

The CHIPS and Sciences ACT of 2022 - The Impact on China

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I. Background

The CHIPS and Sciences Act of 2022 (the “Act”) was passed by the U.S. Congress on July 27, 2022 and signed into law by President Biden on August 9 of the same year. The Act is an effort to increase semiconductor manufacturing and development in the U.S. and to make the U.S. more competitive in the development of technology, especially vis-à-vis the People’s Republic of China (the “PRC”). The White House statement on the signing of the bill into law claimed: “CHIPS and Science Act Will Lower Costs, Create Jobs, Strengthen Supply Chains, and Counter China.”¹

There are two major parts to the Act. The first major part of the Act – Chips Act of 2022 – promotes and supports semiconductor manufacturing in the US. The Chips Act of 2022 provides funding for and expands the semiconductor manufacturing incentives of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (the “NDAA 2021”). The second major part of the Act – Research and Innovation – promotes and supports domestic research and development in science and technology. Each of these two parts of the Act has important provisions that affect the PRC semiconductor industry, PRC companies and, in some cases, PRC nationals. This article focuses on the first major part of the Act – Chips Act of 2022.

II. CHIPS Act of 2022

Division A of the Act provides \$52.7 billion in appropriations to fund financial incentives for the manufacture of semiconductors in the US. It also creates a significant tax credit to encourage and strengthen the domestic production of semiconductors. Both the financial incentives and the tax credit have important restrictions designed to prevent the PRC semiconductor manufacturing industry from directly or indirectly benefiting from the Act. Although the restrictions in the Act apply to any “foreign country of concern,” including the PRC, Iran, North Korea, Russia the Act is particularly concerned with the PRC. As evidence of that concern, the Act refers to the PRC separately when addressing foreign

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countries of concern even though the Act's definition of "foreign country of concern" already expressly includes the PRC.

A. Financial Incentives

1. Financial incentive programs for semiconductor manufacturing in the US:

Section 102 of the Chips Act of 2022 establishes the Creating Helpful Incentives to Produce Semiconductors for America Fund ("CHIPS for America Fund") to implement programs authorized in NDAA 2021. The CHIPS for America Fund allocates \$50 billion over 5 years to the Department of Commerce. Of the total \$50 billion in funds:

(a) \$39 billion is allocated for the financial incentives for the development of domestic semiconductor manufacturing capacity as provided for in NDAA 2021 Sec. 9902; and

(b) \$11 billion is allocated for R&D and workforce development programs as provided for in NDAA 2021 Section 9906.

In addition, the Chips Act of 2022 allocates \$2 billion for the CHIPS for America Defense Fund, \$500 million for the CHIPS for America International Technology Security and Innovation Fund, and \$200 million for the Creating Helpful Incentives to Produce Semiconductors (CHIPS) for America Workforce and Education Fund.

2. Restrictions under the financial incentives:

The Act prevents recipients of funds from making any material expansion of the manufacture of semiconductors in the PRC for a period of ten years from receipt of the award. Specifically, the Act requires any recipient of federal financial assistance under the Act to enter an agreement with the Department of Commerce that would provide:

" . . . during the 10-year period beginning on the date of the award . . . the covered entity may not engage in any significant transaction involving the material expansion of semiconductor manufacturing capacity in the People's Republic of China or any other foreign country of concern" ²

Importantly, this language does not merely prohibit the recipient from using the funds received under the Act to invest in manufacturing semiconductors in the PRC; it prohibits the recipient from engaging in any significant transaction "involving the material expansion of semiconductor manufacturing" in the PRC. In practical terms, it prohibits the recipient from using any source of funding, including any PRC funding source or even the earnings of a PRC affiliate, to expand semiconductor manufacturing in the PRC. In other words, by accepting the award, the recipient effectively chooses to shift any potential growth, improvement, and expansion of its PRC semiconductor manufacturing to the U.S. for a period of 10 years.

3. Exceptions for legacy semiconductors:

Two express statutory exceptions allow the award recipient to expand manufacturing

capacity of “legacy semiconductors” in the PRC, even when these expansions are material. Because the Act’s definition of “legacy semiconductors” include only the older generations of the technology³, the two exceptions promote the development and manufacture of the newer, more cutting-edge technology within the US, while allowing companies that receive Federal financial assistance under the Act with some flexibility to invest in the expansion of legacy semiconductor manufacturing in the PRC.

