Airline unit costs: hub systems vs point-to-point

Abstract:

One of the major advantages of hub and spoke systems is their supposed ability to offer significant advantages in terms of economies of scale and scope. This should give them lower unit costs than point-to-point networks.

This paper looks at the evidence of this from previous studies and explores the truth in this hypothesis in terms of both short/medium haul and long-haul markets. Few of the previous studies distinguished between sector lengths in this way. However, earlier studies did not have the more widespread experience of successful short-haul *scheduled* point-to-point LCC operations.

For short-haul markets, it is concluded that the scale economies are not likely to be significant and in any case more than outweighed by lower productivity compared to point-to-point operators. The hub system model may not even offer many more non-stop connections than a combination of car/bus and LCC flights.

On the other hand, the hub model is still more effective for long-haul markets than point-to-point, also suggesting that long-haul LCCs will not have the same impact that they have on short-haul routes. However, its advantage may decline in the future both from increased hub congestion and the introduction of more economic 200 seat long-haul jets (the B787 and perhaps the A350). The internalisation of noise and emissions costs might also improve the relative economics of long-haul point-to-point operations.