

**Calendar No. 222**

117TH CONGRESS }  
2d Session }

SENATE

{ REPORT  
117-109

SECURING SEMICONDUCTOR SUPPLY  
CHAINS ACT OF 2021

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R E P O R T

OF THE

COMMITTEE ON COMMERCE, SCIENCE, AND  
TRANSPORTATION

ON

S. 3309



MAY 17, 2022.—Ordered to be printed

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SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED SEVENTEENTH CONGRESS

SECOND SESSION

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### SECURING SEMICONDUCTOR SUPPLY CHAINS ACT OF 2021

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MAY 17, 2022.—Ordered to be printed  
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Ms. CANTWELL, from the Committee on Commerce, Science, and  
Transportation, submitted the following

### R E P O R T

[To accompany S. 3309]

[Including cost estimate of the Congressional Budget Office]

The Committee on Commerce, Science, and Transportation, to which was referred the bill (S. 3309) to require SelectUSA to coordinate with State-level economic development organizations to increase foreign direct investment in semiconductor-related manufacturing and production, having considered the same, reports favorably thereon with an amendment (in the nature of a substitute) and recommends that the bill (as amended) do pass.

#### PURPOSE OF THE BILL

The purpose of S. 3309, the Securing Semiconductor Supply Chains Act of 2021, is to direct the Executive Director of the SelectUSA program of the Department of Commerce (Executive Director) to gather and analyze information for a report to Congress about leveraging foreign direct investment (FDI) to bolster domestic supply chains for semiconductors.

#### BACKGROUND AND NEEDS

Semiconductors—also referred to as integrated circuits or chips—are essential to numerous goods and services that play a significant role in the Nation’s economy, from farm equipment and cars<sup>1</sup> to

<sup>1</sup>Dan Crisler, “Chip Shortages Make for ‘Frustrating’ Environment for Vehicle and Ag Equipment Dealers,” *Omaha World-Herald*, September 30, 2021 (updated November 6, 2021) (<https://www.omaha.com/story/news/2021/09/30/chip-shortages-vehicle-ag-equipment-dealers/7011117002/>)

Continued

smartphones, computers, aviation, wireless communication, and more.<sup>2</sup> A recent shortage of semiconductors, driven by a global pandemic and other factors, has threatened economic growth and countless jobs.<sup>3</sup> These events exposed vulnerabilities in supply chains for semiconductors and highlighted the important role they play in the economy.<sup>4</sup>

Advances in semiconductor technologies are driving innovations that will shape the future of the global economy and military power, such as artificial intelligence, 5G wireless communication systems, and quantum computing.<sup>5</sup> Ensuring that semiconductor supply chains can reliably fulfill the country's needs for semiconductors is necessary to the Nation's economic and national security.<sup>6</sup>

To that end, the Administration published a report in June 2021 that analyzed supply chains for semiconductors, among other critical goods, and provided recommendations to make them more resilient.<sup>7</sup> The report suggested that the SelectUSA program of the Department of Commerce could be leveraged "to attract investment in semiconductor manufacturing supply chains."<sup>8</sup> The SelectUSA program helps foreign and U.S. businesses located abroad to invest in the United States by offering various research and counseling services, as well as by working with State-level economic development organizations (EDOs).<sup>9</sup> With these capabilities, the Administration noted that the SelectUSA program is positioned to help strengthen the domestic semiconductor manufacturing ecosystem by fostering related investment in the United States.<sup>10</sup>

#### LEGISLATIVE HISTORY

S. 3309 was introduced on December 2, 2021, by Senator Peters (for himself and Senator Scott of Florida) and was referred to the Committee on Commerce, Science, and Transportation of the Senate. Senator Blackburn cosponsored the bill on December 9, 2021. On December 15, 2021, the Committee met in open Executive Session and, by voice vote, ordered S. 3309 reported favorably with an amendment (in the nature of a substitute).

omaha.com/news/state-and-regional/chip-shortages-make-for-frustrating-environment-for-vehicle-and-ag-equipment-dealers/article\_70d7cdc2-1b0a-11ec-a5a8-672f401c1196.html).

<sup>2</sup>PricewaterhouseCoopers, *The Internet of Things: The Next Growth Engine for the Semiconductor Industry*, 5, 18, May 2015 (<https://www.pwc.com/gx/en/technology/publications/assets/pwc-iot-semicon-paper-may-2015.pdf>).

