# Reading group – Advances in Industrial Policy

Updated: September 3, 2025

### Organizers:

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This reading group aimed at studying **industrial policy**, which is the multi-faceted government intervention to encourage and develop specific industries (e.g. manufacturing), promoting economic growth, especially in the absence of sufficient private sector investment. We consider industrial policies (IP) broadly defined, including taxation, trade policies, innovation policies, financial policies, or place-based policies. Naturally, this reading group will be at the intersection of diverse fields: *macroeconomics, firm dynamics and endogenous growth, international trade and spatial economics, industrial organization, macro-development, and public finance*. The papers covered are both theoretical (especially at the beginning), empirical (especially session 7 onward), or structural/quantitative. It is targeted at PhD students (of all years) and postdocs in these fields.

In previous years, Professors Eric Verhoogen and Josh Whitford (Sociology) organized a similar group in the Center for Political Economy through the Firms and Industrial Policy Idea Lab. As a result, we will merge the two groups!

#### **Organization:**

The reading group will take place for 12 weeks from the 2<sup>nd</sup> week of September to the 1<sup>st</sup> week of December. The 24 papers denoted with \* will be presented by PhD students and postdocs (2 papers per sessions = 1h20-1h30 per session). Depending on attendance, participants will present one or two papers over the quarter for 30 minutes each (ideally no more than 10 slides) + 5-10 min discussion/paper. The choice of paper is voluntary (and participation for the whole quarter is strongly encouraged). If one paper in the "optional readings" (see **Long Syllabus** page 5 onward), or outside the list attracts your interest, feel free to ask the organizers to substitute it for the ones listed.

In addition to the 30-minute presentations, and if participants are interested, some students could present their research in the case where it relates to industrial policy and the paper of their choice.

Food will be provided,

The reading group will meet on Tuesdays, from 12 to 1 (TBC) in Columbia IAB (room TBC).

# Short Syllabus (24 papers / 12 weeks)

# 1. Classics: The Big Push and Industrial Policy

- \* Murphy, Kevin M., Andrei Shleifer, and Robert W. Vishny. "Industrialization and the big push." *Journal of political economy* 97.5 (1989): 1003-1026.
- \* Krugman, Paul. "Increasing returns and economic geography." *Journal of political economy* 99.3 (1991): 483-499.

# 2. Innovation, R&D policy, and endogenous growth

- \* Atkeson, Andrew, and Ariel Burstein. "Aggregate implications of innovation policy." *Journal of Political Economy* 127.6 (2019): 2625-2683.
- \* Akcigit, Ufuk, Douglas Hanley, and Stefanie Stantcheva. "Optimal taxation and R&D policies." *Econometrica* 90.2 (2022): 645-684.

# 3. Trade policy and tariffs

\* Ossa, Ralph. "A "new trade" theory of GATT/WTO negotiations." *Journal of Political Economy* 119.1 (2011): 122-152.

## 4. Modern Industrial Policy

- \* Juhász, Réka, Nathan Lane, and Dani Rodrik. "The new economics of industrial policy." *Annual Review of Economics* 16 (2023).
- \* Bartelme, Dominick, et al. "The textbook case for industrial policy: Theory meets data." *Journal of Political Economy* 133.5 (2025): 1527-1573.
- \* Lashkaripour, Ahmad, and Volodymyr Lugovskyy. "Profits, scale economies, and the gains from trade and industrial policy." *American Economic Review* 113.10 (2023): 2759-2808.

### 5. Financial frictions and policy

\* Itskhoki, Oleg, and Benjamin Moll. "Optimal development policies with financial frictions." *Econometrica* 87.1 (2019): 139-173.

### 6. Misallocation and Industrial Policy

\* Buera, Francisco J., et al. "Big push in distorted economies". *National Bureau of Economic Research, No.* w28561, 2021.

# 7. Industrial Policy in practice – Theory and Evidence

- \* Barwick, Panle Jia, Myrto Kalouptsidi, and Nahim Bin Zahur. "Industrial policy implementation: Empirical evidence from china's shipbuilding industry." *Review of Economic Studies* (2025): rdaf011.
- \* Criscuolo, Chiara, et al. "Some causal effects of an industrial policy." *American Economic Review* 109.1 (2019): 48-85.
- \* Lane, Nathan. "Manufacturing revolutions: Industrial policy and industrialization in South Korea." *The Quarterly Journal of Economics* (2025): qjaf025.
- \* Choi, Jaedo, and Younghun Shim. "From Adoption to Innovation: State-Dependent Technology Policy in Developing Countries" *R&R American Economic Review. 2025*
- \* Matray, Adrien, et al. "EXIM's Exit: Industrial Policy, Export Credit Agencies, and Capital Allocation." (2025).