The two exceptions for legacy semiconductors address (a) the expansion of legacy-semiconductor manufacturing in the PRC with the recipient’s existing facilities or equipment and (b) the expansion of legacy-semiconductor manufacturing in the PRC that predominately serves the PRC market.

4. Permissible PRC transactions:

The Act only purports to prohibit recipients of financial awards from material expansions of non-legacy semiconductor manufacturing in the PRC. However, the Act has many vague terms that create uncertainty for recipients as they plan for possible transactions in the PRC. The agreement prohibits “*significant*” transactions and “*material*” expansions. Naturally, in many cases, it will not be clear whether a particular transaction is significant and/or whether the expansion is material. Similarly, the exceptions allow the expansion of manufacturing capacity for legacy semiconductors in the PRC that “*predominately*” serve the PRC market. In many cases, the recipient may struggle to determine whether the expansion predominately serves the PRC market. These vague terms create a risk that any increase in semiconductor manufacturing in the PRC might violate the agreement as a material expansion.

The Act’s pre-transaction notification and determination process mitigates the risk that a recipient could violate the agreement because of the Act’s vague terms. A company that has received financial incentives under the Act must notify the Department of Commerce of any “planned significant transactions . . . involving material expansion of semiconductor manufacturing capacity in the People’s Republic of China.”⁴ Within 90 days of receipt of the notice, the Department of Commerce would determine whether the transaction violated the agreement.⁵ If the Department of Commerce has determined that a planned transaction would violate the agreement, the recipient will have 45 days to provide tangible proof that it has ceased or abandoned the transaction.⁶ The Department of Commerce would also have discretion to allow the planned transaction to proceed, despite being a violation the agreement, if the recipient could mitigate the risks to national security.⁷

5. Eligibility of PRC companies for the financial incentives

In general, foreign companies are eligible to receive financial incentives under the Act for semiconductor manufacturing in the U.S. However, one important exception is that no “foreign entity of concern” is eligible for the financial incentives. The term “foreign entity of concern” includes “any foreign entity that is . . . owned by, controlled by, or subject to the jurisdiction or direction of a government of a foreign country that is listed in section [4872] of title 10, United States Code.” The People’s Republic of China is one of the

listed countries.

State-Owned Enterprises (including their non-Chinese subsidiaries, collectively “SOEs”) that are owned by the Chinese government will likely be deemed as “foreign entities of concern” under the Act. Similarly, companies formed under the laws of the PRC are subject to the jurisdiction of the PRC and will also likely be deemed as “foreign entities of concern.”

However, the law is less clear as to whether U.S. subsidiaries of non-SOEs from China are “foreign entities of concern.” A subsidiary of a private PRC company formed under the laws of Delaware, for example, is subject to Delaware jurisdiction, not the jurisdiction of the PRC. Nor is it owned by the Chinese government. We believe whether such an entity will be deemed as a “foreign entity of concern” depends on whether such entity itself is controlled by, or subject to the direction of, the Chinese government.

The table below discusses the likely designation of the most common types of Chinese or Chinese-owned companies under the Act that U.S. industries do business with:

Entities	Analysis under the Act
An SOE incorporated in China and its non-Chinese subsidiary (e.g., a U.S. subsidiary of a Chinese SOE)	Likely deemed as a foreign entity of concern, because it is owned by the Chinese government
A non-SOE incorporated in China	Likely deemed as a foreign entity of concern, because it is subject to the jurisdiction of the Chinese government
A non-Chinese subsidiary of a Chinese non-SOE (e.g., a U.S. subsidiary of a Chinese private enterprise) that is generally perceived to be associated with the Chinese government	Likely deemed a foreign entity of concern, if it is controlled by or subject to the direction of the Chinese government
A non-Chinese subsidiary of a Chinese non-SOE (e.g., a U.S. subsidiary of a Chinese private enterprise) that is generally perceived to be not associated with the Chinese government	Should not be a foreign entity of concern, if it is not controlled by or subject to the direction of the Chinese government

The law apparently gives the Department of Commerce some discretion to determine whether an entity is a foreign entity of concern, which probably includes the discretion to determine whether that designation would apply to U.S. entities that are controlled by foreign entities of concern.

The definition of “foreign entity of concern” are extremely complex and require case-by-case analysis. If you have questions about your company’s designations, you may

contact the authors of this article for further clarifications.

