

1. Teoría mínima de la política industrial

1.1. Instrumentos y objetivos de política industrial

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Consenso de Washington, Bidenomics, MAGAnomics, Consenso de Beijing, Xinomics

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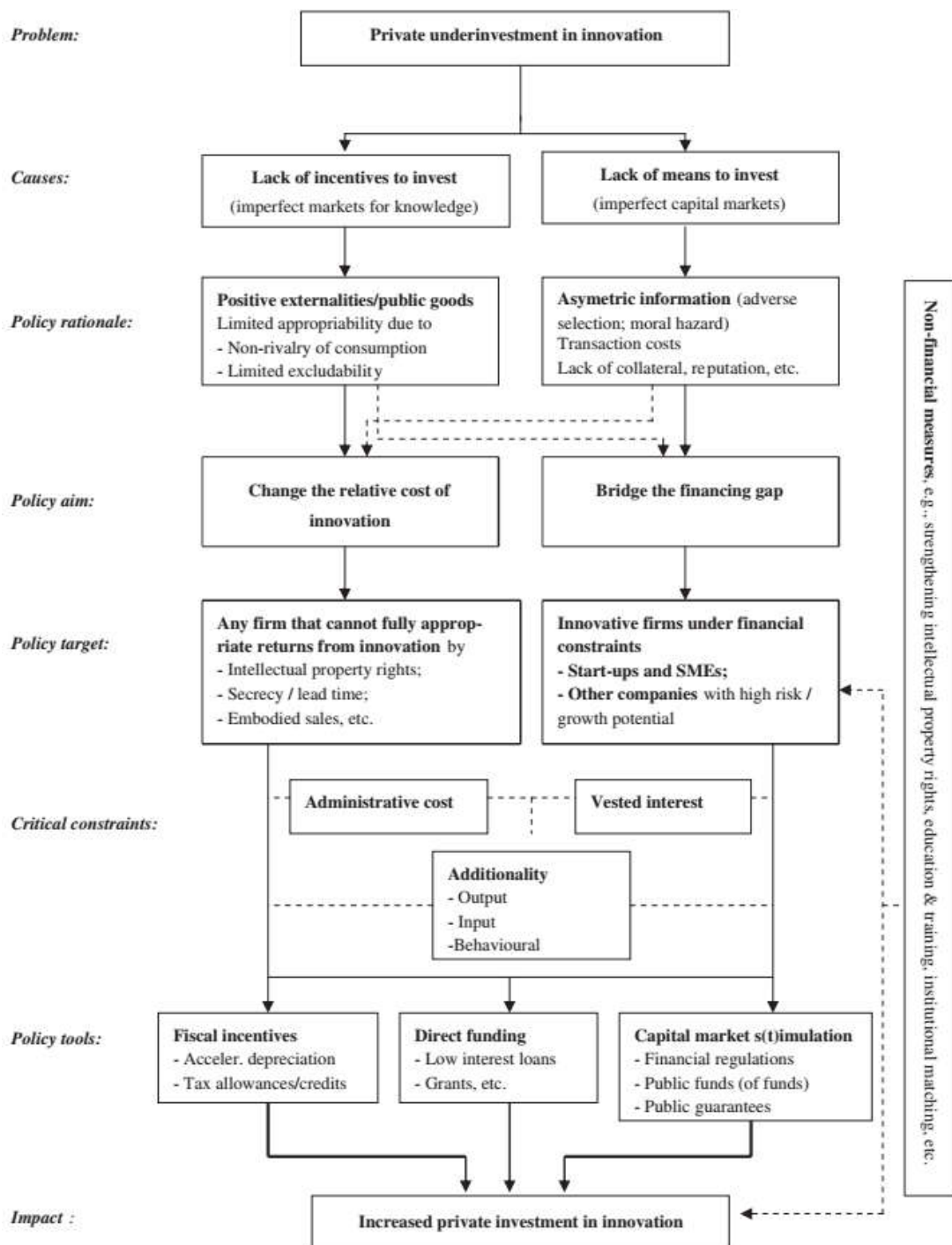


Fig. 1. The financing of innovation: a policy 'mind map'.

Peneder, Michael (2008): "The problem of private under-investment in innovation: A policy mind map", *Technovation* 28, 518-530

1. Teoría mínima de la política industrial

1.1 Instrumentos y objetivos de política industrial

Definiciones de política industrial

"We propose to adopt ... the following ... definition:

'Industrial Policy is 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.'"

Table 1. Definitions of industrial policy

"Industrial policies are concerned with promoting industrial growth and efficiency." (OECD, 1975)

"Industrial policy may be generally defined as any government measure, or set of measures, to promote or prevent structural change." (Curzon-Price, 1981)

"...the term industrial policy indicates the relationship between business and government on a microeconomic level..." (Wachter and Wachter, 1981)

"...everything which is useful to improve growth and competitive performance." (Adams and Klein, 1983)

"Industrial policy... means government policy aimed at or motivated by problems within specific sectors." (Tyson and Zysman, 1983)

"Industrial policy means the initiation and co-ordination of governmental initiatives to leverage upward the productivity and competitiveness of the whole economy and of particular industries in it." (Johnson, 1984)

"Industrial policies refer to those policies intended to affect in some ways manufacturing or service industries." (Graham, 1986)

"...a wide-ranging, ill-assorted collection of micro-based supply initiatives which are designed to improve market performance in a variety of occasionally mutually inconsistent ways." (Geroski, 1989)

"Industrial policy is an attempt by a government to encourage resources to move into particular sectors that the government views as important to future economic growth." (Krugman and Obstfeld, 1991)

Industrial policy is one "aimed at particular industries (and firms as their components) to achieve the outcomes that are perceived by the state to be efficient for the economy as a whole." (Chang, 1994)

Industrial policy "can be defined as any policy affecting the allocation of resources to industry and in this sense embraces both macroeconomic policy ... as well as the more traditional areas of microeconomic policy." (Sharp, 1998)

Industrial policy is "every form of state intervention that affects industry as a distinct part of the economy." (Foreman-Peck and Frederico, 1999)

Narrow view: "Restrict attention to policies that target particular firms and industrial sectors."

Broad view: "any policy that shapes or influences the competitiveness of a country's firms and industries." (Beath, 2002)

"...restructuring policies in favour of more dynamic activities generally, regardless of whether those are located within industry or manufacturing per se." (Rodrik, 2004)

Industrial policy is "the activity which creates a favourable environment for European business in general, the manufacturing sector and its industries in specific." (Aiginger and Sieber, 2005)

"Industrial policy refers to a set of measures taken by a government and aiming at influencing a country's performance towards a desired objective." (Pitelis, 2006)

Source: Based on Aiginger (2007) and White (2008).

- "The definition includes any type of intervention not just selective or targeted interventions, thus including functional or horizontal policies as well as more targeted approaches.

- Policies that aim to improve the business environment – sometimes referred to as ‘framework conditions’ – are included, not just those with the express aim of altering the structure of the economy.
- Policies include those that aim to alter the structure of economic activity, a much broader term than ‘production’, which might be construed as relating only to the production industries (typically manufacturing, construction, primary production and water and sewage) or the manufacturing sector alone or, even more narrowly, the fabrication stage of the manufacturing value chain.
- It is recognised that industrial policy may aim to switch resources not only to particular sectors but also towards certain technologies (for example biotech, ICT or clean-tech) or even ‘tasks’ (shorthand for both tasks and bundles of tasks or activities that make up stages in the value chain, for example design or logistics).
- Finally, although most explicit industrial policy generally has a productivity, employment or growth objective, it is recognised that governments have other policy goals that contribute to societal welfare, and the pursuit of these goals may have important industrial policy-type effects -examples might include regional policy, energy and climate change policy, health policy and defence/security policy. Often industrial policy is closely integrated with other policies as part of a broader government social and economic strategy with wide ranging goals.”

Warwick, K. (2013): “Beyond Industrial Policy: Emerging Issues and New Trends”, OECD Science, Technology and Industry Policy Papers, No. 2, <http://dx.doi.org/10.1787/5k4869clw0xp-en>

Formulación de la política industrial

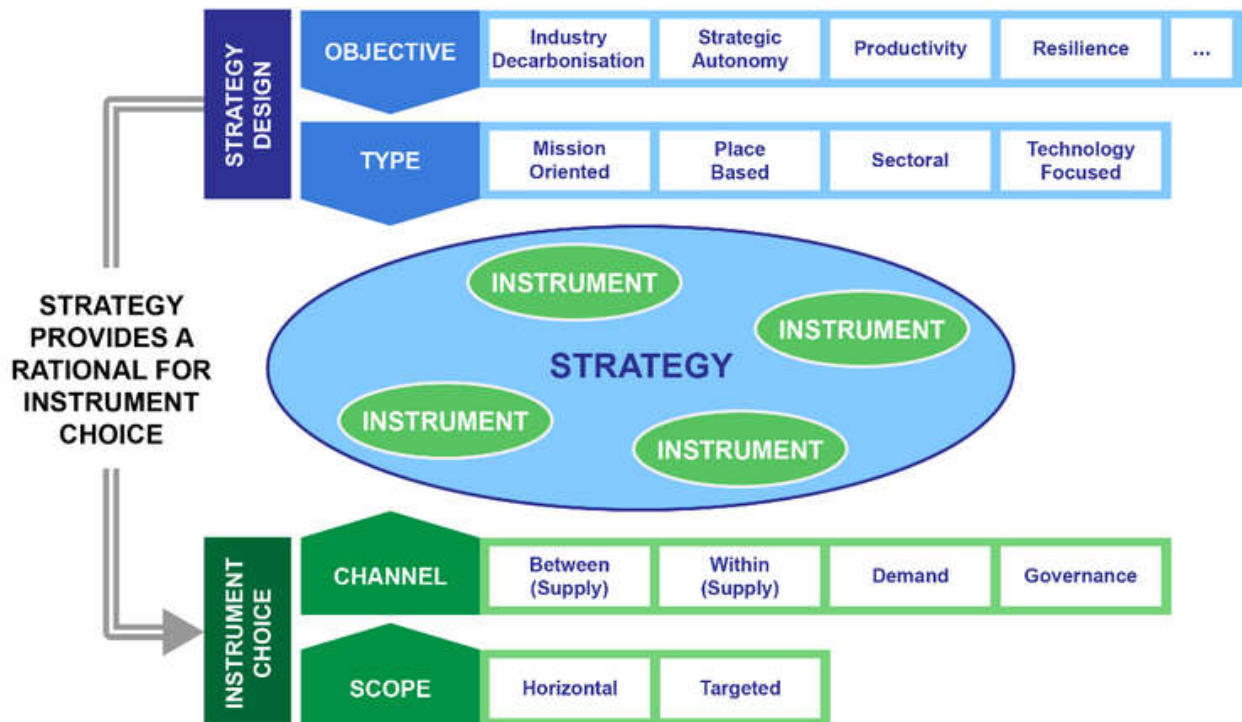
“Industrial policy is back after having been considered a taboo since the 1970s. Until recently, government failures and industry capture were seen as worse enemies than market failures. But ever since the global financial crisis, governments have relied on industrial policy to stimulate growth and productivity, promote resilience, and address societal challenges. Now industrial policy is taking center stage as countries seek to ensure a green, digital, and inclusive recovery after the Covid-19 pandemic, and to reduce dependencies on critical inputs following recent shortages and Russia’s invasion of Ukraine.”

“Virtually every government uses industrial policies, but do they really work? This question will not be answered satisfactorily anytime soon.”

“First, there is no agreement on which interventions are considered ‘industrial policy.’ Second ... we do not really know how (and how much) governments are really spending on industrial policies. Third, the evidence on the effectiveness of single industrial policy tools, let alone entire industrial strategies, is mixed and not always convincing. Targeted policies that focus more narrowly on firms with certain features (e.g., size, age, location) or in specific industries continue to raise concerns related to anticompetitive effects, capture by vested interests, and the opportunity cost of public funds. And no consensus exists on the efficiency of more general industrial policies (known as horizontal or untargeted), and even less on their sufficiency to address global challenges like, for example, climate change.”

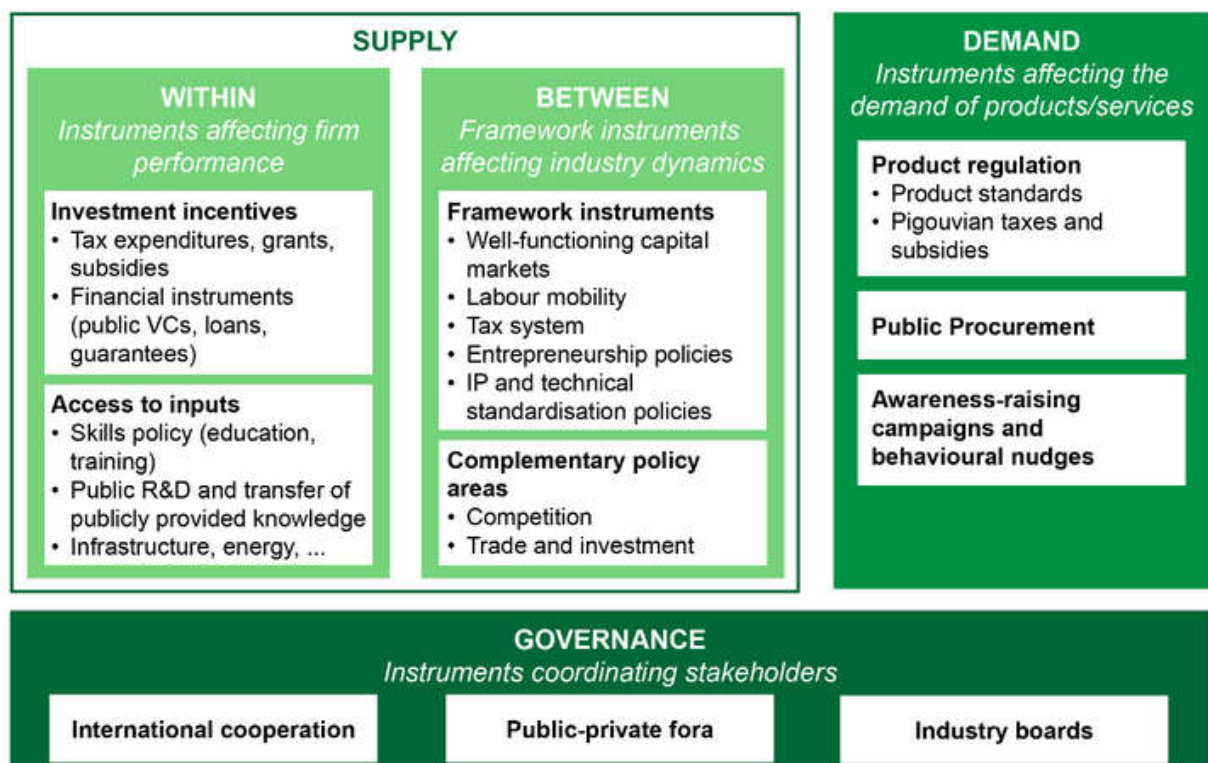
“We define industrial policy as the set of ‘interventions intended to improve structurally the performance of the domestic business sector’ and thus cover instruments ranging from the design of intellectual property protection to public procurement, R&D incentives, or public support to

improve workers' skills. It also encompasses much-studied realms such as science, technology, and innovation and entrepreneurship policies."



The formulation of industrial policy

"Our conceptual framework highlights two main dimensions of the formulation of industrial strategies, which are linked by the rationale underpinning policy intervention: designing an industrial strategy and selecting policy instruments to execute that strategy.



Taxonomy of policy instruments

The design of industrial strategies: A strategy is a consistent and articulated group of measures aimed at achieving a given policy objective, which can go beyond productivity growth and innovation to include things like sustainability, resilience, and strategic autonomy. Beyond traditional sectoral or place-based orientations, 'new' industrial strategies increasingly focus on specific technologies or 'missions'. For instance, mission-oriented industrial strategies are primarily motivated by the societal benefits they can provide and the need to coordinate multiple stakeholders around complex challenges, such as the green transition.

The choice of industrial policy instruments: Our taxonomy identifies the channels through which policy instruments operate and potential complementarities. In addition to keeping with the traditional distinction between horizontal and targeted policies, the taxonomy distinguishes between demand-side instruments and two types of supply-side instruments: those that primarily improve firm performance (such as tax credits, grants, loans or loan guarantees, and public support for training within firms) and those that affect industry dynamics ('framework' instruments such as the tax system, capital and labor market policies, competition or trade policies).

"This framework can shed light on the design of industrial strategies for the green transition, for example, by helping understand the complementarities between innovation and technology adoption support on the one hand and demand-side instruments on the other hand. The latter can contribute to transformative industrial change by affecting the demand for products through either their price, availability, or public demand, and have become more and more common, in particular in transformative mission-oriented strategies. The underlying rationale is the creation of demand to support scaling-up and in turn lowering costs through learning by doing. In the context of targeted industrial strategies, demand side policies are particularly interesting as they may be less distortive than targeted supply-side policies."

"Sound policymaking requires having a helicopter view of industrial policy — policymakers need to know what their government is doing domestically as well as understand partner countries' policies."

"The review of existing empirical evidence clearly supports the premise that well-designed economic incentives for firms and good framework conditions are effective. First, among the different types of economic incentives, the most studied by far are R&D tax credits and subsidies. While it has long been recognised that they stimulate R&D expenditures, recent studies also show that they tend to increase innovation. Second, policies leveling the playing field and ensuring an efficient allocation of resources, such as sound competition and trade policies, lowering barriers to entry, and cutting red tape, are key complements to industrial policy in enabling the most productive firms to grow and an important channel for structural change."

Criscuolo, Chiara; Guy Lalanne (2023): "A New Framework for Better Industrial Policies"

<https://www.promarket.org/2023/01/17/a-new-framework-for-better-industrial-policies/>

**Política
industrial**

Como ocurre con todos los términos fundamentales en Economía, no hay una definición clara, rigurosa y generalmente aceptada de 'política industrial'. Google dice:

“La política industrial es la intervención selectiva de los gobiernos para moldear la estructura de la economía de una nación, a menudo apoyando industrias, tecnologías o empresas específicas mediante herramientas como subsidios, exenciones fiscales y políticas comerciales. Si bien a veces es controvertida por el riesgo de distorsión e ineficiencia del mercado, actualmente está experimentando un resurgimiento para abordar los fallos del mercado y los desafíos sociales como el cambio climático, las vulnerabilidades de la cadena de suministro y las preocupaciones de seguridad nacional, con el objetivo de impulsar sectores estratégicos para el crecimiento económico y la estabilidad.”

Visión tradicional de la política industrial

La visión tradicional de la política industrial considera

- que la iniciativa privada (‘el mercado’) es capaz, por sí misma, producir el mejor resultado económico;
- que es necesario para la adopción de medidas de política industrial que exista alguna ‘deficiencia intrínseca’ en el mercado (externalidades, información asimétrica, derechos de propiedad no asignados...);
- que aunque se pudiera justificar la conveniencia de implementar alguna medida de política industrial es necesario asegurarse de que la implementación será efectiva y diligente, esto es, que no existan ‘deficiencias en el sector público’ (corrupción, falta de información, elegir un mecanismo deficiente o inapropiado de aplicación de las medidas...).

En suma, según la visión tradicional, no basta con que el sector público pueda mejorar el resultado económico: hay que demostrar que la política no empeorará el resultado obtenido sin la política.

Esta visión parece errónea porque prácticamente todos los ‘mercados’ están repletos de ‘deficiencias’ (que se incrementan allí donde el sector público tiene poca influencia en la economía y allí donde las economías están poco desarrolladas). Además, el ‘mercado’ no es una estructura fija: lo que sucede en el resto de la economía (cambios tecnológicos, acumulación de conocimiento, actores internacionales) es susceptible de afectar al resultado económico del ‘mercado’.

Si los poderes públicos alteran lo que sucede en el resto de la economía, el resultado económico correspondiente puede mejorar ese resultado.

¿Qué es la política industrial moderna?

“... modern industrial policy concerns anticipating change and facilitating it by removing obstacles and correcting market failures... In practice, modern industrial policy comprises restructuring policies that facilitate the transfer of resources to the more dynamic activities of an economy, be they agriculture, industry or services.

These are both ‘horizontal’ and ‘vertical’ policies. The former refers to the provision of inputs that can be used by a broad range of firms across different sectors. Typical examples are transport infrastructure, well-educated engineers, or health and safety inspection systems. Vertical policies

favor a particular sector (for example, training electronic engineers). Very often, however, publicly provided inputs (for example, a road) are sector or product specific; that is, vertical.

Examples of these inputs are a remote road that fosters eco-tourism—it does not help carry merchandise to a port—or a laboratory certifying the quality of meat, which is different from a laboratory certifying the quality of vegetables. Such examples show there is a small difference between horizontal and vertical policies.

Consequently, modern industrial policy also entails sector selection (...) However, the strategies used to select sectors have a clear rationale and the tools to promote them are stage-development dependent and linked to performance measures."

"Modern industrial policy also has a clear objective: to address the typical market failures that many firms face in the discovery of new activities in which they may thrive and that may ultimately lead to an economy's transformation (...) Finally, to succeed, modern industrial policy has to be conducted in a highly competitive environment."

"Firms from developing countries face a multiplicity of market failures. Two that are typical are information and coordination externalities. The first derives from the difference between the social and private values that entrepreneurs face when they try a new venture (...) Coordination externalities refer to the fact that new industries require capital that private entrepreneurs may not have."

"... new industries require coordinated investments in many related industries that individual entrepreneurs cannot organize by themselves. These investments generate demonstration effects and technological spillovers that raise the social return above the private return. This is the role of modern industrial policy."

"Another significant problem that many firms in developing countries face is a lack of organizational capabilities (...) Sutton (...) argues that becoming a rich country is about being able to earn higher real wages, and that some economic activities are more lucrative than others. Countries that specialize in such activities enjoy a higher level of real wages. But, unlike the traditional neoclassical model in which higher real wages are the result of an increasing capital-labor ratio, Sutton argues that the primary driver of growth is the gradual buildup of firms' organizational capabilities (...) For example, a car is a car if and only if all systems and components work. This implies that the value of each worker's effort depends on the quality of the efforts of all workers."

"There is also another class of problems that countries face as they become richer (...) network failures. In a wide array of technological and industrial arenas, advances are achieved not entirely through competitive transactions, but also through mutual learning processes fostered by well-managed collaboration between specialists in complementary fields, as well as between designers, producers and end-users. These failures can be addressed through policies aimed at helping dispersed network partners acquire a degree of certainty about the trustworthiness and competence of one another.

Seen in this light, industrial policy need not be controversial. Here, industrial policy is much less about the efficacy of government intervention—in particular about the incorrect allocation of funds

to the wrong sectors or the capture of subsidies by private interests—than about collaboration and the design of mechanisms to avoid these problems... Public-private collaboration is the essence of modern market economies and a key differentiating factor between economies that function well and those that do not.”

“The following is a summary of these findings and arguments:

1. Development is about the structural transformation of the economy. This idea has three key dimensions: diversify the economy, increase product/service sophistication and transfer of resources (both labor and capital) toward the more productive activities of the economy. These lead to higher wages (...) Structural transformation is slow and not a natural process (...) The rationale for industrial policy is the desire to expedite this process through government intervention.
2. Modern governments, in coordination with the private sector, can play an important role in addressing the coordination and information externalities, as well as the lack of capabilities, inherent in attempts to diversify. This coordination is a key pillar of modern industrial policy.
3. (...) industrial policy should be stage-of-development dependent (...) The nature of industrial policy changes as economies mature. Production technologies become more sophisticated and the promotion of new industries moves into uncharted territory. Industrial policy then has to confront high-return, highrisk trade-offs that are too much for the public sector to take on alone. Furthermore, as economies mature, the balance of expertise gradually shifts from the public to the private sector (...)
4. Political economy is an important factor. Industrial policy is unfair by nature as some areas of society benefit more than others. This inherent unfairness becomes less widely accepted as a society becomes more democratic. Furthermore, as an economy develops, foreign competitors will not be as forgiving of government subsidy support to certain sectors. Therefore, the role of government's conducting industrial policy tends to be more indirect in advanced economies.
5. A common misconception is that governments in advanced economies no longer pursue industrial policies. The reality is that many advanced economies do rely on 'indirect industrial policy' by selecting and supporting industries through private financial markets. Here, governments broadly define favored industries and announce incentives for private financing. The role of private financial institutions is to find candidates to support. Governments then adjust the level of incentives to assume a minority or majority share of the guarantee depending on the risk (...) Indirect industrial policy works only in a competitive environment. In the US, the government undertakes a significant amount of industrial policy to address network failures.
6. The benefits of indirect industrial policy are numerous (...) With indirect industrial policy, private financial institutions—not the government—interact directly with firms, and can, if necessary, withdraw their support without causing political backlash or giving the impression that the ‘government is taking away the umbrella when it rains.’
7. The selection of industrial policy tools is also stage-of-development dependent. These can be classified into one of eight categories: fiscal incentives, investment attraction programs, training policies, infrastructure support, trade measures, public procurement, financial mechanisms and

industrial restructuring schemes... Governments in advanced economies rely increasingly on financial tools as their economies mature, while the public sector's role in industrial policy becomes less and less visible.

8. Risk management tools are important in modern industrial policy. Although there are potentially significant social returns from pursuing industrial policy, the fiscal cost of credit program failures are absorbed by the government and, ultimately, taxpayers. A stop-loss mechanism is necessary to ensure that ineffective or wasteful credit programs are not continually funded year after year (...)

9. Human capital development and innovation are essential components of industrial policies. Low- and middle-income economies need to develop high-quality basic and vocational education to gain competitiveness in existing industries or to move into new ones. Societies need workers who can be trained to assimilate technologies. As countries become richer, they should develop high-quality tertiary education (...)

10. Foreign direct investment is an important element of the industrial diversification process. However, if not properly designed, preferential treatment and R&D incentives for foreign multinational corporations can increase their profitability without resulting in technology transfer to domestic firms. Sometimes, buying technology and paying royalties may be more effective in developing the domestic technology base.

11. A strong monitoring and evaluation mechanism is essential for successful industrial policies, and there are several general rules for effective mechanisms, including establishing clear objectives, developing simple check-up systems and ensuring coordination among relevant agents...

12. As economies mature, industrial policies become more complex. It is virtually impossible to trace all spillover effects across industries and come up with a comprehensive macroeconomic evaluation of a modern industrial policy package. Therefore, industrial policies in advanced economies are typically reviewed and monitored on a program-by-program basis rather than evaluated as an overall industrial policy package. Evaluation programs must be decentralized and have multiple layers of oversight. An appropriate legal framework is also needed to make monitoring and evaluation mechanisms effective and transparent."

Felipe, Jesus; ed. (2016): *Development and modern industrial policy in practice. Issues and country experiences*, Edward Elgar.

Características básicas de la política industrial moderna

Juhász et al. (2023) caracterizan la política industrial moderna en los siguientes términos.

- Según la base de datos de los autores, la política industrial es común (el 25% de las políticas) y se ha expandido desde 2010.
- En lugar de emplear aranceles de manera contundente (la Administración Trump parece regresar a los viejos modos), la política industrial es granular y tecnocrática. Se emplean más bien subsidios y medidas de promoción de las exportaciones, e incluso las medidas se dirigen a empresas específicas.

- Los países más activos en el uso de la política industrial tienden a ser las democracias liberales más ricas (el quintil de mayor renta). En la base de datos empleada por los autores la política industrial es una rareza entre los países más pobres (quintil inferior).
- La política industrial se dirige a un subconjunto de industrias (no es universal) y está altamente correlacionada positivamente con una demostrada ventaja comparativa de la industria.
- Se denomina moderna a la política industrial desarrollada en el presente al menos porque la práctica actual de la política industrial difiere substancialmente de la práctica del pasado.

“First, IP [Industrial policy] is common (25% of policies in our database) and has expanded since 2010. Second, instead of blunt tariffs, IP is granular and technocratic. Countries tend to use subsidies and export promotion measures, often targeted at individual firms. Third, the countries engaged most in IP tend to be wealthier (top income quintile) liberal democracies. In our data, IP is rarer among the poorest nations (bottom quintile). Fourth, IP is targeted toward a subset of industries and is highly correlated with an industry’s revealed comparative advantage. Our approach to measuring industrial policy shows that contemporary practice is likely much different from the past.”

Juhász, Réka; Nathan Lane; Emily Oehlsen; Verónica C. Pérez (2023): “The Who, What, When, and How of Industrial Policy: A Text-Based Approach”

<https://steg.cepr.org/publications/who-what-when-and-how-industrial-policy-text-based-approach>

Mensajes sobre la política industrial de la OCDE

“Industrial policy refers to government assistance to businesses to boost or reshape specific economic activities, especially to firms or types of firms based on their activity, technology, location, size or age. Governments use industrial policies to address important economic, social and environmental challenges that markets cannot address on their own, such as to accelerate the green transition, or improve the robustness of value chains for critical products and services

- Industrial strategies need to have clear objectives. The OECD’s conceptual framework for industrial policy uses a broad definition of industrial policy and considers a vast set of policy instruments, ranging from intellectual property protection to public support to improve workers’ skills ... The framework highlights two main dimensions of the formulation of industrial strategies: designing an industrial strategy and selecting policy instruments to execute that strategy.
- Industrial strategies are important tools but come with challenges and need to be evaluated. Sound policy making requires a clear view on what works and what does not. Leveraging the framework, the OECD provides a synopsis of the available empirical evidence on industrial policy instruments, including their complementarities and trade-offs.
- Policymakers need to understand industrial policy domestically as well as in partner countries. Measuring industrial policy expenditures is a first step towards ensuring transparency and accountability and enabling policy evaluation. It also supports cross-country comparability of industrial policies, facilitating international coordination on global challenges... This analysis

across nine OECD countries found that industrial policies are sizable (1.4% of GDP on average). While there is a significant degree of heterogeneity in the format and priorities of this support, these expenditures are dominated by a sectoral approach. This sectoral support tends to support energy, transport, and manufacturing. Green instruments are increasingly important and are largely sector and/or technology specific.

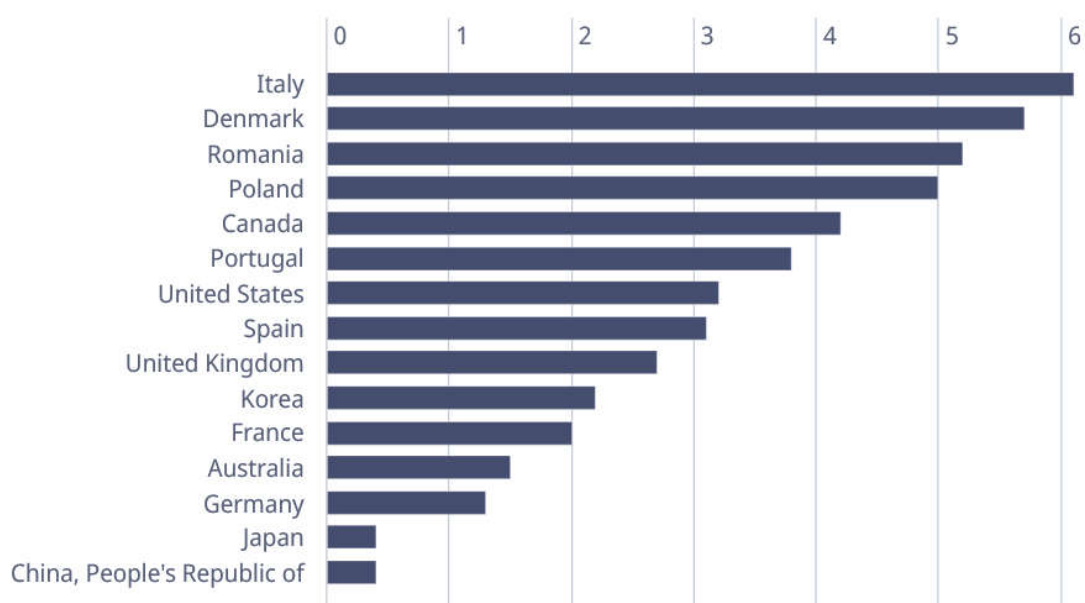
- Industrial policies have a central role to play in accelerating the green transition. Green industrial policies are increasingly considered a necessary part of the solution to keeping climate targets within reach... Such policies can accelerate decarbonization by lowering constraints on access to finance, improving access to skills and infrastructure, reducing regulatory barriers for new entrants, stimulating demand for green products, and aiming to negate first-mover disadvantage. The key question ... is how to design them effectively to help accelerate emissions reductions while minimising risks to competitiveness, inclusiveness, and economic efficiency."

<https://www.oecd.org/en/topics/policy-issues/industrial-policy.html>

Criscuolo, Chiara; Nicolas Gonnet; Kohei Kitazawai; Guy Lalanne (2022): "An industrial policy framework for OECD countries: Old debates, new perspectives", OECD Science, Technology and Industry Policy Papers, No. 127, OECD Publishing, <https://doi.org/10.1787/0002217c-en>.

Criscuolo, Chiara; Nicolas Gonnet; Kohei Kitazawai; Guy Lalanne (2022): "Are industrial policy instruments effective?: A review of the evidence in OECD countries", OECD Science, Technology and Industry Policy Papers, No. 128, OECD Publishing, <https://doi.org/10.1787/57b3dae2-en>.

