compensation. Customer interview respondents debunk this notion. This type of compensation has existed for a very long time. Public companies may be required by law to disclose this perk in public reports.[136] Key executives negotiate employment agreements that entitle them to use corporate aircraft as a perquisite. Perks attract top talent; that is a fact of corporate life, and, for now, experts find that the use of aircraft will generally remain a part of compensation packages despite public scrutiny.[137]

Respondents say repeatedly that, in 2012, other employees regularly used corporate aircraft. They emphasized that companies do permit, and even encourage, certain other employees to travel on corporate aircraft for routine or urgent company business. The Harris Report provides supporting data that managers or middle-level executives use corporate aircraft and do so productively and responsibly. In addition, certain companies require specific senior executives to use corporate aircraft to assure their security.[138]

More broadly speaking, respondents reiterate that companies have generally implemented policies for travel on business jets by appropriate personnel, which often extends well beyond senior management. Interview respondents, including consultants and heads of flight departments, confirm that many companies have already completed or at least initiated an effort to right-size their aircraft and, where applicable, aircraft fleets and flight departments.

Company Resistance Trend

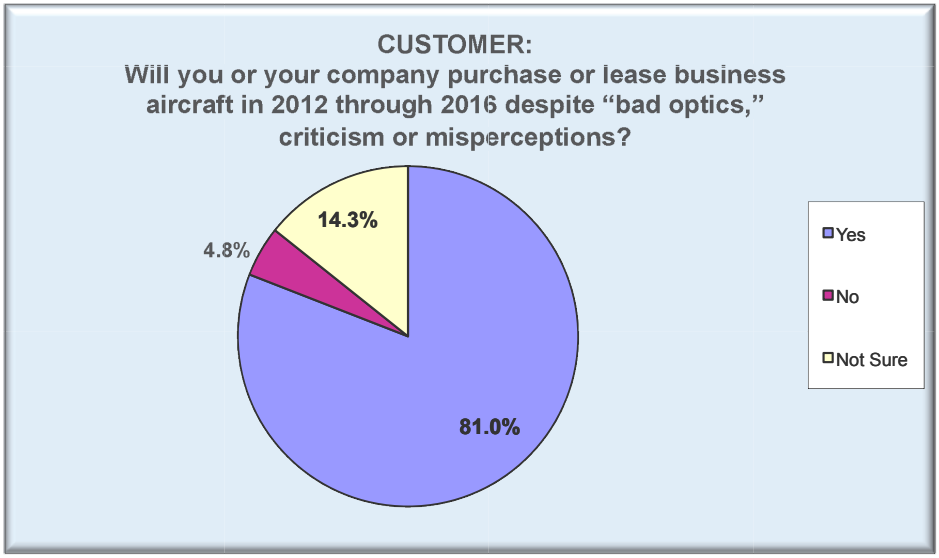
By 2012, more than a majority of respondents stated that the so-called "bad optics" phase of challenges had ebbed. From their perspective, the image issues arose primarily during the great recession and in connection with companies that used funds from the Treasury Department's Troubled Asset Relief Program (TARP)."[139] Job losses, government bailouts[140] and corporate budget cuts also triggered adverse public opinion. The term bad optics characterizes a company perspective of negative opinion of corporate jet users in the public eyes.

Respondents indicated that most (but not all) companies responded to the bad economy by reviewing their individual use of, and needs for, business aircraft. After doing so, companies have reached a point where they had enough of the unwanted exposure and unjustified adversity. It has become evident, in part through the No Plane, No Gain advocacy efforts, that companies have built up a resistance to these comments, opinions and media hype. By the summer of 2012, survey respondents made clear that a trend had developed to remain cognizant of, but largely disregard, adverse public opinion.

As depicted in Figure 6.1, 81% of customer survey respondents have indicated that they will disregard "bad optics, criticism and misperceptions" about using, acquiring, or possessing business aircraft. Customer interview respondents generally confirm that, in 2013 through 2016, the optics issues will not affect their purchase or leasing of private aircraft. As shown in Figure 6.1, only 4.8% responded that they will consider public opinion. This study's survey findings offer useful (but not conclusive) evidence of company intentions regarding such negative public opinion.

However, as shown in Figure 6.2, JETNET iQ found that, as a part of its Q4 2012 quarterly survey of more than 500 business aircraft owners and operators, consistently less than 5% of respondents consider that the public opinion of business aviation is a top 3 inhibitor that would keep them from purchasing a new aircraft in the next 12 months. This finding matches previous surveys in 2012.

Figure 6.1. Misperceptions: Minimal Effect on Aircraft Transactions



Source: Customer survey.

Figure 6.2. Purchase Inhibitors

Source: JETNET iQ, Q4 2012.

Resolution to Corporate Aircraft Challenges

Curiously, nearly 82% of customer survey respondents have also stated that public opinion will be a "pressing challenge" for them in 2013 through 2016. As noted above, 81% say they will disregard public opinion in 2013 through 2016. One response seems to contradict the other, but this apparent contradiction can be easily reconciled.

Public companies in particular realize that the public may criticize them periodically when they use, acquire, or possess corporate jets. Customer interview respondents admit they are not impervious to the criticism, and do not agree with commenters who try to put their companies in a bad light. One customer interview respondent said that, while he knows allegations of misuse of corporate jets will arise, his company has made thoughtful business decisions, without regard to public opinion, about the proper fleet size and type of aircraft for the company's business missions. He also said that most large corporations, he believes, have taken similar steps to right-size their fleets, aircraft types and flight departments based on their respective missions and not public opinion.

In this context, one can appreciate that 82% of customer survey respondents regard public opinion as an unwanted challenge, but 81% of them will nonetheless focus on company business. Further, high wealth individuals and private companies, that routinely strive to maintain their privacy regarding their jet aircraft, will be very unlikely to acknowledge or even consider such public opinion in the U.S.

Hence, in the researcher's opinion, the 81% response finding from public and private companies falls somewhat below the actual level of resistance to public criticism. In discussions with many interview respondents, evaluation of this study's survey responses, and in reviewing other industry data and studies relevant to this topic, coupled with the researcher's experience, the researcher concludes that the resistance trend is strong, even if muted, and supports a finding that a low percentage of affected companies will take any meaningful action regarding their aircraft use, acquisition, or possession based on or in deference to public opinion.

Companies have fundamentally decided that achieving top results for their owners prevails in making decisions regarding corporate jets, especially over public opinion founded on misperceptions rather than the facts. The three-year rise in corporate profits depicted in Figure 3.1 seems to validate the trend to disregard adverse comments on corporate aircraft.

NONCITIZEN TRUSTS UNDER ATTACK?

FINDING: Respondents voice alarm that proposed FAA clarifications to long existing and successful noncitizen trust regulations could disrupt U.S. registrations involving non-U.S. citizens and potentially disqualify multinational companies from registering as FAA aircraft owners.

The FAA recognizes the importance of adhering to its regulatory standards for the safety and oversight of U.S aircraft operations.[141] In this vein, the FAA has taken the initiative to improve the integrity of the registration process and maintain safety in operations of aircraft.[142]

An important aspect of the FAA regulations pertains to non-U.S. citizen trusts (NCTs). The U.S. aircraft industry has used NCTs for more than 35 years, even before its codification in 1980 by an amendment to the Federal Aviation Regulations (FARs).[143] Since 1980, users of NCTs have essentially used the original trust structure. On February 9, 2012,[144] the FAA issued a proposed "policy clarification" of NCTs.

The NCT policy clarification has been subject to broad-based criticism.[145] A particularly difficult situation developed when the FAA placed a de facto moratorium on the pending applications to use NCTs in 2011. The aviation industry quickly, and with a unified voice, opposed the changes contemplated based on solid legal, economic, and policy reasons.[146]

The FAA subsequently issued a letter clarifying that it would continue to process NCT registrations and that it was not challenging the registration of aircraft currently registered under noncitizen owner trusts.[147] Recently, the FAA indicated at an NBAA conference[148] that it is highly likely to issue a revised NCT policy clarification that "refines" the original NCT policy clarification, taking into account aviation industry comments it received.

What Is a Noncitizen Trust?

An NCT enables non-U.S. citizens to register an aircraft at the FAA; without using such trust, only a "citizen of the United States"[149] (also called a U.S. citizen) has the right to register an aircraft at the FAA. It is an owner trust created by a U.S. citizen trust company for the benefit of a non-U.S. citizen. The non-U.S. citizen owns the beneficial interest in the trust and is called the "trustor," "owner participant," or "beneficial owner," and the trustee of the NCT, as trustee, holds the legal title to the aircraft. Thus the non-citizen does not own or register the aircraft.

A non-U.S. citizen can be an individual or an entity. To illustrate, a corporation or bank with diverse stockholder ownership may not qualify as a U.S. citizen. If a corporation elects a non-U.S. citizen as president or chief executive officer, it would not qualify as a U.S. citizen. An NCT facilitates a transaction by allowing its non-U.S. citizen beneficial owner, a corporation in this illustration, to direct its owner trustee to register the aircraft at the FAA.

The structure of an NCT is as follows. A trustor enters into the owner trust agreement with an owner trustee. The trust agreement is required to be filed with the FAA registry. Typically, banks and trust companies act as owner trustees, but other entities or persons can do so. The owner trust agreement specifies the duties and indemnities in favor of the owner trustee. Similarly, it includes certain rights, benefits, and obligations of the trustor.

Acting in its representative capacity, the trustee also signs most transaction documents for its trustor, including an aircraft lease or purchase agreement. The trustee can also enter into an operating agreement with its trustor to give its trustor prescribed authority to operate the aircraft. It files registration forms at the FAA (excluding citizenship affidavits provided by the trustor) and uses its name (as owner trustee) in FAA filings and IR registrations as the legal title owner of the aircraft. The noncitizen trustor cannot have more than 25% of the aggregate power to direct or remove the owner trustee. The noncitizen cannot remove the owner trustee without "cause," and the owner trustee must have certain "control rights" with regard to the aircraft that technically assures, in theory, that the owner trustee, as the U.S. citizen, controls the operation of the aircraft.

The FAA is an ownership (not an operator) registry, which means it registers aircraft based on the name of its owner – in this case the owner trustee's name. The FAA applies U.S. citizenship requirements to any person or entity that files an application for registration as the owner of the aircraft. It does not consider the operator of the aircraft in recording ownership of the aircraft under an NCT structure or otherwise.

Financiers need certainty, as do customers, that an FAA registration properly meets the NCT requirements. The failure to properly register the aircraft can invalidate the financier's lien on the aircraft (subject to the IR registration, which is designed as the main protection of the financier's interests). For customers or other non-U.S. citizens, an invalid registration may cloud title or result in operating and/or owning an unregistered aircraft.

Uses of NCTs

NCT use occurs in a myriad of situations vital to the health and competitiveness of the aircraft industry. Although this study focuses on purchases, sales, and financing of business aircraft, NCTs support almost all aspects of investments in, and management of, business aircraft. NCTs:

- Enable U.S.-based and other multinational/foreign companies to register at the FAA without concern that the composition of their respective ownership or control, or boards of directors, or the citizenship of their respective presidents/chief executive officers will violate citizenship requirements for aircraft registration at the FAA;

- Facilitate the sale, use, leasing, financing, or other disposition of aircraft of a non-U.S. citizen owner by registering the aircraft at the FAA until the transaction closes;

- Expedite the completion of modifications of the aircraft owned by a non-U.S. citizen to fulfill U.S. airworthiness requirements and the issuance of ferry permits when a lessor moves an aircraft from one location to another one for a delivery to a new customer;

- Permit registration of a newly manufactured aircraft to easily manage a sale and/or financing transaction;

- Maintain U.S. registration for stored or repossessed aircraft pending a sale, lease, or other disposition even though the owner is a non-U.S. citizen;

- Allow U.S. partnerships to register at the FAA when they the fail the U.S. citizenship test as a result of having a corporate partner (To qualify, a quirky rule says all partners must be individuals with U.S. citizenship.);[150]

- Comply with the requirement of financiers to register aircraft at the FAA, which, as discussed earlier in this study, happens, for example, when a financier cannot fund a deal unless it is FAA registered (i.e., registration outside the U.S. falls outside of their "charter"); and

- Provide an entry point[151] for a non-U.S. citizen (customer) and the financier to register their transaction on the IR as a benefit of the Cape Town Convention.

NCT Clarification Requirements

The originally proposed clarification included material changes to the original NCT regulations promulgated in 1980.[152] The FAA has said that it would allow for the use of NCTs but would prescribe additional requirements and restrictions.

The clarification would require the owner trustee to submit operating agreements as part of the trust document submissions[153] and deliver information to the FAA very quickly (within two to five days) about non-U.S. citizen flights, operations, maintenance, and travelers, much of which is within the public domain presently.[154] The trustor's rights to remove the owner trustee would change in such a manner as to arguably give the trustor no option but to terminate the trust and the U.S. registration of the aircraft. Such an action would very likely disrupt the operational use of the aircraft.[155]

As noted in the Aircraft Working Group letter of May 23, 2011, to Kathryn Thomson, chief counsel of the FAA,[156] the clarification would expand the regulation with respect to the owner trustee's rights to control of the aircraft. Thus the potential imposition of this obligation on the owner trustee appears to be a far cry from the trustee's current passive role of holding title to the aircraft on behalf of its trustor; moreover, it is an additional obligation not imposed by the FAA on other aircraft owners or lessors.

Ramifications of NCT Policy Changes

The economic and legal ramifications of a policy clarification will require close scrutiny when and if, as expected, the FAA takes the next step in changing how NCTs will work. However, some adverse economic, legal, and risk-management problems arise out of the originally proposed clarification. For example:

- **Forced Re-structuring**. Non-U.S. citizens would have good reasons to use other registries to avoid the complex and unnecessary documentation created solely to prevent a trustor from operating its own aircraft. To illustrate, the owner trustee would have to enter into a lease or other appropriate agreement with another entity created to be the end user/operator of the aircraft rather than allowing the noncitizen to do so. NCT requirements that cause such extra work unnecessarily drive up transactional costs, create a false need for additional entities, and consequently discourage FAA registrations.

- **Excessive Duties on Owner Trustees**. Owner trustees may feel compelled to exit the business of providing trust services for non-U.S. citizens if they must take responsibility beyond their business model of accepting extremely low-risk duties as a passive title holder and, in general, acting only on receiving explicit written directions of particular tasks within the scope of their duties. Owner trustees probably do not have the capability (or willingness) to do much more in this capacity.

- **Reputational and Operational Risks**. The clarification would subject owner trustees to new, significant aircraft operational reporting and control requirements. In addition, owner trustees would have to assess and accept reporting, liability reputation, and aircraft operational risks. Owner trustees would also have to decide whether to accept repu-

tational risk arising out of any allegation or final determination of failing to properly discharge their NCT duties. This risk could be material if the alleged failure arises in connection with any national security breach or serious accidents or incidents related to the aircraft (however remote these risks may be).

- **Financier Uncertainty**. Certain financiers would have to determine whether the clarifications would prevent them from registering their aircraft at the FAA using an NCT. As discussed in the international part of this study, U.S.-centric financiers must clearly determine whether they have authority to fund a transaction. They cannot use resources to approve a transaction that they ultimately cannot close because of their uncertainty about, or a refusal of the customer to operate under, NCT rules.

- **Reduced Competition**. Some U.S.-centric financiers may be able to finance non-U.S. citizen transactions provided the parties register the aircraft at the FAA. If the NCT clarification interferes with FAA registration, these financiers will very likely pass on such transactions. By forfeiting a good quality financing opportunity due solely to an NCT could shift such transactions to internationally active financiers (U.S. or non-U.S.).

- **Economic Losses**. The aircraft sales market places value on compliance with FAA strictures on maintenance and operation of aircraft. If the FAA clarification pushes noncitizens to other use other registries, purchasers looking at two similar planes for sale may select the U.S.-registered aircraft rather than the other one registered outside of the U.S. Alternatively, the purchaser may offer a lower-than-expected price for the aircraft registered outside the U.S., another consequence of issuing new NCT rules. In a buyer's market like the current one, the NCT policy could potentially disadvantage sellers of most aircraft (and benefit purchasers) in such transactions.

- **Increased Costs**. Unless grandfathered, existing NCTs may require potentially complicated restructuring associated with deregistering in the U.S. and reregistering elsewhere. Non-U.S. citizens could incur significant costs associated with registering the aircraft outside the U.S. Such costs could include registry, escrow, trust, and professional fees; the financier's restructuring fees; inspection and aircraft/avionics modifications charges; increased and additional international, state and federal taxes, charges and fees; and insurance, environmental, and other regulatory compliance costs affecting the aircraft and/or the parties.

Financier Respondents on NCTs

Financiers widely consider the NCT initiative to be a threat to the growth of aircraft transactions. They agree that such changes will at best stifle U.S. registration and inevitably push non-U.S. citizens to use aircraft registries in other countries. Although the U.S. started and leads the business aviation industry, that prominence is declining as discussed earlier in the international chapter of this study. In other words, if the FAA shuts down NCTs as a viable or available tool (regardless of whether it nominally exists), respondents will likely bench the FAA as the logical choice of registry for their transactions, business and operational needs.

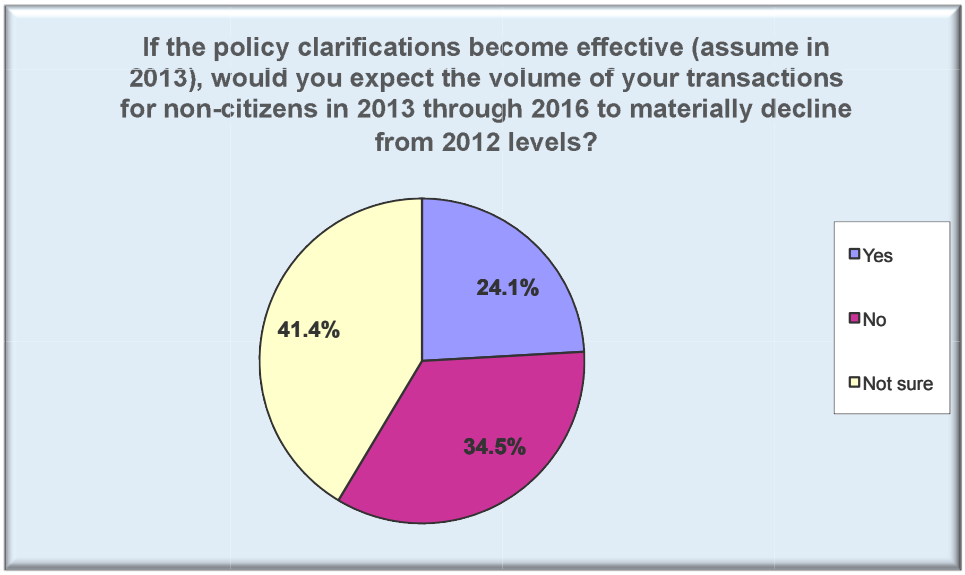
Specifically, as shown in the Figure 6.3, 24% of financiers believe that the changes would reduce their business; approximately 41% are unsure; and approximately 35% do not believe that the change in NCTs would affect them. This response reflects a lack of understanding of the benefit of NCTs. The survey responses seem to understate the level of interest in NCTs by customers and financiers. However, most interview respondents could not articulate any aspect of the clarification, only the potential damage to closing deals when diverse citizenship of institutions and individuals is becoming the norm.

On balance, some financiers express little concern or interest. These respondents state that, with exceptions, they do not engage in non-U.S. citizen and/or non-FAA registered transactions. For these financiers, policy changes in NCTs would be irrelevant.

Customer Respondents on NCTs

Approximately 50% of customer survey respondents reveal that they do know of NCTs, while the other 50% either are not sure or are not aware of the NCT issues. Consistent with other inquiries about international transactions involving U.S. financiers and non-U.S. citizens, only 19% of customers believe NCTs will have any effect on their business aircraft transactions.

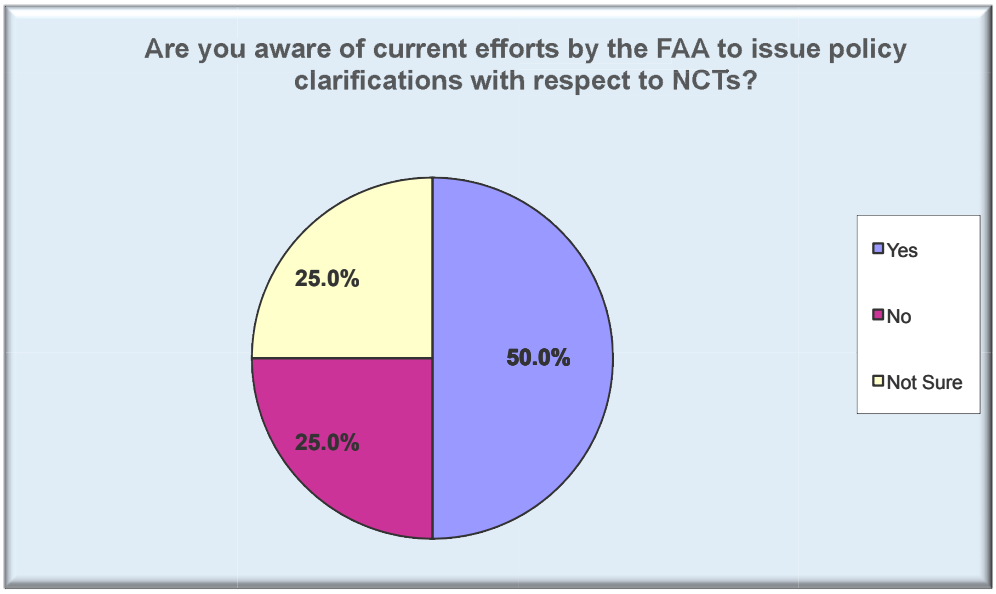
Figure 6.3. Effect of NCT Policy Clarifications



Source: Financier survey.

Showing how uncertain the NCT issue is for customers, Figure 6.4 indicates that 25% of customer survey respondents expect the use of NCTs to materially decline in 2013 through 2016 from levels of, or preceding, 2012. The other 75% either do not know or do not think NCTs will decline.

Figure 6.4. Customer Awareness of NCT Issue



Source: Customer survey.

Again, on balance, for U.S.-registered aircraft owned or leased by U.S. citizens, the NCT policy does not apply. For cash purchasers, including ultra-high-net-worth individuals who buy large or super long-range jet aircraft, it is unlikely that NCTs would be a material factor. These individuals can select a registry based on other significant drivers such as tax planning, confidentiality, and security, with financing not at issue.

NCT Options: Extinction or Survival

The purpose of this study is not to propose a definitive approach to, or even the substance of, an NCT policy.[157] However, this section touches on some of the concepts of importance to respondents.

NCT Extinction

If the NCT clarification makes NCTs impractical, unmanageable, and too expensive for owner trustees and their non-U.S. citizen trustors, it is reasonable to expect, based on responses from interview respondents, that non-U.S. citizen customers will register their aircraft outside of the U.S. financiers have become accustomed to, and frequently rely on, NCTs for the reasons stated above. Owner trusts fit within company policies that require acceptable risk mitigation and title retention structures with respect to financed aircraft. Hence, for financiers and customers, NCTs play an essential role when entering into, closing, and managing their transactions.

For many financiers, entering into transactions with noncitizens is difficult, if not forbidden. Further, they may not have the mandate or resources to register aircraft outside of the U.S. even if they can fund noncitizen transactions. Accordingly, a restrictive NCT policy clarification could lock financiers out of international transaction opportunities at a time when the U.S. market is highly competitive.

One of the significant unknowns is whether the NCT policy changes would prevent multinational and foreign financiers from owning aircraft and leasing them to customers. These financiers may not be able to determine whether they meet the requirements for U.S. citizenship. NCTs provide financiers a workable foundation for capital investments in aircraft in domestic and international (FAA-registered) transactions without violating the highly technical definition of a "citizen of the United States" under 49 U.S.C. 40102(a)(15).

