

BUSINESS JET MARKET OUTLOOK \ 2021-2025

NEW AND PRE-OWNED BUSINESS JET TRANSACTION FORECAST

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I BELIEVE ONE OF THE CORE RESPONSIBILITIES OF ANY MARKETING ORGANIZATION IS TO SUPPORT A BUSINESS'S ABILITY TO MAKE INFORMED DECISIONS.

At Global Jet Capital, we have always strived to develop a superior understanding of our market and the fundamentals driving it—it is, after all, core to our value proposition. Business aviation is a unique market with limited macro data sets that can be taken at face value, but there is always a far richer story that lies beneath—aircraft by aircraft, jurisdiction by jurisdiction, client by client. We have dedicated ourselves to understanding those richer storylines and fundamentals, whether it be in the context of flight operations, inventories, new and pre-owned transactions, or aircraft valuations.

Several years ago, we began developing a detailed transaction model that gives us greater insight into the new delivery and pre-owned transaction market in order to help shape our Annual Operating Plan. As that model grew in sophistication and accuracy, it went from being an interesting project to a tool that enables us to run scenarios, model outcomes, and shape the way we plan and run our business.

While several organizations provide new delivery forecasts periodically, our forecast is unique in scope – it includes both new and pre-owned aircraft – and granularity – breaking each category down into aircraft size classes. We hope you find this information useful.

EXECUTIVE SUMMARY

THE BUSINESS JET MARKET **DEMONSTRATED RESILIENCE IN 2020** AND IS POISED TO **GROW AT A 3.6%** ANNUALIZED RATE OVER THE NEXT FIVE YEARS.

This outlook provides a summary of the outputs of our proprietary transaction forecast model. It reflects projections of future activity in the business jet market in both the new and pre-owned market segments across different geographic markets around the world. We forecast that the business jet market will grow as the global economy emerges from COVID-19 associated lockdowns. The business jet market demonstrated its resilience during the pandemic, experiencing only slight declines in 2020. As such, the market is poised to grow over the next five years.

- · Overall, total new and pre-owned business jet transaction unit volume will increase 5.5 percent between 2020 and 2021. With an increase of 15.5 percent, transaction dollar volume will grow even faster, driven by the increasing sales of heavier aircraft in both the new and pre-owned segments.
- Growth in new deliveries will be driven by an increasingly active market as buyers and sellers restart activities following COVID-19 lockdowns. Deliveries are forecast to grow 11.8 percent, while dollar volume will increase 13.9 percent in 2021 compared to 2020. Transactions will grow at a CAGR of 5.4 percent and transaction dollar volume will grow at a CAGR of 7.3 percent over the next five years.
- Unlike new deliveries, pre-owned transactions did not decline in 2020. Growth in this segment will continue to steadily increase at a rate of 4 percent in 2021. Pre-owned dollar volume will increase at a 17.5 percent rate, due to buyers of large and medium aircraft returning to the market. Transactions will grow at a CAGR of 3.2 percent and transaction dollar volume will grow at a CAGR of 7.5 percent over the next five years.
- North America will continue to be the largest market for both new and pre-owned business jets. While Europe and Asia Pacific (APAC) will also have strong markets for new aircraft, the pre-owned market in both locations is not as mature as that in North America. Latin America is also an important region for business jet transactions and will feature a strong pre-owned market.

THE BUSINESS

JET MARKET IS

WELL PLACED

TO EXPERIENCE

STRONG GROWTH

OVER THE NEXT

FIVE YEARS DRIVEN

BY SEVERAL

FACTORS.

Business jets are primarily business tools, and therefore are closely tied with overall economic growth. Global GDP growth was estimated at 2.6 percent in Q1 2021 and is projected to grow 6.4 percent in 2021 by Oxford Economics.

In addition to overall economic conditions, industry-specific factors are also driving growth in business jet transactions. Driven by charter and fractional usage in the United States, flight activity continues to improve and has nearly recovered to 2019 levels despite the fact that large corporate operators are still not fully up and running — mirroring their current office versus work from home environments. Much of the growth in charter and fractional usage is being driven by new entrants to the market looking to avoid crowded airports and aircraft in the midst of a pandemic. History tells us that while some of these users will revert back to commercial service when the pandemic is over, many will become regular users of business aviation, and some will eventually become owners and operators. At this stage, the industry is poised to fully recover, and possibly expand beyond historical usage, as international and corporate travel resume throughout 2021 and into 2022.