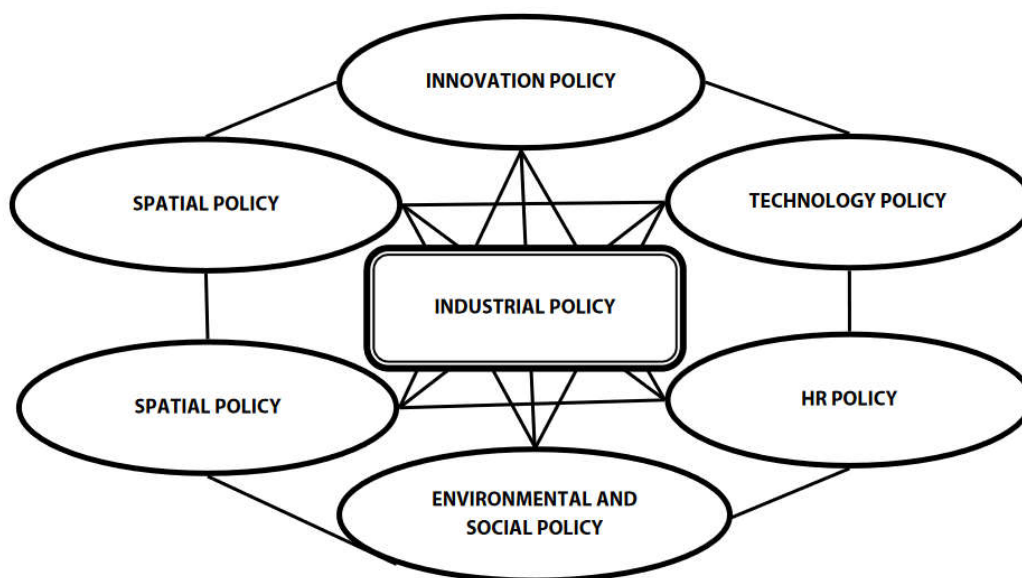
Fiscal spending for green industrial policies
% of GDP



Visiones tradicional y moderna de la política industrial

"Socio-economic policy of any state is based on a variety of policies that define the development of various activities, including economic, social, investment, innovation, environmental, institutional, and other activities. The coordination of above policies in order to successfully implement social and economic policy can be the most effective when it is based on the

formation and implementation of industrial policy. But industrial policy is not only a coordinating component for various state policies, but also a platform that serves as a basis for building the economic policy of the state.”



Coordinating role of industrial policy

“The systematization of multiple studies in this area allows to identify five main groups which can combine traditional, widely used concepts of industrial policy (...) In the first group of interpretations, the industrial policy is viewed as a tool for creating the conditions for economic growth and better competitiveness. The concepts of industrial policy, which can be combined into the second group, are related to defining the impact of the government on the operation of markets. The third group in the traditional understanding of industrial policy combines its supporters from the point of view of defining impact on the development of sectors with high value added. The fourth group brings together the experts focusing on the need to combine support for the development of new industries with the simultaneous modernization of traditional production facilities. The most common interpretation of industrial policy defines it as a policy associated with a target-oriented change in the structure of the economy. The supporters of this approach are combined in the fifth group.”

“... amid high uncertainty and geopolitical transformations, the understanding of industrial policy as an evolving system of relations between the state, business entities, and civil society institutions can become a common theoretical foundation for all groups of above interpretations. Such system of relations emerges in reference to the formation of structurally balanced, competitive economy (industrial policy in the broad sense) or structurally balanced, competitive industry (industrial policy in the narrow sense). At the same time, it is important to mention that industrial policy in the narrow sense may relate not only to industry, but also to any other sector of the economy.”

“The first decades of the 21st century were marked by the appearance of works that offer a new understanding of industrial policy (...) In this case, the industrial policy is viewed as a tool for implementing the comparative advantages of economies in different countries (...) A positive outcome can be achieved only if the government priorities reflect structural changes based on

specific assets of the economy that allows certain sectors to have advantages in global markets (...) Materializing the identified advantages also requires the participation of the state, which is implemented through the state industrial policy.

We also see the development of another approach to understanding industrial policy based on the notion of a 'good economy' (...) Some authors view the so-called 'new entrepreneurial economy' as a good economy. For example, in the works of B. Cutter, the high quality of such good economy is ensured by at least 2 % annual productivity growth with an overall economic growth of 3 %, stable increase of labor, high level of new business creation, unemployment at the level of 5–6 %, and self-employment at about 30 %".

Traditional approach	• Creating conditions for economic growth and higher competitiveness (V. M. Polterovich, V. V. Popov, 2006; J. Beath) [3, 4]; • Influence of the government (ruling elite) on the markets (G. Federico) [5]; • Supporting the development of sectors with high value added (Yu. Simachev, 2017) [6, p.12]; • Developing new and modernizing traditional industries (V. E. Dementyev, 2013) [7]; • Target-oriented change in the structure of the economy (B.V. Kuznetsov, Yu. V. Simachev, 2014, A. I. Tatarkin and O. A. Romanova, 2007, D. Rodrik, 2004, C. Warwick, 2013) [1, 2, 8, 9]
New understanding	• Realization of comparative advantages within the framework of "new structural economy" of J. Lin [10]; • Image of "good economy" (E. Phelps, 2009, B. Cutter, 2016) [11-13]; • "Good economy" as the foundation of industrial policy (V. L. Tambovtsev, 2017) [14].

Traditional and new approach to understanding the purpose of industrial policy

"There is an interpretation of a good economy as an economy that ensures a good life for people (...) a good economy should ensure challenge, engagement, mastery, discovery, and development for people (...) In our view, the industrial policy should focus not only on target-oriented changes in the structure of economic activity and provision of increasing human needs, but also on the formation of a structurally balanced humanitarian and technological space, which is a prerequisite for building a 'good economy.'

A particular role in the formation of successful industrial policy for Russia is played by its regional component. It is the regional industrial policy that allows to use the investment and industrial potential of the regions to address the issues of effective economic restructuring not only in a certain area, but also in Russia in general. Highly uneven development of Russia's territory, small population density in vast areas of Siberia and Russian Far East, unacceptably high gap (28 times) between the subjects of the Russian Federation in terms of per capita GDP makes this issue relevant not only for reducing the socioeconomic inequality of regions, but also for aligning long-term development goals stated in the federal and regional laws on industrial policy. To develop an adequate industrial policy, it is necessary to consider the characteristics of scientific and technological, industrial, resource, and human potential of the regions."

"... when analyzing the effects resulting from the implementation of Washington consensus principles for developing countries, D. Rodrik came to the conclusion that it was impossible to

create a set of industrial policy measures that would be applicable to any country. He demonstrated that any reforms should be adapted to specific circumstances, and 'standard projects' of reforms are no longer relevant in the current environment (...) When it comes to inadmissibility of "standard projects" of regional industrial policy, the relevance of this provision fully applies to Russia."

"The fundamental difference of the fourth industrial revolution is the harmonization and integration of a large number of scientific disciplines, synthesis of resulting technologies, and their interaction in physical, digital, and biological systems. Megatrends of technological development in the era of the fourth industrial revolution can be combined into three units (physical, digital, and biological) ... A fundamentally new feature of these megatrends is the fact that digital technology, as the foundations of all new technology solutions, penetrates into all units."

"A somewhat clarified concept of digital economy was provided in the program 'The Digital Economy of the Russian Federation.' In this case, the digital economy is defined as 'an economic activity, in which the key factor of production are data in digital form and which contributes to emergence of the information space by taking into account the needs of citizens and society in obtaining highquality and reliable information, development of information infrastructure of the Russian Federation, creation and application of Russian information and telecommunication technologies, as well as the formation of a new technological foundation for social and economic environment'."

"The subject matter of the digital economy remains a debatable issue. In this discussion, a fundamental matter is the understanding of digital economy as either an economy of exclusively digital objects, or an economy of the subsequent phase in the development of traditional industries and formation of new industries based on the intensified use of the Internet and digital technology. The second interpretation of the subject matter of the digital economy seems to be more legitimate."

Romanova, O A (2018): "Industrial Policy Priorities of Russia in the Context of Challenges of the Fourth Industrial Revolution. Part 1", *Ekonomika Regiona = Economy of Regions*; Yekaterinburg Iss. 2, (2018): 420-432.

<https://www.proquest.com/openview/5ef046d0999e5209bcf1f795ead841ac/1?pq-origsite=gscholar&cbl=5002427>

1.2. Marcos de política industrial: Consensos, MAGAnomics, Xinomics

Manufacturismo

Carlos Sabillón (2000) defiende el papel central de la actividad manufacturera (que, en el presente, se desarrollo casi exclusivamente en factorías).

- La manufactura (toda actividad económica que no es actividad del sector primario, la construcción y los servicios) es el principal factor responsable de generar crecimiento económico.
- La manufactura es el sector más ligado a la tecnología. La tecnología es el factor determinante de la productividad. Por tanto, la manufactura (al menos en el largo plazo) ha sido el sector más intensivo en productividad. El resto de actividades más bien son receptores, no creadores, de tecnología y se limitan a absorber pasivamente la tecnología y las mejoras de productividad generadas en la manufactura.
- La tecnología se manifiesta en forma de bienes manufacturados: imprentas, máquinas de vapor, teléfonos, bombillas eléctricas, automóviles, aviones, medicamentos, equipo médico, frigoríficos, microondas, aparatos de televisión, electrónica de consumo, microchips, ordenadores, satélites...
- La historia económica sugiere que cuanto más crece el sector de la manufactura, más se desarrolla la innovación, más es la importación de tecnología y más se expande la tecnología.
- La política más efectiva para conseguir y mantener el crecimiento económico es el apoyo continuado a la manufactura. Cuando este apoyo se detiene, la producción manufacturera se estanca y con ello también se estanca el resto de la economía.

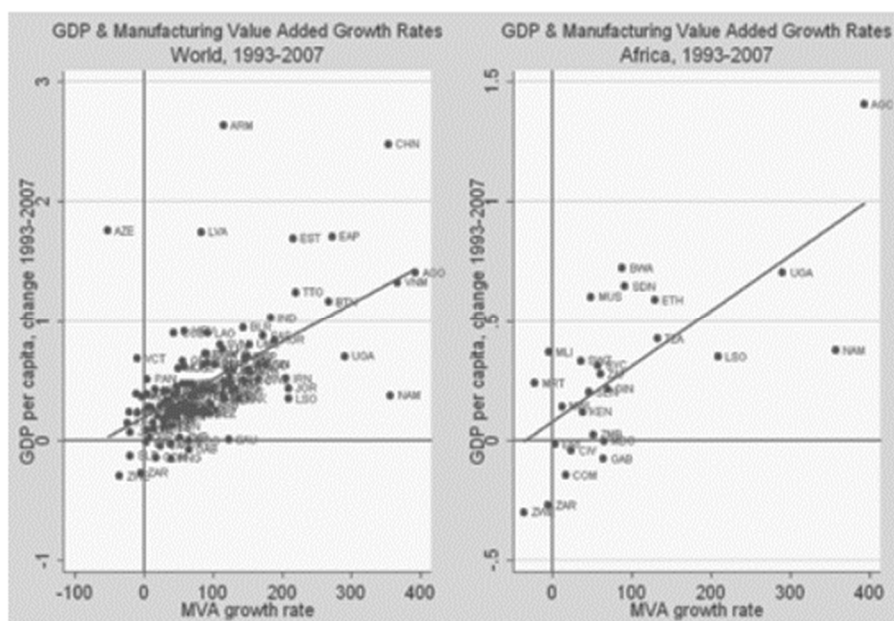
Sabillon, Carlos (2000): *Manufacturing, technology, and economic growth*, M.E. Sharpe.

Desarrollo, industrialización y vuelo de gansos

“... modern economic development is accompanied by structural transformation from an agrarian to an industrial economy and occurs through a process of continuous industrial and technological upgrading.

Since the 18th century, all countries that industrialized successfully in

Europe, North America and East Asia had two features in common: one, they exploited their comparative advantage; and two, they leveraged the late-comer advantage to emulate the industrial upgrading patterns of countries richer than them. Except for a few oil exporting countries, no country has achieved a high-income status without industrializing. In general, a change in GDP per capita is strongly and positively

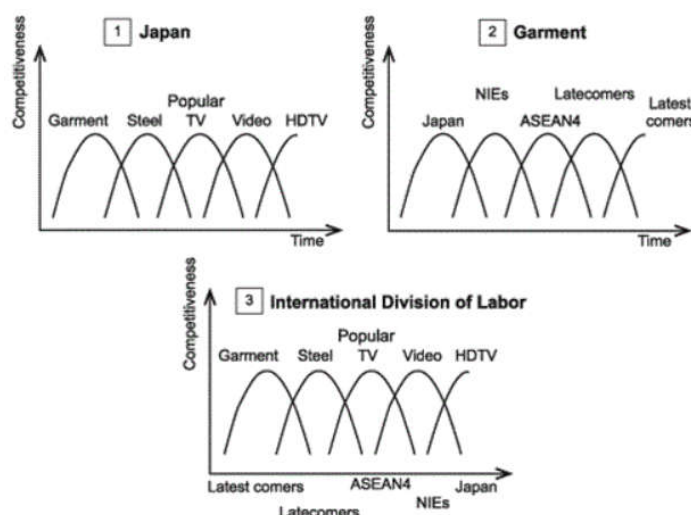


correlated with growth in value added in the manufacturing sector (figure 1). If a natural resource- or land-rich country has achieved a middle income status without a large manufacturing sector, it has rarely succeeded in sustaining growth.”

“The large dynamic emerging market countries such as China, India and Brazil are also engaged in industrial upgrading but with a critical difference. Because of its sheer size, China has absorbed nearly all labor-intensive jobs and has become the world’s largest exporter of labor-intensive products. The current view is that China’s dominance hinders poor countries from developing similar industries.”

“In the 1930s, economists researching ‘catch-up growth models’ argued that catch-up was not random. Kuznets and Akamatsu explored the conditions under which the Industrial Revolution occurred in the UK and how it spread only to those countries that had sufficient accumulation of capital and skilled labor, among other conditions (...) The focus on structural transformation and industrial upgrading (...) and cross-country catch-up (...) can be found in Akamatsu’s work (...) on Japan, a country that started from a much lower level of income than the Western European countries. In a seminal paper in the 1930s, Akamatsu documented what he called the ‘wild-geese flying pattern’ in economic development and noted that ‘wild geese fly in orderly ranks forming an inverse V, just as airplanes fly in formation’ (Akamatsu 1962, p. 11).

The flying geese pattern describes the sequential order of the catch-up process of industrialization of latecomer economies. It focuses on three dimensions or stages: (i) the intra-industry dimension; (ii) the inter-industry dimension; and (iii) the international division of labor dimension. The third element in particular involves the process of relocation of industries across countries, from advanced to developing countries, during the latter's process of convergence. A prominent feature of this stage is that exports of consumer goods start declining and capital goods begin to be exported. In this stage, a group of economies advance together through emulation and learning-by-doing.”



Chandra, Vandana; Justin Yifu Lin; Yan Wang (2013): “Leading Dragon Phenomenon: New Opportunities for Catch-up in Low-Income Countries”, Asian Development Review 30(1), 52–84.
<https://blogs.worldbank.org/en/developmenttalk/leading-dragons-phenomenon-new-opportunities-for-low-income-countries-to-catch-up>

El efecto Vanek-Reinert

“It has been observed that upon trade liberalization the most efficient industries in the less developed countries are the first to become extinct. This is known as Vanek-Reinert effect.”

https://mpira.ub.uni-muenchen.de/47909/1/MPRA_paper_47909.pdf

El efecto Vanek–Reinert explica que la apertura comercial tiende a destruir las industrias más desarrolladas en países en vías de desarrollo. Cuando estas industrias se enfrentan a industrias más avanzadas y de gran dimensión de países desarrollados, el resultado más probable es su desaparición.

“The traditional, still influential and pessimistic view holds that post-unification economic policies favoured industrialisation and development in the North at the expense of the South (...) In contrast, more recent scholarship has highlighted the ways unification benefited, at least temporarily, the Southern economy by promoting market integration (...), free trade (...), and public investments in infrastructure and education.”

Guglielmo Barone; David Chilosì; Carlo Ciccarelli; Guido de Blasio (2025): “A cold case (over 160 years old): The effects of unification on Italy’s North-South divide” 28 Jun 2025

<https://cepr.org/voxeu/columns/cold-case-over-160-years-old-effects-unification-italys-north-south-divide>

Xinomics

Google ofrece la siguiente explicación del término ‘Xinomics’ (≈ ‘política económica de Xi Jinping’ o ‘modelo económico chino de capitalismo de estado’).

“**Xinomics** es un término que se usa en la prensa internacional para describir la cosmovisión económica de China bajo Xi Jinping, caracterizada por una mayor centralización del poder, un énfasis en la autosuficiencia y la estrategia de ‘Doble Circulación’ para gestionar la economía doméstica y las relaciones con el mundo. Este concepto se diferencia del modelo económico de Deng Xiaoping, que buscaba la riqueza a través de un capitalismo más libre, y se enfoca en convertir a China en una superpotencia económica global.”

Elementos clave de la Xinomics

- **Estrategia de Doble Circulación.** China busca gestionar los flujos económicos internos y externos de manera más controlada, con una clara división entre el mercado doméstico y el internacional.
- **Énfasis en la autosuficiencia.** Se busca reducir la dependencia de factores externos, promoviendo una mayor autonomía en la economía china.
- **Centralización del poder.** La política económica está más alineada con los objetivos del gobierno central, buscando la fortaleza y el poder de la nación.
- **Objetivo de superpotencia.** El fin último es convertir a China en una potencia global capaz de competir por el liderazgo mundial.”

La explicación en inglés difiere en algunos aspectos.

“Xinomics refers to Chinese President Xi Jinping’s economic policies and the shift towards a more state-controlled, hybrid economic model characterized by the Dual Circulation Strategy. Key features include increased control over state-owned enterprises, a greater role for the Communist Party in the economy, and a focus on strengthening the domestic economy while managing its

relationship with the global economy. This approach represents a departure from Deng Xiaoping's 'reform and opening-up' era, which favored a greater role for private and foreign capital.

Key Characteristics

- **Strengthening State-Owned Enterprises (SOEs).** A core component of Xinomics is making SOEs bigger, better, and stronger, promoting the idea of the state advancing while the private sector retreats.
- **Increased Communist Party Control.** The Communist Party exerts tighter control over economic decision-making and requires private companies to establish Party organizations within their companies.
- **Dual Circulation Strategy.** This strategy divides the economy into domestic and international spheres, managing the links between them and focusing on self-reliance.
- **Politicized Economy.** Ideology, security, and politics are deeply intertwined with China's business environment, making it more uncertain.
- **Hybrid Economic Model.** Xinomics blends aspects of state-controlled economies with some privatization and deregulation, particularly in consumer-facing sectors, but with overall tightening of Party control."

Cinco pilares de Xinomics

Pilar 1. Control estricto del ciclo económico y del endeudamiento.

Pilar 2. Administración pública eficiente y reducción de la burocracia (*red tape*)

Pilar 3. Frontera borrosa entre empresas privadas y públicas (las públicas se gestionan como las privadas y ello contribuye a atraer inversores privados; el partido se integra en empresas privadas y estas pueden ser penalizadas por no respetar principios o instrucciones del partido)

Pilar 4. Atención a los puntos críticos de las cadenas de suministro (ejercer influencia en el exterior, ser autosuficiente en tecnologías clave, identificar vulnerabilidades propias que puedan explotar agentes extranjeros)

Pilar 5. Refuerzo de la circulación dual (reducir importaciones, dar prioridad al consumo interno, limitar relaciones exteriores que generan vulnerabilidades e impulsar las que generan beneficios, reforzar la dependencia externa de China)

<https://www.slideshare.net/slideshow/xinomics/241659390>

"China's 'Great Dual Circulation' is an economic strategy that divides the economy into 'internal circulation' (domestic economic activity) and 'external circulation' (global economic interaction), with the goal of developing a self-reliant Chinese economy that mutually reinforces its strength and openness to the outside world. The strategy prioritizes strengthening the domestic market to reduce dependence on foreign fluctuations and promoting Chinese standards and priorities internationally, fostering a 'home-based globalization'.

Key Aspects of the Dual Circulation Strategy

• Prioritization of Domestic Consumption

The strategy aims to make the Chinese economy less reliant on external markets by boosting domestic demand and consumption, thereby making it more resilient to global economic shocks.

• Increased Self-Reliance

China seeks to become more self-sufficient in key sectors, particularly high-technology industries, to reduce dependence on foreign supplies and technology.

• ‘Home-Based Globalization’

China intends to become the world’s largest consumer market, encouraging foreign companies to adhere to Chinese standards and priorities to gain market access and promote them globally.

• Mutual Reinforcement

While focusing inward, the strategy is not a complete break from the global economy; instead, it seeks a symbiotic relationship where a strong domestic economy supports international engagement, and international trade and investment contribute to internal strength and industrial upgrading.

• Shifting Focus from Integration

The dual circulation concept signifies a move away from China’s previous emphasis on seamless integration into the global economy toward a more distinct and managed interaction between its large domestic market and the rest of the world.”

<https://www.google.com/search?client=firefox-b-d&q=great+dual+circulation>

Informe sobre la labor del gobierno chino en 2024

Li Qiang, primer ministro de la República Popular China desde marzo de 2023, presenta anualmente, en marzo, ante el máximo órgano legislativo de la República Popular China (la Asamblea Popular Nacional de China) un informe sobre la labor realizada por el gobierno chino en el año anterior. En el informe cuesta encontrar una referencia a una tarea no económica.

“A Review of Our Work in 2024

The year 2024 was a truly remarkable year in China’s development journey (...) We celebrated the 75th anniversary of the founding of the People’s Republic of China (...) We ensured overall stable performance and steady growth of the economy and accomplished the main goals and tasks for economic and social development in 2024. Solid headway was made in pursuing high-quality development and fostering new quality productive forces. China’s economic strength, scientific and technological capabilities, and composite national strength continued to rise, and solid new strides were made in advancing Chinese modernization.

Stable performance was consolidated and sustained, as demonstrated in the following areas:

— **Steady expansion of the economy:** China’s gross domestic product (GDP) rose to 134.9 trillion yuan, a year-on-year increase of 5 percent. China ranks among the world’s fastest-growing major economies, continuing to contribute about 30 percent to global economic growth.

— **Generally stable employment and prices:** A total of 12.56 million urban jobs were created, and surveyed urban unemployment rates averaged 5.1 percent. The consumer price index (CPI) increased by 0.2 percent.

— **A basic equilibrium in the balance of payments:** Foreign trade reached a record high, and the global market share of China's exports increased steadily. Foreign exchange reserves surpassed 3.2 trillion US dollars.

— **Steady progress in ensuring the people's wellbeing:** Per capita disposable income grew by 5.1 percent in real terms."

"Strong and solid progress was achieved, as shown in the following areas:

— **New advancements in industrial upgrading:** (...) The value added of high-tech manufacturing and equipment manufacturing rose by 8.9 percent and 7.7 percent respectively, and the output of new-energy vehicles passed the 13 million mark. The value added increased by 10.9 percent in the sectors of information transmission, software, and IT services and by 10.4 percent in leasing and business services.

— **Further enhancements in innovation capacity:** New achievements were made in integrated circuits, artificial intelligence (AI), quantum technology, and other areas. The Chang'e-6 mission completed humanity's first-ever sample collection from the far side of the moon, and the Mengxiang ocean drilling vessel was delivered and commissioned (...)

— **New improvements in the environment:** In cities at and above the prefectural level, the average concentration of fine particulate matter (PM2.5) fell by 2.7 percent, and the proportion of days with good or excellent air quality rose to 87.2 percent. The proportion of surface water with a good quality rating reached 90.4 percent. Energy consumption per unit of GDP dropped by more than 3 percent, and installed renewable energy capacity grew by 370 million kilowatts.

— **New breakthroughs in reform and opening up:** We implemented the reform plans (...) which included completing the reform of government institutions across the board, adopting major reform measures for building a unified national market, and gradually raising the statutory retirement age. All market access restrictions on foreign investment in the manufacturing sector were lifted, and trade and investment cooperation under the Belt and Road Initiative was steadily expanded and upgraded.

Our achievements in 2024 did not come easily. The adverse impact of changes in the international environment increased, and some deep-seated structural problems that had been building up in the country for years came to a head (...) All this added to the difficulty of maintaining economic and social stability. In the course of this, we deepened our understanding of the laws governing economic work and became more keenly aware that the centralized, unified leadership of the Party Central Committee is essential to doing our economic work well. It is also clear that we must properly handle the relationships between an efficient market and a well-functioning government, between aggregate supply and demand, between fostering new growth drivers and upgrading old ones, between optimizing allocation of new resources and making the best use of existing ones, and between enhancing quality and expanding total output. What we have achieved once again proves

that under the strong leadership of the CPC Central Committee with Comrade Xi Jinping at its core and with the dedicated efforts of our people across the country, we can prevail over any difficulty in pursuing development. Last year, we continued to deepen our understanding of and apply Xi Jinping *Thought on Socialism with Chinese Characteristics for a New Era*...”

“Acting on the decisions and plans of the Party Central Committee, we mainly did the following work:

- 1. We took more robust and innovative measures in conducting macro regulation in light of evolving conditions and promoted economic recovery and growth (...)**
- 2. We deepened reform and opening up comprehensively with unswerving commitment and boosted the internal momentum of development.**

We overhauled and abolished regulations and practices impeding the development of a unified national market, formulated and implemented regulations on fair competition review, and adopted measures to regulate steps taken by local governments to attract investment. We further reformed state-owned enterprises (SOEs) and continued to improve the layout of the state-owned sector (...) We expanded unilateral opening up, adopting zero tariffs on all products from all the least developed countries that have diplomatic relations with China (...)

- 3. We made major efforts to promote innovation-driven development and upgraded the industrial structure.**

To boost China’s strength in science and technology, we rolled out major national science and technology programs across the board, worked faster to improve major science and technology infrastructure, and redoubled efforts to cultivate first-class innovators (...) Thanks to swift development of the Digital China Initiative, the value added of core industries of the digital economy rose to about 10 percent of GDP.

- 4. We advanced coordinated development between urban and rural areas and between different regions and improved the economic layout.**

(...) New achievements were made in advancing all-around rural revitalization. We secured further headway in promoting integrated regional development by introducing a range of regional development policies, implementing a set of major regional programs, and improving functional zoning systems and policies.

- 5. We actively developed social programs and improved the people’s wellbeing.**

We adopted new policy measures to promote high-quality and full employment, supported businesses in creating new jobs, and ensured stable employment among key groups, including college graduates, people lifted out of poverty, and rural migrant workers. We worked to build a strong educational system for China (...) We deepened the reform of elderly care services and formulated policies to promote the development of the silver economy [= actividades económicas, productos y servicios dirigidos a mayores de 50 años] (...) Chinese athletes achieved their best overseas Olympic performance at the Paris Olympics.

6. We continued to strengthen environmental protection and promoted green and low-carbon development.

We stepped up comprehensive efforts to improve the environment and achieved yet another drop in the discharge of major pollutants (...) The share of electricity generated from non-fossil fuels increased, accounting for close to 40 percent of total power generation. We launched the National Voluntary Greenhouse Gas Emission Reduction Trading Market, and carbon emissions trading in China became increasingly brisk.

7. We enhanced government performance and governance innovation and ensured social harmony and stability.

We implemented the Party Central Committee's strategic plans for conducting full and rigorous Party self-governance (...) We made a major push to address pointless formalities so as to lighten the burdens on those working on the ground, intensified efforts to rectify misconduct directly affecting people's lives, and kept working to improve conduct, build integrity, and combat corruption (...) We developed new and better ways of conducting social governance (...) We took effective measures to guard against and respond to floods, typhoons, earthquakes, and other natural disasters. We improved the national security system (...) In doing so, we protected our people's lives and property and ensured social stability."

"In 2024, we made new advances in conducting major-country diplomacy with Chinese characteristics (...) We continued to promote the building of a community with a shared future for mankind. We consolidated and expanded partnerships across the globe, stayed committed to true multilateralism, and played a positive and constructive role in addressing global challenges and resolving regional and international hotspot issues. With these efforts, China made important contributions to peace and development in the world. We owe our achievements in 2024 to General Secretary Xi Jinping, who is at the helm charting the course."

"While recognizing our achievements, we are keenly aware of the problems and challenges that confront us.

Internationally, changes unseen in a century are unfolding across the world at a faster pace (...) Global economic growth lacks steam, unilateralism and protectionism are on the rise, the multilateral trading system is experiencing disruptions, and tariff barriers continue to increase. All this is undermining the stability of global industrial and supply chains and impeding flows in the international economy (...)

Domestically, the foundation for China's sustained economic recovery and growth is not strong enough. Effective demand is weak, and consumption, in particular, is sluggish. Some enterprises face difficulties in production and operations, and overdue payments remain a prominent issue for enterprises (...) We in government need to improve our performance and capacity for conducting law-based administration. Coordination and cooperation are lacking in some areas of our work, and the pace of implementation for some policies is too slow, with the results being less than expected. Some government departments are not fully service-oriented and are thus often inefficient. Some

officials either act arbitrarily or lack the drive and ability to deliver. Corruption remains a common problem in some sectors and localities.”

“China has distinctive institutional strengths and many advantages, including an enormous market, a complete industrial system, and a wealth of manpower and talent. We have effective governance mechanisms featuring long-term plans, sound regulation, and coordination between central and local governments as well as vast space for further growth through demand upgrades, structural improvements, and a shift to new growth drivers. The underlying trend of long-term economic growth has not changed and will not change. The giant ship of China’s economy will continue to cleave the waves and sail steadily toward the future.”

“Major Tasks for 2025

(...) 1. Vigorously boosting consumption and investment returns and stimulating domestic demand across the board

(...) We will launch special initiatives to boost consumption (...) We will expand effective investment. With a focus on national development strategies and the needs of the people, we will leverage government investment instruments of all types (...) We will simplify investment approval procedures and establish sound mechanisms for ensuring coordinated implementation of major cross-department and trans-regional projects. Investment in the service sector will be scaled up. To support and encourage private investment, we will implement new mechanisms for public-private partnership in a well-regulated manner and guide more private investment toward major infrastructure and public wellbeing projects, thus creating more opportunities for the development of private capital.

2. Developing new quality productive forces in light of local conditions and accelerating the development of a modernized industrial system

We should pursue integrated advancements in technological and industrial innovation, press ahead with new industrialization, expand and strengthen advanced manufacturing, and vigorously develop modern services (...) We will foster emerging industries and industries of the future (...) We will establish a mechanism to increase funding for industries of the future and foster industries such as biomanufacturing, quantum technology, embodied AI, and 6G technology (...) To promote orderly industrial development and healthy competition, we will improve coordination and planning of industries and strengthen monitoring and early warning for production capacity (...) We will promote the transformation and upgrading of traditional industries (...) We will unleash the creativity of the digital economy. Under the AI Plus initiative, we will work to effectively combine digital technologies with China’s manufacturing and market strengths (...) We will promote the healthy and well-regulated development of the platform economy and give better play to its role in inspiring innovation, expanding consumption, and stabilizing employment.

3. Fully implementing the strategy of invigorating China through science and education and boosting the overall performance of China’s innovation system

(...) We will press ahead with educational reform and development to meet our country’s needs and address people’s concerns, and move faster to transform China from a large educational

country to an educational powerhouse. We will improve self-reliance and strength in science and technology. We will fully leverage the strengths of the new system for mobilizing resources nationwide to intensify the push for breakthroughs in core technologies in key fields and R&D advancements in frontier and disruptive technologies, and accelerate implementation of and forward-looking planning for major science and technology projects (...) We will develop a first-rate industrial technical workforce (...) We will improve the distribution of talent across regions and foster closer personnel collaboration between the eastern, central, and western regions (...)

4. Accelerating the implementation of landmark reform measures and better leveraging the leading role of economic structural reform

(...) We will take solid steps to implement policies and measures designed to spur the growth of the private sector, effectively protect the lawful rights and interests of private enterprises and entrepreneurs in accordance with the law, and encourage private enterprises with appropriate conditions to institute and refine modern corporate systems with distinctive Chinese features (...) We will introduce policies for improving the social credit system and develop an integrated credit repair system (...) We will further reform the fiscal, taxation, and financial systems.

5. Expanding higher-standard opening up and stabilizing foreign trade and investment

Regardless of changes in the external environment, we should remain steadfast in our commitment to opening up (...) We will work for stable development of foreign trade (...) We will cultivate new growth drivers, such as green trade and digital trade (...) We will strive for solid progress in pursuing high-quality Belt and Road cooperation (...) We will deepen multilateral, bilateral, and regional economic cooperation (...)

6. Effectively preventing and defusing risks in key areas and ensuring that no systemic risks arise

To ensure both development and security, we will continue to defuse risks step by step in the course of pursuing development and work for positive interactions between high-quality development and greater security (...) We will take prudent steps to defuse local government debt risks (...) We will guard against financial risks (...)

7. Making every effort to deliver in work relating to agriculture, rural areas, and rural residents and taking solid steps to advance all-around rural revitalization

(...) We will adopt all means necessary to raise agricultural returns, invigorate rural development, and increase rural incomes. We will continue to improve our capacity for ensuring stable production and supply of grains and other major agricultural products (...)

8. Advancing new urbanization and coordinated regional development and further improving the spatial layout of development

We will refine the mechanisms for implementing the coordinated regional development strategy, take a people-centered approach to promoting higher-quality urbanization, and foster a regional economic layout and a territorial space system featuring complementarity between different regions and territorial spaces. We will advance strategic initiatives for new urbanization (...)

9. Making coordinated efforts to cut carbon emissions, reduce pollution, pursue green development, and boost economic growth and accelerating the green transition in all areas of economic and social development

We will further deepen structural reform in ecological conservation and coordinate initiatives for industrial restructuring, pollution control, ecological conservation, and climate change response. We will continue to prioritize ecological protection, conserve resources and use them efficiently, and pursue green and low-carbon development (...) We will accelerate development of the green and low-carbon economy (...) We will support labor-intensive industries in creating jobs and stabilizing employment and strike a balance between the application of new technologies and job relocation for employees. This will help create new job opportunities. We will improve services to facilitate employment and entrepreneurship (...) We will carry out large-scale plans for upgrading vocational skills to increase the supply of highly-skilled personnel urgently needed in the manufacturing and service sectors. We will move faster to develop a skills-based pay system to see that skilled workers get better paid. In short, we will ensure better pay for those with a commitment to hard work, an outstanding skill set, and a dedication to innovation (...) We will formulate policies on boosting birth rates, provide childcare subsidies, vigorously develop integrated nursery and childcare services, and increase public-interest childcare services (...) We will safeguard national security and social stability."