The apprehension of financiers in this respect cannot be overstated. An NCT policy that prevents or seriously limits financiers from qualifying for NCT could potentially deprive the aviation industry (commercial and GA) of a huge amount of capital that financiers can provide under existing regulations and practice. The outcome could reduce the $742 billion of equipment acquisitions forecasted for 2013 (and beyond) by the Equipment Leasing & Finance Foundation.[158]

NCT Survival

The U.S. recovery of business aviation is young and fragile. Financiers in particular would react very negatively to any regulatory initiative that hampers the recovery in business aviation. Of the respondents that are not aware of or do not understand the NCT issue yet, it is very likely that most of them will take a negative view of material changes if they perceive that the policy will hurt their ability to do any noncitizen business in the U.S.

However, in assessing the input from respondents, the final policy clarification could work for them if it balances solutions for the most significant national security, registration, and safety issues, on the one hand, with pragmatic and essential adjustments to NCT function, on the other hand. If changes do not impose onerous changes on non-U.S. citizen customers, it is likely, but not assured, that they would continue to register aircraft in the U.S.

The rights of removal of and resignations by an owner trustee, coupled with the uncertainty as to the proper entity authorized to exercise operational control of the aircraft (trustee vs. customer), present difficult and complex issues. Still, noncitizen customers would be likely to register their aircraft in the U.S. if they can direct the owner trustee's efforts on a rational basis. The operational control issue would present a far greater concern for these customers.

Conversely, it is highly likely that a material limitation on these rights would cause noncitizen customers to register outside of the U.S. in the absence of compelling business or legal reasons to remain in the U.S. If the NCT policy clarifica-

tions do not materially affect their "normal" use of the aircraft, it is likely, but not assured, that political, economic, tax, and corporate policy reasons may increase their tolerance for workable changes.

Some respondents worry that an NCT policy clarification would interfere with normal market functions that do not involve ongoing operation of aircraft, such as storing, repairing, positioning, or readying aircraft for sale, lease, or other disposition. It is the researcher's opinion that, if asked, most respondents would say that such functions have little relevance to, and should remain untouched by, the policy clarification.

In short, respondents need ways to boost their purchases and financing in the slow global economy without having to overcome the dampening effect of excessive and impractical NCT regulation or clarification. If the FAA issues an NCT policy clarification, respondents will almost certainly enter the conversation to help achieve a fair and workable NCT policy that will not derail transactions in 2013 through 2016.

THE FLIGHT DEPARTMENT COMPANY—THE LLC CONUNDRUM OF PART 91

FINDING: A high percentage of customers form a limited liability company ("LLC") for the sole or primary purpose of owning, financing, maintaining, and operating their business aircraft. In doing so, they typically disregard or do not realize that this use of an LLC converts the LLC into a commercial "flight department company" that must operate its aircraft under 14 C.F.R. Part 119 and 14 C.F.R. Part 135. Despite potentially serious consequences of not complying with Parts 119 and 135, financiers and customers seem very unlikely to alter this practice in 2013 through 2016.

This section describes some of the risks of customers (and others) failing to comply with 14 C.F.R. Parts 119 and Part 135 by forming special purpose entities (SPEs), typically as LLCs and owner trusts, for the purpose of owning, financing, maintaining, and operating business aircraft. This section uses the terms LLC and SPE interchangeably, and any reference to a customer includes the wide population of aircraft operators subject to these regulations.

This section also suggests a few of the best practices and planning tools for customers to operate their aircraft properly under the noncommercial, "general aviation" rules found at 14 C.F.R. Part 91. A full discussion of these topics,[159] however, is outside the scope of this study.

FAA's Regulatory Oversight of Aircraft Operations

The FAA regulates the ownership and operation of aircraft in the U.S. and U.S.- registered aircraft throughout the world, with a primary mission of "provid(ing) the safest, most efficient aerospace system in the world."[160] The FAA's oversight therefore extends to a wide range of aircraft within the U.S. business aviation community.

Part 91 forms the baseline set of FAA regulations that applies to all U.S.-registered aircraft. Under Part 91, the aircraft is, in essence, personal, private, and noncommercial. So long as customers do not "hold out" (i.e., actively market) flight services to the public and can meet certain cost-sharing restrictions, they can operate their aircraft under Part 91 without additional FAA oversight. This limited operational approach enables customers to save most of the incremental cost of complying with the safety requirements imposed on operators that are acting as common carriers (i.e., flying passengers for fees).[161]

A company can conduct "commercial" operations, which refers to an operator of aircraft for "compensation or hire"[162] under 14 C.F.R. Part 119 and Part 135. Designed for the safety of commercial passengers, these operations under Part 135 must satisfy extra requirements[163] to those found in Part 91. For example, Part 135 requires operators to meet additional certification requirements before they can even begin to conduct such flight operations. It also imposes additional operational rules, such as rules that establish acceptable airport,[164] record keeping[165] and pilot testing requirements.[166]

The decision to operate under Part 91 or Part 135 involves an assessment of economic, legal, and other factors, including costs of operation and maintenance; FET liability; employment of pilots or professional management teams; operational limitations; airport access; sales, use and property tax planning; and adequate insurance coverage. These

factors require analysis separately and interdependently in deciding how to best manage and operate an aircraft. The distinction between Part 91 and Part 135 is at once clear and muddled, which creates practical challenges for financiers, customers, service providers, and to a lesser extent, the FAA. Most legal personnel involved in this area at the FAA can describe the differences; the FAA just has too few resources, in most cases, to seek out violators and enforce these regulations.

SPE Operations: A Small Divide Between Part 91 and Part 135

The FAA's regulations determine how, when, and why a special purpose entity crosses over the divide from Part 91 operations to Part 135 operations. Even the smallest misstep amid these rules can lay the SPE open to negative consequences, as described below.

The critical question is whether a particular operator is acting as a "commercial operator." A commercial operator conducts its operations, as noted, for "compensation or hire." The test of these two elements applies on a flight-by-flight basis.[167] Stated as a question with respect to the "hire" element: Is the operator holding out its flight services to the public (for hire) as a common carrier like an airline?

The more difficult, and arguably more important, test pertains to the meaning of the term "compensation," which spreads a huge net to catch inadvertent or intentional violations of Part 91. If an SPE receives compensation for flights, the company becomes a commercial operator in the view of FAA, even if no one in the public takes a flight or the operator never offers a flight to anyone in the public.

This compensation part is counter-intuitive, and that is the crux of most violations. Most people think the term "commercial operator" refers only to a company making flight services available to third parties for a profit. However, that conclusion, simply put, is wrong in the FAA's view. The FAA construes the concept of compensation very broadly. It does not care if the company makes a profit, expresses any profit motive, or actually receives any payment. Instead, compensation for the FAA refers to the transfer and receipt of anything – and in any amount – of value in exchange for the conduct of a flight,[168] referred to in the FARs as any charge, assessment, or fee for carriage of officials, employees, guests, and property with respect to the aircraft.

Two examples of compensation help understand this rule: (1) a parent company's contribution of capital into an SPE in order for the SPE to pay for flight operations is considered compensation; and (2) a guest's or other passenger's mere sharing of expenses in any amount – perhaps in the form of payment of the fuel costs –constitutes compensation. Even something as simple (and trivial) as giving the operator a bottle of champagne as a thank you for a ride technically is compensation. As a practical matter, a Part 91, noncommercial aircraft operator company must have its own cash (not from anyone but the company itself) to pay its expenses, including fuel, pilots salaries, hotel, landing fees, transfers, meals, repairs, and engine maintenance program charges, without crossing over the line of receiving compensation for the conduct of those flights.

Using a liability shielding SPE to own or lease the aircraft and sharing aircraft costs seems customary and appropriate to customers and their financiers; however, it is illegal and subject to serious penalties and other negative consequences.

Narrow Exceptions under Part 91

The FARs contain a number of narrow exceptions to this general rule, primarily found at 14 C.F.R. §91.501.[169] The FAA agrees that Part 91 operators (not owners),[170] in certain limited circumstances, operators should have the flexibility to conduct operations otherwise prohibited under Part 91. In other words, the FAA permits Part 91 operators to legally conduct these Part 135-type flights. Companies (but not individuals) can legally engage in time sharing under 14 C.F.R. §91.501(c)(1),[171] interchange arrangements under 14 C.F.R. §91.501(c)(2)[172] and joint ownership under 14 C.F.R. §91.501(c)(3).[173] In addition, 14 C.F.R. §91.501(b)(4) permits an individual owner, not a company, to operate an airplane for his or her own personal transportation and for guests without charge.[174]

Each option addresses different operational needs or circumstances of the respective parties. In essence, these provisions, with respect to SPEs, allow some limited cost sharing to occur when the operator conducts flights for a limited amount of compensation, without triggering the requirement to comply with Part 135.[175]

It is very likely that the most widely used exception to the general "no-compensation" rule, and one that allows for fully allocated cost-sharing, is found at 14 C.F.R. §91.501(b)(5). This exception states that a Part 91 company can conduct aircraft operations, and receive some reimbursement for those flights, so long as the flights are "within the scope of and incidental to the [nonair transportation] business of the company."[176]

Stated differently, this exception only applies to a company whose primary business is not commercial air transportation.[177] An SPE cannot, does not, and will not fit into this exception because it exists primarily or solely to conduct flight operations as its major enterprise or primary business purpose. It does so in many instances for the benefit of its owners, affiliates, or third parties.[178] Accordingly, the FAA regards each such SPE as a "flight department company," which conducts illegal commercial operations. The SPE fails to meet applicable safety standards and other important regulatory requirements under Parts 119 and 135.

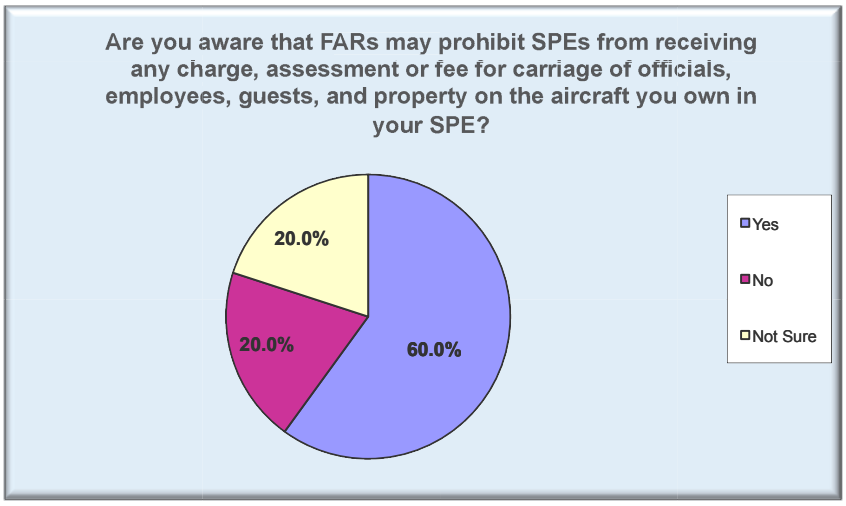
Customers frequently make two errors in structuring the companies that own and operate their aircraft. The first mistake occurs when a customer assumes that its operations are private and confidential: that it does not offer travel services to the public – that is, it does not "hold out" or market commercial transportation by air, but simply shares costs or funding with or through affiliates. The second common mistake happens when companies do not study or ignore these regulations, on the one hand, or believe that their flight department companies meet the 14 C.F.R. 91.501(b)(5) exceptions, on the other hand. To emphasize the point, SPEs, most frequently created in the form of LLCs, cannot operate aircraft legally under Part 91.

Noncompliance with 14 C.F.R. Parts 91, 119 and 135

Customers and financiers generally do not understand or worry that aircraft operations by an SPE for compensation constitute illegal commercial flights and create illegal flight department companies. According to customer survey respondents, approximately 43% of customers in financing transactions form SPEs for the purposes stated above. Financier interview respondents believe that, in fact, this percentage vastly understates the use of SPEs. Some view the level as exceeding 80% of transactions, driven primarily by the erroneous belief that the SPE protects its owners[179] from liability arising out of, among other occurrences, aircraft crashes or other accidents.

As shown in the Figure 6.5, 60% of customer survey respondents understand the prohibition on receiving compensation for flights.

Figure 6.5. Knowledge of SPE Limitations (14 CFR &91.501)



Source: Customer survey.

In a separate question, approximately 65% of customer survey respondents say they either do not know how their organizations handle the use of SPEs or that their organizations do not take any steps to avoid violating Part 91.

Of the financier survey respondents, 69% have some knowledge of the FARs' restriction on the typical SPE structure. Still, they are generally not aware that the FARs may prohibit SPEs from inadvertently or even intentionally collecting or receiving "compensation." Another 31% responded that they do not know about the flight department company problem. One interview respondent said that his organization makes no attempt to enforce or even mention Part 91 compliance to customers that form SPEs so as to avoid a competitive disadvantage to other financiers.

Negative Consequences of Violating Part 91

The discussion above may imply that the FAA will not respond to violations or that operators can skate by any negative consequences of these violations. While exceptions may occur, operators may believe that using an SPE does not in itself threaten passenger safety. Customers and financiers know the FAA has not typically enforced this particular infraction, in part, to allocate resources to higher safety-based priorities. Customers and financiers, therefore, express little, if any, concern about noncompliance or even gaining an understanding of the prohibitions in the regulations.

However, the FAA is not the only risk factor associated with the use of SPEs. One small advance by a Part 91 operator into Part 135 operations can produce negative contact with the FAA and other government agencies and private entities in areas such as regulatory penalties, insurance, state and federal taxes, and reputational and economic risk.

Regulatory Penalties

The FAA can impose monetary penalties on misguided operations of up to $25,000 per violation, which means that each violation of regulations associated with a flight could include multiple $25,000 penalties per flight[180] The Transportation Security Administration can also impose fines. SPE pilots can face license suspensions and other disciplinary actions for compensation or hire violations if they fail to have the necessary license and meet other requirements.[181]

Insurance in Doubt

Customers that believe they are legally operating under Part 91 typically obtain insurance only for those Part 91 operations. If, however, an aircraft operated in an SPE crashes or suffers another accident or incident, the insurance company may deny coverage because the Customer breached "the purpose of use" clause[182] in its insurance policy, which distinguishes between noncommercial use and lawful Part 91 private operations. An insurer may also treat the violation of Part 91 as a material violation of law that breaches the representations or warranties in its policy, which merits a denial of coverage.

However, as competition among insurance companies has increased, some carriers do not have exclusions for such violations of law. Therefore, insurance may be available cover the SPE regardless of violations of Parts 91, 119 and 135. Nonetheless, it behooves each customer to closely evaluate proper coverage generally, and in connection with the use of SPEs as discussed above, specifically.

State Tax Changes

The SPE is a taxpayer, and if it operates outside of Part 91 as a commercial carrier, it may inadvertently trigger different treatment under state property or sales tax rules. Customers and financiers both need to examine applicable state tax law for its economic impact as a commercial or private operator. Ironically, operating as a commercial carrier may exempt the SPE from sales tax obligations and reduce property taxes.

Federal Tax Shifts

The purposes for which a taxpayer uses an aircraft, whether personal or business, affects the federal tax treatment.[183] As discussed earlier in this study, the IRS has become more aggressive through its own 2012 Chief Counsel Advice (CCA), by imposing federal excise tax (FET) on Part 91 management agreement fees. Though the approach of the IRS

in the CCA regarding "possession, command and control" of an aircraft (discussed above) differs from, and is not dependent on,[184] the FAA regulations on "operational control" of any aircraft, any action that shifts operations from Part 91 to Part 135 is likely to require the Part 135-type operator to pay FET. Significant federal tax issues arise out of personal use of aircraft[185] where, for example, the personal use of a corporate aircraft triggers income to the users and a reduction in tax deductions for the company.

Federal Tax Policy

Federal tax policy with respect to aircraft depreciation[186] remains mired in debate on Capitol Hill,[187] but private and commercial use of aircraft may affect depreciation deductions. Aircraft used in commercial service (i.e., Part 135) are normally depreciated under modified accelerated cost recovery system (MACRS)[188] over a seven-year recovery period or under the alternative depreciation system (ADS) using a 12-year recovery period.[189]

Reputational and Economic Risk

If a crash or other accident occurs that destroys a financed aircraft while it operated in violation of Part 91, customers and financiers both face reputational risk arising out of a government investigation and imposition of penalties coupled with an intentional or even unwitting violation of federal regulations designed to assure safety in flight. In addition, as described above, the circumstances could also present potential loss of insurance coverage, personal liability and increased operational or business interruption costs.

Best Practices Under 14 C.F.R. Part 91

Best practices in this area appear to run counter to actual behavior in a majority (perhaps more) of transactions involving financed (and apparently many other) business aircraft.

For Customers

To manage risk and legal compliance, customers can and should:

1. Conduct a full analysis of, and develop a proper structure for, their intended use of the aircraft for noncommercial Part 91 or commercial Part 135 operations, or both, at the acquisition/financing stage of a transaction;

2. Involve financiers in the discussions about properly structures for operations as financiers take an interest in the type of use of the aircraft in determining residual/collateral value, maintenance requirements and liability risk exposure;

3. Be aware that, even if financiers do not take a direct interest in technical company structuring to comply with the FARs, they still include legal compliance representations and warranties in their documentation that they can and will use against the customer as a basis of declaring a default and seeking indemnification for wrongful operations and any accident or incident claims;

4. Evaluate options to operate under either Part 91 or Part 135, or both, that best meet the customer's overall usage objectives;

5. Review insurance coverage carefully, including the application, to obtain the endorsements that provide protection against risks that may otherwise be excluded or limited and cover in the "purpose of use" provisions operations under Part 91 and Part 135 of the FARs; and

6. Explore ideas for proper structuring with knowledgeable legal counsel before the purchase or financing of an aircraft to comply with, among others, regulatory, tax and financing requirements.

As to operational and regulatory structuring, if a customer desires to operate its aircraft under Part 91, it can (a) operate the aircraft under direct ownership and operational control of the user, or (b) if feasible, arrange for its main enterprise company to operate the aircraft "within the scope of and incidental to [the non-air transportation] business of the company."
This latter structure works well where the company does not expect its missions to include any commercial use and re-

stricts use to employees, officers, and customers, consistent with private operations under the FARs incidental to its regular business. Conversely, a customer may take title to the aircraft in a holding company and then enter into a "dry lease" with a charter company to move operational control to that charter company for operations to be conducted under Part 135 for the benefit of either the customer or third parties, either on a flight-by-flight basis, short-term or even a long-term basis.

There are a number of different structures that may achieve the customer's purposes while still complying with the applicable FARs. Best practices would dictate that a customer identify and implement the optimal approach that meets its needs and not dismiss the requirements in the FARs as unnecessary or overkill.

For Financiers

Financiers can, and perhaps should:

1. Require their customers to develop a compliant structure at financial closing if they use an SPE to own or lease their aircraft;

2. Ask their customers during regular reporting for certification of use of the aircraft within the applicable regulations and a factual basis for the statement;

3. Review flight logs or other records periodically when conducting inspections of the aircraft to ensure compliance with the Part 91 or Part 135, as the case may be, including the "safe harbor" under 14 C.F.R. §91.501; and

4. Include a specific default in primary agreements for the failure to abide by Part 91 and Part 135, with reasonable cure periods.

Finally, neither the financier nor customer should take comfort in the unavailability of FAA agents to enforce these regulations or the use of the SPE to block federal action. The FAA is highly likely to show up in a significant occurrence, and that matter may be the one in which a lax customer takes a big hit from preventable violations and liabilities. At a minimum, neither financiers nor customers should ignore this issue on the chance that the violation will go unnoticed by any government entity.

FEDERAL EXCISE TAX ON PART 91 MANAGEMENT FEES

FINDING: Financiers and customers largely view the imposition of federal excise tax on "private" travel flown by a management company under Part 91 as a grab for more revenue that lacks support in the law and historical practice. This issue creates serious financial concerns among owners and their management companies but minimal concerns for financiers.

The Internal Revenue Service (IRS) in 2012 issued a "Chief Counsel Advice"[190] that purportedly justifies the imposition of an excise tax on nearly all management agreement costs on the premise that the aircraft management company is providing air transportation service to the aircraft owner subject to the FET. The CCA has resulted in protests and meetings with the IRS to curb the expansion of the FET, but IRS auditors[191] continue to assert that that CCA entitles them to collect such FET revenue.

The FET is a 7.5% tax of the "amount paid" for domestic air transportation service plus a per- head tax. FET is collected by the taxable air entity from the owner/passenger.[192] It is similar to a sales tax. FET is commonly associated with a tax on the amount paid by passengers for a commercial airline or charter ticket.

To be subject to FET, a taxable entity must exercise "possession, command, and control" of the aircraft. For most customer survey respondents, in particular, the FET puts another tax burden on Part 91 flight management companies that will add significant cost to managed aircraft operations. A troubling question for managers is whether they can recover the unexpected FET in a charge from their passengers.
Nearly 62% of customers, managers, and operators know about this CCA issuance and how the IRS intends to im-

pose FET on management company fees. Nearly 38% did not know of the CCA. Customer interview respondents did not know whether the costs would be prohibitive. Those respondents aware of the FET have a very high degree of concern that the FET charges will subject them to a material cost and administrative burden.

Most interview respondents expect management companies to challenge or alter the CCA interpretation as being inconsistent with court rulings and statutory provisions that would not tax Part 91 flights.

Best practices require customers to:

1. Assess the risk continually of FET audits by staying current with IRS ruling and guides applicable to business aircraft;

2. Discuss tax planning with counsel about ways to reduce the FET at the inception of a contractual arrangement, including management company arrangements, that pertain to the operation of any business aircraft;

3. Evaluate how to maintain personal services under Part 91 using a dry lease that only includes pilot services, if feasible, to avoid FET liability;

4. Shift payment of costs associated with air transportation services directly to the user of the aircraft, such as arranging for payment of fuel costs directly to vendors (fuel being one of the greatest costs of operation potentially subject to FET); and

5. Remember that FET is only one factor of a multi-factor analysis involving such other issues as state sales tax and operational planning, a full discussion of which is beyond the scope of this study.

The CCA creates an unexpected financial burden on passengers and their management companies. Consequently, knowledgeable tax and aviation counsel have already begun to structure transactions to minimize the economic downside effects of the new FET.

USER FEES BATTLE ON CAPITOL HILL

FINDING: The potential imposition of "user fees" is generally considered a threat to the economic viability of owning, operating, and financing business aircraft by smaller businesses and/or high-cycle aircraft operators. Financiers and high-net-worth customers express less concern about the $100 user fee program. However, almost all respondents believe that a government unit, if formed to manage the program, would inevitably increase fees and the administrative burden on all operators. Financiers believe that a bureaucracy's cost could reduce financing transactions as users cut back on flights subject to the user fees.

User Fee Program Explained

The user fee program, as envisioned by the Obama administration, would create a government unit that would charge a "$100 per flight fee [be paid] … to the FAA, by aviation operators who fly in controlled airspace. Military aircraft, public aircraft, recreational piston aircraft, air ambulances, aircraft operating outside of controlled airspace, and Canada-to-Canada flights would be exempted." The rationale is that general aviation users "currently pay a fuel tax, but this revenue does not cover their fair-share-use of air traffic services."[193]

User Fee Concern Levels

The attention devoted to potential user fees depends on the type or profile of the customer. For example, customer views will very likely differ if the customer is a billionaire, a very-high-net-worth individual, a GA operator of a turboprop, or a corporate flight department. One of the 1,226 billionaires is very likely to have the staff to complete necessary forms and will very likely treat user fees as immaterial compared to his or her other purchase and/or operating and maintenance costs. Nonetheless, each type of user has constraints economically and administratively. A commercial airline may incur high administrative costs but would pass the fees onto customers, perhaps without a backlash.

For financiers, the initial $100 fee does not create a major issue except for 10% of the financier survey respondents. They do not believe the imposition of a user fee would be likely to stop large cabin or ultra-long-range aircraft transactions. It is important to note that this study point is not conclusive due to a lack of survey data. However, financier interview respondents largely share this view.

According to JETNET iQ, data suggests that the user fee issue ranks in the low single digits of concern in it surveys. However, interview respondents affected by the fees offer a decidedly opposite view of this issue as discussed below.

