Cambridge University Press
978-1-107-14508-5 — Industrial Policy and the World Trade Organization
Sherzod Shadikhodjaev
Excerpt
More Information

1

Industrial Policy under the Global Trade Regime

Industrial policy consists in a certain government intervention in the national economy, but there is no unified definition of what it is. Although the government has several industry-affecting tools at its disposal, officials, academics, and practitioners often differ on how to utilize them efficiently and properly. Trade and industrial policies considerably overlap in many aspects, which explains why trade economics and law are important for all stages of the industrial policy-making process. This chapter starts with the economics of industrial policy, highlighting some key theoretical findings, as well as practical issues derivable from the East Asian development experience. Then, we touch upon some important features of the multilateral trading system, briefly discussing its historical background, principal functions, and flexibilities in relation to national industrial policies. Overall, this chapter aims to provide an introductory analysis for more specific issues covered in the remainder of this book.

1.1 The Conceptual Framework for Industrial Policy

In spite of the widespread use, the term "industrial policy" has never been defined in a single way due to different perceptions changing over time. For example, an early definition by the Organization for Economic Cooperation and Development (OECD) stresses "promoting industrial growth and efficiency," and a working definition of the World Bank refers to "government efforts to alter industrial structure to promote productivity-based growth."[1] Diverse academic approaches to this

[1] OECD, "Objectives and Instruments of Industrial Policy: A Comparative Study," 1975, p. 7; World Bank, *The East Asian Miracle: Economic Growth and Public Policy* (New York: Oxford University Press, 1993), p. 304.

© in this web service Cambridge University Press www.cambridge.org

Cambridge University Press
978-1-107-14508-5 — Industrial Policy and the World Trade Organization
Sherzod Shadikhodjaev
Excerpt
More Information

concept are common in accepting varying degrees of public intervention but are different in specifying the subject matter, purposes, and effects.[2]

On the basis of previous studies, Ken Warwick defines "industrial policy" in perhaps a most comprehensive way as "any type of intervention or government policy that attempts to improve the business environment or to alter the structure of economic activity toward sectors, technologies or tasks that are expected to offer better prospects for economic growth or societal welfare than would occur in the absence of such intervention." This description is quite inclusive for covering both horizontal and selective policies vis-à-vis industrial sectors and even certain technologies or tasks (design, logistics, and other stages of the value chain) and for pursuing wide-ranging goals on the economic, environmental, security, and other relevant fronts.[3] This book relies on this definition, as it provides an up-to-date conceptual foundation for our topic and substantially reflects a multitude of issues falling within the purview of today's global trade governance.

1.1.1 The Theory of Industrial Policy in a Nutshell

The theory of industrial policy goes back to the eighteenth century. Unlike Adam Smith, who had advocated a free market in which each agent would act in its own self-interest out of the government's reach, US Treasury Secretary Alexander Hamilton in his *Report on the Subject of Manufactures* (1791) advocated the use of bounties (subsidies) and the moderate tariff, as a source of revenue, for nurturing American producers in their "infancy" level.[4] Later, German economist Friedrich List in *The National System of Political Economy* (1841) elaborated on the government's role in protecting emerging industries from foreign competition. Drawing lessons from history, he suggested an economic development path to be followed in three consecutive stages, such as (i) the adoption of free trade with more advanced nations for the purpose of moving away from a state of "barbarism" and making progress in agriculture, (ii) the promotion of manufacturing by means of commercial restrictions, and (iii) a gradual reversion to free trade and competition at

2 See Ken Warwick, "Beyond Industrial Policy: Emerging Issues and New Trends," OECD Science, Technology and Industry Policy Paper No. 2, 2013, p. 15.
3 *Ibid*., p. 16 (italics in the definition removed).
4 For a critique, see Douglas A. Irwin, "The Aftermath of Hamilton's 'Report on Manufactures'," 64 *The Journal of Economic History* 800 (2004).

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-107-14508-5 — Industrial Policy and the World Trade Organization
Sherzod Shadikhodjaev
Excerpt
More Information

home and overseas.[5] Both Hamilton and List are widely recognized as intellectual pioneers of the infant industry argument. David Ricardo's *On the Principles of Political Economy and Taxation* (1817) presented the theory of comparative advantages, which explains how countries can gain from trade via industry specialization.