#### 8. Production Networks

\* Liu, Ernest. "Industrial policies in production networks." *The Quarterly Journal of Economics* 134.4 (2019): 1883-1948.

# 9. Industrial Policy in practice: Automobile Industry and EV

\* One of these 3 papers: US policies and "Buy American Act":

Head, Keith, et al. "Industrial policies for multi-stage production: The battle for battery-powered vehicles." *Working Paper*, 2025.

Allcott, Hunt, et al. "The effects of "Buy American": Electric vehicles and the inflation reduction act." *National Bureau of Economic Research, No. w33032.* 2024.

Acosta, Miguel, and Lydia Cox. "The Macroeconomic Effects of the Buy American Act." *Working Paper*, (2025).

\* One of these 3 papers: Chinese policies and learning by doing in the Auto and EV industry

Jia Barwick, et al. "Drive Down the Cost: Learning by Doing and Government Policies in the Global EV Battery Industry." Working Paper, 2025.

Jia Barwick, et al. "Industrial Policies and Innovation: Evidence from the Global Automobile Industry." Working Paper, 2025.

Jia Barwick, et al. "Attribute-based Subsidies and Market Power: an Application to Electric Vehicles." R&R, Journal of Political Economy, 2024.

# 10. Environmental and Energy Policies

- \* Gerarden, Todd D., Mar Reguant, and Daniel Xu. "The Role of Industrial Policy in the Renewable Energy Sector." *National Bureau of Economic Research*, *No. w34079*, 2025.
- \* Hahn, Robert W., et al. "A welfare analysis of policies impacting climate change". *R&R American Economic Review*, 2024.

# 11. Industrial policy and coordination failures

- \* Garg, Tishara. "Can Industrial Policy overcome Coordination Failures? Theory and Evidence" *Job Market Paper, MIT,* 2025
- \* Sturm, John. "How to Fix a Coordination Failure: A "Super-Pigouvian" Approach", *Job Market Paper, MIT,* 2025

# 12. Place-based industrial policies

### \* One of these 2 papers

Fajgelbaum, Pablo D., and Cecile Gaubert. "Optimal spatial policies, geography, and sorting." *The Quarterly Journal of Economics* 135.2 (2020): 959-1036.

Rossi-Hansberg, Esteban, Pierre-Daniel Sarte, and Felipe Schwartzman. "Cognitive Hubs and Spatial Redistribution." *American Economic Journal: Macroeconomics*.

#### \* One of these 2 papers

Bhandari, Aditya. "Optimal place-based industrial policy" Job Market Paper, University of Chicago, 2025

Chikis, Craig A., Benny Kleinman, and Marta Prato. "The Geography of Innovative Firms". *National Bureau of Economic Research No. w34010*, 2025.

# **Long Syllabus**

# 1. Classics - Industrial Policy and the Big Push

# Mandatory

- \* Murphy, Kevin M., Andrei Shleifer, and Robert W. Vishny. "Industrialization and the big push." *Journal of political economy* 97.5 (1989): 1003-1026.
- \* Krugman, Paul. "Increasing returns and economic geography." *Journal of political economy* 99.3 (1991): 483-499.

# Optional

### Other references - The pioneers

Rosenstein-Rodan, Paul N. "Problems of industrialisation of eastern and south-eastern Europe." *The economic journal* 53.210-211 (1943): 202-211.

Hirschman, Albert O. "The strategy of economic development." (1958).

Rosenstein-Rodan, Paul N. "Notes on the theory of the 'big push'." *Economic Development for Latin America*. (1961)

#### Other references - Industrial policy

Matsuyama, Kiminori. "Increasing returns, industrialization, and indeterminacy of equilibrium." *The Quarterly Journal of Economics* 106.2 (1991): 617-650.

Rodrik, Rani. "Trade and industrial policy reform." *Handbook of development economics* 3 (1995): 2925-2982.

Sachs, Jeffrey D., and Andrew M. Warner. "The big push, natural resource booms and growth." *Journal of development economics* 59.1 (1999): 43-76.