User Fee Opposition

The proposal for user fees has drawn wide bipartisan opposition, as evidenced by a letter written to the White House by nearly 200 members of Congress in March 2012. The proposal surfaced again as Congress takes up the 2013 budget. This fee is supposed to constitute a new administrative mechanism to level the playing field between commercial and general aviation as a means, according to the White House, to help pay for ongoing operations of the "world-class aviation system" in the U.S.[194]

Business aircraft industry leaders unanimously agree that, if additional fees cannot be avoided, paying the additional taxes at the gas pump is the most efficient, practical, and fair way to raise tax revenue.[195] The alternative to paying at the pump leads to the creation of a new federal bureaucracy to administer a user fee program. Respondents share the worry that a federal program will almost certainly force significant increases in the proposed $100 fee to pay for the administration and collection of the fees.

Customer respondents widely consider the imposition of user fees on aircraft operators to threaten the economics of the business aviation industry and say it makes no sense. If implemented with respect to operators of bottom-half jets, the imposition would likely cause disproportionate and arguable unfair economic burden on those aircraft operators because their fees would be the same as for large business and commercial jets.

Furthermore, the user fee could exacerbate the unprecedented bifurcation between bottom-half jets and top-half jets. The cost and burden associated with the user fee program could put further downward pressure on the residual/collateral values of the bottom-half jets. This reduction could occur as a result of a potential purchaser reducing the purchase price to buy bottom-half jets, upon taking into account the user fees arising out of expected use of the aircraft. For large aircraft, a purchaser would likely treat user fees as an immaterial factor in setting a purchase price.

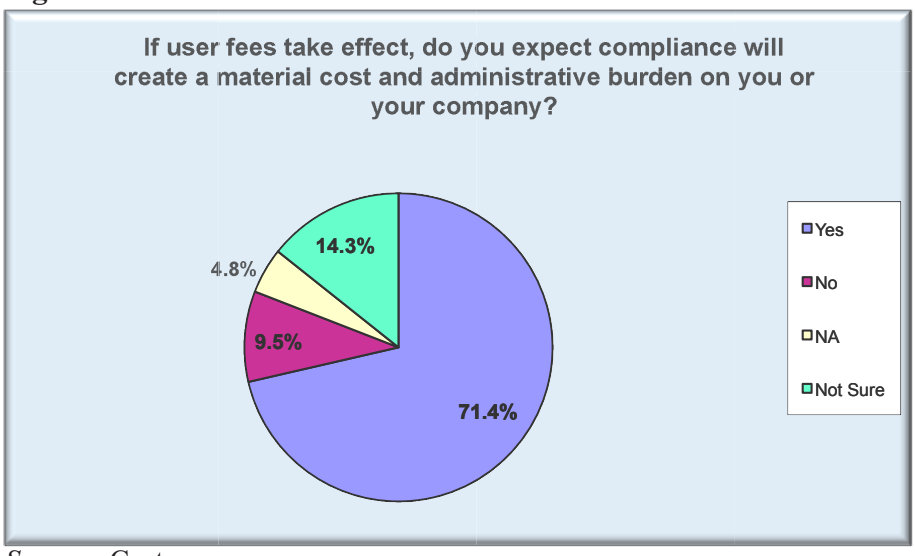
Not surprisingly, implementation of user fees represents the biggest challenges among customer survey respondents. For customers that have a high number of takeoffs and landings, the increase in operational expense could adversely affect their financial condition and ability to qualify for financing. Approximately 24% of customer survey respondents either do not know the potential effect or do not think user fees would be a problem in cost and administration. Figure 6.6 shows that 71% of customers worry about the cost and administrative burden associated with the user fee proposal.

All views of respondents coalesce in opposition to user fees when they are asked about the potential burden of an established bureaucracy. In that instance, almost all respondents, including financiers, believe that that a user fee bureaucracy could easily become a vehicle to impose much greater taxes and fees on all aircraft operations (including commercial aircraft). As one financier interview respondent said, once the government puts "its nose under the tent," the user fees will become an "insidious" and "creeping" cost for all operators of business aircraft, with a disproportionate burden on small businesses.[196]

The economic issue seems clear. If the federal fee burdens flights with a $100 (or greater) charge and significant compliance documentation, businesses will have no choice but to redirect time to the administration of the fee. Moreover, they will take revenue for administrative costs out of their businesses just to pay the fee rather than to pay salaries and earn profits.

The net result for financiers is, of course, unknown, but they worry, as do their customers, that money redirected to fees will not be available to operate the aircraft or pay financing costs. Customers may cope with the fees by reducing use

Figure 6.6 User Fee Cost and Burden



Source: Customer survey.

of their aircraft. The extra cost may also slow the replacement cycle of aircraft and widen the bifurcation between bottom-half jets and top-half jets segments.

Respondents in this study conclusively agree that the federal government should not implement, and does not need, user fees when respondents can, if essential, pay a few pennies more at the pump to level the playing field between commercial and GA aircraft.

BASEL III: RELATIONSHIPS COUNT

FINDING: For all its complexity, Basel III compliant banks can potentially benefit customers by building and maintaining strong banking relationships.

Basel III: Financiers' Fear of Greater Complexity

Basel III[197] interests financiers in part because of their fear that it will add another layer of complexity to, and increase costs of, financing transactions. They appear to be correct on both points, but on a positive note, long-term relationships with good creditworthy customers may potentially reduce their rates and applicable banking reserves under the law.

Basel III is the latest version of a series of international standards of banking regulatory oversight and supervision reforms, which represent measures developed by the Basel Committee on Banking Supervision (BCBS) with the goals of (1) improving the banking sector's ability to absorb shocks arising from financial and economic stress, (2) improving risk management and governance, and (3) strengthening banks' transparency and disclosures.[198] The effects are these:

1. Risk weights increase dramatically (for noninvestment grade clients and for term loans), which means more loan loss reserves are required.

2. Higher levels of liquidity will be required, which is costly to banks.

3. More capital will be required, which, again, is more costly to financial institutions.

As a result, the fundamentals used to calculate returns associated with loans are dramatically changing. It is clear that noninvestment grade and longer term lending will become more costly for banks due to higher capital requirements as a result of increased risk weights. How banks view risk and returns associated with aircraft lending will depend on their entire loan portfolio, concentration of different asset classes, and the focus of their credit appetite.

How the aircraft finance industry will change as a whole is somewhat uncertain. However, we can identify some common themes and make the following predictions.

The winners will be:

- Investment-grade clients
- Relationship banking, as Basel gives credit for existing relationships
- Consulting, accounting, and risk-management firms
- Private banks that historically have focused on relationship lending and that have historical aircraft lending data
- Nonbank and alternative lenders that are not subject to NPRM (Notice of Proposed Rulemaking) and Basel
- Ratings agencies (Risk-weighted assets[199] can rely heavily on ratings.)

The losers will be:

- Systemically important financial institutions (SIFI) (They are required to hold more capital, resulting in pressure on profitability and ROE in comparison to regular banks.)
- Noninvestment grade clients, due to higher risk weights
- Borrowers seeking longer term loans (greater than 5 years)
- Borrowers not looking for relationship banking
- Weaker, unsophisticated, small banks (The standard risk weighting model is less favorable.)
- Banks lacking viable historic aircraft lending data that nevertheless are looking to enter the market

Basel III Effects on Aircraft Transactions

Customer relationships with financiers, especially banks, may benefit both parties in transactions. Strong relationships between financiers and Basel III compliant banks should support transaction approvals and reduce bank reserves that can raise a financier's cost of funds.[200]

Half of the financiers believe that new bank regulations, such as the Dodd Frank Act or Basel III, likely will not reduce their transaction opportunities in 2013, with any difficulty tapering off to an immaterial concern in 2013 through 2016. These financiers believe that their existing approval processes will need only minor adjustments to comply with new regulations. In some cases, financiers said that the regulations will not affect their existing approval processes. The other half of financiers takes the opposite view: Regulations likely will reduce their transaction opportunities in 2013–2016.

Financier interview respondents break the survey's tie. They generally indicate that Basel III in particular is so highly complex that the answers above can only reflect an early indication of how financiers will adapt to Basel III. The interview respondents and the author of this section believe that, as Basel III phases in, long-standing, quality bank relationships with customers that have strong credit will clearly help Basel III banks win deals despite reserve requirements associated with the particular transaction.

Best Practices for Basel III Financiers and Customers

Customers and financiers can embrace or resist Basel III as they might other laws and regulatory initiatives. However, best practices for 2013 through 2016 suggest that financiers and customers will benefit by building a strong relationship whether the customer is investment grade or not. For customers, their search for financiers should include regional and local banks that may offer lower rates and fewer diligence burdens than those of financiers that are subject to the complexities of Basel III. Yet for customers with good credit and strong relationships with their banks subject to Basel III, it will be important to remember that those relationships may count in rate savings and other benefits too.

See Appendix F, Research and Resources on Basel III.

Chapter 7: Flight Path To The Future

REFLECTIONS ON THE RECESSION PAST

Before the great recession began in December 2007, the business aviation industry enjoyed several years (circa 2003–2007) of good times–lucrative purchases, sales, and financings of business aircraft. Year over year starting in 2003, deliveries of aircraft climbed rapidly just as corporate profits shot up and purchase prices of aircraft soared to new highs.

The future in 2008 looked promising too, but that was not to be the reality. Despite all the success and promise for a vibrant future, business aircraft transactions and aircraft residual/collateral values took a steep nosedive in stunning response to the credit market collapse in 2008.

The great recession wreaked havoc on business aircraft financing, as evidenced by dramatic losses in residual/collateral value, a collapse of available business aircraft financing, a huge buildup of preowned inventory for sale, and a reduction in business aviation transactions with respect to certain types of aircraft since 2008. The period from 2009 until 2013 has challenged even the best and most successful players in business transactions.

LOOKING FORWARD – A TRANSACTION LIFT IN SIGHT

Since 2008, transaction volume of most financers has limped along without significant expansion. Respondents still remain cautious, even skeptical, about the future. But mainly they express optimism for growth in 2013 through 2016 amid many challenges they expect to encounter. This study has discussed most of the challenges, but also opportunities and best practices. What the future brings, discussed at length in this study, still confounds even the most knowledgeable respondents in this study. However, Table 7.1 generally supports the findings on issues covered in this study and mostly reassures the industry that the future will mostly be brighter than the past few years.

The following list summarizes the study's key points and, in many respects, aligns with the Table 7.1.

Financier View of the Future

Respondents have swung from pessimism since 2008 to cautious optimism for prospects in 2013 through 2016. They fundamentally, if somewhat hesitantly, believe the overall direction in business aviation and business aircraft financing looks good and encouraging. However, they still express concern about specific accounting, tax, optics, regulatory, policy, and legal issues.

For financiers, the ultimate changes on these issues have the potential, if determined adversely, to reduce financing opportunities, trim repeat customers, and throttle the growth of their businesses. Mainly they seem most focused on transaction flow, which they consistently suggest is improving and strengthening worldwide. Many financiers as of January 2013 see a significant level of activity for new and preowned aircraft acquisitions.

Competition

Competition among financiers in the U.S. market will continue to put downward pressure on funding spreads, cause financiers to ease up on covenants, and increase residual/collateral values assumed in pricing. While bank and independent leasing/finance companies, including wealth management groups, will compete effectively for business, local and regional banks will become a formidable competitive force in 2013 through 2016. Competition internationally will depend on the capabilities of the U.S. financier, but internationally active financiers in the U.S. will encounter few U.S. competitors in international transactions.

Table 7.1. The Outlook for General Aviation Is Mostly Positive

Future Outlook Factor	Probability	Jets	Turbo-Props	Piston	Comments
Pent-Up Demand	High	●	●	●	4 year sales drought must come to end
International growth and aviation-friendly	High	●	●	●	Industry associations and lobby groups continue to expand. Governments cooperate with approvals.
Fractional a replace-ment, not growth mkt.	High	○	○		From 16% of industry production to 8-8% in future
Tighter lending standards	High	○	○	●	60% of all business jets are financed, particularly on the low end
High fuel costs	High	○	○	●	Smaller aircraft more sensitive and price elastic to higher fuel costs
New Products in Pipeline	Med	●	○	○	More jets in development than turboprops or pistons
Worldwide economies continue improvement	Med	●	●	●	Sales tied to corporate profits, GDP, stock indices
Dollar stays relatively weak	Med	●	●	●	Business aircraft priced in dollars. Low dollar means more international demand.
Airline experience continues decline	Med	●	●	●	Airlines are 24/7 sales people for general aviation
New User Fees & Taxes	Med	○	○	●	U.S. phenomenon only. Politicians become anti-business jet during every economic downturn.
Double-Dip Recession	Low	●	●	●	If was to occur, unlikely to be as severe or lengthy as the first dip was
U.S. political "Jet Bashing" continues	Low	○	○		A U.S.-phenomenon only

● Favorable ○ Somewhat Unfavorable ● Unfavorable

Source: Brian Foley Associates.

Residual/Collateral Values

Despite market pressures, most financiers in 2013 through 2016 will use conservative residual/collateral values assumptions in transactions and treat these values as their most important pricing-approval factor, next to the creditworthiness of their customer (i.e., quality cash flow, business model, management, net worth and other criteria used by the particular financier). Financiers will gradually raise the values assumed in transactions, which increases their asset exposure, to compete for business. This trend is already occurring but will be more pronounced as aircraft values stabilize and the memory of losses suffered during the recession and 2008 financial crisis fades into the past.

Product Mix Shifting

Leasing will continue to lose ground to lending in 2013 through 2016, especially if, or as expected when, the IASB and FASB revise accounting principles to end off-balance sheet leasing. Still, leasing will remain a viable product, based on its fundamental attributes such as 100% financing, tax-advantaged pricing, and residual risk transference to the lessor by the customer.

Repetition of Past Mistakes

Financiers in the U.S. feel the heat of competition to win deals, and that is likely to continue in 2013 through 2016. They will "skinny down" margins and assume somewhat more "aggressive" residual/collateral value positions in 2013 through 2016 (relative to 2011). However, very few of them will make the same or similar mistakes as some financiers made before the recession. For example, they are highly unlikely to assume that residual/collateral values will increase.

International Transactions

Most U.S.-based financiers would rather compete in the U.S. in 2013 through 2016 than pursue international transactions. With 40% or more of new-build deliveries occurring outside the U.S., this recalcitrance represents many opportunities lost for U.S. financiers.

Federal Tax Policy

The inclusion of another year of "bonus depreciation" in 2013 for business aircraft transactions bodes well for leasing and lending transactions in 2013 and in certain cases in 2014.[201] However, to raise revenue, Congress will almost certainly deliberate whether to lengthen the depreciation period for aircraft to at least seven years from five years and let bonus depreciation expire. These actions will modestly chill the incentive to make significant capital investment in aircraft after 2013–just as deliveries of new-build aircraft appear to be ready for takeoff.

User Fees

Implementing a user fee program makes no sense to respondents, especially when the government can raise the existing gas tax at the gas pump. For financiers and high net-worth operators, this issue has less importance, except that financiers worry that a bureaucracy to administer the program would hurt their customers in smaller businesses or with bottom-half jets. Although this issues draws mixed levels of concern, user fees is one of the most widely and intensely discussed issues in this study.

Optics and Misperceptions

Although users of corporate jets believe public criticism is unwarranted, they still face unpleasant challenges and inclinations to defend themselves. Mainly public companies have right-sized their aircraft and flight departments to fit their missions and have developed travel polies suited to their particular business requirements. These actions have contributed to a trend, which has been gaining strength for at least a year, to disregard adverse public debate, opinion, and misperceptions about the acquisition, possession, or use of business aircraft that may arise in 2013 through 2016. The productivity and profitability of jet users supports this response to the public.

Off-balance Sheet Leasing

It is highly likely that FASB and IASB will end most off-balance sheet leasing, which respondents generally expect will have a profoundly negative effect on leasing business aircraft. Although leases will remain viable products, they will continue to lose ground to lending transactions if that occurs.

Noncitizen Trusts

The die is cast. The FAA is highly likely to issue a refinement of "policy clarifications" pertaining to, but not terminating the use of, NCTs. The FAA is expected to expand the duties of owner trustees to report information held by, or only available from, their beneficial owners. For all practical purposes, NCTs are likely to become a relic of the past, despite many years of successful, valued, and safe use in transactions if the FAA makes any significant change from current practice.

Federal Excise Tax

The IRS will not pull back from the Chief Counsel Advice approach of imposing FET on management agreement fees paid when the manager has "possession, command and control" of a business aircraft. The industry efforts to educate the IRS on the error of its ways will be helpful but very unlikely to deter auditors or change the CCA. Revenue demands will trump past practice unless lawsuits curb the IRS's appetite for revenue. Legal structuring can minimize the risks of the significant cost that federal excise tax would add to flights by owners and other passengers.

LLCs and Other Special Purpose Aircraft Entities

SPEs own or lease a large percentage of business aircraft. More than a majority of SPE owners are highly likely to violate 14 C.F.R. Parts 119 and 135 inadvertently or unknowingly by accepting compensation for Part 91 flights. This behavior is very unlikely to change in 2013 through 2016, and it typically is not closely monitored by the FAA (for lack of staffing), customers or financiers. The FAA is still likely to look for opportunities to make an example out of wrongdoing to demonstrate its commitment to safety and enforcement in this area.

Basel III

All respondents expect that Basel III will add complexity to transactions, and potentially require financiers to seek higher spreads in aircraft financing transactions. However, Basel III is expected to give a compliant financial institutions credit for a strong, long-term banking relationship with their customers. The importance of the relationship cannot be overstated as it may help the financier deliver a competitive bid for the customer's aircraft financing business.

Fractional Shares

In 2013 through 2016, financiers will largely stay away from this industry. It is unlikely to grow enough (if at all) to make these transactions profitable for, or even of interest to, most financiers. Special customers that wish to finance their shares may still be able to do so, but only through exceptions to product policies, or regional or local banks.

CONCLUSION

This study has been greatly benefited by the open dialogue with more than 26 experts and active participants in business aviation involving more than 20 hours of interviews. The 80 respondents to surveys provided data that offered indicative, and sometimes conclusive, insights into the collective thinking of customers, service providers, and financiers about the future.

Considering all the inputs for this study, it is hard to encapsulate and synthesize the complex and diverse views of the respondents. Yet, from the vantage point of the researcher, it now seems reasonable to conclude that business aircraft will gain altitude in 2013 through 2016 and ultimately ascend to an active (if not robust) transactions market during that period.

Appendix A: Selected Definitions and Short Explanations[202]

14 C.F.R. Part 91 or 14 C.F.R. Part 135. Two parts of the C.F.R. pertaining to business aircraft used privately and commercially, respectively.[203]

bottom-half jets. Aircraft smaller than super-midsize, with a new-build value of less than $25 million.

business aircraft or aircraft. The asset type at the heart of this study. Generally means fixed-wing aircraft and helicopters used for business purposes. A business aircraft does not include aircraft used by a scheduled airline or the U.S. military. Business aircraft constitute one portion of general aviation (GA) aircraft. GA refers to privately owned and operated aircraft other than scheduled airlines and military aircraft. The term *GA aircraft* typically (and correlatively) means private aircraft, other business aircraft, and corporate aircraft (i.e., business aircraft used by corporations). Business jets, one of five segments or types of business aircraft, provide "fast, flexible, safe, secure and cost-effective access to travelers' destinations of choice."[204] Other business aircraft provide the same kind of service in aircraft that do not have turbine-powered engines.

Cape Town Convention or Cape Town. Refers to the Cape Town Convention on International Interests in Mobile Equipment, previously known as the Unidroit Convention (Cape Town). Cape Town is accompanied by the "Protocol on International Interests in Mobile Equipment on Matters Specific to Aircraft Equipment" (Aircraft Protocol).[205]

C.F.R. The Code of Federal Regulations.[206]

C.F.R. Part 91. CFR Part 91 prescribes operating rules governing the operation of large airplanes of U.S. registry, turbojet-powered multiengine civil airplanes of U.S. registry, and fractional ownership program aircraft of U.S. registry that are operating under Part 91, subpart K, in operations not involving common carriage.

citizen of the United States or U.S. citizen. Under 49 U.S.C. 40102(a)(15), "(A) an individual who is a citizen of the United States; (B) a partnership each of whose partners is an individual who is a citizen of the United States; or (C) a corporation or association organized under the laws of the United States or a State, the District of Columbia, or a territory or possession of the United States, of which the president and at least two-thirds of the board of directors and other managing officers are citizens of the United States, which is under the actual control of citizens of the United States, and in which at least 75 percent of the voting interest is owned or controlled by persons that are citizens of the United States."[207]

To describe a U.S. citizen in a less technical way, U.S. citizens may be individuals who are citizens of the U.S. or its possessions (by birth), partnerships and corporations, and those who qualify as resident aliens. Federal regulations focus, generally, on assuring for registration purposes that corporations are owned, operated, and actually controlled by citizens of the U.S. and that partnerships are composed entirely of individuals who are citizens of the U.S. Determining whether a corporation is a U.S. citizen is recognized as a substantial problem by multinational institutions that use or finance business aircraft and by virtually all interviewee[208] respondents.

FAA. The Federal Aviation Administration. Among other aviation functions, it is responsible for promulgating and enforcing regulations on all safety matters relating to the operation of airports; the manufacture, operation, and maintenance of aircraft; and the efficiency of the National Airspace System under Section 1.82 of the C.F.R[209]

finance or financing (or derivative terms). Solely for purposes of this study, these terms refer to all forms of lending (secured and unsecured), refinancing, equity investing, and leasing with respect to business aircraft, including any lease, finance lease, financing lease, and operating lease.

finance lease. This type of lease is not the same as a *financing lease*. To be treated as a finance lease,[210] the basic agreement must be treated as a lease. It is not a secured transaction, financing, or lease intended as security under Article 9 of the UCC. A *finance lease* refers to a special type of lease under Article 2A of the UCC (Article 2A) involving three parties: lessor, lessee, and supplier. In aircraft transactions, a *finance lease* can apply to (1) the purchase from an

OEM, as the supplier, and (2) the lease of a new aircraft to a customer, as the lessee, by a financier, as the lessor. The basic idea is that the lessee selects the aircraft and the lessor is a passive source of funding for the purchase. A *finance lease* is not the same lease transaction as a *financing*, which, for purposes of this study, constitutes a secured loan with respect to the aircraft. These structures may contain (1) "buck out" or other nominal purchase options or forced purchases at the end of the term and (2) agreements that, considering the economic realities, the lessee, at lease expiration, is very unlikely to return the aircraft to the lessor with any meaningful residual value.

financing lease. A *secured transaction, a secured loan, security interest, financing, installment sale,* or *lease intended for security*. Each of these arrangements refers to a secured transaction under Article 9 of the UCC regardless of the form of, or labels on, documentation. Thus an agreement called a lease may nonetheless constitute a secured transaction, a financing lease with respect to a business aircraft.[211]

gross domestic product or GDP. The output of goods and services produced by labor and property located in the U.S.[212]

international. In this study, *international* refers to transactions where the aircraft is registered outside of the U.S. and/or is primarily used, hangared, or based outside of the U.S. even if registered at the FAA. These transactions typically involve parties from the U.S. and one or more other countries. Frequently a customer will have substantial contact with, or primarily live in, a country outside of the U.S. The owner or lessee may not be a U.S. citizen. An aircraft financing transaction may occur within or involve one or more countries wholly outside the U.S.