"We will readily accept democratic oversight from the CPPCC and readily place ourselves under public oversight and oversight through public opinion (...) With a commitment to sound, democratic, and law-based decision-making, we will conduct a more thorough review of the legislative work of the government and improve legality review for major decisions and normative documents. We will make government affairs more transparent. More efforts will be made to see that the law is enforced in a strict, procedure-based, impartial, and non-abusive way (...) We will support trade unions, Communist Youth League organizations, women's federations, and other people's organizations in better playing their roles (...) We will improve government efficiency and performance. We will adopt a realistic and pragmatic approach and solve problems based on actual conditions."

"China is ready to work with other members of the international community to promote an equal and orderly multipolar world and universally beneficial and inclusive economic globalization, pursue the Global Development Initiative, the Global Security Initiative, and the Global Civilization Initiative, and actively participate in reform and development of the global governance system."

"Confidence builds strength, and hard work creates glorious achievements (...) Let us strive to build a great country and advance national rejuvenation on all fronts through Chinese modernization."

Li Qiang, Premier of the State Council (2024): "Report on the work of the government", Delivered at the Third Session of the 14th National People's Congress of the People's Republic of China on March 5, 2025

https://english.www.gov.cn/news/202503/12/content_WS67d17f64c6d0868f4e8f0c10.html

https://npcobserver.com/wp-content/uploads/2025/03/2025-Government-Work-Report_NON-FINAL_EN.pdf

Las cuatro trampas de China

“... if Mao made China independent (zhan qi lai), and Deng made it prosperous (fu qi lai), Xi will make it strong again (qiang qi lai). Thrilled by this prospect, a top education official predicted that in 2049, Chinese standards of education will become the standards of the world.

In order to fulfill these ambitious targets, China has to overcome four traps: the Middle-Income Trap, the Tacitus Trap, the Thucydides Trap, and the Kindleberger Trap.

The Middle-Income Trap occurs when a country attains a certain income and gets stuck at that level, which falls short of that of advanced economies (...) GDP growth may continue to be used as the yardstick to measure local government officials' performance. Meanwhile, in recognition of the social cost associated with the single-minded pursuit of economic growth, Beijing is taking a more proactive approach in promoting other developmental goals, including environmental protection and poverty alleviation.”

“The Tacitus Trap (...) describes a situation where no matter what the government says or does, people will consider it a lie or a bad deed. President Xi himself used the term to highlight the need to maintain government credibility, without which ‘the Party’s legitimacy foundations and power status will be threatened.’ In order to overcome the Tacitus Trap, the Chinese state is supposed to introduce more transparency, restructure state-society relations, and renew its legitimacy base.”

“The Thucydides Trap is the theory that a rising power will inevitably challenge the dominance of an existing hegemon, and the latter’s fear of that prospect can trigger competitive dynamics that ultimately lead to confrontation, even war.

The Kindleberger Trap was coined by Harvard professor Joseph Nye but derived from the late economic historian Charles Kindleberger. Both the Thucydides Trap and the Kindleberger Trap highlight the danger inherent in the shifting balance of power. What makes them different is that rather than focus on the threats from a strong aspirant power (as implied by the Thucydides Trap), the Kindleberger Trap attributes the failure of the international system to the under-provision of global public goods. Kindleberger argued that the chaotic and disastrous nature of the 1930s was caused by the failure of the United States to assume the international responsibilities that came with the mantle of the largest global power that it took from Great Britain. The term can also be used to explain the challenges faced by the current global governance regime. As the United States seems to be retreating from its international commitment, the international community is turning to China, which has indicated its interest in filling the void left by the United States. Yet as I noted in a recent piece, China has to overcome significant capacity gaps –small amounts of foreign aid, a lack of soft power, and mounting domestic political economy challenges– before it can play the role of a true global leader.”

<https://www.cfr.org/blog/four-traps-china-may-fall>

Bidenomics

“The economic policy of the Joe Biden administration, colloquially known as **Bidenomics** (a portmanteau of *Biden* and *economics*), is characterized by relief measures and vaccination efforts to address the COVID-19 pandemic, investments in infrastructure,

and strengthening the social safety net, funded by tax increases on higher-income individuals and corporations. Other goals include increasing the national minimum wage and expanding worker training, narrowing income inequality, expanding access to affordable healthcare, and forgiveness of student loan debt.”

La tabla a continuación muestra la evolución de ciertas macromagnitudes durante el mandato de Joe Biden (enero de 2021 a enero de 2025).

Variable	January 2021	January 2025	Change	% Change
Jobs, level (millions) ^[5]	143.0	159.1	+16.1	+11.3%
Unemployment rate % ^[3]	6.4%	4.0%	-2.4pp	n/a
Employment to population ratio, age 25–54 ^[78]	76.4%	80.7%	+4.3pp	n/a
Real wages (\$/Hour Production & Non-Supv; June 2025\$) ^[49]	\$30.81	\$31.03	+0.22	0.7%
Real GDP per capita (Chained 2017 Dollars) ^[79]	\$63,418	\$69,006	+5,588	+8.8%
Stock market (S&P 500 Index monthly avg.) ^[48]	3,794	5,980	+2,186	+57.6%
Real net worth per household, bottom 50% group (2025 Q1\$) ^[80]	\$55,795	\$60,628	+\$4,833	+8.7%
Real net worth per household, 50th to 90th percentile group (2025 Q1\$) ^[81]	\$873,218	\$922,631	+\$49,413	+5.7%
Debt held by public % GDP ^[82]	97.3%	97.1%	-0.2%	n/a
Crude oil production, level (000's of Barrels/Day) ^[83]	11,137	13,248 (Apr '24)	+2,111	+19.0%

Wikipedia (2025): “Economic policy of the Biden administration”

https://en.wikipedia.org/wiki/Economic_policy_of_the_Biden_administration

“A new breed of industrial policy is taking hold in the United States. Under President Joe Biden’s leadership, the federal government has created major new programs through the Infrastructure Investment and Jobs Act (\$550 billion), the CHIPS and Science Act (\$280 billion), and the Inflation Reduction Act (\$394 billion). These are not traditional spending measures to stimulate demand. Rather, as Secretary of the Treasury Janet Yellen explains, they are supply-side investments to boost US economic capacity, both overall and in key sectors such as semiconductors and renewable energy.

While the individual provisions and funding processes differ, all three programmes are based on the public-private model that has been critical to US competitiveness over the past century. They are designed to crowd-in and accelerate private investment, not substitute for it (...)

The programmes also will encourage more supportive regulatory changes, for example, in the permitting and siting of green-energy projects, by state and local governments, which are responsible for the bulk of economic development in the US. And they share various features that have come to define a new “sustainable and equitable” approach to industrial policy (...)

All three bills include place-based programmes designed to promote inclusive growth, and these have elicited complementary efforts at the state and local level (...)

Finally, a healthy, skilled workforce is the most important factor in attracting and retaining employers and businesses in key sectors. Hence, many states, cities and regions have been increasing their investments in workforce development to ensure that their residents have the right skills to benefit from new job opportunities in infrastructure, semiconductors, and climate-related industries (...)

The Biden administration's three big industrial policy programs all recognise the importance of human capital in building supply capacity, and each provides some support for skills development, primarily through tax credits to employers (...)

By design, the new regional economic-development efforts are cross-sectoral and cross-governmental, from the state and local level to the federal level (...)

Industrial policy is central to Biden's economic agenda. Getting an industrial policy right is never easy, and getting a place-based one right will prove even more challenging. But doing so is now essential to achieving more equitable and sustainable growth."

Tyson, Laura; Lenny Mendonca (2023): "America's new era of industrial policy"

<https://jordantimes.com/opinion/project-syndicate/americas-new-era-industrial-policy>

"A fundamental component of both Bidenomics and California's economic strategy is robust world-class research to support innovation in global growth sectors. It is these sectors that will drive productivity growth, create good jobs and fuel US exports and wealth creation now and in the future."

Tyson, Laura; Lenny Mendonca (2021): "From California capitalism to Bidenomics"

<https://www.socialeurope.eu/from-california-capitalism-to-bidenomics>

"Joe Biden's supporters in the political establishment seem increasingly perplexed. Although they insist that the administration's economic policies –marketed as 'Bidenomics' by the DNC– have been a huge success, the public isn't buying it. In one recent poll, only 28% of Americans said they were satisfied with the economy (...)

Biden's economic policies, exemplified by legislation such as the CHIPS Act and the Inflation Reduction Act, aim to increase manufacturing investment in the US. The Biden administration argues that, by 'bringing manufacturing back to America,' it is creating high-paying jobs, while simultaneously 'addressing the climate crisis' through investments in green energy.

Biden and his supporters are correct to point out that millions of people have gotten new jobs. But despite the big increase in the percentage of people who are working, the typical family is actually getting paid less in real terms, taking inflation into account: according to data from the Federal Reserve, real median household income has been falling during the entire time Biden has been president.

Families at the low end of the income distribution have been hit especially hard. Last year the poverty rate more than doubled, and the number of people struggling with hunger jumped to 44

million, an increase of 10 million from the year before (...) over the past few years, businesses have increased prices at the fastest rate in four decades, reducing what workers can afford to buy with the wages they receive (...)

Workers have not passively accepted the decline in their living standards. There have been a series of organizing drives, and strike activity for this year is at the highest level in over two decades. But Biden –notwithstanding his tedious speeches about being ‘pro-labor’– has actually worked behind the scenes to push union leaders to negotiate settlements acceptable to CEOs.”

“The bottom line is that whether Biden is successful in bringing new manufacturing jobs to the US or not, workers cannot count on him to improve their living standards. Although there was a period in the past when industrial workers were paid relatively well, this was because they built strong unions and were willing to physically fight against strike-breaking by corporations and the federal government.”

“Biden has also promoted his economic policies as a way to address climate change, and the legislation he has promoted has included some new funding for clean energy. These policies fall far short of what is needed, however. To stop climate catastrophe, the US needs to rapidly decrease its carbon emissions, but emissions in 2022 actually increased.”

“Emissions in the US grew to 5.9 billion metric tons in 2022, and scientists estimate that each new ton of carbon will ultimately cause about \$185 worth of future economic damage. This means that the future economic losses caused by 2022’s carbon emissions will be around a trillion dollars – enough to cancel out the entirety of measured real income growth for the year.”

“Biden’s economic policies have not addressed climate change or runaway income inequality. In fact things have only gotten worse. So then what was the point of ‘Bidenomics’?

It is important to understand Biden’s policies in the larger context of Washington’s New Cold War with Beijing. For both sides of the conflict, the geographic location of production, and especially the production of advanced semiconductor technology, is a key strategic concern. This –and not some abstract desire to ‘invest in Americans’– is why Democrats and Republicans now increasingly seek to bring investment back to the US.

But for the capitalist politicians who make up both parties, the only way to ‘reshore’ production is to convince corporations that it is profitable to do so. That means making sure workers are paid as little as possible, and absolutely avoiding anything like taxing corporations to fund a Green New Deal. Although Biden will pay lip service to progressive ideas, his real position is revealed in the fact that, instead of using the country’s enormous wealth to improve people’s lives, he is asking Congress for a hundred billion dollars in new military spending to prolong the war in Ukraine and support the Israeli regime’s criminal assault on Gaza.”

Thompson, Stephen (2023): “Working More, Making Less: Life Under ‘Bidenomics’”

<https://www.socialistalternative.org/2023/11/05/working-more-making-less-life-under-bidenomics/>

La web <https://www.bidenomics.com/> presenta una visión crítica de la política económica de la administración Biden, política que denomina 'bidenomics', por 'bad economics'.

Una crítica básica es que Bidenomics es retomar la planificación gubernamental de la economía.

"President Reagan had a unique political talent for explaining complex matters of policy and strategy in simple terms. In 1986, he summed up the state of the U.S. economy under the Carter administration:

'Back then, the government's view of the economy could be summed up in a few short phrases; if it moves, tax it. If it keeps moving, regulate it. And if it stops moving, subsidize it.'

Over eight years, the Reagan administration successfully rolled back excessive government interventions of the Kennedy, Johnson, Nixon, and Carter administrations, unleashing the productive capacity of the U.S. economy. This consensus mostly held through the George H.W. Bush, Clinton, and George W. Bush administrations. But the Obama administration featured a return to heavy government intervention in the private sector, particularly through its turbocharged expansion of the regulatory state, delivering an economic constipation similar to that which plagued the U.S. before the Reagan revolution. The Trump administration's pursuit of tax reform, deregulation, and fair trade produced noninflationary growth that generated the fastest increases in real wages in a generation.

Yet the Biden administration actively chose to disregard the roadmap for economic dynamism that Presidents Reagan and Trump left behind. Instead, the Biden administration reached back for the Carter model. 'Bidenomics,' or under Treasury Secretary Janet Yellen's more nomenclative framing of 'modern supply side economics,' is neither modern nor supply side nor economical. At its core, Bidenomics represents a return to the discredited economic philosophy of central planning.

President Biden's economic team hoped (...) that the Bidenomics experiment would result in a 'new equilibrium of higher productivity, higher wage growth, [and] higher GDP growth as a result of this set of policy interventions.' But like all prior attempts at central planning, it failed to deliver prosperity, and instead generated a substantial upward price-level shock, accompanied by an insidiously persistent inflationary environment that has eroded standards of living in the United States. Continual economic anxiety has replaced abundance and prosperity."

Bessent, Scott K.H. (2024): "The Fallacy of Bidenomics: A Return to Central Planning"
<https://manhattan.institute/article/the-fallacy-of-bidenomics-a-return-to-central-planning>

"Deng Xiaoping, who led China from 1978-89, famously described his effort to integrate limited, free market capitalism into China's communist system as 'socialism with Chinese characteristics.' Taking that step helped China become an economic powerhouse and the world's second largest economy.

Chinese President Xi Jinping has been steadily undoing Deng's reforms by imposing top-down, command-and-control policies, and China is suffering for it both economically and politically.

Ironically, President Joe Biden has been abandoning the U.S. version of free market capitalism that Deng admired and increasingly embracing variations of Xi's policies. Call it Xinomics with American characteristics.

Industrial policy. The International Monetary Fund (IMF) says, ' 'Industrial policy' refers to government efforts to shape the economy by targeting specific industries, firms, or economic activities.' The IMF explains that 'In the US, industrial policy is no longer a taboo subject.' Indeed, it is one of Biden's chief strategies, and has also been key to Xinomics.

According to the IMF, industrial policy's goal is "(i) enhancing national security by promoting self-sufficiency in key industries, (ii) supporting job-rich and inclusive growth, (iii) revitalizing left-behind communities...." You will find references to all three in Biden's CHIPS Act (promoting semiconductor manufacturing), his infrastructure bill and the Inflation Reduction Act, which showers money on various green energy projects.

As National Public Radio reported last April, "Biden is making the case for his brand of industrial policy — using taxes, subsidies and regulations to systematically shape the economy."

How is that different from Xi Jinping's policies? Xi uses taxes, subsidies and regulations to shape China's economy the way he wants it, not the way Chinese consumers want it. Xi may use a heavier hand in imposing his industrial policies, but that's a matter of degree, not substance.

And don't think our allies and major trading partners haven't noticed. The Financial Times writes that Biden's industrial policies have 'drawn fire from European and Asian allies, who claim their deep subsidies and made-in-America requirements amount to protectionism.' Those same criticisms are leveled at China (...)

Government-mandated boondoggles. Xi has a real estate problem on his hands. He pushed for a massive increase in commercial buildings and residential housing that no one wanted. Now, there are ghost-cities covered with empty high-rise buildings.

Biden, by contrast, has a green energy boondoggle on his hands. He has poured subsidies and tax breaks on a whole host of green energy projects, and many, if not most, of those efforts are now failing.

Electric Vehicles (EVs) are backing up on car lots —sort like Xi's empty buildings— and the car makers are slashing prices to try and move them. Car makers are dramatically scaling back their grossly ambitious EV production estimates. In addition, rising interest rates have forced other types of green energy companies —e.g., offshore wind farms— to postpone or abandon their projects.

To be very clear, all of these green energy efforts were the result of government policies, mandates and taxpayer subsidies — like China's failed building boom.

One big difference. There is one way in which Biden is not following Xi's lead: the military buildup. China has embarked on the largest military buildup since 1930s Germany. China now has the largest navy and standing army. And the country is beginning to use that power to expand its territory and influence. By contrast, Biden has been scaling back military spending as a percent of GDP (...) The irony in Biden's embrace of Xinomics is that it is free markets and capitalism that created U.S.

prosperity. Even China benefited greatly from its more limited free market experiment. Xi's top-down malinvestment policies are slowly undermining China's economy by redirecting capital from where it's most productive. Having inherited one of the strongest economies the world has ever known, Biden's embrace of Xinomics and malinvestment will take the U.S. down the same slow-growth path."

<https://thehill.com/opinion/4321120-matthews-bidenomics-is-xinomics-with-american-characteristics/>

Biden sobre Bidenomics

El 14 de septiembre de 2023, el presidente Biden dio un discurso en el *Prince George's Community College* (Maryland) en el que oponía su política económica (Bidenomics) a la política (Maganomics) de su antecesor en el cargo.

"... since I've come to office, all they've really done is attack me and my economic plan ... even though we've created ... over 13 million jobs —more jobs in two years than any president has created in a four-year term ... even though we've had 19 straight months of unemployment under 4 percent for the first time in American history ... even though we have the lowest inflation rate of any major economy in the world, with core inflation rate the last three months at 2.4 percent. We got more to do, even though we've created 800,000 manufacturing jobs and a manufacturing boom we haven't seen in decades.

Even though America, as we met here —meet here today, has the strongest economy in the world. Let me say that again: America has the strongest economy in the world of all the major economics."

"For all the time they spend attacking me and my plan, here's what they never do: They never talk about what they want to do (...) Look, we're going to talk about the MAGA Republican economic plan (...) All kidding aside, we've all worked with Republicans on the other side. Over our careers, we've become good friends: honest, decent people. Disagree like hell with them, but they were ... They thought the institutions mattered (...) Our democracy is at risk because I don't think they do think it matters anymore."

"Look, their plan —MAGAnomics— is more extreme than anything America has ever seen before ... But up to now, Republican have given us a failed plan of trickle-down economics that didn't work ... Instead, there's what trickle-down economics did. It ... shipped jobs overseas ... : Find the cheapest place in the world for labor, send the jobs there and the product there, and then import the product home.

Well, you know, they hollowed out the main streets of America, and they did the same for the middle class. They blew up the deficit. It produced an anemic economic growth, if any growth at all. And it stripped the dignity and pride and hope out of a community, one after another."

"Now Republicans in Congress are doubling down with a plan that does three things.

One, it cuts taxes even more for the very wealthy and big corporations.

Two, it cuts Social Security and Medicare and Medicaid.

Three, it raises costs for families, gutting investments in the middle class."

“MAGA Republicans in the Congress are also trying to undo the progress we’ve made to make it ... —what they call the G7, among the NATO countries and European countries— I was able to get them to all agree —and then around the world; all the democracies— agree that we were going to have a global minimum tax on ... corporations.

And that global minimum tax was finally agreed. It took me a better part of a year to get it done ... They want to get rid of it, let corporations go back to shifting jobs and profits overseas, and avoiding paying taxes at home. And who is going to pay for that? ... Seniors and hardworking Americans are going to pay for it.”

“MAGA Republicans don’t think we should be investing in education ... MAGA Republicans in Congress want to slash Pell Grants. More than 6 million students who count on these grants to be able to afford to go to college would lose them ... You saw how they took on my attempt to eliminate student debt. Well, we’re still going to eliminate a hell of a lot of student debt.”

“... they want to slash research on cures for cancer and Alzheimer’s by nearly \$4 billion ... They want to cut funding that guarantees the clean air and clean water ... they want to cut 226,000 teachers and staff.”

“... my predecessor ... created more debt than any other president did in one year ... when he passed that \$2 trillion tax cut skewed to the wealthy and big corporations, they didn’t pay for a penny of it. The end result was that it has ballooned the national debt by nearly 40 percent.”

“... we just cut the budget deficit by ... \$160 billion. A hundred and sixty billion. You know how we did it? By giving Medicare the power to negotiate for lower prescription drug costs.”

“We pay more for drug prices — for prescription drugs than any nation in the world ... you’re going to pay somewhere between 20 and 40 percent less in those other countries [Canada, UK, France, Spain].”

“Just a few years ago ... 55 percent of the ... largest corporations in the Fortune 500 paid zero in income tax, and they made \$40 billion ... Now the biggest corporations have to pay a minimum tax of 15 percent, so they don’t get away with paying nothing ... Not only are they refusing to take corporations —make them pay their fair share ... MAGA Republicans are planning to give an additional ... \$1 trillion tax cut for big corporations ... Apparently, they think corporations, which made record profits in recent years, pay too much in taxes. It’s unbelievable.”

“... we’ve gone, in the pandemic, from about 740 billionaires in the America to a thousand ... These billionaires pay an average of ... less than 8 percent in federal taxes ... They pay a lower federal tax rate than a firefighter, a teacher, a cop. How can that be right? ... It’s time billionaires began to pay at least a minimum tax of 25 percent, for God’s sake. (Applause.) They’ll still be multibillions at that.”

“That’s why I promised that no one making under \$400,000 ... will see their federal taxes go up a single penny ... All the things we do for middle-class and working-class families increases economic productivity (...) There are only two presidents in American history with fewer jobs the day they left office than when they started. One was President Hoover, and the other was Donald ‘Hoover’ Trump.

(Laughter.) ... And, look, you may remember my predecessor promised to be the greatest job president in history. Well, it didn't really work out that way. (Laughter.) He lost two million jobs over the course of his presidency. ... But ... we've created 13.4 million new jobs. We not only recovered all the jobs we lost during the pandemic, we've added millions more. We've seen record lows in unemployment ... particularly for African Americans and Hispanic workers and veterans ... and the workers without high-school diplomas. The lowest unemployment rate in 70 years for women now ... A higher share of working-age Americans are in the workforce now than any time in the past 20 years."

"... my dad used to have a saying ... 'Joey, a job is about a lot more than a paycheck. It's about your dignity. It's about respect. It's about being able to look your kid in the eye and say, 'Honey, it's going to be okay,' and mean it.' **That's Bidenomics.**"

"The prior administration promised to revive manufacturing; they failed. I'm not sure they even tried, to be honest with you ... they had a theory, and it shipped jobs overseas for cheaper labor markets and import the product ... We used to ... have the largest economy in the world in terms of manufacturing. Under my presidency, America has surged to the front again. We're now on track of having the strongest economy in the world for decades to come."

"Great real estate builder — the former president. He didn't build a damn thing ... Can you believe we used to have the best infrastructure in the world ... But guess what? We fell to — and ranked number 13 in the world ... When I signed the bipartisan infrastructure bill these guys helped me get through, we're now investing in America again: our roads, our bridges, our ports, our airports, high-speed Internet, and removing lead pipes from everyone so they have access to clean water ... **you can't have the strongest economy in the world without the best infrastructure in the world.** We're making sure we're growing the economy in a way that benefits all Americans. We awarded a record \$70 billion in federal [contracts] to small, disadvantaged businesses, and more Black small businesses are starting up than at any time in American history. Now we have the fastest economic growth from the pandemic of any world economy. We have the lowest inflation rate among the major economies.

"... we're living through one of the greatest job-creation periods in our history. And, folks, it's not an accident ... That ... is our economic plan in action — Bidenomics in action."

"But you hear from our friends on the other side, the MAGA Republicans, what's wrong with America. Everything's wrong with America. They keep telling us America is failing. Well, they're wrong. They're failing. America is not failing. America is winning. And there's one reason for it: you. All you people get up every single morning and go out to try to do the right thing."

"We just have to remember who the hell we are: We're the United States Of America ... There is nothing beyond our capacity."

Remarks by President Biden on Bidenomics, Largo, Maryland, September 14, 2023

<https://bidenwhitehouse.archives.gov/briefing-room/speeches-remarks/2023/09/14/remarks-by-president-biden-on-bidenomics-largo-md/>

“Aun aquellos que presagiaban que vendrían consecuencias negativas con un segundo periodo de Trump, se han sorprendido del daño que MAGA ha hecho a las fortalezas de la economía estadounidense y con la velocidad con la que ha socavado lo que popularmente se designa como ‘la grandeza de Estados Unidos’. No son ni siete meses de este gobierno trumpista en que, a toda velocidad, ha llevado al colosal aparato gubernamental al punto del colapso, incluida la ciencia y la salud. Ha destruido la habilidad del gobierno de llevar a cabo con eficacia sus funciones más básicas.

Las raíces de MAGA son el nacionalismo, el populismo y la demagogia. Su modelo económico MAGAnomics tiene seis componentes principales.

Primero, la utilización de los aranceles comerciales como herramienta de presión política a tasas mucho mayores a las que impuso en su anterior presidencia. De acuerdo con la economía básica, los aranceles tan elevados causan inflación y reducen los ingresos reales.

Segundo, las deportaciones masivas de indocumentados, que son altamente disruptivas para la agricultura, la construcción y ciertas manufacturas.

Tercero, politizar a la Reserva Federal para obligarla a conducir la política monetaria a su antojo, atropellando su autonomía.

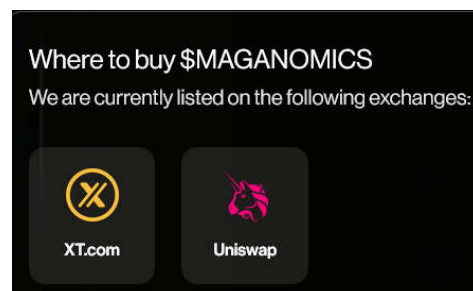
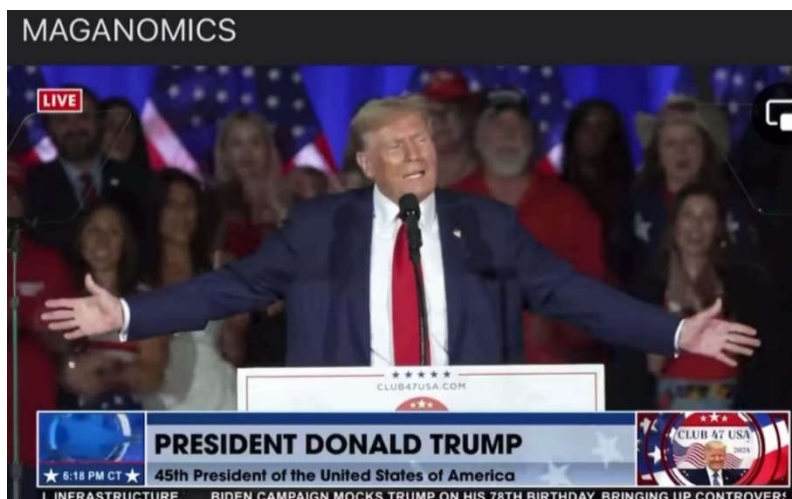
Cuarto, reducción indiscriminada de trámites, servicios y tamaño de la burocracia para aumentar la eficiencia (el programa DOGE de Musk).

Quinto, recortes a programas sociales de salud y suspensión del programa de estampillas para alimentos (*food stamps*).

Y sexto, fuertes reducciones de impuestos para los estratos más ricos.”

“Trump ha sido errático en toda esta instrumentación. Su política arancelaria cambia a voluntad (...) Las deportaciones, si bien han sido brutales e ilegales en muchos casos, no han implicado hasta ahora números masivos equiparables a los de Obama. La presión hacia Powell y la Reserva Federal ha sido, hasta ahora, una incómoda retórica. DOGE ya finalizó y Musk salió del gobierno. Finalmente, los recortes al programa Medicaid han sido extremos (700,000 millones de dólares), lo cual dejará a millones de ciudadanos sin seguro médico. Adicionalmente, se redujo en 300,000 millones de dólares el programa de food stamps, con lo que aumentará el hambre en segmentos pobres de la población. Finalmente, las reducciones impositivas han favorecido a oligarcas multimillonarios que se han enriquecido más, además de otorgar contratos para los amigos del presidente, floreciendo ‘el capitalismo de cuates’.

Se puede concluir que, hasta ahora, MAGAnomics ha promovido el caos y la incertidumbre. Gran parte del daño puede ser permanente. Aun si MAGA y el trumpismo eventualmente perdieran el poder y se procurase la reversión de sus políticas, Estados Unidos nunca retornará a ser la nación que fue, con todo y sus defectos, en 2024. Como lo dice Paul Krugman, crítico y premio Nobel, Trump se empeña en MABA (Make America Backward Again), es decir, ‘hacer que Estados Unidos vuelva a ser un país atrasado’. No obstante, Krugman tiene suficiente fe en su país de que este ‘reino’ algún día terminará. Pero no espera ver una plena recuperación en la vida que le queda.”



“Maganomics is the economic policy crafted by Donald J. Trump prioritizing wealth and prosperity for all.”

<https://maganomics.com/>

“While the end of World War II 80 years ago ushered in an age of reason, Donald Trump’s return to the White House has ushered it out. His MAGA (Make America Great Again) movement promises to take a wrecking ball to the postwar global economic order, raising the question of what will replace it. ‘America First’ seems to appeal to a wide spectrum of constituents, from blue-collar workers in the heartland to Big Tech ‘broligarchs.’ But what does it mean in practice?”

“At his second inauguration, Trump announced a new American “golden age,” which presumably would be achieved by delivering on his campaign promises to end inflation, impose new tariffs, expel undocumented immigrants, cut taxes, and radically reduce the size of government. But mainstream economists were quick to point out that achieving these contradictory objectives simultaneously will be difficult, if not impossible. After all, tariffs, deportations, and tax cuts are all potentially inflationary. What are we to make of MAGA economics – or what is variously referred to as ‘economic nationalism,’ ‘Trumponomics,’ or ‘populist economics’? Is it the progeny of economics, or something else entirely? Economics traditionally has comprised coherent schools of thought: neoclassical, Keynesian, monetarist, and Marxian economics, for example, follow a certain internal logic. But MAGAnomics is an intellectual grab bag. Start with Trump’s emphasis on tariffs, which represents a repudiation of neoclassical economics’ commitment to free trade and a return to mercantilism or the heterodox developmentalism of the left. Meanwhile, ‘industrial policy’ – active government interventions to support strategic industries, which are typically associated with government-led planned economies – somehow coexists with the echoes of anarcho-libertarianism implied by the war on the ‘deep state.’ Likewise, whereas the rejection of austerity and tolerance for deficit spending smacks of Keynesianism, the focus on deregulation and tax cuts harks back to Ronald Reagan and trickle-down economics.

Thus, MAGAnomics is simultaneously considered to be ‘pro-business’ (corporate tax cuts and deregulation) and ‘pro-worker’ (reindustrialization, reshoring, and anti-immigration). By rejecting the logic of Ricardian comparative advantage, Trump rejects the supreme criterion of neoclassical economics: efficiency. Yet he supports the mission of Elon Musk’s ‘Department of Government

Efficiency' (DOGE) (...) Unlike traditional schools of economic thought, MAGAnomics operates as a pastiche of contradictory doctrines and impulses crammed together under the banner of nationalism and grievance politics.

Trump's brand of economic nationalism resonates not because of any theoretical coherence, but through its emotional appeal. The currency of MAGAnomics is not analytical rigor; it is affect – wounded pride, humiliation, and, above all, anger. Legions of experts and academics, especially economists, have struggled to rationalize what is fundamentally an emotional phenomenon."

"... a defining feature of MAGAnomics: its animus toward experts and elites (...) Its power lies in its ability to channel collective frustrations into a political agenda whose purpose is not economic stewardship but cultural messaging (...) MAGAnomics may not qualify as a school of economic thought, but economists need to recognize that it is no mere aberration, but rather a symptom of the deeper, longstanding shortcomings of the orthodoxy that prevailed in the aftermath of WWII. A reckoning is in order, not just with Trumpism, but with the assumptions that made it possible in the first place (...) Until and unless economists get their discipline's house in order, the MAGA madness will be here to stay."

Haldar, Antara (2025): "What Is MAGAnomics?"

<https://www.project-syndicate.org/commentary/maganomics-intellectual-grab-bag-for-political-messaging-not-economic-results-by-antara-haldar-2025-02>

¿Fracaso geopolítico de Trumponomics?

"Russia thought energy dependence would force Europe to accept its invasion of Ukraine in 2022, and that calculation was partly right: Europe has found it hard to wean itself off of Russian oil. Moreover, energy deals

are at the heart of Russia's improved relations with both India and China, providing the economic underpinning for a new anti-American coalition.

China is in an equally strong position, owing to its control over strategic raw materials and their processing, particularly rare earths and other critical minerals. Gallium and germanium are key ingredients only in not green energy technologies, but also in LEDs, fiber optics, and high-performance electronic devices. And antimony, also predominantly sourced from China, is crucial for high-performance military equipment and as a fire retardant.

In response to US President Donald Trump's 'Liberation Day' tariff announcement in April, China imposed new restrictions on seven additional rare earths: samarium, gadolinium, terbium, dysprosium, lutetium, scandium, and yttrium. Having demonstrated little previous awareness of their importance, the Trump administration had to backpedal almost immediately on multiple fronts of its trade war.

The US has been scrambling to imitate the Russian and Chinese strategies, ramping up energy production and pouring public money into promoting the development of rare-earth production. But both efforts are problematic.