**Review:** Harrison, Ann, and Andrés Rodríguez-Clare. "Trade, foreign investment, and industrial policy for developing countries." *Handbook of development economics* 5 (2010): 4039-4214.

#### Reviews: trade

Krugman, Paul R. "Industrial organization and international trade." *Handbook of industrial organization* 2 (1989): 1179-1223.

Redding, Stephen J. "Theories of heterogeneous firms and trade." Annu. Rev. Econ. 3.1 (2011): 77-105.

#### Reviews: quantitative spatial

Redding, Stephen J., and Esteban Rossi-Hansberg. "Quantitative spatial economics." *Annual Review of Economics* 9.1 (2017): 21-58.

Allen, Treb, and Costas Arkolakis. "Trade and the Topography of the Spatial Economy." *The Quarterly Journal of Economics* 129.3 (2014): 1085-1140.

### Books: Trade, Economic Geography, Growth, and Development

Grossman, Gene M., and Elhanan Helpman. Innovation and growth in the global economy. MIT press, 1993.

Bhagwati, Jagdish N. Essays in Development Economics: Wealth and Poverty. Vol. 1. Mit Press, 1985.

Fujita, Masahisa, Paul R. Krugman, and Anthony Venables. *The spatial economy: Cities, regions, and international trade.* MIT press, 2001.

Bagwell, Kyle, and Robert W. Staiger. The economics of the world trading system. MIT press, 2004.

# Trade Policy and Tariffs

\* Ossa, Ralph. "A "new trade" theory of GATT/WTO negotiations." *Journal of Political Economy* 119.1 (2011): 122-152.

Costinot, Arnaud, et al. "Comparative advantage and optimal trade policy." *The Quarterly Journal of Economics* 130.2 (2015): 659-702.

Itskhoki, Oleg, and Dmitry Mukhin. *The optimal macro tariff.* No. w33839. National Bureau of Economic Research, 2025.

# Optional

**Review:** Goldberg, Pinelopi K., and Nina Pavcnik. "The effects of trade policy." *Handbook of commercial policy*. Vol. 1. (2016). 161-206.

Bagwell, Kyle, and Robert W. Staiger. "An economic theory of GATT." *American Economic Review* 89.1 (1999): 215-248.

Eaton, Jonathan, and Gene M. Grossman. "Optimal trade and industrial policy under oligopoly." *The Quarterly Journal of Economics* 101.2 (1986): 383-406.

Gawande, Kishore, and Pravin Krishna. "The political economy of trade policy: Empirical approaches." *Handbook of international trade* (2003): 212-250.

Ossa, Ralph. "Trade wars and trade talks with data." American Economic Review 104.12 (2014): 4104-4146.

Broda, Christian, Nuno Limao, and David E. Weinstein. "Optimal tariffs and market power: the evidence." *American Economic Review* 98.5 (2008): 2032-2065.

Costinot, Arnaud, Andrés Rodríguez-Clare, and Iván Werning. "Micro to macro: Optimal trade policy with firm heterogeneity." *Econometrica* 88.6 (2020): 2739-2776.

**Review:** Amiti, Mary, Stephen J. Redding, and David E. Weinstein. "The impact of the 2018 tariffs on prices and welfare." *Journal of Economic perspectives* 33.4 (2019): 187-210.

Adão, Rodrigo, et al. *Why is trade not free? A revealed preference approach*. No. w31798. National Bureau of Economic Research, 2023.

Lashkaripour, Ahmad. "The cost of a global tariff war: A sufficient statistics approach." *Journal of International Economics* 131 (2021): 103419.

Adão, Rodrigo, Arnaud Costinot, and Dave Donaldson. "Putting Quantitative Models to the Test: An Application to the US-China Trade War." *The Quarterly Journal of Economics* 140.2 (2025): 1471-1524.

Flaaen, Aaron, Ali Hortaçsu, and Felix Tintelnot. "The production relocation and price effects of US trade policy: the case of washing machines." *American Economic Review*110.7 (2020): 2103-2127.

Benguria, Felipe, and Felipe Saffie. "Beyond tariffs: How did China's state—owned enterprises shape the US—China trade war?" *National Bureau of Economic Research No. w33599*, 2025.

### Other references - Older studies on Industry Protection

Melitz, Marc J. "When and how should infant industries be protected?" *Journal of International Economics* 66.1 (2005): 177-196.