International Registry or IR. The *International Registry* or *IR* is the electronic registry system located in Dublin, Ireland created under the Cape Town Convention. Transacting debtors, creditors and other parties register their various interests in aircraft and engines on the IR. It establishes priority of these interests and other rights for all countries that sign the Cape Town Convention. The IR will file international interests, prospective international interests, and registerable nonconsensual rights and interests, including the interests evidenced by most of the following documents: security agreement; title reservation agreement (conditional sales); leasing agreement; assignments; contracts of sale; bills of sale and notices of national interest subrogation agreements; prospective assignment agreements; prospective sale agreements; prospective leasing agreements; guarantee contracts; commitment or proposal letters covering prospective international agreements; interest relating to filings at IR before closing; and amendments, discharges, and extensions to any of the above.[213]

lease. Section 2A-103(1)(j) of the UCC[214] defines a lease as "a transfer of the right to possession and use of goods for a term in return for consideration, but a sale . . . or retention or creation of a security interest is not a lease." As used in this study, the term *leasing* (or derivative terms) refers to all forms of leasing business aircraft where the lessor typically enters into a form of a lease as the owner/lessor, takes residual value risk, and may be entitled to certain tax benefits with respect to the aircraft. Leases used for refinancing are included in this term.

lending or loan (or derivative terms). In this study, refers to a loan secured by an aircraft as collateral (and, in some transactions, other aircraft or non-aircraft collateral) or unsecured loan in connection with the purchase or refinancing of a business aircraft. It also refers to financing leases. Unsecured loans are rare, but they may arise when a customer has particularly strong "credit" or the financier elects to take collateral risk that falls short of the value its needs to recover its loan balance from the aircraft sale or other post-default proceeds only.

recession. In this study, refers to the U.S. recession that began in December 2007 and ended in June 2009. This 18-month slump was the longest since the Great Depression, according to the National Bureau of Economic Research. The NBER does not define a recession in terms of two consecutive quarters of decline in real GDP. Rather, a recession is a significant decline in economic activity spread across the economy; lasting more than a few months; and normally visible in real GDP, real income, employment, industrial production, and wholesale-retail sales.[215]

secured loan. One of the most common forms of aircraft financing arrangements. Generally evidenced by a loan agreement, a security agreement (or similar document) and a promissory note, this financing transaction is the core of a secured transaction that creates a security interest in the aircraft under applicable federal, state, or international law. In this context, a security interest means an interest in the business aircraft that secures payment or performance of the

lease or loan obligations. It is neither a lease nor a finance lease. The parties often refer to such a transaction as a *financing*. Though not called a secured loan, a financing lease is usually treated as if it is a secured loan.[216]

top-half jets. Aircraft at or larger than super-midsize with a new-build value of more than $25 million.

true lease, tax lease or true tax lease. A lease transaction that qualifies as a true tax lease under applicable federal tax law (i.e., the lessor is treated as the tax owner of the leased property). Revenue Procedure 2001–28 establishes criteria for classifying a lease as a true lease for federal income tax purposes. Technically, Rev. Proc. 2001–28 establishes criteria for obtaining an advance ruling from the Internal Revenue Service that a lease is a *true lease* as contrasted with a conditional sale. Rev. Proc. 2001–28 (like its predecessor Rev. Proc. 75–21) is sometimes called the tax *Guidelines*. A lease classified as a true tax lease under these rules may be called a *guidelines lease*. A *conditional sale* is the dominant term used in federal tax or guideline leases to refer to a lease that does not qualify as a true tax lease but represents a sale of the leased property based on installment payments by a lessee to a lessor."[217]

Uniform Commercial Code. Abbreviated as UCC.

Appendix B: Original Equipment Manufacturers

An *original equipment manufacturer*, or OEM, designs, builds (individually and in coordination with other manufacturers such as engine manufacturers), warranties, trades, finances, maintains, inspects, repairs, and sells general aviation (GA) aircraft. Only one OEM located in the U.S. remains active in providing financing for its customers: Cessna Finance Corp., a Textron company that provides financing for Cessna products.[218] Other OEMs enter into creative incentives or other arrangements to facilitate sales and other strategic objectives. The six major OEMs are as follows.

1. Bombardier Aerospace Corp. is headquartered in Montreal, Quebec. Through its Bombardier Business Aircraft[219] unit, it offers, designs, manufactures, and services business jets, Learjet, Challenger, and Global aircraft. Bombardier also has commercial aircraft as well as an amphibious aircraft and has interests in Flexjet, the fractional share company.

2. Cessna Aircraft Co., a wholly owned subsidiary of Textron Inc., is located in Wichita, Kansas.[220]

3. Dassault Aviation is the only private company of its type.[221] It is a member of Groupe Industriel Marcel Dassault. With its home base in France, it has a significant facility in the U.S. in Teterboro, New Jersey, operating as Dassault Falcon Jet Corp.

4. Embraer S.A.[222] is located in Sao Paulo, Brazil. Embraer has been involved in all aspects of aviation including design, development, manufacturing, sales, and technical support for commercial, agricultural, and executive aviation. Embraer also offers integrated solutions for defense and security.

5. Gulfstream Aerospace Corporation, a wholly owned subsidiary of General Dynamics, designs, develops, manufactures, markets, services, and supports business jets. Its headquarters is in Savannah, Georgia.[223]

6. Hawker Beechcraft Corporation emerged from a bankruptcy February 19, 2013.[224] It will implement a business plan that focuses on its turboprop, piston, special mission, and trainer/attack aircraft – the company's leading products – and on its parts, maintenance, repairs, and refurbishment businesses, all of which are profitable and have high growth potential.[225]

Appendix C: Aircraft Segments or Types

Very light jets, or microjets, or VLJs,[226] are designed to provide air travel for a few passengers to any of more than 5,000 small community airports in the U.S. These jets typically have a maximum takeoff weight of no more than 10,000 pounds. Aircraft of this class are well suited to landing at small community airports. Models include the Cessna Citation Mustang, Eclipse 500, and Embraer Phenom 100. This product attracts small and medium-size companies in all geographic regions.

Light jets weigh approximately 10,001 to 20,000 pounds (entry level coming in under 10,000 pounds)[227] They can land at smaller airfields than larger aircraft and deliver higher speeds than propeller-driven aircraft. This is a good answer for intracontinental flight. Debuting in the 1960s, they have been a mainstay ever since, well suited as business aircraft or private jets. An example is the Bombardier Learjet 40 XR. The market focus is on emerging countries like Brazil, Russia, India, and China (the BRIC countries).

Helicopters[228] are aircraft lifted and propelled by one or more horizontal rotors. Helicopters are powered either by a piston engine that uses 100 octane low-leaded fuel or a turbo-shaft engine that uses Jet A fuel. Turbo-shaft engines are a form of gas-turbine propulsion designed to produce shaft power rather than jet thrust. They are typically used for very short business aviation flights of less than 100 miles, at altitudes of less than 1,000 feet. The interior of a business helicopter typically seats four to six passengers and is configured like the inside of a small car. Helicopters are often attractive to businesspeople because of their ability to land at a variety of heliports and outlying airports.

Piston airplanes[229] have one or more piston-powered engines connected to the propeller(s), which provide thrust to move the aircraft on the ground and through the air. Piston-powered aircraft most commonly use 100 octane low-leaded fuel and fly at altitudes below 15,000 feet. A typical piston aircraft seats one to six passengers and is configured like the interior of a small car. Piston aircraft used for business typically fly relatively short missions of 300 to 400 miles, using very small general aviation airports that are often without air traffic control towers.

Turboprops refer to aircraft powered by a type of turbine engine that drives an aircraft propeller using a reduction gear.[230]

Midsize (medium) jet aircraft weigh approximately 20,001 pounds to 40,000 pounds. They work for longer range travel, including transcontinental flights, and for travel with larger passenger capacity requirements.[231]

Super-midsize jet aircraft can fly at high altitude and speed and the ultra-long range. These aircraft also offer wide-body comfort with room to move around. This segment appeals to emerging regions without too strong a focus on prices such as Russia, the Commonwealth of Independent States, and the Middle East.[232]

Large-cabin jet aircraft[233] are large jets that typically weigh more than 40,000 pounds and attract buyers in the fractional ownership and jet card programs in mature markets, China, and the Asia Pacific[234] region. Large-cabin, long-range business jets can provide nonstop access to overseas markets, especially Brazil, Russia, India, China, and South Africa.[235]

Super long-range jet aircraft *or* heavy jets are mainly used for large groups of passengers such as sports teams or celebrities with large entourages. Heavy jets will offer such amenities as living rooms, bedrooms, workspaces, full-service galleys, and lavatories with showers. With a 6,000 mile or greater range, they are well suited to intercontinental flight in the ultimate of luxury. Examples of these are the Boeing Business Jet line and the Airbus. Examples of this class of jet are the Bombardier Global, the Dassault Falcon 7X, and the Gulfstream G500 (Gulfstream G V). This aircraft fulfills a need for fleet replacement and fractional ownership in mature markets such as North America and Europe.[236]

Appendix D: Overview of Lease Accounting Project

The Lease Accounting Project remains in flux. This appendix describes important structural principles in the current proposal issued by the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB).

Decision on the Two-Lease Approach

In closing out their recent redeliberations, the boards compromised on a two-lease model approach for both lessees and lessors that use the same dividing line to determine which accounting approach to use. The IASB had consistently advocated a one-lease model under which all leases greater than one year would be considered the acquisition of an asset with related indebtedness (essentially characterizing a lease as the functional equivalent of an installment purchase-sale transaction).

The Equipment Leasing and Finance Association (ELFA) has advocated[237] a two-lease approach since the outset of the project in 2006. The dividing line is based on risks and rewards without the Financial Accounting Standard (FAS) 13 bright lines – an approach similar to the existing international accounting standard for leases (IAS 17).

Although the boards have now tentatively accepted a two-lease approach, they have generally drawn the dividing line based on the nature of the underlying property. For aircraft lessees, this proposed line essentially means that substantially all equipment leases, including business aircraft, formerly classified as operating leases, would be recharacterized as on-balance sheet, asset-backed financings.

Two-Lease Approach for Lessees – Disclosures Required

After bringing on balance sheet a lease obligation equal to the present value of the lease payments and an equal and offsetting right-of-use (ROU) asset, the lessee applies one of the following approaches in amortizing these capitalized amounts (with an exception for short-term leases,[238] which may continue to use the existing operating lease model).

The boards believe that all leases in excess of 12 months involve the acquisition of an asset and the incurrence of a related liability.[239] For example, if the present value of the future lease payments equals $1,000, on day 1, the lessee should report an increase in its debt obligations of $1,000 and an increase in its fixed assets of $1,000.

Subsequently, consistent with the accounting for an installment purchase of an equipment asset, the lessee generally should apply its fixed-asset accounting policies for the ROU asset (generally amortizing the asset using the straight-line method over the lease term) and apply the effective interest method to amortize the debt obligation.[240]

1. The interest and amortization (I&A) approach is generally applicable to equipment leases such as those used for business aircraft, whereas the ROU asset (aircraft) is amortized straight-line over the lease term and interest is imputed on the liability. The sum of these separately calculated amortized amounts will exceed the average rental amount in the early years and fall below it in the later years, resulting in a "front-end loaded" lease expense pattern[241].

2. The single-lease expense (SLE) approach is generally applicable only to real estate leases.

The I&A approach not only would skew a lessee's key performance ratios, such as its return-on-assets and debt-to-equity ratios, but it would also eliminate any overlap between book and tax accounting for its true leases. Lessees would then have to keep two sets of records and account for the temporary book-tax difference in their deferred income tax calculations when preparing their financial statements.[242]

Two-Lease Approach for Lessors

The two lessor approaches (with an exception for short term-leases) are (1) the receivable and residual (R&R) approach (similar to today's direct finance lease accounting) and (2) the operating lease approach (similar to that cur-

rently used in FAS 13). Because it would be symmetrical with lessee accounting, the R&R approach is the one an aircraft lessor generally should use.[243] However, unlike today's accounting, residual value guarantees (RVG) or residual value insurance (RVI) obtained at lease inception would no longer "monetize" the lessor's residual asset – that is, create a financial asset (receivable) eligible for sale or securitization. The boards generally view RVG and RVI as asset protections that should be considered only when testing for impairment or reported as a contingent asset in the footnotes.

Timing of Deliberations and Effective Date

In October 2012, FASB and IASB completed their joint redeliberations on the Lease Accounting Project. The boards have scheduled to "re-expose" an "exposure draft" reflecting the tentative decisions made during the redeliberations in the first half of 2013 and to provide a 120-day comment period. Since the boards will need to consider the comments, it appears likely that the earliest the boards could issue a new standard would be in early 2014. The boards would probably allow two to three years' lead time, with an additional year for private companies, and require all prior period financial statements presented for comparative purposes to reflect the effects of bringing on balance sheet all but short-term operating leases.

Accordingly, if the boards set the adoption date as 2017, U.S. public companies would generally need to reflect the new standard in their 2015 and 2016 financial statements. Based on the boards' projected timing, existing aircraft leases that expire before 2015 can remain off-balance sheet (whether originated in 2015 or before). For example, for a five-year aircraft lease qualifying as an operating lease under FAS 13, entered into by a public corporation, the lease would have had to expire before 2014, with the aircraft returned to the lessor to remain reported as off-balance sheet in its historical financial statements.

Strong ELFA Objections

ELFA has consistently supported the leasing project's principal objective: to provide financial statement users with an improved accounting model for leases that faithfully represents the economics of lease transactions (notably, by eliminating the existing "bright lines" of FAS 13 in classifying leases). However, in a letter dated August 30, 2012, ELFA notified the boards that "since we do not believe the Boards have appropriately resolved the question of lessee cost allocation, we are seriously considering withdrawing our support for the issuance of a final standard based on the tentative conclusions reached in recent redeliberations."

Appendix E: International Markets for Prudent Financiers

Although the recession ended in June 2009, the apparent aversion of financiers to entering into international transactions has not. This appendix discusses the reasons for their disinterest and ways to enter this arena with manageable risk.

As government subjects financiers to greater regulatory scrutiny and financiers see some growth in the U.S. economy, they seem very likely to stick to U.S. transactions despite the intense competition and consequent pressure on rates and terms. For the foreseeable future, therefore, most U.S. financier respondents seem highly likely to leave international transactions to others. In the U.S., financiers with active international transaction capabilities and experience should be able to seize opportunities for quality international transactions in competition with foreign (non-U.S.) financiers in 2013 through 2016.

Despite this stance of U.S. financiers, an unexpected flicker of interest arose in financier surveys, to the effect that stiff competition for transactions in the U.S. may push financiers to consider international transactions.

Assessment of Disinterest in International Transactions

From the perspective of most U.S. financiers, the U.S. presents enough transaction opportunities, such that that their organizations have no reason to broaden their mandates and put the resources into non-U.S. market development. If the U.S. financiers did, in theory, have authority to enter international transactions, they would continue to remain U.S.-centric, as conclusively illustrated in Table E.1.

Table E.1. Decision Not to Engage in International Transactions

If you do NOT currently engage in international business aircraft financing, how likely are you to start doing these transactions before 2014?	
Answer Options	**Response**
Won't Happen	47.6%
Not Likely	47.6%
Likely	4.8%
Very Likely	0.0%
Highly Likely	0.0%

Source: Financier survey.

Some financiers developed or hardened their risk aversion to expanding beyond U.S. markets once the recession began. The crisis of confidence and the seriousness of the downturn apparently left no reason or support to expand transactions either in or outside the U.S. Instead, these financiers retrenched and tried to grow more proven sources of revenue, such as wealth management and commercial lending.

On balance, financiers active in international transactions confirm that the transactions can be complex and time consuming. Each particular country or region has its own unique characteristics, practices, and laws. A financier must understand how to act in the target market. Yet the trend clearly points to increasing international activity, including cross-border transactions, as the size U.S. market continues to dip relative to the rest of the world.

Table E.2 lists some countries (as of November 2012) where aircraft transactions opportunities may be available to U.S. financiers.

Table E.2. Top 20 Business Aircraft Fleets by Country

Country	Number of business jets
1 USA	11082
2 Mexico	695
3 Brazil	638
4 Canada	486
5 Germany	410
6 United Kingdom	408
7 Austria	239
8 Portugal	172
9 Switzerland	172
10 France	161
11 South Africa	161
12 Venezuela	156
13 Australia	155
14 Italy	139
15 Argentina	132
16 India	128
17 China	113
18 Spain	109
19 Saudi Arabia	100
20 Turkey	94

Source: Ascent Online and Corporate Jet Investor[244]

More commonly, financiers avoid international transactions in part because they do not feel comfortable that they can get their aircraft back. Yet certain techniques help financers to manage this risk described below and others in reassuring ways that work, with some patience for cultural and judicial differences.

Ways to Enter International Markets

There are many ways to enter a market slowly and successfully. In all cases, financiers need the right advisors to evaluate transactions and close them. All these methods should work but require patience and resourcefulness.

1. Financiers can follow the leader. They can buy a part of a transaction closed by an established financier that is willing to syndicate parts of its international transactions.

2. Financiers can use the existing infrastructure of their institution to work with counterparts in other parts of the world to learn a particularly attractive market.

3. Financiers can invest in talent with a geographic focus to learn into transactions with the highest credit quality and most desirable aircraft.

4. A U.S. financier can partner with a local bank in a series of transactions after qualifying the partner as having the requisite skills, experience, and credit criteria.

5. A U.S. financier can directly investigate the markets of its choice and select one or two markets to learn how to compete and source transactions.

The optimal time to enter a target market is when a financier makes its initial commitment to gaining international deal experience. At that early juncture, financiers may investigate selected markets, but do not necessarily expect or desire to find and closing deals immediately.

Given the current deceleration of the BRIC economies (Brazil, Russia, India and China), 2013 through 2014 could be a time for U.S. financiers to choose particular markets and devote the time to learn a market before committing substantial capital to one or more of them. These economies do have promise of gaining new momentum, especially India and Brazil.

Risk Management in International Transactions

The strongest and most promising market internationally depends on the capabilities of the financier and its institutional assessment of, among other criteria, country risk, including an acceptable legal system of organized laws for the type of transaction; credit risk; and how well the financier knows its customer and how well the customer knows and trusts the financier. In other words, the importance of the relationship between the financial and its non-U.S. customer cannot be overstated.

Financier interview respondents indicate that substantial opportunity exists for financiers in this type of transaction.

Interview respondents suggest, among others, the following possibilities.

1. Obtaining additional collateral located in the U.S. or a third country with a quality legal system as security for its obligations regarding the financed aircraft (e.g., cash deposits, advance rent payments, a letter of credit, another U.S.-based aircraft or other valuable equipment the customer owns and the financier can use as collateral);

2. Enrolling the engines and auxiliary power unit (APU) in an acceptable engine and APU maintenance programs to mitigate risk of customers "running out" engines (or not maintaining the APU) or failing to complete inspections; and locate the aircraft at a maintenance facility;

3. Requiring that the customer hire only major international management companies to provide services and crews for the aircraft; and locate the aircraft through those companies;

4. Purchasing political risk insurance, which, among other coverage, handles the interference of a government with recovering an aircraft[245] to allay relevant issues about a local governments action against the aircraft;

5. Insisting on U.S. dollar denominated transactions or the use of a hedge at the customer's expense to address fluctuation in currency values;

6. Agreeing that non-U.S. citizens that (who) reside or work outside of the U.S. register their aircraft in the U.S. or an acceptable third country; and

7. Structuring legal and tax aspects requires the assistance of knowledgeable lawyers and accountants in country and in the U.S.

Legal structuring and risk mitigation[246] require that the parties promptly determine whether the Cape Town Convention[247] and the related Aircraft Protocol[248] cover the transaction. If so, then the parties can register the lien (called an international interest)[249] on the International Registry (IR).[250] The Cape Town Convention reduces the risk of financing and sale transactions by literally notifying the world (through a wholly electronic portal) of the registration of the international interest and, among other actions, by setting the priority to rights in the aircraft.[251]

Every study respondent knew about the IR and the Cape Town Convention. Typically, they consider registration a matter of normal course of closing a transaction. However, they usually did not concentrate on the protections afforded to financiers by the Cape Town Convention.

Top 10 International Markets for Financiers in 2013 Through 2016

For financiers that understand or may wish to evaluate international transactions, the following 10 countries (or regions), presented in alphabetical order, provide a glimpse of opportunities in reasonably safe and active markets for financiers:

1. Australia

Knowledgeable financiers believe that Australia presents good opportunities for expansion of large business jets as to dollar value – but not many jets by number. However, this market is already well served by existing banks. According to ExecJet USA, the market has been growing despite the 2008 downturn.[252]

2. China and Asia

There is little doubt that China represents one of the highest potential markets in the world.[253] Although the infrastructure is improving, China still has very few airports to service business jets. In addition, according to the Bombardier 2012 forecast, "… net inflows of foreign direct investment over the last decade have been strong in countries such as South Korea, Indonesia, Singapore, Thailand, and Vietnam. Each of these has also benefited from growing trade with China and Japan."[254]

Most buyers in China tend to pay cash for the large-cabin or super long-range business jets, a practice that reflects the rapidly rising new wealth of Chinese individuals and entrepreneurs. North American banks have begun to express interest in doing Chinese-registered aircraft. According to one financier interview respondent, in 2011 North American financiers began to consider providing financing in China. They seemed focused on what would happen in the Chinese legal system if a financier needed to repossess an aircraft in China.

More recently, financiers have begun to finance Chinese-registered aircraft. In addition, certain European lenders have also identified China as a potentially strong financing market.

According to one interview respondent, China has traditionally been restricted because opportunities for the airspace have been controlled by the military. It takes a long time to get flight permits, but that is improving. Airport infrastructure consists of 150 airports that can be used by business aircraft. The Chinese economy continues to strengthen, with manufacturing expanding to a 19-month high in December 2012. In addition, the economy is forecasted to grow at a rate of 8.6% in 2013, despite economic pressure outside China.[255]

In addition, with the installed base (i.e., the aircraft permanent home) of 58 aircraft in China, representing a 40% share of the Chinese market, the actual number of aircraft is extremely small. However, the increase in the percentage-of-deliveries in China is significant there. Thus the potential for increased deliveries exists, but the number of aircraft is small relative to the world fleet.[256]

Although China is trying to ease restrictions to facilitate business aviation growth, it must address fundamental challenges apart from the demand for, and financing of, business aircraft. The challenges include the following:[257]

- The military controls the country's airspace and recently eased restrictions on business aircraft operations. However, it still prevents business jets from flying at optimal altitude (that is, higher than commercial jets).
- Aircraft registered outside China pay higher landing fees, government fees, navigation fees, and other ground handling costs, even though such aircraft operators may obtain landing permits.
- Chinese fixed-base operators cannot sell fuel to subsidize their operations; that is controlled by the government. Service levels are still inconsistent.
- The aircraft infrastructure cannot support substantial growth of business aviation, in part because China will not allow foreign pilots to access remote or sensitive airports.

- A shortage of Chinese pilots may slow development of business aviation because their training takes more time and expense than comparable training outside of China.

With the exception of a large handful of internationally active U.S. financiers, financiers do not even address these kinds of issues. They simply will not provide financing in China even though the use and acquisition of business aircraft is trending upward.[258]

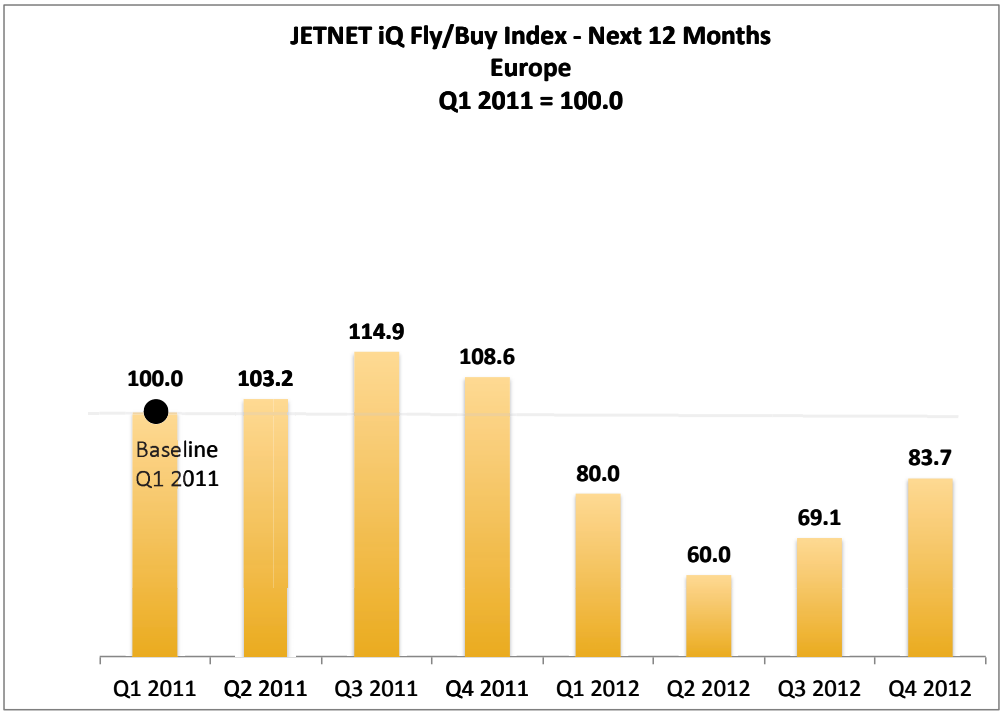
It is only a matter of time before China provides significant transaction opportunities even if the number of aircraft, estimated at 160 flying in mainland China,[259] is relatively small compared to the U.S. or other active markets around the world. Despite the reluctance of most U.S. financiers to venture into China, other financiers inside and outside the U.S., including financiers in China, recognize this opportunity and have become active in providing financing, according to certain knowledgeable financier interview respondents.