As Wim Naudé observes,[6] the intensive academic debate on industrial policies in modern times began after World War II, covering the periods of the reconstruction of Europe and Japan, the establishment of independent States in former colonies, and a series of financial crises of the regional and global scales. In the early postwar years, governments opted for selective interventions with an extensive use of import restrictions for infant industry protection. The then economic writings focused on such issues as coordination failures, economies of scale, and demand insufficiencies. By the 1980s, commentators justified government interventions only in limited areas of market failures and called for the loosening of import restrictions in accordance with the free market ideology. Such an antiinterventionist sentiment was influenced by the Washington Consensus prescriptions for economic liberalization and deregulation.[7] The 1997 Asian financial crisis spurred increasing skepticism about economic soundness of selective industrial policies. In contrast, the 2008 global financial crisis gave rise to scholarly defense of such policies, with some criticizing trade liberalization for inhibiting industrialization in Africa and other developing countries. Table 1.1 summarizes key findings of the economic literature since the 1940s.

1.1.1.1 Justifiability of Industrial Policy

Two extreme views on economic development treat industrial policy differently. Those who deny the need for an industrial policy insist that the market should be free so as to reach an efficient resource allocation.

[5] Friedrich List, *The National System of Political Economy* (originally published in 1841), translated by Sampson S. Lloyd (London: Longmans, Green and Co., 1909), p. 93.

[6] This paragraph is based on Naudé, Introduction, *supra* note 3, pp. 10–12.

[7] The "Washington Consensus" is a set of ten policy reforms for developing countries recommended by the US government and international financial organizations headquartered in Washington, DC. As summarized by John Williamson, the author of this concept, it includes "prudent macroeconomic policies, outward orientation, and free-market capitalism." See John Williamson, "What Washington Means by Policy Reform," in John Williamson (ed.), *Latin American Adjustment: How Much Has Happened?* (Washington, DC: Peterson Institute for International Economics, 1990), available at https://piie.com/commentary/speeches-papers/what-washington-means-policy-reform.

© in this web service Cambridge University Press www.cambridge.org

Table 1.1 *Evolution of Theory and Practice of Industrial Policy*

Phase	Key Idea	Representative Contributors
1940s to late 1960s	- Industrialization is necessary for development. - Market failures would prevent this from happening automatically. - Market failures are pervasive in developing countries. - Industrial policy is needed, particularly infant industry protection, state-ownership, and state coordination.	P. N. Rosenstein-Rodan, "Problems of Industrialisation of Eastern and South-Eastern Europe," 53 *Economic Journal* 202 (1943) Albert O. Hirschman, *The Strategy of Economic Development* (New Haven: Yale University Press, 1958) Gunnar Myrdal, *Economic Theory and Under-Developed Regions* (London: Duckworth, 1957)
1970s to 1990s	- Practical obstacles to industrial policy are considered significant. - Government failure is worse than market failure. Industrial policy is invitation to waste and rent-seeking. - Trade liberalization (exports), privatization and attracting FDI together with macroeconomic stability and minimum government interference are the basic requirements for growth and industrialization. - The era of the Washington consensus, especially after the debt crisis of the early 1980s and the ubiquity of structural adjustment programs.	Robert E. Baldwin, "The Case against Infant-Industry Tariff Protection," 77 *Journal of Political Economy* 295 (1969) Anne O. Krueger, "The Political Economy of the Rent-Seeking Society," 64 *American Economic Review* 291 (1974) Anne O. Krueger, "Government Failures in Development," 4(3) *Journal of Economic Perspectives* 9 (1990) Howard Pack, "Productivity and Industrial Development in Sub-Saharan Africa," 21 *World Development* 1 (1993) Howard Pack, "Industrial Policy: Growth Elixir or Poison?" *World Bank Research Observer* 47 (2000)
2000s to present	- Market and government failures are present.	Alice H. Amsden, *Asia's Next Giant: South Korea and Late*

CAMBRIDGE

Cambridge University Press
978-1-107-14508-5 — Industrial Policy and the World Trade Organization
Sherzod Shadikhodjaev
Excerpt
More Information

