

Literature Review on US and Japan etc. semiconductor dispute

Xing Mingjie

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1 Economics of Intellectual Property

1.1 Learning by doing

Irwin and Klenow (1994) finds that the US semiconductor industry has a learning rate of 20%, firms learn three times more from own-grown production, spillover effect similar across and within countries, Japanese firms no faster learning, and inter-generational learning is weak.

Besen and Raskind (1991) first describes some of the basic economic tradeoffs involved in intellectual property law, and then describes the framework of the law in the six areas described above: patent, copyright, semiconductor protection, trademark, trade secret, and misappropriation.

2 Model

2.1 Tariff

Bown (2021) marks the timing of tariff changes, highlights two additional channels through which tariffs changed, provides an initial exploration into why China fell more than 40% short of meeting the goods purchase commitments, and considers additional trade policy actions.

2.1.1 Welfare loss

Fajgelbaum et al. (2019) embed the estimated trade elasticities in a general-equilibrium model of the US economy to account for tariff revenue and gains to domestic producers. The aggregate real income loss was \$7.2 billion or 0.04% of GDP. Import tariffs favored sectors concentrated in politically competitive counties.

Amiti et al. (2019) implies a reduction in aggregate US real income of \$1.4 billion per month by the end of 2018.

Handley et al. (2020) identify firms that eventually faced tariff increases. They accounted for 84% of all exports and represented 65% of manufacturing employment.

Handley et al. (2023) find that decline in imports of tariffed goods was driven by discontinuations of U.S. buyer-foreign supplier relationships

2.1.2 GVC change

Fajgelbaum et al. (2021) find that countries that operate along downward-sloping supplies whose exports substitute (complement) US and China are among the larger (smaller) beneficiaries of the trade war.

Latipov et al. (2022) quantify the impact of EU's mirror sanctions on Russia following US and find they would inflict on Russia welfare losses of at least \$996 million per year — at an overall cost of \$150 million to EU consumers.

Antras and Chor (2022) surveys the recent body of work in economics on the importance of global value chains (GVCs) in shaping international trade flows and multinational activity

Chang et al. (2022) empirically examines the determinants of the utilization of regional trade agreements (RTAs).

Chen et al. (2021) shows that the export control policy has increased the export price of rare earth downstream products from China, whereas the effects on export quantity and value have been heterogeneous across sectors: they are significant for sectors in which the rare earth cost share is high, and the elasticity of substitution is low.

3 Disputes

3.1 East Asia

Ning (2008) examines the role of the state in ICT sector over the course of its evolution in Japan Korea Taiwan and China.

3.2 Japan

Langlois and Steinmueller (2000) argues that the American success is the result of the capabilities developed in earlier heyday American dominance.

Irwin (1994) examines how the U.S. semiconductor industry became the beneficiary of this unique and unprecedented sectoral trade agreement by analyzing the political and economic forces leading up to the 1986 accord and shaping subsequent events.

Baldwin (1990) argues that the semiconductor arrangement has the exactly opposite effect of enhancing free trade.

3.3 Korea

Flaen et al. (2020) finds that the US tariffs on washing machines increases price of washers by nearly 12 percent. The price of dryers—not subject to tariffs—increased by an equivalent amount

3.4 Taiwan

3.5 EU

Andreescu and Radu (2013) presents the main transatlantic trade disputes, explaining the ways in which they were solved with the help of the WTO.

3.6 General

Conconi et al. (2017) finds that US presidents are more likely to file dispute in the year preceding re-election. They are more likely to involve industries important in swing states.

3.7 Others

Vandenbussche and Viegeln (2018) studies within-firm input reallocation from trade protection on imported raw material inputs used in firm-level production in Indian antidumping cases.

3.7.1 Japan-Korea

Makioka and Zhang (2023) examines Japan-Korea trade dispute in semiconductor industry in 2019 and finds . Kim (2021) measures the impact of the recent Korea-Japan trade dispute on the Korean economy using supply-driven input-output analysis

Bown and Reynolds (2014) establishes a set of basic facts and pattern regarding the trade that countries fight about under WTO dispute settlement.

4 Data

5 Trade disputes and agreement design

Maggi and Staiger (2018)'s model of trade agreements with renegotiation and imperfectly verifiable information yields predictions on how the dispute outcome depends on the contracting environment and how it correlates with the optimal contract form. (Maggi and Staiger (2011), Maggi and Staiger (2015))

5.1 Protectionism

Mayer (1984), Grossman and Helpman (1994), Grossman and Helpman (1995), Grossman and Helpman (1996), Goldberg and Maggi (1999), Gawande and Bandyopadhyay (2000), Ederington and Minier (2008)

5.2 Chad Bown

great explanation of the semiconductor history since its invention in America Bown (2020)

5.3 Santacreu

Santacreu (2022)

5.4 Semiconductor

Branstetter et al. (2006) reveals that royalty payments for technology transferred to affiliates increase at the time of reforms, as do affiliate R&D expenditures and total levels of foreign patent applications. Increases in royalty payments and R&D expenditures are concentrated among affiliates of parent companies that use U. S. patents extensively prior to reform and are therefore expected to value IPR reform most.

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Modern industrial policy and the WTO [chrome-extension://efaidnbmnnnibpcajpcgiclfindmkaj/https://www.piie.com/sites/default/files/2023-12/wp23-15.pdf](https://www.piie.com/sites/default/files/2023-12/wp23-15.pdf)

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