While short-term oil and gas production may have increased, new investment in drilling and pipelines will be required in the long run (...) Developing rare earths is more plausible, but it will

take time (...) The newest US rare-earths company, MP Materials, started up in 2017 and has now secured its future by giving the Pentagon a \$400 million equity stake, coupled with a purchase guarantee for what it mines. But while Trumpian state capitalism can prevent future bankruptcy, it cannot perform miracles. MP's key investment, the 10X Facility, will not start producing until 2028 or later.

So, in its desperation to do something more immediately effective, the Trump administration has reached for the most obvious and widely discussed lever: the dollar. Back in the 1960s, Valéry Giscard d'Estaing, then France's finance minister, famously complained that the greenback's global primacy gave America an 'exorbitant privilege' within the global economy. Now, Trump seems to want to test the limits of that privilege, even as he pursues other priorities (such as threatening the independence of the US Federal Reserve) that undermine it."

"As a recent International Monetary Fund report makes clear, the dollar is indisputably at the center of the global financial system. But trade and finance move at different speeds, because the former depends on the exchange of production, while the latter is simply a platform. If one financial platform has problems, it can be changed. Substantial sunk costs did not prevent Genoa, Antwerp, or Amsterdam from losing their positions as global financial centers.

Moreover, it is easier, and much quicker, for other countries to develop alternatives to the dollar than for America suddenly to develop its own rare-earths industry (...) Recall Facebook's Libra initiative, undertaken in a much more stable world, to launch a blockchain-based currency benchmarked to a basket of other currencies. While this effort immediately ran into opposition from the United States and the European Union, there were no technical hurdles to pulling it off. While alternatives to the dollar – such as the euro or renminbi – looked implausible in the past, blockchain makes possible the old dream of a world currency.

To be sure, the Trump administration believes that stablecoins secured against the US dollar will increase demand for Treasury bills and bonds, thus allowing the US to service its vast national debt more easily. But while almost all stablecoins are indeed dollar-pegged, it would take only one financial crisis in the US, or even just the hint of one, to create an impetus for coins pegged to a basket of other strong currencies (such as the Australian, Canadian, and Hong Kong dollar, the Norwegian and Swedish krone, and the Swiss franc). An imaginative issuer of a new synthetic currency could even add in some pure cryptocurrencies, and almost certainly would also include the world's most enduring monetary backstop, gold.

In any case, Trump is impatient about asserting America's role in the world. He likes quick results and disdains losers. But despite the country's abundance of talent and ingenuity, he has picked a fight that he is unlikely to win. The growing risk to the dollar's global role will see to that."

James, Harold (2025): "Trump is losing his Geoeconomic War"

<https://www.stabroeknews.com/2025/10/02/features/project-syndicate/trump-is-losing-his-geoeconomic-war/>

<https://www.project-syndicate.org/commentary/trump-losing-geoeconomic-war-dollar-decline-most-likely-outcome-by-harold-james-2025-10>

El Consenso de Washington

La expresión 'Consenso de Washington' (*Washington consensus*) fue sugerida por John Williamson (1990) para designar un conjunto de propuestas de política económica que ciertas instituciones (FMI, Banco Mundial, departamento del Tesoro de EEUU) proponían a los gobiernos de Latinoamérica. Las propuestas (en conjunto consideradas medidas 'promercado') pueden agruparse en tres categorías:

- 'menos estado', mediante disciplina fiscal, reorientación del gasto público y rebajas de impuestos;
- 'más mercado', esto es, medidas favorecedoras de la actividad económica del sector privado (desregulación, privatización, garantía de derechos de propiedad); y
- apertura internacional (financiera, comercial y de inversión directa).

Diez años después de la propuesta, Williamson (2000) recapitula:

"... years ago I invented the term 'Washington Consensus' to refer to the lowest common denominator of policy advice being addressed by the Washington-based institutions to Latin American countries as of 1989 ... I have long been doubtful about whether my phrase served to advance the cause of rational economic policymaking ... I find that the term has been invested with a meaning that is significantly different from that which I had intended and is now used as a synonym for what is often called 'neoliberalism' in Latin America, or what George Soros ... has called 'market fundamentalism.' When I first came across this usage, I asserted that it was a misuse of my intended meaning."

"... there is a real danger that many of the economic reforms favored by international development institutions—notably macroeconomic discipline, trade openness, and market-friendly microeconomic policies—will be discredited in the eyes of many observers, simply because these institutions are inevitably implicated in views that command a consensus in Washington and the term 'Washington Consensus' has come to be used to describe an extreme and dogmatic commitment to the belief that markets can handle everything."

"The Original Version

My original paper ... argued that the set of policy reforms that most of official Washington thought would be good for Latin American countries could be summarized in 10 propositions:

- Fiscal discipline
- A redirection of public expenditure priorities toward fields offering both high economic returns and the potential to improve income distribution, such as primary health care, primary education, and infrastructure
- Tax reform (to lower marginal rates and broaden the tax base)
- Interest rate liberalization
- A competitive exchange rate
- Trade liberalization
- Liberalization of inflows of foreign direct investment

- Privatization
- Deregulation (to abolish barriers to entry and exit)
- Secure property rights.

The need for the first three reforms is, so far as I am aware, widely accepted among economists."

"Current Usage

... when I coined the term in 1989, the market fundamentalism of Reagan's first term had already been superseded by the return of rational economic policymaking, and one could discern which ideas were going to survive and which were not (monetary discipline but not monetarism; tax reform but not tax-slashing; trade liberalization but maybe not complete freedom of capital movements; deregulation of entry and exit barriers but not the suppression of regulations designed to protect the environment). How is it that a term intended to describe a technocratic policy agenda that survived the demise of Reaganomics came to be used to describe an ideology embracing the most extreme version of Reaganomics?"

"The popular, or populist, interpretation of the Washington Consensus, meaning market fundamentalism or neoliberalism, refers to laissez-faire Reaganomics—let's bash the state, the markets will resolve everything."

["... principal economic institutions located in Washington: the U.S. Treasury, the Federal Reserve Board, the International Monetary Fund, and the World Bank."]

Williamson, John (1990): "What Washington Means by Policy Reform", capítulo 2 en John Williamson, ed., *Latin American Adjustment: How Much Has Happened?*, Institute for International Economics.

Williamson, John (2000): "What Should the World Bank Think about the Washington Consensus?", *The World Bank Research Observer* 15(2), 251-64.

¿Ha fracasado el Consenso de Washington?

Moisés Naím (2002) coincide con la bastardización de la expresión 'Consenso de Washington' y que ello ha tendido a avalar el rechazo entre los destinatarios de la versión corrupta, a pesar de que, en su percepción, la versión corrupta mantiene algunas propuestas sensatas de la versión original. También contribuyó al descrédito de las medidas del consenso la hipocresía de los gobiernos de países económicamente más desarrollados, que lo prescribían a los gobiernos de los menos desarrollados pero sin ellos mismos llevar a la práctica lo que predicaban.

"During the first half of the 1990s ... privatisation, trade liberalisation and deregulation were the common building-blocks of the economic reforms that seemed to be sweeping the world. Many called these policies the 'Washington consensus'."

"Governments everywhere did indeed profess to share remarkably similar goals; many adopted a market-oriented stance in their economic policies. But what they in fact did was often at odds with the policies they had announced or even the promises they had made to the International Monetary Fund."

“To its early-1990s consumers, the Washington consensus carried a whiff of imminent prosperity and the promise of a flood of foreign money and goods. Over time, the living standards associated with American capitalism and globalisation became important parts of this brand’s allure. Naturally, the politicians and multilateral institutions that were ‘selling’ the product had no interest in curbing these illusions or in nurturing more realistic expectations about how quick, painless and widespread the benefits of these reforms would be. High expectations often lead to disappointment and this case is no exception. As befits a global brand, frustrations with the consensus are now global and the brand is irreparably damaged.

Instead of prosperity, the consensus now emits the poisonous odours of a recipe concocted in Washington by a cabal of inept technocrats who are out of touch with the realities of poor countries or, even worse, are in the pockets of Wall Street. Widely derided as ‘market fundamentalism’ or ‘savage neo-liberalism’, the concoction is accused of making the poor poorer and the world unacceptably inequitable and dangerously unstable. In many countries, privatisation, trade liberalisation and fiscal austerity have become politically noxious ideas.”

“The consensus may be an impaired brand, but some of the ideas remain sound. A recent study, for example, has found that infant mortality fell 6 per cent in the Argentine municipalities that privatised their water services and that this positive effect was larger in the poorest municipalities, where infant mortality fell 24 per cent.”

“The Washington consensus was never meant to be used as a development programme, a national project, a doctrine or a political platform, much less as an ideology. Alas, at one time or another and in different countries it was called on to perform all of these functions. Naturally, it failed miserably.”

“Also, the consensus was often badly or partially implemented and some of its policies are in urgent need of revision. It also ignores important areas where better government intervention is needed. But its core ideas are far better than the damaged brand that now leads most clients to repudiate the product.”

Naím, Moisés (2002): “The Washington Consensus: A Damaged Brand”, Financial Times, 28 Oct 2002

<https://carnegieendowment.org/posts/2002/10/washington-consensus-a-damaged-brand?lang=en>

Si bien Williamson (2002) admite, con Naím (2002), que la interpretación desnaturalizada del ‘**Consenso de Washington**’ es prevalente, continúa defendiendo que los tres **principios de la versión original (disciplina presupuestaria del sector público, economía de mercado y economía abierta)** siguen siendo válidos en el diseño de la política económica. Identifica motivos del fracaso en la aplicación de las propuestas del consenso: su adopción como conjunto de principios ideológicos y no como guía técnico-pragmática; su ejecución parcial o incompleta; y que sus objetivos eran modestos, centrados en crecimiento más que en desarrollo.

“It is difficult even for the creator of the term to deny that the phrase ‘Washington Consensus’ is a damaged brand name (Naím 2002). Audiences the world over seem to believe that this signifies

a set of neoliberal policies that have been imposed on hapless countries by the Washington-based international financial institutions and have led them to crisis and misery ... The basic ideas that I attempted to summarize in the Washington Consensus have continued to gain wider acceptance over the past decade, to the point where Lula has had to endorse most of them in order to be electable.”

“The three big ideas here are macroeconomic discipline, a market economy, and openness to the world (at least in respect of trade and FDI). These are ideas that had long been regarded as orthodox so far as OECD countries are concerned, but there used to be a sort of global apartheid which claimed that developing countries came from a different universe which enabled them to benefit from (a) inflation (so as to reap the inflation tax and boost investment); (b) a leading role for the state in initiating industrialization; and (c) import substitution. The Washington Consensus said that this era of apartheid was over.”

“I of course never intended my term to imply policies like capital account liberalization ..., monetarism, supply-side economics, or a minimal state (getting the state out of welfare provision and income redistribution), which I think of as the quintessentially neoliberal ideas ... But this is not how everyone has interpreted the idea.”

“(1) Countries ought not to have adopted the Washington Consensus as an ideology ... for a policymaker to imagine that s/he can stop thinking and simply follow a set of policies that someone else has concocted is irresponsible. (2) Anyone offering a new set of policy guidelines ... has a duty to include a set of suggestions as to how crises can be avoided.”

“A second reason that outcomes did not match the hopes of a decade ago is that reforms were incomplete ... For one thing, some of the ‘first-generation reforms’ were neglected (perhaps most conspicuously regarding the labor market, which has remained strongly dualistic everywhere, resulting in ever-growing informality) or incomplete (e.g. with regard to fiscal reform, where the massive budget deficits were eliminated but opportunity was not taken of the good times to run budget surpluses that would allow deficit spending in bad times). In addition, there is a whole generation of so-called ‘second-generation reforms’, involving the strengthening of institutions, that is necessary to allow full advantage to be taken of the first-generation reforms.”

“And a third reason for disappointing performance is that the objective that underlay the Washington Consensus was excessively narrow. It consisted in accelerating growth without worsening income distribution... If one regards poverty as an affront to human dignity, then one will care not simply about the level and growth of income but about its distribution as well. That is why Nancy Birdsall and Augusto de la Torre (2001) authored a tract that aims to complement the Washington Consensus by listing a set of ten reforms intended to improve income distribution without reducing growth.”

Williamson, John (2002): “Did the Washington Consensus Fail?”, Peterson Institute for International Economics, 6 Nov 2002

<https://www.piie.com/commentary/speeches-papers/did-washington-consensus-fail>

Birdsall y de la Torre (2001) sugieren una revisión del consenso de Washington (que llaman 'el Contencioso de Washington'), ampliando las medidas para lograr un objetivo más: **reducir pobreza y desigualdad sin coste en crecimiento.**

"In the past 15 years the dominant direction of economic policies worldwide has been to reduce barriers to foreign trade and investment, sell state-owned companies to the private sector, and tighten fiscal and monetary practices (...) Economist John Williamson labeled this policy package the 'Washington Consensus' because of its backing by the U.S. Treasury and the Washington-based international institutions (the International Monetary Fund, the World Bank, the Inter-American Development Bank). The consensus detailed by Williamson comprised 10 economic reform policies. The policies emphasized stabilization of prices to return developing countries to a path of sustainable growth and structural adjustment measures to make economies more efficient and competitive."

"A new and overriding objective has emerged: to reduce poverty and improve equity without sacrificing growth ... This report proposes '10 + 1' new policy tools to advance that new objective in Latin America (...) We emphasize that there is no such consensus about our 10 plus tools. Indeed, our tools are contentious."

"The 10 + 1 policy tools are:

1. Rule-based fiscal discipline. Fiscal indiscipline—when governments consistently spend more than they collect and more than they can easily finance through sustainable borrowing—has high costs for the poor and the emerging middle class (...)

2. Smoothing booms and busts. Booms are better for the rich, busts worse for the poor. Fiscal and monetary policies and tough banking and other financial standards to manage volatility and minimize crisis cannot be improvised. They should be locked in when times are good.

3. Social safety nets that trigger automatically. A modern system provides an income floor for working and middle class households as well as the poor. During slumps, spending should kick in automatically for emergency public works employment and subsidies to families to keep their children in school.

4. Schools for the poor, too. Today's centralized systems reinforce inequality. Critical reforms include more school autonomy, lower subsidies to the better-off for higher education, and more public spending on preschool programs. Education policy must also embrace the internet, with public subsidies to ensure that every school and every community benefit from this revolution in access to knowledge.

5. Taxing the rich and spending more on the rest. The region relies heavily on consumption taxes that are regressive. Closing income tax loopholes and reducing evasion would increase revenues without adding to the tax burden of working and middle-income households.

6. Giving small business a chance. Weak financial and judicial systems and onerous red tape block talented small entrepreneurs from expanding their businesses. Improved enforcement of credit contracts and shareholder rights, the end of insider credit from state-owned banks, and access to information and professional services would help create more small firms and more jobs.

7. Protecting workers' rights. The poor bear the cost of a job contracting environment that has too little worker protection and too many legal rules. Latin America needs more aggressive protection of workers' rights of association and collective bargaining, more independent and democratic unions, and more social protection to replace inflexible rules that discourage job mobility and growth.

8. Dealing openly with discrimination. (...) Political leadership can help break down the social and political barriers that hurt blacks and members of indigenous groups—and, in some arenas, women.

9. Repairing land markets. A new generation of land reform programs can make rural land markets truly competitive—finally giving the rural poor a fair chance. The new approach emphasizes credit and community involvement and relies less on centralized bureaucracy.

10. Consumer-driven public services. Shortcomings in infrastructure, public health, and such regulatory services as consumer protection have cost the poor and the near-poor dearly. Poor and other low-income consumers must now be at the heart of a new culture of service delivery.

Plus 1. Reducing rich-country protectionism. Rich countries' barriers to agriculture and textile imports aggravate poverty and reinforce inequality in Latin America. Lowering them will do the reverse.”

“... our proposed toolkit has limitations. We cannot suggest that it makes sense in every country. We do not specify an optimal mix and sequencing. If any tool puts growth and equity in conflict, we cannot clarify the right tradeoff (...) Except possibly for fiscal discipline ... and education ..., we suggest no ranking.

Our tools are only for economic policy—following the lead of the Washington Consensus. Yet good government goes well beyond economics to a broader agenda—of promoting democracy, extending civil liberties, reducing violence, and ensuring the rule of law, all central to equity. With two exceptions we refer to these political and institutional topics only tangentially ... The first exception is corruption, which poisons an equity-enhancing strategy ... The second is civil society. Civil society groups in Latin America can contribute to more open and democratic policy making by enlarging the public debate about many policies and programs.”

Birdsall, Nancy; Augusto de la Torre; con Rachel Menezes (2001): *Washington Contentious. Economic Policies for Social Equity in Latin America*, Carnegie Endowment for International Peace and Inter-American Dialogue

https://www.cgdev.org/sites/default/files/2923_file_WashCont_0.pdf

El Post-consenso de Washington

El Post-consenso de Washington (*Post-Washington consensus*) se fue definiendo a finales del siglo XX como revisión del Consenso de Washington y más orientado hacia el favorecimiento del desarrollo económico. El post-consenso defendía:

- la complementariedad público-privada (no se aboga por minimizar el papel económico del sector público sino equilibrarlo con el del sector privado);

- la adaptación de estrategias e instituciones para el desarrollo a las características del país (en oposición a las 'políticas de talla única', válidas para todo lugar y momento;
- la importancia de la reducción de la pobreza y los servicios sociales (educación, sanidad...);
- la elección y diseño de las instituciones apropiadas;
- prestar atención a instrumentos y objetivos más allá de los macroeconómicos.

Stiglitz (2008) resume la visión de política económica asociada con el post-consenso. Su reflexión se fundamenta en la idea que el sector privado por sí mismo no es muy efectivo en las primeras fases del desarrollo económico y, en general, tampoco generan un rápido desarrollo. En su opinión, la evidencia histórica sugiere que el desarrollo también necesita de políticas económicas adecuadas.

Sobre el consenso sostiene que su versión bastarda llegó a convertir medios (la privatización o la liberalización, por ejemplo) en fines. La ineffectividad del consenso condujo a ampliarlo (Consenso de Washington Plus, Consenso de Washington Plus Plus) mediante políticas adicionales con las que reformar las instituciones y hacerlas más capaces de implementar el consenso. Al parecer, ni el consenso ni sus variaciones acabaron funcionando. De aquí la necesidad del 'post-consenso'.

"If there is a consensus today about what strategies are most likely to promote the development of the poorest countries in the world, it is this: there is no consensus except that the Washington Consensus did not provide the answer. Its recipes were neither necessary nor sufficient for successful growth, though each of its policies made sense for particular countries at particular times.

"... the term 'Washington Consensus' ... has come to refer to development strategies that focus on privatization, liberalization, and macro stability (meaning, mostly, price stability). (The policies are often referred to as 'neoliberal' policies, because of the emphasis on liberalization, and because like nineteenth century liberalism, they emphasized the importance of a minimal role for the state). To most people, the Washington Consensus represents a set of policies predicated upon a strong faith ... in unfettered markets and aimed at reducing, or even minimizing, the role of government."

"The post-Washington Consensus consensus goes further in detailing the nature of the failures of the Washington Consensus. There was a failure in understanding economic structures within developing countries, in focusing on too narrow a set of objectives, and on too limited a set of instruments."

"The Limits of Market Fundamentalism: Theory

For instance, markets by themselves do not produce efficient outcomes when information is imperfect and markets are incomplete (true in all countries, but especially in developing countries) or when technology is changing as a result of R&D expenditures or learning, or more generally, when there is learning, for instance, about markets.

The intellectual foundations of the Washington Consensus had been badly eroded even before its doctrines became widely accepted. The fundamental theorems of welfare economics provided the ... conditions under which and the sense in which markets lead to efficient outcomes. Under

these theorems, it turned out, markets were efficient only if capital markets were impossibly perfect ... There could be no externalities (no problems of air or water pollution), no public goods, no issues of learning, and no advances in technology that were the result either of learning or expenditures on R&D ... These problems are serious in any economy, but are at the heart of development. There are important externalities in these dynamic processes, which give rise to an important role for government. The successful East Asian countries recognized this role; the Washington Consensus policies did not. In short, *there is no theoretical underpinning to believe that in early stages of development, markets by themselves will lead to efficient outcomes.*

The Limits of Market Fundamentalism: History

Historical experience also provided little support to the belief that markets, by themselves, would lead to rapid development. While there is an active debate about the particular role of each of the industrial policies undertaken by each of the East Asian countries, there is a clear link between the policies and the successes ... And it is hard to conceive that Korea or Taiwan would have become the industrial players of today without having undertaken active industrial policies ... While firms in the rest of the world complain about a shortage of capital, the governments of East Asia provided capital to those firms that were proving their mettle by exporting, especially in technology sectors where there were likely spillovers to the rest of the economy."

"If the success of East Asia suggests the desirability of a larger role for government in successful development than was traditionally emphasized in the Washington Consensus policies, the failures in sub-Saharan Africa and Latin America have reinforced the doubts about the Washington Consensus strategies... Growth in Latin America during the 1990s—the decade of reform—was just half of what it was in the 1960s and 1970s, the decades marked by the 'failed' policies of import substitution. Surely, there were problems with the import substitution strategy and it would have had to evolve, as it did in East Asia, into a strategy based more on exports. It was the debt crisis, however, and not the shortcomings of the development strategy that brought an end to the period of high growth."

"In Africa, the costs of a simple-minded belief in the magic of the market were palpable and huge. For example, policy conditionalities imposed on the region's countries too often focused much too narrowly on liberalization of agricultural prices without adequate attention to the prerequisites to make such liberalization effective, for example, functioning markets for inputs and outputs, credit availability, and infrastructure (especially roads). The insistence on static comparative advantage foreclosed the kind of dynamic changes that underlay the successes in East Asia—had Korea stuck with its static comparative advantage, it would still be growing rice."

"The fact that countries that followed the Washington Consensus policies grew more slowly than those that did not should, by itself, have been enough to lead countries to abandon these strategies."

"A Balanced Role for Markets and Government

The political agenda was most evident in the Washington Consensus' reliance on market fundamentalism—the belief that markets by themselves lead to economic efficiency, that economic

policies should focus on efficiency, and that distributional concerns could and should be taken care of elsewhere in the political process. The policies pursued by the international financial institutions that came to be called 'Washington Consensus policies' or 'neoliberalism' entailed a much more circumscribed role for the state than was embraced by most of the East Asian countries, a set of policies that (in another simplification) came to be called the 'development state.'

To be sure, governments can make matters worse. No doubt, the Washington Consensus represented, in part, a reaction to failures of the state in attempting to correct failures of the market. But the pendulum swung too far in the other direction and for too long. The Washington Consensus policies often assumed the worst about the nature and capability of *all* governments, and, in its quest to find a 'one-size-fits-all' policy, gave up on trying to improve governments, arguing that it was better simply to rely on markets by themselves."

"The post-Washington Consensus consensus recognizes that there is a role for markets; ... recognizes too that there are government failures, just as there are market failures. But it believes that there are systematic ways to improve the performance of the government, just as there are systematic ways to improve markets. Governments and markets are seen as complementary, with government actually often playing an important role in addressing market failures, helping markets to work better."

"The Washington Consensus failed so systematically largely because of its failure to understand development and developing countries; but its failure is also attributable to the fact that the objectives of development reflected in the Washington Consensus were too narrowly defined: the objective of policy should not have been limited to an increase in GDP ... but should have included sustainable increases in standards of living, as well as the promotion of democratic and equitable development."

"Even worse than the formulation of too narrow a set of objectives was the fact that, too often, the IMF confused means with objectives—privatization and liberalization, for instance, became not means to an end, but ends in themselves. Sometimes privatization makes sense. But it matters how privatization is done; if done in the wrong way, growth can be reduced and societal welfare lowered. The pursuit of rapid privatization in the former Soviet Union contributed to the enormous increase in inequality, compromising the legitimacy of private rights, at least those acquired in the privatization process, and perhaps even of the market system."

The Evolving Washington Consensus

"The Washington Consensus thus focused on policies—policies of privatization, liberalization, and stability ... When these policies failed to produce the hoped-for results, the diagnosis changed, and it was argued that these policies needed to be supplemented with additional policies: the Washington Consensus Plus. What was added depended on the criticism that was being leveled and on the nature of the failure that was being recognized. When growth failed to materialize, 'second generation reforms,' including competition policies to accompany privatizations of natural monopolies, were added. When problems of equity were noted, the 'Plus' included female education or improved safety nets."

“From the Washington Consensus Plus to the Washington Consensus Plus Plus

When all of these versions of the Washington Consensus Plus also failed to do the trick, a new layer of reforms was added: one had to go beyond projects and policies to the reform of institutions, including public institutions, and their governance.

In some ways, this represented a more fundamental change in perspectives, but in other ways it was a continuation of the same mindset. Government had long been viewed as the problem and markets as the solution. The questions should have been: what can we do to improve the efficiency of both markets and the government? ... Rather than asking these questions, the Washington Consensus had ignored market failures, viewed government as the problem, assumed that governments could not be reformed, and proposed massive scalebacks in government ... For instance, rather than asking if public pension systems could be strengthened, the Washington Consensus continued to focus its attention on privatization.”

“There is also a broad consensus that the international economic institutions have created unfair rules of the game (most evident in the case of trade...) and have foisted failed policies on developing countries that are dependent on these institutions and on donors for assistance.”

“Some Elements of an **Emerging Consensus**

In recent years, the economics profession has paid more attention to institutions, the incentives confronting the institutions and those within the institutions, and the relationships between governance, organization design, and organization behavior (...)

There are several more elements of a post-Washington Consensus. The first is that a post-Washington Consensus consensus cannot be arrived at simply within the confines of Washington. The development of a successful development strategy will have to involve those in the developing world in an important and meaningful way.

The second is that one-size-fits-all policies are doomed to fail. Policies that work in one country may not work in others. The contrast between the success of the East Asian economies, which did not follow the Washington Consensus, and those that did has become increasingly clear. However, the question remains, to what extent can the policies that worked so well in East Asia be transferred to other countries?

A third is that there are some areas in which economic science has not yet provided sufficient evidence, sufficiently strong theory, or empirical evidence, to result in a broad consensus about what countries should do.

There may be a broad consensus against ‘excessive protectionism’ that only serves the interests of special interests, but there is no consensus that rapid liberalization, especially in a country with high unemployment, will lead to faster economic growth. It may only lead to more unemployment (...) There is an emerging consensus: countries should be given room to experiment, to use their own judgment, and to explore what might work best for them.

A fourth is that successful development requires not the minimal role assigned to the state by the Washington Consensus, but a balanced role. The exact role may differ from country to country,

depending on the stage of development of market and public institutions.”

“A fifth point of consensus is that development requires strengthening of both market and state institutions. And a final point of consensus is that success is to be measured not just by an increase in GDP, but by a broader set of measures—including those that assess environmental and social sustainability.”

Stiglitz, Joseph E. (2008): “Is there a Post-Washington Consensus?”, capítulo 4 en Serra, Narcís Serra; Joseph E. Stiglitz; eds.: *The Washington Consensus Reconsidered. Towards a New Global Governance*, Oxford University Press.

El Consenso de Beijing

La expresión ‘Consenso de Beijing’ fue sugerida por Joshua Cooper Ramo (2004) para designar el conjunto de medidas de política económica que se entiende que (desde el mandato de Deng Xiaoping) hicieron posible el ‘milagro económico chino’ (crecimiento sostenido del PIB de dos dígitos). Considerado como alternativa al Consenso de Washington, el Consenso de Beijing (a veces denominado ‘el modelo de China’) defiende:

- el capitalismo de estado (o autoritarismo de mercado);
- el pragmatismo en política económica (elegir lo que funciona), sobre la base innovación y la experimentación;
- reformas económicas graduales (no las ‘terapias de choque’ asociadas con el Consenso de Washington);
- un crecimiento económico fundamentado en las exportaciones;
- la adopción de un régimen político autoritario.

Ramo (2004) describe y contextualiza el Consenso de Beijing en los siguientes términos, enfatizando el papel de la innovación, la sostenibilidad, la equidad y la autodeterminación.

“China is marking a path for other nations around the world who are trying to figure out not simply how to develop their countries, but also how to fit into the international order in a way that allows them to be truly independent, to protect their way of life and political choices in a world with a single massively powerful centre of gravity. I call this new physics of power and development the Beijing Consensus.

It replaces the widely-discredited Washington Consensus (...) Washington-knows-best approach to telling other nations how to run themselves. The Washington Consensus was a hallmark of end-of-history arrogance; it left a trail of destroyed economies and bad feelings around the globe. China’s new development approach is driven by a desire to have equitable, peaceful high-quality growth... It is flexible enough that it is barely classifiable as a doctrine. It does not believe in uniform solutions for every situation. It is defined by a ruthless willingness to innovate and experiment, by a lively defense of national borders and interests, and by the increasingly thoughtful accumulation of tools of asymmetric power projection.”

“Though it is decidedly post-Deng Xiaoping in structure, the Beijing Consensus still holds tightly to his pragmatic idea that the best path for modernisation is one of ‘groping for stones to cross the river,’ instead of trying to make one-big, shock-therapy leap.”

“The Beijing Consensus is as much about social change as economic change. It is about using economics and governance to improve society, an original goal of development economics that somehow got lost in the Washington-consensus driven 1990s. China’s path to development and power is, of course, unrepeatable by any other nation. It also remains fraught with contradictions, tensions and pitfalls. Yet many elements of the country’s rise have engaged the developing world.”

“What is the Beijing Consensus? It is simply three theorems about how to organise the place of a developing country in the world ... The first theorem repositions the value of innovation. Rather than the ‘old-physics’ argument that developing countries must start development with trailing-edge technology (copper wires), it insists that on the necessity of bleeding-edge innovation (fiber optic) to create change that moves faster than the problems change creates. In physics terms, it is about using innovation to reduce the friction losses of reform.

The second Beijing Consensus theorem ... demands a development model where sustainability and equality become first considerations, not luxuries. Because Chinese society is an unstable stew of hope, ambition, fear, misinformation and politics only this kind of chaos-theory can provide meaningful organization. China’s new approach to development stresses chaos management.”

“Finally, the Beijing Consensus contains a theory of self-determination, one that stresses using leverage to move big, hegemonic powers that may be tempted to tread on your toes ... China’s very emergence is remaking the international order. Chinese officials’ interest in the country’s Peaceful Rise is rooted in their worry that China’s current acceleration to international power may shake the world too much, undermining the country’s ability to grow and to maintain a stable internal and external balance.”

“The only thing that can save China is knowledge. ‘Innovation sustains the progress of a nation.’”

Ramo, Joshua Cooper (2004): *The Beijing Consensus*, Foreign Policy Centre.

“First, the Beijing Consensus refers to China’s willingness to experiment and use innovation as a driver of progress.”

“Using economics to improve society and enhance the quality of life is the second theorem of the Beijing Consensus. The centrality of GDP to traditional assessments of economic development levels is a notion rejected by China as the sole indicator of economic success. Instead, China’s policies are “people-focused” and measure development based on the quality of life of the population, sustainability and equality levels.”

“The third Beijing Consensus component is self-determination for China and other countries vis-à-vis the US. China emphasizes the need for developing countries to actively seek independence from outside pressure. While Ramo argues that China has thrived by pointedly ignoring the Washington Consensus, in fact, China adheres to eight of the ten elements of the Washington Consensus... Yet,

China has convincingly demonstrated that deregulated, market-based decision making is not the only path to economic growth and integration in the global economy.”

<https://hcss.nl/report/issue-brief-no-2-the-beijing-consensus-an-alternative-approach-to-development/>

“The Chinese have refined the Asian growth model to develop a fast-growth, stable, ‘market-authoritarian’ governance that is admired in the world beyond the West and particularly among Third World leaders.”

“This is the basic idea of *market authoritarianism*. Beyond everything else that China sells to the world, the country functions as a global billboard for ‘going capitalist and staying autocratic’. Thus, Beijing provides a compelling demonstration of how to liberalize economically without surrendering to liberal politics. In this respect, China presents the challenge of a new type of corporate state. China has, in effect, legitimized authoritarianism in our time.”

“As the government newspaper *Xinhua* reported, the excesses and failures of free-market fundamentalism had emphasized the superiority of the Chinese way of doing things under President Hu Jintao’s ‘scientific theory of development.’ This was the official name given to the ruling party’s policy of promoting welfare for the masses under the strict guidance of the central government. In other words, state capitalism.”

Halper, Stefan (2012): *The Beijing consensus. Legitimizing authoritarianism in our time*, Basic Books.

¿Beijing =
Washington +
pragmatismo?

Según Yang Yao (2011), el Consenso de Beijing se puede interpretar como el Consenso de Washington aplicado a la manera china: gradualmente, con pragmatismo y flexibilidad, experimentando medidas.

“In Joshua Ramo’s original formulation ... the BC [Beijing consensus] is defined by three principles, none of which necessarily requires strong government intervention:

- institutional innovation,
- equitable and sustainable development, and
- self-determination.

Over the last 30 years, the Chinese economy has moved progressively toward the market doctrines of neoclassical economics as summarized by John Williamson in his formulation of the WC.”

“What’s unique is the way China has applied the WC [Washington consensus]. Implementing the WC requires substantial institutional change and policy reform, whereas developing countries are usually characterized by rigid institutions that impede the function of the market. A big-bang approach to reforms is usually politically impractical or prohibitively costly. China’s gradual one-step-at-a-time approach has been more successful. So if there is a Beijing Consensus it refers to the way China shaped its institutional and policy reforms to make the Washington Consensus work in the Chinese context (...) The Chinese experience has yielded a number of lessons for other developing countries.”

“First, institutional efficacy is more important than institutional purity (...) The township and village enterprise (TVE) played a key role in China’s industrialization in the 1980s. TVEs were nominally owned by local governments but in effect managed by private entrepreneurs.”

