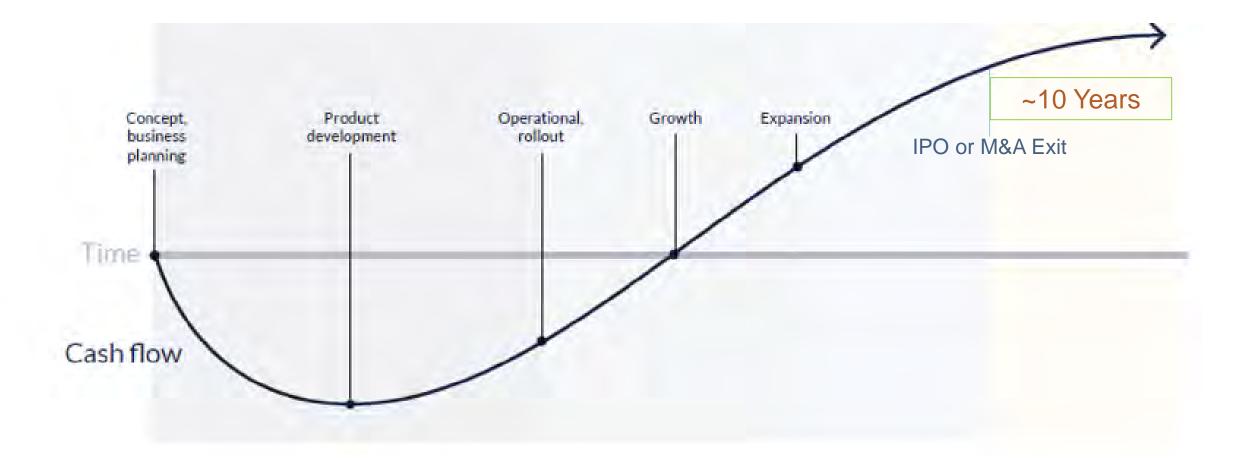
Startups and the American Jobs Plan



Why are VC-Backed Companies Critical to AJP's Success?

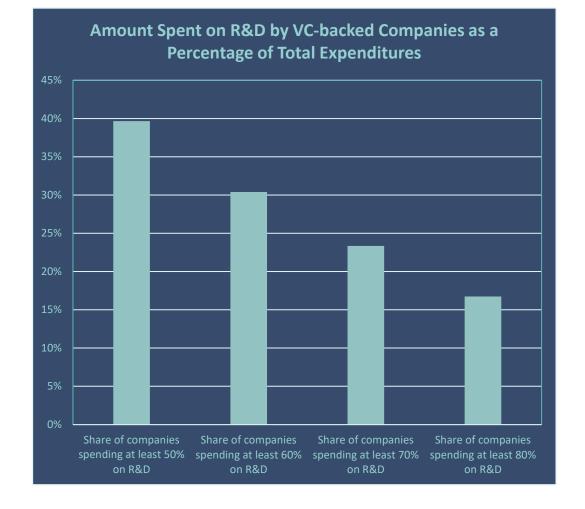


VC is capital-intensive long-term investment



VC-backed companies are the most innovative in the world

- Heaviest R&D investment among Fortune Global 500 companies is 26% of revenues.
- R&D spend at more than half of VC-backed companies exceed 30% of total expenditures.
- Venture capital investment generally technology focused.

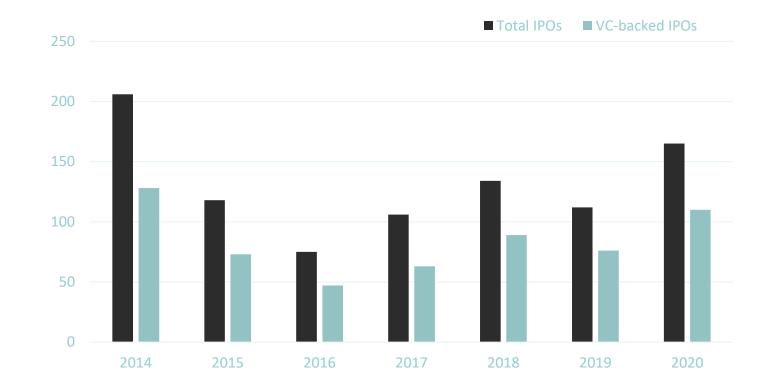


New industries in the modern economy driven by young firms

VC-backed companies about 50% of all companies that go public each year

Historical examples include:

- Semiconductors: IBM largest tech co at the time VC-backed Intel went public in 1971.
- **Biotechnology:** Bristol Myers Squibb largest pharmaceutical co when VC-backed Genentech went public in 1980, launching the biotech industry.
- **mRNA:** VC-backed Moderna went public in 2018.



