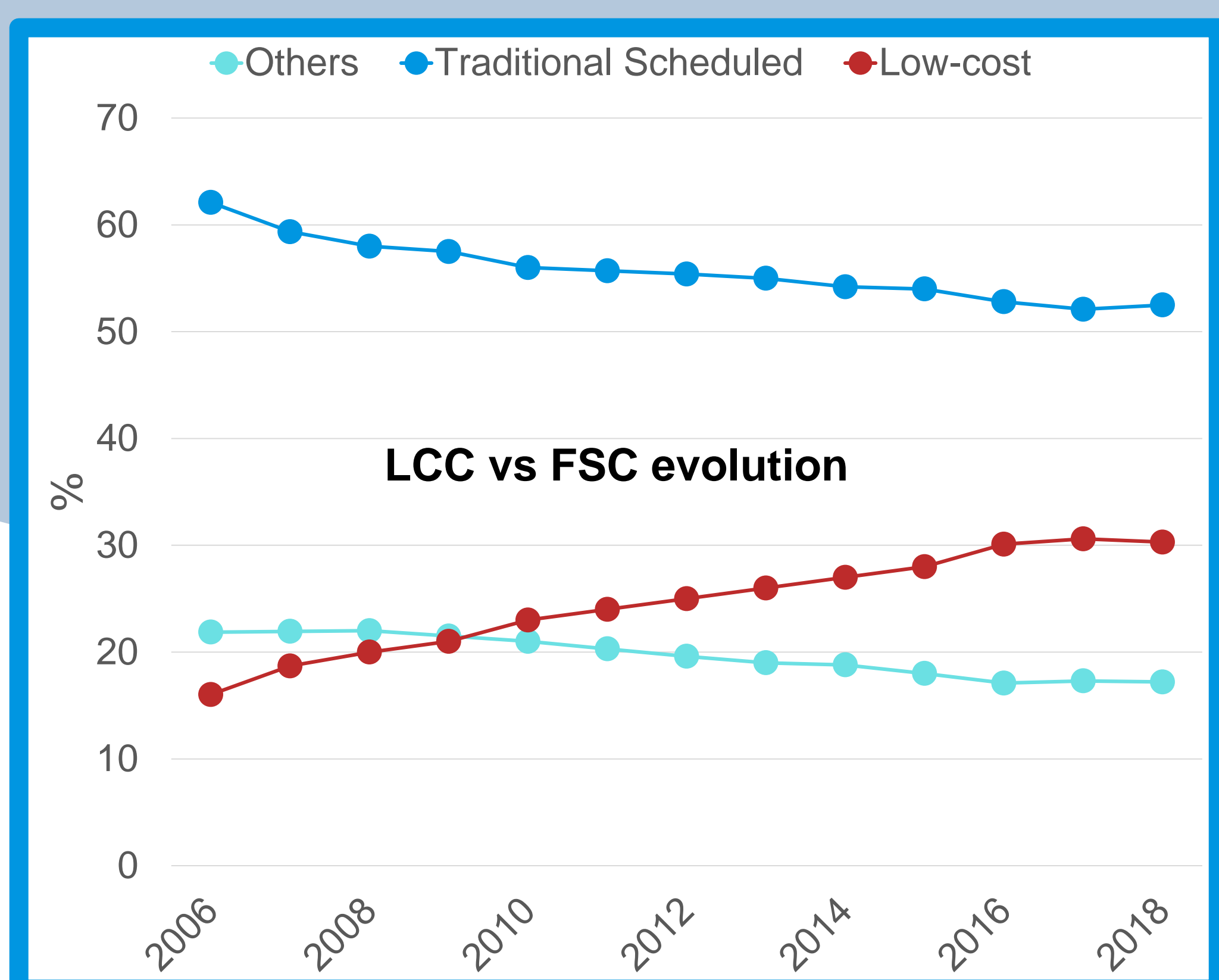


Similitudes between EO small sats and LCC strategy value curve model

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Marina García Berenguer marina.gb.479@gmail.com

