

U.S. Innovation & Competition Act Likely Passes 2022

USICA & ARPA-H Funding Boosts Life Sciences Industry

- **We think the anti-China U.S. Innovation & Competition Act (USICA) of 2021 will likely pass (tweaked) in 2H 2022.** Both the House and Senate have passed different versions of the “Endless Frontiers” or “COMPETES Act.” See text of this note for the key provisions in each bill.
- **The catch-all bill funds semiconductors/chips, space exploration, and overall domestic technology innovation, reducing US reliance on China.** While mainly a non-healthcare piece of legislation, the bill aims to accelerate American innovation in medical technologies, biotech and life sciences. The bill would boost U.S. manufacturing, scientific research, and technology development in the face of growing economic, technological, and military competition from China.
- **Biggest wins for Life Sciences are science and preparedness funding, allowing for public-private partnerships, and key research focus areas: Win-win when combined with ARPA-H.** Section B establishes a Directorate of Technology and Innovation within the National Science Foundation (NSF) and authorizes other programs within the NSF and Dept. of commerce. Biotechnology, medical technology, genomics, and synthetic biology are listed as key technology focus areas that will take precedence in funding and research opportunities.
 - **Bill establishes university technology centers and innovation institutes to improve education in key areas, funding new research, and expanding commercialization and patenting of scientific advances (similar to ARPA-H).** Private industries are expected to have access to new opportunities to collaborate with federal and educational institutes and receive assistance for accelerated commercialization. Overall, the NSF is expected to pursue more public-private partnerships following passage.
 - **Congress is trying to decentralize technology development to US cities without heavy research and tech investments.** Creation of a regional tech hub program at the Dept. of Commerce will provide collaboration opportunities for private companies in this aspect. In USICA, the regional hubs will focus on workforce education, entrepreneur development, technology maturation and collaboration between state, local, and private industry to increase geographic diversity in tech.
 - **A plus for companies and start-ups looking to establish away from highly competitive localities like CA, MA, and TX.** The direct financial benefit is expected to be negligible as the program only has \$10 B in authorized grant funding over the next 5 fiscal years.
- **USICA was passed by the Senate on June 8, 2021. The equivalent America COMPETES Act was passed by the House on February 4, 2022.** Reconciliation is ongoing and significant changes are expected due to major differences in provisions between each version, especially in Section B. A major House-Senate bill difference is in the new technology directorate. The House largely leaves intact the NSF infrastructure and leaves the smaller technology directorate (\$13 B) to the discretion of NSF, while the Senate creates a new technology division under the directorate (\$29 B) which remains separate in the NSF ecosystem. Conversely, the House bill directs the Department of

Energy to take a larger role in energy innovations (\$150 B authorized compared to \$17 B) and the Department of Commerce is expected to lead a significant number of programs (\$85 B compared to \$17 B). A reconciliation process will hammer out these differences.

- **In tandem the Administration has obtained \$1 B for Life Sciences/ARPA-H funding this year.** Note that ARPA-H is a DARPA inspired investment to fund high-risk, game-changing investments in public health. ARPA-H is designed to be a vehicle for accelerating innovation that doesn't fall into a specific "public" or "private" investment category, and it is expected to leverage public-private partnerships to bring scientific discovery to market. ARPA bolsters the legislative initiatives mentioned in this note.
- **NEXT STEPS:** See text for a summary of the major sections of both the House & Senate bills, which we note are mainly comprised of non-healthcare innovation (e.g., semiconductors, space exploration) measures. Senate leadership is discussing appointing a Conference committee to work out the differences in each chamber's bill. While passage of the US Innovation & Competition Act is possible stand-alone 2H 2022, another logical place for inclusion is in the "must pass" FDA User Fee Act 3Q22. The Pandemic Preparedness bill passed by a Senate Committee today is also expected to be folded into the FDA User Fee Act. Separately, ARPA-H funding boosts the government's ability to invest in promising technologies, working with the private sector on anything from cancer detection and screening, novel diagnostics as well as emerging technologies, like SynBio.

Background

Senate bill summary below and CBO score is [here](#)

S. 1260 would authorize appropriations and provide direct appropriations for programs to improve U.S. competitiveness in technology and communications.

USICA

- Division A would, among other things, provide appropriations aimed at strengthening the domestic industry for semiconductors and microelectronics.
- Division B would establish a technology directorate within the National Science Foundation (NSF) and would authorize other programs within the NSF, the National Institute of Standards and Technology, and the National Aeronautics and Space Administration (NASA).
- Division C would specifically authorize appropriations of about \$38.5 B over the 2021-2026 period for international affairs programs, primarily for the United States' contribution to the Inter-American Development Bank, foreign assistance programs for the Indo-Pacific region, and Department of State operations.
- Division D would establish a Made in America Office to prioritize federal procurement of materials produced in the United States, establish a Cyber Response and Recovery Fund to coordinate with nonfederal partners to assess risks of a cyber-attack, and provide resources for response and recovery.
- Division E would establish sanctions to counter illicit trade and forced labor, cyberattacks, and intellectual property theft.
- Division F would create or amend and reauthorize several elementary, secondary, and higher education grants programs, amend the statutes authorizing the Truman and Madison Foundations, require institutions of higher education to disclose certain gifts from and contracts with foreign sources, and establish requirements that institutions of higher education with certain types of cultural partnerships must meet in order to be eligible to participate in the federal student aid programs. This division also would change the structure for filing fees collected from some businesses that are considering a merger or acquisition.

House bill summary is below and CBO score is unavailable.

COMPETES Act

The America COMPETES Act includes investments for:

- Supercharging investments in semiconductor chips with \$52 billion to support U.S. production of semiconductors — a key component in consumer electronics, cars, healthcare, defense systems and other key products.
- Strengthening supply chains and manufacturing at home with \$45 billion to improve our nation's supply chains and strengthen our economy and national security by preventing shortages of critical goods and ensuring that more of these goods are made right here in the United States.

- Advancing American scientific research and innovation excellence with a suite of bipartisan science, research and technology bills to increase American innovation.
- Promoting U.S. global leadership by positioning the interests and values of the United States to win on the world stage, including strong action to hold the People's Republic of China accountable for its trade abuses and human rights violations.