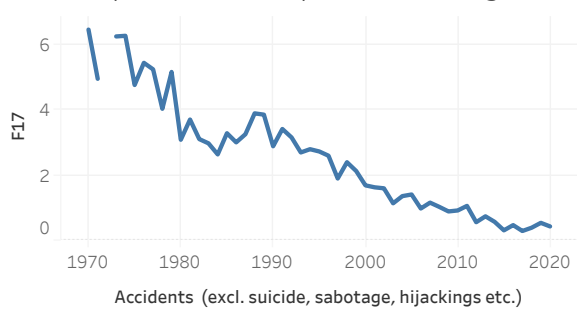
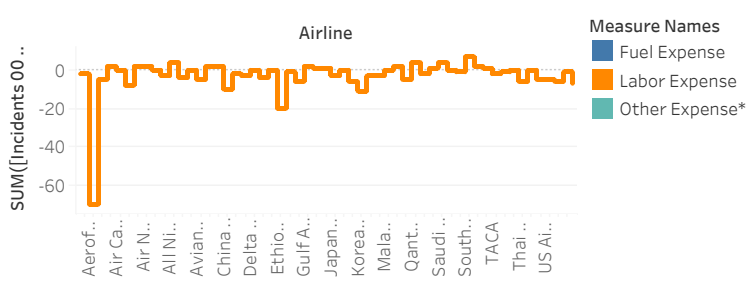


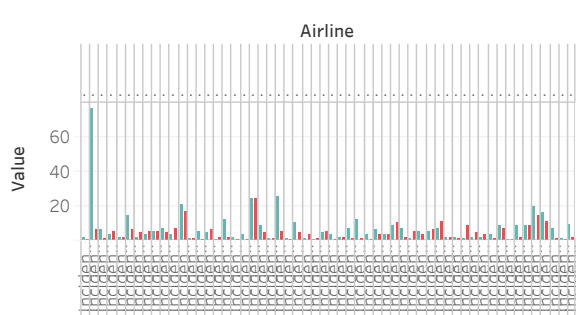
Line Graph- Accidents per million Flights



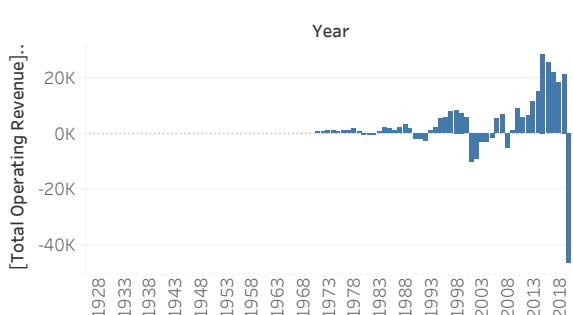
Stack Chart Difference in accidents from 85-99 to 2000-2014



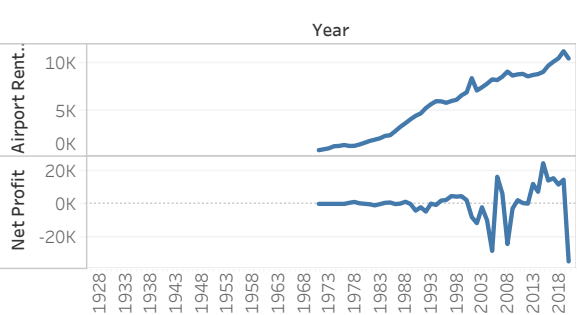
Side by Side bar Company accidents



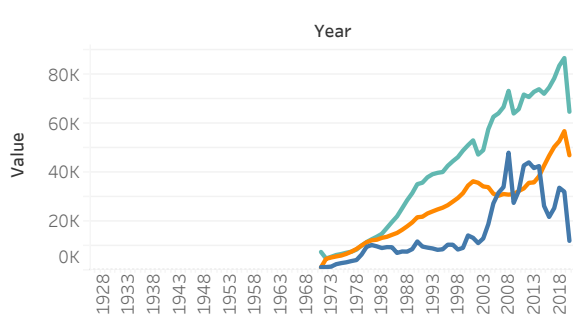
Revenue versus Expenses



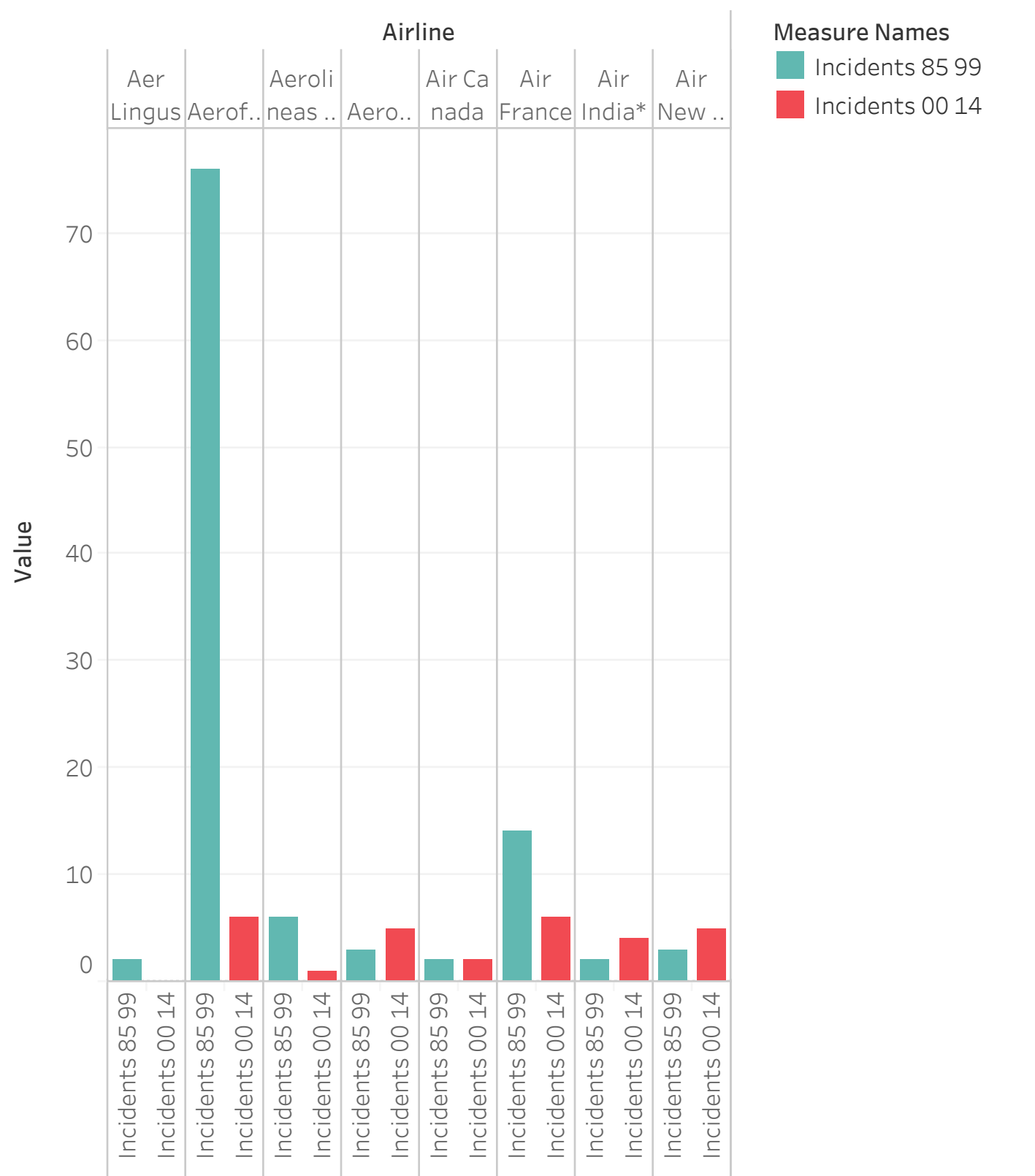
Dual Line Graph compare profit with costs



Cost breakdown line graphs



Side by Side bar Company accidents



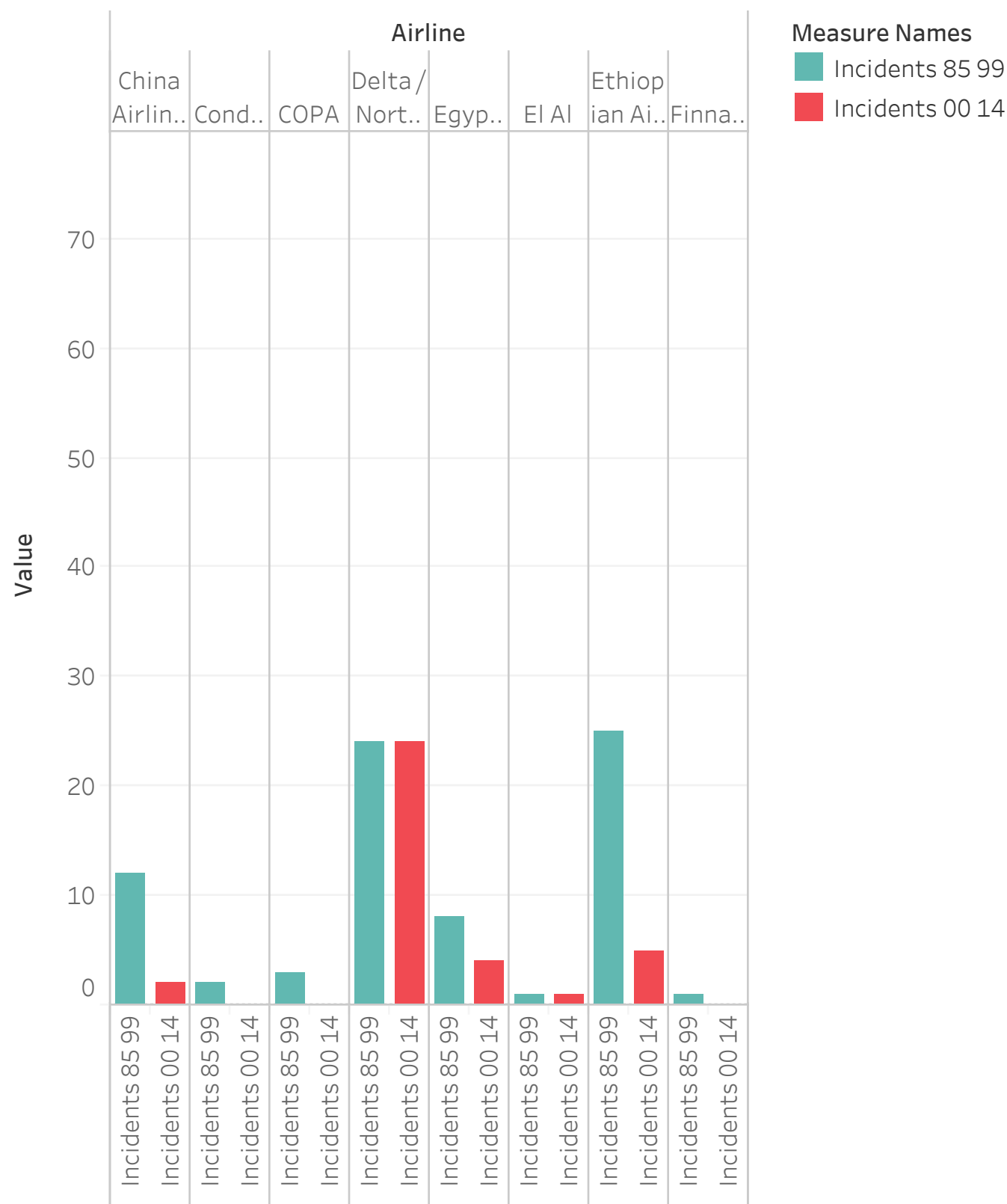
Incidents 85 99 and Incidents 00 14 for each Airline. Color shows details about Incidents 85 99 and Incidents 00 14.