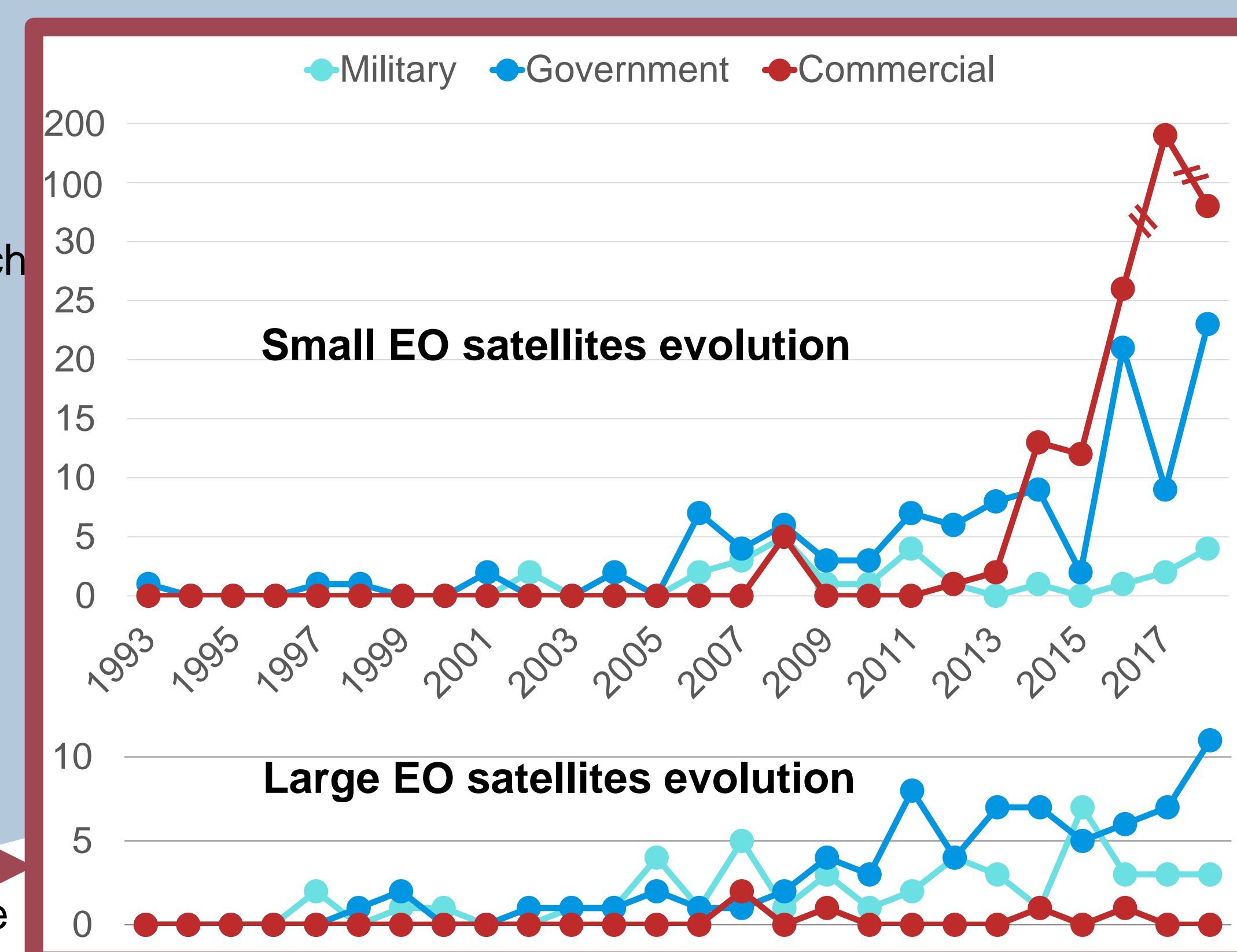
An estimation of the EO space market can be done by comparing its evolution with the airlines one by means of the strategy value curve CANVAS^[1].

Airlines market evolution



First aircraft 1903
First FSC airline 1919
EU market liberalization 1993
First EU low-cost airline (Ryanair) 1995
Market share 2018 [2]