<sup>3</sup>Daniel Howley, "What the Chip Shortage Means for the US Economy," Yahoo! Finance, April 22, 2021 (<https://news.yahoo.com/what-the-chip-shortage-means-for-the-us-economy-152607880.html>); see also Jack Ewing and Patricia Cohen, "How Car Shortages Are Putting the World's Economy at Risk," *The New York Times*, November 2, 2021 (<https://www.nytimes.com/2021/11/02/business/car-shortage-global-economy.html>).

<sup>4</sup>Saif M. Khan et al., Center for Security and Emerging Technology, *The Semiconductor Supply Chain: Assessing National Competitiveness*, January 2021 (<https://cset.georgetown.edu/wp-content/uploads/The-Semiconductor-Supply-Chain-Issue-Brief.pdf>).

<sup>5</sup>FP Analytics, "Semiconductors and the U.S.-China Innovation Race," *Foreign Policy*, February 16, 2021 (<https://foreignpolicy.com/2021/02/16/semiconductors-us-china-taiwan-technology-innovation-competition/>).

<sup>6</sup>Ibid.

<sup>7</sup>Biden Administration, Executive Office of the President of the United States, *Building Resilient Supply Chains, Revitalizing American Manufacturing, and Fostering Broad-Based Growth*, June 2021 (<https://www.whitehouse.gov/wp-content/uploads/2021/06/100-day-supply-chain-review-report.pdf>).

<sup>8</sup>Ibid. at 77.

<sup>9</sup>Ibid.

<sup>10</sup>Ibid. at 23.

## ESTIMATED COSTS

In accordance with paragraph 11(a) of rule XXVI of the Standing Rules of the Senate and section 403 of the Congressional Budget Act of 1974, the Committee provides the following cost estimate, prepared by the Congressional Budget Office:

U.S. CONGRESS,  
CONGRESSIONAL BUDGET OFFICE,  
Washington, DC, April 27, 2022.

Hon. MARIA CANTWELL,  
Chair, Committee on Commerce, Science, and Transportation,  
U.S. Senate, Washington, DC.

DEAR MADAM CHAIR: The Congressional Budget Office has prepared the enclosed cost estimate for S. 3309, the Securing Semiconductor Supply Chains Act of 2021.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is David Hughes.

Sincerely,

PHILLIP L. SWAGEL,  
Director.

Enclosure.

<b>S. 3309, Securing Semiconductor Supply Chains Act of 2021</b>			
As reported by the Senate Committee on Commerce, Science, and Transportation on December 17, 2021			
By Fiscal Year, Millions of Dollars	2022	2022-2026	2022-2031
Direct Spending (Outlays)	0	0	0
Revenues	0	0	0
Increase or Decrease (-) in the Deficit	0	0	0
Spending Subject to Appropriation (Outlays)	*	4	not estimated
Statutory pay-as-you-go procedures apply?	No	Mandate Effects	
Increases on-budget deficits in any of the four consecutive 10-year periods beginning in 2032?	No	Contains intergovernmental mandate?	No
		Contains private-sector mandate?	No
* = between zero and \$500,000.			

S. 3309 would direct the Department of Commerce (DOC), through its SelectUSA program, to solicit comments from state economic development organizations about how to support foreign direct investment in semiconductor production. The bill also would require the department to report to the Congress on the comments and strategies that SelectUSA may implement to increase such investment.

Using information from DOC, CBO expects the department would need two employees and six contractors over the 2022–2024 period to carry out the comment solicitation process and complete the required report. On that basis, CBO estimates that implementing S. 3309 would cost \$4 million over the 2022–2026 period; such spending would be subject to the availability of appropriated funds.

The CBO staff contact for this estimate is David Hughes. The estimate was reviewed by H. Samuel Papenfuss, Deputy Director of Budget Analysis.

#### REGULATORY IMPACT STATEMENT

Because S. 3309 does not create any new programs, the legislation will have no additional regulatory impact, and will result in no additional reporting requirements. The legislation will have no further effect on the number or types of individuals and businesses regulated, the economic impact of such regulation, the personal privacy of affected individuals, or the paperwork required from such individuals and businesses.