Side by Side bar Company accidents



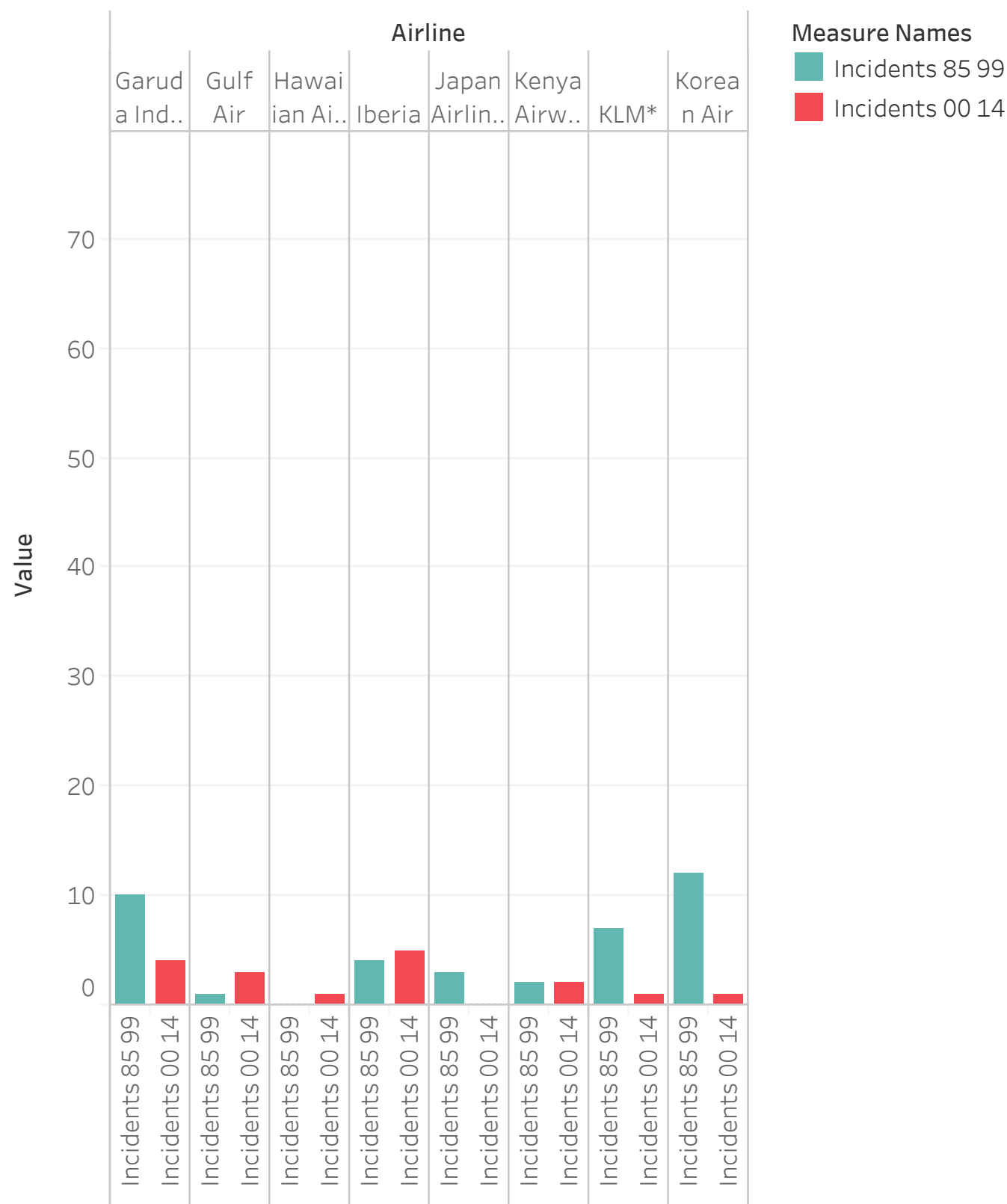
Incidents 85 99 and Incidents 00 14 for each Airline. Color shows details about Incidents 85 99 and Incidents 00 14.

Side by Side bar Company accidents



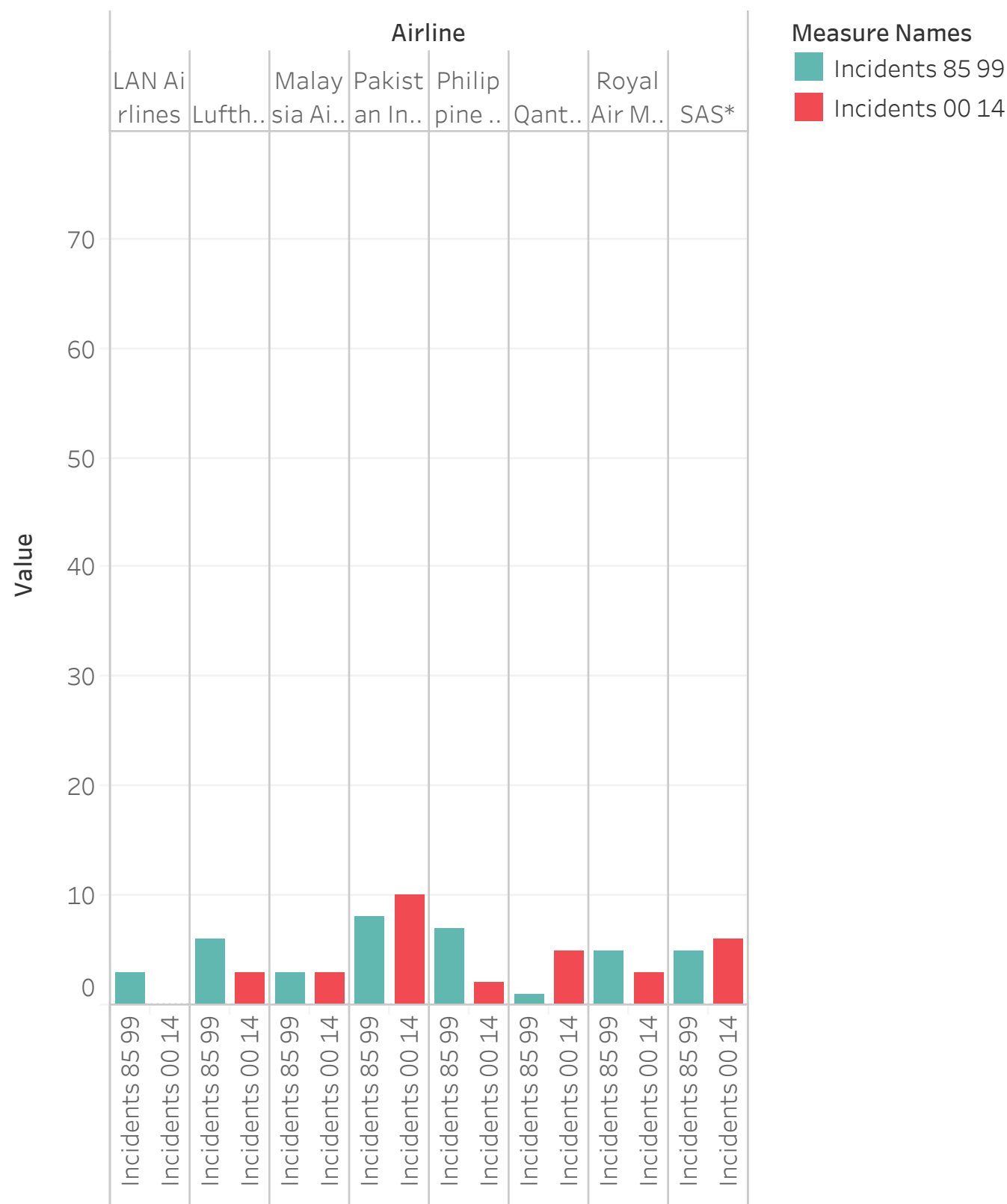
Incidents 85 99 and Incidents 00 14 for each Airline. Color shows details about Incidents 85 99 and Incidents 00 14.

Side by Side bar Company accidents



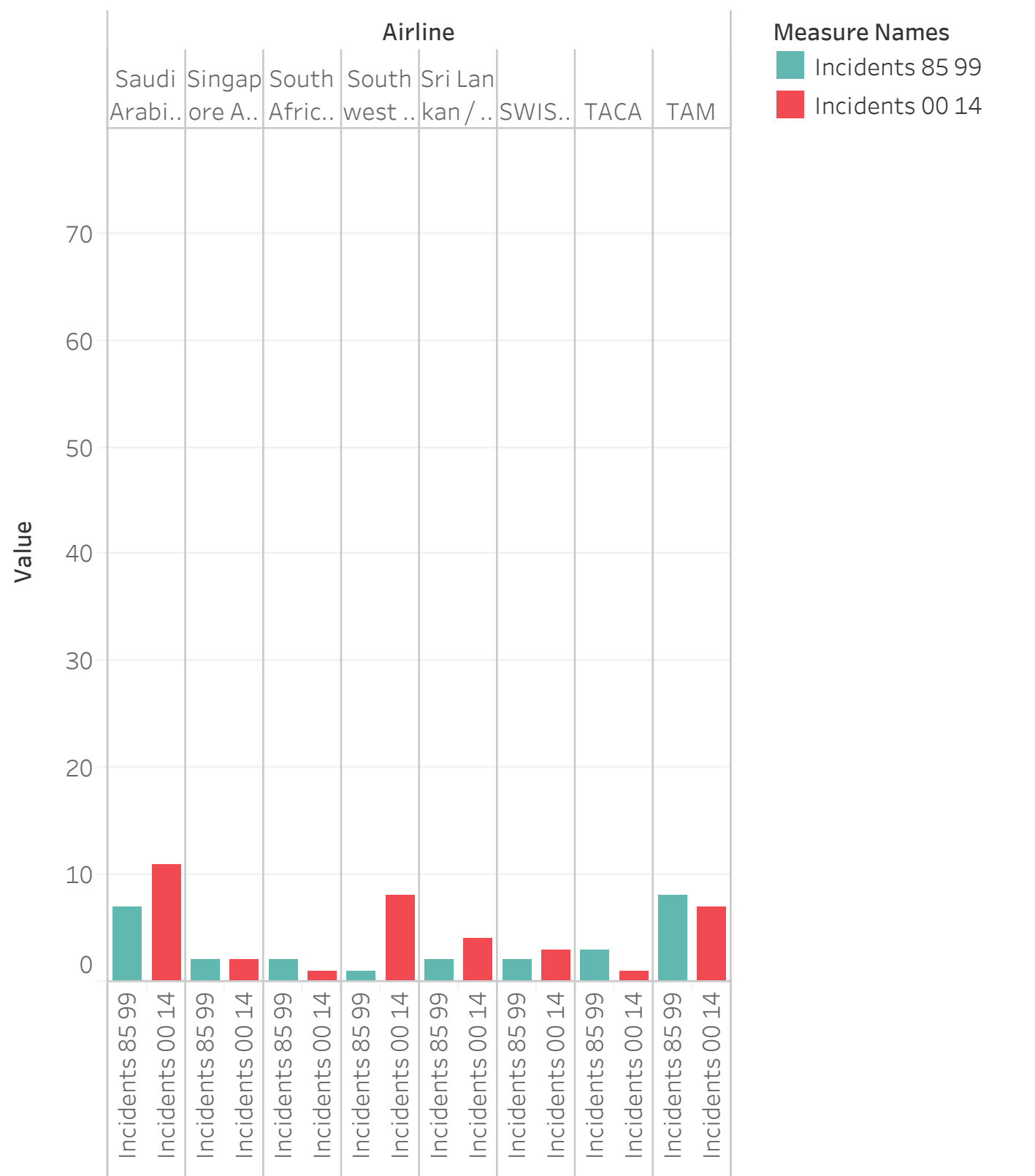
Incidents 85 99 and Incidents 00 14 for each Airline. Color shows details about Incidents 85 99 and Incidents 00 14.

Side by Side bar Company accidents



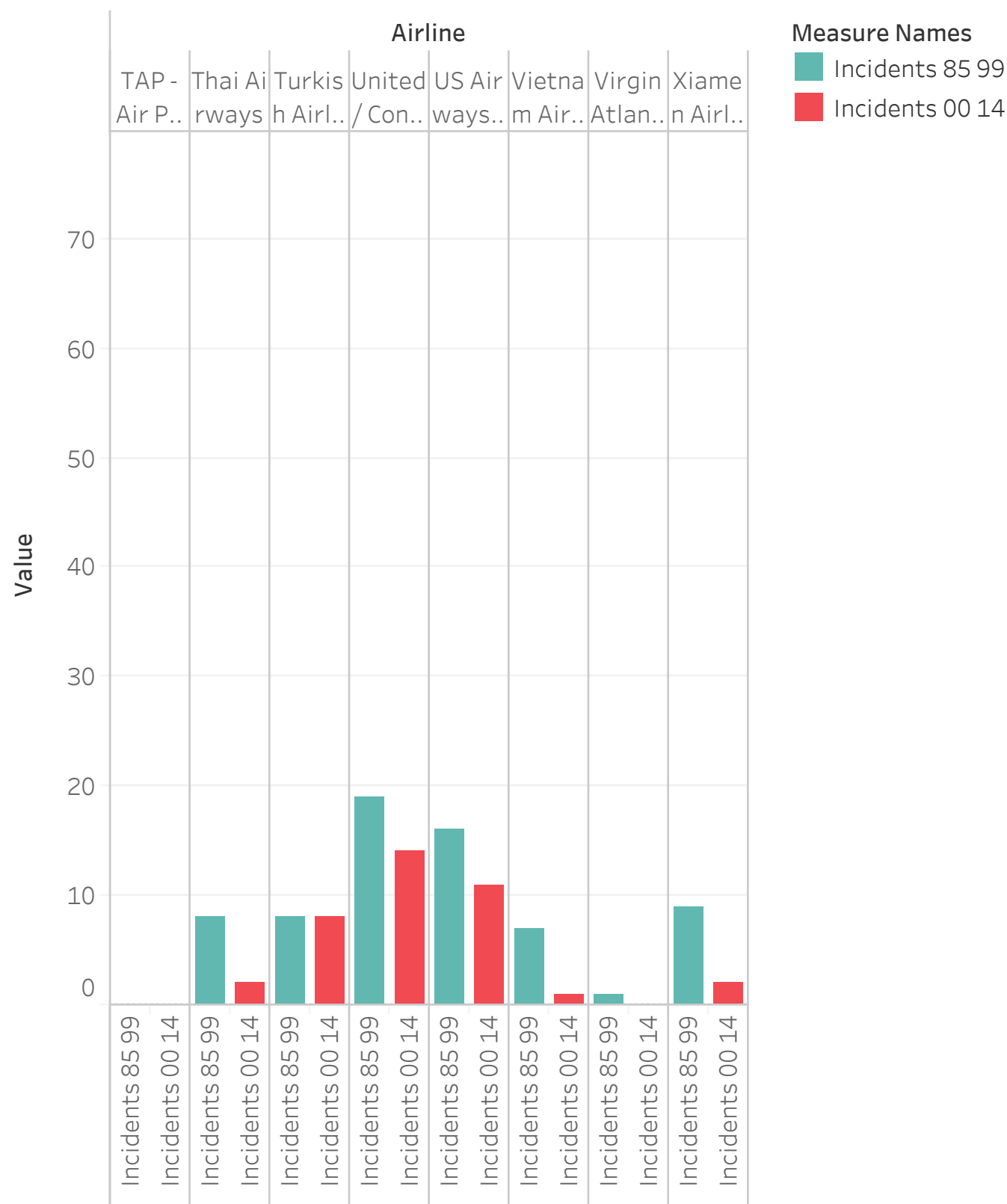
Incidents 85 99 and Incidents 00 14 for each Airline. Color shows details about Incidents 85 99 and Incidents 00 14.