“Second, government officials need to be motivated ... In China, government officials are motivated in two ways. First, promotion of government officials is strongly based on merit, especially their contributions to economic growth. This is quite different from performance evaluation based on accountability, which requires government officials to follow preset rules or be punished (...) Second, public servants benefit directly from economic growth:

- those in more prosperous regions enjoy much higher salaries than those in less developed regions,
- different government departments can offer different levels of income and welfare, with departments that are directly involved in managing economic activities enjoying better treatment, and
- some provinces provide bonuses to officials in subnational governments for generating more tax revenue.”

“Fiscal decentralization, too, has helped motivate subnational government officials. As one of the most fiscally decentralized countries in the world, China’s subnational government revenue accounts for 45 percent of total government revenue and subnational spending accounts for 77 percent of total government spending. Decentralization turns local government officials into strong stakeholders in local economic growth. In addition, fiscal decentralization has created a constructive competition for resources among local governments, inducing them to improve services, local infrastructure, and other aspects of the business environment.”

“Third, insulation from special interests. Government officials should be immune to conflicts of interests and pressure from special interest groups which in many developing countries often derail institutional and policy reforms. Because Chinese society has been relatively equal, the government faces less pressure from powerful interest groups. The primary interest is in promoting long-run economic growth which helps ensure better incomes for society as a whole.”

“The Chinese experience has taken a different approach. It treats the government as made up of rational individuals who need to be motivated to work for the common good of society. Based on this belief (...) institutional arrangements have been established to incentivize government officials to behave as if they were disinterested when they face conflicts of interests in society.

Although China’s application of the Washington Consensus may be country specific, it contains a key principle that others can learn from: namely, a volitional pragmatism featuring constant experimentation with a defined objective to improve on the status quo. Nothing is taken as permanent or perfect: the future is always envisioned as better than today and incentives are crafted to make that vision a reality.”

Yang Yao (2011): “Beijing Consensus or Washington Consensus. What Explains China’s Economic Success?”

https://openknowledge.worldbank.org/bitstream/handle/10986/6098/deor_13_1_26.pdf?sequence=2&isAllowed=y

La tesis de Lee

Se conoce como 'Tesis de Lee' la posición (atribuida al primer ministro de Singapur Lee Kuan Yew, 1959-1990) según la cual es aceptable negar derechos civiles y políticos a la ciudadanía si con ello se promueve el desarrollo económico y la mejora del bienestar para la mayoría. Alternativamente, la Tesis de Lee sostiene que la democracia no es necesaria ni efectiva para el desarrollo económico.

La justificación es que la democracia genera inestabilidad social y/o bloqueo político, lo que impide implementar reformas y políticas que favorecen y estimulan el desarrollo. Un gobierno autoritario puede aprobar y ejecutar estas reformas y políticas libres de la interferencia de los grupos de presión y de la necesidad de alcanzar metas de corto plazo, logrando así elevados niveles de inversión aplicando las políticas industriales adecuadas. La democracia distrae fuerzas sociales y económicas hacia la confrontación política y genera inestabilidad y tensiones que no favorecen la adopción de medidas encaminadas a objetivos de largo plazo.

<https://thediplomat.com/2015/09/why-do-outsiders-care-about-singapores-elections/>

Knutsen, Carl Henrik (2009): "Investigating the Lee-thesis: ¿How bad is democracy for Asian economies?", artículo para "Den nasjonale fagkonferansen y statsvitenskap 2009".

"Lee Kuan Yew fervently argued that denying civil and political rights to people was acceptable if it promotes economic development and general wealth for the majority. That idea, subsequently dubbed 'the Lee Thesis,' has been fiercely debated since."

<https://thediplomat.com/2015/09/why-do-outsiders-care-about-singapores-elections/>

"Indonesia's democratic transition was a success, and now is in the third decade of democratic experience. But it has been backsliding, bringing the country to the edge of competitive authoritarianism. During the three-decades of Suharto's authoritarian rule, the economy grew at 7% annually, while the democratic Indonesia grew only at around 5%. Higher authoritarian growth resonates with the so-called Lee thesis, popularised by the founding Prime Minister of Singapore, Lee Kuan Yew. It is argued that that development requires some restraints on democracy, famously put as a choice between two 'D's' - democracy and development or between democracy and discipline. Its proponents hold the view that poor developing countries are not fit for democracy.

The Lee thesis is supported by high growth phases under the authoritarian rules of Singapore under Lee himself, Mahathir's Malaysia, Park Chung-hee's South Korea, and Chiang Kai-shek's Taiwan. Authoritarian China's phenomenal growth since the early 1990s has also provided credence to the thesis. Thus, temptations to authoritarianism can also be seen in other developing Asian and African countries. However, it is argued that democratic growth is more stable and more resilient to crises. AK Sen argued that it is wrong to ask whether a country is fit for democracy; rather a country becomes fit through democracy. Entering the second half of the third decade of its current democratic experience, Indonesia will have to decide whether to stay with the path of democratic growth or returning to an authoritarian path."

“Amartya Sen claims in *Development as Freedom* that democracy is the solution to helping poor economies, but the Lee thesis states otherwise. The thesis states that authoritarianism eradicates poverty because of a focus on economic development rather than freedom.”

“Some opponents of democracy in developing countries echo the ‘Lee thesis,’ named for former Prime Minister of Singapore, Lee Kuan Yew. It states that authoritarian regimes are better at enriching poor nations than democracies.”

Proponents of the Lee thesis attribute this to an authoritarian focus on economic development rather than on freedom, which is seen as unnecessary to eradicating poverty. For example, Singapore, South Korea, and China achieved higher growth while under authoritarian governments than did democracies like India, Costa Rica, and Jamaica.

However, Sen states that the Lee thesis is based on faulty evidence. Empirical studies reveal there’s no relationship between authoritarianism and economic growth. By contrast, democratically-oriented policies are proven growth drivers. Examination of the ‘East Asian Miracle’ economies (such as Japan, Singapore, Taiwan, and South Korea), which achieved rapid economic growth in the 20th century, suggests the following policies are most helpful:

- Openness to competition
- Use of global markets
- High literacy rates
- Land reforms
- Incentives for industrialization, research and development, and exports

Sen argues all of these helpful policies are compatible with democratic rights. Additionally, many authoritarian regimes that have failed to adopt these policies have remained poor. Therefore, the assertion that authoritarianism is either necessary or sufficient to achieve economic growth is false.”

<https://www.shortform.com/blog/lee-thesis/>

Knutsen, Carl Henrik (2010): “Investigating the Lee Thesis: How Bad is Democracy for Asian Economies?”, *European Political Science Review* 2 (3): 451–473.

Opiniones de Lee Kuan Yew

La siguiente es una selección de opiniones de Lee Kuan Yew (1923-2015), Primer Ministro de la República de Singapur entre 05/06/1959 y 28/11/1990 y ‘padre de la patria’, sobre sociedad, economía y gobernanza.

- “Human beings, regrettable though it may be, are inherently vicious and have to be restrained from their viciousness.”



- “We may have conquered space, but we have not learned to conquer our own primeval instincts and emotions that were necessary for our survival in the Stone Age, not in the space age.”
- “I have always thought that humanity was animal-like, while Confucian theory says that it can be improved. I am not sure it can be, but it can be trained, it can be disciplined.”
- “In any given society, of the 1,000 babies born, there are so many percent near-geniuses, so many percent average, so many percent morons... It is the near-geniuses and the above-average who ultimately decide the shape of things to come.”
- “Good sense and good economics require that we must always find practical, not doctrinaire, solutions to our problems of growth and development.”
- “I do not believe that because a theory sounds good, looks logical on paper, or is presented logically, therefore that is the way it will work out. The final test is life. What happens in real life, what happens with people working in a society.”
- “Do not try to impress by big words. Impress by the clarity of your ideas...I speak as a practitioner. If I had not been able to reduce complex ideas into simple words and project them vividly for mass understanding, I would not be here today.”
- “There are three basic essentials for [the] successful transformation of any society. First, a determined leadership...two, an administration which is efficient; and three, social discipline.”
- “One of the reasons why a privileged society based on the privilege of property and rank must give way to a society where people are rewarded according to their ability and their contribution to society is that it is only when people are encouraged to give their best that society progresses. No society has existed in history where all people were equal and obtained equal rewards. If that were to be practiced, and the lazy and the incompetent were paid as much as the industrious and the intelligent, it would end up by all the good people giving as little of themselves so as not to give more than their weaker brethren. But it is possible to create a society in which everybody is given not equal rewards, but equal opportunities, and where rewards vary not in accordance with the ownership of property, but with the worth of a person’s contribution to that society. In other words, society should make it worth people’s while to give their best to the country. This is the way to progress.”
- “Why did China’s technological advance slow down and halt, just when the Renaissance was beginning in Europe? China’s stagnation was caused by its arrogance and complacency. It refused to learn from the West. When the British emissary Lord Macartney arrived in Beijing in 1793, bringing with him the marvels of the industrial revolution, the Emperor Qian Long was not impressed. The great emperor told the English nobleman, ‘There is nothing we lack nor do we need any of your country’s manufactures.’ The price China paid for this arrogance was 200 years of decline and decay, while Europe and America forged ahead. Two hundred years later, another Chinese leader, more thoughtful and practical, set out to undo the damage. Deng Xiaoping opened up China to the world in 1978.”
- “These are the four salient features of America’s entrepreneurial culture: (1) a national emphasis on personal independence and self-reliance, (2) respect for those starting new businesses, (3)

acceptance of failure in entrepreneurial and innovation efforts, and (4) tolerance for a high degree of income disparity."

- "From my empirical observation of people and leaders, I believe 70–80% of a person's capability, proclivities, temperament is genetic... If you are bound to be a capable person, you will grow into a capable person. If you are bound to be slow, you will be slow. Nothing can change that...I do not believe, contrary to what American books say, that you can teach people to be leaders. I think you are a born leader or you are not a leader. You can teach a person to be a manager, but not a leader. They must have the extra drive, intellectual verve, an extra tenacity, and the will to overcome."
- "I have spent 40 years trying to select people for big jobs...I have gone through many systems, spoken to many CEOs...I decided that Shell had the best system of them all, and the government switched from 40 attributes to three, which they called 'helicopter qualities'...What are they? Powers of analysis; logical grasp of the facts; concentration on the basic points, extracting the principles. You score high marks in mathematics, you have got it. But that is not enough... They must have a sense of reality of what is possible. But if you are just realistic, you become pedestrian, plebeian, you will fail. Therefore, you must be able to soar above the reality and say, 'This is also possible' — a sense of imagination."
- "The problem is that the human being is unable yet to assess this thing called 'character.'... It is amazing how many highly intelligent persons in the world make no contribution at all to the well-being of their fellow people. And it is this as yet unascertainable or, rather, as yet unmeasurable, quality called 'character,' which, plus your mental capacity or knowledge or discipline, makes for leadership... In the established societies ... all their leadership comes from a broad stratum of people who have gone to universities. It is so much better if ... a person also goes through a systematic course of discipline, learns all the basic norms, what history has to offer and human experience has to offer, and then takes over that leadership."
- "What are the most common public policy mistakes that leaders make? Sometimes they succumb to hubris and overconfidence, and other times they miss a transformative opportunity when it arrives."
- "China has more handicaps going forward and more obstacles to overcome than most observers recognize. Chief among these are their problems of governance: the absence of the rule of law, which in today's China is closer to the rule of the emperor; a huge country in which little emperors across a vast expanse exercise great local influence; cultural habits that limit imagination and creativity, rewarding conformity; a language that shapes thinking through epigrams and 4,000 years of texts that suggest everything worth saying has already been said, and said better by earlier writers; a language that is exceedingly difficult for foreigners to learn sufficiently to embrace China and be embraced by its society; and severe constraints on its ability to attract and assimilate talent from other societies in the world."
- "China is not going to become a liberal democracy; if it did, it would collapse."
- "I understood Deng Xiaoping when he said: if 200,000 students have to be shot, shoot them, because the alternative is China in chaos for another 100 years."

- “Historically, the U.S. has demonstrated a great capacity for renewal and revival. America’s strengths include no grooved thinking, but rather, an ability to range widely, imaginatively, and pragmatically; a diversity of centers of excellence that compete in inventing and embracing new ideas and new technologies; a society that attracts talent from around the world and assimilates them comfortably as Americans; and a language that is the equivalent of an open system that is clearly the lingua franca of the leaders in science, technology, invention, business, education, diplomacy, and those who rise to the top of their own societies around the world.”
- “India has wasted decades in state planning and controls that have bogged it down in bureaucracy and corruption. A decentralized system would have allowed more centers like Bangalore and Bombay to grow and prosper...The caste system has been the enemy of meritocracy...India is a nation of unfulfilled greatness. Its potential has lain fallow, underused ... There are limitations in the Indian constitutional system and the Indian political system that prevent it from going at high speed ... Whatever the political leadership may want to do, it must go through a very complex system at the center, and then even a more complex system in the various states.”
- “Oil without Islamism can be a problem, but Islamism *plus* oil becomes a volatile mix. Islamism *plus* oil *plus* weapons of mass destruction equals a threat...A nuclear-capable Iran will significantly alter the geopolitical balance.”
- “There are no historical precedents on how to maintain peace and stability and to ensure cooperation in a world of 160 nationstates. And the age of instant communications and swift transportation, with technology growing exponentially, makes this problem very complex.”
- “There is no viable alternative to global integration. Protectionism disguised as regionalism will sooner or later lead to conflicts and wars between the regional blocs as they compete for advantage in non-bloc areas, like the oil countries of the Gulf. Globalism is the only answer that is fair, acceptable, and will uphold world peace.”
- “Westerners have abandoned an ethical basis for society, believing that all problems are solvable by a good government ... In the West, especially after World War II, the government came to be seen as so successful that it could fulfill all the obligations that in less modern societies are fulfilled by the family ... In the East, we start with self-reliance. In the West today, it is the opposite. The government says give me a popular mandate and I will solve all society’s problems.”

Ilison, Graham; Robert D. Blackwill; Ali Wyne (2013): *Lee Kuan Yew. The Grand Master's Insights on China, the United States, and the World* (interviews and selections by), MIT Press.

https://es.wikipedia.org/wiki/Lee_Kuan_Yew

La tesis de Lipset

La tesis de Lipset (formulada en un artículo que tiene más de 12.000 citas) establece que

- la democracia es resultado del desarrollo económico y
- cuanto más desarrollado un país, más probable que sea democrático.

Singapur fue un contraejemplo de la tesis: en 1990 era la única economía (no exportadora de petróleo) de altos ingresos que no era una democracia (en cambio Taiwán y Corea del Sur estaban haciendo la transición).

Lipset, Seymour Lipset (1959): "Some Social Requisites of Democracy: Economic Development and Political Legitimacy", American Political Science Review 53 (març), 69-105.

Lipset, Seymour Martin (1994): "The Social Requisites of Democracy Revisited" (1993 Presidential Address, American Sociological Association), American Sociological Review 59 (febrer), 1-22.

"Seymour M. Lipset dubbed economic development a 'social requisite to democracy,' considering factors such as national wealth, a large degree of industrialization, and high levels of education to be necessary fertilizers to prepare a breeding ground for democracy... He famously posited that 'the more well-to-do a nation, the greater the chances that it will sustain democracy.'"

Banerjee, Anwesha (2013): "Revisions to Lipset's Economic Theory of Democratic Development. India as a case study"

https://journals.library.cornell.edu/tmpfiles/CIAR_6_1_6.pdf

El Consenso de Seúl

El Consenso de Seúl (*Seoul development consensus*) es un conjunto de principios adoptados por los miembros del G20 en 2010 y que expresan una visión pragmática del desarrollo (el desarrollo económico se presentaba como prioridad del G20).

Según Wikipedia (2025):

"The Seoul Development Consensus for Shared Growth is a set of principles and guidelines set up to assist the G20 nations and other global actors in working collaboratively with less developed countries in order to boost their economic growth and to achieve the UN's Millennium Development Goals (...) In contrast with the older Washington Consensus, the Seoul Consensus allows a larger role for state intervention. Rather than seeking to impose a uniform 'top down' solution, it postulates that solutions should be tailored to the requirements of individual developing nations, with the developing countries themselves taking the lead in designing packages of reforms and policies best suited to their needs."

Wikipedia (2025): "Seoul Development Consensus"

https://en.wikipedia.org/wiki/Seoul_Development_Consensus

"... the G20 has the opportunity to contribute to the reconstruction of the world economy in a form conducive to strong, sustainable, inclusive and resilient growth. Through the Seoul Development Consensus for Shared Growth, we seek to add value to and complement existing development commitments (...) We recognize as a crucial part of this exercise that we need to enhance the role of developing countries and low income countries (LICs) in particular, for the following reasons:

- First, because for prosperity to be sustained it must be shared.

- Second, because we acknowledge that the impact of the recent crisis demonstrated a global interconnectedness that is disproportionately affecting the most vulnerable in the poorest countries. It has been estimated that, as a result of the recent crisis, an additional 64 million people will be living in extreme poverty (i.e., living on less than USD 1.25 a day) by the end of 2010. We therefore have a responsibility to fulfill.

- Third, as the premier forum for our international economic cooperation, because the G20 has a role to play, complementing the efforts of aid donors, the UN system, multilateral development banks (MDBs) and other agencies, in assisting developing countries, particularly LICs, achieve the Millennium Development Goals (MDGs). Our role must relate to our mandate on global economic cooperation and recognize that consistently high levels of inclusive growth in developing countries, and LICs in particular, are critically necessary, if not sufficient, for the eradication of extreme poverty.

- Fourth, because the rest of the global economy, in its quest for diversifying the sources of global demand and destinations for investing surpluses, needs developing countries and LICs to become new poles of global growth – just as fast growing emerging markets have become in the recent past.

Our overarching objective of helping LICs improve and maintain the levels and quality of growth, thereby reducing poverty, improving human rights and creating decent jobs, requires strengthening the relationships among high, middle and low income countries. This entails promoting sustainable economic, social and environmental development; honoring equity in the partnerships that exist; building stronger and more effective partnerships among advanced countries, emerging countries and LICs; engaging the private sector and civil society; and refocusing our priorities and efforts to remove the bottlenecks for LIC growth. We further believe there is no 'one-size-fits-all' formula for development success and that developing countries must take the lead in designing and implementing development strategies tailored to their individual needs and circumstances.”

“G20 Development Principles

We therefore commit ourselves to a Multi-Year Action Plan to achieve these objectives. This Plan will be based on the following principles (...)

1. Focus on economic growth. (...) Actions and policies should have the capacity to significantly improve the prospects for inclusive, sustainable and resilient growth above business as usual.

2. Global development partnership. Engage developing countries, particularly LICs, as equal partners, respecting their national ownership and recognizing that the most important determinant of successful development is a country’s own development policy (...)

3. Global or regional systemic issues. (...)

4. Private sector participation. Promote private sector involvement and innovation, recognizing the unique role of the private sector as a rich source of development knowledge, technology and job creation (...)

5. Complementarity. Differentiate, yet complement existing development efforts, avoiding duplication (...)

6. Outcome orientation. Focus on feasible, practical and accountable measures to address clearly articulated problems that are serious blockages to significantly improving growth prospects for developing countries.”

<https://g7g20-documents.org/database/document/2010-g20-korea-leaders-leaders-annexes-annex-i-to-seoul-summit-document-seoul-development-consensus-for-shared-growth>

El Consenso de Mumbai

‘Consenso de Mumbai’ (*Mumbai consensus*) es una expresión creada para designar el modelo (‘basado en la gente’) de desarrollo económico de la India y empleada por primera vez en 2010 por Lawrence Summers, consejero económico principal del presidente Barack Obama.

“... in the long sweep of history, the biggest story from our era will be what has happened in the developing world, in the world’s emerging markets, especially here in Asia.

Consider this: Economic historians have calculated that if you compare living standards in Athens at the time of Pericles and living standards in London in 1800, they changed over those 2200 years at most by 75%. That’s a growth rate far less than one tenth of one percent per year.

They called it the Industrial Revolution because for the first time in all of human history, economic growth started at a rate where you could see the difference in living standards at the end of a human lifespan relative to the beginning of a human lifespan.”

“Think about what is happening today in India, China, or a number of other emerging countries – countries that between them have 40% of the population of our planet.

Living standards are rising at a rate between 5 and 7 percent a year, a rate at which they double within a long decade. A rate at which they increase between 30 and 100 fold within a single human life span.

In the economic history of the last millennium that is an event that ranks only with the Renaissance and the Industrial Revolution.”

“India, which will become the world’s most populous nation, will have much to say in this story. The tremendous economic energy being unleashed by India today, making one of the world’s top three economies, will only continue to grow when, a generation from now, it also has the world’s largest work force.”

“And perhaps ... in 2040, the discussion will be less about the Washington Consensus or the Beijing Consensus, than about the Mumbai Consensus – a third way not based on ideas of laissez-faire capitalism that have proven obsolete or ideas of authoritarian capitalism that ultimately will prove not to be enduringly successful.

Instead, a Mumbai Consensus based on the idea of a democratic developmental state, driven not by a mercantilist emphasis on exports, but a people-centered emphasis on growing levels of consumptions and a widening middle class.

A consensus based globally not on the idea that competitiveness was in service of a nation trying to win a zero sum game, but rather on the idea that through international integration, nations could diversify, pursue their strengths, and realize together the benefits of larger global markets."

"Your country, like my country, faces formidable challenges in the years ahead.

- Challenges of ensuring that government by the people is effective government for the people.
- Challenges of maintaining faith and trust in public institutions and assuring that public institutions are worthy of that faith and trust.
- Challenges of creating prosperity that does not just mean the success of a thin elite at the top, but opportunity for an every growing middle class.
- Challenges of ensuring the availability of jobs that provide dignity, opportunity, and better lives for children and parents and citizens."

"But ultimately in the relationships between democratic nations, between broad pluralistic societies, it is not the government to government agreements that will make the largest difference.

- It is the ties that are formed when students from one country study in another. Ties that I hope will increase in scale dramatically over the next decade.
- It is the ties that are formed when firms from one country invest in another country. Flows that, to our mutual benefit, are becoming increasingly reciprocal between the United States and India.
- It is the ties that are formed when professionals from one country do business, learn, share, with professionals for another country.
- And it is the ties that are formed by the institutions that are undergird democracy."

Summers, Lawrence H. (2010): "India and the Global Economy", Remarks at The Asia Society, Mumbai, India, 15 Oct 2010

<http://www.whitehouse.gov/administration/eop/nec/speeches/india-global-economy>

La Declaración de Berlín

La Declaración de Berlín (*The Berlin Summit Declaration*) de 29 de mayo de 2024, fruto de una reunión de un grupo de economistas en paralelo al *Forum for a New Economy*, manifiesta la necesidad de alejar la política económica de la influencia del Consenso de Washington y consolidar el papel del sector público en múltiples direcciones: políticas industriales proactivas, fomentar trabajos de calidad, regular la globalización, menguar las desigualdades, reducir el poder de mercado, atender problemáticas globales como el calentamiento global y la dificultad de los países económicamente menos desarrollados para impulsar su desarrollo...

"Paradigm shifts in mainstream economic thinking usually occur during crises that require new responses. This happened after the onset of stagflation (low economic growth and high inflation) in developed countries during the 1970s. And it may be happening again now, as liberal democracies

face a wave of popular distrust in their ability to serve citizens and respond to the multiple crises that threaten our future: climate change, intolerable inequality, major global conflicts."

"To counter dangerous populist policies that exploit voter discontent and prevent serious harm to humanity and the planet, we must urgently address the root causes of citizen discontent."

"With this imperative in mind, many leading economists and practitioners gathered in Berlin at the end of May for a summit organized by the Forum for the New Economy. As a result of the Summit 'Restore Citizens' Trust', a new understanding emerged that could replace the market-liberal 'Washington Consensus', which for forty years prioritized free trade and capital movement, deregulation, privatization and other market dogmas.

The Berlin Declaration, published after the meeting, was signed by dozens of leading scientists, including Nobel laureate Angus Deaton, Mariana Mazzucato, Olivier Blanchard, Tom Piketty, Izabela Weber, Branko Milanović and many others.

In recent years, the 'Washington Consensus' has already begun to crumble under a deluge of studies confirming the growth of inequality in income and wealth, and citing the reasons for that growth. In addition, these studies have provided new insight into the role of industrial policy and climate change strategy. Recent crises, not to mention the danger of losing the battle for liberal democracy, have encouraged efforts to use all this research to develop a new general framework of measures that will help restore citizens' trust.

The Berlin Declaration underscores the abundant evidence that people's mistrust is largely driven by a general sense of real or perceived loss of control over their livelihoods and the trajectory of social change. This sense of helplessness has been fueled by shocks caused by technological change and globalization, and exacerbated by climate change, artificial intelligence, the latest rise in inflation and fiscal austerity."

"In order to restore people's trust, policies are needed that restore faith in their and their government's ability to effectively respond to the real problems they face. This means that policy should focus on creating shared prosperity and good jobs, including policies that proactively address immediate regional disruptions by supporting new industries and channeling innovation to create wealth for the many.

There is equally strong support for designing a healthier form of globalization, for coordinating climate policies, and for establishing national control over key strategic interests. Underlying these priorities is broad agreement that income and wealth inequality must be reduced."

"There is also widespread acceptance of the need to provide developing countries with the financial and technological resources they need to transition to climate resilience.

To summarize, there is a new general understanding that a new balance needs to be found between markets and collective action."

"... the purpose of the declaration is to state principles that are clearly distinct from previous orthodoxy and create a mandate to refine political concepts for practical application. The answer to the question of how to properly implement industrial policy depends on the conditions in a

particular country and joint international efforts. The same applies to the answer to the question of how governments could encourage climate-friendly behavior. Questions remain open: how to reconfigure globalization and how to most effectively reduce economic inequality.

It is vital, however, to reach consensus on the principles that should guide policymakers. Recognizing that markets alone will not stop climate change or reduce wealth inequality is the first step toward developing the best policies to effectively respond to the real challenges we face."

"In order to preempt the populists, we need a new political consensus focused on solving the causes of citizens' mistrust and not on its symptoms ... To restore the trust of the citizens, we need a plan for the people."

Rodrik, Dani; Laura Tyson; Thomas Fricke (2024): "From the Washington Consensus to the Berlin Declaration", Project Syndicate, 27 Jun 2024

<https://www.project-syndicate.org/commentary/washington-consensus-gives-way-to-berlin-declaration-by-dani-rodrik-et-al-2024-06>

<https://en.vijesti.me/column/716807/from-the-Washington-Consensus-to-the-Berlin-Declaration>

"The Berlin Summit Declaration

Liberal democracies are today confronted with a wave of popular distrust in their ability to serve the majority of their citizens and solve the multiple crises that threaten our future. This threatens to lead us into a world of dangerous populist policies exploiting the anger without addressing the real risks, ranging from climate change to unbearable inequalities, or major global conflicts. To avert major damages to humanity and the planet, we must urgently get to the root causes of people's resentment.

There is ample evidence today that this distrust is not only, but to a large extent, driven by the widely shared experience of a real or perceived loss of control over one's own livelihood and the trajectory of societal changes. This sense of powerlessness has been triggered by shocks stemming from globalization and technological shifts, now amplified by climate change, AI and the inflation shock. And, decades of poorly managed globalization, overconfidence in the self-regulation of markets and austerity have hollowed out the ability of governments to respond to such crises effectively.

Winning back the people's trust means rebuilding these capacities. We do not pretend to have definitive answers. However, it seems crucial to re-design or strengthen policies based on some of the fundamental lessons we can draw from what has caused such levels of distrust. These suggest that we need to:

- reorient our policies and institutions from targeting economic efficiency above all to focusing on the creation of shared prosperity and secure quality jobs;
- develop industrial policies to proactively address imminent regional disruptions by supporting new industries and direct innovation toward wealth-creation for the many;

- make sure industrial strategy is less about giving out subsidies and loans to sectors to stay in place and more about helping those invest and innovate towards achieving goals like net zero;
- design a healthier form of globalization that balances the advantages of free trade against the need to protect the vulnerable and coordinate climate policies while allowing for national control over crucial strategic interests;
- address income and wealth inequalities that are reinforced via inheritance and financial market automatism, be it by strengthening the power of poorly paid, appropriately taxing high incomes and wealth, or securing less unequal initial conditions through instruments like a social inheritance;
- redesign climate policies combining reasonable carbon pricing with strong positive incentives to reduce carbon emissions and ambitious infrastructure investment;
- ensure developing nations have the financial and technological resources they need to embark on the climate transition and the mitigation and adaptation measures without compromising their prospects;
- generally establish a new balance between markets and collective action, avoiding self-defeating austerity while investing in an effective innovative state;
- reduce market power in highly concentrated markets.

We are living through a critical period. Markets on their own will neither stop climate change nor lead to a less unequal distribution of wealth. Trickle-down has failed. We now face a choice between a conflictual protectionist backlash and a new suite of policies that are responsive to people's concerns. There is a whole body of groundbreaking research on how to design new industrial policies, good jobs, better global governance and modern climate policies for all. It is now critical to develop them further and put them into practice. What is needed is a new political consensus addressing the deep drivers of people's distrust instead of merely focusing on the symptoms, or falling into the trap of populists who pretend to have simple answers.

As the danger of armed conflicts around the world has risen due to diverging geo-political interests, liberal democracies will, as a prerequisite, need to demonstrate their ability to both defend their values and defuse direct hostilities, ultimately open the path to sustainable peace, as well as diminish the tensions between the US and China.

Any attempt to durably get citizens and their governments back into the driver's seat has the potential to not only promote wellbeing for the many. It will help to once again foster trust in the ability of our societies to solve crises and secure a better future. We need an agenda for the people to win back the people. There is no time to waste.

May 2024"

"Total signatories [577 on 30 May 2025]"

<https://newforum.org/en/the-berlin-summit-declaration-winning-back-the-people/>

El 'viejo' Consenso de Bruselas

Tradicionalmente, de manera más o menos implícita, se ha desarrollado en el entorno de los órganos de gobierno de la Unión Europea una percepción común (Consenso de Bruselas) sobre qué menú de medidas de política económica es más efectivo para conseguir el progreso y el crecimiento económicos de la unión. Se trata de un menú cercano al menú del Consenso de Washington. Los platos principales del menú:

- política fiscal austera
- política monetaria estricta
- intervención pública limitada si bien se establece una sistema público protección social
- promoción del libre comercio en los mercados globales
- promoción de la competencia en el mercado interno.

Implícito en el Consenso de Bruselas es que el resto de actores globales principales adopten una estrategia similar de política económica; en particular, el respeto a las normas globales que regulan el funcionamiento de los mercados globales y en no emplear la influencia geopolítico en beneficio propio. Los límites del Consenso de Bruselas se ponen en evidencia cuando otros actores globales (EEUU y China) ponen en cuestión el orden internacional basado en normas o se enfrentan entre ellos (cuestionamiento y enfrentamiento que afectan muy negativamente la UE, cuya estrategia es el respecto a las normas internacionales y el acuerdo multilateral).

"Europe's growth in recent decades has been driven by its economic integration and the significant opening of the world economy. This expansion accelerated in 2001 with the accession of China to the World Trade Organization (WTO) and the global trade and growth shock it provoked."

"Despite its remarkable success, Europe's economic enlargement also brought challenges, including the massive displacement of industrial and manufacturing jobs inside and outside the continent. Still, Europe held the promise of economic growth and progress, grounded in a consensus that backed free and fair competition in the internal market, conservative fiscal policy, monetary rigour, limited state interventionism, and the promotion of free trade.

Now, this economic consensus is unravelling. Although domestic competition policy has been fairly effective in Europe, its lapses in the US as well as trade liberalisation have given rise to globally dominant corporate giants that have compromised free and fair competition, particularly in the tech space.

However, there are two corrections underway. The Biden administration championed a Neo-Brandeisian policy (hostile to excessively centralised private power) which amounts to a form of alignment with EU competition policy. Meanwhile, as the EU has committed to strengthening Europe's strategic autonomy and competitive edge in global markets that remain open because of trade policy, its competition regulations appear to be growing more tolerant of the dominant position carved out by large firms."

"The economic consensus is also shifting internationally with the constant decline of the WTO as China and – more recently – the US have turned hostile towards the organisation ... The last two governments in Washington have confirmed and cemented this trend, with Donald Trump piling

tariffs and Joe Biden shunning the WTO completely with the green subsidy scheme of the Inflation Reduction Act (IRA).

This new reality has had a considerable impact on competition policy in Europe. In the absence of a real lever to activate industrial policy in the same way as the US or China, Europe is opting for the time being to considerably loosen its competition policy. Notably, there are now larger exemptions for state aid, ... competition policy is increasingly shaped by the dynamics of global markets in which EU companies operate."

"For its part, China managed to achieve its impressive economic expansion in the last 25 years while shunning the constraints of the WTO (via forced technology transfer, circumventing the protection provided by intellectual property rights) and using its loopholes (to grant subsidies). By the time the US and Europe awakened to the damage caused by Beijing and decided denying China, under WTO rules, the status of market economy in 2017 (therefore maintaining the very high anti-dumping duties which could potentially be imposed on Chinese goods), it was too little, too late to decisively tip the balance and meaningfully curb China's rise.

The WTO's inability to overcome the formidable challenge to its authority posed by its two main powerhouses, coupled with its failure to advance its agenda and conclude negotiations between WTO contracting parties, accelerated the irrelevance of the institution. For the first time in more than 70 years, the future of trade will not be written in Geneva but in Washington DC, Beijing, and Brussels. This paradigmatic change has profound consequences for Europe that are yet to be fully appreciated."

"Europe's new dilemma

The EU legal order was largely built on the assumption that the bloc would play a leading role in a stable, liberal, and rules-based economic system ... This framework served the mercantile interests of the EU well, eventually leading it to record a constant and growing trade surplus with the rest of the world between 2000 and 2018. It was also combined with an aggressive competition policy that largely ignored global markets and focused somewhat narrowly on consumer welfare.