#### CONGRESSIONALLY DIRECTED SPENDING

In compliance with paragraph 4(b) of rule XLIV of the Standing Rules of the Senate, the Committee provides that no provisions contained in the bill, as reported, meet the definition of congressionally directed spending items under the rule.

#### SECTION-BY-SECTION ANALYSIS

##### *Section 1. Short title.*

This section would provide that the bill may be cited as the “Securing Semiconductor Supply Chains Act of 2021”.

##### *Section 2. SelectUSA defined.*

This section defines the term “SelectUSA” to mean the SelectUSA program of the Department of Commerce established by Executive Order 13577.<sup>11</sup>

##### *Section 3. Findings.*

This section provides congressional findings related to supply chains for semiconductors, noting the importance of semiconductors to the U.S. economy and the economic recovery, identifying areas that can benefit from further investment—such as advanced manufacturing, packaging, and materials and equipment—and opportunities for FDI to help grow domestic manufacturing.

##### *Section 4. Coordination with State-level economic development organizations.*

This section would require the Executive Director to solicit comments from State-level EDOs about their efforts to boost FDI in domestic semiconductor-related production, among other relevant topics. These comments would serve to develop recommendations to SelectUSA on increasing FDI in domestic semiconductor-related production, either independently or in partnership with EDOs.

Both the Federal Government and outside experts have raised concerns that agreements related to foreign investment can enable foreign individuals to “exploit ownership in U.S. companies by misappropriating sensitive data and information in ways that might be

<sup>11</sup> Executive Order 13577, *Federal Register*, vol. 76, no. 118, 35715–35717, June 20, 2011 (<https://www.federalregister.gov/documents/2011/06/20/2011-15443/establishment-of-the-selectusa-initiative>).

detrimental to US national security.”<sup>12</sup> Congress has, therefore, directed the Chairman of the Committee on Foreign Investment in the United States to work with allies and partners to protect U.S. national security interests.<sup>13</sup> This section further specifies that the Executive Director should leverage EDO feedback to develop recommendations on working with U.S. allies or partners of the United States—which could include semiconductor manufacturing leaders such as the Netherlands or South Korea—to ensure that U.S. attempts to increase FDI do not advantage foreign adversaries. The term “foreign adversaries” has the same meaning as in section 8(c)(2) of the Secure and Trusted Communications Networks Act of 2019.<sup>14</sup>

*Section 5. Report on increasing foreign direct investment in semiconductor-related manufacturing and production.*

This section would require the Executive Director, in coordination with the Federal Interagency Investment Working Group,<sup>15</sup> to submit a report about semiconductor supply chains to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Energy and Commerce of the House of Representatives. This section would direct the Executive Director to narrow the report based on comments received from EDOs pursuant to section 4, to describe related work SelectUSA is conducting, and to assess strategies—at the Executive Director’s discretion—that SelectUSA could implement to increase investment that helps secure U.S. semiconductor supply chains for the United States.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, the Committee states that the bill as reported would make no change to existing law.



<sup>12</sup>Deloitte, Committee on Foreign Investment in the United States (CFIUS) Monitoring and Assessment Services, 1, 2021 (<https://www2.deloitte.com/content/dam/Deloitte/us/Documents/risk/us-committee-on-foreign-investment-in-the-us-cfius-monitoring-and-assessment-services-2021.pdf>).

<sup>13</sup>Foreign Investment Risk Review Modernization Act of 2018, Public Law 115–232, sections 1701–28, 132 Stat. 2174.

<sup>14</sup>Secure and Trusted Communications Networks Act of 2019, section 8(c)(2), 47 U.S.C. 1607(c)(2) (defining the term “foreign adversary” to mean “any foreign government or foreign nongovernment person engaged in a long-term pattern or serious instances of conduct significantly adverse to the national security of the United States or security and safety of United States persons”).

<sup>15</sup>Executive Order 13577, *Federal Register*, vol. 76, no. 118, 35715–35717, June 20, 2011 (<https://www.federalregister.gov/documents/2011/06/20/2011-15443/establishment-of-the-selectusa-initiative>) (establishing the Federal Interagency Investment Working Group consisting of senior officials from several agencies tasked with coordinating activities to promote business investment among other related functions).