3. Europe

Europe's extensive debt problems have reduced the amount of business aviation activity since 2011. It has been, and despite its economic crisis, continues to be, the second largest market outside of the U.S., with an installed base of 2,737 aircraft, representing 14% of the world fleet of jet aircraft.[260] As Table E.2 above shows (Top 20 Business Aircraft Fleets), Germany, Austria, France, Portugal, Switzerland, and the United Kingdom contribute to the fleet in Europe.

Forecasts are mixed with a negative outlook according to JETNET iQ, in its Q4 2012 surveys chart.[261] Based on Figure E.1 below, JETNET iQ shows a slow recovery in process. Referencing Q1 2011 at 100, Europe has climbed out of its steep drop after Q1 2012 at 80:100 to 60:100 in Q2 2012; 69.1:100 in Q3 2012; and 83.7:100 in Q4 2012. Although it peaked for 2012 in Q4, it still has a distance to go to reach parity with 2011.

Figure E.1. JETNET 1Q Fly/Buy Index – Europe



Source: JETNET iQ, Q4 2012.

Based on Eurocontrol's information, NetJets has projected a reduction of -2.0% in activity in 2013–2014, rather than the recovery of the expected 4% growth during that time period. It has reduced its pilot workforce in anticipation of the decline.[262]

Thus the outlook is somewhat dim in Europe but slowly improving. The condition of the economy in Europe and likely competition from local banks make Europe a less attractive market for U.S. financiers for the next year or two.

4. India

India is a strong, high-potential market, but like China, it presents challenges to U.S. financiers.

- It needs to develop its airport infrastructure. However, the government has taken steps to build additional airports as well as to establish service centers that maintain inventories of spare parts for business aircraft operating in the country.

- Financing high-net-worth individuals may pose disclosure hurdles. U.S. financiers may find customers to be reluctant to share adequate corporate or personal financial statements to comply with U.S. regulatory and underwriting requirements before having financing terms on the table, while the financier will be reluctant to provide such terms in the absence of information.

- The prolonged documentation and approval effort makes financing transactions slower than comparable transactions in the U.S. Most of the bureaucracy that slows down transactions relates to the aircraft import permit and to larger aircraft. For that reason, customers often seek financing after they receive this permit.

- From an underwriting point of view, Indian accounting rules or audits may be difficult to understand, for purposes of a U.S. financier seeking approvals of financing transactions.

- A 25% import tax on general aviation can render U.S.-based funding noncompetitive and extremely expensive. High tariffs on imports of aircraft parts accompany these transactions.

Despite these challenges, interview respondents with knowledge of international markets suggest that Indian customers tend to own their aircraft through their businesses and seek financing from international sources rather than domestic sources. Accordingly, the local practice seems likely to contribute to potential opportunities in India for U.S. financiers.

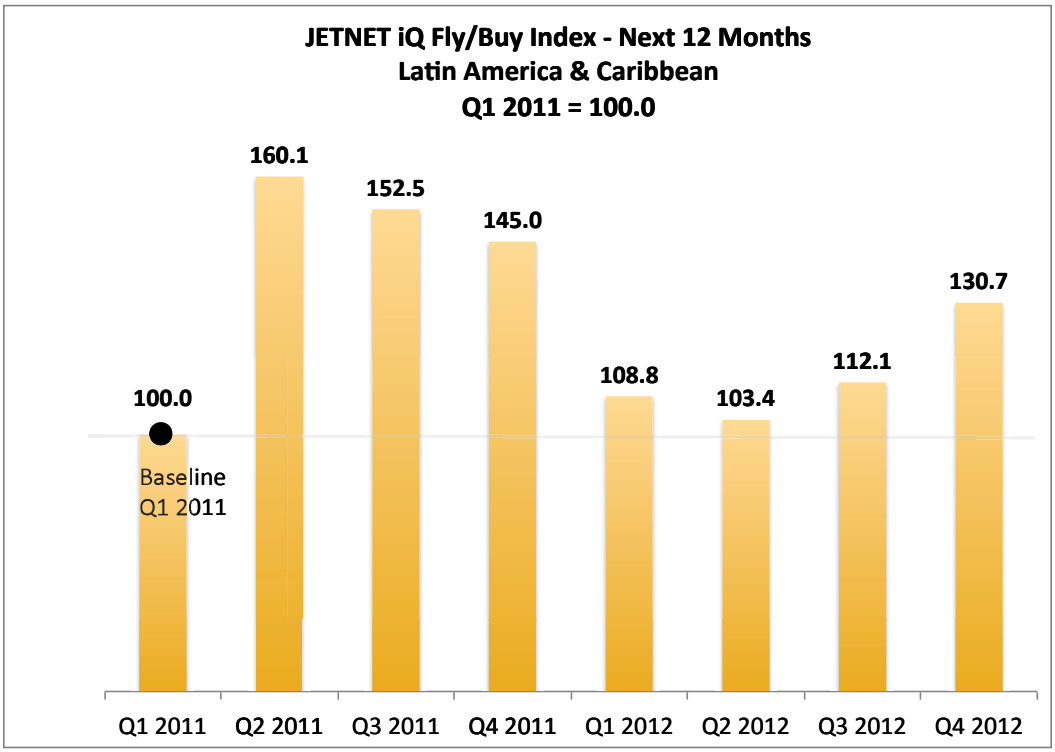
5. Latin America

Latin America is a diverse region that comprises all countries between the Rio Grande and Cape Horn. Latin American economies grew at 4.2% in 2011. The growth resulted from rising commodity prices and increasing employment. In turn, the growth fueled export revenue and consumption demand, respectively."[263]

Brazil represents Latin America's largest economy, but it has recently started to experience a deceleration of growth.[264] Nonetheless, very light and light business jets have already become popular in the domestic market, including the Phenom 100 and 300 models, produced by the Brazilian aerospace manufacturer Embraer, and the Citation Mustang, produced by the U.S. firm Cessna. These business jet models are often used by Brazilian companies to transport employees between cities that are two to three hours' distance by plane. After the U.S., Brazil is reportedly the second largest market for Embraer's Phenom series of aircraft, and, in 2011, it represented 8% of the global market for Cessna's Citation Mustang.[265]

The Brazilian tax and aviation authorities have recently become more vigilant with Brazilian customers that register their aircraft abroad. This situation may result in more deals being concluded with Brazilian aircraft registration.[266]

Figure E.2. JETNET 1Q Fly/Buy Index – Latin America & Caribbean



Source: JETNET iQ Report Q4 2012.

6. Mexico

Mexico has been active in business aviation for many years. Table E.2. above (Top 20 Business Aircraft Fleets by Country) shows that Mexico has the second largest installed fleet in the world. Mexico will continue to be an active and productive business market with U.S. financiers, especially if the aircraft is registered in the U.S. or another registry outside of Mexico.

Mexico is a "contracting state" (signatory) to the Cape Town. As of November 1, 2007, Cape Town and related Aircraft Protocol "enter[ed] into force" for Mexico.[267] In the creditors' rights "declaration" under Cape Town and the related Aircraft Protocol, Mexico selected "Alternative B,"[268] which does not sanction expedited recovery of aircraft insolvency proceedings.

This "soft" version of remedies gives the debtor discretion, upon a request by the creditor, to surrender the "object" (i.e., the aircraft) or give notice that it will cure all defaults and perform all obligations. If the debtor does not cure, a potentially complicated judicial process may ensue in which the creditor must provide evidence of its claims to the court. Then, as if Cape Town and the Protocol did not apply, the court may (but is not required to) permit the creditor to take possession of the aircraft.

The reality seems clear that, to recover a business aircraft in Mexico, financiers should anticipate using a judicial process there as the vehicle to enforce its remedies. Proper structures can, to some extent, alleviate the costs and collateral risks associated with delays in recovering the aircraft, but, in any event, if the debtor wishes to prolong the return of the aircraft, financiers will need to take the time and expend funds to see the process to conclusion, which may continue for a period of at least six months to a year.

7. Middle East

Middle Eastern customers tend to do most of their deals through wealth management banks. Daily life in these countries continues to be punctuated by protests, and the main structural problems, such as unemployment and income in-

equality, remain unresolved. Moreover, foreign investment and tourism have not fully resumed. The International Monetary Fund, in its April 2012 Regional Economic Outlook, remarked that social unrest and policy uncertainty in the Arab Spring countries are likely to endure in the near term. In Egypt, its protest portend more difficulties ahead for its government and population.

8. North America (Canada and U.S.)

As the founder of business aviation and boasting the largest installed fleet of business aircraft in the world, the U.S. offers the competitive market of choice for almost all U.S.-based financiers.

Canada accounts for about 4% of the business jet demand in North America, Bombardier Aerospace reports. Its economy grew at a rate of 2.3% in 2011 and was expected to grow at a slower rate of around 2% in 2012.[269] Nonetheless, the registration and documentation process may qualify Canada as a good market for U.S. financiers to consider if cross border taxes do not unduly hamper competitive pricing.

9. Russia

"The present moderate pace of growth in Russia and Commonwealth of Independent States (CIS) is expected to continue. Although Russia's manufacturing sector decelerated in the second half of 2011, private consumption and exports have been flourishing."[270]

Similarly, rising affluence in Russia and increasing participation in international business has stimulated the sale of high-end business jets into the Russian market, including the Bombardier Challenger, the Dassault Falcon, and the Embraer Legacy models. In addition, fractional ownership is gaining popularity in Russia as well as in neighboring CIS countries. In 2008, the U.S.-based fractional firm NetJets viewed Russia as one of the company's three largest markets in Europe.

10. South Africa

South Africa is a small but promising market in which individual wealth increases the opportunity for U.S. financiers to enter into properly structured transactions. South Africa has approximately 420 business aircraft based in the country. Approximately 40% of the aircraft are older than 10 years and will need to be replaced in the coming years. South Africa has quietly emerged as a significant source of new demand as the BRIC countries (Brazil, Russia, India, and China) have pulled back on their acquisitions in 2012. South Africa also remains relatively open to all suppliers, which should help it grow its business jet fleet.[271]

Appendix F: Basel III Research and Resources

Notice of Proposed Rulemaking (NPRM)

Department of the Treasury, Office of the Comptroller of the Currency. 12 C.F.R. parts 3, 5, 6, 165, 167. Docket ID OCC-2012-0008 RIN 1557-AD46

Federal Reserve System. 12 C.F.R. parts 208, 217, and 225 Regulations H, Q, and Y

Federal Deposit Insurance Corp. 12 C.F.R. parts 324 and 325, RIN 3064–AD95

Available at: http://www.regulations.gov. Click Advanced Search. Select Document Type of Public Submission. In By Keyword or ID box enter Docket ID OCC-2012-0008, and click Search.

http://www.federalreserve.gov/generalinfo/foia/ProposedRegs.cfm
http://www.FDIC.gov/regulations/laws/federal/propose.html

The Basel Committee on Banking Supervision (BCBS) published Basel III in December 2010 and revised it in June 2011. http://www.bis.org/publ/bcbs189.htm

This NPRM does not incorporate the Basel III reforms related to liquidity risk management, published in December 2010: "Basel III: International Framework for Liquidity Risk Measurement, Standards and Monitoring." The agencies expect to propose rules to implement the Basel III liquidity provisions in a separate rulemaking.

Federal Register, vol. 72, no. 235 (Dec. 7, 2007), Rules and Regulations 69335

BCBS, "International Convergence of Capital Measurement and Capital Standards: A Revised Framework" (June 2006). http://www.bis.org/publ/bcbs128.htm (Basel II)

Dodd-Frank Wall Street Reform and Consumer Protection Act (15 U.S.C.), Section 939A

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https://jscholarship.library.jhu.edu/bitstream/handle/1774.2/32826/Basel%20I%2c%20Basel%20II%2c%20and%20Emerging%20Markets%20a%20Nontechnical%20Analysis052008.pdf?sequence=1

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GSTAT Basel III and Liquidity Risk
http://www.garp.org/media/635590/basel-iii-andliquidityriskmanagement-goldin_051811.pdf

Endnotes

[1]Richard Aboulafia, "A Long Way Back to Prosperity" – "Industry Overview and 2012 Outlook," at Slide 8 (bottom-half and top-half jets bifurcation), Presentation at Canadian Business Aviation Association, 2012 Annual Convention (June 2012), available at http://www.slideshare.net/eedmondson/the-long-road-back-to-prosperity-richard-aboulafia-cbaa-2012 [Accessed March 11, 2013].

[2]John H. Winant, *Keep Business Flying: A history of the National Business Aircraft Association, Inc., 1946-1986,* (NBAA, 1989), sold by Amazon.com at http://www.amazon.com/Keep-business-flying-Association-1946-1986/dp/B0006EW4OU. [Accessed March 2, 2013]. A summary and table of contents is available at http://www.nbaa.org/about/history/keep-business-flying.php. [Accessed March 2, 2013].

[3]"What is Business Aviation," NBAA, available at http://www.nbaa.org/business-aviation/ [Accessed March 2, 2013].

[4]Richard Aboulafia, Teal Group, "Business Aircraft Market Overview" (April 2012) at 2.

[5]According to the BAC, "Following the 2001-2003 downturn, the U.S. economy regained its momentum and the demand for business jets rose significantly between 2004 and 2007. New markets for business aircraft, such as Europe, Asia and the Middle East, also began to generate substantial demand. Moreover, the launch of new, innovative aircraft spurred demand even higher. "2012 Business Aircraft Market Forecast at 6, available at http://www2.bombardier.com/en/3_0/3_8/market_forecast_BA/index.html [Accessed March 2, 2013] (sometimes called the "2012 BAC Forecast").

"[T]he "near-collapse" of the financial markets at the end of 2008 "precipitated a sharp downturn in business aviation and new business aircraft orders. Order intake stalled in Q4 2008 and remained very low. The inventory of preowned aircraft for sale increased dramatically and residual values declined sharply. Bombardier estimates that more than 800 orders were cancelled in the Light to Large categories in 2009. That forced manufacturers to juggle order deferrals and cancellations, and led them to decrease production rates and deliveries. The bottom of the market in terms of demand was reached in the first half of 2009." 2012 BAC Forecast at 10.

[6]"2012 General Aviation Statistical Databook & Industry Outlook," General Aviation Manufacturers Association, first introductory page with all Databooks, available at http://www.gama.aero/publications/statistical-databook-and-industry-outlook [Accessed March 5, 2013] and directly at http://www.gama.aero/files/GAMA7233_AR_FINAL_LOWRES.pdf [Accessed March 5, 2013]. This report is sometimes called the "2012 GAMA Databook." For an update of the information for 2012, visit the same site and click on the 2012 edition of the Databook.

[7]GAMA Press Release: "GAMA Releases 2012 Year-End Report and Focuses on the Opportunities and Goals That Lie Ahead," the text of which is available at http://www.gama.aero/media-center/press-releases/content/gama-releases-2012-year-end-report-and-focuses-opportunities-and and 2012 [Accessed March 3, 2013]. These numbers may vary by a small number of jets from other reports.

[8]2012 GAMA Databook, Table 1.2 at 14.

[9]ITC Study at Appendix D-19, Figure 2.3.

[10]"FAA Aerospace Forecast Fiscal Years 2012-2032," at Table 28, the text of which is available at http://www.faa.gov/about/office_org/headquarters_offices/apl/aviation_forecasts/aerospace_forecasts/2012-2032/media/2012%20FAA%20Aerospace%20Forecast.pdf [Accessed Feb. 13, 2013].

[11]2012 GAMA Databook at 6.

[12]2012 GAMA Databook, Table 1.3 at 15.

[13]ITC Study at xvii.

[14]Source: CJI at 4.0, *Orders and Deliveries, Market share by number of aircraft delivered* [Nov. 2012].

[15]Gulfstream Aerospace Corporation, a wholly-owned subsidiary of General Dynamics (NYSE: GD), designs, develops, manufactures, markets, services and supports the world's most technologically-advanced business jet aircraft. Its home site is available at: http://www.gulfstream.com/. [Accessed March 6, 2013].

[16]Embraer S.A., a Brazilian company, began exploring the executive aviation market in 2000 and operates today under the name Embraer Executive Jets, with a home site available at: http://www1.embraerexecutivejets.com/en-US/about-embraer/Pages/History.aspx. [Accessed March 2, 2013]

[17]Bombardier Business Aircraft offers Learjet, Challenger and Global come together under the Bombardier brand.

[18]Hawker Beechcraft Corporation Restructuring site, available at http://www.beechcraft.com/restructuring/ [Accessed March 2, 2013]. The company emerged from bankruptcy as Beechcraft Corporation. Its site is http://www.beechcraft.com/ [Accessed March 2, 2013].

[19]Dassault Aviation is the parent company of Dassault Falcon Jet located in the U.S. Dassault Aviation designs and produces Falcon aircraft. Dassault Aviation is responsible for organizing, promoting and supporting sales of Falcon business aircraft for markets in Europe, Africa and the Middle East. The parent web site is available at http://www.dassault-aviation.com/en/falcon/falcon-philosophy/organization.html?L=1 [Accessed March 6, 2013].

[20]See Boeing Business Jets home site at http://www.boeing.com/commercial/bbj/flash/indexflash.html. [Accessed March 6, 2013].

[21]Headquartered in Toulouse, Airbus S.A.S. is owned by EADS, a global leader in aerospace, defence and related services. This group–which is comprised of Astrium, Cassidian and Eurocopter, in addition to Airbus–has a presence on every continent, and employs a total workforce of more than 119,000, home site available at http://www.airbus.com/company/. [Accessed March 6, 2013]

[22]As of February 19, 2013, Hawker Beechcraft emerged from bankruptcy as under a new name: "Beechcraft Corporation." See: http://newsroom.hawkerbeechcraft.com/news/beechcraft-emerges-from-chapter-11-a-stronger-global-company/ [Accessed Feb. 26, 2013].

[23]"2012 GAMA General Aviation Aircraft Shipment Report, Year-End Report" at 1-5 (Feb. 12, 2013), available at http://www.gama.aero/files/documents/02-12-13%20GAMA%20RELEASES%202012%20YEAR-END%20REPORT%20AND%20FOCUSES%20ON%20THE%20OPPORTUNITIES%20-%2020120213Final.pdf [Accessed March 2, 2013] (sometimes called "2012 GAMA Year-End Report").

[24]"Business Aircraft" Segments described at http://www.nbaa.org/business-aviation/aircraft/ [Accessed March 2, 2013].

[25]Al Lewis, "Al's Emporium, H-P's Air Farce," *WSJ.com* (July 21, 2012), available at http://online.wsj.com/article/SB10000872396390444464304577536833346267906.html [Accessed March 2, 2013].

[26]Matt Thurber, "Does flying privately make financial sense?" *Business Jet Traveler* (August 7, 2012) available at http://bjtonline.com/business-jet-news/does-flying-privately-make-financial-sense [Accessed March 2, 2013]. The writing attributes value to executive time as well as examining out of pocket cost.

[27]ITC Study at 1-1.

[28]"The Real World of Business Aviation: A Survey of Companies Using General Aviation Aircraft," Prepared For: The National Business Aviation Association And The General Aviation Manufacturers Association" at 11, *Harris Interactive Inc.* (October 15, 2009). http://noplanenogain.org/images/The%20Real%20World%20of%20Business%20Aviation%20101509%20FINAL_copy6.pdf [Accessed March 2, 2013]. See also: "Studies Show Business Aviation Drives Success," available at http://www.noplanenogain.org/Studies.htm?m=47&s=379 [Accessed March 2, 2013] (sometimes called "Harris Poll on Business Aviation").

[29]Harris Poll on Business Aviation at 11.

[30]Benjamin Franklin, *Advice to a Young Tradesman, Written by an Old One* (21 July 1748), 375-7. (Yale University Library), reference available at http://www90.homepage.villanova.edu/lowell.gustafson/ben/readings/advice.pdf [Accessed January 17, 2013] and http://ebooks.cambridge.org/chapter.jsf?bid=CBO9780511806889&cid=CBO9780511806889A027 (Cambridge Books). [Accessed January 17, 2013].

[31]NEXA Advisors, LLC, "Business Aviation – An Enterprise Value Perspective, the S & P 500 From 2003 – 2009• Part I" (Fall 2010) – [Accessed March 2, 2013], available at http://www.nbaa.org/business-aviation/NEXA-Report-Part-1-2009.pdf. This paper is sometimes called "NEXA Study – S&P" and "NEXA Advisors, LLC, "Business Aviation – An Enterprise Value Perspective Small and Medium Enterprises • Part II" (Fall 2010) – [Accessed March 2, 2013], available at http://www.nbaa.org/business-aviation/NEXA-Report-Part-2-2010.pdf [Accessed March 3, 2013].

[32]"Study Shows Business Aviation Grows Companies", NBAA Website, available at http://www.nbaa.org/events/amc/2012/news/20121101-study-shows-business-aviation-grows-companies.php. [Accessed March 2, 2013].

[33]NEXA, "Business Aviation: Maintaining Shareholder Value Through Turbulent Times", available at http://www.nbaa.org/business-aviation/NEXA-Report-Part-4-2012.pdf (Part IV, Fall 2012). (sometimes called, "NEXA's Turbulent Times Study." [Accessed March 2, 2013].

[34]NEXA defines "resiliency" as "the ability of a company to quickly return to revenue growth and profitability following a severe economic turndown." NEXA's Turbulent Times Study – S&P at 5.

[35]NEXA's Turbulent Times Study – S&P at 7. For example, of the 100 companies in *Business Week's* 2012 "100 Best Brands" survey, 48 of the S&P 500 companies made the list, and 96% of them use business aircraft. In Fortune's 2012 rating of the "50 World's Most Admired" companies, 43 of the S&P 500 companies made the list, and 95% of them S&P companies use business aircraft. *BusinessWeek* compiles a list of the "50 Most Innovative Companies." The facts repeat prior positive results as shown by similar reports in 2009: This paper is sometimes called "NEXA Study – SME." The "50 Most Innovative Companies," *BusinessWeek* 2009, available at http://www.businessweek.com/interactive_reports/innovative_50_2009.html [Accessed March 2, 2013] and *Fortune Magazine*, "World's Most Admired Companies 2009," available at http://money.cnn.com/magazines/fortune/mostadmired/2009/index.html [March 2, 2013].

[36]"Business Jet Aircraft Industry: Structure and Factors Affecting Competitiveness" (Investigation No. 332-526, United States International Trade Commission, Publication 4314, April 2012), available at http://www.usitc.gov/publications/332/pub4314.pdf at D-21 (Testimony Summary) [Accessed March 3, 2013]. This study is sometimes referred to as the "ITC Study."

[37]Richard Aboulafia of the Teal Group wrote in 2007 that "after 2009, we forecast a modest market dip" but this industry looks set to remain larger than before its pre-1996-2001 transformation, when it experienced its 350% growth." Richard Aboulafia, "Teal Group Business Aviation Overview (Part 1)", *World Aircraft Sales Magazine* at 122 (August 2007), available at http://e-ditionsbyfry.com/ActiveMagazine/getBook.asp?Path=WAC/2007/08/01&BookCollection=WAC&ReaderStyle=Gray&page=122 [Accessed March 3, 2013]. Interviewed for the Study, Aboulafia shared that he expected a downturn to some degree, but the magnitude and severity of the 2009 fall in the market period shocked him. The researcher found that the drastic market change shocked virtually all respondents as it did Aboulafia.

[38]"NetJets History," available at http://www.netjets.com/AboutNetJets/Our-History/ [Accessed January 18, 2013].

[39]ITC Study at 4-8, Box 4.1.