That increased usage has led to improved demand from buyers. In Q4 2020, there were over 1,200 new and pre-owned transactions valued at \$10.4 billion, the largest quarter in at least five years. While Q1 2021 transaction levels were not quite as high, total transaction dollar volume was 11.2 percent higher than Q1 2020 and only 1.7 percent below Q1 2019, demonstrating continued strong demand.

With transactions continuing at a strong pace, most business jet manufacturers reported strong order activity, leading to book-to-bill ratios above 1:1 in Q1 2021. Anecdotally, many of these customers were habitual pre-owned aircraft buyers that turned to the new market due to lack of quality aircraft in inventory. Many others were buying their first business jet. For example, Embraer recently reported that 35 percent of orders in Q1 2021 came from first-time buyers, compared to a historical average between 10-15 percent.

Over the long-term, business jet growth will continue as economic growth continues, business jet users maintain historical replacement and trade-up patterns, and manufacturers introduce new models that will increase demand from buyers.

TOTAL MARKET OVERVIEW





AS THE GLOBAL ECONOMY RECOVERS FROM COVID-19 AND ASSOCIATED LOCKDOWNS, THE BUSINESS JET TRANSACTION MARKET WILL ALSO GROW.

Transactions involving both new and pre-owned business jets will grow 5.5 percent in 2021 compared to 2020. Between 2020 and 2025, the market will grow at a CAGR of 3.6 percent. Dollar volume will increase 15.5 percent in 2021, with a CAGR of 7.4 percent between 2020 and 2025.

Over the next five years, pre-owned transactions will make up 79.4 percent of overall transactions, with new deliveries accounting for the remaining 20.6 percent. Despite the high proportion of pre-owned transactions, the relatively higher price of new aircraft means new deliveries will make up 55 percent of dollar volume between 2021 and 2025.

NEW MARKET OVERVIEW





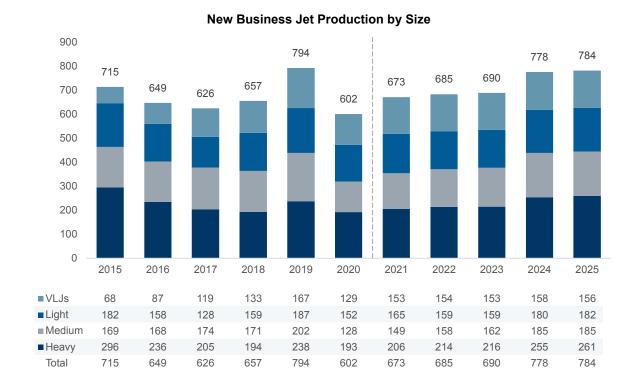
NEW BUSINESS JET DELIVERIES DECLINED 24.2 PERCENT IN 2020 COMPARED TO 2019, WHILE DOLLAR VOLUME DECLINED 16.4 PERCENT.

The decline was largely driven by manufacturers shutting down or significantly slowing production early in the year as COVID-19 began spreading.

In 2021, production and deliveries are improving. Delivery unit volume will increase 11.8 percent, while dollar volume will increase 13.9 percent. With orders and backlogs increasing in Q1 2021, delivery increases will begin in the second half. Based on current guidance from manufacturers, increases will be mixed. Some OEMs plan to increase production rates as the world opens up and travel restarts. Others intend to use increases in demand to build backlog. Despite variances, there will be a more robust market in 2021 than in 2020.

Following 2021, deliveries will gradually improve, reaching 2019 levels in terms of dollar volume by 2023. A more substantial increase is forecast in 2024 as economic growth continues and buyers are further removed from the disruptions of the COVID-19 pandemic. In addition, a number of new models that will be introduced over the next few years will be entering full production, further increasing demand for new business jets. Overall, unit volume will increase at a CAGR of 5.4 percent between 2020 and 2025, while dollar volume will increase at a CAGR of 7.3 percent.

NEW MARKET BY SIZE

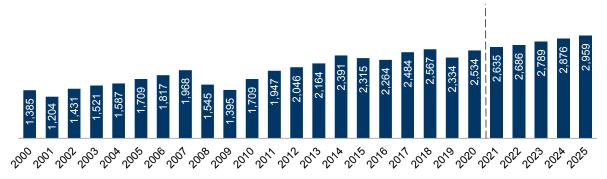


DELIVERIES OF ALL SIZE CLASSES WILL INCREASE DURING THE FORECAST PERIOD COMPARED TO LEVELS IN 2020, WHICH WERE REDUCED DUE TO LOCKDOWNS AND THE SHUTDOWN OF INTERNATIONAL AIR TRAVEL IMPLEMENTED IN RESPONSE TO THE PANDEMIC. INCREASES WILL BE DRIVEN BY OVERALL IMPROVEMENT IN THE MARKET.