Table 1.1 (*cont.*)

Phase	Key Idea	Representative Contributors
day	- The "how" rather than the "why" of industrial policy is important. - Institutional setting matters but design difficult. Need to understand political context. - Flexibility in the practice of industrial policy is important. - Differences exist with respect to the extent to which comparative advantage needs to be defied, not the principle. - Innovation and technological upgrading should be a central objective of industrial policy. - Promoting national innovation systems should be an important objective of industrial policy.	*Industrialization* (New York: Oxford University Press, 1989) Mario Cimoli, Giovanni Dosi, and Joseph E. Stiglitz, "The Political Economy of Capabilities Accumulation: The Past and Future of Policies for Industrial Development," in Mario Cimoli, Giovanni Dosi, and Joseph E. Stiglitz (eds.), *Industrial Policy and Development: The Political Economy of Capabilities Accumulation* (Oxford: Oxford University Press, 2009), pp. 1–16 Dani Rodrik, "Industrial Policy for the Twenty-First Century," Harvard University Faculty Research Working Paper No. RWP04–047, 2004 Ha-Joon Chang, *Kicking Away the Ladder: Development Strategy in Historical Perspective* (London: Anthem Press, 2003) Ha-Joon Chang, "Industrial Policy: Can We Go Beyond an Unproductive Confrontation?" Annual World Bank Conference on Development Economics, Seoul, 2009 Sanjaya Lall, "Selective Industrial and Trade Policies in Developing Countries: Theoretical and

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE
Cambridge University Press
978-1-107-14508-5 — Industrial Policy and the World Trade Organization
Sherzod Shadikhodjaev
Excerpt
More Information

Table 1.1 (*cont.*)

Phase	Key Idea	Representative Contributors
		Empirical Issues," QEH Working Paper No. 48 (2000)
		Justin Yifu Lin, "Learning from the Past to Reinvent the Future," in Justin Yifu Lin and Boris Pleskovic (eds.), *Lessons from East Asia and the Global Financial Crisis* (Washington, DC: World Bank, 2011), pp. 19–29
		Richard R. Nelson, *National Innovation Systems: A Comparative Analysis* (New York: Oxford University Press, 1993)
		James A. Robinson, "Industrial Policy and Development: A Political Economy Perspective," Annual World Bank Conference on Development Economics (Seoul, 2009)

Source: Wim Naudé, "Industrial Policy: Old and New Issues," UNU–WIDER Working Paper No. 2010/106, 2010, p. 10 (table 3), modified by the author.

In contrast, opponents stress the government's role in directing resources toward a particular course of growth. But in reality, virtually all successful industrial countries have followed mixed strategies under which the government has intervened in the marketplace at some point.[8]

In economics, public intervention is warranted when markets are distorted or incomplete. A market can be distorted by an externality – when the price of a good/service does not reflect the associated societal cost or benefit – or by an excessive market power attributable to, for

[8] Joseph E. Stiglitz, "Some Lessons from the East Asian Miracle," 11 *The World Bank Research Observer* 151 (1996), p. 155.

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-107-14508-5 — Industrial Policy and the World Trade Organization
Sherzod Shadikhodjaev
Excerpt
More Information

example, a monopoly. If a market does not exist for certain goods or services, it is incomplete. In either case, industrial policies may deliver a socially desirable outcome. Income redistribution can be another legitimate reason for governments to intervene.[9]

There is no consensus among economists on the optimal extent of government participation in the market. A laissez-faire approach says that, in a virtually unrestrained market, a government should be a passive player creating only favorable "framework conditions" for business like predictable and transparent governance and macroeconomic stability.[10] By contrast, a traditional approach supports more active interventions through sector-specific subsidies, nationalization, government-driven mergers, or preferential procurement practices, underlining possible intersectoral linkages and knowledge spillovers.[11] In this regard, one can distinguish functional (horizontal) and selective (vertical) industrial policies, with the former referring to economy-wide actions and the latter targeting specific sectors or regions.