Head, Keith. "Infant industry protection in the steel rail industry." *Journal of International Economics* 37.3-4 (1994): 141-165.

Baldwin, Robert E. "The case against infant-industry tariff protection." *Journal of Political Economy* 77.3 (1969): 295-305.

Grossman, Gene M., and Elhanan Helpman. "Protection for Sale." *The American Economic Review* 84.4 (1994): 833-850.

Irwin, Douglas A. "Could the United States iron industry have survived free trade after the Civil War?" *Explorations in Economic History* 37.3 (2000): 278-299.

# 3. Innovation, endogenous growth, and R&D policy

# Mandatory

- \* Atkeson, Andrew, and Ariel Burstein. "Aggregate implications of innovation policy." *Journal of Political Economy* 127.6 (2019): 2625-2683.
- \* Akcigit, Ufuk, Douglas Hanley, and Stefanie Stantcheva. "Optimal taxation and R&D policies." *Econometrica* 90.2 (2022): 645-684.

### Optional

### Other references - Endogenous growth

**Review:** Akcigit, Ufuk. "Economic Growth: The Past, the Present, and the Future" *Journal Political Economy* 125th anniversary. 2018.

**Review:** Grossman, Gene M., and Elhanan Helpman. "Endogenous innovation in the theory of growth." *Journal of economic perspectives* 8.1 (1994): 23-44.

Jones, Charles I. "Growth: with or without scale effects?" American economic review 89.2 (1999): 139-144.

Grossman, Gene M., et al. "Balanced growth despite Uzawa." *American Economic Review* 107.4 (2017): 1293-1312.

Juhász, Réka, Mara P. Squicciarini, and Nico Voigtländer. "Technology adoption and productivity growth: Evidence from industrialization in France." *Journal of Political Economy* 132.10 (2024): 3215-3259.

De Souza, Gustavo. "The Labor Market Consequences of Appropriate Technology." *Federal Reserve Bank of Chicago, R&R QJE*, 2025.

Ribeiro, Bernardo. "Growth with New and Old Technologies." Job Market Paper, Princeton University 2024.

Casal, Lucía. "Lock-In and Productive Innovations: Implications for Firm-to-Firm Innovation Pass-Through" *Job Market Paper, Cornell University,* 2025

### Other references - R&D policy

Bloom, Nick, Rachel Griffith, and John Van Reenen. "Do R&D tax credits work? Evidence from a panel of countries 1979–1997." *Journal of Public Economics* 85.1 (2002): 1-31.

Hall, Bronwyn, and John Van Reenen. "How effective are fiscal incentives for R&D? A review of the evidence." *Research policy* 29.4-5 (2000): 449-469.

Dechezleprêtre, Antoine, Elias Einiö, Ralf Martin, Kieu-Trang Nguyen, and John Van Reenen. 2023. "Do Tax Incentives Increase Firm Innovation? An RD Design for R&D, Patents, and Spillovers." American Economic Journal: Economic Policy 15 (4): 486–521.

### Other references - Regulation, Competition, and Innovation

Aghion, Philippe, Antonin Bergeaud, and John Van Reenen. "The impact of regulation on innovation." *American Economic Review* 113.11 (2023): 2894-2936.

Aghion, Philippe, et al. "Industrial policy and competition." *American economic journal: macroeconomics* 7.4 (2015): 1-32.

# 4. Modern Industrial Policy

# Mandatory

- \* Juhász, Réka, Nathan Lane, and Dani Rodrik. "The new economics of industrial policy." *Annual Review of Economics* 16 (2023).
- \* Bartelme, Dominick, et al. "The textbook case for industrial policy: Theory meets data." *Journal of Political Economy* 133.5 (2025): 1527-1573.
- \* Lashkaripour, Ahmad, and Volodymyr Lugovskyy. "Profits, scale economies, and the gains from trade and industrial policy." *American Economic Review* 113.10 (2023): 2759-2808.

Alvarez, Fernando, Francisco Buera, and Nicholas Trachter. "Technology Adoption and Optimal Industrial Policy", *Slides NBER*, 2025

### References – other empirical studies on industrial policy

Rodrik, Dani. "Industrial policy for the twenty-first century." Mimeo (2004).

Irwin, Douglas A., and Peter J. Klenow. "Learning-by-doing spillovers in the semiconductor industry." *Journal of Political Economy* 102.6 (1994): 1200-1227.