Heavy and medium jets will increase at faster rates than other categories. Heavy jet deliveries will increase at a CAGR of 6.2 percent while medium jets will increase at a CAGR of 7.6 percent between 2020 and 2025, compared to an overall market increase of 5.4 percent. These aircraft continue to increase in popularity due to their range and capacity. Manufacturers will also drive interest in these size categories with the introduction of new models, further improving their appeal.

PRE-OWNED MARKET OVERVIEW

Total Pre-Owned Transactions (Unit Volume)



Total Pre-Owned Transactions (\$ Volume)



IN 2020, THE PRE-OWNED MARKET DEMON-STRATED GREATER RESILIANCE THAN THE NEW DELIVERY MARKET.

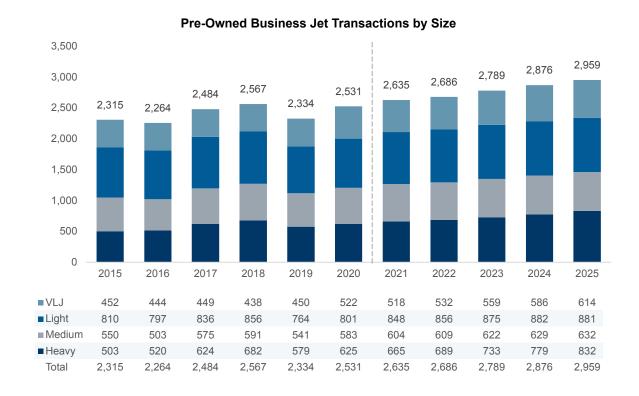
Restarting transactions of aircraft already in inventory proved to be easier than ramping up production. In addition, as major business jet manufacturers continued to be cautious about production levels, pre-owned inventory filled the void in supply.

The trend of strong pre-owned transactions continued into early 2021. Despite low inventories, demand has continued for pre-owned business jets. The market is forecast to continue to be strong throughout the year as vaccinations accelerate, especially in North America and Europe, and a "new normal" emerges. The result is a 4 percent forecasted uptick in pre-owned transaction unit volume.

In addition, buyers of medium and larger aircraft have begun to return to the market after slower sales of those aircraft in 2020. As a result, dollar volume will increase 17.5 percent in 2021.

Over the next five years, unit volume will increase at a 3.2 percent CAGR, while dollar volume will increase at a 7.5 percent CAGR. Dollar volumes will rise faster than unit volume as larger aircraft continue to increase in popularity.

PRE-OWNED MARKET BY SIZE



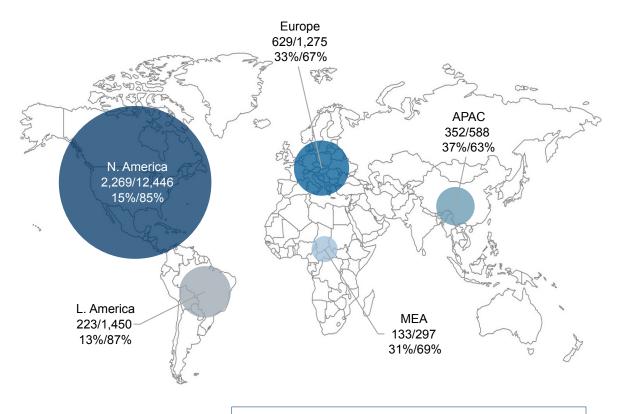
SINCE 2015, HEAVY AIRCRAFT HAVE BECOME INCREASINGLY POPULAR ON THE PRE-OWNED MARKET, MAKING UP A LARGER PORTION OF OVERALL TRANSACTIONS.

As heavy aircraft increased in popularity, light and medium aircraft made up lower proportions of the overall market. Heavy aircraft offer owners longer range and additional passenger capacity—capabilities buyers have favored in the pre-owned market.