Side by Side bar Company accidents



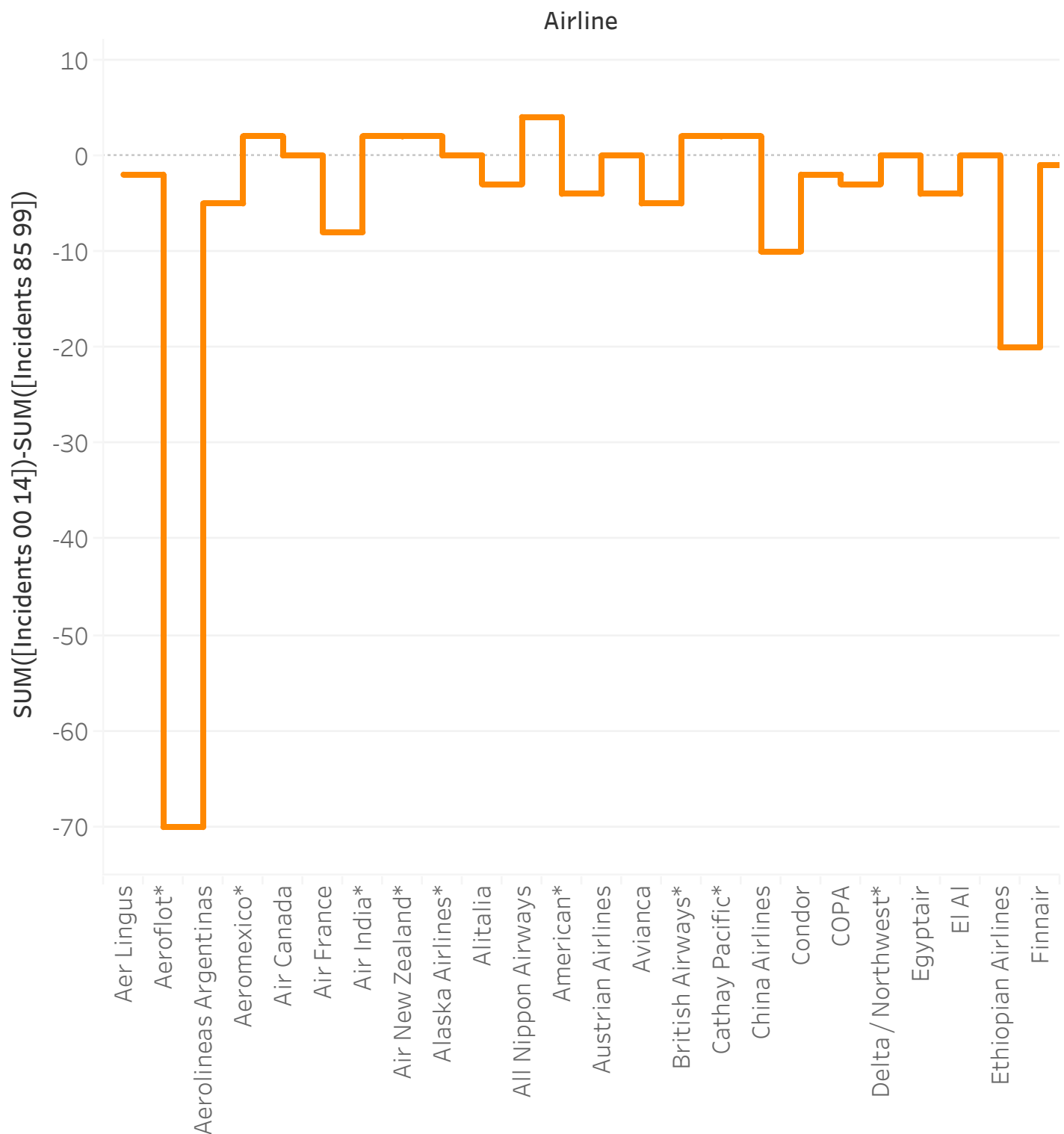
Incidents 85 99 and Incidents 00 14 for each Airline. Color shows details about Incidents 85 99 and Incidents 00 14.

Side by Side bar Company accidents



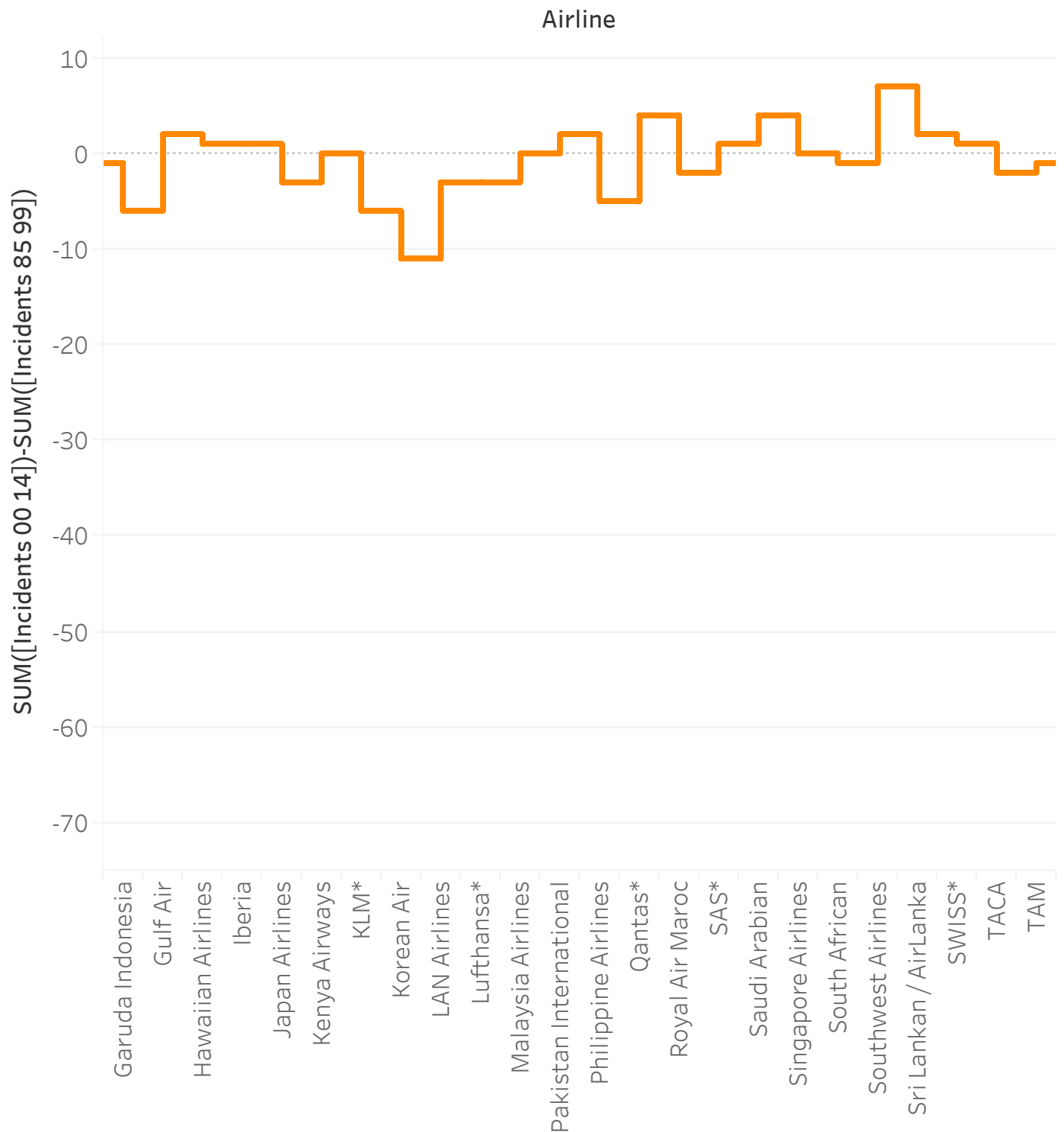
Incidents 85 99 and Incidents 00 14 for each Airline. Color shows details about Incidents 85 99 and Incidents 00 14.

Stack Chart Difference in accidents from 85-99 to 2000-2014



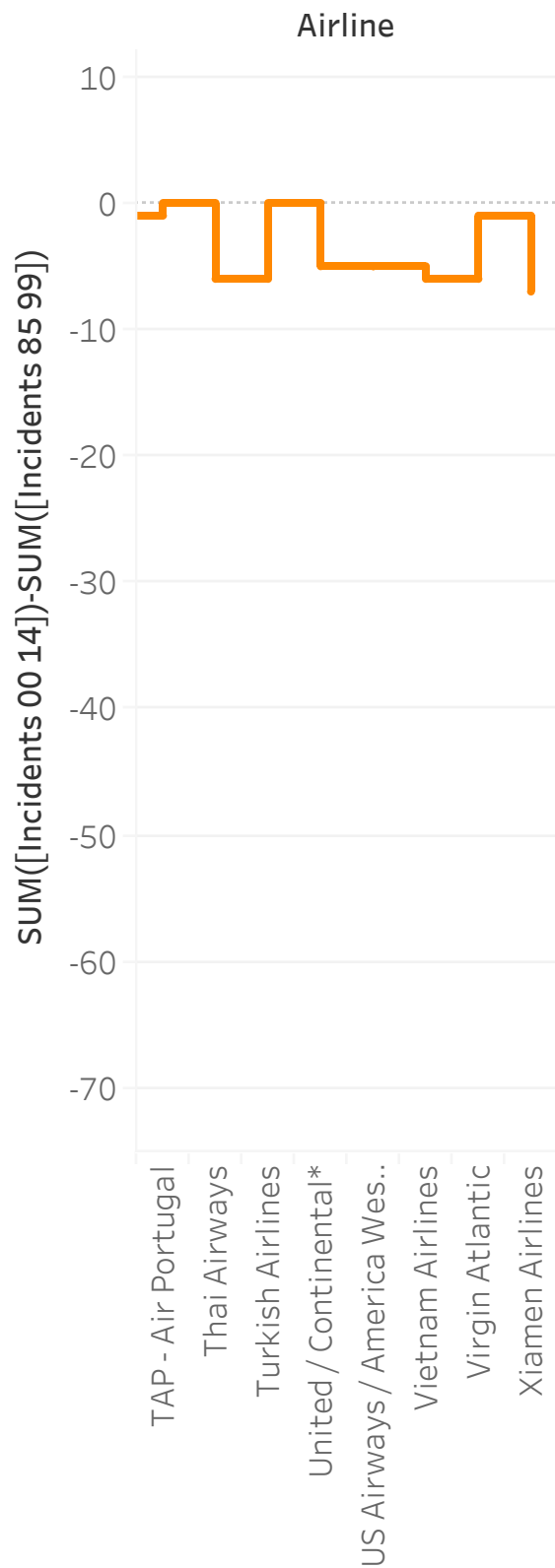
The trend of SUM([Incidents 00 14])-SUM([Incidents 85 99]) for Airline.