Baldwin, Richard, and Paul Krugman. "Industrial policy and international competition in wide-bodied jet aircraft." *Trade policy issues and empirical analysis*. University of Chicago Press, (1988): 45-78.

Baldwin, Richard E. "The impact of the 1986 US—Japan semiconductor agreement." *Japan and the World Economy* 6.2 (1994): 129-152.

Beason, Richard, and David E. Weinstein. "Growth, economies of scale, and targeting in Japan (1955-1990)." *The review of Economics and Statistics* (1996): 286-295.

Branstetter, Lee G., and Mariko Sakakibara. "When do research consortia work well and why? Evidence from Japanese panel data." *American Economic Review* 92.1 (2002): 143-159.

### 5. Financial frictions

# Mandatory

\* Itskhoki, Oleg, and Benjamin Moll. "Optimal development policies with financial frictions." *Econometrica* 87.1 (2019): 139-173.

Buera, Francisco J., Joseph P. Kaboski, and Yongseok Shin. "Finance and development: A tale of two sectors." *American economic review* 101.5 (2011): 1964-2002.

Midrigan, Virgiliu, and Daniel Yi Xu. "Finance and misallocation: Evidence from plant-level data." *American economic review* 104.2 (2014): 422-458.

# 6. Misallocation and the Big Push

\* Buera, Francisco J., et al. "Big push in distorted economies". *National Bureau of Economic Research, No.* w28561, 2021.

# Optional

**Review:** Buera, Francisco J., Joseph P. Kaboski, and Robert M. Townsend. "From micro to macro development." *Journal of Economic Literature* 61.2 (2023): 471-503.

### Classics on misallocation

Restuccia, Diego, and Richard Rogerson. "Policy distortions and aggregate productivity with heterogeneous establishments." *Review of Economic dynamics* 11.4 (2008): 707-720.

Hsieh, Chang-Tai, and Peter J. Klenow. "Misallocation and manufacturing TFP in China and India." *The Quarterly journal of economics* 124.4 (2009): 1403-1448.

Atkeson, Andrew, and Ariel Burstein. "Pricing-to-market, trade costs, and international relative prices." *American Economic Review* 98.5 (2008): 1998-2031.

Edmond, Chris, Virgiliu Midrigan, and Daniel Yi Xu. "How costly are markups?" *Journal of Political Economy* 131.7 (2023): 1619-1675.

**Review:** Hopenhayn, Hugo A. "Firms, misallocation, and aggregate productivity: A review." *Annu. Rev. Econ.* 6.1 (2014): 735-770.

#### Other references - Misallocation

Atalay, Enghin, et al. " Scalable demand and markups." Accepted Journal of Political Economy, 2025

Adamopoulos, Tasso, et al. "Misallocation, selection, and productivity: A quantitative analysis with panel data from China." *Econometrica* 90.3 (2022): 1261-1282.

Bilbiie, Florin O., Fabio Ghironi, and Marc J. Melitz. "Monopoly power and endogenous product variety: Distortions and remedies." *American Economic Journal: Macroeconomics* 11.4 (2019): 140-174.

Bornstein, Gideon, and Alessandra Peter. "Nonlinear pricing and misallocation" *forthcoming American Economic Review*, 2025.

Milosavljević, Filip. "Mergers and Acquisitions: Market Power or Efficiency?" *Job Market Paper, Washington University in St. Louis*, 2025

# 7. Industrial Policy in practice – Theory and Evidence

### Mandatory

- \* Barwick, Panle Jia, Myrto Kalouptsidi, and Nahim Bin Zahur. "Industrial policy implementation: Empirical evidence from china's shipbuilding industry." *Review of Economic Studies* (2025): rdaf011.
- \* Criscuolo, Chiara, et al. "Some causal effects of an industrial policy." *American Economic Review* 109.1 (2019): 48-85.
- \* Lane, Nathan. "Manufacturing revolutions: Industrial policy and industrialization in South Korea." *The Quarterly Journal of Economics* (2025): qjaf025.
- \* Choi, Jaedo, and Younghun Shim. "From Adoption to Innovation: State-Dependent Technology Policy in Developing Countries" *R&R American Economic Review. 2025*
- \* Matray, Adrien, et al. "EXIM's Exit: Industrial Policy, Export Credit Agencies, and Capital Allocation." (2025).
- \* Gaubert, Cecile, Oleg Itskhoki, and Maximilian Vogler. "Government policies in a granular global economy." Journal of Monetary Economics 121 (2021): 95-112.

