

The Effects of Codesharing Alliances on Airline Profitability

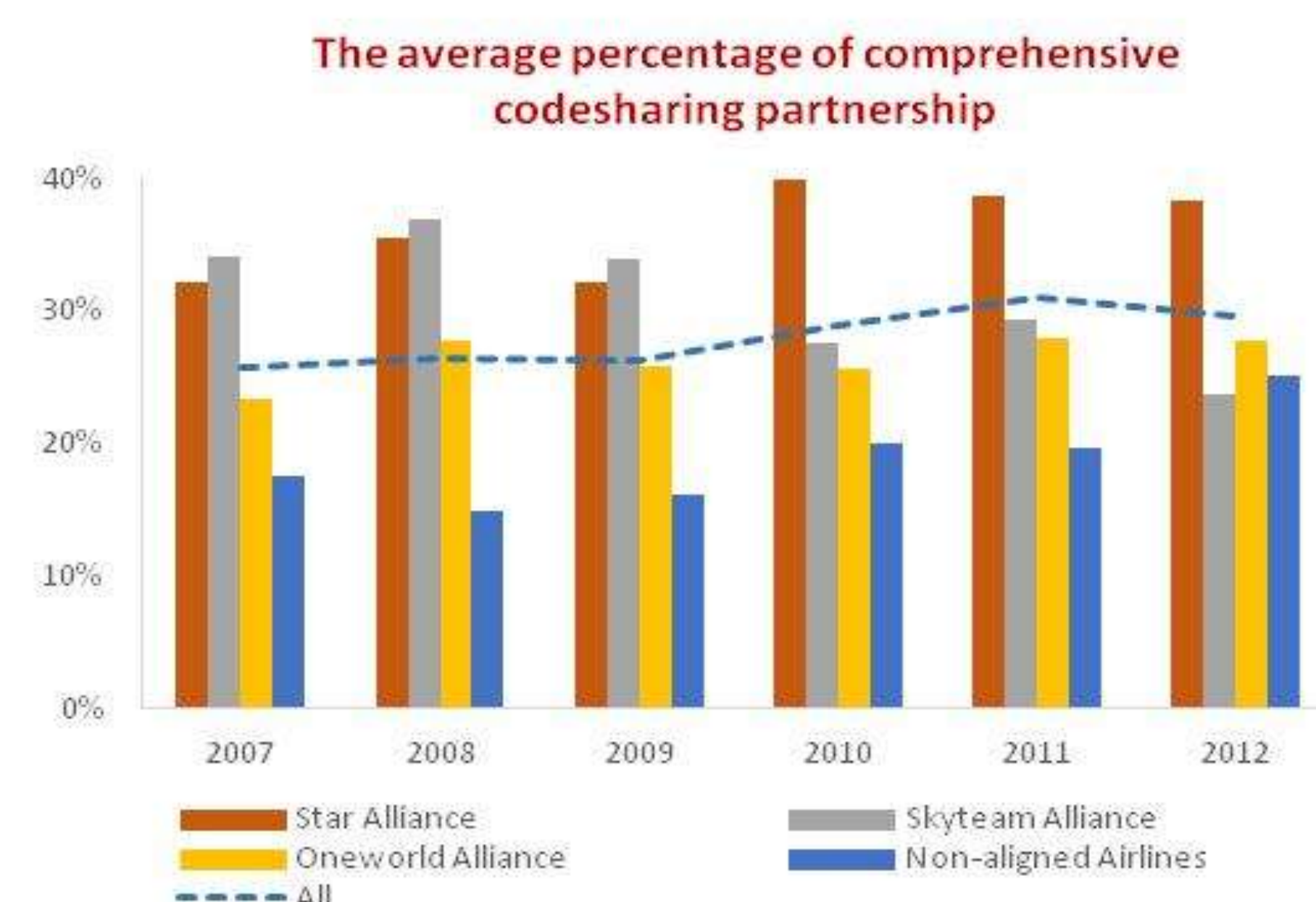
