



living planet BONN 23-27 May 2022

TAKING THE PULSE OF OUR PLANET FROM SPACE









New Space - new entrepreneurship frontier

Wojtek Walniczek, OTB Ventures

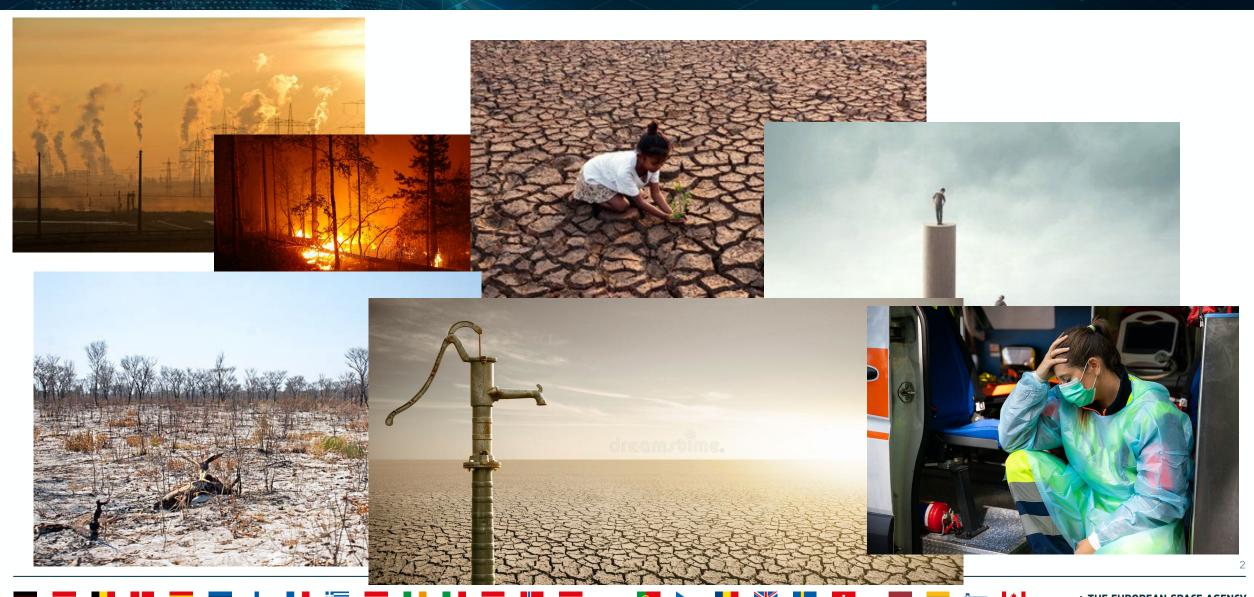
26 May 2022

ESA UNCLASSIFIED - For ESA Official Use Only



The world seems to be in a precarious place





The last 2 years seemed like a constant onslaught of crises





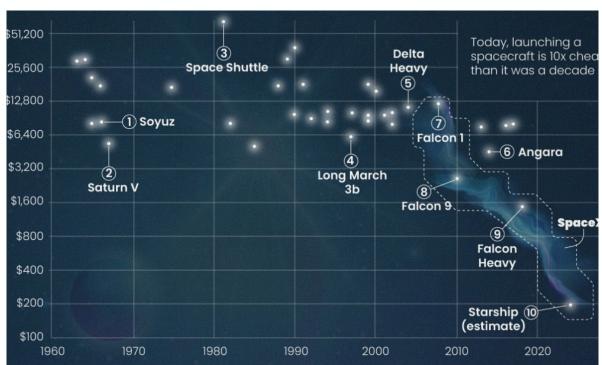
Inflation hits new high in eurozone Harmonised index of consumer prices (annual % change) — Eurozone HICP — ECB target 6 4 1997 2000 2005 2010 2015 2020 2022 Source: European Central Bank

Source: European Central Bank, FT, various

But then this happens...