IPOs by Year 2014-2020

Background on Arizona Startup Ecosystem



Arizona startup ecosystem overview



- 2020: 111 AZ-based companies raised \$626m in VC financing (22nd and 21st in US respectively).
- From 2015-2020, 697 AZbased companies raisde \$3.95B in VC financing.

AZ growth companies

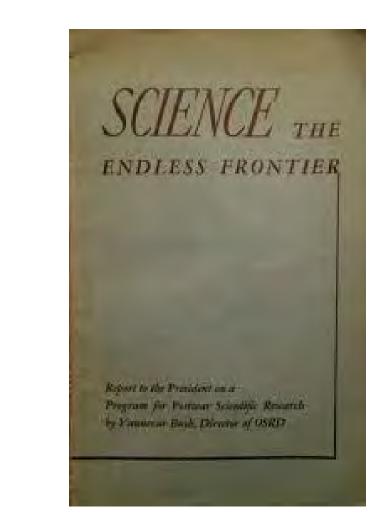
- Examples include:
 - **EnPower** (Phoeniz AZ): Electrode coating technology to increase charging rates and withstand a wide range of use conditions for long periods of time.
 - **Source** (Phoenix AZ): Hydropanel technology to pull pure water out of dry atmospheres for human use.
 - Navajo Power (Flagstaff, AZ): Provider of clean energy projects designed to develop utility-scale clean energy projects on tribal lands.
 - NP Photonics (Tucson AZ): Manufacturer of fiber lasers and specialty fiber intended for the sensing, defense, metrology and research markets.
 - **CampusLogic** (Phoenix, AZ): developer of tools and resources used by college officials to help students manage scholarships, loans and other financial supports.

Harnessing Innovation to Expand Economic Opportunity



R&D & economic development

- Biden economic agenda relies heavily on modernizing innovation policy to achieves its goals:
 - \$180 billion federal investment in basic research
 - NSF Technology Directorate for R&D investment into critical technologies
 - Upgrade research infrastructure in labs
 - Establish new research agencies
 - ARPA-H
 - ARPA-C



Endless Frontier Act

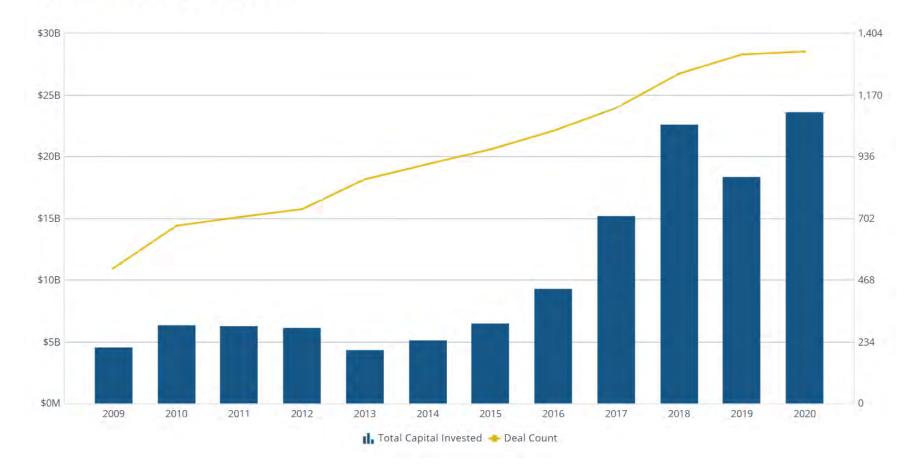
- Establishes NSF Directorate in Technology and Innovation
 - \$100b to accelerate ten key technology focus areas through research and grants
 - Relevant programs to NVCA:
 - Academic Tech Transfer: priorities include development of new businesses and entrepreneur participation; encourage revising institution policies for academic tech transfer best practices
 - Test Bed: priorities include development of new businesses and participation of entrepreneurs
 - R&D: opportunity for research grants for startups
- Establishes Regional Tech Hub program at Dept. of Commerce
 - \$10b to establish regional hubs supporting tech focus areas and innovation strengths
 - Priorities: access to capital for new business formation; relationships with business leaders and investors; entrepreneurship training