# Optional

Gaubert, Cecile, and Oleg Itskhoki. "Granular comparative advantage." *Journal of Political Economy* 129.3 (2021): 871-939.

Cox, Lydia. "The long-term impact of steel tariffs on US manufacturing." *Job Market Paper, Harvard University*, 2021.

Colonnelli, Emanuele, Bo Li, and Ernest Liu. "Investing with the government: A field experiment in China." *Journal of Political Economy* 132.1 (2024): 248-294.

Hornbeck, Richard, et al. "Gaining steam: Incumbent lock-in and entrant leapfrogging." *National Bureau of Economic Research, No. w32384*, 2024.

Ottonello, Pablo, Diego J. Perez, and William Witheridge. *The Exchange Rate as an Industrial Policy*. No. w32522. National Bureau of Economic Research, 2024.

Choi, Jaedo, and Younghun Shim. "Industrialization and the Big Push: Theory and Evidence from South Korea." *R&R Review of Economics and Statistics.* 2025

Choi, Jaedo, and Andrei A. Levchenko. "The long-term effects of industrial policy." *Journal of Monetary Economics* (2025): 103779.

Fang, Hanming, Ming Li, and Guangli Lu. *Decoding China's Industrial Policies*. No. w33814. National Bureau of Economic Research, 2025.

Juhász, Réka, et al. "Measuring industrial policy: A text-based approach". *National Bureau of Economic Research, No. w33895.* 2025.

Juhász, Réka, Shogo Sakabe, and David Weinstein. "Codification, technology absorption, and the globalization of the industrial revolution." *National Bureau of Economic Research, No. w32667*, 2024.

Leibovici, Fernando, and Ana Maria Santacreu. "Shortages of critical goods in a global economy: Optimal trade and industrial policy." *R&R JPE Macro* (2025).

De Souza, Gustavo, Gabriel Garber "R&D Subsidy and Import Substitution: Growing in the Shadow of Protection", *Working Paper*, 2025.

Feng, Yushen, et al, "Industrial Policy and Retaliatory Protection under the WTO: Lessons from China", *Working Paper*, 2025.

**Review:** Reed, Tristan. "Export-led industrial policy for developing countries: Is there a way to pick winners?" *Journal of Economic Perspectives* 38.4 (2024): 3-26.

**Review:** Bown, Chad. "Modern industrial policy and the WTO", *Peterson Institute for International Economics*, 2023.

### Other references - Development policy

Verhoogen, Eric. "Firm-level upgrading in developing countries." *Journal of Economic Literature* 61.4 (2023): 1410-1464.

Bassi, Vittorio, et al. "Achieving scale collectively." *Econometrica* 90.6 (2022): 2937-2978.

#### 8. Production networks

# Mandatory:

\* Liu, Ernest. "Industrial policies in production networks." *The Quarterly Journal of Economics* 134.4 (2019): 1883-1948.

# Optional

Ciccone, Antonio. "Input chains and industrialization." *The Review of Economic Studies* 69.3 (2002): 565-587.

Acemoglu, Daron, Ufuk Akcigit, and William R. Kerr. "Innovation network." *Proceedings of the National Academy of Sciences* 113.41 (2016): 11483-11488.

Baqaee, David Rezza, and Emmanuel Farhi. "Productivity and misallocation in general equilibrium." *The Quarterly Journal of Economics* 135.1 (2020): 105-163.

Vom Lehn, Christian, and Thomas Winberry. "The investment network, sectoral comovement, and the changing US business cycle." *The Quarterly Journal of Economics* 137.1 (2022): 387-433.

Boehm, Johannes and Ezra Oberfield. "Growth and the Fragmentation of Production," *mimeo Princeton University*, 2022.

Liu, Ernest, and Song Ma. "Innovation networks and R&D allocation." *National Bureau of Economic Research, No. w29607*, 2024.

Buera, Francisco J., and Nicholas Trachter. "Sectoral development multipliers." *National Bureau of Economic Research, No. w32230*, 2024.

Casal, Lucia, and Julieta Caunedo. "On the Investment Network and Development." 2024.