The flip side of the EU's total embrace of globalisation (both in trade and finance) has been a dramatic increase in the bloc's exposure to the two major economic players ... In fact, the EU's competition regulations proved largely powerless to curb the corporate imperialism of American big tech firms and equally toothless in competing with China in the manufacturing and industrial space. The EU's significant financial exposure to the US can best be observed in its reliance on the dollar and the need for its financial institutions to raise capital in the US. Moreover, the collapse of private transatlantic finance in 2008 and the need for dollar liquidity support highlighted the acute European reliance on the US Federal Reserve System's role as a global lender of last resort. On top of that, the Covid-19 pandemic revealed the EU's structural dependencies on the US across many critical supply chains.

Brussels is also facing considerable commercial and industrial exposure to China, which has become the first market for EU goods while also emerging as the preferred supplier of goods to European companies and consumers."

“While dependence on the dollar has somewhat declined since the global financial crisis, the exposure to China has kept growing (...) The EU is virtually at the mercy of US retaliation in the field of trade and finance and Chinese retaliation in commercial matters.

This complex situation creates important tensions between the EU’s internal and external policies. While the EU has a comprehensive framework to regulate the delivery of subsidies within its internal market, the framework at the international level has historically been deficient as the WTO’s competence is minimal.”

“In this context, the EU’s recent adoption of the Foreign Subsidies Regulation should be seen as an acknowledgement of the bloc’s failure to reach any achievements on subsidy control within the framework of the WTO, choosing instead to pursue a unilateral road. It is also a clear sign of trade policy and competition finally coming together and being somewhat internalised.”

“The negative impact of the growing competition between the US and China on the EU is exacerbated by the securitisation of trade policy. As the US increasingly expands the list of economic issues falling under the national security exception to trade, it undermines transatlantic cooperation and forces the EU to consider its own options. The most telling example of this escalation is the steel and aluminium tariffs introduced by the Trump Administration in 2018. Since then, the EU has been compelled to expand its toolkit considerably to be able to respond to a more hostile trade environment.”

“However, progress in this field has also been hampered by the fact that national security remains a national prerogative in Europe. Export controls and inward and outward investment screening remain national competencies and most member states are wary of harmonising their positions at the European level ... Consequently, the more national security becomes a central part of trade policy, the less the EU framework and consensus will be fit for the purpose.”

“Trade meets climate policy

The growing fragmentation of the international economic order is a huge liability for a player like the EU which aims to control climate change via its economic agenda. Historically, the EU has been a committed and active player at the international level when it comes to supporting and participating in environmental and climate treaties, believing that international cooperation is crucial for effective global climate policy. Brussels believed that a combination of the rule of law, international collaboration, and market mechanisms – particularly through carbon taxation and pricing models – was the backbone of the climate and energy transitions. This was the foundational intellectual basis for the 2015 Paris Climate Conference.

Divergences first came to the fore with the 1997 Kyoto Protocol. The US signed but did not ratify the protocol, while China was actively involved in the negotiation process but was not obligated to reduce emissions under the treaty because it was classified as a developing country. Although the Paris Agreement was an impressive step in the right direction, it failed to sufficiently address the perceived risks of divergent implementations. In addition, even though the Paris Agreement entails binding procedural requirements, the actual targets and measures that countries committed to are not legally enforceable.”

“... the European hope of a gradual expansion of carbon pricing and international taxing is unlikely to materialise ... Washington has been trying to undermine Europe’s efforts to introduce a carbon border adjustment mechanism (CBAM) for years. The Biden administration has even threatened to restore steel and aluminium tariffs if Brussels imposes a carbon levy on energy-intensive American imports.”

“A new trade policy is emerging

... A new trade policy is emerging in Europe. It will inevitably have to be more aggressive at levelling the playing field vis-à-vis China to offset its dumping capacity and subsidies. The very recent decision of the Commission to levy tariffs up to 38 per cent on Chinese electric vehicles is a testament to this new approach ... The EU will have to be able to respond to more friction from the US which has increasingly invoked national security concerns in its trade and competition decisions. Additionally, Brussels needs to revisit existing trade agreements to expand climate and social clauses, as seen in the free trade agreements with Singapore and Canada, even as recent discussions around Mercosur have highlighted future challenges. Finally, the EU must decide how to position itself in the global race to secure critical raw materials.”

“These choices will all have profound geopolitical and economic consequences for Europe. They will not only redefine our relationships with the US and China but will determine our ties with the Global South, where trade openness has long been a critical bargaining chip. Europe is at a crossroads for its economic, climate, and trade policy, yet does not fully grasp the extent to which these changes could upset its relationship with the world.”

Segoin, Daniel; Shahin Vallée (2024): “The Brussels Economic Consensus is Shifting”, 03 Oct 2024
<https://www.greeneuropeanjournal.eu/the-brussels-economic-consensus-is-shifting/>

Un nuevo Consenso de Bruselas

Bernard Guetta (2020) sugiere definir un nuevo Consenso de Bruselas en la UE con seis rasgos básicos:

- transición verde que limite el calentamiento global;
- política industrial común (en relación con desarrollos tecnológicos cruciales, como la IA);
- recuperación de soberanía industrial;
- política de defensa y diplomacia común;
- harmonización de sistemas tributarios y sistemas de protección social;
- deuda pública solidaria.

“Now, that France, Germany, the European Commission and so many of the Union’s capitals have embraced the principles of joint borrowing and the pooling of investments to deal with this crisis, now that all that remains is to negotiate a compromise with the States that are most committed to balanced budgets in order to achieve unanimity and take action, what is the next step?”

“... there is fortunately no ruling party or dominant party in Europe, not even a dominant party in limbo. There are left-wings, right-wings, Greens and centrists who do not share the same ambitions.

This diversity is a political richness that is certainly not going to disappear. It is actually an asset which we would be very wrong to deprive ourselves of (...) We all feel a need to know what unites us and what separates us in the political landscape shaped by the effects of this pandemic."

"The war had left us with a Europe to rebuild and to defend against the USSR. The post-war consensus on social protection, industrial policies and the common market emerged from this need. The success of the "Glorious Thirty", together with the rise in the price of raw materials and the gradual implosion of the Soviet system had opened the way to a new era. For some forty years, from the first election of Margaret Thatcher to the first deaths of Wuhan, the 'Washington Consensus' defined the policies of the five continents proclaiming that the State was not the solution but the problem, that too much taxation was killing taxation, and that the development of free trade was bringing democracy with it.

Like Brezhnev's USSR, this neo-liberalism had shown signs of running out of steam long before collapsing, but in the last three months it happened. The State is once again becoming the solution. Public debt is no longer the legacy we should not leave to our children but the inevitable tool for saving their jobs. We are entering a third era, the most glaring sign of which is Germany's abandonment of its *schwarze Null*, its demand for a zero deficit."

"... as useless and futile as it would be to aspire to give a common programme to the major European parties, all the more do we need to define this 'Brussels Consensus' which now replaces the Washington consensus and could well win the world as Thatcherism had done yesterday.

So let's read, let's look, let's listen. Not everyone has the same conception of the pace at which we should move to a new industrial model, but apart from vague and negligible differences, everyone agrees on the need for a green transition that could limit global warming. This first point of consensus is so real that, even before the pandemic, all the Commission's proposals were based on its 'Green Deal', its 'Green Pact', whose idea the Parliament had promoted by an overwhelming majority.

The second point of the Brussels Consensus is that we must focus our resources on a concerted effort in industrial research and modernisation, in other words on a common industrial policy aimed, in this case, at not missing out on the technological turning point brought about by the artificial intelligence.

The third point of this consensus is that we can no longer rely on an international division of labour in strategic areas and that the European Union must aim, as China and the United States are doing, for industrial sovereignty that would protect it from external dependence.

The fourth point of this consensus is that the Union must, like the United States and China, have the means of its political sovereignty, in other words a common defence and diplomacy. In black and white in the Franco-German proposals and between the lines in the Commission's proposals, the fifth point of this consensus is that the Member States of the Union must not delay any longer in harmonising their tax and social protection systems.

As for the sixth point of this consensus, it is – as we know – that the Union must no longer refuse to take on joint debt when it is about pooling debts but about investing in the future, that the Thatcherian page should be turned and another one opened: that of the Brussels Consensus.

Now we see it clearly. As much as there is convergence on these six points, there are also differences of opinion on what should be the Common Defence, the Green deal, industrial policies or relations with China or Russia like. There is no dominant party in the Union, but the consensus that is forming is so essential, innovative and forward-looking that it is urgent to tell Europeans that they are not getting lost in the fog but are, on the contrary, moving towards a common horizon and that the Brussels Consensus brings together between two-thirds and four-fifths of their political forces – a more than qualified majority.”

Guetta, Bernard (2020): “The Brussels consensus”, 02 Jun 2020

<https://www.bernard-guetta.eu/2020/06/02/the-brussels-consensus/?lang=en>

1.3. Aproximaciones teóricas a la política industrial

Política industrial, industrialización y éxito de los países

“... industrialization is a good thing economically, but it involves a costly, risky, and complex process. Many confuse industrialization with the construction of many factories. In fact, it is a capacity-building process with a significant intangible aspect; more than hardware, industrialization resembles software. It goes through certain stages and many countries of the world have not been able to proceed to advanced stages. However, as the country progresses towards advanced stages, the economic returns it reaps from industrialization increase.

The observation is that successful industrialization in the modern era has nowhere and never been an accident. It has always been based on some policy that aimed at supporting manufacturing. Currently, we call these ‘industrial policies.’”

“Few fully realize that industrialization is a crucial necessity for economic development and requires design and implementation of appropriate policies. Many countries ignore industrial policy or fail to employ it effectively. The outcome is that countries such as Japan, South Korea, Germany, Sweden, China, and Finland stand out as rare relatively recent examples of successful economic development on the back of industrialization. Meanwhile, the majority of countries remain in the middle-income trap, or—if we may call it so—the low-income trap.”

“Industrial policy is used to change the production structure of an economy in favour of the manufacturing industry by channelling a government’s selected budgetary and non-budgetary resources and by channelling private capital, labour, and entrepreneurs towards the manufacturing sector. Industrial policy, as other ‘structural policies,’ is designed and implemented in order to improve the long-term growth performance of the economy. In particular, it helps countries surmount the so-called middle-income trap by raising growth performance over the long term. This is made possible by the innovational and growth-inducing nature of the manufacturing sector.”

“In the UK, the Industrial Revolution began in the eighteenth century. It was not an accident; what can be identified as industrial policies had started much earlier. It started at a time when the UK was characterized as a mercantilist, colonizing, hegemonizing, and brutal empire built after the fifteenth century. The Spanish and Portuguese empires preceded Britain with their versions of mercantile, brutal, and hegemonizing histories. However, they could not industrialize, as they ultimately failed to employ industrial policies. They started the twentieth century as poor countries...”

“Britain started to employ policies to achieve industrialization as early as the fourteenth century through import–substitution-type industrial policies. After it built its global empire, its industrial policies aimed at keeping its colonies as suppliers of raw materials (at prices commanded by the British) and the mainland as a manufacturing hub: navigation acts, restricting manufacturing activities in the colonies through its colonial laws, enforcing triangular trade arrangements that gained Britain a monopoly power over its international trade and opening up new markets for its industrial export apparatus by forcing the (‘unequal’ as East Asians called it) free trade agreements with unprepared and politically and militarily weak markets (such as China). The outcome for Britain was impressive; it indeed became the manufacturing and commercial hub of the world; it

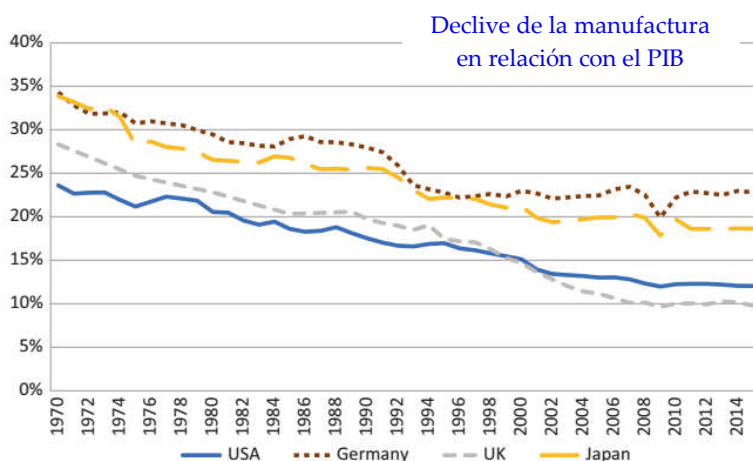
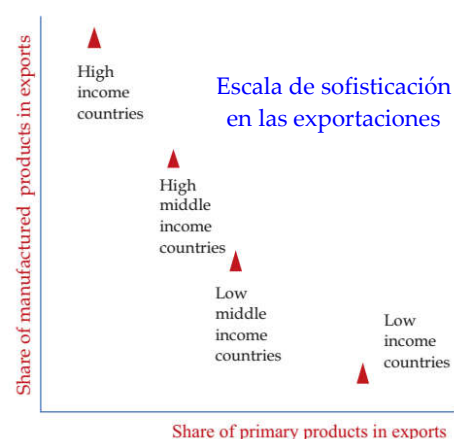
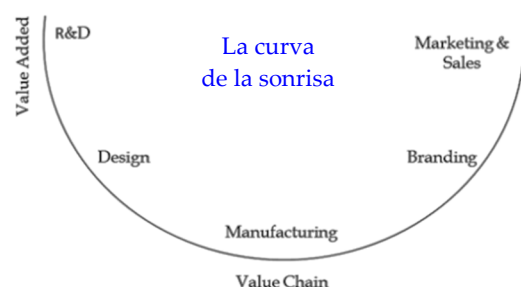
collected raw materials at low prices from around the world and disseminated its manufactured products to its colonies and other markets.”

“Today’s industrialized nations which experienced their industrial revolutions after the British have all employed industrial policies at different times in their development cycles. This is confirmed by the stories of France, the USA, Japan, Germany, and Russia. In each of them, one or more dominant leaders pushed for economic (and social) reform and industrialization.”

“... manufacturing is the hotbed of productivity, and innovations and services are the hotbed of employment. In our world today, global imbalances are more crucial than ever. They are driven by the major trade deficits of some countries and surpluses of others. A trade surplus of a country drives growth and employment. That ‘export-led growth’ explains growth in countries such as Germany, South Korea, Japan, and China; without trade surpluses, these countries would have had lower growth rates. On the other hand, trade deficits, in particular caused by ‘unnecessary’ imports, mean less growth and more unemployment for the importing country than would otherwise occur. As manufacturing constitutes the major part of world exports and imports, the manufacturing sector, then, is vital for growth and overall employment.”

“Overall, industrialization is a capacity-building process that materializes through real manufacturing experience over time. It requires the development of human and institutional skills. It is important to stress that not all manufacturing makes money for the manufacturer. The smile curve implies that some manufacturing forms may yield peanuts for the firm and country. However, manufacturing always has positive side effects through linkages to other industries and through learning effects that generate larger impacts on society than on the individual manufacturing firm.”

“Sectors are often qualified as ‘strategic,’ but from an economic point of view, there is no consensus let alone an analytical study on what makes a sector ‘strategic.’ (...) Industrialization is possible through the industrial layer of industrial firms and entrepreneurs, industrial labour and managers, and industrial finance. Industrial policy is designed and implemented by the state on the industrial layer. It is the capacities of the state and the industrial layer that are the key to a successful industrial policy.”

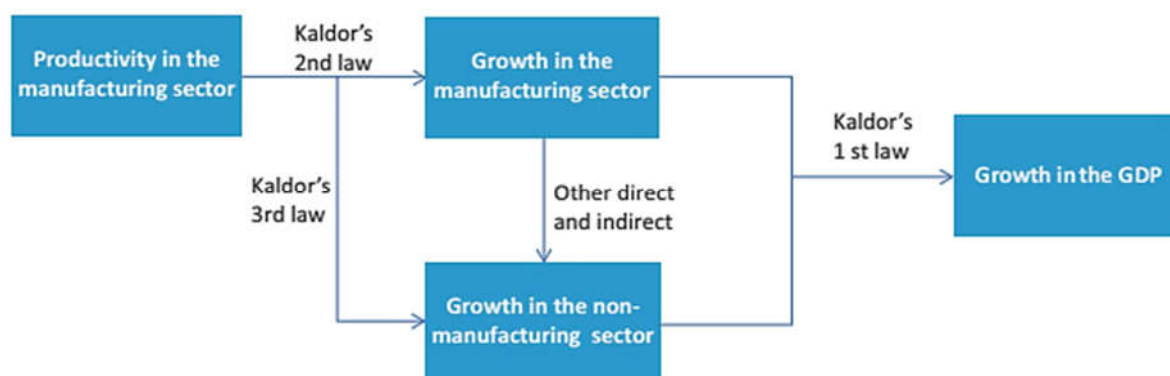


Yülek, Murat A. (2018): *How Nations Succeed. Manufacturing, Trade, Industrial Policy, and Economic Development*, Palgrave Macmillan.

Las leyes de Kaldor

“Kaldor’s three laws have been formulated as follows (order changed purposefully):

- The second law of Kaldor: Productivity drives the growth of the manufacturing sector; also known as Verdoorn’s (1949) law.
- The third law of Kaldor: The productivity of the non-manufacturing sector is positively related to the growth of the manufacturing sector.
- The first law of Kaldor: The manufacturing sector is the engine of GDP growth.”



Kaldor, N. (1966) ‘Causes of the Slow Rate of Economic Growth of the United Kingdom: An Inaugural Lecture’, a N. Kaldor (1978): *Further Essays on Economic Theory*, Duckworth.

Thirlwall, A. P. (1983): “A plain man’s guide to Kaldor’s growth laws”, *Journal of Post Keynesian Economics* 5(3), 345–358.

Verdoorn, J. P. (1949): “On the factors determining the growth of labor productivity”, *Italian Economic Papers* 2, 59-68

Yülek, Murat A. (2018): *How Nations Succeed. Manufacturing, Trade, Industrial Policy, and Economic Development*, Palgrave Macmillan.

“As postulated by the Kaldor-Verdoorn Law, a stable long-run relationship between output and labour productivity exists, whereby output growth determines productivity growth. Market expansion becomes a necessary condition for activating those technological and organisational factors which favour productivity growth.”

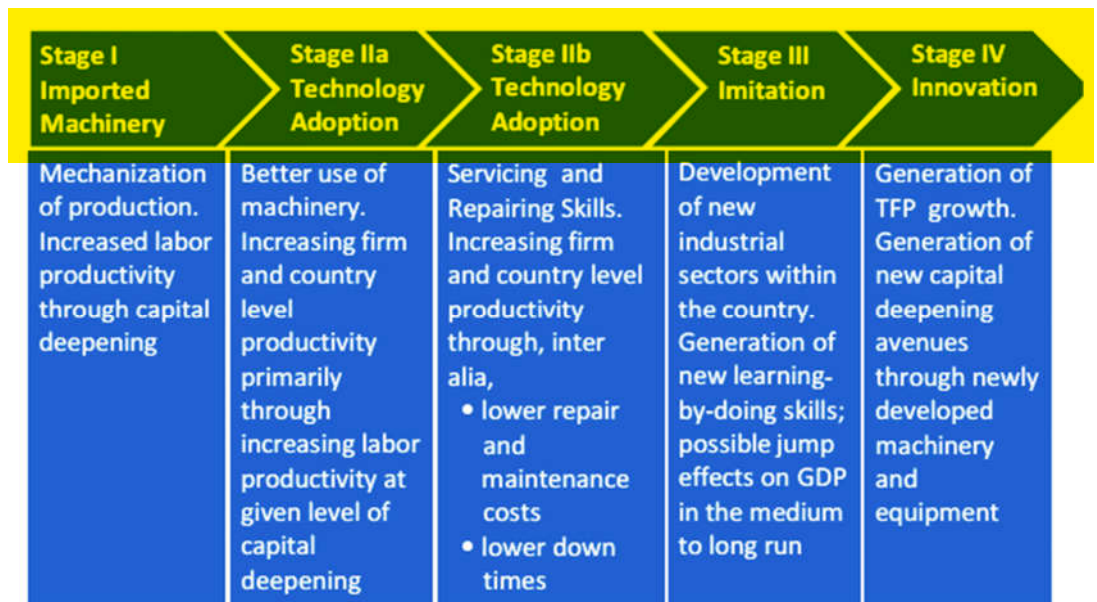
Deleidi, Matteo; Santiago J. Gahn; Claudia Fontanari (2022): “Autonomous Demand and Technical Change: Exploring the Kaldor-Verdoorn Law on a Global Level”, *Post-Keynesian Economics Society WP 2212*.

Etapas estilizadas de la industrialización

“... we will define a typical process that has repeated itself over time in different countries. This streamlined version of the industrialization process can be considered to consist of four consecutive stages.”

“At the outset of the first industrial revolution, the first industrial machinery was manufactured in the UK and other early industrializing countries. In the process (...) the administrators in the UK were careful in preventing technology transfer to other countries. Skilled masters of textile

machinery were not allowed to leave the country. As the Industrial Revolution progressed however, countries which had not manufactured industrial machinery (...) had the opportunity and necessity to import them from those who manufactured them.



The industrialized country benefited from exporting technology-embedded machinery.”

“Technology can be usefully defined as the relationship of conversion of inputs to outputs. When a firm or country imports foreign machinery in order to increase labour productivity, it actually imports the technology embedded within the machinery developed by the exporter. Importing machinery is an act of ‘capital deepening’ and leads to an initial jump in the (per hour) productivity of domestic labour (Stage I...), as it changes the production technology; it is a general observation that countries with low capital accumulation record high GDP growth rates when capital deepening occurs. However, it takes time for the full benefits of the new machinery to be reaped, as it takes time for labour to use machinery more effectively.

Over time, the importing country, through its firms and labour force, develops skills to run the machinery more efficiently. This is referred to as the ‘adoption’ of technology (Stage IIa). Adoption of new technologies can be defined as the use (i.e. not the development) of new and more efficient mappings between quantities of inputs and outputs. Better training of the workforce is considered to increase the speed of adoption of the technology embedded in the machinery. That in turn can lead to further gains in productivity in the firm and the country at a given level of capital stock. This adds to the productivity benefits acquired during the first stage, capital deepening.

A good user of machinery, and thus the embedded technology, is not necessarily also good in servicing or repairing the machinery. Acquiring these skills is a further stage in development and such skills would increase the overall productivity gains from the imported machinery by, for example, reducing downtimes or maintenance/repair costs (Stage IIb). That further complements the productivity benefits from the initial capital deepening. At the same time, it reduces the dependence of the importing country on after-sales services. South Korea’s nuclear power programme is a good example of the achievement of Stage III.”

“The next possible stage in the industrialization process is ‘imitation’ (Stage IV...). If this stage is ever reached by a country, firms reverse-engineer some of the imported machinery or products and build similar or slightly different ones. This is a new sector for the country (...) Imitation may unleash a new growth engine for the firm and the country through possible import substitution

effects as well as through new skills generation and learning. This is because significant learning spillovers are at play at this stage, as knowledge, including manufacturing know-how, is a public good.”

“There is a limited but valuable amount of new learning potential at this stage; the contribution of imitation to technological knowledge is limited and it does not add to global technological knowledge (...) The next and ultimate step in the industrialization process is developing new products (Stage V). This can be either through formal or informal R&D or through incremental innovation (...) This stage requires properly skilled human resources, such as R&D engineers. Countries which have reached this stage have firms at the boundaries of commercialized products. In order to compete globally, they need to develop new products, which is costly but at the same time which provides them with a certain period of pricing power.”

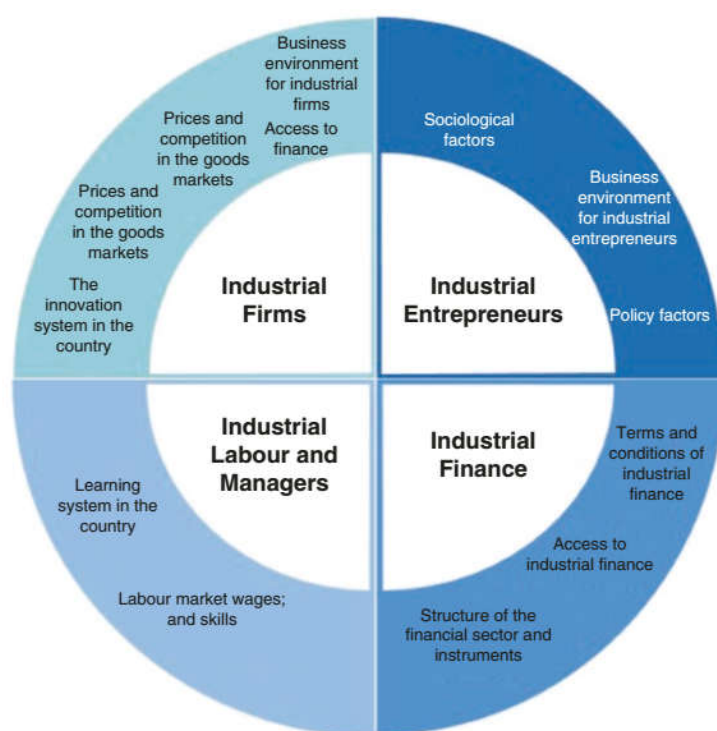
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Yülek, Murat A. (2018): “Thinking about a new industrial policy framework for Turkey”, a Aysan, A. F.; H. Karahan; N. Gür, N.; eds. (2018): *On the path to high income status: Navigating the Turkish economy in uncharted territories*, Palgrave.

Yülek, Murat A. (2018): *How Nations Succeed. Manufacturing, Trade, Industrial Policy, and Economic Development*, Palgrave Macmillan.

El estrato industrial “At the receiving end of the industrial policies is the ‘industrial layer’ composed of industrial entrepreneurs, firms, labour (both managers and workers), and finance. The quality and quantity of the industrial layer players are a critical success factor for the industrial policy no matter how ‘well’ it is designed and implemented.”

“Other than some abstract consideration contemporary economic literature does not say much about the nature of the industrial production and investment process, its internal and external actors, and the interaction between these actors. The manufacturing activity in economic theory is thus represented by a production function of some simple mathematical form (...) The reality is much more complex, and that is why many countries have failed to industrialize and fall into the middle-income trap. Industrialization process is primarily undertaken by industrial firms. Primary and direct agents of industrialization, they are established and led by *industrial entrepreneurs*. Industrial firms hire workers and managers, seek



capital, select manufacturing technologies, build factories, develop and manufacture industrial products, and sell them in domestic and international markets. In the process, the industrial firm acts as part of a national ecosystem which may be called the ‘industrial layer’ (...) It consists of the industrial entrepreneurs, industrial labour, and industrial finance in addition to industrial firms. It is important to note that the industrial layer is a concept wider than the (regional or local) industrial ecosystem. Typically, an industrial ecosystem, or a cluster, is considered to comprise closely linked networks of supplier firms.”

“The scope of industrial policies, thus, should cover not only the industrial firm alone but the entire industrial layer. The quality of the industrial layer is important in that it determines both the overall competitiveness of the industrial sector and the efficiency and effectiveness of industrial policies. Industrial policies are likely to fail if designed or implemented without taking into consideration the particular characteristics, weaknesses, and strengths of the industrial layer.”

Yülek, Murat A. (2018): *How Nations Succeed. Manufacturing, Trade, Industrial Policy, and Economic Development*, Palgrave Macmillan.

Industrialización y política industrial exitosas

“Within the industrial layer, the industrial firm is a key determinant of successful industrialization. Consequently, the design of the industrial policy should consider market failures arising from firm capabilities and should be selectively applied. Industrialization is primarily a

process of capacity building (of the industrial layer) with skill accumulation, technical progress, and physical infrastructure and superstructure as key ingredients

(Fig. 10.1). Skill requirements rise as industrialization proceeds (middle panel of Fig. 10.2). That is why, in some countries such as Germany and Sweden, vocational education and the manufacturing sector developed in tandem or the former preceded the latter. A successful industrialization process, which consists of forming an internationally competitive industrial layer, goes hand in hand with ‘technical progress’ (bottom panel of Fig. 10.2) in addition to simple capital deepening and the ensuing factor accumulation, which

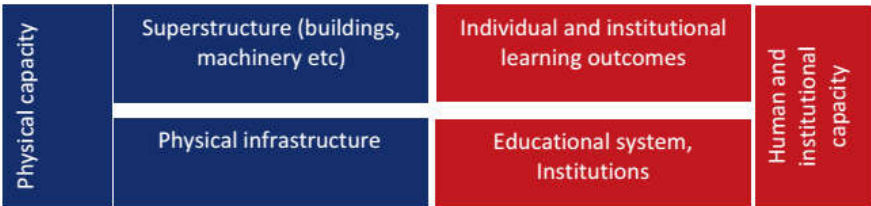


Fig. 10.1 Components of industrial capacity

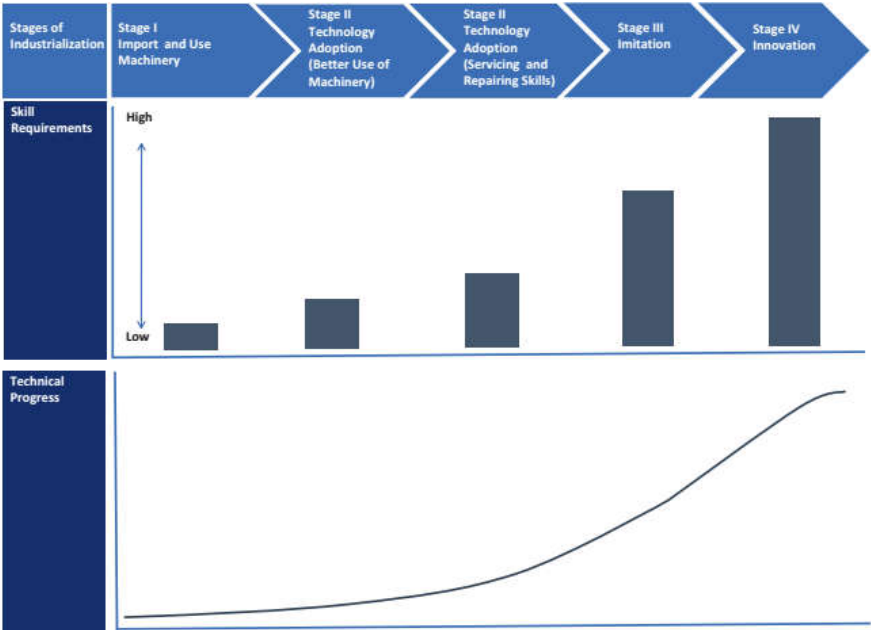


Fig. 10.2 Stages of industrialization, skills, and technical progress

is only a visual aspect of industrialization, consisting of factory buildings and machinery. Technical progress means getting more outputs from the same amount of inputs in the country.”

“... state capacity is more appropriately defined as ‘the ability of policymaking authorities to pursue domestic adjustment strategies that, in cooperation with organized economic groups, update or transform the industrial economy.’” That is very close to the concept of ‘developmental state’ as minted by economist Chalmers Johnson when explaining the rapid industrialization and economic development in Japan after the Second World War.”

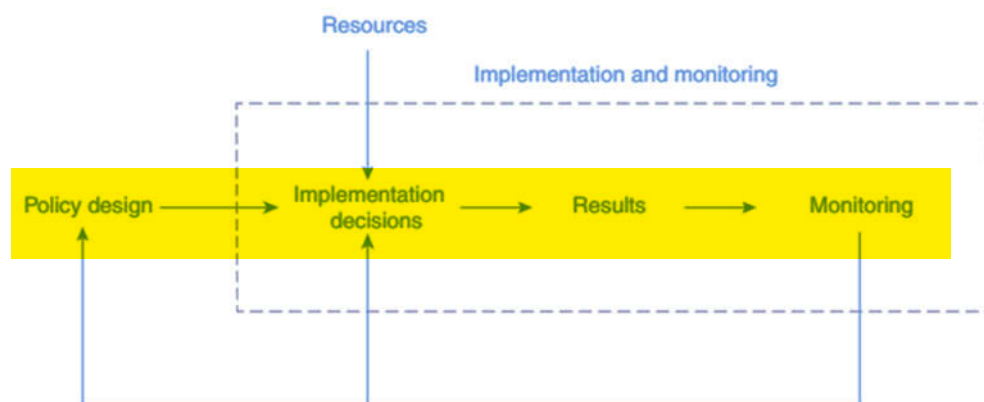
“A developmental state does not necessarily mean an autocratic or a statist one. Successful developmental states (mostly in East Asia), while exerting considerable influence on the domestic financial institutions, were careful to establish consultation mechanisms with the private sector. In the process, in consultation with the private sector, the (elite) bureaucrats were responsible for policy design, while ruling politicians maintained political stability by providing the bureaucrats with a conducive political and economic environment and conveying them the needs of the social and political groupings.

Maria[na] Mazzucato has extended the developmental state concept, stressing the pioneering role of the state in leading the firms to high-technology areas. Investment in high-technology areas is considered too risky

and costly by firms, which are concerned about how to internalize the returns (i.e. how to reap more profits) if successful. Significant initial R&D investments are necessary in those areas to achieve returns but success rates are very low. Thus, an entrepreneurial state levels the ground by funding R&D, enabling the entry of the firms to the high-technology areas by lowering initial private R&D risks and costs. Mazzucato’s (...) work revealed that every key technology (...) underlying iPhone’s success was funded by the American government (...) Mazzucato’s argument is not much different from Adam Smith’s, who underlined that where public goods are concerned, lack of state intervention would lead to undersupply. Thus, policies involving state subsidy can efficiently increase the supply of public goods (including of R&D) to the society.”