In spite of its theoretical appeal, the pure laissez-faire policy lacks political popularity, as it "offers special interest benefits to nobody."[12] Not surprisingly, the literature justifies selective industrial policy sparingly, notably in the presence of market failures resulting from, inter alia, certain factors, as follows.[13]

First, this is the case of "coordination failures" when an individual agent does not invest in a particular project absent simultaneous investment in other related activities. For instance, a firm will not venture into production of clothes unless the government invests in transportation or financing facilities needed for the clothing industry.

Second, the government can respond to "information(al) externalities" arising from the lack of knowledge about potential business opportunities. A firm's innovative business plan is exposed to the risk of failure,

9 See Howard Pack and Kamal Saggi, "Is There a Case for Industrial Policy? A Critical Survey," 21 *The World Bank Research Observer* 267 (2006), p. 268; Alan V. Deardorff, "The Economics of Government Market Intervention and Its International Dimension," in Marco Bronckers and Reinhard Quick (eds.), *New Directions in International Economic Law: Essays in Honour of John H. Jackson* (The Hague: Kluwer Law International, 2000), pp. 71–84.

10 Warwick, *supra* note 2, p. 19. 11 *Ibid.*

12 Randall G. Holcombe, "South Korea's Economic Future: Industrial Policy, or Economic Democracy?," 88 *Journal of Economic Behavior & Organization* 3 (2013), p. 9.

13 See, e.g., Pack and Saggi, *supra* note 9, pp. 272–9; Dani Rodrik, "Industrial Policy for the Twenty-First Century," Harvard University Faculty Research Working Paper No. RWP04–047, 2004, pp. 8–14.

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE
Cambridge University Press
978-1-107-14508-5 — Industrial Policy and the World Trade Organization
Sherzod Shadikhodjaev
Excerpt
More Information

but, if it succeeds, others will "copy" it and thereby cut that firm's profits from the project. This makes many firms reluctant to engage in new industrial activities. But the government can encourage discovery of novel business solutions by, inter alia, stimulating venture capital funding in specific sectors.

Third, it may be prudent for the government to invest in a particular infant industry that has the potential to generate manifold spillovers and linkage effects. Otherwise, individual agents will not invest on their own, as they cannot foresee new technologies and markets that can emerge once that industry becomes mature.

By contrast, critics point out a number of factors to disapprove of industrial targeting. In particular, selective State intervention distorts resource allocation and competition in the marketplace. This keeps many inefficient producers alive.

Furthermore, although optimal industrial targeting is warranted for imperfect markets in theory, making accurate policy prescriptions is extremely difficult in practice. Importantly, certain "government failures," such as the lack of information and capacity building, do not allow public practitioners to know exactly which industries or firms to support (i.e., "pick winners") and how. One study, for instance, lists fifteen areas (firm/industry-related knowledge spillovers, dynamic scale economies, comparative advantages, capital market failures, etc.) that government officials need to master in order to properly implement an industrial policy.[14]

In addition, it is not easy to evaluate precisely the costs and benefits (and the fact of success or failure) of industrial targeting even in retrospect.[15] Some "popular" criteria for selecting industries – such as high value-added per worker, usability of output across many sectors, future competitiveness, and defensive targeting in response to foreign industrial targeting – can, in fact, be destructive and counterproductive.[16]

Last but not least, industrial targeting provokes corruption and rent-seeking and results in preferences to politically connected entities.[17]

14 Pack and Saggi, *supra* note 9, pp. 281–2.

15 See Paul R. Krugman, "Targeted Industrial Policies: Theory and Evidence," Proceedings, Economic Policy Symposium, Jackson Hole, 1983, pp. 123–76.

16 See *ibid.*, pp. 125–34.

17 Dani Rodrik, "Normalizing Industrial Policy," Working Paper No. 3, Commission on Growth and Development, 2008, p. 8. For the literature review on this issue, see Naudé, Introduction, *supra* note 3, pp. 20–1.