Stack Chart Difference in accidents from 85-99 to 2000-2014



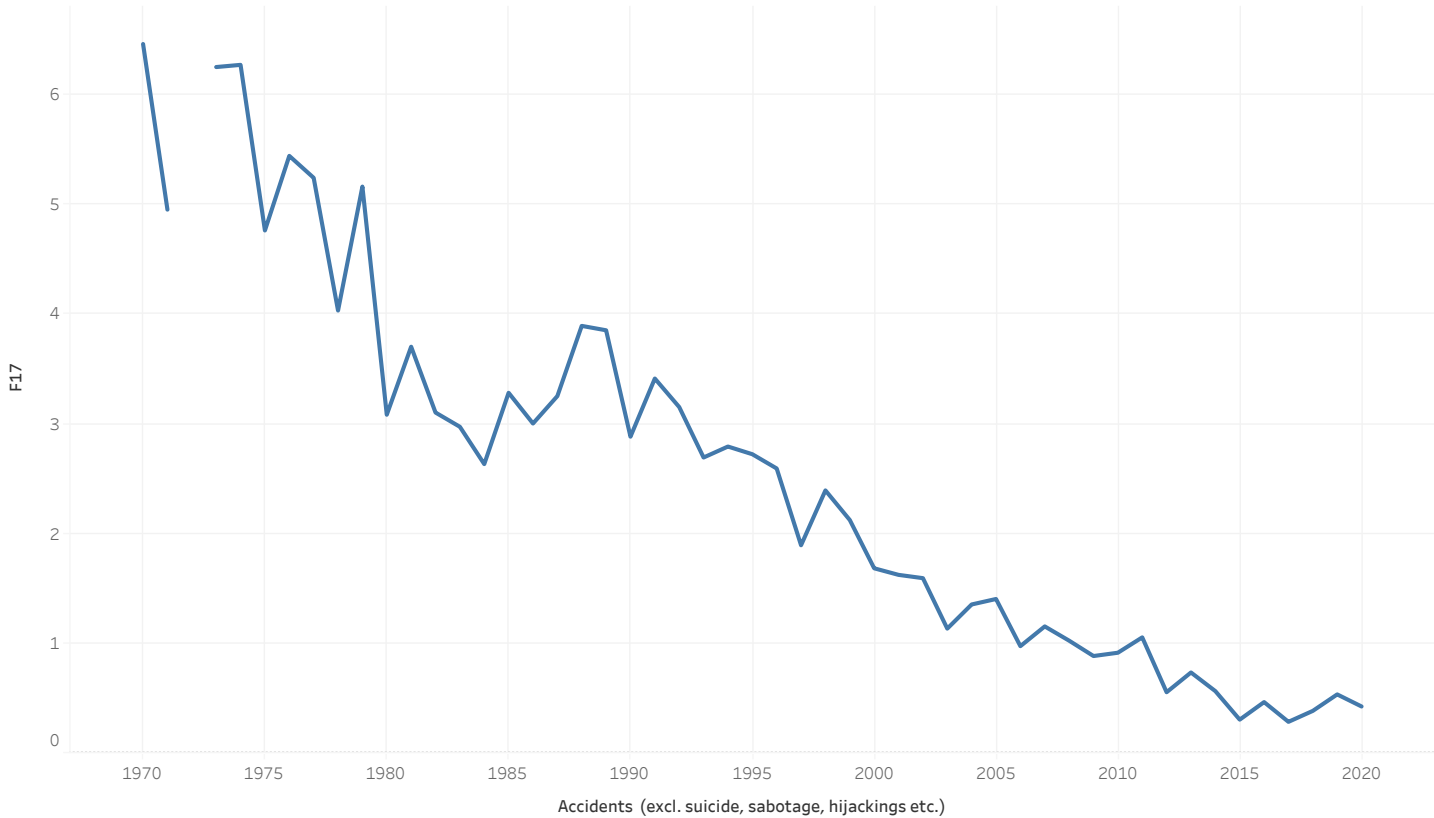
The trend of $SUM([Incidents\ 00\ 14]) - SUM([Incidents\ 85\ 99])$ for Airline.

Stack Chart Difference in accidents from 85-99 to 2000-2014



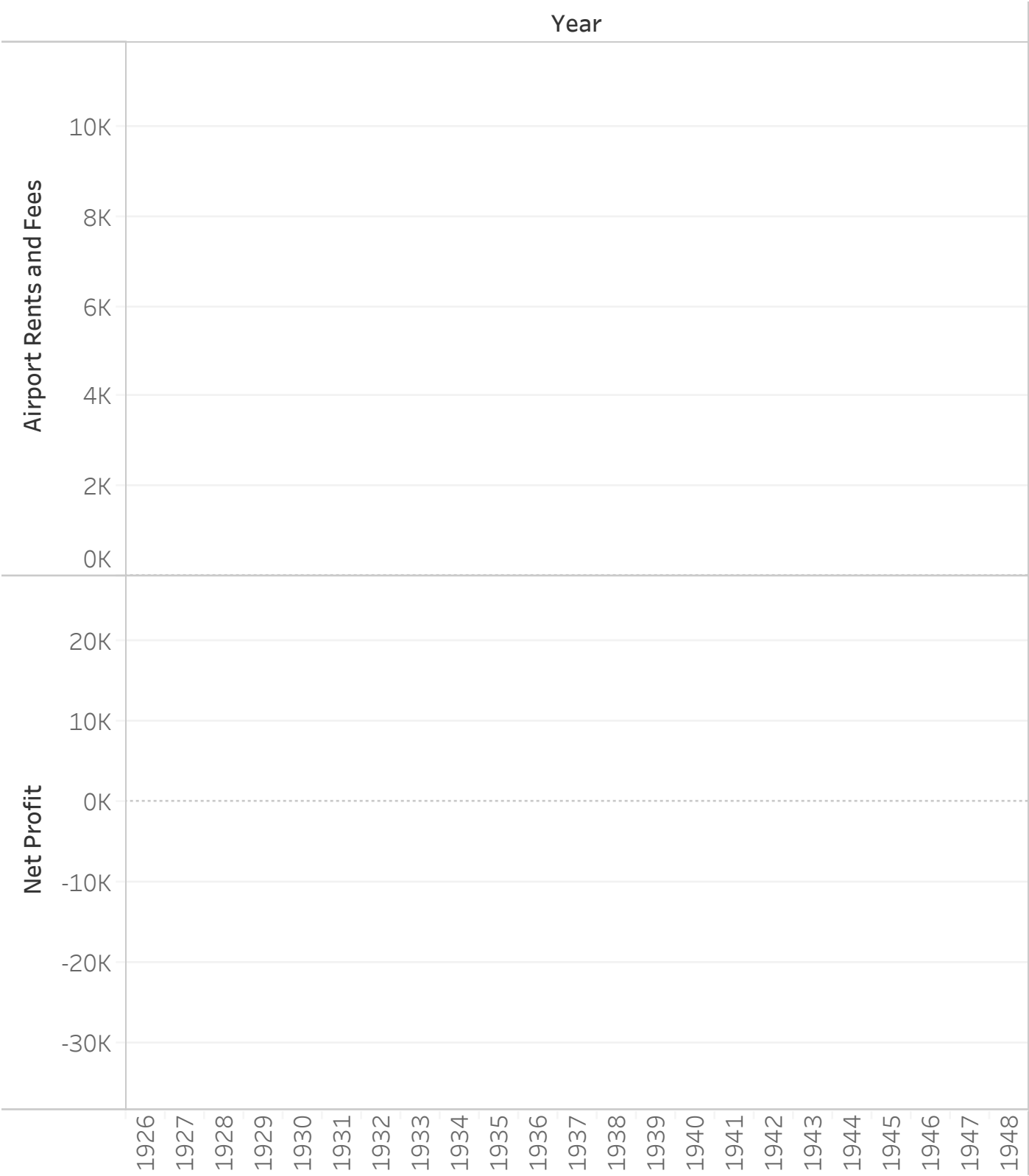
The trend of $SUM([Incidents\ 00\ 14]) - SUM([Incidents\ 85\ 99])$ for Airline.

Line Graph- Accidents per million Flights



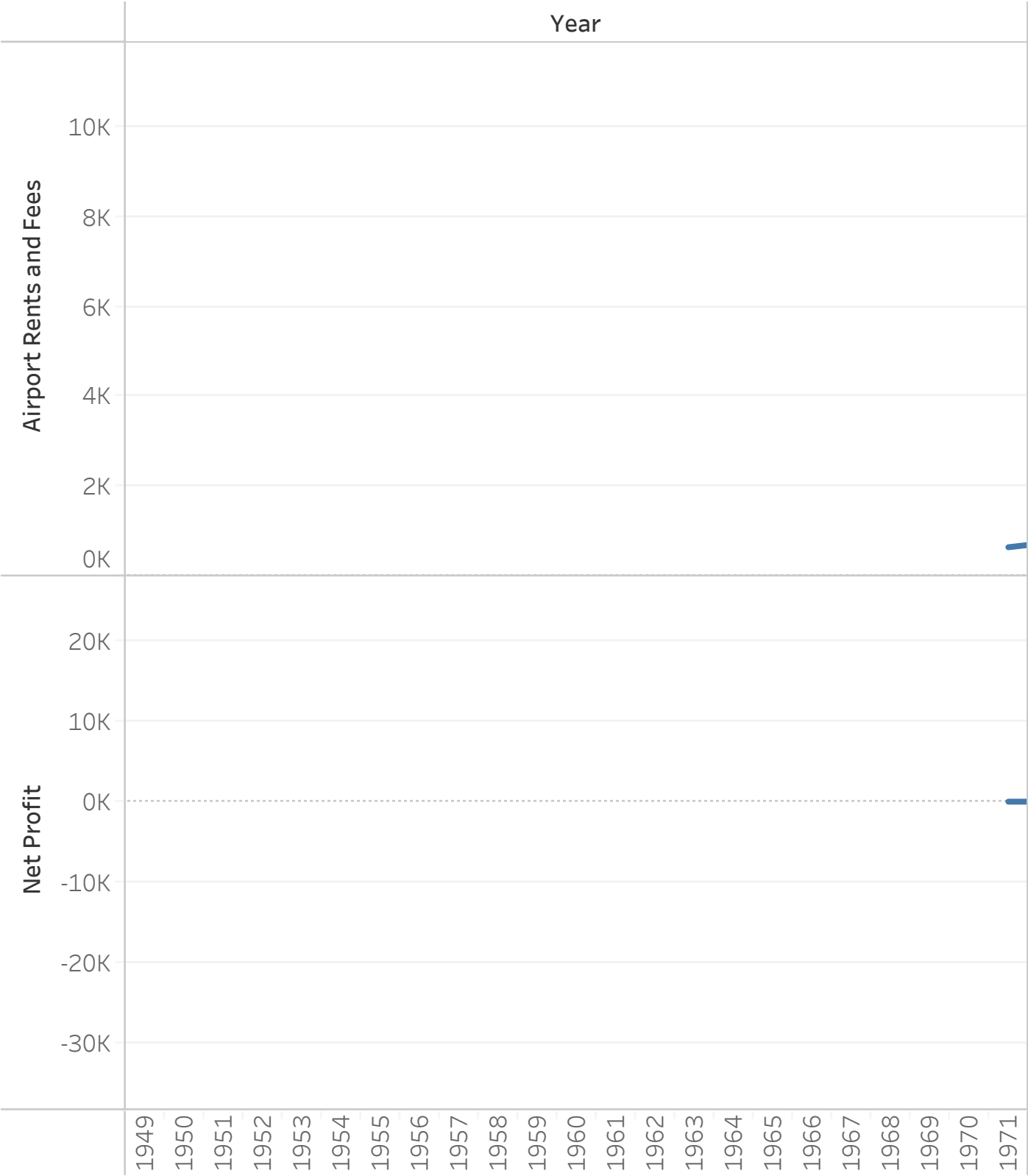
The trend of sum of F17 for Accidents (excl. suicide, sabotage, hijackings etc.).