“It is arguable that the magnitude of the steering capacity of the state can determine or at least significantly influence the pace of economic development. In particular, the success of industrial policy in different countries in the recent or distant past has a lot to do with state success. In East Asia, Sweden, and Germany, among others, state capacity has arguably been one of the main defining factors of successful economic development.”

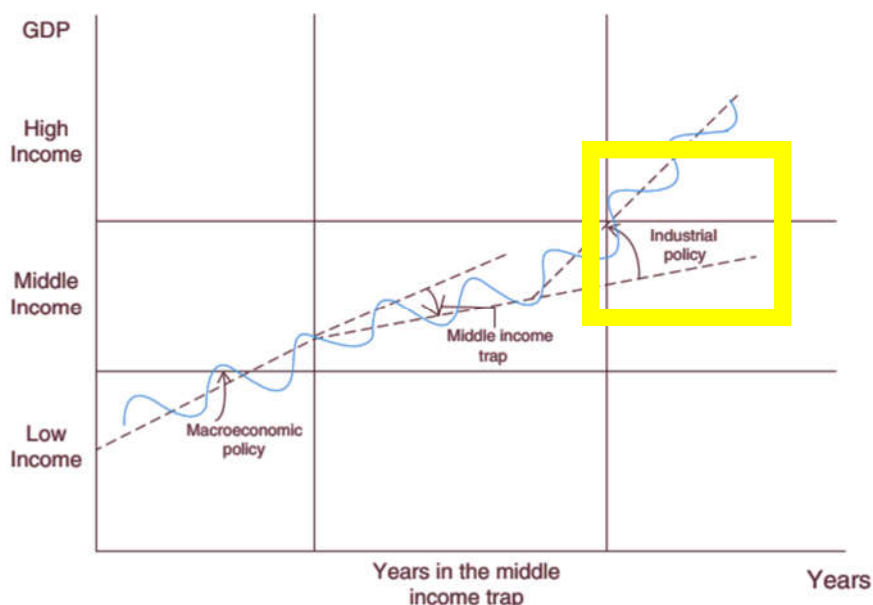
“The quality of the steering capacity depends on the quality of both the policy design and the implementation (...). The results that are achieved determine the ‘developmental impact’ of the resources employed. The effectiveness (the level of satisfaction with the results obtained) and the efficiency (results obtained in relation to the resources employed) are determined by the steering



capacity of the state. Things often do not go as planned due to many reasons: design mistakes, inadequacy of inputs deployed, insufficiency of the implementation capacity, and so on. Therefore, the quality of monitoring, which is also an important component of steering, is crucial. Monitoring may lead to corrections in the implementation or, more substantially, reforms in policies.”

“In developed economies, industrial policy is back in the policy agenda. In the EU, for example, after retreating between 1990 and early 2000s, industrial policy reclaimed an official position in the policy agenda in 2002 with the objectives of reviving productivity and growth and increasing competitiveness. Following the global financial crises, the EU’s industrial policy effort intensified as growth further diminished.”

“In developing countries which need growth to catch up, unnecessary imports cause slowdown (...) The costs of slowdown are higher in developing countries than in developed ones, as it impedes the needed catch-up process. Worse, if the import-led slowdown is systemic and sustained, then the developing country risks falling into the middle-income trap, which is a critical impediment to sustained growth.”



“In many developing economies, the growth of per capita GDP has been quite volatile and its average value in the long run remains relatively low. As empirical studies have demonstrated, a typical growth path for relatively successful low-income countries helps them reach the middleincome threshold, but then they slow down, keeping the country in the middle-income levels for protracted periods of time.”

Yülek, Murat A. (2018): *How Nations Succeed. Manufacturing, Trade, Industrial Policy, and Economic Development*, Palgrave Macmillan.

Industrialización y prosperidad

“First, there is growing consensus that a one-size-fts-all development model does not exist. Second, an appropriate policy framework and institutions are indispensable for initiating a sustained growth process, even if there is considerable disagreement over what these highly context-specific policies should be. Third, there is a rediscovery of the insights from economists of the past, such as Albert Hirschman, Paul Rosenstein-Rodan and Arthur Lewis, who argued that a crucial element in spurring development is to transform a predominantly rural and highly informal economy into a ‘modern’ economy with a thriving industrial sector at its core. Finally, it is widely acknowledged in the meantime that economic growth, with its associated increase in average income levels, does not guarantee development.”

“Historically, the phenomenon of industrialization, featuring the establishment of a thriving manufacturing sector nurtured by innovation and a supportive infrastructure, has gone hand in hand with economic development. This is true for pioneering countries (such as England or the Netherlands) as well as ‘latecomers’ (and ‘late latecomers’) eager to catch up with countries at the technological frontier. Against this background, the re-introduction of Industry, Innovation and Infrastructure as a development goal (SDG 9) was overdue. Many economists assign great importance to this component, as the entire process of development is rooted in the transformation of the productive structure and its underlying capabilities.”



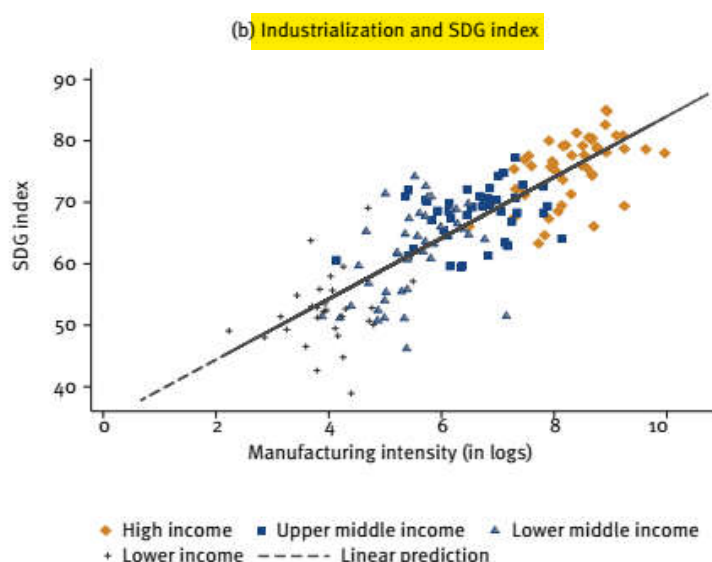
“Why manufacturing is special

It is a well-established empirical fact that (...) productivity, tends, on average, to be higher in manufacturing than in agriculture and in the services sector due in part to higher levels of capital per workers. In addition, however, there is also evidence that the growth of productivity has been higher in manufacturing than in agriculture and in many, but not all, parts of services. The growth of productivity that has made manufacturing an engine of growth arises from several sources.

First are economies of scale. In the presence of up-front investments (fixed costs), capital deepening facilitates mass production and reduces the costs per unit produced as output increases. Equally important are dynamic economies of scale which arise from learning-by-doing as more pieces of the same product, e.g. aircraft, are produced. Increasing returns to scale are one of the key features that distinguish manufactured goods from simple commodities and also from most service activities.”

“A second key feature of manufacturing is found in its strong linkages to other parts of the economy. Linkages are important because they imply that the growth of an industry automatically creates additional demand or new supplies and opportunities for other industries. Linkages across industries therefore ensure that economic dynamism in one sector spreads to other areas. For many economists, the reinforcing nature of linkages lies at the core of economic development.”

“Third, the manufacturing sector is the source of most innovations and advances



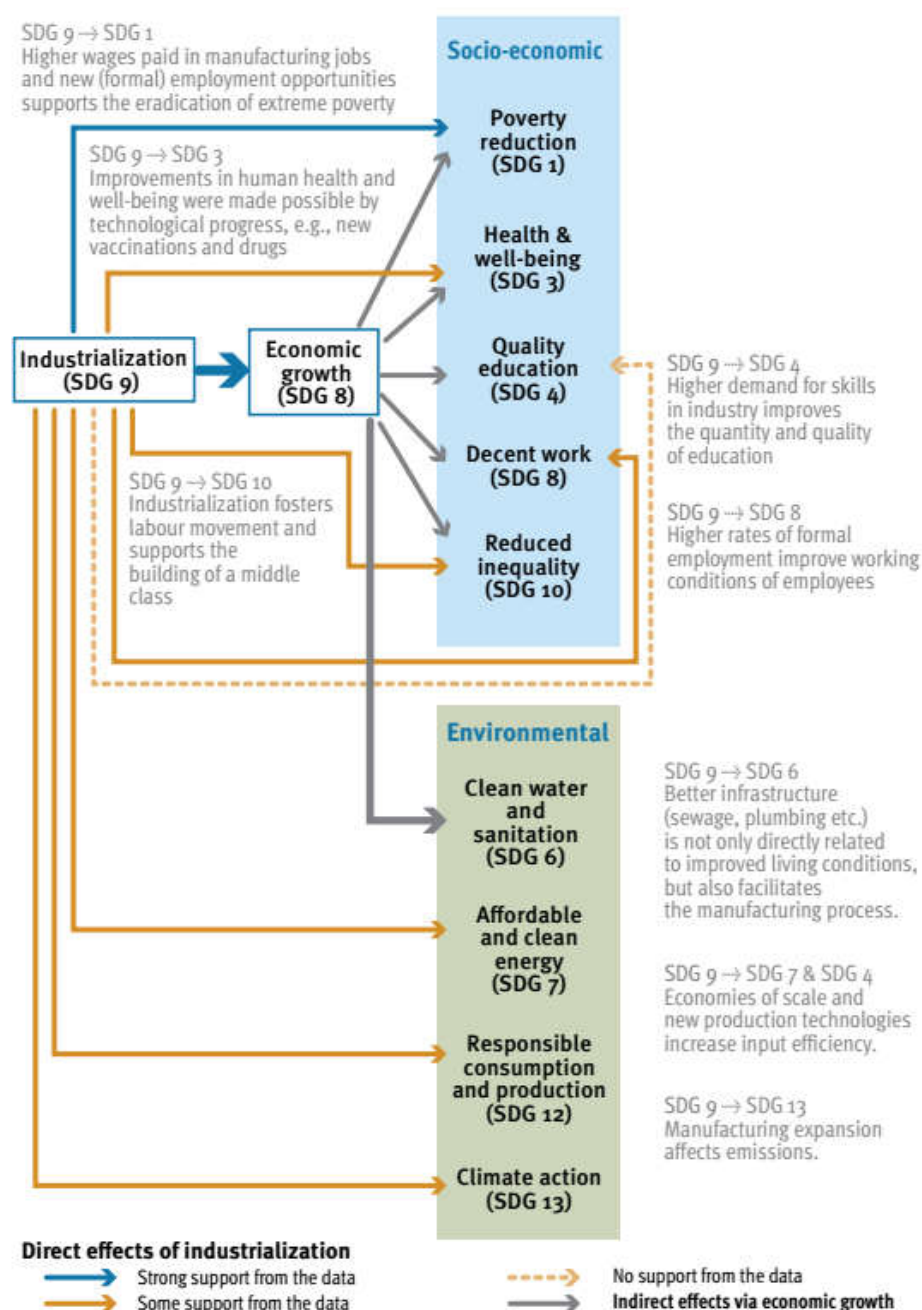
in technology. Manufacturing feeds into the growth process beyond the sector itself as other parts of the economy make use of the newly developed technologies.”

Key lessons: The interlinkages between industrialization and the SDGs

“... A number of conclusions on the nexus between industrialization, which is associated with growing manufacturing intensities and manufacturing shares, and a number of other SDGs has emerged from the analysis, which can be summarized in the following messages (...)

- The empirical analysis in this chapter shows that there is a very close and robust relationship between industrialization and economic growth (SDG 8). Countries that recorded stronger growth in the share of manufacturing in their economies also experienced higher economic growth. This view also supported by both theoretical arguments and historical evidence
- Industrialization promotes advancement in a large number of other socioeconomic goals (...)
- In the realm of socio-economic SDGs, direct effects have primarily been identified in terms of poverty reduction (SDG 1), leading to the conclusion that industry-led growth is pro-poor. Weaker but still identifiable direct effects were found for health (SDG 3), decent work (SDG 8) and reduction of inequality (SDG 10).
- Mixed results emerged in the contentious domain of inequality. Industrialization seems to support growth in income and consumption among the poorer segments of a country's population, but no such impacts are detected for a broader set of inequality indicators.
- Industrialization and the associated structural changes, such as urbanization and a trend towards formal economic activities, are important, but so are many other factors. The policy choices by governments are of particular importance (...)

Figure 1.5: Industrialization, economic growth and the SDGs: Synthesis framework



- Arguably, the role of policy is even more pronounced when it comes to environment-related SDGs. This is because there are clear trade-offs between economic development and most environmental SDGs (...)
- Manufacturing development reduces energy intensity and material consumption inputs, which amounts to a direct positive effect of industrialization on clean energy (SDG 7) and responsible consumption and production (SDG 12) (...)
- An expansion of the manufacturing sector does not have to come at the expense of increasing carbon dioxide emissions, because emission intensity typically decreases as countries industrialize. This is evidence, at least, of a relative emission decoupling, that is a delinking of economic development from CO2 emissions.”

United Nations Industrial Development Organization (2020): “Industrialization as the driver of sustained prosperity”, Vienna.

Escalas de la industrialización

“To identify the factors which have made countries successful in industrialization the analysis focusses on a group of nine countries to review their different experiences with industrial policy. Among the countries selected are three cases of ‘early industrializers’—Germany, United States and Japan—three cases of ‘recent industrializers’—China, Brazil and Malaysia—and three cases of ‘emerging industrializers’—Indonesia, Viet Nam and Ethiopia.

The *early industrializers*—Germany, Japan and the United States—have all reached a high-income status and in 2017 ranked first, second and fourth in the UNIDO Competitive Industrial Performance (CIP) ranking, respectively. They are also among the top five countries for global market share of exports in manufacturing. Their industrialization pathway can be traced back to the middle of the nineteenth century, and they have been using industrial policy more or less consistently since then.”

“The *recent industrializers* selected—Brazil, China and Malaysia—include countries which started a sustained industrialization journey only during the second half of the twentieth century. However, while Brazil made use of industrial policy discontinuously since then, both China and Malaysia have continuously experimented, implemented and upgraded their industrial policies since the 1980s. China is however the only recent industrializer which has managed to get closer to the early industrializers in terms of industrial competitiveness. China is ranked third in the UNIDO Competitive Industrial Performance Index, with Taiwan Province of China ranked 13th. The other two countries which experienced the same phenomenal industrialization performance are the Republic of Korea (ROK) (5th) and Singapore (12th).”

“Despite being the best performer among recent industrializers until the 1970s, Brazil experienced severe macroeconomic crises in the 1980s and 1990s and resumed its industrialization efforts only in the 2000s, after a long Structural Adjustment Programme. On the contrary, starting in the 1980s and with a significant acceleration in the 1990s and 2000s, China sustained its industrialization efforts and became integrated into the global economy and World Trade Organization (WTO)

regime (China joined in 2001). Malaysia's growth trajectory, instead, started slowing after joining the WTO in 1995, and the country became one of those cited as falling into the 'middle-income trap'."

"The *emerging industrializers* selected include two lower-middle income countries— Indonesia and Viet Nam—and a low-income country — Ethiopia. These are ranked 38th, 44th and 143rd in the UNIDO Competitive Industrial Performance Index. The start of a successful industrialization journey for these countries can be traced back to the mid-1980s for Indonesia and Viet Nam and to the 1990s for Ethiopia."

"... depending on when countries started their industrialization journey, early, recent and emerging industrializers faced a different policy space—so governments could implement a different version of industrial policy. They also faced a different industrial paradigm or environment— that is, the dominant technologies, organizational modes of production, and global demand conditions were different.

Similarities were due to the fact that countries within each group had to go through a similar sequence of steps and faced similar challenges in transforming their economies through industrialization.

First, all countries went through initial preindustrial phases in which state building, resource mobilization and macroeconomic stabilization were critical in preparing for industrialization.

Second, despite differences in natural endowments, geography and other historical legacies, all countries needed to develop and accumulate capabilities and make strategic use of their strengths through industrial policy.

Third, given their distinct governmental capabilities and political economy conditions,

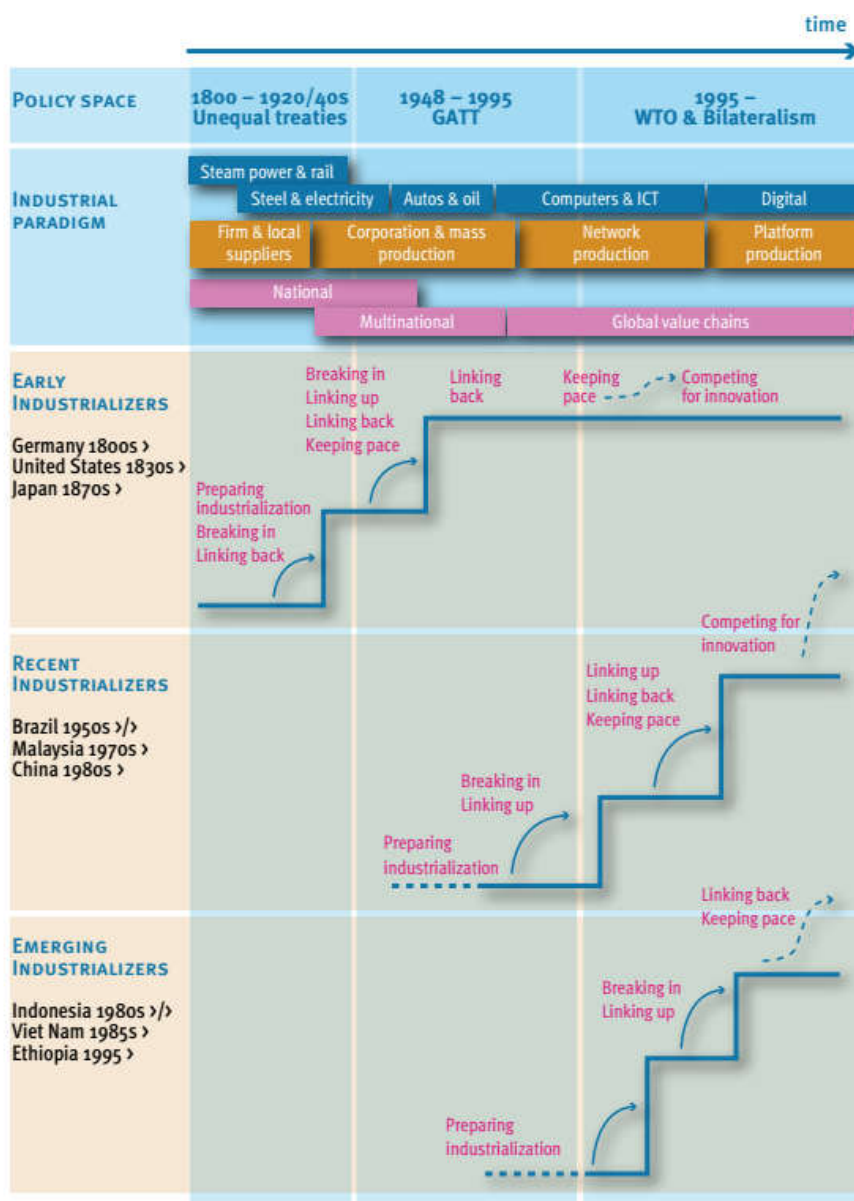


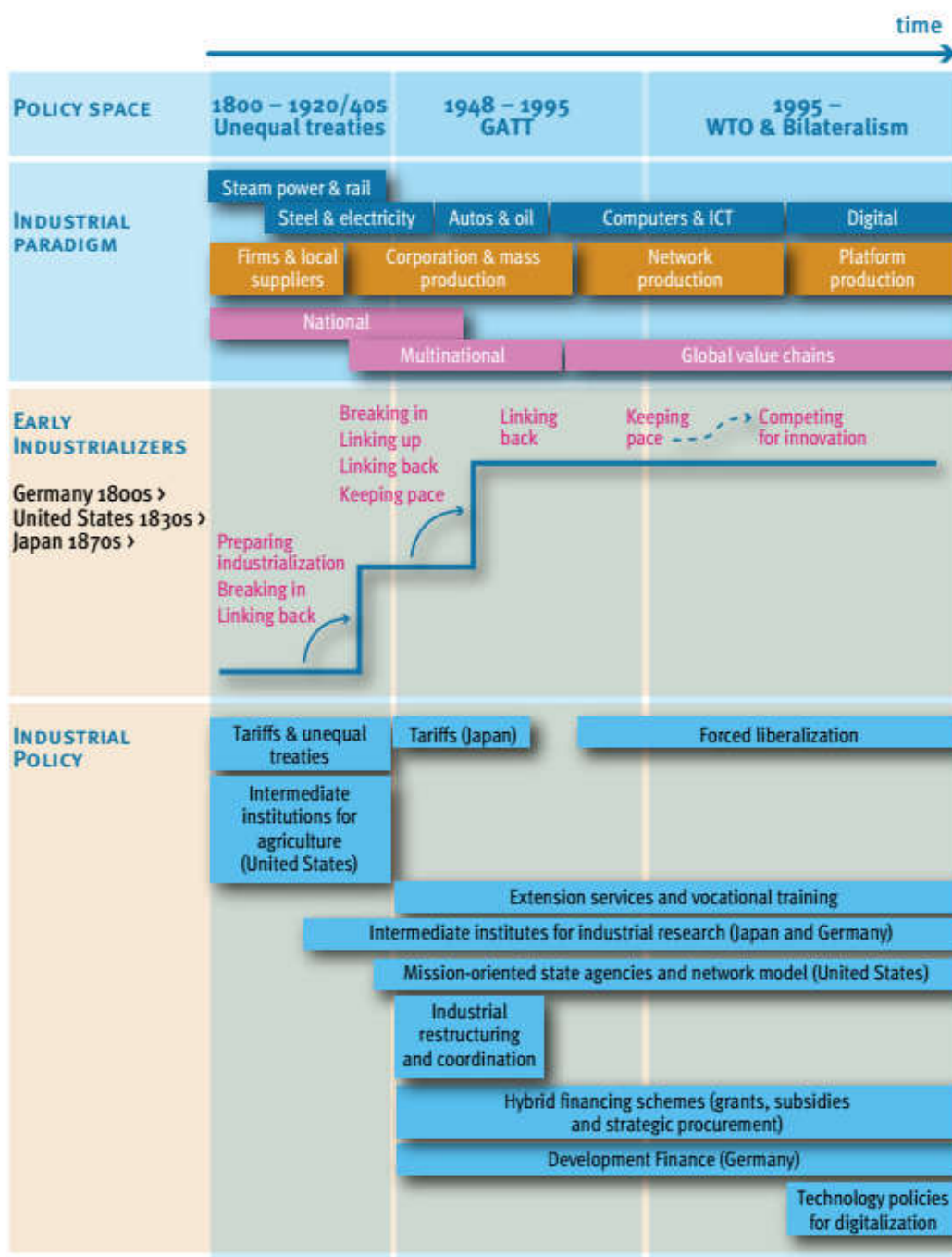
Table 2.1: Industrial paradigms from 1860 to present

Industrial paradigms	1861 - 1913	1896 - 1945	1955 - 1992	1991 - 2005	2008 - present
Technological paradigm	Steam power & rail	Steel & electricity	Autos & oil	Computers and ICTs	Digital
Organizational model of production	Managerial firms & local suppliers	Corporation & mass production	Multinational corporation & mass production	Network production	Platform production
Geographic scope	National	National multinational	Multinational	Global value chains	

they all faced similar types of policy governance challenges in driving industrialization at early, intermediate and more advanced stages of development.”

“If countries follow similar steps and face similar challenges in their industrialization journey, they face a single industrialization ladder. However, the ladder may change over time depending on the policy space and industrial paradigm under which the process of industrialization is taking place. The three country groups can be considered to be facing three distinct industrialization ladders, one for each group. Figure 2.1 [página previa] provides a graphical representation of these industrialization ladders.”

Figure 2.3: Successful policy factors for early industrializers



“One key dimension is trade policy—that is, the freedom to use tariffs strategically to support domestic production and under specific conditions and complementary policies stimulate industrial learning (...) Since the Uruguay Round started in 1986 under GATT and then the WTO new trade regime, the effectively applied tariff protection in world trade has declined significantly (...) The global policy space has been also shrinking as a result of bilateral trade agreements and the introduction of a more comprehensive set of regulations on investment, intellectual property rights and sectors of the economy which were not previously covered by international agreements. While the formal policy space is important, how countries engage with global regulations is also significant. In some cases, countries chose a very rapid integration into the global economy, while in others

governments have used the available industrial policy instruments and institutions to ensure a much more gradual approach.”

“The second layer of the framework is the dominant industrial paradigm countries faced when they took their first steps on the industrialization ladder. Here industrial paradigm refers to three main aspects of the operating environment facing firms—the dominant techno-economic paradigm, the main organizational model of production and firms’ main geographic scope. Since the first industrial revolution, different historical periods have been dominated by different technologies—from steam power in the nineteenth century to digital technologies today. In addition, different organizational models of production have developed, from

Figure 2.4: Successful policy factors for recent industrializers

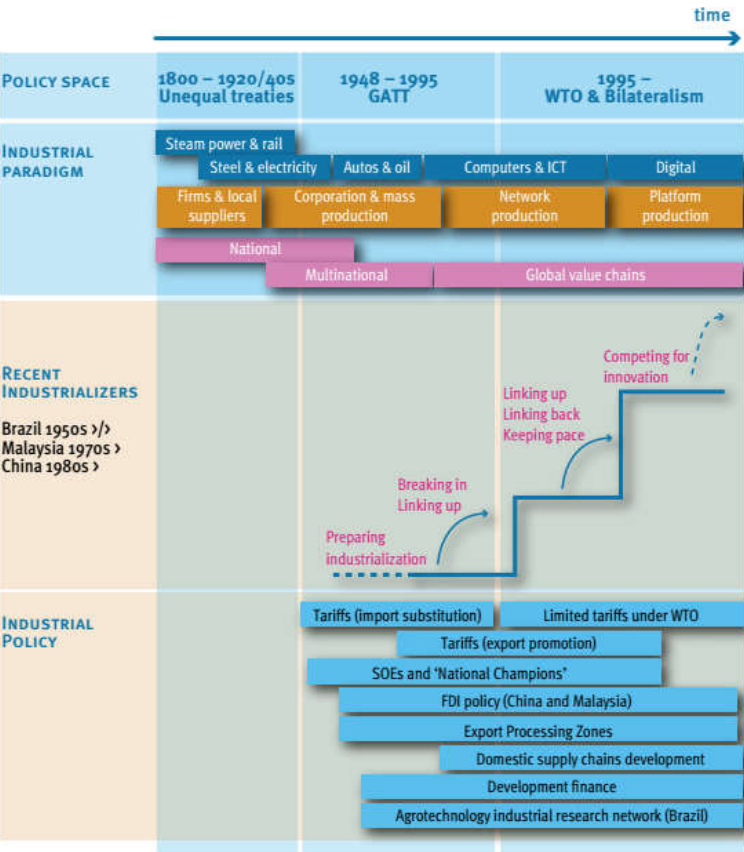
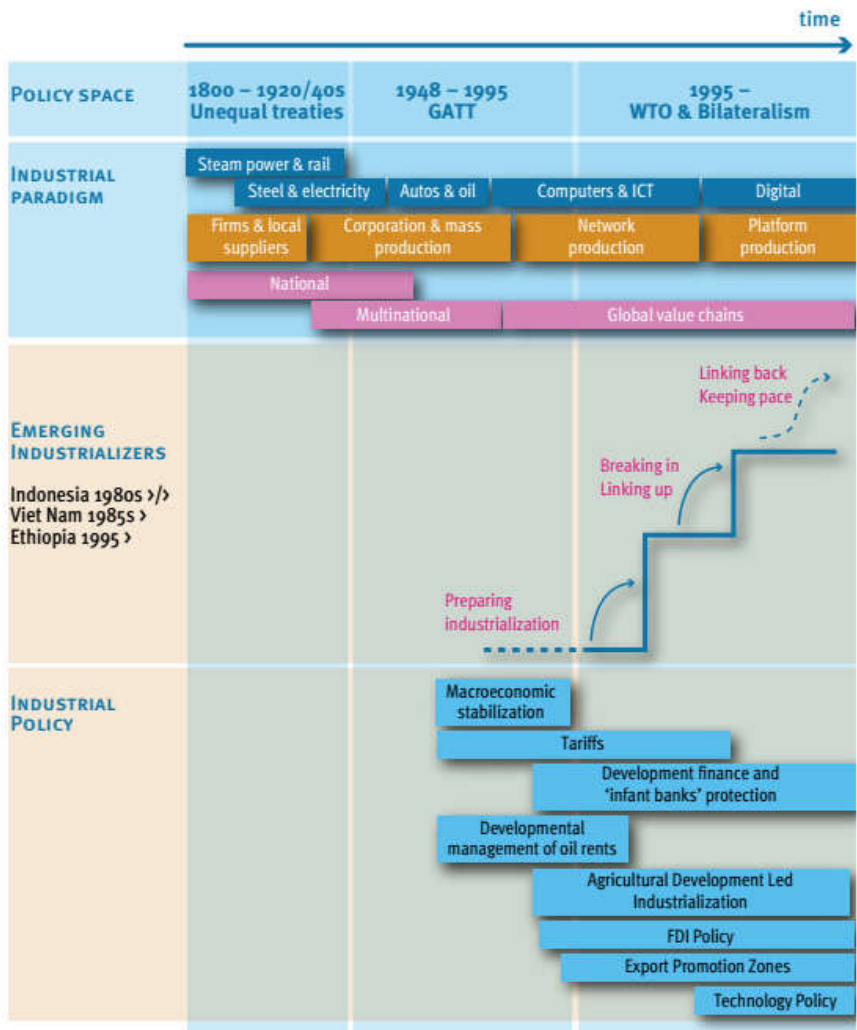


Figure 2.5: Successful policy factors for emerging industrializers

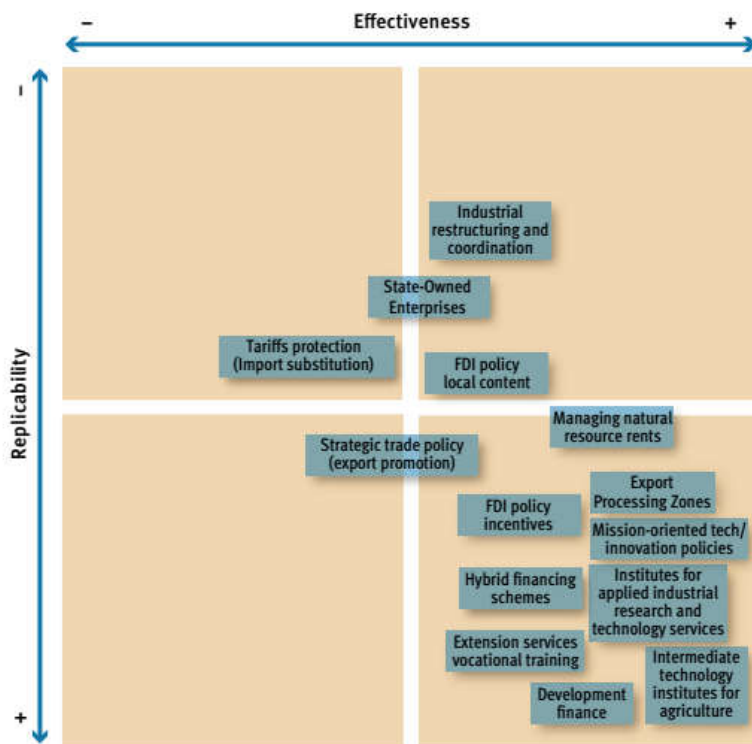


the managerial firm of early industrializers, to mass production and platform production. Finally, the geographic scope of production has moved from the national to the global, and is increasingly structured around global value chains (GVCs). Table 2.1 presents a schematic representation of changing industrial paradigms since the 1860s.”

“Policy instrument 1: Intermediate technology institutes for improving productivity in agriculture (Best practices: Brazil, Ethiopia, Malaysia and the United States)

Policy instrument 2: Extension service and vocational training to improve technology absorption, diffusion and adaptation (Best practices: China, Germany and Japan)

Figure 2.6: The effectiveness-replicability quadrant



Policy instrument 3: Institutes for applied industrial research and provision of technology services (Best practices: China, Germany and Japan)

Policy instrument 4: FDI Policy incentives and conditionalities to attract foreign direct investments and favour technology transfer (Best practices: China, Japan and Viet Nam)

Policy instrument 5: Export Processing Zones to promote export capabilities and domestic linkages (Best practices: China, Ethiopia and Viet Nam)

Policy instrument 6: Development banks and other banking sector regulation favouring specialized and long-term credit for investment (Best practices: Brazil, China, Germany and Ethiopia)

Policy instrument 7: Incentives and hybrid financing schemes including grants, matching investment schemes, subsidies and procurement policies supporting investments in research and development, technological upgrading and production capacity expansion (Best practices: China, Japan, Malaysia and the United States)

Policy instrument 8: Mission-oriented innovation policies creating new markets and addressing major societal challenges (Best practices: China, Germany and the United States)

Policy instrument 9: Strategic trade policies supporting export promotion (Best practices: China, Ethiopia, Indonesia, Malaysia and Viet Nam)

Policy instrument 10: Management of natural resource rents to divert resources in productive development policies (Best practices: Indonesia and Malaysia)

The effectiveness of these industrial policy instruments will depend on the specific country context, the effectiveness of its governance and the package of interdependent policies that countries implement to move up their industrialization ladder. Hence there can be no guarantee that the success achieved in the best practice experiences can be automatically replicated."

United Nations Industrial Development Organization (2020): "Industrialization as the driver of sustained prosperity", Vienna.

