

Virgin Galactic goes public and leads space tourism race

November 5 2019, by Louis Brennan



The view from space on Virgin Galactic's first spaceflight. Credit: Virgin Galactic

Richard Branson rang the opening bell at the New York Stock Exchange on October 28 as Virgin Galactic became the first commercial spaceflight company to list on the stock market. It was valued at <u>more</u> <u>than US\$1 billion</u> following its merger with publicly-listed holding firm Social Capital Hedosophia, then experienced a 20% drop in its share



price after a week of trading. It is now worth around US\$800m.

The route to success in the space tourism industry is bound to be a wild ride and Branson is hoping his first mover advantage will bring healthy returns in the long run. Indeed, this high-risk venture could well pay off—it's just a question of when.

Virgin Galactic was founded in 2004 to offer paying customers a trip into suborbital space. For US\$250,000, anyone can take a 90-minute flight into the upper reaches of the atmosphere where they will experience a few minutes of weightlessness and see the curvature of the Earth's surface. <u>According to Virgin</u>, 600 people from some 60 countries have already made their reservations, while a further 3,700 people have registered for the opportunity to buy flights once ticket sales are back on offer. This suggests that the combination of Branson's marketing prowess and the allure of space for humans are a plausible value proposition for investors.

Virgin is also offering a much cheaper route to experiencing space than its competitors. There have only been seven space tourists to date <u>and</u> <u>none since 2009</u>. All travelled on a Russian Soyuz spacecraft to the International Space Station (ISS) at a reported price tag of tens of millions of dollars.

NASA announced in June that it would offer trips to the ISS at a cost of US\$35,000 per night, not including the cost of a taxi ride there from SpaceX and Boeing. The cost of these rides is likely to be at least US\$60m, which is what NASA pays to take its astronauts to the ISS, and these visits are due to start in 2020. In September 2018, <u>SpaceX unveiled its 2023 lunar passenger flight</u> that would take Japanese billionaire businessman Yusaku Maezawa and six of his guests on a space <u>flight</u> around the moon using its Big Falcon Rocket for an undisclosed, but certainly a very substantial, price.



Substantial progress

Although it has yet to fly any paying passengers and is currently loss making, Virgin Galactic aims to be profitable by 2021, based on completing 115 flights that generate US\$210m in revenue. By 2023, it is forecasting revenues of US\$590m and expects to have flown more than 3,000 passengers. Since that number is a tiny portion of the target market of high net-worth individuals with assets of at least US\$10m, its projections could well be achievable. And, currently, Virgin Galactic appears to be ahead of Elon Musk's SpaceX and Jeff Bezos' Blue Origin in fulfilling the vision of space tourism.

While Virgin Galactic has <u>failed to deliver on expectations in the past</u> – it missed its own targets for flights commencing and experienced a catastrophic accident in 2014—it has more recently made substantial progress. In December 2018 it achieved its <u>first suborbital space flight</u>. Given that achievement and subsequent progress, it seems likely that commercial flights could commence within the next 18 months.

It is also diversifying its offering as it gears up for launch. In collaboration with the sportswear maker Under Armour, Virgin Galactic has developed a line of high-tech clothing that its passengers will wear on their flights. At the same time, it is moving into its new facilities at Spaceport America in the desert lands of New Mexico.

Spaceport America, where Virgin's flights will take off from and return to, has a US\$220m investment by the New Mexico government. It is also here that passengers will undergo three days of training to prepare for the G-forces and weightlessness that they will experience on flights.

The business of space tourism is only just beginning. Air travel similarly started small with a limited target market, but grew to become a mass market with many commercial air carriers and millions travelling every



month, served by airports that over time became large commercial hubs. The trajectory for space tourism travel in the decades to come <u>has the</u> <u>potential to be similar</u>. From a highly niche market, it can become one that has much broader appeal when costs reduce.

At the same time, spaceports can, like airports before them, become large concentrated centres of commercial activity. Should Virgin Galactic maintain its first mover advantage in <u>space</u> tourism in the years ahead, there is the prospect for healthy returns to investors in this high risk venture.

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