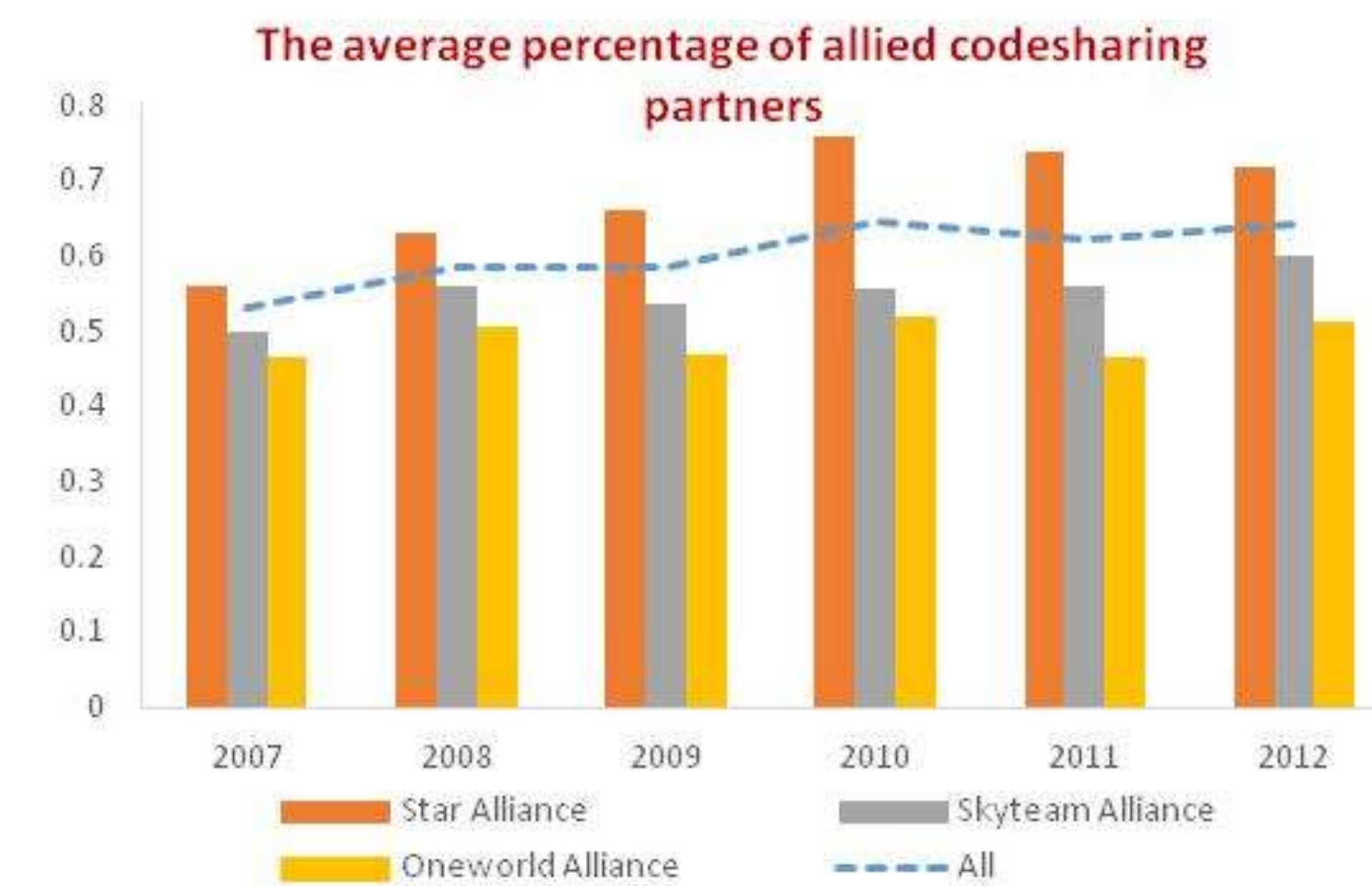
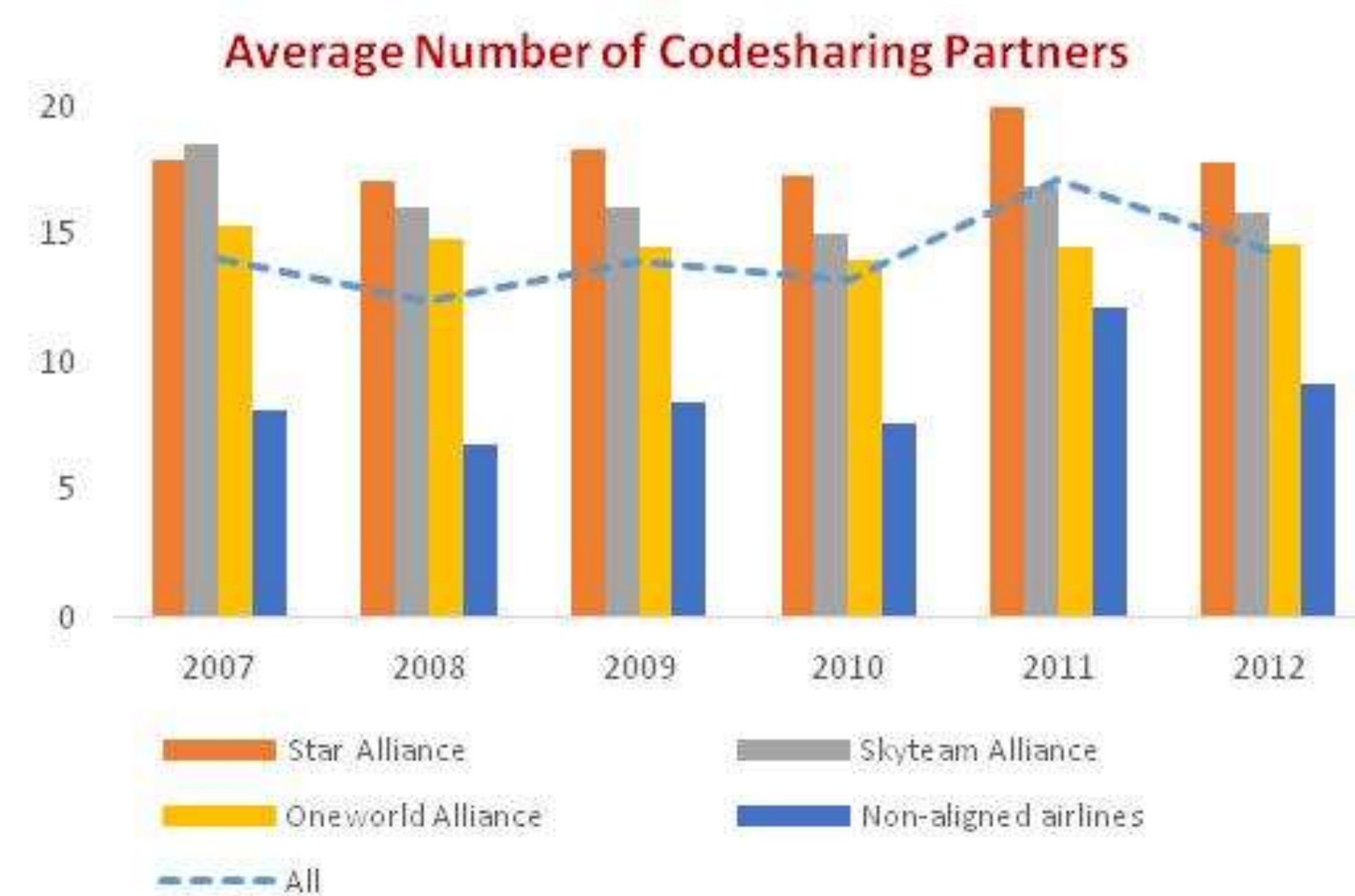
Xueqian Chen