B. Tax Credit:

1. The tax credit for semiconductor manufacturing in the US:

The act provides a 25% tax credit for investments in the manufacture of semiconductors in the US, or the manufacture of special equipment used in semiconductor manufacturing.⁸

2. Restrictions under the tax credit:

(a) Eligibility for tax credit – no “applicable transaction” during the tax year:

The Act’s tax credit provisions create incentives for U.S. companies to limit their investments in semiconductor manufacturing in the PRC.⁹ As with the financial-incentive restrictions discussed above, the tax credit restrictions focus on material expansion of semiconductor manufacturing in the PRC. A taxpayer that has engaged in an “applicable transaction” during the tax year would not be eligible for the tax credit for that year.¹⁰ According to the Act, an “applicable transaction” is:

“ . . . any significant transaction (as determined by the Secretary [of the Treasury], in coordination with the Secretary of Commerce and the Secretary of Defense) involving the material expansion of semiconductor manufacturing capacity of such applicable taxpayer in the People’s Republic of China, or a foreign country of concern . . . ”¹¹

(b) Recapture of tax credit – any “applicable transaction” in the following 10 years:

It is not enough for a taxpayer to merely avoid an applicable transaction in the tax year in which they claim the tax credit. Under the Act’s provision for “recapture in connection with certain expansions,” the eligible taxpayer must also refrain from any applicable transaction for the following ten years, or risk losing the tax credit retroactively for all prior years.¹²

3. Exception for legacy semiconductors:

The tax credit restrictions also have a limited exception for any transaction that “primarily involves the expansion of manufacturing for legacy semiconductors,”¹³ which is similar to the restrictions for recipients of financial incentives under the Act. However, in contrast to the legacy-semiconductor exception discussed above in the context of the financial incentives, the tax-credit exception is not limited to existing PRC facilities and equipment or to legacy semiconductors that predominately serve the PRC market. Despite the differences, both versions of the legacy-semiconductor exception have the same general import: they promote the development and manufacture of the newer, more cutting-edge technology within the US, while permitting some investment in legacy semiconductor manufacturing in the PRC.

C. Impact on China:

Because the reach of the award agreement with the Department of Commerce extends to the “affiliated group” of the award recipient,¹⁴ any expansion of manufacturing in the PRC by an affiliate of the recipient would be imputed to the recipient. Generally, an entity would be part of the award recipient’s affiliated group if the award recipient held 80% of the entity’s voting and economic rights.¹⁵ Similarly, “sister” companies would be within each other’s affiliated group if they were under the common control of the same parent entity that held 80% of each company’s voting and economic rights.¹⁶

1. Impact on PRC subsidiaries of U.S. companies

A potential award recipient with a wholly-owned PRC subsidiary that manufactures semiconductors in the PRC would need to consider how accepting financial incentives under the Act would affect its PRC manufacturing operations. Moreover, for a company that has a PRC joint venture that is part of its affiliated group, accepting any financial incentives under the Act could create potential issues and conflicts with its local PRC joint-venture partner. A company that has received financial incentives under the Act might be required to prevent its PRC joint venture from engaging in any material expansion of the joint venture’s semiconductor manufacturing for 10 years, including any expansion funded through local earnings or other PRC-sourced financing. This situation could lead to a dispute with the local joint-venture partner.

Even if the PRC joint venture were not considered to be part of the award recipient’s affiliated group, the language of the statute is broad enough so that the recipient might be considered to “engage in a significant transaction” if the joint venture expanded its PRC semiconductor manufacturing capacity. Because the Act does not define the term “engage in any significant transaction,” it is uncertain how this provision will apply to recipients of financial incentives under the Act that have less than 80% control or even only minority holdings in PRC entities. If the PRC entity makes a material expansion of its semiconductor manufacturing, it is unclear what level of investment in the PRC entity by the recipient of the financial incentives will result in a determination that the recipient has engaged in a significant transaction. Clarification of this issue awaits guidance by Department of Commerce, or it might be resolved in the agreement between the award recipient and the Department of Commerce.

2. Impact on U.S. subsidiaries of PRC companies

Similarly, if U.S. subsidiaries of PRC entities are eligible for the financial incentives, they will have to consider how the Act’s restrictions could affect the parent’s semiconductor manufacturing operations in the PRC.