Dual Line Graph compare profit with costs



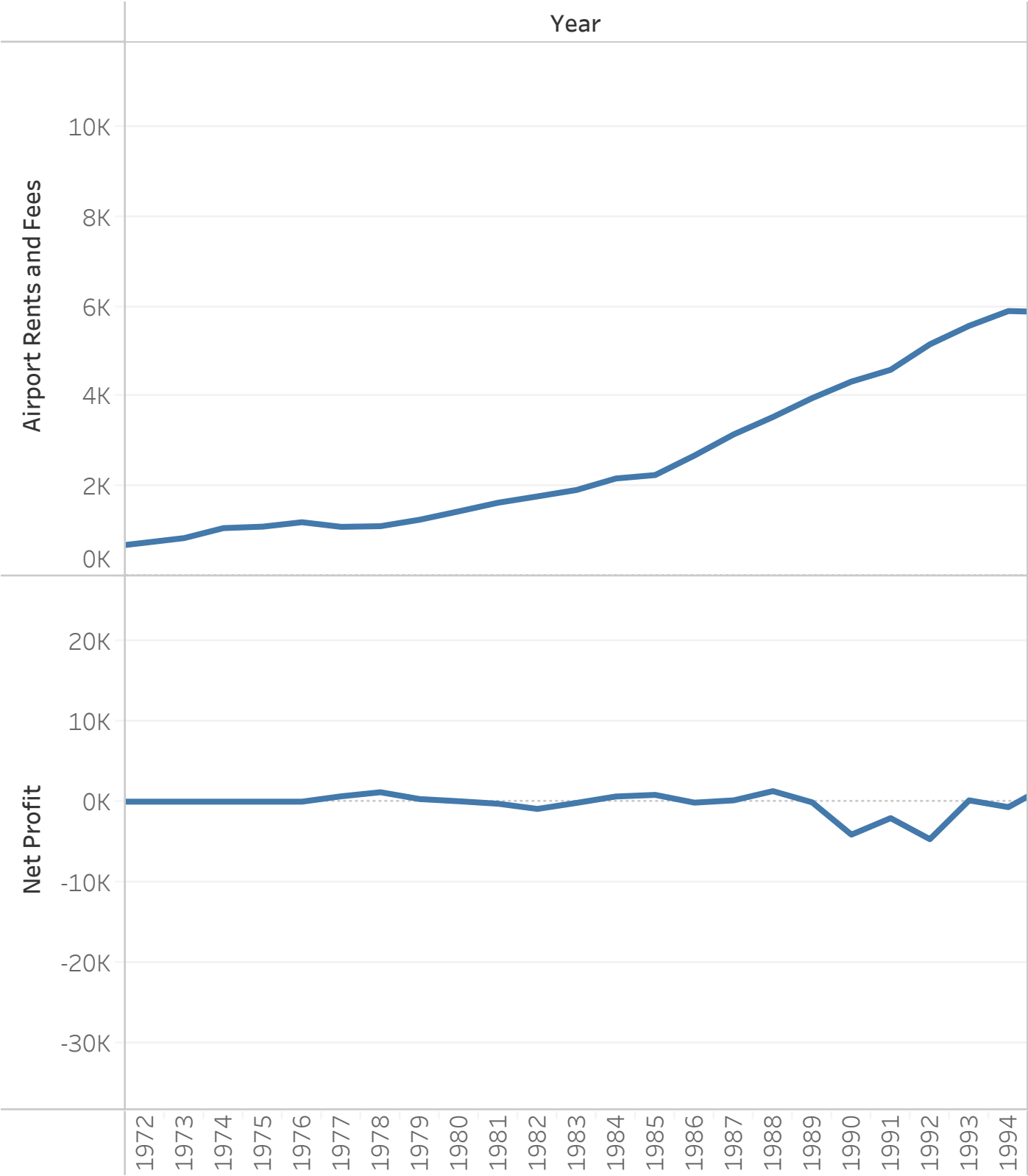
The trends of sum of Airport Rents and Fees and sum of Net Profit for Year.

Dual Line Graph compare profit with costs



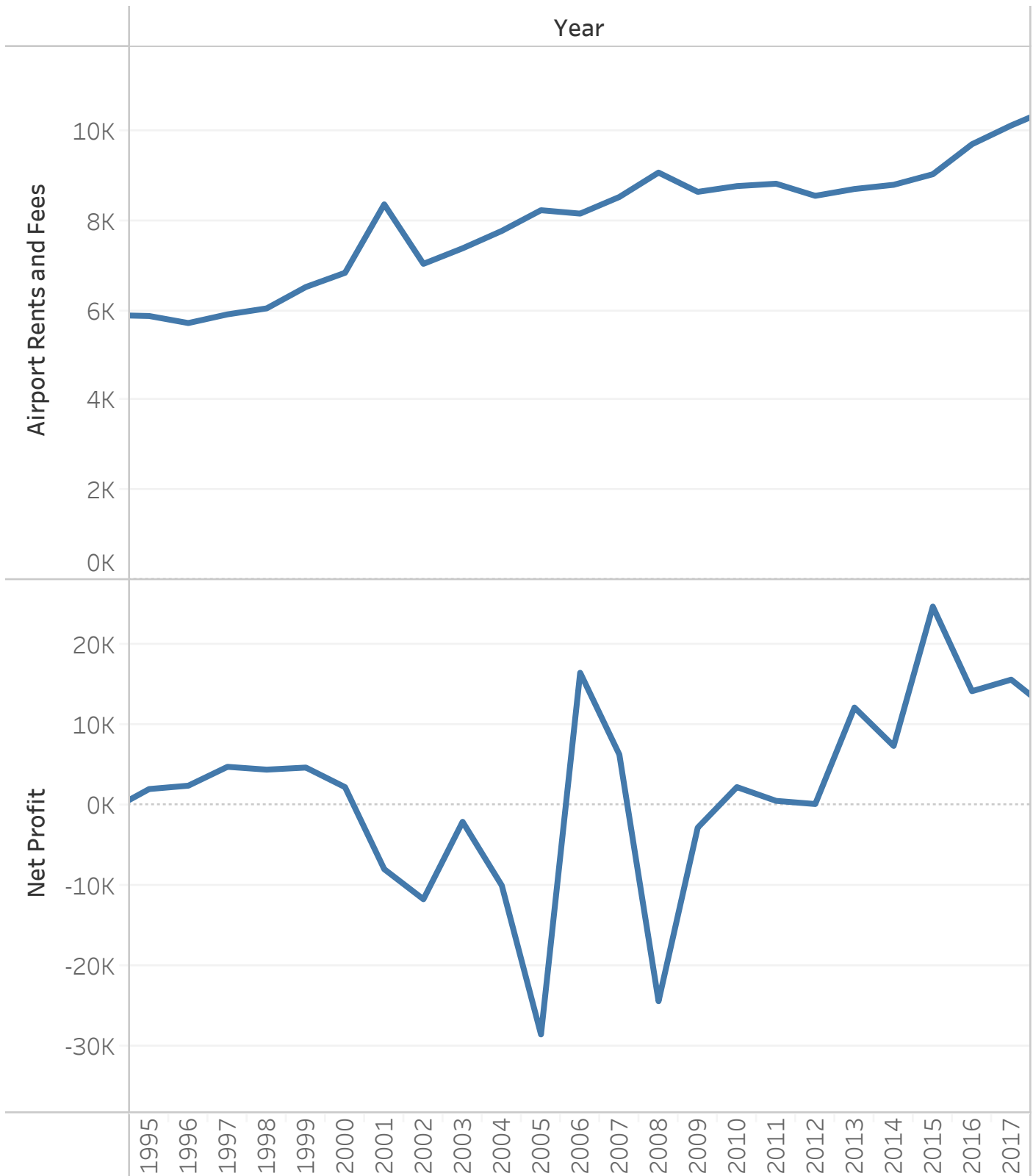
The trends of sum of Airport Rents and Fees and sum of Net Profit for Year.

Dual Line Graph compare profit with costs



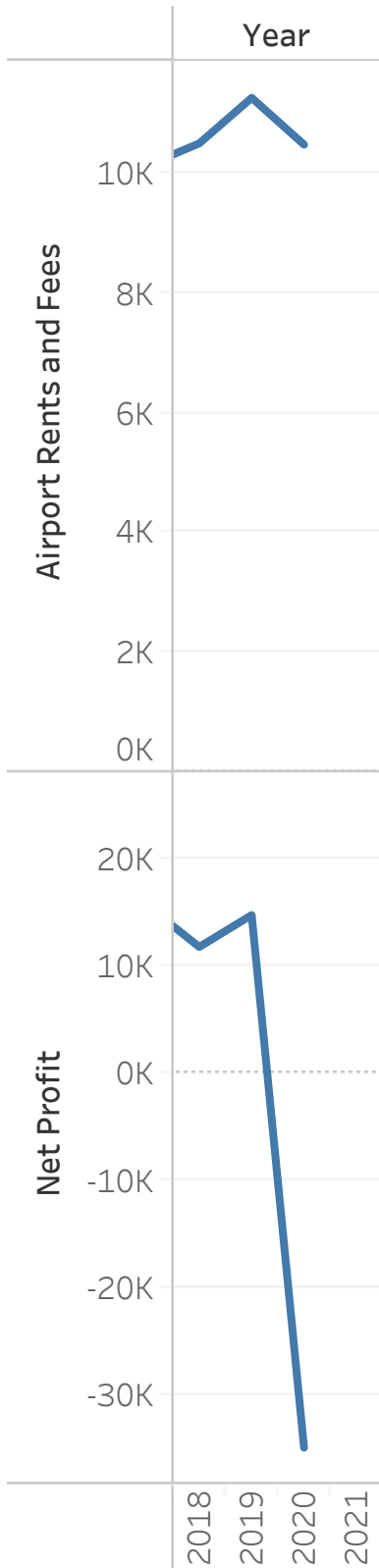
The trends of sum of Airport Rents and Fees and sum of Net Profit for Year.

Dual Line Graph compare profit with costs



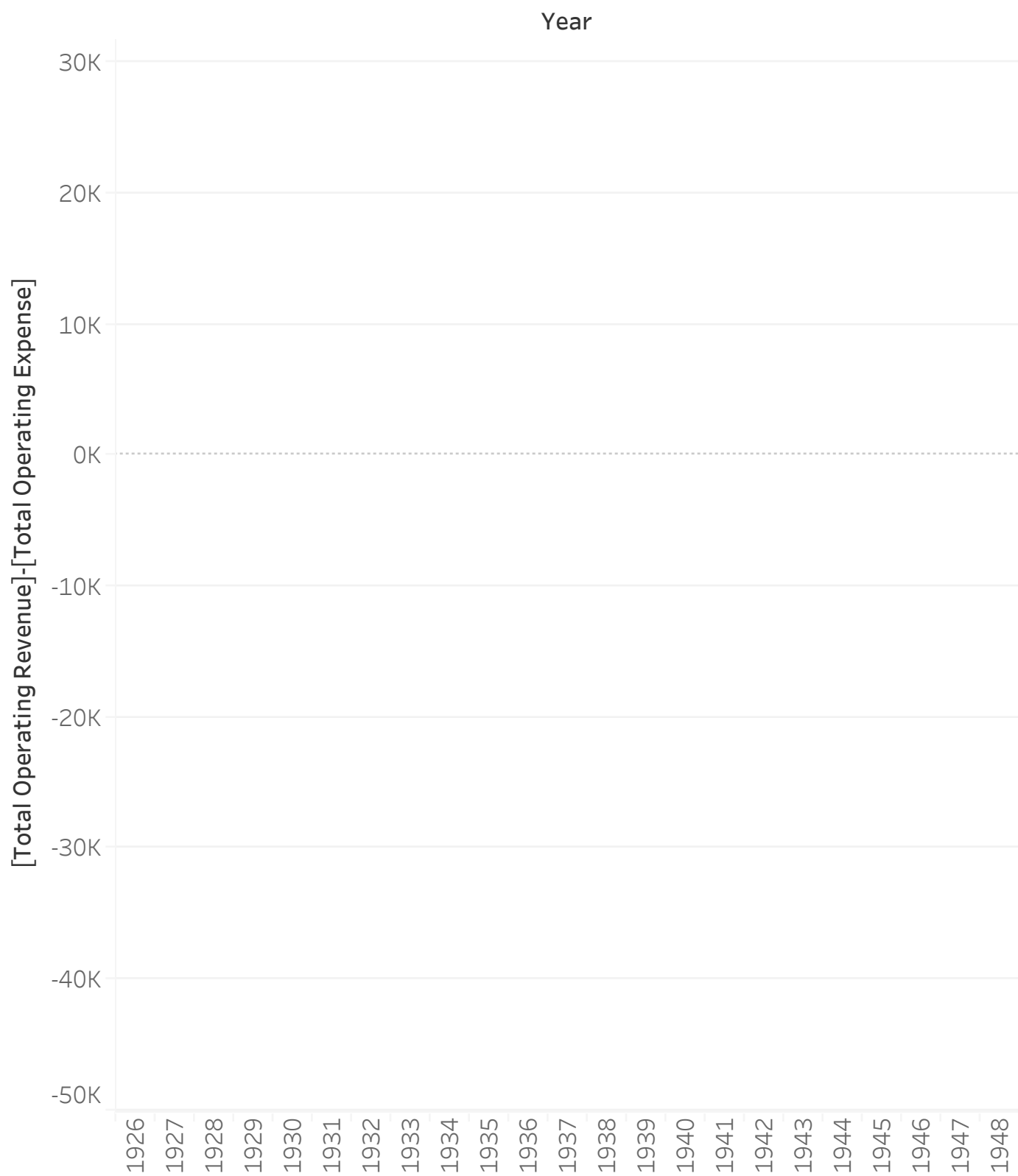
The trends of sum of Airport Rents and Fees and sum of Net Profit for Year.