# 9. Industrial Policy in practice: Automobile Industry and EV

#### \* One of these 3:

Head, Keith, et al. "Industrial policies for multi-stage production: The battle for battery-powered vehicles." *Working Paper*, 2025.

Allcott, Hunt, et al. "The effects of "buy american": Electric vehicles and the inflation reduction act." *National Bureau of Economic Research, No. w33032.* 2024.

Acosta, Miguel, and Lydia Cox. "The Macroeconomic Effects of the Buy American Act." (2025).

### \* One of these 3:

Jia Barwick, et al. "Drive Down the Cost: Learning by Doing and Government Policies in the Global EV Battery Industry." *Working Paper*, 2025.

Jia Barwick, et al. "Industrial Policies and Innovation: Evidence from the Global Automobile Industry." *Working Paper*, 2025.

Jia Barwick, et al. "Attribute-based Subsidies and Market Power: an Application to Electric Vehicles." *R&R, Journal of Political Economy*, 2024.

# 10. Environmental and energy policies

### Mandatory:

- \* Gerarden, Todd D., Mar Reguant, and Daniel Xu. "The Role of Industrial Policy in the Renewable Energy Sector." *National Bureau of Economic Research, No. w34079*, 2025.
- \* Hahn, Robert W., et al. "A welfare analysis of policies impacting climate change". *R&R American Economic Review*, 2024.

# Optional

#### **Environment and DTC**

Acemoglu, Daron, et al. "The environment and directed technical change." *American economic review* 102.1 (2012): 131-166.

Acemoglu, Daron, et al. "Transition to clean technology." Journal of political economy 124.1 (2016): 52-104.

Aghion, Philippe, et al. "Carbon taxes, path dependency, and directed technical change: Evidence from the auto industry." *Journal of Political Economy* 124.1 (2016): 1-51.

Arkolakis, Costas, and Conor Walsh. "Clean growth." R&R American Economic Review, 2025.

Xiang, Wei. "Clean Growth and Environmental Policies in the Global Economy." *Job Market Paper, University of Michigan*, 2024.

Gentile, Claudia, David Hémous, and Carole Marullaz. "The Power of Industrial Policy: The Global Impact of Chinese Subsidies on Solar Innovation and Emissions Reduction." *Working Paper*, 2025.

### **Energy/electricity markets and IO**

**Review:** Kellogg, Ryan, and Mar Reguant. "Energy and environmental markets, industrial organization, and regulation." *Handbook of industrial organization*. Vol. 5. No. 1. Elsevier, 2021. 615-742.

Fabra, Natalia, and Mar Reguant. "Pass-through of emissions costs in electricity markets." *American Economic Review*104.9 (2014): 2872-2899.

Gerarden, Todd D. "Demanding innovation: The impact of consumer subsidies on solar panel production costs." *Management Science* 69.12 (2023): 7799-7820.

Gowrisankaran, Gautam, Ashley Langer, and Mar Reguant. "Energy Transitions in Regulated Markets", *R&R American Economic Review*. 2024.

Butters, R. Andrew, Jackson Dorsey, and Gautam Gowrisankaran. "Soaking up the sun: Battery investment, renewable energy, and market equilibrium." *Econometrica* 93.3 (2025): 891-927.

Asker, John, et al. "Two wrongs can sometimes make a right: The environmental benefits of market power in oil." *National Bureau of Economic Research, No. w33115*, 2024.

#### **Environment and Trade policy**

**Review:** Domínguez-lino, Tomas. "Spatial Economics and Environmental Policies". In: Zimmermann, K.F. (eds) Handbook of Labor, Human Resources and Population Economics (2023), Springer

**Review:** Copeland, Brian R., Joseph S. Shapiro, and M. Scott Taylor. "Globalization and the Environment." *National Bureau of Economic Research, No. 28797*, 2021.

Shapiro, Joseph S. "The environmental bias of trade policy." *The Quarterly Journal of Economics* 136.2 (2021): 831-886.

Farrokhi, Farid, and Ahmad Lashkaripour. "Can trade policy mitigate climate change." *Forthcoming Econometrica*, 2025

Garcia-Lembergman et al, "Carbon Emissions in the Global Economy." Working Paper, 2025.

Bourany, Thomas, and Jordan Rosenthal-Kay. "The Winners and Losers of Climate Policies, A Sufficient Statistics Approach." *R&R Economic Journal*, 2025.