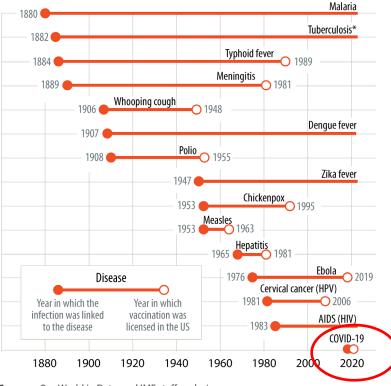
Source: YouTube, SpaceX, Center For Strategic and International Studies

...or this...





COVID-19 vaccines were developed at a speed never seen before in history.



Sources: Our World in Data; and IMF staff analysis.

Note: *The only vaccine against tuberculosis is bacillus Calmette-Guérin (BCG), but there is no effective vaccine to prevent tuberculosis in adults. There is a partially effective vaccine against Dengue virus (CYD-TDV). Not all cervical cancers are caused by the HPV virus, but the HPV vaccine does protect against other cancers caused by the HPV virus. The hepatitis vaccine in the chart is for hepatitis B.

Source: Our World in Data, IMF







































What underlies those innovative breakthroughs



Science

Basic research, new discoveries +

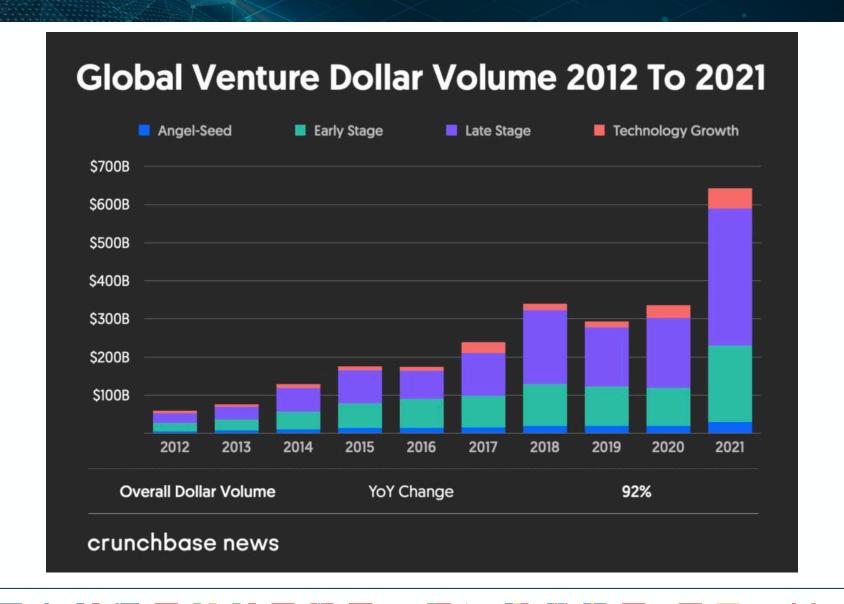
Entrepreneurship

Commercialization, scalability, sustainability

Two forces that give hope...