[40]Net fleet additions at the fractional players came to an impressive 360 aircraft between 1996 and 2001. See Richard Aboulafia, Teal Group Business Aviation Overview - Part 1, World Aircraft Sale Magazine at 124 (August 2007), available at http://www.avbuyer.com/articles/detail.asp?Id=836 [Accessed March 6, 2013].

[41]NetJets is financially backed by Warren Buffett's Berkshire Hathaway. For more, see: http://www.netjets.com/About-NetJets/Berkshire-Hathaway/ [accessed January 18, 2013]. NetJet Aviation, Inc. is the U.S. company and separate affiliates exist in Europe and China.

[42]Flight Options, LLC home page available at http://www.flightoptions.com/company/history.html [Accessed March 5, 2013].

[43]Flexjet is a Bombardier Inc. company. Its home site is: http://www.flexjet.com/ [Accessed March 6, 2013].

[44]2012 BAC Forecast at 19.

[45]Polyana da Costa, "Financial crisis timeline: collapse and bailout," Bankrate.com, available at http://www.bankrate.com/finance/federal-reserve/financial-crisis-timeline.aspx#ixzz27sqXszdf [Accessed March 3, 2013].

[46]Richard Aboulafia reported in an interview for this Study that the change in the market turned out quite differently than he expected. In 2009, he said: "Business aircraft for sale have been hit harder by the economic crisis than any other aerospace market. After unprecedented growth, the market is falling at an unprecedented rate. All meaningful indicators – utilization, prices, used aircraft availability, and corporate profits – indicate a prolonged and painful down turn. Financing business jets is also more difficult than financing jetliners. Delivery numbers are falling fast, and we won't see a recovery to the 2008 peak level for many years to come." Richard Aboulafia, "Teal Group Business Aviation Overview (Part 1)," *World Aircraft Sales Magazine* at 64 (July 2009), available at http://e-ditionsbyfry.com/ActiveMagazine/getBook.asp?Path=WAC/2009/07/01&BookCollection=WAC&ReaderStyle=Gray&page=64 [Accessed March 3, 2013].

[47]Polyana da Costa, "Financial crisis timeline: collapse and bailout," Bankrate.com, available at http://www.bankrate.com/finance/federal-reserve/financial-crisis-timeline.aspx#ixzz27sqXszdf [Accessed March 3, 2013].

[48]Polyana da Costa, "Financial crisis timeline: collapse and bailout," Bankrate.com, available at http://www.bankrate.com/finance/federal-reserve/financial-crisis-timeline.aspx#ixzz27sqXszdf [Accessed March 3, 2013].

[49]2012 BAC Forecast at 14.

[50]JETNET iQ numbers vary from GAMA's 2012 year-end report to which reference is made elsewhere in this study due to the analytic premises for calculations or the methodology used in preparing the data. "GAMA 2012 Year- End Report and Databook," available at http://www.gama.aero/files/documents/02-12-13%20GAMA%20RELEASES%202012%20YEAR-END%20REPORT%20AND%20FOCUSES%20ON%20THE%20OPPORTUNITIES%20-%2020120213Final.pdf [Accessed March 3, 2013]. For example, the greatest difference in the number of deliveries in JETNET iQ and GAMA's year-end 2012 report arises for deliveries in 2012 of 628 and 672 jet deliveries, respectively.

[51]In two different questions, financiers gave a range of responses about the problems that occurred during and after the recession. In one response, financiers said that of 100% of financiers, only 38% encountered significant problems and 62% did not; and in responding to a related question, of 100% of financiers, 43% encountered significant problems and 57% did not.

[52]The historical numbers differ to some extent in basic content or expression of statistics. ITC Study at xix.

[53]The data on shipments of the different types of aircraft is available on the GAMA website. There, it clarifies how each of the segments performed during the recent recession and up to the close of 2012. See 2012 GAMA Databook at Table 1.1a at page 16-17 (business jets), available at first introductory page with all Databooks, available at http://www.gama.aero/publications/statistical-databook-and-industry-outlook [Accessed March 5, 2013] and directly at http://www.gama.aero/files/GAMA7233_AR_FINAL_LOWRES.pdf [Accessed March 5, 2013]. Note that certain numbers differ on jet deliveries from sources other than GAMA based on the methodology used by such sources in classifying applicable data.

[54]2012 GAMA Databook at 6.

[55]Luisa Kroll, "Forbes World's Billionaires", Forbes online (March 7, 2012), available at http://www.forbes.com/sites/luisakroll/2012/03/07/forbes-worlds-billionaires-2012/ [Accessed March 3, 2013]. See also: 2012 BAC Forecast at 14.

[56]ITC Study at Chapter 6, page 3.

[57]2012 BAC Forecast at 10.

[58]Bombardier said in its 2012 forecast: Bombardier estimates that more than 800 orders were cancelled in the Light to Large categories in 2009. That forced manufacturers to juggle order deferrals and cancellations, and led them to decrease production rates and deliveries. The bottom of the market in terms of demand was reached in the first half of 2009."

[59]ITC Study at Chapter 4-15.

[60]ITC Study at Appendix D-22 (ITC Testimony Summary referring to Richard Aboulafia of Teal Group).

[61]ITC Study at Chapter 6-6, Table 6.2: Percentage change in global business jet deliveries and segment market shares 2006-2011," available at http://www.usitc.gov/publications/332/pub4314.pdf [Accessed March 3, 2013].

[62]"Aboulafia, "Bifurcated, Torn, and Conflicted: The Business Aircraft Industry's Difficult Recovery," PowerPoint presentation before the USITC, September 28, 2011; USITC, hearing transcript, September 28, 2011, 200 (testimony of Richard Aboulafia, Teal Group); and Solon, "In Business Jet Industry, a Downturn That Was Not Evenly Shared," May 16, 2011. In this context, "smaller" business jets are those that are priced at approximately $25 million or less, whereas "larger" business jets are priced above $25 million Summary). See *Business Jet Aircraft Industry: Structure and Factors Affecting Competitiveness* (Investigation No. 332-526, United States International Trade Commission, Publication 4314, April 2012), ITC Study, Chapter 4-15, footnote 64.

[63]Richard Aboulafia, Teal Group, Business Aircraft Market Overview (April 2012) at 1.

[64]ITC Study at xx.

[65]ITC Study at Chapter 4-15.

[66]See: Rohit Jaggi and Rose Jacobs, "Sector looks for a shot of confidence", FT.com, available at http://www.ft.com/intl/cms/s/0/7dd2c4be-1c36-11e2-a63b-00144feabdc0.html#axzz2EdOTRFyh [Accessed March 3, 2013].

[67]2011 GAMA Databook at 6, available at http://bizavnews.ru/images/bizavweek/GAMA_DATABOOK_2011_new.pdf [Accessed March 3, 2013].

[68]See JETNET iQ "State of Market" Briefing, NBAA 2012, "Falling Out of Sync. at 22 (Oct. 2012).

[69]JETNET iQ "State of Market" Briefing, NBAA 2012 at 46 (Oct. 2012).

[70]Teal Group commented in a 2007 report: "The major problem with the fractional business is that there is no proof that aviation fractional ownership businesses can maintain consistent profitability. Also, the number of fractional shares has remained relatively static since it rose above the 6,000 mark in 2003, staying below 7,000 through 2006.

Clearly, the days of fractional demand as a driver for growth are over. See Richard Aboulafia, "Teal Group Business Aviation Overview - Part 1", World Aircraft Sale Magazine at 124 (August 2007), available at http://www.avbuyer.com/articles/detail.asp?Id=836 [Accessed March 6, 2013] and at http://e-ditionsbyfry.com/ActiveMagazine/getBook.asp?Path=WAC/2007/08/01&BookCollection=WAC&ReaderStyle=Gray&page=122 [Accessed March 6, 2013].

By contrast, fractional players have added just 100 net planes (new deliveries minus retirements) in 2002-2006." See Teal Group Business Aviation Overview - Part One (August 2007), available at http://www.avbuyer.com/articles/detail.asp?Id=836 [Accessed March 3, 2013].

[71]"Orders and Deliveries, Market share by number of aircraft delivered", CJI at 4.0 [Nov. 2012]. See also 2012 BAC Forecast at 5.

[72]2012 BAC Forecast at 5.

[73]"NetJets announces largest ever private aviation order", NetJets Latest News, available at http://www.netjets.com/News/?query=9.6#searchPanel [Accessed January 18, 2013].

[74]Unallocated preowned shares invariably produce less value and return on investment. New aircraft shares may encounter downward pressure on pricing stemming in part from a lack of demand. Savvy purchasers understand this dynamic and negotiate new against preowned share prices to strike deals with the sponsor. The massive deployment of capital to replace aircraft puts sponsors at risk to suffer nearly immediate residual value downside due to market pressures for competitive or alternative products. This downside risk creates a potential for built-in losses for the sponsor before the new aircraft share is first sold (i.e., purchase the aircraft at $100 per share and sell at $95 per share).

[75]The well-timed exercise by owners of their option to cause sponsors to repurchase shares puts a particularly significant strain on sponsor profits when the fair market value of an aircraft continues to drop after the repurchase by the sponsor. This situation leaves the sponsor with a dual economic burden of a loss of resale value of the repurchased share and a reduction of revenue associated with owning unallocated shares and stoppage of fixed and usage payments by the selling owner.

[76]"NetJets updates fleet with $17.6 billion in jets", Bloomberg News, Omaha.com (Nov. 30, 2012), available at http://omaha.com/article/20121130/MONEY/711309953/1031 [Accessed March 5, 2013]; "NetJets Takes Delivery of Its First Global Aircraft", available at http://www.netjets.com/News/2012/NetJets-Takes-Delivery-of-Its-First-Global-Aircraft/ [Accessed March 5, 2013].

[77]"Loyal Clients, New Aircraft Deliveries Fuel Growth At Private Aviation Leader", Flight Options (Feb. 20, 2013), available at http://www.flightoptions.com/press-release/loyal-clients-new-aircraft-deliveries-fuel-growth-at-private-aviation-leader.html [Accessed March 5, 2013].

[78]For a detailed discussion of drivers to growth and investment, see ITC Study and NEXA Advisors, LLC, "Business Aviation – An Enterprise Value Perspective, the S & P 500 From 2003 – 2009 • Part I" (Fall 2010), available at http://www.nbaa.org/business-aviation/NEXA-Report-Part-1-2009.pdf [Accessed March 11, 2013].

[79]See Roland Berger 2020 at 13.

[80]ITC Study at D- 22 (Testimony of Richard Aboulafia – Teal Group).

[81]2012 BAC Forecast at 14.

[82]2012 BAC Forecast at 22.

[83]2012 BAC Forecast at 22.

[84]Commercial jets aircraft analysis clearly falls outside the scope of this Study. However, Aboulafia observes that the "remarkable divergence between (the) jetliner market fortunes and the rest of the civil aircraft industry revolves around third-party financing." Richard Aboulafia, "Aircraft Update: Aircraft finance: Drought and flood?" *Aerospace America* at 18 (January 2013), available at http://www.aerospaceamerica.org/Documents/AerospaceAmerica-PDFs-2013/January2013/Aircraft_update-AA-Jan2013.pdf [Accessed Feb. 6, 2013].

[85]For example, Eurocontrol helps "measure, monitor and mitigate the impact aviation is having on the environment." See "The Single Sky and the environment," available on the site of EUROCONTROL, The European Organisation for the Safety of Europe, at http://www.eurocontrol.int/articles/single-sky-and-environment [Accessed March 4, 2013].

[86]BAC Forecast at 18.

[87]2012 BAC Forecast at 16.

[88]2012 BAC at 16.

[89]2012 BAC at 16.

[90]FAA Aerospace Forecast Fiscal Years 2012-2032, at 52-53, the text of which is available at http://www.faa.gov/about/office_org/headquarters_offices/apl/aviation_forecasts/aerospace_forecasts/2012-2032/media/2012%20FAA%20Aerospace%20Forecast.pdf [Accessed Feb. 13, 2013].

[91]Rolland Vincent Associates, January 2013.

[92]2012 BAC at 16.

[93]ITC Study at 1-1.

[94]2012 GAMA Databook, at 6 and Table 1.4a at 16-17, "Customer Delivery Region (in Percent of Total) for General Aviation Airplane Shipments by Type of Airplane Manufactured Worldwide (2007–2012)."

[95]"2012 GAMA Databook, Chapter 7 (International GA statistics), at 67-73[Accessed March 5, 2013]

[96]2012 GAMA Databook at 6.

[97]2012 GAMA Databook at Chapter 7.

[98]Although financiers strongly prefer registration at the FAA, they may allow a customer to register at an aviation registry outside the U.S. Only one country can register an aircraft at one time under the Chicago Convention on International Registration at Chicago (Chicago Convention) (Dec. 7, 1944), text available at http://www.icao.int/publications/Documents/7300_orig.pdf [Accessed January 23, 2013]; and Annex 7 – Aircraft Nationality and Registration Marks, International Civil Aeronautics Organization, available at http://legacy.icao.int/icao/en/hist/stamps/annex_7_aircraft_nationality_and_registration_marks.htm [Accessed January 23, 2013].

[99]Teal Group, *Market Overview* at 3.

[100]"What Is Aircraft Title Insurance", Aircraft Title Insurance Agency, Inc., available at http://www.actitleins.com/ [Accessed Feb. 26, 2013].

[101]R. Randall Padfield, *Aircraft title insurance: Do you need it–or not?* Aviation International News, (Oct. 20, 2006), available at http://www.ainonline.com/aviation-news/aviation-international-news/2006-10-20/aircraft-title-insurance-do-you-need-it-or-not [Accessed Feb. 26, 2013].

[102]Frank Polk, "62 Ways Lenders Lose An Aircraft", available at http://www.actitleins.com/titleins/62ways.html [Accessed Feb.26, 2013].

[103]First American Transportation Title Insurance Company introduced the product in 1999 and issued a Cape Town policy on November 1, 2004, the text of the press release introducing the Cape Town product is available at http://www.firstam.com/news/2004/5702.html [Accessed Feb. 26, 2013].

[104]Avsure, Inc., the new aircraft title insurance company, has a site at http://www.avsure.us. [Accessed Feb. 27, 2013]. AIC Title Insurance, LLC provides aircraft title insurance underwritten by Avsure, Inc. and its authorized agents. AIC's site, which explains the ATI product, is available at: https://www.aictitle.com/ServicesandFees/TitleInsurance.aspx [Accessed Feb. 27, 2013].

[105]Oklahoma Insurance Commission NAIC site for Avsure, Inc., available at https://sbs-ok.naic.org/Lion-Web/jsp/sbsreports/CompanyLookupDetail.jsp?companyName=AVSURE%20INC&fein=453661519&stateOfIncorporation=OKLAHOMA&incorporationDate=10/24/2011&issueDate=02/23/2012&companyNo=864034&companyId=864034&naicNo=14199&naicGroup= &naicGroupName= &domicileType=Domestic&companyType=Title&status=Active&effectiveDate=02/03/2012&oldCompanyName= [Accessed March 2, 2013].

[106]Avsure's site is available at http://avsure.us/planes.html [Accessed March 1, 2013].

[107]Avsure pays a deductible, approved by the Oklahoma Insurance Commission, which it pays before Lloyds reinsurance responds to the covered/insured risk. AIC Title Service, LLC, in Oklahoma City, Oklahoma, USA acts as the Global Managing General Agent. C.L. Frates and Company, an insurance company in business since 1924, administers the aircraft title insurance program. Its website is available at http://www.clfrates.com/index.html [Accessed March 2, 2013].

[108]One of the early title insurance agencies is Global Aviation Title Insurance Agency, LLC. It helped restructure the original policies to cover more title insurance risks. See: http://www.globalaviationtitle.com/aboutglobal/frank_polk.html [Accessed Feb. 26, 2013].

[109]One of the biggest shortcomings of the FAA and other national registries is the lack of comprehensive reporting of all possible/potential interests in the aircraft (and applicable other assets, such as engines of a certain size). Title reports and legal opinions should always include the ubiquitous caveat that the conclusions or information reported is only as good as the information provided and maintained by the FAA (or in many, but not all, other registries where full opinions can be issued). Thus, by their own stated limits, these reports and opinions do not, and cannot, address every possible title problem.

[110]Based on the bankruptcy filing of Hawker Beechcraft, high level diligence may be appropriate, but none of the Respondents expressed any doubt about the solvency of, or any risk of title problems being created by, any other OEM. As of February 19, 2013, Hawker Beechcraft emerged from bankruptcy as under a new name: "Beechcraft Corporation." See: http://newsroom.hawkerbeechcraft.com/news/beechcraft-emerges-from-chapter-11-a-stronger-global-company/ [Accessed Feb. 26, 2013].

[111]"Managing Risk", RVI Group, available at http://www.rvigroup.com/businesses/rvi.shtml [Accessed January 19, 2013].

[112]Although some customers may resist doing business with financiers with long or complex documents, an overwhelming 97% of financiers find no measurable demand or need to shorten or simplify documents. Closing efficiency trumps simpler documentation.

[113]"Know Your Customer: Quick Reference Guide - Understanding global KYC differences", PricewaterhouseCoopers International Limited (Jan. 2013), available at http://www.pwc.com/en_GX/gx/financial-services/assets/pwc-kyc-anti-money-laundering-guide-2013.pdf [Accessed Feb. 3, 2013].

[114]A current summary description of the Boards' tentative decisions on the Leases project appears on the FASB website (www.fasb.org) under the tab "Projects." "Exposure Draft" (or "ED"): and Comment letters, IFRS, available at http://www.ifrs.org/Current-Projects/IASB-Projects/Leases/ed10/Pages/Ed.aspx [Accessed Feb. 18, 2013]. An Exposure Draft represents a proposed standard. It is the result of an FASB technical project. The FASB invites individuals and organizations to provide comments expressing agreement or disagreement on any matter(s) in the proposed draft. General Description of Exposure Documents available at http://www.fasb.org/ed_info.shtml [Accessed March 6, 2013].

[115]FASB's discussion of the "Project Objective and Summary of the Proposed Model" is available at http://www.fasb.org/cs/ContentServer?c=FASBContent_C&pagename=FASB%2FFASBContent_C%2FProjectUpdatePage&cid=900000011123#objective [Accessed March 6, 2013].

[116]The revised definition would, among other things, exclude a right to use an explicitly or implicitly identified asset that is inseparable from the provision of a service as well as certain service contracts where control over the underlying asset is with the service provider. See: Defining Issues® / July 2012 / No. 12-31 at 8, available at http://www.us.kpmg.com/microsite/taxnewsflash/2012/Jul/definingissues-july19-2012.pdf [Accessed March 6, 2013].

[117]See News Release, Grant Thornton, "87% of UK businesses hold leases, but just over half aware of pending lease accounting changes" (January 31, 2013), available at http://www.grant-thornton.co.uk/en/Media-Centre/News/2013/87-of-UK-businesses-hold-leases-but-just-over-half-aware-of-pending-lease-accounting-changes/ [Accessed Feb. 12, 2013].

[118]Grant Thornton International Business Report (IBR), "The global economy in 2012: a rocky road to recovery" (2011), available at http://www.gtcayman.com/assets/ibr2011%20-%20global%20overview%20final.pdf [Accessed Feb. 11, 2013].

[119]The providers of pricing software have kept current with the changing proposals by timely releasing analysis tools so users can see the differing financial statement effects (current vs. proposed GAAP). One Big 4 firm has commenced developing a comprehensive software solution for lessees given its finding that the market does not currently offer software solutions anywhere near as robust as those used by today's lessors in capturing and analyzing data.

[120]Minutes of January 30, 2013 joint FASB - IASB meeting, dated February 11, 2013, are available at http://www.fasb.org/cs/ContentServer?c=Document_C&pagename=FASB%2FDocument_C%2FDocumentPage&cid=1176160961947 [Accessed March 6, 2013].

[121]The current "Technical Plan," as of February 8, 2013, including the estimated quarterly period (Q-2 of 2013) of reissuing the Exposure Draft, is available at http://www.fasb.org/cs/ContentServer?c=Page&pagename=FASB%2FPage%2FSectionPage&cid=1218220137074 [Accessed March 6, 2013].

[122]Joann Muller, "Smelling Freedom, GM Better Not Get A Corporate Jet For Christmas," Forbes.com (Dec. 19, 2012), available at http://www.forbes.com/sites/joannmuller/2012/12/19/smelling-freedom-gm-better-not-get-a-corporate-jet-for-christmas/ [Accessed March 6, 2013].

[123]AvWeb, "Aviation Advocates Criticize Obama Remarks" (Oct 08, 2012), available at http://www.noplanenogain.org/index.php?m=51&s=340&id=387 (relating to President Obama's debate remarks at an October 2012 debate) [Accessed March 6, 2013]. Again, on February 5, 2013, President Obama specifically mentioned "corporate jets" as a shining example of ""tax loopholes" to be eliminated. See: Emily Miller: "Obama's corporate jet obsession. Class-warfare gimmick ignores the real issues," *Washington Times* (Feb. 5, 2013), available at http://www.washingtontimes.com/news/2013/feb/4/obamas-corporate-jet-obsession/#disqus_thread [Accessed Feb. 6, 2013] and Robert Frank, "New Dogfight Between Obama and Private Jet Industry," CNBC (Feb. 6, 2013), available at http://www.cnbc.com/id/100439712 [Accessed February 6, 2013].

[124]Bill Saporito, "Why The Big Three Should Fly Corporate Jets," *TIME Magazine* (Dec 03, 2008), available at http://www.noplanenogain.org/index.php?m=51&s=340&id=3 (reporting on aftermath of the automaker executives flying to Washington on private jets to seek bailout funding) [Accessed March 6, 2013].

[125]Al Lewis, Al's Emporium, "H-P's Air Farce," *WSJ.com* (July 21, 2012), available at http://online.wsj.com/article/SB10000872396390444464304577536833346267906.html?KEYWORDS=AL+Lewis [Accessed March 11, 2013]. In this article, the writer suggests that Hewlett Packard does not need seven jet aircraft fleet when CEO, Meg Whitman, is charged with cutting $3-3.5 billion in cost – all elsewhere than her flight department. Ms. Whitman defended the use of the business jets that fly HP staff around the globe to the 170 countries in which HP does business. Acknowledging that the jets have a cost, she articulated the advantages of enabling her team to reach customers efficiently and securely.

[126]"No Plane, No Gain" gathers and demonstrates broad-based business, political, community and philanthropic support for business aviation generally and for its prompt response, directly or indirectly (through NBAA) to unfounded and critical comments of business jets particularly. *No Plane, No Gain* online, NBAA Advocacy, available at http://www.nbaa.org/advocacy/npng/ [Accessed March 6, 2013].

[127]"NBAA Denounces President's Misleading Debate Attack on Business Aviation" (October 3, 2012), available at http://www.nbaa.org/news/pr/2012/20121003-080.php [Accessed March 6, 2013]. Again, on February 5, 2013, President Obama commented about closing corporate jet "tax loopholes on corporate jets:" NBAA President Ed Bolen responded immediately: "The White House's rhetoric about general aviation depreciation ignores established facts and long-standing tax policies related to business airplane ownership and use, does almost nothing to seriously address the nation's debt, and has the potential to harm a great American industry in the process." The "loophole" would lengthen the depreciation period for private jets (Part 91) to seven years from five years, saving a pittance compared to the national budget gap and deficit (i.e., three billion dollars over a decade"). "GA Depreciation Debate Should Focus on Reality Rather Than Rhetoric", *NBAA*, available at http://www.nbaa.org/news/pr/2013/20130205-012.php [Accessed Feb. 6, 2013].

[128]Website for "Aircraft Owners and Pilots Association" at http://www.aopa.org/index.html [Accessed March 6, 2013].

[129]Website of "General Aviation Serves America", at http://web.gaservesamerica.com/nata-feature/2009-07/ [Accessed March 6, 2013].

[130]"Aviation Across America" at http://www.aviationacrossamerica.org/. [Accessed March 6, 2013].

[131]NATA states on its website that it's "mission is to be the leading national trade association representing the legislative, regulatory and business interests of general aviation service companies and to provide education, services and benefits to our members to help ensure their long-term economic success." The Website is available at http://www.nata.aero/ [Accessed March 6, 2013].