Earth Observation market evolution

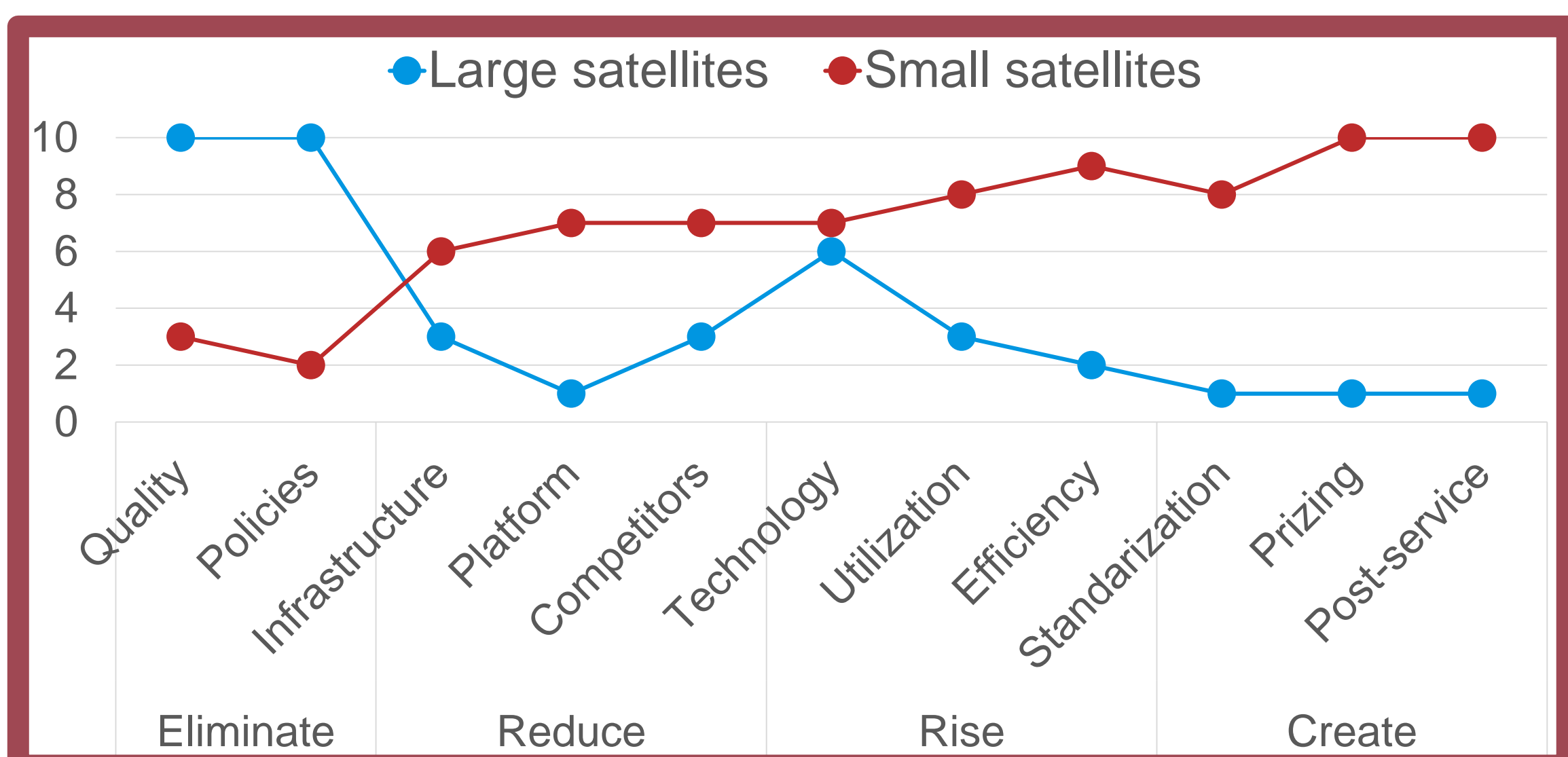
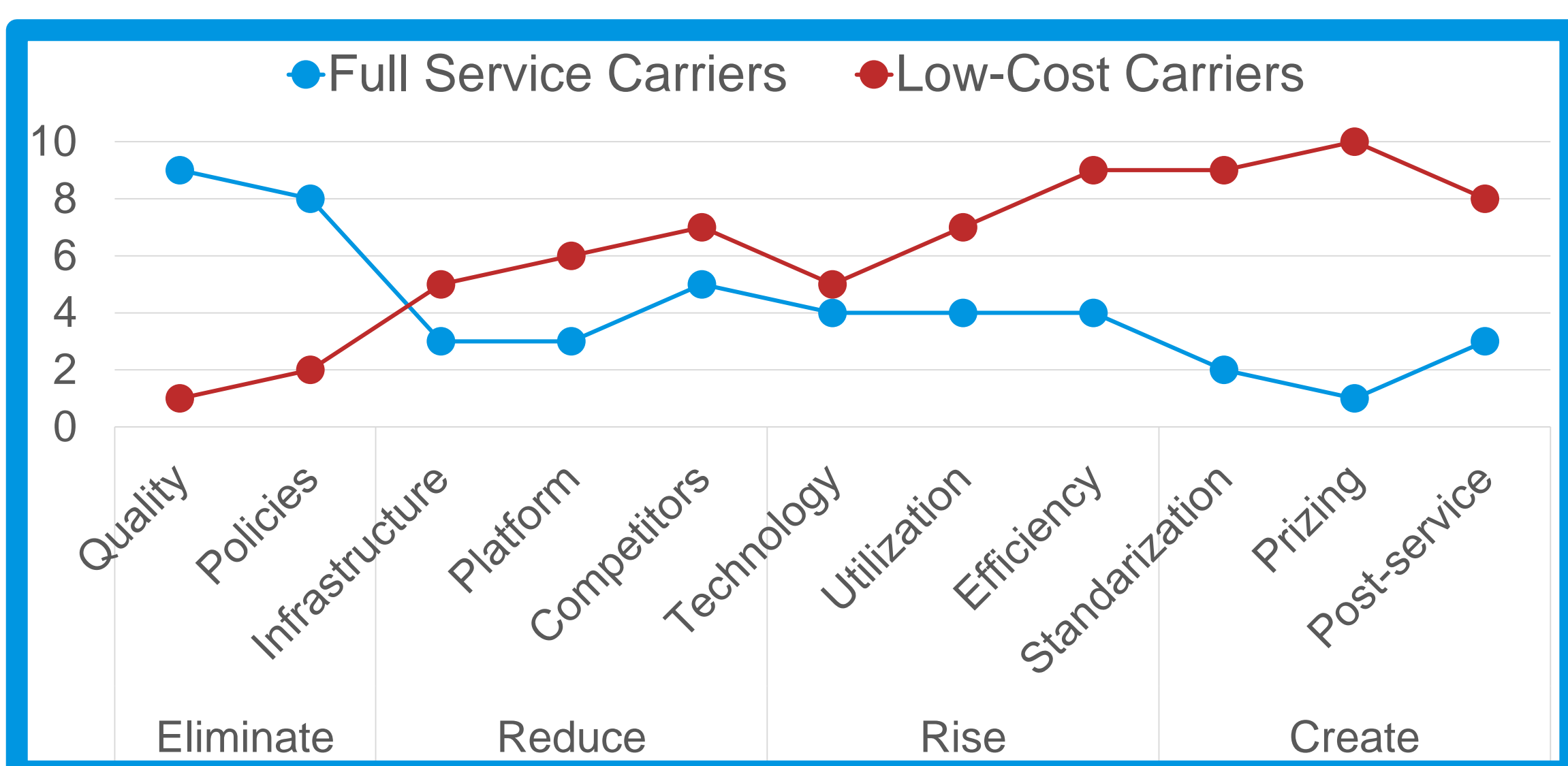