Booming investments into technology startups



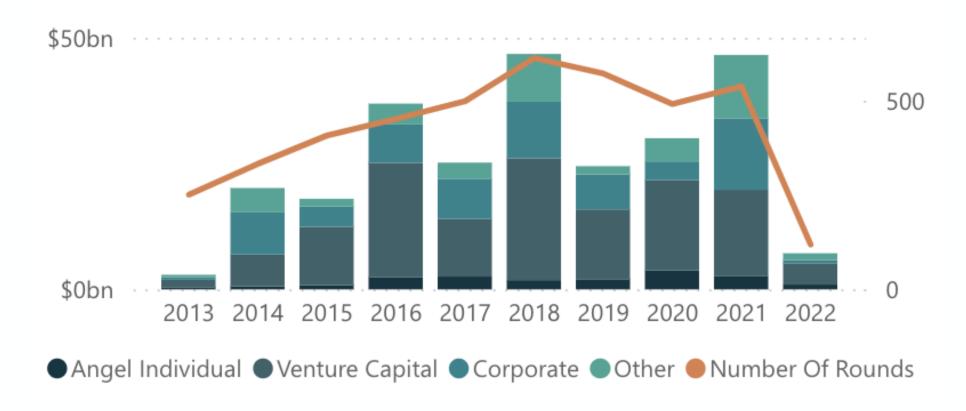




... including SpaceTech



Equity Investment by Investor Type



Source: Space Capital's, Space Investment Quarterly, Q1 2022

Just to be clear what we are talking about



Near-Earth

- Real-time, high-resolution EO systems
- 1mm on-ground change detection
- In-space molecule and semiconductor production
- Near-constant connectivity
- Hypersonic travel
- Etc.

Outer Space

- Lunar infrastructure (landing, habitat, connectivity, etc.)
- Missions to and colonialization of Mars?
- Space mining?
- Etc.

We're just at the very beginning

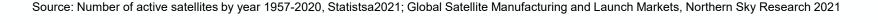


Satellites launched / to be launched by years:

> 2001-2010: 290

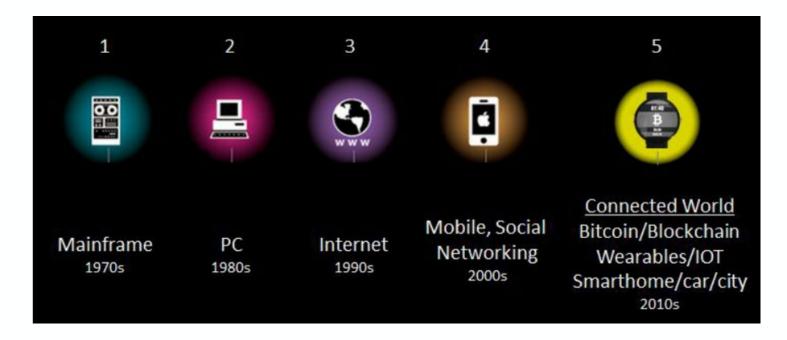
>2011-2020: ca. 2,500

> 2021-2030E: ca. 23,000

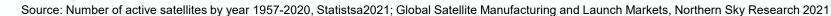


We're just at the very beginning













































Call to action / call to arms



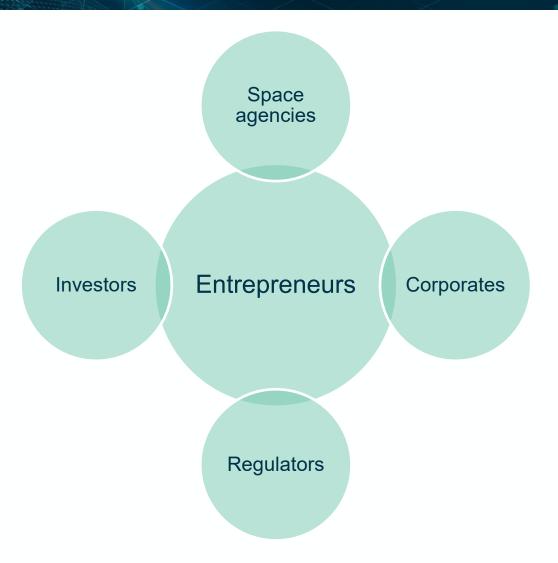
To all the entrepreneurs, builders and mavericks out there:

"Stay hungry, stay foolish" Steve Jobs "It's time to build"

Marc Andreessen

How can we enable that in Europe





OTB Ventures



- \$170m Fund
- Series A and late seed: \$1-9m investments in the first round
- DeepTech focused, unique and defensible tech / IP
- Particular interest in: SpaceTech, Fintech
 Infrastructure, Enterprise Automation, Cybersecurity
- European-based founders and companies