Going forward, that trend should continue. Heavy jets made up about 24.7 percent of transactions in 2020 and we forecast that will increase to 28.1 percent by 2025. While overall increases in pre-owned transactions will drive all size categories up, light and medium jets will both experience steady declines as a ratio of overall transactions, while very light jets will increase slightly.

The changing mix of aircraft sizes is the primary reason why business jet transaction unit volume will increase at an average rate of 3.2 percent over the next five years, while dollar volume will increase at an average rate of 7.5 percent.

GLOBAL DISTRIBUTION OF ALL NEW AND PRE-OWNED AIRCRAFT TRANSACTIONS



Top figures indicate new transactions/pre-owned transactions. Bottom figures indicate new ratio/pre-owned ratio.

WE FORECAST THAT NORTH AMERICA WILL BE THE LARGEST MARKET FOR BUSINESS JETS OVER THE NEXT FIVE YEARS, ACCOUNTING FOR NEARLY 75 PERCENT OF TRANSACTIONS DURING THAT TIME.

North America remains the location of the largest install base of business jets in the world and strong market maturity will drive continued strength in the market.

The North American market is also driven by wide acceptance of pre-owned business jets. Nearly 78 percent of all pre-owned transactions will take place in North America between 2021 and 2025, and transactions involving pre-owned aircraft will account for about 85 percent of all transactions in North America.

Despite the continued importance of North America for business jet transactions, other regions of the world continue to drive sales as well. Europe will be the second largest overall market for business jets over the next five years, accounting for 9.7 percent of all transactions. Latin America will remain a significant destination for pre-owned business jets, accounting for 9 percent of all pre-owned transactions globally between 2021 and 2025. APAC will also remain an important region, accounting for nearly 10 percent of new deliveries.

3399

0.6580

0.7157

111.94

GLOBAL JET CAPITAL UTILIZES A TOP-DOWN LINEAR REGRESSION MODEL, USING ECONOMIC VARIABLES AS INPUTS TO FORECAST THE BUSINESS JET MARKET OUTLOOK.

Mathematical outputs are balanced against Global Jet Capital's in-depth market knowledge and insights to arrive at a detailed five-year market forecast covering both the new and pre-owned business jet markets.

0.7147

Economic data and forecasts come from Oxford Economics and are based on their analysis of current and expected future market conditions. Forecasts are based on analysis of relevant data at the time they are made. In a dynamic market, data may change rapidly and unforeseen events may lead to differences between forecasts and actual future events. Global Jet Capital does not guarantee the accuracy or likelihood of these forecasts and these projections should not be construed as advice for any business decisions.

As with any forecast, there are several risks that may result in different outcomes than expected. Upside risks include faster economic recovery than expected and adoption of business aviation becoming significantly more widespread than in the past. Downside risks include a slower than anticipated economic recovery, continuing low pre-owned supply negatively impacting demand, and corporate flight not returning to pre-COVID levels.

CONCLUSION

DESPITE DISRUPTIONS DUE TO COVID-19 IN 2020, THE BUSINESS JET MARKET FARED RELATIVELY WELL.

To be sure, new deliveries did decline as manufacturers shut down or slowed operations, fixed supply chains, and proactively managed deliveries to the market. Still, demand for business jets continued in the market. Much of the slack was taken up by the pre-owned segment, which experienced growth in the number of transactions for the year.

Growth is forecast to return to the new market and persist in the pre-owned market in 2021 as demand for business jets will continue, evidenced by strong orders early in 2021. Growth will be driven by continued economic recovery and increased usage of business jets – especially by new customers to the market, driving orders. In the long run, growth will be driven by increasing economic activity, the introduction of new models, and routine replacement and trade-up patterns.

North America, led by the U.S., will continue to be the dominant geographic market for business jets. North America benefits from an established new as well as pre-owned market. Europe and APAC also have strong new markets; however, pre-owned markets in those regions are not as developed as in North America. Latin America will also be a major market for pre-owned business jets.

SOURCES

FOR PURPOSES OF THIS STUDY, GLOBAL JET CAPITAL HAS RELIED ON VARIOUS SOURCES, WHICH ARE AS FOLLOWS:

Business Jet Transaction Data: JetNet and Global Jet Capital Analysis

Economic Data: Oxford Economics and Global Jet Capital Analysis

Global Distribution Map: <u>freeusandworldmaps.com</u>

OEM Data: Company Financial Reports, Jefferies Equity Research, and Earnings calls

Aircraft Valuation Data: Aircraft Bluebook and Global Jet Capital Analysis



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