Emerging Risk

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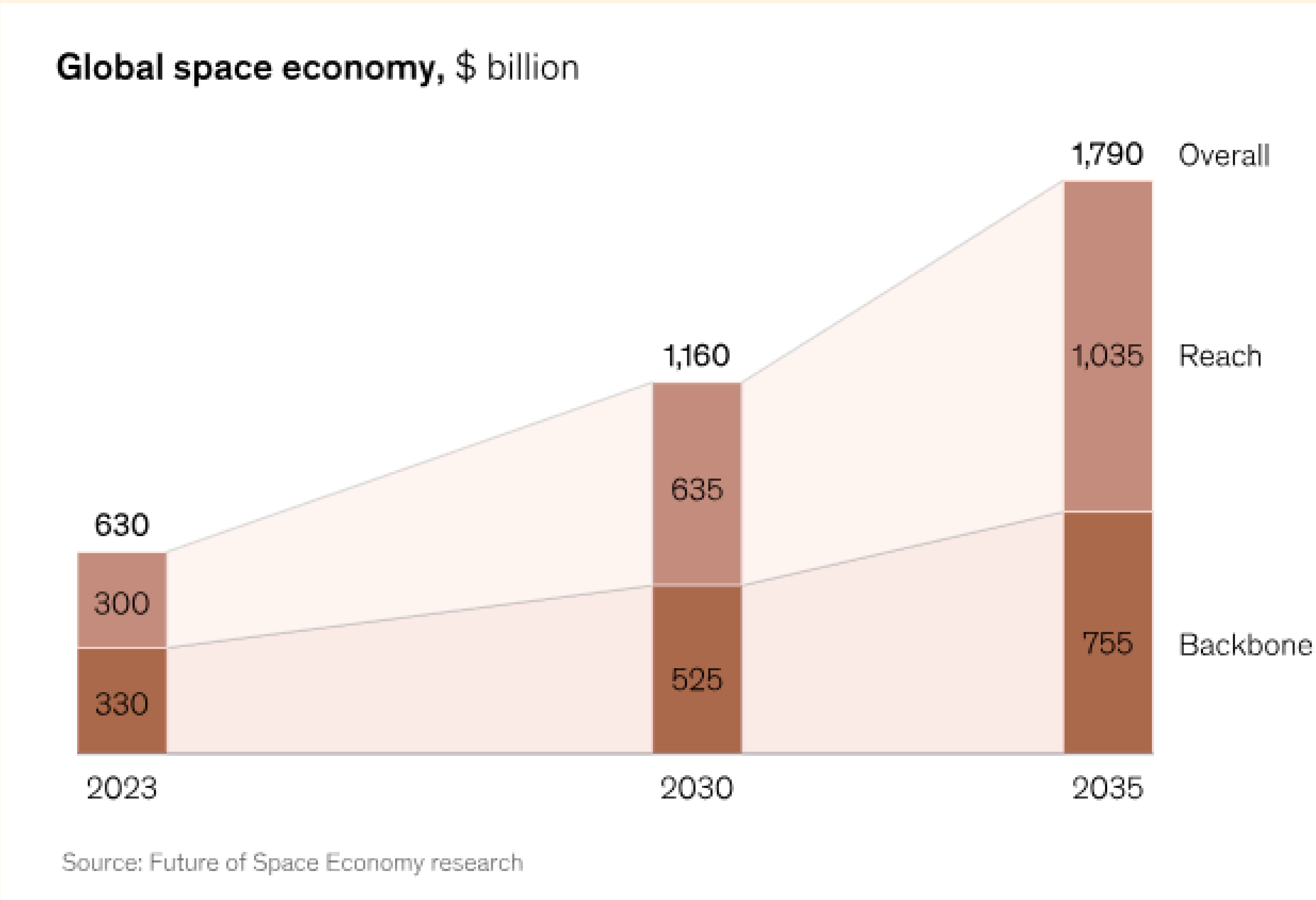
Spotlight 4

