

Are we more accurate in predicting short- or long-term future?

Adam Pilarski, senior vice-president at Avitas, explains why it is easier to predict long-term growth in the Asian market than passenger growth at St Louis Lambert airport.

A puzzling question is the relationship of the time horizon of a forecast and its accuracy. Most people assume that the further in the future an event is being forecast, the less likely it will occur since so many things change with the passing of time. This goes for aviation variables as well as for life overall. We are more comfortable predicting the future of our favourite sports team in the coming weekend than prognosticating its future in a decade.

In January, I spoke at the 98th annual meeting of the Transportation Research Board in Washington DC. The session I attended dealt with forecasting techniques in aviation. Participants were the usual cross section of economists from government, academia, trade associations, consulting firms and manufacturers. I used to attend these January meetings regularly a few decades ago and was amazed how little has changed in the topics discussed.

Many speakers raised the subject I mentioned above. There was a consensus that accuracy diminishes greatly the further in the future we try to predict some variables. The rationale was that we kind of know what will happen next year but there are too many variables that can dramatically change over time.

A speaker showed airport traffic forecasts for an unnamed city to illustrate his point. I looked up passenger statistics for two cities I am familiar with that fit his story: St Louis in Missouri and Cincinnati, Ohio (the airport is actually in Kentucky not that this matters). St Louis grew in the 1990s from about 20 to 30 million passengers. Based on such growth, extensive growth plans were developed to facilitate the anticipated increase in passengers and forecasts of about 45 million were used for the period covering two decades. The number of passengers in that period did not grow by 50% but rather fell to 15 million in 2018.

The picture for Cincinnati was similar with traffic almost doubling from 1992 to 2004. Capital expenditure plans were developed and the airport was being readied to accommodate further significant increases in passenger throughput. Alas, this is not what has occurred. Today's traffic



Our author at the *Airfinance Journal* Dublin 2019 conference.

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in Cincinnati is less than half the level experienced 15 years ago.

What has happened? Passengers who want to fly have a choice of arriving at their destination in multiple ways. They can select different airlines and different airports.

The above-mentioned specific examples were heavily dependent on the cities being hub cities for major airlines. St Louis was a big hub for TWA and Cincinnati was used by Delta as a significant hub. I do remember flying to Paris from Los Angeles (LAX) via Cincinnati in 1994. As readers probably remember, TWA went bankrupt and was absorbed by American Airlines, which had its own hubs and neglected St Louis. Delta had a strategy of using

Comair as a feeder and grew Cincinnati significantly but eventually changed course and abandoned Comair.

The underlying traffic did not disappear though. I would still go to Europe from LAX, just not via Cincinnati. Forecasts made assuming no change in the industrial structure of the airline industry proved to be wrong. I understand and empathise with forecasters whose job it is to predict traffic for a specific city and airline since changes in connection patterns can wreak havoc with their forecasts. It is a fact that forecasters do not have the tools to predict reliably changing traffic patterns – hence, the longer the forecast horizon, the higher the chance of the forecast going off the rails.

There is an alternative view, though, which I subscribe to. It is counter intuitive, but forecasting the short term is less accurate than the long term.

The variables I am interested in can be predicted quite robustly by using proper economic theory and econometric techniques. So, as an example, let me go back to 1980 and my predictions about the rising dominance of Asian traffic in the world. I was convinced then that Asia's market share of world traffic would increase significantly for decades to come. This was because virtually all economists predicted Asian economies outperforming the rest of the world in growth. Also, the many geographical factors (large country sizes, long distances, many islands) and socio-cultural ones (large populations, ethnic ties) assured me that Asia would experience a historical period of catching up with the rest of the world.

Today, this may seem obvious to the reader but this was not the case in 1980 when my view was not universally accepted. My conclusion did not assume specific forecasts for given cities (say, Narita traffic for 1982). It was a very general view that, over the coming years, economic forces would prevail and inevitably lead to huge traffic growth in Asia. This could manifest itself in various structures and city pairs. My prediction dealt with fundamentals, not short term or local details that can change rapidly. ▲