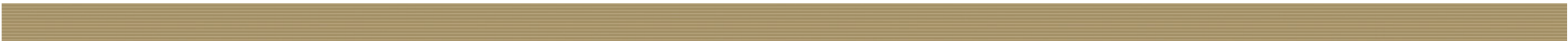




Angel Investment in Space Access

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Focus: Space Access Costs



- Current rates: Putting an object in orbit costs twice its weight in gold.
- It's hard to build a factory with \$10,000 wrenches and \$3 million commutes!
- Need a 100x reduction in launch costs, or *nothing else matters.*



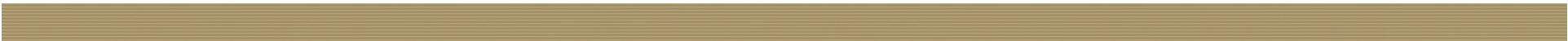
Angels vs. Institutions



Angels

- Investing our own money
- Typically interested in adding value
 - Advisory role, making contacts, etc.
- Can invest solo or in groups
- “You gotta believe!”

Institutions (VCs, etc.)

- Investing someone else’s money
 - Following rules established at fund inception
 - Most prefer to be “fast followers” ... not the first into a sector
 - Pure financial focus
- 

Angel Investment



- Usually \$100K—\$1 million per deal
- U.S. activity: \$24 billion/year
 - Primarily invested by groups of angels in small companies close to home

Relevance to space access

- It may be hard to assemble a group!
 - Companies typically need more than \$1M.
 - And they're typically not close to home.
- ▶ So we've seen the rise of the "super-angels"
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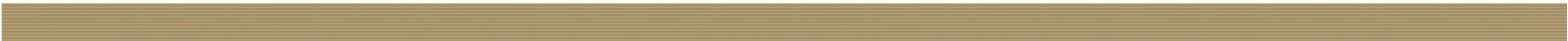
Angel-Financed Space



Super-Angels

- Paul Allen, SpaceshipOne
- Richard Branson, Virgin Galactic
- Elon Musk, SpaceX
- Jeff Bezos, Blue Origin
- Robert Bigelow, Bigelow Aerospace
- John Carmack, Armadillo Aerospace

Traditional Angels

- XCOR
 - Rocketplane Kistler
 - Constellation Services
 - TGV Rockets
 - Masten Space
 - UP Aerospace
 - PlanetSpace
 - Starchaser (UK)
 - etc...
- 

What's Needed Now



- Success stories!
 - Next SpaceX launch
 - Next Genesis module launch
 - First suborbital tourist launch
- Successful exits (IPO Or M&A)
 - Biggest single factor in overcoming angel skepticism (*Hi, Paul!*)
 - Prove we can make money at this!
- Formation of space-focused angel groups
 - Involve more investors without billions in personal assets