Hsiao, Allan, Jacob Moscona, and Karthik Sastry. "Food policy in a warming world". *R&R, Econometrica,* 2025

Gerarden, Todd, et al. "Strategic Avoidance and the Welfare Impacts of US Solar Panel Tariffs." *Working Paper*, 2025.

### 11. Industrial Policy and coordination failures

- \* Garg, Tishara. " Can Industrial Policy overcome Coordination Failures? Theory and Evidence" *Job Market Paper, MIT,* 2025
- \* Sturm, John. " How to Fix a Coordination Failure: A "Super-Pigouvian" Approach", *Job Market Paper, MIT,* 2025

### 12. Place-based industrial policies

# Mandatory:

### \* One of these 2 papers:

Fajgelbaum, Pablo D., and Cecile Gaubert. "Optimal spatial policies, geography, and sorting." *The Quarterly Journal of Economics* 135.2 (2020): 959-1036.

Rossi-Hansberg, Esteban, Pierre-Daniel Sarte, and Felipe Schwartzman. "Cognitive Hubs and Spatial Redistribution." *American Economic Journal: Macroeconomics*.

### \* One of these 2 or 3 papers

Bhandari, Aditya. "Optimal place-based industrial policy" Job Market Paper, University of Chicago, 2025

Chikis, Craig A., Benny Kleinman, and Marta Prato. "The Geography of Innovative Firms". *National Bureau of Economic Research No. w34010*, 2025.

Atalay, Enghin, et al. "Micro- and Macroeconomic Impacts of a Place-Based Industrial Policy", *Working Paper*, 2025

### Optional

**Review:** Fajgelbaum, Pablo D., and Cecile Gaubert. "Optimal spatial policies." *National Bureau of Economic Research, No. w33493*, 2025.

Fajgelbaum, Pablo D., and Cecile Gaubert. "Place-Based Policies: Lessons from Theory." *National Bureau of Economic Research, No. w33517*, 2025.

Davis, Donald R., and David E. Weinstein. "Bones, bombs, and break points: the geography of economic activity." *American economic review* 92.5 (2002): 1269-1289.

Davis, Donald R., and David E. Weinstein. "A search for multiple equilibria in urban industrial structure." *Journal of Regional Science* 48.1 (2008): 29-65.

Allen, Treb, Costas Arkolakis, and Xiangliang Li. "On the equilibrium properties of spatial models." *American Economic Review: Insights* 6.4 (2024): 472-489.

Mongey, Simon, and Michael E. Waugh. "Discrete choice, complete markets, and equilibrium." *National Bureau of Economic Research, No. w32135*, 2024.

Greenstone, Michael, Richard Hornbeck, and Enrico Moretti. "Identifying agglomeration spillovers: Evidence from winners and losers of large plant openings." *Journal of political economy* 118.3 (2010): 536-598.

Kline, Patrick, and Enrico Moretti. "Local economic development, agglomeration economies, and the big push: 100 years of evidence from the Tennessee Valley Authority." *The Quarterly journal of economics* 129.1 (2014): 275-331.

Donaldson, Dave, and Richard Hornbeck. "Railroads and American economic growth: A "market access" approach." *The Quarterly Journal of Economics* 131.2 (2016): 799-858.

Hornbeck, Richard, and Daniel Keniston. "Creative destruction: Barriers to urban growth and the Great Boston Fire of 1872." *American Economic Review* 107.6 (2017): 1365-1398.

Rossi-Hansberg, Esteban, Pierre-Daniel Sarte, and Felipe Schwartzman. "Local industrial policy and sectoral hubs." *AEA Papers and Proceedings*. Vol. 111. 2021

Crews, Levi Garrett. "A dynamic spatial knowledge economy." Job Market Paper, University of Chicago, 2023

Bordeu, Olivia. "Commuting infrastructure in fragmented cities." *Job Market Paper, University of Chicago Booth School of Business*, 2023.

Franco, Santiago. "Output market power and spatial misallocation." *Job Market Paper, University of Chicago,* 2024

Oh, Ryungha. "Spatial sorting of workers and firms." Yale University, Job Market Paper, 2024.

Donald, Eric, Masao Fukui, and Yuhei Miyauchi. "Unpacking aggregate welfare in a spatial economy." *National Bureau of Economic Research, No. w34075.* 2025.

Donald, Eric, Masao Fukui, and Yuhei Miyauchi. "Optimal Dynamic Spatial Policy." 2025.