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-107-14508-5 — Industrial Policy and the World Trade Organization
Sherzod Shadikhodjaev
Excerpt
More Information

In short, selective intervention necessitated by market failures may face practical constraints in the light of government failures. Therefore, some authors suggest moving away from price-distorting "hard" industrial policy to "soft" industrial policy, the concept that highlights cooperation between the government and industries. As Ann Harrison and Andrés Rodríguez-Clare explain, soft industrial policy seeks to develop "a process whereby government, industry and cluster-level private organizations can collaborate on interventions that can directly increase productivity":

> The idea is to shift the attention from interventions that distort prices to interventions that deal directly with the coordination problems that keep productivity low in existing or raising sectors. Thus, instead of tariffs, export subsidies, and tax breaks for foreign corporations, we think of programs and grants to, for example, help particular clusters by increasing the supply of skilled workers, encouraging technology adoption, and improving regulation and infrastructure. While "hard" [industrial policy] is easier to implement than "soft" [industrial policy] measures, tariffs and subsidies become entrenched and are more easily subject to manipulation by interest groups.[18]

Under soft industrial policy, governments could invite industry representatives to come forward with their well-grounded proposals for government support in various projects on infrastructure, education, innovation, research, and other fields. In countries with weak private sector organizations, the government should work to encourage different sectors to improve their level of organization. It is argued that, compared to "hard" measures such as trade protection or selective subsidies, soft industrial policy is less susceptible to corruption and rent-seeking, and it is more compatible with international trade and investment regimes.[19]

Finally, the infant industry argument for import protection deserves attention, as it is a "precursor of modern industrial policy."[20] The main idea is that the government should protect domestic industry in its early stage of formation from foreign competitors, because the latter have more experience in producing at lower costs. However, such protection should later be phased out as domestic producers will reduce costs throughout the learning-by-doing process to reach the production-efficiency

[18] Ann Harrison and Andrés Rodríguez-Clare, "Trade, Foreign Investment, and Industrial Policy for Developing Countries," in Dani Rodrik and Mark Rosenzweig (eds.), *Handbook of Development Economics* (North-Holland: Elsevier, 2010), vol. 5, p. 4112.

[19] *Ibid.*, p. 4113.

[20] Pack and Saggi, *supra* note 9, p. 269.

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-107-14508-5 — Industrial Policy and the World Trade Organization
Sherzod Shadikhodjaev
Excerpt
More Information

level of foreign rivals. A stronger version of the infant industry argument states that initial protection can even be of the global interest, because the true (but latent) comparative advantage may lie with the emerging domestic industry that will eventually be able to produce at a lowest world price thanks to the import protection.[21]

As with some justifications discussed earlier, economists regard the infant industry argument as a valid exception to the free trade philosophy in the presence of either market failure: (i) imperfect capital markets or (ii) problems of appropriability.[22] The first case refers to countries with a weak financial system that does not allow infant industries to secure sufficient funds for growth. The second case arises when pioneering companies are not compensated for generating social benefits (e.g., knowledge) in entering a new industry, while they incur startup costs of adapting technology to local circumstances, something that latecomers (free riders) would normally not bear.

1.1.1.2 Instruments of Industrial Policy

Because virtually all countries in the world, including economically advanced nations, have used – and will arguably continue to use – industrial policies even if disguised by other names like "investment promotion" or "export facilitation," a more pragmatic way today would be to focus on *how* (rather than *whether* or *why*) governments should pursue an industrial policy.[23] This hinges on what instruments governments may apply.

The scope of industrial policy tools ranges from trade measures, such as, for example, import restrictions and subsidies, to a broader array of actions aimed at the improvement of a business climate. In Table 1.2, Ken Warwick categorizes all available instruments by policy domains within the horizontal and selective action groups. The policy domains concern merchandise, labor, capital, land, technology, as well as some soft industrial policy measures ("systems/institutions") relating to interactions among markets, economic agents, and the government.

21 *Ibid*., pp. 268–9.

22 Robert E. Baldwin, "The Case against Infant-Industry Tariff Protection," 77 *Journal of Political Economy* 295 (1969), p. 295; Paul R. Krugman, Maurice Obstfeld, and Marc J. Melitz, *International Economics: Theory and Policy*, 10th edn. (Boston: Pearson, 2015), pp. 277–8.

23 Rodrik, *supra* note 17, p. 2; Wim Naudé, "New Challenges for Industrial Policy," UNU–WIDER Working Paper No. 2010/107, 2010, p. 1; Stiglitz, Lin, and Monga, Introduction, *supra* note 5, p. 9.

© in this web service Cambridge University Press www.cambridge.org