¹<https://www.whitehouse.gov/briefing-room/statements-releases/2022/08/09/fact-sheet-chips-and-science-act-will-lower-costs-create-jobs-strengthen-supply-chains-and->

²See Act Sec. 103(b)(5) (amending the NDAA 2021 Sec. 9902 by adding (6)(C)(ii)).

³“The term ‘legacy semiconductor’ includes (I)(aa) a semiconductor technology that is of the 28 nanometer generation or older for logic; (bb) with respect to memory technology, analog technology, packaging technology, and any other relevant technology, any legacy generation of semiconductor technology relative to the generation described in item (aa), as determined by the Secretary, in consultation with the Secretary of Defense and the Director of National Intelligence; and (cc) any additional semiconductor technology identified by the Secretary in a public notice issued under clause (ii); and (II) does not include a semiconductor that is critical to national security, as determined by the Secretary, in consultation with the Secretary of Defense and the Director of National Intelligence.” Act Sec. 103(b)(5) (amending the NDAA 2021 Sec. 9902 by adding new (6) to Sec. 50(a)(5)). The Act requires an update of the definition of legacy semiconductors every two years with after public notice and comment. See Act Sec. 103(b)(5) (amending the NDAA 2021 Sec. 9902 by adding (6)(A)(ii)).

⁴See Act Sec. 103(b)(5) (amending the NDAA 2021 Sec. 9902 by adding (6)(D)). See *also* 10 US Sec. 4872(d)(2) (“The term ‘covered nation’ means—(A) the Democratic People’s Republic of North Korea; (B) the People’s Republic of China; (C) the Russian Federation; and (D) the Islamic Republic of Iran.”).

⁵See Act Sec. 103(b)(5) (amending the NDAA 2021 Sec. 9902 by adding (6)(E)).

⁶See Act Sec. 103(b)(5) (amending the NDAA 2021 Sec. 9902 by adding (6)(E)).

⁷“If the Secretary [of Commerce] in consultation with the Secretary of Defense and the Director of National Intelligence, determines that a covered entity planning a significant transaction that would violate the agreement required under subparagraph (C)(i) could take measures in connection with the transaction to mitigate any risk to national security, the Secretary [of Commerce] . . . (I) may negotiate, enter into, and enforce any agreement or condition for the mitigation; and, (II) waive the recovery requirement . . .” Act Sec. (b)(5) (amending the NDAA 2021 Sec. 9902 by adding (6)(E)).

⁸See Act Sec. 107.

⁹These restrictions apply to any “foreign country of concern,” but the Act mentions the PRC specifically. See note 3, and accompanying text.

¹⁰See Act Sec. 107(a) (amending chapter 1 of the Internal Revenue Code of 1986 by adding Sec. 48D(c)).

¹¹See Act Sec. 107(b)(2) (amending chapter 1 of the Internal Revenue Code of 1986 by adding new sub-paragraphs (D) to Sec. 50(a)(6)).

¹²See Act Sec. 107(b)(1) (amending chapter 1 of the Internal Revenue Code of 1986 by

adding new sub-paragraph (3) to Sec. 50(a): “If there is a an applicable transaction by an applicable taxpayer before the close of the 10-year period beginning on the date such taxpayer placed in service investment credit property which is eligible for the advanced manufacturing investment credit under section 48D(a), then the tax under this chapter for the taxable year in which such transaction occurs shall be increased by 100 percent of the aggregate decrease in the credits allowed under section 38 for all prior taxable years which would have resulted solely from reducing to zero any credit determined under section 46 which is attributable to the advanced manufacturing investment credit under section 48D(a) with respect to such property.”)

¹³See Act Sec. 107(b)(2) (amending chapter 1 of the Internal Revenue Code of 1986 by adding new sub-paragraphs (D) to Sec. 50(a)(6)).

¹⁴“For the purpose of applying the requirements in an agreement required under clause (i), a covered entity shall include the covered entity receiving financial assistance under this section, as well as any member of the covered entity’s affiliated group under section 1504(a) of the Internal Revenue Code of 1986, without regard to section 1504(b)(3) of such Code.” Act Sec. 103(b)(5) (amending the NDAA 2021 Sec. 9902 by adding (6)(C) (ili)).

¹⁵See Internal Revenue Code Sec. 1504(a).

¹⁶See id.