Dual Line Graph compare profit with costs



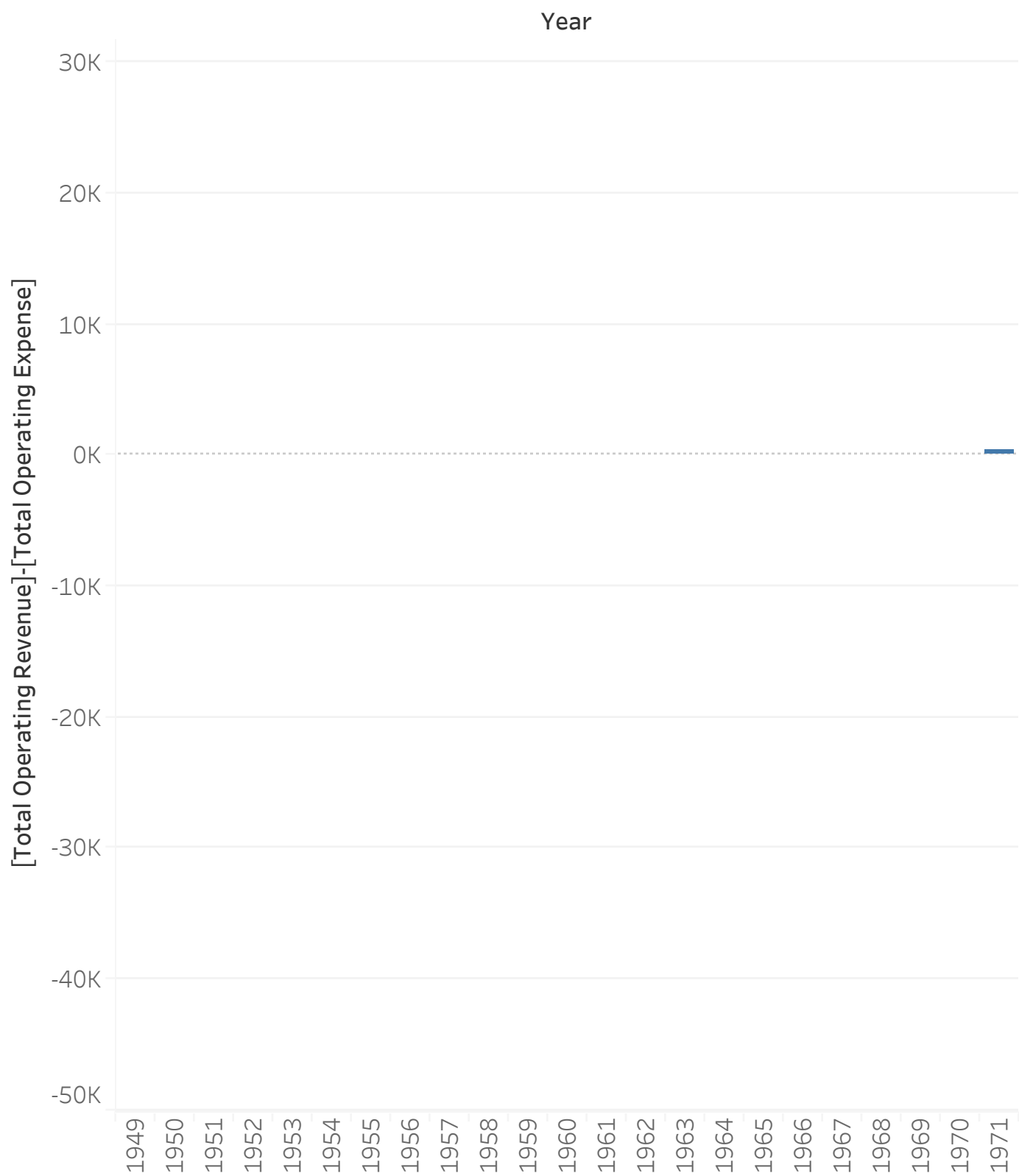
The trends of sum of Airport Rents and Fees and sum of Net Profit for Year.

Revenue versus Expenses



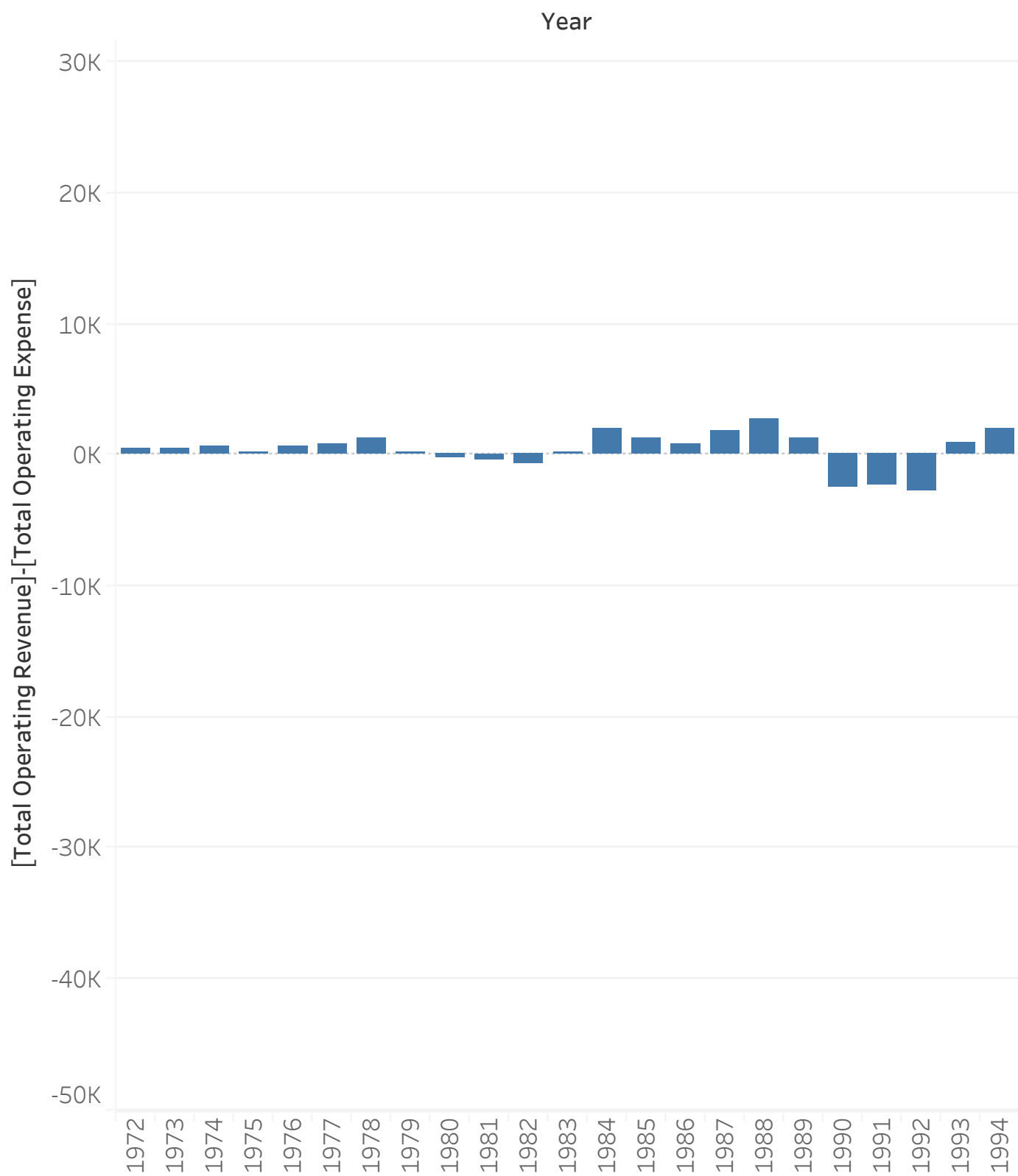
[Total Operating Revenue]-[Total Operating Expense] as an attribute for each Year.

Revenue versus Expenses



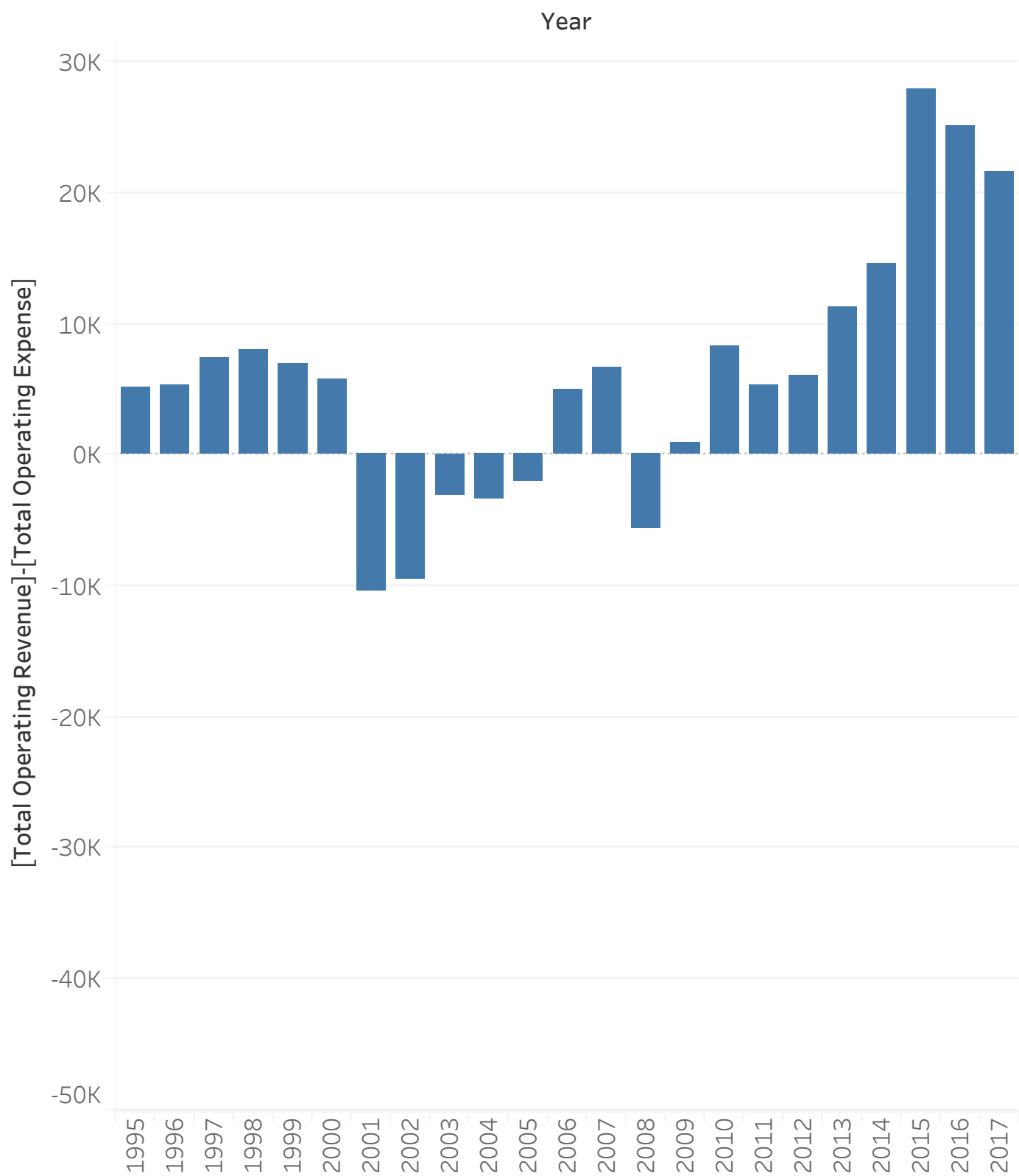
[Total Operating Revenue]-[Total Operating Expense] as an attribute for each Year.

Revenue versus Expenses



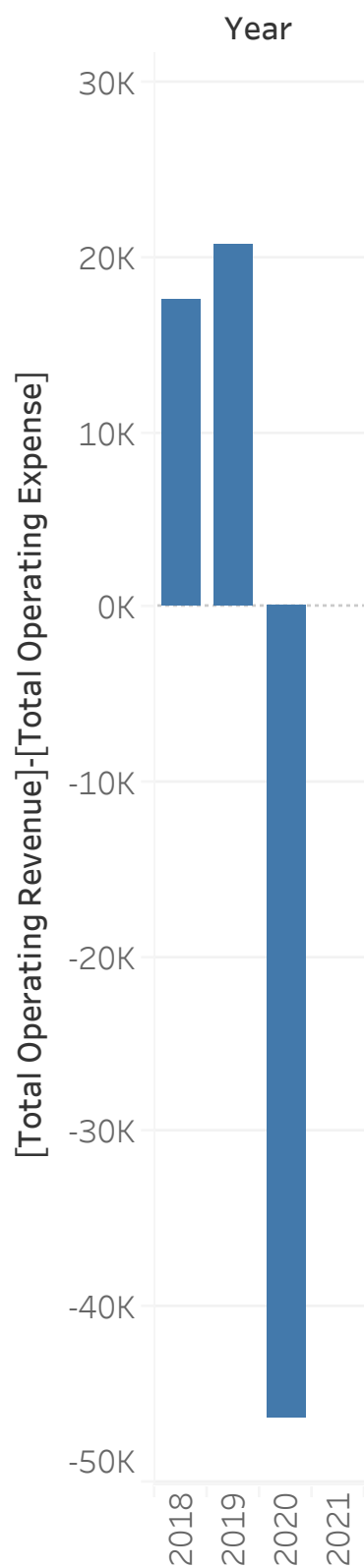
[Total Operating Revenue]-[Total Operating Expense] as an attribute for each Year.