Beyond Earth: Insuring the space economy

1

Space economy take off



- 16000 + functioning satellites
- > 1.2M debris objects >1cm estimated

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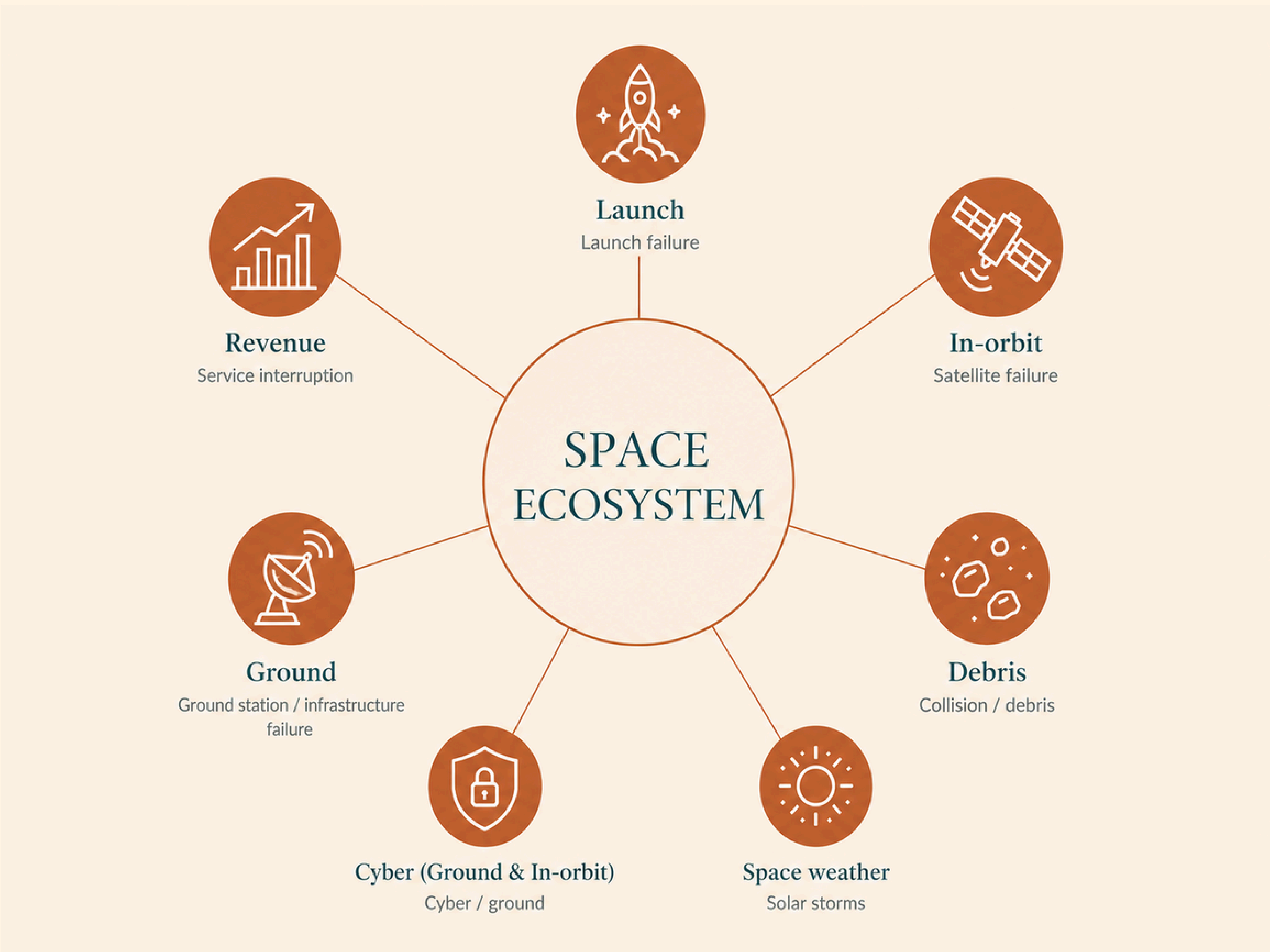
2

Launch failure has been the focus for traditional insurers

Space insurance already spans pre-launch, launch, inorbit and liability cover but the risk landscape is expanding rapidly.



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3

Insurance asset may be in space but economic loss happens on Earth

Space disruption	Impact on earth
Satellite failure	Connectivity disruption
Loss of navigation	Aviation, ship, logistics
Space- weather event (solar storm)	GPS and power infratructure
Debris/Collision	Other space crafts impacted

Similarly, ground infrastructure failure and cyber attack can lead to space disruption and interruption of services.

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4

What major insurers say?

AXA

"Market has shifted from a few large satellites toward many smaller spacecraft"

beazley

On-orbit servicing is going to be an insurable activity

Lloyd's has highlighted insurance's role in missions such as Astroscale's debris-removal demonstration.

LLOYD'S

Allianz

LEO connectivity to become increasingly important for autonomous vehicles, robotics, drone logistics and AI-enabled infrastructure

5

Closing notes

The actuarial problem is no longer “What is the probability this satellite fails?”

It is “How many insured exposures fail from the same cause?”

Follow Suguna Jayaraj for emerging risk insights and applied AI for insurance

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