Startups and Climate



2020 record year for VC investment in climate

Capital Invested & Deal Count



Technology areas of focus

Energy sources & storage

• Technologies to improve the generation of clean energy, perhaps greatest focus now on storage technology

Transportation, infrastructure & mobility

• Smart grid, EV charging infrastructure, building energy efficiency, smart city technology, autonomous vehicles, clean public transit

Agriculture & sustainability

• Agriculture efficiency technology (soil sensors/irrigation mgmt. software etc), data collection and analysis, carbon-reduction agricultural practices, local/vertical farming, food waste prevention

Emissions

• Direct air & point source capture, carbon conversion into useful products (cement, industrial gases, clothing, jet fuel etc), carbon footprint accounting and analysis software, methane conversion into hydrogen fuels

Manufacturing

• Batteries, clean industrial and construction products, supply chain components for clean energy facilities, clean manufacturing technologies

Water & recycling

• Water treatment, technologies to clean up PFASs, water analytics/monitoring software, contaminant testing, desalination, trenchless pipelaying, zero liquid discharge

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Must avoid the fate of the last generation

- Between 2006-2011, VCs poured more than \$25B into climate technology, more than half was lost.
- More than 90% of companies failed to even return initial capital investment.
- Fracking and drop in fossil fuel prices, lack of strong and consistent climate policy, foreign dumping all major factors in the failure.

Working group policy priorities

Assistance to innovative companies

- Tax credits expanded to included storage with refundability mechanisms for startups
- Eliminate 45Q minimum scale requirements and provide increase for "innovative tech"
- Monetization of tax assets (NOLs, climate & R&D credits)
- ARPA-E SCALE-UP program, loan guarantee programs, and capital availability for new/upgraded manufacturing facilities
- Expand and modernize SBIR grant program
- Green bank
- Expand research & commercialization capacity
 - Endless Frontier Act
 - Increased investment in research programs through NSF, DOE/ARPA-E, DOD, DARPA, Agriculture
- Other government actions
 - Grid modernization & smart city tech deployment
 - Reform procurement rules to reduce barriers for government purchases of innovative climate technologies
 - Incentives for deployment of technologies to reduce impact of pollution on underrepresented communities

Tax Policy: Capital Gains and Carried Interest



AFP would impose unprecedented tax increase on long-term investment

- Taxes capital gains at 39.6%, plus 3.8% Medicare surtax
 - Would be highest capital gains rate in the world, and highest in U.S. history
 - AJP wants to encourage greater long-term investment to accomplish goals, erasing capital gains differential pushes economic policy the wrong direction
 - Even in height of New Deal era, capital gains rate didn't exceed 30%

• Taxes carried interest as ordinary income, despite no rate differential:

• "The President is also calling on Congress to close the carried interest loophole so that hedge fund partners will pay ordinary income rates on their income just like every other worker. While equalizing tax rates on wages and capital gains will address this disparity, permanently eliminating carried interest is an important structural change that is necessary to ensure that we have a tax code that treats all workers fairly."

Carried interest targets the investment funds that AJP needs to be successful

- Creates bottleneck in the President's economic opportunity agenda
 - Endless Frontier/SSBCI both will be impacted
- Targets climate and other emerging technology investment funds
- Creates barriers for new VC fund formation, particularly for aspiring VCs from underrepresented communities
- Applies tax increase to VC funds that doesn't apply to most other partnerships





Thank you.

For any further questions about the group, please email Justin Field jfield@nvca.org