1957 Sputnik launch
1960 First weather EO satellite
1998 First cub Sat
2018 [3] Market share

	Key factor	Airline's definition	Satellite's definition
ELIMINATE	Quality	Reduction of passenger comfortability	Reduction of redundancies and lifespan
	Policies	Eliminate free inflight services, less flexibility	Dependence on the orbits and altitude of the big players, no flexibility
REDUCE	Infrastructure	Small airports for small aircrafts	Cheap ground stations and communication network for LEO satellites
	Platform	Use of secondary airports	Use of secondary launching methods (piggyback, etc.)
	Competitors	Competition with FSC and land and sea transport	Competition with large and GEO satellites and drones

	Key factor	Airline's definition	Satellite's definition
RISE	Technology	New technology to increase the efficiency	New technology to improve the resolution
	Utilization	Point-to point, local flights	One and specific short mission
	Efficiency	Ground times and delay reduction	Staff reduction and agile design method
CREATE	Standardization	One type of aircraft in the fleet	Standardization and modularity of satellites
	Prizing	Low ticket prizes	Low production prize
	Post-service	Extra services as baggage service, car renting, hotel reservation, etc.	Post-process of the image to fit the client needs (VAS)

Strategy value curve airline CANVAS



Strategy value curve EO satellite CANVAS

Discussion and conclusions:

- The final purpose is to determine if the EO space market evolution has similitudes with the airlines market evolution
- The LCC gain weight in the market share due to the air traffic liberation and the technology improvements on efficiency
- The small sat market is starting to grow in the commercial applications more than the large one but it is not yet a consolidated market
- Both, the starting point of grow and the Key Factors of the LCC airlines and the small sat market, are similar so the results can be compared
- The airlines value curve CANVAS shows a profitable low-cost business model that remarks the low prizes over the comfort of the clients
- The satellite canvas shows correlations between the two models, in this case the business remarks are post-service product over mission complexity

References:

- [1] W. Chan Kim, R. Mauborgne, Blue ocean strategy: how to create uncontested market space and make the competition irrelevant, Harvard Business School Publishing Corporation, 2005.
- [2] Eurocontrol, Forecasting (Supporting European Aviation), (n.d.). <https://www.eurocontrol.int/forecasting>.
- [3] Union of Concerned Scientists, UCS Satellite Database, (2019). <https://www.ucsusa.org/resources/satellite-database>.