[132]See: Congressional General Aviation Caucus, NBAA Website for information updated to August 03, 2012, available at http://www.nbaa.org/advocacy/ga-caucus/ [Accessed March 6, 2013].

[133]NBAA Letters to Membership: "Call To Action: You Can Help Grow Congressional GA Caucuses," NBAA (February 4, 2013), available at http://www.nbaa.org/membership/letters/2013/20130204-bolen-ga-caucus.php [Accessed February 6, 2013].

[134]NEXA Advisors, LLC, "Business Aviation – An Enterprise Value Perspective, THE S & P 500 From 2003 – 2009• Part I," (Fall 2009), available at http://www.nbaa.org/business-aviation/NEXA-Report-Part-1-2009.pdf [Accessed March 11, 2013]; NEXA Advisors, LLC, "Business Aviation – An Enterprise Value Perspective Small and Medium Enterprises • Part II" (Fall 2010), available at http://www.nbaa.org/business-aviation/NEXA-Report-Part-2-2010.pdf [Accessed March 4, 2013]; "Studies Show Business Aviation Drives Success," available at http://www.noplanenogain.org/Studies.htm?m=47&s=379 [Accessed March 2, 2013].

[135]See Richard Aboulafia, "Teal Group Business Aviation Overview: Part One", *World Aircraft Sales Magazine* at 126 (August 2007), available at http://e-ditionsbyfry.com/ActiveMagazine/getBook.asp?Path=WAC/2007/08/01&BookCollection=WAC&ReaderStyle=Gray&page=122 [Accessed March 6, 2013]. Business jets for many people represent an incredibly glamorous and expensive perk for top executives.

See another article: Lexington, "Fat cats and corporate jets – Why is it so unrewarding for politicians to bash the rich in America?" (Jul 7th 2011), from the print edition, available at http://www.economist.com/node/18928384 [Accessed March 6, 2013].

[136]"Executive compensation disclosure requirements arise under Securities Exchange Act of 1934", Item 402 of Regulation S-K, 17 C.F.R. 229.402, available at http://www.gpo.gov/fdsys/pkg/C.F.R.-2012-title17-vol2/pdf/C.F.R.-2012-title17-vol2-sec229-402.pdf [Accessed March 6, 2013]. Unless aggregate amount of such compensation is less than $10,000, the Securities and Exchange Commission requires companies must to compensation paid to certain executive officers and directors in the nature of "perquisites and other personal benefits," including the use of corporate aircraft.

[137]Compdatasurveys (on executive compensation and "perks") in 2012-2013 (December 12, 2012), available at http://www.compdatasurveys.com/tag/executive-perquisites/ [Accessed March 6, 2013].

[138]Media takes shots at corporate security measures, but acknowledges that companies do mandate use of corporate aircraft for security. See: Steven M. Davidoff, "For Some Corporate Chiefs, Private Security Is a Tax Breaks," NY Times Deal Book online (April 10, 2012), available at http://dealbook.nytimes.com/2012/04/10/for-some-corporate-chiefs-private-security-is-a-tax-break/ [Accessed March 6, 2013].

[139]"Report on the Troubled Asset Relief Program" (October 2012), available at http://www.cbo.gov/publication/43662 [Accessed March 6, 2013].

[140]Many other company flight departments have suffered from, and continue to be reminded of, public relations disaster created by the Big Three automakers' chief executives when they flew to Washington in private jets to seek a bailout in 2008. See: Brian Ross and Joseph Rhee, "Big Three CEOs Flew Private Jets to Plead for Public Funds," *ABC.com* (November 19, 2008), available at http://abcnews.go.com/Blotter/WallStreet/story?id=6285739&page=1 [Accessed March 6, 2013].

[141]Content from this section drawn in part from article: Walden and Mayer, "Aviation Industry Buffeted by FAA Plans for Non-U.S. Citizen Trusts," *Business Leasing and Finance News*, Summer Edition, Issue 91 (Summer 2012) available at http://www.pattonboggsblfn.com/blfn_2012_08_08/ [Accessed March 6, 2013].

[142]Greg Walden, "As the FAA Implements Re-Registration of More Than 350,000 Aircraft, Will Chaos Prevail?" *Business Leasing and Finance News* (First Quarter 2011), available at http://www.pattonboggsblfn.com/blfn_2011_03_16/ [Accessed March 6, 2013].

[143]In 1979, the FAA proposed amendments to the FARs, which for the first time allowed trustees to own aircraft. These amendments became effective on January 1, 1980, and included §47.7 of FAR Part 47, available at http://rgl.faa.gov/Regulatory_and_Guidance_Library%5CrgFAR.nsf/0/0BB14E69215D9D2886257775006C5558?OpenDocument [Accessed Feb. 11, 2013].
FAR §47.7(c) sets forth the requirements applicable to the registration of aircraft owned by trustees. Section 47.7(c)(3) allowed non-U.S. citizen to own a beneficial interest in the trust.

[144]See: Federal Register / Vol. 77, No. 27 / Thursday, February 9, 2012 at 6694 / Proposed Rules for NCTs, available at http://www.gpo.gov/fdsys/pkg/FR-2012-02-09/pdf/2012-2930.pdf [Accessed Feb. 11, 2013]; and http://www.faa.gov/about/office_org/headquarters_offices/agc/special/Aircraft%20Registration%20-%20Proposed%20Policy%20Clarification/media/Federal%20Register%20Notice%202.9.12.pdf [Accessed Feb. 11, 2013].

[145]The NBAA and the Aviation Working Group presented comments on the proposed clarification, by letter to Katherine Thompson, Chief FAA Counsel, dated August 17, 2012, available at http://www.nbaa.org/admin/registration/non-U.S. citizen-trusts/20120820-nct-industry-response-to-faa.pdf [Accessed Feb. 10, 2013].

[146]Aviation Working Group letter to FAA Administrator, Rudolph Babbitt and David Grizzle, Chief Counsel of the FAA, dated May 10, 2010, a copy of which is available at http://www.awg.aero/assets/docs/NCT%20letter%20and%20supplemental%20paper%202011-2010.pdf [Accessed Feb. 12, 2013].

[147]See: Non-Citizen Trusts, NBAA, available at http://www.nbaa.org/admin/registration/non-citizen-trusts/ [Accessed Feb. 12, 2013].

[148]The issuance of a revised clarification with respect to non-U.S. citizen trusts ("NCTs") is all but certain according to remarks made by Joseph R. Standell, Assistant Chief Counsel, FAA Aeronautical Center, on February 8, 2013, at an NBAA conference. He confirmed the FAA's intent to issue a revision of the original clarification issued and that stakeholders in government have reached a consensus on its content. If the business aviation industry pressures the FAA through political or judicial means, Mr. Standell indicated the FAA could elect to use a rule-making process to implement its policy changes with respect to NCTs. Business Aircraft Finance, Registration & Legal Conference, NBAA, Feb. 7-8, 2013, available details at http://www.nbaa.org/events/finance-registration-legal-conference/2013/ [Accessed Feb. 12, 2013].

[149]Under 49 U.S.C. 40102(a)(15), a "citizen of the United States" means defined in the Annex 1 to the Study, the "Glossary" and at http://www.law.cornell.edu/uscode/text/49/40102 [Accessed Feb. 18, 2013].

[150]It submitted a letter to Marc Warren, Acting Chief Counsel of the FAA, dated May 26, 2011 at 4. It contains a thoughtful and extensive analysis of NCTs in response to a notice of a June 1, 2011 NCT meeting with the FAA, a copy of which is available at http://www.faa.gov/about/office_org/headquarters_offices/agc/special/AircraftRegistration/media/Atch%20to%20Brantner%20e-mail%20AWG%20re%20NCT%20Response.pdf [Accessed Feb. 11, 2013] (sometimes called the "Warren-AWG Letter").

[151]*Registering Interests with the International Registry Affecting Eligible U.S. Aircraft & Aircraft Engines* [FAA Form 8050-135 for point of entry through the FAA civil registry], available at http://www.faa.gov/licenses_certificates/aircraft_certification/aircraft_registry/registering_interests_international_registry/ [Accessed Feb. 10, 2013].

[152]FAR §47.7(c) sets forth the requirements for registration of aircraft owned by trustees. It is available at http://rgl.faa.gov/Regulatory_and_Guidance_Library%5CrgFAR.nsf/0/0BB14E69215D9D2886257775006C5558?OpenDocument [Accessed Feb. 12, 2013].

[153]The FAA has determined that "the operating agreement and the trust agreement are so intertwined that the operating agreement will always affect the relationship established under the trust." This is apparently not an idle requirement. A U.S. citizen trustee will be expected to provide assurances, perhaps by an affidavit, if there is no such operating agreement or side agreement in place. The FAA treats the operating agreement as a "document legally affecting a relationship under the trust," (14 C.F.R. 47.7(c)(2)(i)) available at http://www.gpo.gov/fdsys/pkg/CFR-2006-title14-vol1/xml/CFR-2006-title14-vol1-sec47-7.xml [Accessed Feb. 10, 2013].

In doing so, "the FAA will require that all operating agreements or similar side agreements involving the Trustee transferring custody and use of the aircraft held in trust to the trustor be submitted to the FAA along with other documents that affect a relationship under the trust . . ." See: See: Federal Register / Vol. 77, No. 27 / Thursday, February 9, 2012

at 6694, 6697 / Proposed Rules for NCTs, available at http://www.gpo.gov/fdsys/pkg/FR-2012-02-09/pdf/2012-2930.pdf [Accessed Feb. 11, 2013].

[154]The reporting requires the owner trustees: within two business days of the FAA request to provide the FAA with (1) the identity of the person normally operating or managing the operations of the aircraft; (2) where that person lives or has its principal place of business; (3) the location of maintenance and other aircraft records; and (4) where the aircraft normally is based and operated; and within five business days of the FAA request, to respond to FAA requests for additional information about (5) the operator, crew, and aircraft operations on specific dates; (6) maintenance and other aircraft records; and (7) the aircraft's current airworthiness.

[155]The proposed notice also addresses removal and termination provisions in the trust agreement. Current regulations provide that non-U.S. citizens may not have more than 25% of the aggregate power to direct or remove a Trustee. 14 C.F.R. §47.7(c)(3), available at http://www.gpo.gov/fdsys/pkg/CFR-2006-title14-vol1/xml/CFR-2006-title14-vol1-sec47-7.xml [Accessed Feb. 10, 2013]. The trust agreement referred to in the notice "must describe with specificity" the grounds for removal, and where the non-U.S. citizen trustor appears to have 100% of the removal power, the FAA must be "assured" (in the trust agreement or otherwise in writing) "how and why it is that such non-U.S. citizens will not be able to exercise such aggregate power in excess of 25 percent." See 77 FR at 6698, available at http://www.gpo.gov/fdsys/pkg/FR-2012-02-09/pdf/2012-2930.pdf [Accessed Feb. 18, 2013].
With respect to termination by the non-U.S. citizen trustor, or resignation by the owner trustee, the FAA believes the likely result would be to end registration or render the registration ineffective. But, here the FAA provides no new requirement or even much information or guidance in the notice.

[156]See: http://www.faa.gov/about/office_org/headquarters_offices/agc/special/Aircraft%20Registration%20-%20Proposed%20Policy%20Clarification/media/AWG%20Letter%20and%20ICG%20Submission%205.23.12.pdf [Accessed Feb. 10, 2013].

[157]See the Warren-AWG Letter. The Consultative Group formed under the aegis of the Aviation Working Group (AWG - see www.awg.aero) has provided useful and comprehensive not analysis to the FAA. It is made up of and has drawn its views from a broad aviation industry coalition of commercial and business aircraft manufacturers, financiers, lessors, trustees, lawyers (both in and outside of the express FAA Aeronautical Center legal practice) and other service providers and FAA users.

[158]"U.S. Equipment Finance Market Study 2012-2013," Equipment Leasing & Finance Foundation, available at http://www.leasefoundation.org/positive/index.cfm?fuseaction=display_article&artID=20715 [Accessed Feb. 11, 2013].

[159]For a more detailed discussion on Part 91 and Part 135 operations, see: David T. Norton, "Don't Put Your Client's Shiny New Corporate Jet Into A Sole-Asset L.L.C. (Unless You Really Want to Create an Airline"), Texas Bar Journal (April, 2002), available at http://www.cjjetsales.com/pdf/corporate_jet.pdf [Accessed March 6, 2013].

[160]"Safety: The Foundation of Everything We Do," FAA Publication, available at http://www.faa.gov/about/safety_efficiency/ [Accessed January 27, 2013], premised on 49 U.S.C. §40104(a), available at http://codes.lp.findlaw.com/uscode/49/VII/A/I/401/40104 [Accessed January 27, 2013].

[161]"Certain cost reimbursable operations permitted by FAA under Part 91, Subpart F, will require a United States Department of Transportation ("DOT") permit under Part 375. Other operations may be prohibited by DOT because of the statutory prohibition against cabotage (i.e., the carriage by a non-citizen operator of passengers or property for compensation between two points in a country other than its own)." See: *Managing and Operating Your Aircraft*, at Slide 24, Business Aircraft Finance, Registration & Legal Conference | Bonita Springs, FL | Presentation on Thursday, February 7, 2013, by James M. Meyer, Harper Meyer, and Eileen M. Gleimer, Crowell & Moring, LLP. See also: 14 C.F.R. §375 - Navigation of Foreign Civil Aircraft Within The United States, available at http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&sid=536898ef1677c05939ae6b0619493b9a&rgn=div5&view=text&node=14:4.0.1.4.60&idno=14 [Accessed Feb. 12, 2013].

[162]Under 14 C.F.R. §1.1 "commercial operator means a person who, for compensation or hire, engages in the carriage by aircraft in air commerce of persons or property, other than as an air carrier or foreign air carrier or under the authority of Part 375 of this title. Where it is doubtful that an operation is for "compensation or hire", the test applied is whether the carriage by air is merely incidental to the person's other business or is, in itself, a major enterprise for profit." See: http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&SID=c6c6ef6dd15619485de5b71474637aa8&rgn=div8&view=text&node=14:1.0.1.1.1.0.1.1&idno=14 [Accessed January 29, 2013].

[163]Part 135 of FARs §135.61, available at http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=c6c6ef6dd15619485de5b71474637aa8&n=14y3.0.1.1.11&r=PART&ty=HTML#14:3.0.1.1.11.2.3.1 [Accessed January 30, 2013].

[164]14 C.F.R. §135.229, airport requirements, available at http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=c6c6ef6dd15619485de5b71474637aa8&n=14y3.0.1.1.11&r=PART&ty=HTML#14:3.0.1.1.11.1.3.3 [Accessed March 6, 2013].

[165]14 C.F.R. §135.63, recordkeeping requirements, available at . http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=c6c6ef6dd15619485de5b71474637aa8&n=14y3.0.1.1.11&r=PART&ty=HTML#14:3.0.1.1.11.2.3.2 [Accessed January 27, 2013].

[166]See examples: 14 C.F.R. §§135.293, 135.295, pilot and crew testing requirements. available at http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=c6c6ef6dd15619485de5b71474637aa8&n=14y3.0.1.1.11&r=PART&ty=HTML#14:3.0.1.1.11.7.3.2 [Accessed January 29, 2013].

[167]Interpretation 1990-11, 2 Fed. Av. Dec. I-305. Customers can switch between Part 91 and Part 135 on a flight by flight basis, but should analyze these Parts and Part 375 (foreign civil aircraft flights) and ensure that the changes do not offend any rules or regulations of the Department of Transportation.

[168]Joseph A. Kirwan FAA Interpretation 1989-22 (May 27, 2005), available http://www.faa.gov/about/office_org/headquarters_offices/agc/pol_adjudication/agc200/interpretations/data/interps/2005/Kirwan.rtf [Accessed January 29, 2013].

[169]14 C.F.R. §91.501 is available at http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&sid=3efaad1b0a259d4e48f1150a34d1aa77&rgn=div5&view=text&node=14:2.0.1.3.10&idno=14#14:2.0.1.3.10.6.7.1 [Accessed March 10, 2013].

[170]Kevin Y. Jung, FAA Interpretation (Letter), dated March 22, 1996, the text of which is available at http://www.faa.gov/about/office_org/headquarters_offices/agc/pol_adjudication/agc200/interpretations/data/interps/1996/K.Jung.pdf [Accessed Feb. 13, 2013]. This letter emphasizes that 14 C.F.R. 91.501(b)(5) applies to operators, not owners.

[171]Time sharing is defined in 14 C.F.R. §91.501(c)(3) of the FARs as an "arrangement whereby a person leases his airplane with flight crew to another person, and no charge is made for the flights conducted under that arrangement other than those specified in paragraph (d) of this section" (includes such costs as fuel and travel expenses of the crew). See NBAA discussion at http://www.nbaa.org/admin/options/timeshare/ [Accessed March 6, 2013].

[172]An interchange agreement is defined in 14 C.F.R. §91.501(c)(2) of the Federal Aviation Regulations (FARs) as an "arrangement whereby a person leases his airplane to another person in exchange for equal time, when needed, on the other person's airplane, and no charge, assessment, or fee is made, except that a charge may be made not to exceed the difference between the cost of owning, operating, and maintaining the two airplanes." See NBAA discussion at http://www.nbaa.org/admin/options/interchange/ [Accessed March 6, 2013].

[173]"Joint ownership" is defined in 14 C.F.R. §91.501(c)(1) of the FARs as an "arrangement whereby one of the registered joint owners of an airplane employs and furnishes the flight crew for that airplane and each of the registered joint owners pays a share of the charge specified in the agreement." See NBAA discussion at http://www.nbaa.org/admin/options/joint-ownership/ [Accessed March 6, 2013].

[174]James W. Dymond, FAA Interpretation (Letter), dated March 9, 2007, the text of which is available at http://www.faa.gov/about/office_org/headquarters_offices/agc/pol_adjudication/agc200/interpretations/data/interps/2007/James%20Dymond.pdf at 1 [Accessed Feb. 13, 2013].

[175]Aircraft Operating & Ownership Options, NBAA, available at http://www.nbaa.org/admin/options/ [Accessed March 6, 2013].

[176]14 C.F.R. 91.501(b)(5) provides that: "Carriage of officials, employees, guests, and property of a company on an airplane operated by that company, or the parent or a subsidiary of the company or a subsidiary of the parent, when the carriage is within the scope of, and incidental to, the business of the company (other than transportation by air) and no charge, assessment or fee is made for the carriage in excess of the cost of owning, operating, and maintaining the airplane, except that no charge of any kind may be made for the carriage of a guest of a company, when the carriage is not within the scope of, and incidental to, the business of that company." Additionally, a 14 C.F.R. §91.501(b)(5) reference to a company means an organization, not a natural person. Therefore, an individual (natural person) cannot, directly or through companies he or she may own, rely on Section 91.501(b)(5). This very limited exception applies to the owner/operator company's its subsidiaries, its parent or its parent's subsidiaries."

In a technical interpretation excludes "sister companies" because sister companies are not contemplated by the regulation. See: Kevin Y. Jung, FAA Interpretation (Letter), dated March 6, 1996, the text of which is available at http://www.faa.gov/about/office_org/headquarters_offices/agc/pol_adjudication/agc200/interpretations/data/interps/1996/Jung.pdf [Accessed Feb. 13, 2013]. The FAA apparently allows operations for "(A) parents or subsidiaries of the company operating the aircraft, and (B) companies that share a common parent with the company operating the aircraft (i.e., a subsidiary of the company's parent, a subsidiary of a subsidiary of the company's parent)." Scott Hunsaker, FAA Interpretation (Letter), dated March 3, 2011, at 2, the text of which is available at http://www.faa.gov/about/office_org/headquarters_offices/agc/pol_adjudication/agc200/interpretations/data/interps/2011/Hunsaker.pdf [Accessed Feb. 13, 2013]. The corporate relationships are based on objective evidence. See: Interpretation 1985-9, 2 Fed. Av. Dec. I-305 (May 31, 1985) and Interpretation 1975-13, 1 Fed. Av. Dec. I-24, 25.

[177]The FAA has not established a standard for the amount of money a company must make; it just cannot have as its primary business operating the aircraft is transportation, or the carriage of persons or goods for a fee or charge. That operation would require a commercial operator's certificate. Kevin Y. Jung, FAA Interpretation (Letter), dated March 6, 1996, at 4, the text of which is available at http://www.faa.gov/about/office_org/headquarters_offices/agc/pol_adjudication/agc200/interpretations/data/interps/1996/Jung.pdf [Accessed Feb. 6, 2013].

[178]Interpretation 1989-22, 2 Fed. Av. Dec. I-241; Interpretation 1975-15, 1 Fed. Av. Dec. I-27 (Apr. 4, 1975).

[179]One significant concern relates to "piercing the corporate veil"–cutting through the corporation structure to reach its owners personally. The claimants must establish that the SPE and its controlling stakeholders operate as a "single economic entity" where the use of the shield creates an injustice or denies fairness to the claimant. See: *Tradewinds Airlines, Inc., et. al. v. Soros, et. al.*, Nos. 08 Civ. 5901 (FK), 10 Civ. 8175 (JFK), 2012 WL 983575 (S.D.N.Y. Mar. 22, 2012), available at http://docs.justia.com/cases/federal/district-courts/new-york/nysdce/1:2008cv05901/328658/96/0.pdf?1332513936 [Accessed February 4, 2013]. In Tradewinds, the court refused to dismiss a claim against owners individually as the company that operated aircraft where the company and its owners may have acted as "alter-egos." SPE owners should not, therefore, assume their SPEs will shield them from personal liability.

[180]14 C.F.R. § 13, Investigative and Enforcement Procedures, available at http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&SID=d1044a7e783eb6ab8edf83d1c46f75cf&tpl=/ecfrbrowse/Title14/14cfr13_main_02.tpl [Accessed January 29, 2013] and http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&SID=58760d9e29a4377c1d62790d67fbb196&ty=HTML&h=L&r=SECTION&n=49y9.1.3.3.3.5.10.1 [Accessed January 29, 2013].

[181]14 CFR §61.113 - Private pilot privileges and limitations: Pilot in command, available at http://www.law.cornell.edu/cfr/text/14/61.113 [Accessed February 4, 2013]. Pilots can provide a range of services from private to commercial aircraft command. A private pilot holds a certificate where he or she can fly for compensation or hire under 14 CFR §61.113 (b)(1): The flight is only incidental to that business or employment; and 14 CFR §61.113(b)(2): The aircraft does not carry passengers or property for compensation or hire. Otherwise, private pilots may face FAA discipline, including loss of certification. See: *Eli Mansour and Kathleen Yodice, Getting Reimbursed for Flights: What Do the FARs Say?* NBAA (October 11, 2011), available at http://www.nbaa.org/events/amc/2011/news/presentations/1011-Tue/NBAA2011-1011-1030-Reimbusement-FARs.pdf [Accessed February 4, 2013].11

[182]Thomas H. Chappell, "Purpose of Use", Aviation & Risk Management Insurance at 24-28, Vol. 5 (Fall 2005), available at http://www.airmmagazine.com/airm/2005/AIRMfall_05.pdf [Accessed January 31, 2013]. In its application for aircraft insurance (APP-05 rev. 2011), Chartis Aerospace Insurance Services, Inc. (in connection with AIG) includes a "Purpose of Use" section that differentiates personal from commercial operations. Chartis expects to receive truthful and accurate information and issues a "fraud" warning above the applicant's signature that reads: "All information herein is warranted to be true to the best of my knowledge and no information has been suppressed or withheld, and no insurer has cancelled or refused to renew this insurance. I understand that the information herein and the truthfulness thereof will be the basis of any insurance provided by the company. This application does not bind the applicant or the company to provide any insurance." Even if the insurance issues an endorsement that insures the use of the business aircraft for commercial or private use (perhaps without regard to a violation of Part 135 or 119), this type of misstatement could constitute a material misrepresentation that could entitle the insurance company to deny coverage or engage the name insured in a lengthy and expensive dispute on coverage. See APP-05 rev. 2011 at http://www.aig.com/Chartis/internet/US/en/APP-05%20Aircraft%20Insurance_V05_tcm3171-450814.pdf [Accessed February 18, 2013].