Revenue versus Expenses



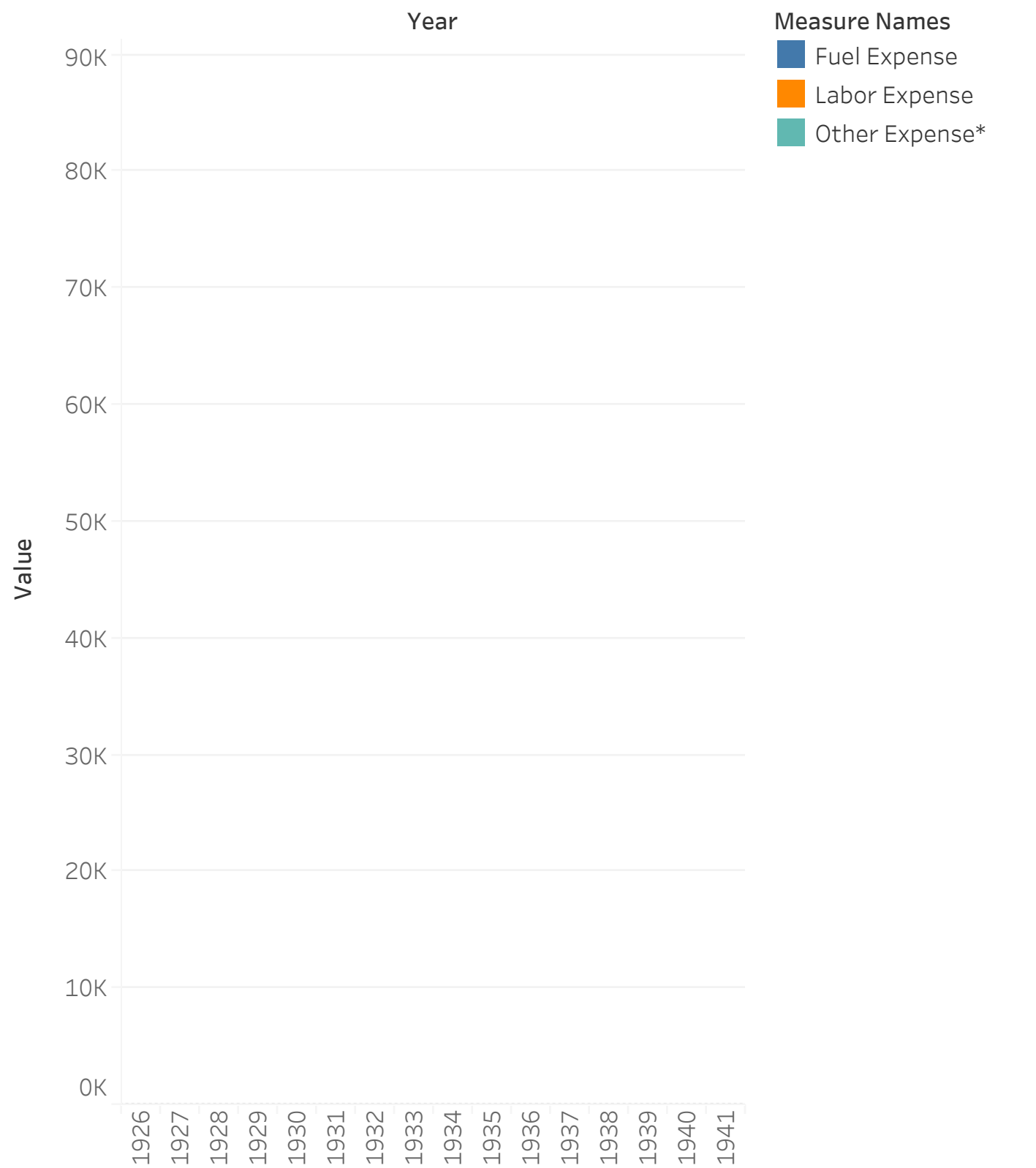
[Total Operating Revenue]-[Total Operating Expense] as an attribute for each Year.

Revenue versus Expenses



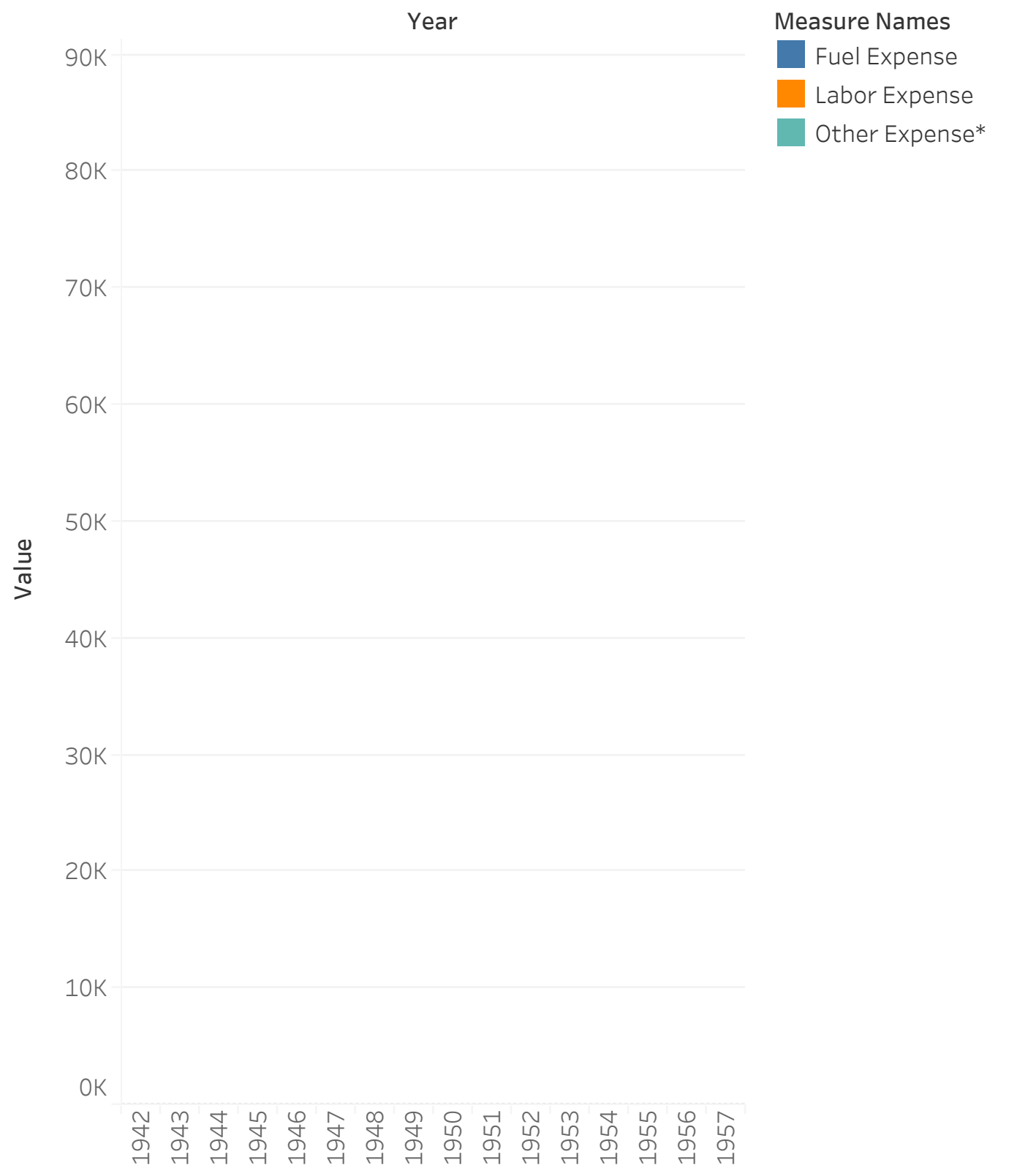
[Total Operating Revenue]-[Total Operating Expense] as an attribute for each Year.

Cost breakdown line graphs



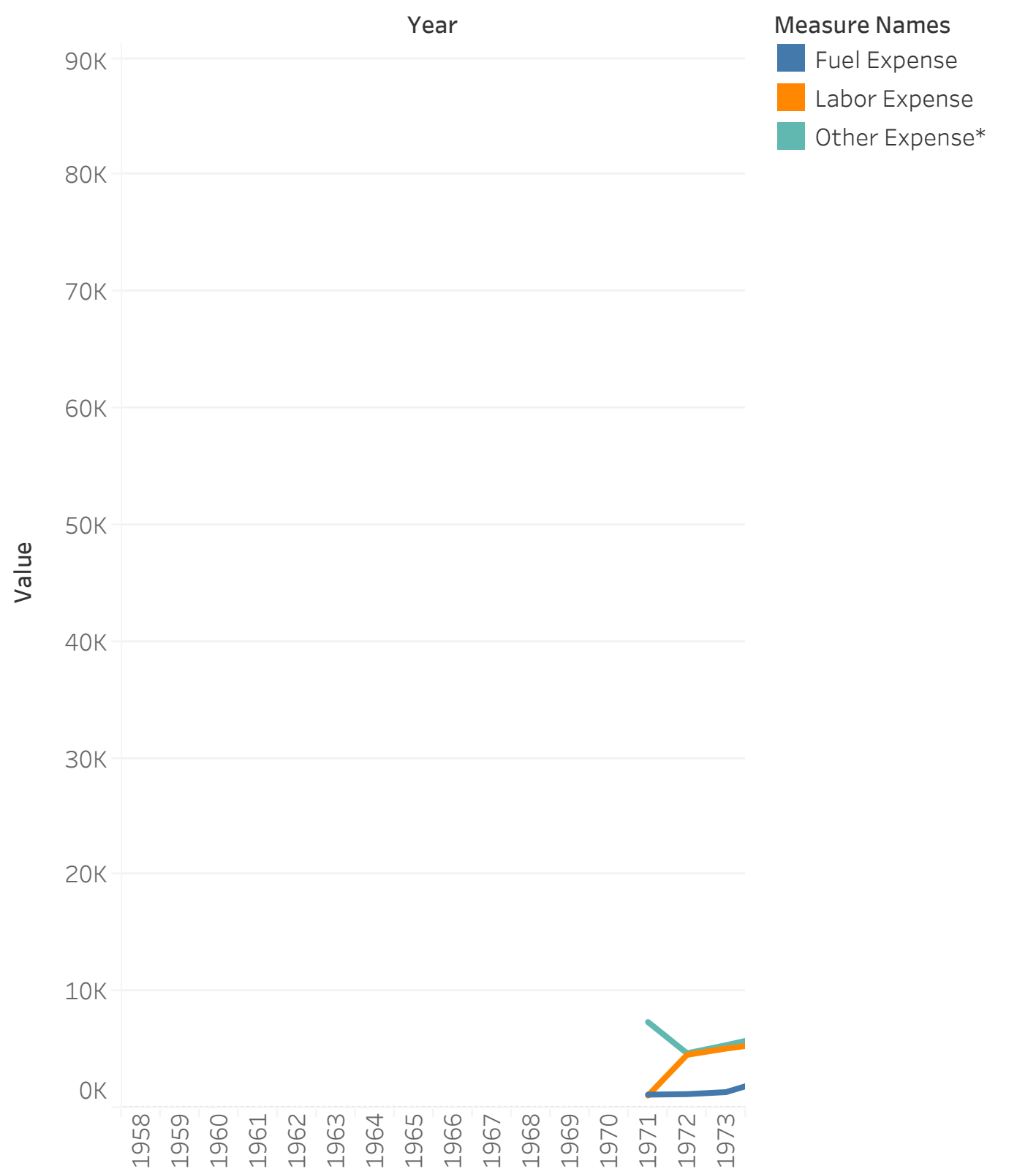
The trends of Fuel Expense, Labor Expense and Other Expense* for Year. Color shows details about Fuel Expense, Labor Expense and Other Expense*.