Advisor: Dr. Li Zou



Introduction

Codesharing and global alliances both have been widely and increasingly employed by many airlines worldwide in recent years. A growing number of airlines, therefore, are embedded in networks of multilateral cooperative relationships that influence their product offering, pricing strategies, operating efficiency, market power, and the overall successes. There has been plenty of research analyzing the benefits for airlines either from joining global alliances or from building up bilateral codesharing partnerships. However, the joint effects of codesharing and global alliances on airlines' performance have not been fully investigated. In this project, we study how the use of codesharing strategies and their structural embeddedness into global alliances may impact airline performances.



Method and Analysis

The data for our analysis is mainly collected from *FlightGlobal* and *Airline Alliance Survey* published by *Airline Business*. Using panel data for 81 airlines from 2007 to 2012, we estimate the effects from a) The number of codesharing partners; b) The percentage of allied codesharing partners; and c) The percentage of comprehensive codesharing partnership that a focal airline has on its operating profit margin while controlling for other performance determining variables such as load factor, passenger yield, unit cost, operation scale (measured by ASK), and global alliances membership.

The Random-effects GLS Estimation Results for Ln(Operating Profit Margin)

Independent Variables	Model I	Model II	Model III	Model IV
# of codesharing partners	0.014***	0.017***	0.014***	0.016***
% of allied codesharing partners		0.226**		0.256**
% of comprehensive codesharing partnerships			0.027	-0.126
Ln(Load Factor)	2.297***	1.865***	2.286***	1.887***
Ln(Passenger Yield)	1.760***	1.945***	1.762***	
Ln(Unit Cost)	-1.997***	-2.202***	-2.000***	-2.187***
Ln(ASKs)	-0.011	-0.009	-0.013	0.002
Star Alliance	-0.071	-0.351***	-0.077	-0.332***
Skyteam Alliance	-0.053	-0.273***	-0.056	-0.263***
Oneworld Alliance	0.162*		0.162*	
No. of observation	338	232	338	232

Note: *** Significant at 0.01 level; ** Significant at 0.05 level; * Significant at 0.1 level.

Conclusion and Implications

- There is a highly significant and positive relationship between the number of codesharing partners and an airline's operating margin.
- For an airline planning to develop codesharing partners, it is better to choose those in the same global alliance for greater operating margin improvement.
- The use of comprehensive codesharing partnership has no significant effect on an airline's operating margin.
- Among the three global alliances, member airlines of Oneworld, on average, perform better than those in Star and Skyteam.