[183]For extensive list of regulatory research sites concerning, among other business aircraft topics, personal use, FET, cost disallowance, depreciation and FAA regulations pertaining, in part, to federal tax issues, see *Resource Library, Wolcott & Associates PA*, available at http://aviation-cpa.com/resources.cfm [Accessed January 29, 2013].

[184]Interpretation 1993-17, 4 Fed. Av. Dec. I-42 (August 2, 1993).

[185]*Non-Business Use of Employer-Provided Aircraft*, NBAA Website, available at http://www.nbaa.org/admin/taxes/personal-use/ [Accessed January 29, 2013].

[186]Bonus depreciation allows taxpayers to deduct 50% of the cost of bonus depreciation eligible property in the year the property is acquired. The remaining 50% of the cost or "basis" remains eligible for depreciation in future years according to normal depreciation rules. The American Taxpayer Relief Act of 2012, signed into law on January 2, 2013, further extended 50% bonus depreciation through the end of 2013 with certain other aircraft still being entitled to bonus depreciation benefits in 2014. See: Depreciation, NBAA, available at http://www.nbaa.org/admin/taxes/depreciation/bonus/ [Accessed Feb. 12, 2013].

[187]"The idea of lengthening the depreciation period for "corporate aircraft" from five years to seven years surfaced on page 20 of the "Fiscal Year 2014 Budget of the U.S. Government," available at http://www.whitehouse.gov/sites/default/files/omb/budget/fy2014/assets/budget.pdf [Accessed April 12, 2013]. It is a certainty that this proposal will draw various degrees of opposition from all quarters of the business aviation industry. See also: Depreciation, NBAA, available at http://www.nbaa.org/admin/taxes/depreciation/20130211-congressional-leaders-echo-nbaa-challege-to-white-house-mischaracterizations-about-business-aviation.php [Accessed Feb. 12, 2013].

[188]Depreciation, NBAA, available at http://www.nbaa.org/admin/taxes/depreciation/ [Accessed Feb. 12, 2013].

[189]Depreciation, NBAA, available at http://www.nbaa.org/admin/taxes/depreciation/ [Accessed Feb. 12, 2013].

[190]NBAA Resources Explain IRS Excise Tax CCA (June 25, 2012), available at http://www.nbaa.org/admin/taxes/federal/fet/management-fees/ [Accessed March 6, 2013].

[191]IRS "Air Transportation Excise Tax - Audit Technique Guide," available at http://www.irs.gov/Businesses/Small-Businesses-&-Self-Employed/Air-Transportation-Excise-Tax---Audit-Technique-Guide [Accessed March 10, 2013] and IRS excise tax "Examining Process," available at http://www.irs.gov/irm/part4/irm_04-024-006.html [Accessed March 10, 2013].

[192]Internal Revenue Code of 1986, as amended, sections 4261(d) and 4291, available at http://www.law.cornell.edu/uscode/text/26/4261 and http://www.law.cornell.edu/uscode/text/26/4291, respectively [Accessed March 10, 2013].

[193]"Living Within Our Means and Investing in the Future, The President's Plan for Growth and Deficit Reduction, Office of Management and Budget" (Sept. 19, 2011), available at http://www.whitehouse.gov/the-press-office/2011/09/19/living-within-our-means-and-investing-future-president-s-plan-economic-g [Accessed March 5, 2013.

[194]Dana Hyde, "Why We Need Aviation User Fees" Official Office of Management and Budget, Response to "Take Aviation User Fees off the table," available at https://petitions.whitehouse.gov/response/why-we-need-aviation-user-fees [Accessed March 10, 2013].

[195]"The 'Fuel Tax' – The Most Effective Payment System For General Aviation", National Business Aviation Association, available at http://www.nbaa.org/advocacy/issues/modernization/fuel-tax.php (undated) [Accessed March 5, 2013]; also see "User Fee Fact Sheet, Aviation Across America", available at http://www.aviationacrossamerica.com/user-fee-fact-sheet/ [Accessed March 5, 2013]. NBAA, AOPA, GAMA and other industry leaders have renounced the user fee idea in the strongest terms as one that will undermine job creation and retention and devastate the GA industry. See NBAA's advocacy and resource page titled: "Oppose Onerous Aviation User Fees," available at http://www.nbaa.org/advocacy/issues/user-fees/ [Accessed April 12, 2013]; AOPA's advocacy page titled: "AOPA warns user fee proposal could cripple GA," available at http://www.aopa.org/advocacy/articles/2013/130410aopa-warns-user-fee-proposal-could-cripple-ga.html [Accessed April 12, 2013]. Pete Bunce, President and CEO of GAMA clearly expressed GAMA's opposition to user fees in a press release dated April 10, 2013, titled GAMA Says, for "General Aviation, the President's budget is still off-course," available at <http://www.gama.aero/media-center/press-releases/content/gama-says-general-aviation-president%E2%80%99s-budget-still-course [Accessed> April 12, 2013]. It is highly likely that most financiers and customers will react negatively to user fees, as advanced by the Obama Administration.

[196]Dan Namowtiz, "Small businesses sound off on user fees", OAPA (September 12, 2012), available at http://www.aopa.org/advocacy/articles/2012/120912user-fees-could-devastate-small-business.html [Accessed March 5, 2013].

[197]Progress report on Basel III implementation (update published in October 2012), available at http://www.bis.org/publ/bcbs232.htm [Accessed March 5, 2013].

[198]This part of the Study on Basel III is an excerpt of an article contributed by Ford von Weise, Citi Private Bank, Director, Global Aircraft Finance. He can be contacted at ford.vonweise@citi.com.

[199]Vanessa Le Leslé and Sofiya Avramova, "Revisiting Risk-Weighted Assets - "Why Do RWAs Differ Across Countries and What Can Be Done About It?" *International Monetary Fund, Working Paper WP 12/90* (March 2012), available at http://www.imf.org/external/pubs/ft/wp/2012/wp1290.pdf [Accessed Feb. 9, 2013]. In this paper, the IMF "provide(s) an overview of the concerns surrounding the variations in the calculation of risk-weighted assets (RWAs) across banks and jurisdictions and how this might undermine the Basel III capital adequacy framework."

[200]For different reasons, customers will also consider the quality of relationships when selecting financiers to fund their transactions, especially leases where they interact more often with the financier than in loans. To illustrate, approximately 38% of the customer respondents have taken special interest in whether a financier can give the respondent lower rates on their aircraft financing if the customer is a bank customer.

[201]Jonathan S. Levy, Legal Director, "Fiscal Cliff" Deal Extends Bonus Depreciation & Retroactively Enhances Expensing Election For 2012 And Into 2013 available at http://www.advocatetax.com/7416/"fiscal-cliff"-deal-extends-bonus-depreciation-retroactively-enhances-expensing-election-for-2012-and-into-2013/ (Jan. 3, 2013) [Accessed Jan. 6, 2013].

[202]For aviation terms that explain some of the technical references in this study, see the Glossary in "Pilot's Handbook of Aeronautical Knowledge," FAA, available at http://www.faa.gov/regulations_policies/handbooks_manuals/aviation/pilot_handbook/media/PHAK%20-%20Appendix-Glossary-Index.pdf [Accessed March 10, 2013].

[203]For an "Overview – Title 14 of the Code of Federal Regulations" (14 C.F.R.), see http://www.faa.gov/library/manuals/aircraft/amt_handbook/media/FAA-8083-30_Ch12.pdf [Accessed January 23, 2013].

[204]"2012 Business Aircraft Market Forecast} at 6, available at http://www2.bombardier.com/en/3_0/3_8/market_forecast_BA/index.html [Accessed March 2, 2013] (sometimes called the "2012 BAC Forecast").

[205]See the Cape Town Convention at the Unidroit web site at http://www.unidroit.org/english/conventions/mobile-equipment/main.htm [Accessed Jan. 6, 2013].

[206]C.F.R. Annual Edition, available at http://www.gpo.gov/fdsys/browse/collectionCfr.action?collectionCode=C.F.R. [Accessed January 19, 2013].

[207]The definition of a "citizen of the United States or U.S. citizen" in the C.F.R. is available at http://www.law.cornell.edu/uscode/text/49/40102 [Accessed Feb. 10, 2013].

[208]See 14 C.F.R. Part 47.2, available at http://www.law.cornell.edu/cfr/text/14/47.2 [Accessed Feb. 18, 2013].

[209]For a description of the FAA's responsibilities, see 49 C.F.R. §1.82, available at http://www.ecfr.gov/cgi-bin/retrieveECF.R.?gp=&SID=eea6125a7dacb1dc39caf498ebaaeaec&n=49y1.0.1.1.1&r=PART&ty=HTML#49:1.0.1.1.1.4.3.4 [Accessed March 10, 2013].

[210]The full definition of a "finance lease" under the UCC is available at http://www.law.cornell.edu/ucc/2A/2A-103.html#Finance lease_2A-103 [Accessed March 3, 2013].

[211]Mayer, True Leases Under Attack at 3.

[212]For a more detailed description and details on the actual U.S. GDP, see "National Economic Accounts", Bureau of Economic Analysis, available at http://www.bea.gov/national/index.htm#gdp [Accessed March 3, 2013].

[213]See: http://www.aviareto.aero/ [Accessed Feb. 13, 2013]. Aviareto, a joint venture between SITA SC and the Irish Government, has a contract with the International Civil Aviation Authority (ICAO), to establish and operate the International Registry as required by the Cape Town Convention.

[214]The full definition of a "lease" under the UCC is available at http://www.law.cornell.edu/ucc/2A/2A-103.html#Lease_2A-103 [Accessed March 3, 2013].

[215]"Business Cycle Dating Committee", *National Bureau of Economic Research, NBER*, available at http://www.nber.org/cycles/dec2008.html [Accessed Jan. 6, 2013].

[216]See: UCC Section 1-201(b)(35), available at http://www.law.cornell.edu/ucc/1/article1.htm#Securityinterest [Accessed Jan. 6, 2013].

[217]http://www.irs.gov/pub/irs-irbs/irb01-19.pdf at 1156 et. seq. (May 7, 2001) [Accessed January 15, 2013]

[218]Cessna Finance Corporation web site is available at http://www.cessnafinance.com/_forSale.shtml [Accessed March 5, 2013].

[219]Bombardier Aerospace Home Internet page, available at http://businessaircraft.bombardier.com/en/ownership/businessaviation.html [Accessed March 6, 2013].

[220]Cessna Finance Corporation web site is available at http://www.cessnafinance.com/_forSale.shtml [Accessed March 10, 2013].

[221]Dassault Aviation is the parent company of Dassault Falcon Jet located in the U.S. Dassault Aviation designs and produces Falcon aircraft. Dassault Aviation is responsible for organizing, promoting and supporting sales of Falcon business aircraft for markets in Europe, Africa and the Middle East. The parent web site is available at http://www.dassault-aviation.com/en/falcon/falcon-philosophy/organization.html?L=1 [Accessed March 10, 2013].

[222]Embraer SA website (history) available at http://www.centrohistoricoembraer.com.br/sites/iba/en-US/Sobre/Pages/default.aspx [Accessed March 6, 2013].

[223]Gulfstream Aerospace Corporation, a wholly-owned subsidiary of General Dynamics (NYSE: GD), designs, develops, manufactures, markets, services and supports the world's most technologically-advanced business jet aircraft. Its home site is available at: http://www.gulfstream.com/ [Accessed March 10, 2013].

[224]On February 19, 2013, "Hawker Beechcraft Emerged from bankruptcy as a new company called 'Beechcraft.'" The press release is available at http://newsroom.hawkerbeechcraft.com/news/beechcraft-emerges-from-chapter-11-a-stronger-global-company/ [Accessed Feb. 26, 2013].

[225]Hawker Beechcraft Newsroom, available at http://newsroom.hawkerbeechcraft.com/news/hawker-beechcraft-disclosure-statement-approved-by-bankruptcy-court/ [Accessed March 6, 2013].

[226]For a standard definition of and discussion about very light jets, see "Very Light Jets: Bloom or Blip," *VLJ News*, available at http://www.very-light-jet.com/vlj-news/66-very-light-jets-boom-or-blip.html [Accessed March 10, 2013].

[227]Roland Berger, "On the runway to recovery, Business Aviation Study 2020 – Development of the Business Aviation" at 3, available at http://www.rolandberger.com/media/pdf/Roland_Berger_Business_Aviation_Study_2020_20110726.pdf [Accessed March 6, 2013]. This report is sometimes called "Roland Berger 2020").

[228]NBAA, Helicopters, description available at http://www.nbaa.org/business-aviation/aircraft/helicopters/ [Accessed March 5, 2013].

[229]NBAA, Piston Aircraft Engine, description available at http://www.nbaa.org/business-aviation/aircraft/pistons/ [Accessed March 5, 2013].

[230]See the "Glossary" for related terms in "Pilot's Handbook of Aeronautical Knowledge," FAA, available at http://www.faa.gov/regulations_policies/handbooks_manuals/aviation/pilot_handbook/ [Accessed March 10, 2013].

[231]"Medium Jets Review 2011 (Part 1)," *AvBuyer* (2011), available at http://www.avbuyer.com/articles/detail.asp?Id=2032 [Accessed March 10, 2013].

[232]"Business Jets", Wikipedia, available at http://en.wikipedia.org/wiki/Business_jet#Large-Cabin_jets [Accessed March 5, 2013].

[233]Av Buyer, "Large Cabin/Ultra-Long-Range Jet Review 2011" (May 2011), available at http://www.avbuyer.com/articles/detail.asp?Id=1974 [Accessed March 6, 2013].

[234]Roland Berger 2020 at 3.
[235]Roland Berger 2020 at 3.

[236]R. Randall Padfield, "Jets for the Long Haul" (May 19, 2012), *Barron's Penta*, available at http://online.barrons.com/article/SB50001424053111903935304577380262461370738.html [Accessed Feb. 26, 2013].

[237]Roland Berger 2020 at 3

[238]ELFA Lease Accounting Project advocacy, available at http://www.elfaonline.org/Issues/Accounting/ [Accessed March 6, 2013].

[239]A "short-term" lease refers to a "lease that, at the date of commencement of the lease, has a maximum possible term, including any options to renew, of 12 months or less."

[240]For example, assume the lessee enters into the 5 year lease with fixed annual rentals of $240. Also assume the lessee derives the initial capitalized amounts of $1,000 (ROU asset and debt obligation) by applying its incremental borrowing rate of 6.4% to the rent stream. Assuming the fair value of the leased property is $1,150 and the estimated economic useful life is 7 years, under current GAAP the lessee would report annual rent expense of $240 in each year of the lease because the present value of the rentals is 87% of the fair value of the leased equipment (below the 90% threshold for capitalization) and the lease term is 71% (below the 75% threshold for capitalization). However, under the I&A method, which is proposed to apply to most equipment leases, the lessee would report $200 as its periodic ROU amortization expense ($1,000/5 years) and $64 as its interest expense ($1,000 x 6.4%), or $264 as the total expense, or 10% more under the I&A method compared to current GAAP. For longer term leases, the front loaded effect can be as much 25% more. Further, if this example lease also contained renewal options, at each reporting period the lessee would need to reassess whether facts and circumstances had changed such that it now had a "significant economic incentive" to renew. If so, such renewal period would need to be tacked on, which would cause the capitalized amounts to increase and thus amplify the "front-loaded" effect.

[241]The SLE approach generally applies to leases of land, building, or a physically distinct part of a building, where the lessee should recognize total lease expense on a straight-line basis. This expense pattern is e accomplished by first calculating imputed interest and then amortizing the ROU asset as balancing amount. The underlying (criticized as internally inconsistent) principle is that equipment leases generally involve lessee consumption of all but an insignificant portion of the underlying asset, while real estate leases generally do not involve the consumption of a major portion the underlying asset measured in terms of economic life or the present value of the lease payments.

[242]Further, lessees argue that, since a true lease is an executory contract and understood as such by potential lenders and lessors in assessing credit risk, the lease liability should not be lumped together with their other debt obligations on the balance sheet without any differentiation provided between true and non-true leases even in the footnote disclosures. Thus the obligations arising under any typical aircraft lease should be reported separately, preferably on the face of the balance sheet.

[243]The R&R approach applies to equipment lessors unless the lease term is an insignificant portion of the economic life of the underlying asset or the present value of the fixed lease payments is insignificant relative to the fair value of the underlying asset (in that case the lessee should use the SLE approach and the lessor the operating lease approach). Based on examples prepared by the FASB staff, it appears only if the duration of the lease is less than approximately 10-12.5% of the economic life and the present value of the payments is less than approximately 10-12.5% of the fair value of the leased equipment.

[244]See Ascend Worldwide website at http://www.ascendworldwide.com/ [Accessed Dec. 10, 2012]; CJI at 3.3, *Geographic spread, Top 20 business aviation fleets by country* [Nov. 2012].

[245]*Risk Mitigation: What are Updates & Proposals on Risk Mitigation Products?*, INFRADEV, available http://www.globalclearinghouse.org/InfraDev/entry.cfm?v&ID=16&referrer=http%3A%2F%2Fwww.globalclearinghouse.org%2FInfraDev%2Frmlist.cfm [Accessed Jan. 6, 2013]; AIG Political Risk Insurance, available at

http://www.aig.com/political-risk_3171_418000.html [Accessed Jan. 6, 2013].
[246]David G. Mayer and Frank L. Polk, "Legal Opinions and Title Insurance Mitigate Risk Under The Cape Town Convention", available at http://www.mcafeetaft.com/repository/files/Aviation%20Article%20-%20LJN%20Eqpt%20Leasing%20Nov%202005.pdf [Accessed Jan. 6, 2013].

[247]David G. Mayer, - Frank L. Polk – "A test of the Cape Town convention. A useful tool in debtor insolvencies and defaults or a trap for the unwary," Corporate Rescue and Insolvency, 2(5) (2009), 237-240, available at http://www.unidroit.org/english/conventions/mobile-equipment/bibliography/2001convention.htm [Accessed March 10, 2013].

[248]See the Cape Town Convention at the Unidroit web site at http://www.unidroit.org/english/conventions/mobile-equipment/main.htm [Accessed March 10, 2013].

[249]An "international interest" covers other transactions too. It refers to an interest in an "aircraft object" (certain aircraft and engines) held by a creditor such as a seller, lender or lessor under a conditional sale agreement, security agreement or leasing agreement.

[250]See David G. Mayer, "Complex Transactions: An Overview of the Cape Town Convention and Aircraft Protocol", presentation at Equipment Leasing Association Legal Forum, Miami Beach, Florida (May 15-17, 2005), available at http://www.elfaonline.org/cvwebelfa/ProductDownloads/MLF05TRANSAC.PDF at Slides 27 - 28 [Accessed Jan. 6, 2013].

[251]Cape Town Convention is designed, among other things, to: (1) increase predictability and consistency of legal systems affecting aviation deals; (2) reduce risk of leasing/financing aircraft; (3) facilitate investment of capital in aircraft worldwide at higher economic returns by relying on higher asset valuations in aircraft transactions; (4) improve the availability and speed of remedies under uniform rules; and (5) preserve freedom of contract. For an explanation of the purposes and operation of the Cape Town Convention, see David G. Mayer, "Complex Transactions: An Overview of the Cape Town Convention and Aircraft Protocol", presentation at Equipment Leasing Association Legal Forum, Miami Beach, Florida (May 15-17, 2005), available at http://www.elfaonline.org/cvweb_elfa/Product_Downloads/MLF05TRANSAC.PDF at Slide 19 [Accessed Jan. 6, 2013].

[252]Charles Alcock, "ExecuJet Opens FBOs in Wellington and Melbourne", Aviation International News (March 2012), available at http://www.ainonline.com/aviation-news/aviation-international-news/2012-03-02/execujet-opens-fbos-wellington-and-melbourne [Accessed March 10, 2013].

[253]Curt Epstein, "Bombardier Claims It Has One-third of China Bizav Market" (March 12. 2012), available at http://www.ainonline.com/aviation-news/ainalerts/2012-03-26/bombardier-claims-it-has-one-third-china-bizav-market [Accessed Jan. 6, 2013]. Bombardier expects China new aircraft delivery to increase to 2,300 new business jets by 2030.

[254]2012 BAC Forecast at 41.

[255]Charles Riley, Manufacturing expansion accelerates in China, CNN Money (December 30, 2012), available at http://money.cnn.com/2012/12/30/news/economy/china-pmi-hsbc/index.html [Accessed March 10, 2013].

[256]2012 BAC Forecast at 27 and ITC Study at 4-13.

[257]Siva Govindasamy, IN FOCUS: "Business aviation stars shines bright in China" (Nov. 8, 2012), available at http://www.flightglobal.com/news/articles/in-focus-business-aviation-stars-shines-bright-in-china-378629/ [Accessed Jan. 1, 2013].

[258]Amy Laboda, "Shanghai Hawker Pacific Sees China Business Aviation Trending Up", NBAA Convention News, AIN Online (Oct. 29, 2012), available at http://www.ainonline.com/aviation-news/nbaa-convention-news/2012-10-29/shanghai-hawker-pacific-sees-china-business-aviation-trending [Accessed March 10, 2013].

[259]Amy Laboda, "Shanghai Hawker Pacific Sees China Business Aviation Trending Up", NBAA Convention News, AIN Online (Oct. 29, 2012), available at http://www.ainonline.com/aviation-news/nbaa-convention-news/2012-10-29/shanghai-hawker-pacific-sees-china-business-aviation-trending [Accessed March 10, 2013].

[260]For more information, Contact Rolland Vincent, Creator / Director – JETNET iQ, Plano, Texas, U.S.A. He can be contacted at rvincent@rollandvincent.com.

[261]For more information, Contact Rolland Vincent, Creator / Director – JETNET iQ, Plano, Texas, U.S.A. He can be contacted at rvincent@rollandvincent.com.

[262]Charles Alcock, "NetJets Europe Gives Candid View of a Tough Market", Aviation International News (Nov. 2012), available at http://www.ainonline.com/aviation-news/aviation-international-news/2012-11-01/netjets-europe-gives-candid-view-tough-market [Accessed Feb. 11, 2013].

[263]2012 BAC Forecast at 35.

[264]2012 BAC Forecast at 35.

[265]ITC Study at 4-13.

[266]Richard Pedicini, "Brazil Seizes Nine Bizjets over Alleged Tax Evasion", *AINalerts online* (June 26, 2012), available at http://www.ainonline.com/aviation-news/ainalerts/2012-06-26/brazil-seizes-nine-bizjets-over-alleged-tax-evasion [Accessed March 6, 2013]. According to this article, "Brazilians allegedly own and use the jets but registered them overseas to avoid Brazilian state and federal import taxes of nearly 35 percent."

[267]For a list of contracting states to the Cape Town Convention, including Mexico, see: http://www.unidroit.org/english/implement/i-2001-convention.pdf http://www.unidroit.org/english/implement/i-2001-convention.pdf [Accessed March 10, 2013].

[268]Mexico's Declaration No. 2 regarding insolvency is the "soft" remedy of judicial action rather than action equivalent to the U.S. Federal Bankruptcy law Section 1110 to recover the aircraft on a more expedited basis. The Declaration can be seen on the Unidroit.org website at http://www.unidroit.org/english/conventions/mobile-equipment/depositary-function/declarations/bycountry/mexico.htm [Accessed March 10, 2013]. Alternative A may not help financiers with respect to business aircraft in any case as it structured more appropriately to commercial aircraft. For a detailed presentation on Cape Town and the related Aircraft Protocol in Mexico, see: Carlos Sierra,), "Mexico's Ratification and Effect of Declarations," at Slides 20-21, *Latin American Cape Town Treaty Seminar* (April 12, 2012), available at http://www.capetowntreatyforum.com/saopaulo/2012/presentations/04asierra.pdf [Accessed March 11, 2013].

[269]2012 BAC Forecast at 27.

[270]2012 BAC Forecast at 37.

[271]David Donald, "Industry Wakes Up To Rising Bizav Demand In Africa", Aviation International News (Nov. 2012), available at http://www.ainonline.com/aviation-news/aviation-international-news/2012-11-04/industry-wakes-rising-bizav-demand-africa [Accessed Jan. 6, 2013]. According to this article "Embraer… foresees a large market on the continent over the next 10 years, suggesting that approximately 250 aircraft worth $6.3 billion will be delivered."

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