Cost breakdown line graphs



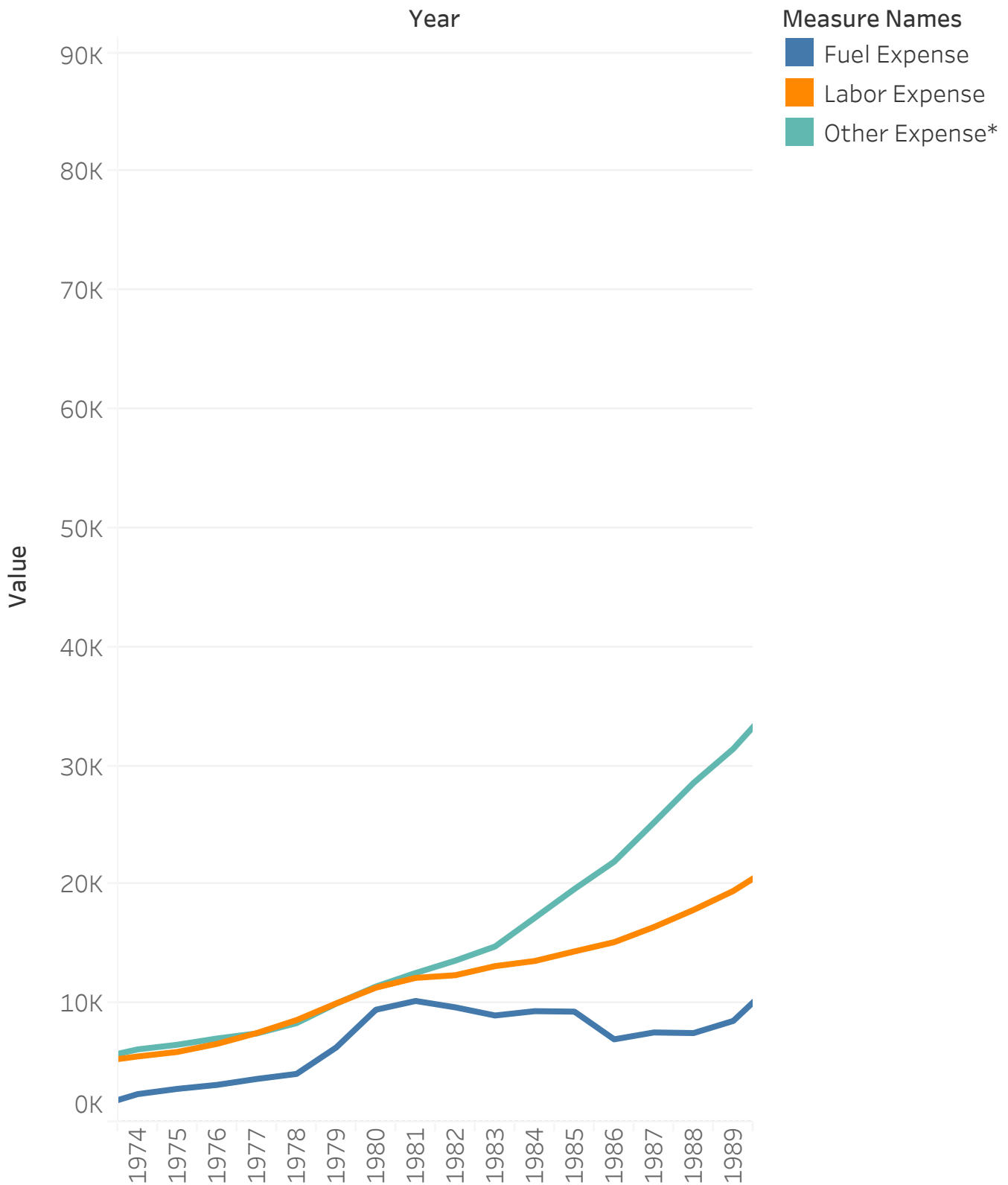
The trends of Fuel Expense, Labor Expense and Other Expense* for Year. Color shows details about Fuel Expense, Labor Expense and Other Expense*.

Cost breakdown line graphs



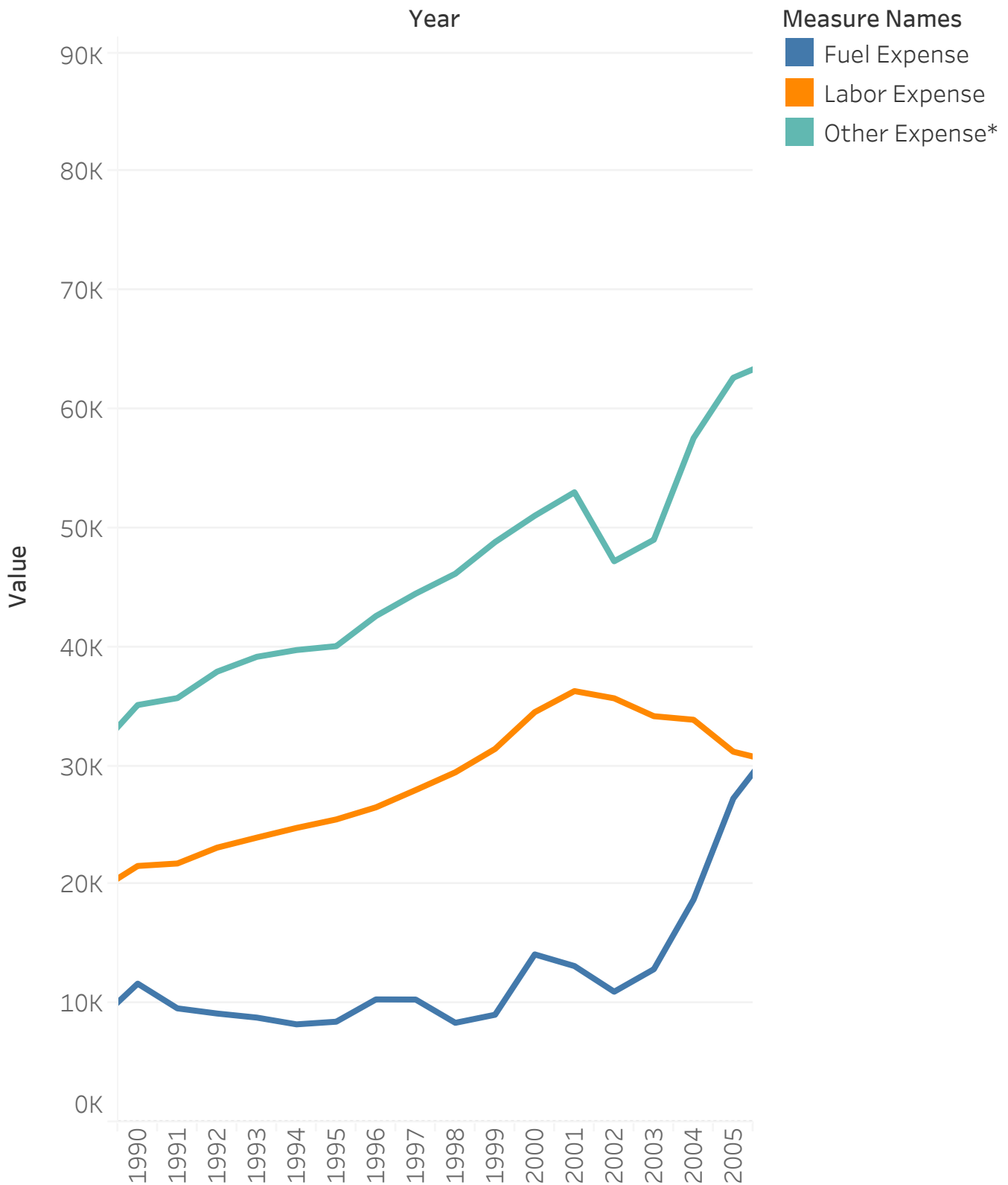
The trends of Fuel Expense, Labor Expense and Other Expense* for Year. Color shows details about Fuel Expense, Labor Expense and Other Expense*.

Cost breakdown line graphs



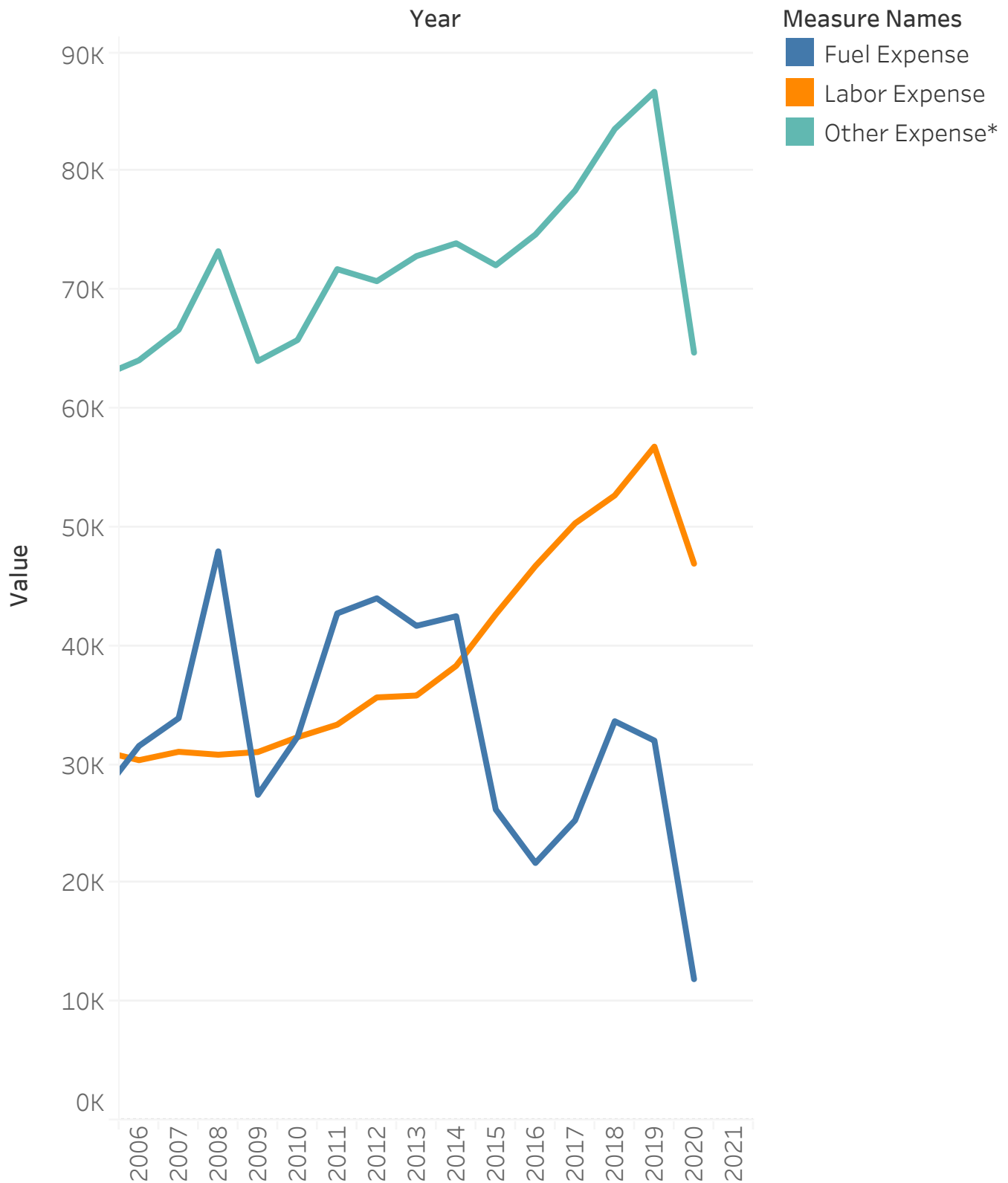
The trends of Fuel Expense, Labor Expense and Other Expense* for Year. Color shows details about Fuel Expense, Labor Expense and Other Expense*.

Cost breakdown line graphs



The trends of Fuel Expense, Labor Expense and Other Expense* for Year. Color shows details about Fuel Expense, Labor Expense and Other Expense*.

Cost breakdown line graphs



The trends of Fuel Expense, Labor Expense and Other Expense* for Year. Color shows details about Fuel Expense, Labor Expense and Other Expense*.

Aaron Drexler

DSC 640

Dashboard Summary

As the data scientist in charge of the Airplane safety data project, I wanted to set out to prove that Airplanes are not dangerous, that in fact they are getting safer every year. I also wanted to look for the potential reasoning as to why these increased safety concerns were occurring. When looking at the dashboard, I split the visualizations into two different categories, a look at the safety numbers as they progressed year to year, as well as the airplane companies' financial considerations.

First, when I was looking over the safety concerns of planes, I wanted to both show the safety of planes as well as show the improving safety data, as opposed to the alleged decrease in safety. The first line chart demonstrates the number of accidents, in which there was not a forced accident (Suicide/ High jacking/sabotage) per year has decreased dramatic since the beginning of our recorded data in 1971. The next thing that we looked at, in a step chart, was that even in the decreased accidents, it was certain companies that counted for most of the incidents. The major airlines had very few accidents. The final safety visualization was a side-by-side bar graph showing that within each company, even those unsafe companies, that the number of incidents still went down across the board.

The second category that I visualized was the economic concerns that airlines have this year of the covid shutdown. After showing major growth for many years, as demonstrated via bar graph in visualization 4, Covid revenue is far down as compared to their expenses. Visualization 5 shows this duality, as rent and fees for airlines continued to rise, despite the sharp decline in revenue. The final visualization shows that the largest expenses are associated with other costs, such as the number of passengers.

I believe when we consider all these factors, that airplane companies, despite the improving safety of their planes, want to decrease the number of flights by any means to decrease costs.