**Diversificación económica
y política industrial para
el crecimiento**

"Economic diversification is at the core of both structural transformation and development, and there is a need to shed new light on the policies required to achieve it. A rich literature shows that sustained growth, and the improvement in living standards it

brings about, are associated with a process of economic diversification (...) This is typically described as the transition from agriculture or mining toward a wider range of sectors, more sophisticated products, and higher-quality varieties of goods and services. Such diversification is driven by many factors, including infrastructure, education, fiscal and monetary policies, as well as technology and social development (...) The challenges associated with climate change (...) and rising automation require a renewed effort to promote diversification to achieve high and sustained growth. A successful diversification strategy should tackle both broad policy failures and sector-specific market failures. The emergence of new, modern sectors hinges on the presence of effective government institutions, a favorable business environment and investment climate, and credible macroeconomic policies. Policy failures, which are not necessarily sector-specific, may include a burdensome regulatory framework, high tariffs on critical inputs, an overvalued exchange rate, inadequate infrastructure, or an insufficiently skilled workforce.”

“Industrial policy is typically justified by the presence of sector-specific externalities, where the benefits of addressing them outweigh the costs and risks of the proposed intervention. For a targeted sectoral intervention to raise welfare, it must address an externality. In addition, the externality must not be amenable to resolution through neutral means, such as a better definition of property rights. The intervention must also pass a cost-benefit test, which considers alternative uses for public funds.”

“Industrial policy should be designed not just to tackle the underlying market failures, but also to mitigate the risk of government failure, including through government capture. Several principles may help minimize this risk. First, demanding accountability for the support received, for instance by meeting specific performance targets such as export market shares, with a corresponding willingness to cut losses. Second, maintaining competition, including by supporting sectors rather than specific firms, and by focusing on export orientation. These were often key characteristics of the East Asian growth miracles, in sharp contrast with the import-substitution strategies pursued in other developing countries, where high tariffs led to monopolies and to an inability to innovate or compete internationally, even after decades of support. Third, using independent, appropriately qualified experts to select projects for public support (...) Fourth, complementing any interventions with reforms to control corruption.”

“Some strategies may also help reduce informational uncertainty. First, since costs are easier to establish than benefits, governments should at a minimum analyze how much money is at risk if the uncertain benefits fail to materialize. Second, proposals can often be pre-screened with back-of-the-envelope calculations to establish whether they are likely to meet any cost-benefit standard. Third, existing and new interventions should bear the burden of proving their merits; this gives those who stand to benefit from policies the incentive to generate data on their relative benefits. Relatedly, the private sector should be involved from the outset in the decision-making process. Fourth, governments should also invest in gathering information to assess the net benefit of programs, including by benchmarking costs against international standards, and assessing the benefits of past programs after their conclusion. Finally, policy proposals can often be piloted on a small scale to establish their feasibility, costs, and benefits, before being scaled up.”

“... taxonomy of policy tools commonly employed to implement targeted sectoral interventions (... in ...) five categories of instruments: (1) product market, (2) capital market, (3) labor market, (4) land market, and (5) technology.”

A. Product Market

• Trade Policy

“Import tariffs and nontariff barriers, including import quotas, local content requirements, and export subsidies are often justified on ‘infant-industry’ arguments, to develop a sector that will eventually prove viable even without public support (...) Other measures currently being used to promote exports and/or encourage participation in global value chains include differential tax rates for profits from export sales, import-tariff rebates on imported intermediates, and credit lines for exports. Subsidies to foreign investors on the purchase of domestic inputs can achieve the same outcome as local content requirements.”

• Tax Incentives to Promote Investment

“Tax holidays and exemptions, special corporate tax structures, targeted allowances, and subsidized infrastructure are sometimes justified as a second-best option when the economywide corporate income tax is relatively high. The emphasis is often on attracting foreign direct investment (FDI), which is viewed as generating particularly strong spillovers, including through improved technology and management techniques.”

• The State as a Producer and Consumer

“As producers, states often enter ‘strategic’ sectors through state-owned enterprises (SOEs). Typically, these sectors have strong upstream or downstream linkages, but require large fixed-capital investments and a long time horizon; examples include water, electricity, and other types of infrastructure. As consumers, states can provide a stable source of adequate demand through public procurement agencies (...) Public procurement can also be used to spur technological change by setting technical standards for the goods being procured (...) SOEs can still generate positive human capital and R&D spillovers.”

• Measures to Reduce Informational Frictions

“Informational gaps and asymmetries may be addressed more directly by promotion agencies that match buyers with suppliers. For instance, export promotion agencies may organize fairs, linkage programs, and other services such as quality certification schemes that facilitate domestic and foreign investments. Such measures are often referred to as ‘soft industrial policy.’ Such schemes are particularly likely to boost exports where they provide a clear and effective one-stop shop, as opposed to multiple agencies that employ unclear mandates, involve significant coordination with the private sector, and promote increases in product quality or complexity.”

B. Capital Market

“Securing financing to enter new sectors is particularly difficult where the financial sector is underdeveloped or expected to comply with stringent prudential restrictions, so that financial intermediaries have short investment horizons or are very risk averse, and borrowers find it difficult

to establish collateral. Various capital-market interventions have been justified on the grounds that governments may have longer investment horizons, or better information than private lenders on the riskiness of a particular investment. Also, (...) intervention may signal to private investors that the government has 'skin in the game' and is committed to the reforms necessary for the industry to succeed."

- **Directed and Direct Lending**

"Government can instruct commercial banks to allocate a proportion of their lending to a particular sector. The evidence on the impact of directed lending is mixed, but it can boost production when the targeted firms are severely credit constrained (...) Alternatively, the public sector may lend directly, often through specialized public sector development banks or export-import banks (...) If the credit is provided at interest rates below what a commercial bank would normally charge, then this support is akin to a subsidy which has a fiscal cost."

- **Credit Guarantees**

"Governments may provide loan guarantees to support credit flows to firms from commercial banks or investors. The use of such schemes has expanded considerably in the wake of the COVID-19 pandemic (...) The beneficiaries of the guarantee may also misuse the funds."

- **Venture Capital and Incubators**

"In advanced economies, venture capital and private equity firms play an important role in providing financing to start-ups. These financial firms are often missing in developing countries, especially in low-income countries. Public intervention can help develop this sector. Governments can also set up public bodies to play the role of venture capital firms. Related, governments are increasingly setting up or lending support to start-up incubators. These incubators can provide a range of services, such as capital, public land, and expertise, and often engage with public universities."

C. Labor Market

- **Skills Development**

"Sectors may face a shortage of required skills. To close this skill gap, governments can grant tax credits or subsidies to firms, industry associations, and skill councils that provide training. Governments can also directly create vocational training institutions geared toward industry-specific skills, partially funded through payroll levies in the targeted sectors."

- **Labor Taxes**

"Governments can lower labor costs in favored sectors by selectively reducing payroll taxes. Alternatively, they may provide tax holidays or credits to investors based on employment creation."

D. Land Market

- **Cheap Land**

"Governments can provide access to public land at below-market rates for a new activity. This may

be a second-best response to land-tenure regulations that limit access to land for factories or impact the use of land as collateral.”

- **Special Economic Zones**

“Special Economic Zones (SEZs) may provide firms with better infrastructure and public services, as well as corporate tax and import duty exemptions, more streamlined regulations, and other product market incentives (...) SEZs can be helpful where countrywide reforms face political economy constraints, and/or the government is unable to provide good-quality infrastructure and services throughout the economy (...) However, SEZs can reduce government incentives to implement more comprehensive reforms, such as trade liberalization or infrastructure upgrading (...) SEZs can also have limited spillovers to the rest of the economy (...) SEZs have a mixed track record (...) They appear to have promoted growth in countries such as China, Jordan, Korea, Malaysia, Mauritius, and Singapore (...) In other countries, particularly in sub-Saharan Africa, SEZs have not worked as well. Overall, the success of SEZs seems to require an integrated strategy comprising a conducive business environment within the zones, strategic locations, technology upgrading and skills training, and strong linkages with the local economy.”

E. Technology

“R&D tax incentives and subsidies are typically justified based on the significant externalities from one firm’s R&D on the productivity of other firms. They could prove particularly effective for export diversification, by reducing the risk involved in adopting foreign technologies and developing new export sectors (...) Governments also often engage in R&D themselves, provide direct funding for it, or set up public-private research consortia. Governments can support digitalization by providing important information and communications technology infrastructure, including strengthened cybersecurity; creating regulatory sandboxes to encourage experimentation; helping establish sector-specific digital platforms; and boosting the digital skills of the workforce.

Numerous studies indeed find a negative impact of taxes on firms’ R&D. However, R&D subsidies can be expensive instruments (for instance, costing half of a percentage point of GDP in Korea in the 1980s). Further, returns to R&D are on average smaller in developing than in advanced economies (...), since they depend on the level of human capital, which is critical to assimilate and apply technologies.”

“Technology-transfer instruments may improve the technology used by domestic firms (...) Governments can help bridge information gaps between foreign firms and local subcontractors. They can buy technology licenses for local producers or participate in patent pools to increase access to technology.”

“Governments differ in not only their available resources, but also their institutional capabilities, such as public development finance institutions. Further, political priorities and public sensitivities also differ across countries. A one-size-fits-all approach is therefore not possible. The authors suggest a decision-making framework to assist policymakers in choosing the policy tools that are the best fit for their circumstances and that are best suited to implementing a response. This framework involves addressing three key sets of questions:

• Targeting

Which sectors to assist, and why? That is, which sectors and activities are characterized by market failures with substantial social costs? What resources are available to address these market failures? What are the country's priorities?

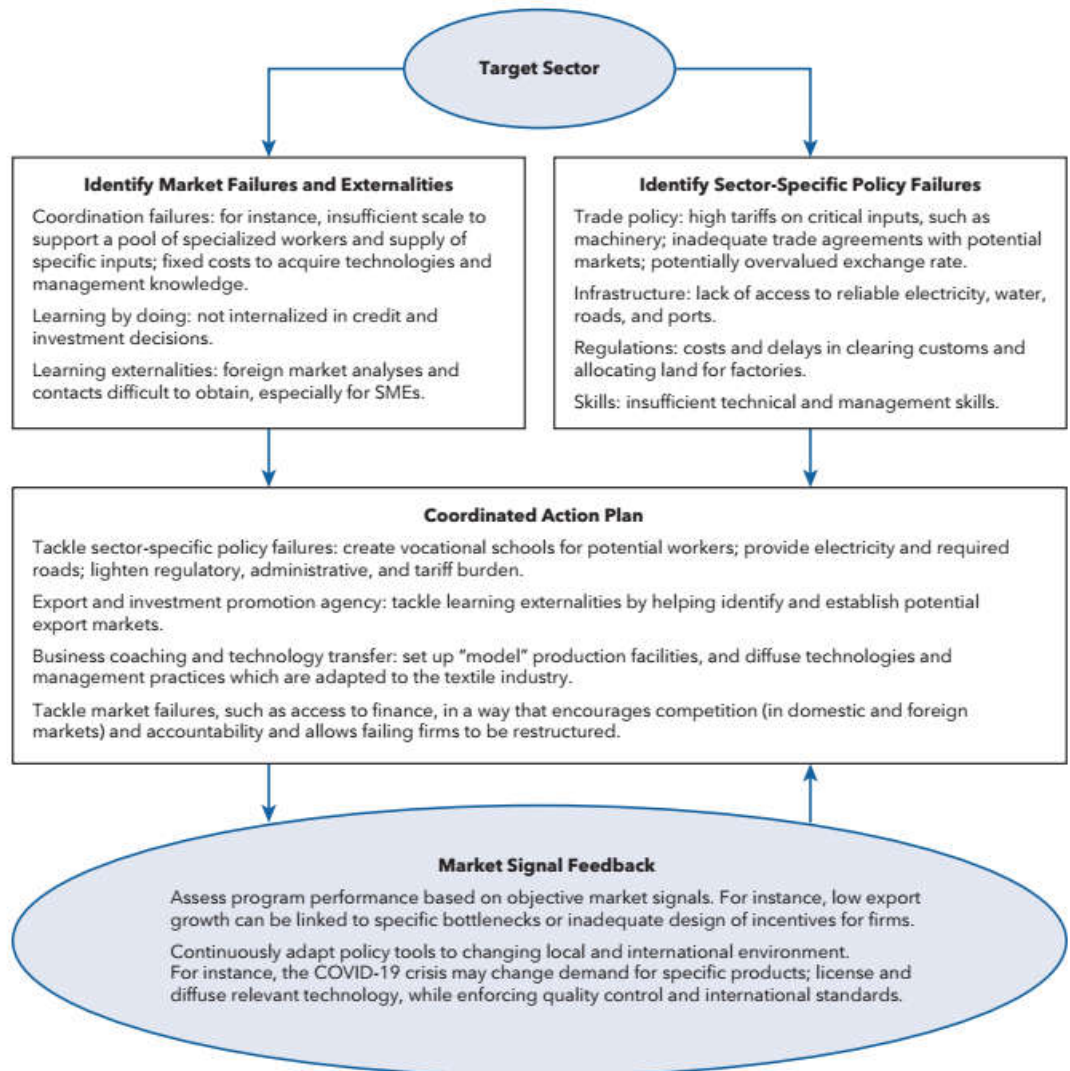
• Implementation

How to assist sectors? That is, how much and what type of public support should be provided, in order to minimize government failures? How should the interventions be structured? How should they be monitored and evaluated? And how long should they last?

• Governance

Who decides which sectors to assist? In particular, how should the needs of individual sectors be determined, and by whom? How will the proposed governance structures mitigate the risk of government failure, and reduce informational uncertainty?"

Figure 1. Decision-Making Framework: Implementation Considerations



IMF (2022): "Industrial Policy for Growth and Diversification. A Conceptual Framework", IMF Departmental Papers, DP/2022/017.

La tragedia de los bienes comunes

La 'tragedia de los comunes' (*tragedy of the commons*) es una parábola que cuestiona la idea de que los mercados no regulados producen resultados socialmente positivos: el interés propio es, en última instancia, incompatible con la estabilidad social. El lema de la tragedia es 'freedom in a commons brings ruin to all'.

La tragedia se aplica a la explotación de un recurso gratuito (un bien común), como un pastizal. El interés propio obliga a cada pastor a maximizar el ganado en el pastizal. Pero si un número suficientemente grande de pastores desarrolla la misma estrategia de aumentar el rebaño sin

restricciones, el pastizal se agotará y todos los pastores se arruinarán por intentar extraer demasiado de él. Por ello, un recurso de propiedad común y de libre acceso tiende a agotarse cuando es explotado por un número suficientemente grande de personas. Una demanda ilimitada no es compatible con una oferta finita y frágil.

La lógica de la tragedia de los comunes parece explicar el agotamiento de los recursos y la degradación ambiental: tomar sin preocuparse por la preservación (el presente importa más que el futuro).

Hardin, Garrett (1968): "The tragedy of the commons," Science 162(3859), 1243-1248.

Machan, Tibor R.; ed. (2001): *The commons: Its tragedies and other follies*, Hoover Institution Press.

La economía misión y la política industrial de 'misiones a la Luna'

"The urge to beat the Russians, therefore, galvanized one of the most innovative feats in human history. What became known as the Apollo programme cost the US government \$28 billion, or \$283 billion in 2020 dollars. It took up 4 per cent of the US budget and involved over 400,000

workers in the National Aeronautics and Space Administration (NASA), universities and contractors. But cost was not the issue: the point was to get the job done (...) What a contrast with how, today, we hear about costs of our public services – and the implication on annual deficits and debt – not the ambition or the grand outcomes they are trying to achieve."

"The moon landing was a massive exercise in problem-solving, with the public sector in the driving seat and working closely with companies – small, medium and large – on hundreds of individual problems. It required collaboration between government and many different sectors, from computing and electrical equipment to nutrition and materials (...) What integrated all these efforts and gave them direction was that they were part of a mission – a mission led by government and achieved by many. Today, a 'mission-oriented' approach – partnerships between the public and private sectors aimed at solving key societal problems – is desperately needed. Imagine, for example, using public-sector procurement policy to stimulate as much innovation as possible – social, organizational and technological – to solve problems as diverse as knife crime in cities or loneliness of the elderly at home."

"We have to believe in the public sector and invest in its core capabilities, including the ability to interact with other value creators in society (...) This means restoring public purpose in policies so that they are aimed at creating tangible benefits for citizens and setting goals that matter to people – driven by public-interest considerations rather than profit. It also means placing purpose at the core of corporate governance and considering the needs of all stakeholders, including workers and community institutions, as opposed to just shareholders (...)

In this context, 'moonshot' thinking is about setting targets that are ambitious but also inspirational, able to catalyse innovation across multiple sectors and actors in the economy. It is about imagining a better future and organizing public and private investments to achieve that future (...) But there is a catch. Conventional wisdom continues to portray government as a clunky bureaucratic machine that cannot innovate: at best, its role is to fix, regulate, redistribute; it corrects markets when they

go wrong. According to this view, civil servants are not as creative and risk-taking as the entrepreneurs of Silicon Valley, and government should simply level the playing field and then get out of the way – so the risk-takers in private business can play the game. This book's thesis is that we cannot move on from the key problems facing our economies until we abandon this narrow view. Mission thinking of the kind I outline here can help us restructure contemporary capitalism."

"The wrong question is: how much money is there and what can we do with it? The right question is: what needs doing and how can we structure budgets to meet those goals?"

"Changing capitalism means changing both how government is structured and how business is run – and how public and private organizations interrelate. Driving governance structures of organizations, and relationships between organizations, through a notion of 'purpose' is the key to a mission-oriented approach."

"... governments need to invest in their internal capabilities – building the competence and confidence to think boldly, partner with business and civil society, catalyse new forms of collaboration across sectors, and deploy instruments that reward actors willing to engage with the difficulties. The task is neither to pick winners nor to give unconditional handouts, subsidies and guarantees, but to pick the willing. And missions are about making markets, not only fixing them. They're about imagining new areas of exploration. They're about taking risks, not only 'de-risking'. And if this means making mistakes along the way, so be it. Learning through trial and error is critical for any value-creation exercise."

"Governments cannot pursue missions alone. They must work alongside purpose-driven businesses to achieve them. As I've argued in this book, this requires addressing one of the biggest dilemmas of modern capitalism: restructuring business so that private profits are reinvested back into the economy rather than being used for short-term financialized purposes. Missions can accelerate this shift by shaping expectations about where business opportunities lie and also getting a better return for public investment (...) This means creating a more symbiotic form of partnership and collaboration in different sectors, whether in health, energy or digital platforms."

Mazzucato, Mariana (2021): *Mission economy. A moonshot guide to changing capitalism*, Penguin.

Objeciones a la de política industrial de 'misiones a la Luna'

"Until recently, there was a broad consensus that free trade, domestic deregulation, and the removal of entry barriers and other policies that curtail competition were the keys to stimulating economic growth and societal welfare. In the business realm, the prevailing sentiment was that policy's primary objective was to create a level playing field for companies ... This perspective significantly influenced the establishment of an internal market within the European Union.

However, this consensus has shifted in recent years. Western governments are now launching expansive programs to not only rejuvenate their economies post-pandemic but also achieve ambitious goals such as sharply reducing and eventually eliminating CO2 emissions ... Highlighting the purported immediacy of the problems they aim to address, these increasingly interventionist and specialized industrial policies are frequently termed 'Missions' or 'Moonshots.'

The reemergence of state-driven strategies stems from several powerful dynamics: China's deployment of industrial policy fueling its remarkable growth, the West's perceived stagnation juxtaposed with China's swift technological advancements, the unforeseen disruption of the COVID-19 pandemic, climate change concerns, and growing geopolitical tensions. The ripple effect of imitation is evident: the European Union, observing the recent surge in subsidies and interventions in the United States, has reciprocated with measures of its own."

"Horizontal policies are universal, applying to companies regardless of their operations, geographic locations, or employed technologies. Such policies encompass measures such as R&D tax credits and accelerated depreciation allowances, which mitigate capital investment costs. In contrast, vertical policies are tailored to benefit particular sectors or even specific companies. A notable recent instance is the renewable energy tax credits included in the US Inflation Reduction Act."

"We observe how governments in the West are introducing large-scale government programs in their efforts to both reboot their post-pandemic economies and to attain bold targets such as sharply reducing and eventually eliminating CO2 emissions.

This broad trend toward increasingly interventionist industrial policies is often named missions, moonshots, or mission-oriented innovation policies (MOIPs). An archetypical example is the Cancer Moonshot, a large, government-directed effort to eliminate cancer, initiated by Barack Obama in 2016 (...) The EU Green Deal is an example of a new MOIP, amounting to EUR 1000 billion over a 10-year period (...) In the United States, the Biden presidency has put in place the Inflation Reduction Act (IRA), which is a combination of debt repayment (USD 306 billion) and funds specifically targeting cleantech."

"Despite many historical examples of failed moonshot policies, policymakers and scholars who engage in these large-scale programs which aim to accomplish industrial and environmental renewal are rarely questioned."

"The idea of mission-oriented innovation has its roots in the literature on evolutionary economics ... and innovation systems ... It is clearly steeped in the tradition of what could be called third-generation innovation policy, which posits that governments should not only provide basic research and contribute to the commercialization of it but also to guide innovation efforts in specific directions. According to this approach, it is no longer enough for the government to increase positive knowledge externalities by supporting R&D activities, nor is it enough to provide targeted support or platforms strengthening the links between diverse actors such as universities, start-ups, and incumbent firms. The purposeful direction of these activities and proactive intervention in the marketplace is deemed necessary. A critical element distinguishing the mission-oriented approach is therefore directionality."

"While several scholars have proposed more directed innovation policies, no one has been more successful in diffusing such ideas and popularizing them to policymakers than Mariana Mazzucato. Using the Apollo and Manhattan Projects as illustrative examples, she argues that the state should initiate bold efforts into novel, uncharted territory, thereby guiding and driving change to achieve social and economic progress."

“The purpose of MOIPs is to mobilize actors from various parts of society to address important challenges. Its proponents claim that missions can be launched in order to transition to green energy, address homelessness, clean up oceans, or increase equality, to name a few examples. Ideally, these missions provide an overarching umbrella where actors can be mobilized and collaborate.”

“... seven takeaways that together call into question the usefulness of MOIPs (...):

1. Wicked problems cannot be solved through missions.
2. Politicians and government agencies are not exempt from self-interest.
3. MOIPs are subject to rent seeking and mission capture.
4. MOIPs distort competition.
5. Policymakers lack information to design MOIPs efficiently.
6. Government support distorts incentives and creates moral hazard.
7. MOIPs ignore opportunity costs.”

“Government-led, large-scale attempts to achieve industrial renewal or fulfil various desirable goals have often failed. This volume features several case studies of such failed endeavors, including foreign aid, the Brazilian shipbuilding industry and deep-sea drilling for oil, and the large-scale US government effort to eradicate homelessness. Other examples ... concern the role of Fannie Mae and Freddie Mac in the global financial crisis, the US War on Cancer in the 1970s, and the Swedish Million Program for housing.

While many of these programs and initiatives were put in place prior to the widespread diffusion of ideas around a mission economy, it is still clear that they were inspired by a mission-oriented logic, often with explicit reference to the moonshot. The Brazilian shipbuilding industry MOIP, which led to the most extensive series of arrests of government officials in the country’s history and the imprisonment of President Lula in 2018, was at its inception in 2005 compared to the 1960s US-Soviet ‘space race’ (...)

Our findings point to the risks of missions being captured by vested interests. We also observe that such large-scale government initiatives distort incentives and give rise to unproductive entrepreneurship. Subsidies, soft loans, and various targeted support programs aimed at objectives such as homeownership, building inexpensive housing, reducing homelessness, or nation-building provide an opportunity for companies and policymakers to engage in opportunistic behavior as someone else is footing the bill. Several chapters also emphasize that governments cannot set goals and design a credible plan for their accomplishment, as they have neither the ability to aggregate and process the required information nor the know-how to accomplish these goals.”

“Proponents of MOIPs may criticize our suggested alternative approaches on the grounds that they deny the existence of grand challenges, such as climate change and global health inequality, that can only be solved through MOIPs. We do not deny that those challenges are formidable, but the evidence and theoretical arguments provided in this collective volume suggest that MOIPs are plagued by so many problems that they even may prove to be counterproductive... In effect, the ‘bottom-up’ premise is really the foundational alternative to the ‘top-down’ mission.”

Trilema de la
estrategia del
crecimiento

“Industrial policy is gaining momentum in many countries, with some economists pointing to China's model as a success (...) There is renewed debate about the role of industrial policy and government support for firms and industries deemed strategically important. People are questioning whether we can trust the free market, and there are concerns that countries are losing their innovation edge. National security hawks also worry about relying on adversaries for critical resources such as semiconductors and pharmaceuticals.”

“More than 90 percent of advanced chips, crucial for defense and artificial intelligence (AI), come from Taiwan Province of China—which raises concerns about US industry vulnerability in case of an attack. To address such risks, the US government is allocating \$39 billion in funding from the \$280 billion CHIPS Act to support the development of advanced semiconductor manufacturing capability (...) These policies are part of the administration's broader approach to industrial policy, which also includes \$370 billion in subsidies for clean energy in the Inflation Reduction Act. Meanwhile, Japan is providing subsidies worth more than \$500 million to 57 companies to encourage them to invest domestically—as part of its efforts to reduce reliance on China. Similarly, the European Union is scaling up its industrial policy—including by setting aside €160 billion of its COVID-19 recovery fund for digital innovations such as chips, batteries, and climate adaptation. In the US, industrial policy is no longer a taboo subject.”

“‘Industrial policy’ refers to government efforts to shape the economy by targeting specific industries, firms, or economic activities. This is achieved through a range of tools such as subsidies, tax incentives, infrastructure development, protective regulations, and research and development support. When implementing industrial policy as part of their growth strategy, countries are often faced with competing objectives, such as securing sustainable economic growth, maintaining financial and fiscal stability, and establishing ‘national champions.’”

“Several considerations underpin this objective ... : (i) enhancing national security by promoting self-sufficiency in key industries, (ii) supporting job-rich and inclusive growth, (iii) revitalizing left-behind communities, and (iv) the voter optics associated with reviving the manufacturing sector. Various countries have promoted specific firms or industries as national champions—such as semiconductors in Taiwan Province of China, renewable energy in Germany, and aerospace in France. This approach aims to create globally competitive companies, ensuring economic growth and security.”

“Although the use of industrial policy to establish national champions has been successful in some cases, it remains controversial. Economists worry that picking winners and losers can lead to market distortions and inefficient allocation of resources (...) In a world of increasing economic nationalism and geopolitical tensions, establishing national champions is likely to remain an important policy objective for governments seeking to advance their national interests (...) The Growth Strategy

Trilemma framework ... can guide policymakers in striking a balance among economic growth, stability, and national champion objectives."

"Pursuing any two of these objectives comes at the cost of partially sacrificing the third, making it a trilemma."

"Governments that support safe champions (Strategy A) prioritize financial and fiscal stability along with support for safe national champions. This strategy often emphasizes national security, prudence, and resilience over the potential benefits of a more aggressive growth strategy.

The strategy of supporting bold champions (Strategy B) emphasizes economic growth and the selection of risk-taking national champions. However, this approach may result in less attention to stability concerns. This could result from greater risk-taking activity or less focus on efficiency and governance—leading to potential costs to the financial system and resulting in fiscal costs."

"Finally, the fair-market capitalism approach (Strategy C) prioritizes stability along with economic growth—without a focus on national champions. Instead, the emphasis is on supporting a dynamic market economy along with free entry and ensuring that businesses operate in a fair and competitive marketplace.

Fair-market capitalism also offers a different path to achieving national security goals than the industrial policy approach. Instead of each country promoting national champions, the approach encourages a diversified global supply chain based on open and fair trade, thus avoiding an economic arms race. This approach can lead to greater efficiency and innovation in the long run while mitigating risks of supply-chain disruptions through diversification and international cooperation."

"A significant pressure you face as a country leader is the need to deliver economic growth. Achieving adequate growth can be essential for maintaining your political power, providing jobs, and ensuring the stability of your society. Without sustained growth, you may face mounting unemployment and social discontent, endangering your political tenure."

"In this context, industrial policy is a key tool at your disposal. This can involve awarding contracts, providing subsidies or tax breaks, or investing in infrastructure projects to establish national champions. However, promoting national champions can also have negative consequences. It can result in a concentration of economic power, misallocation of resources, and neglect of long-term considerations. It can also undermine market competition and innovation, ultimately harming growth and social welfare."

Promoting national champions

The Growth Strategy Trilemma has three competing objectives: fiscal/financial stability; economic growth; and the promotion of national champions.



“Despite these costs and inefficiencies, you may be compelled to promote bold champions (Strategy B). This is because you could be under intense pressure to deliver quick wins, maintain political power, or provide jobs for your citizens. Moreover, industrial policy can give a sense of control over economic outcomes, reducing growth anxiety and providing a sense of security to both the government and the public.”

“The Airbus case is often hailed as a model of successful government intervention in the economy. The creation of the Airbus consortium in Europe in the late 1960s—which challenged the dominance of Boeing in world markets—was made possible through government subsidies, commitments to absorb losses, and financing for fixed development costs. As a result, Airbus became a formidable competitor. However, the recent Chinese experience with the COMAC C919 aircraft shows that industrial policy is far from a silver bullet. Driven by the conviction that a great nation should have its own airliners, China has invested heavily in developing its commercial aircraft to challenge the dominance of Boeing and Airbus (...) The C919 also hasn’t been certified yet by any major aviation authority outside China, partly due to safety issues. Thus, despite industrial policy success with its domestic high-speed rail network during the 2010s, China has not been able to replicate this achievement in the competitive global aviation industry. The lesson here is that promoting national champions can sometimes be effective, but it’s not a guaranteed recipe for success.”

Agarwal, Ruchir (2023): “Industrial Policy and the Growth Strategy Trilemma”

<https://www.imf.org/en/Publications/fandd/issues/Series/Analytical-Series/industrial-policy-and-the-growth-strategy-trilemma-ruchir-agarwal>

**Política industrial
y calidad en la
gobernanza**

“Industrial strategies are back, as governments seek to boost competitiveness, drive the green transition and secure critical supply chains. But policy tools alone are not enough. Success depends on strong governance: clear institutions, coordination and the capacity to implement and adapt.”

“Across the OECD, governments are pursuing ambitious industrial strategies to build greener, more competitive and resilient economies. But too often, the spotlight is on policy instruments such as grants, tax credits and public procurement, while the governance systems needed to deliver those instruments are overlooked.

Modern industrial strategies are complex. They juggle competing objectives, multiple ministries and diverse stakeholders. Without strong governance, this complexity leads to fragmentation, contradiction, and ultimately policy failure.”

“Here is a 12-step checklist for clear and effective industrial policy governance.

1. Build a comprehensive, evidence-based diagnosis

Use data, expert input, and international benchmarks to establish a precise empirical picture of the economy. Identify market failures where government action can make a real difference. This is the foundation for any effective industrial strategy.

2. Create broad consensus beyond government

Success requires more than data. Engage policymakers, businesses and the public to build broad buy-in. Use online consultations, large in-person events, traditional questionnaires, and smaller roundtables to shape a shared vision for your strategy.

3. Formalise your strategy with clear and measurable objectives

A written strategy builds legitimacy and guides action. Summarise your vision, spell out policy alignment, set measurable goals – and make the document public. An online tracker showing progress can boost transparency and accountability.

4. Design policy instruments with strategic alignment

Use international benchmarks such as the OECD's Quantifying International Strategies project (QuiS) and STIP Compass to explore examples of industrial, technology and innovation policies and inform your policy mix. Apply a portfolio approach to cover all relevant areas, avoid gaps or redundancies, and ensure instruments align with your strategy's goals.

5. Establish formal co-ordination mechanisms between ministries

Industrial policy cuts across ministries. Regular inter-ministerial meetings and a high-level lead for industrial policy can help resolve conflicts and maintain alignment across workstreams. Technical-level arbitration processes can expedite routine decisions.

6. Define clear roles across institutions and levels of government

In Europe, align national strategies with EU goals and funding cycles. Domestically, ensure clear responsibilities between ministries, regions, and implementing agencies to prevent confusion and duplication.

7. Assign ownership and accountability for each instrument

Delivery works best when one entity has clear responsibility for each policy instrument. Give implementing agencies autonomy for day-to-day decisions, within legal and budget limits, to ensure efficient rollout.

8. Secure stable, multi-year budget commitments

Avoid spreading resources too thinly. Multi-year financial commitments provide certainty for both implementing agencies and beneficiaries, improving the credibility and impact of your strategy.

9. Build skilled, multi-disciplinary implementation teams

Delivering industrial policy requires diverse expertise: understanding business needs, mastering technological developments, and navigating legal frameworks. Invest in recruitment, training, and capacity building.

10. Embed independent evaluation in your strategy

Credible evaluation depends on independence from those designing and delivering policies. Use internal or external teams with clear separation to assess what works and what doesn't.

11. Collect data to support rigorous and timely evaluation

Data collection should start from day one of the policy cycle. Track beneficiaries and applicants, integrate this information with administrative data, and ensure statistical agencies can support robust analysis.

12. Use evaluation results to drive action

Publish evaluation and ensure they reach decision-makers. Use findings to trigger a dialogue that leads to the revision and improvement of instruments, while maintaining flexibility and agility in a context of increasing uncertainty.”

“Governance is the foundation for effective industrial strategy, but it’s often overlooked. This 12-step checklist provides a (...) way to assess and strengthen your industrial policy governance.”

Guy Lalanne; Louise Guillouët (2025): “Making industrial policies work: 12 steps for smarter governance”, 25 Jun 2025

<https://www.oecd.org/en/blogs/2025/06/making-industrial-policies-work-12-steps-for-smarter-governance.html>

“The most successful and powerful states of the Renaissance – Venice and Florence – both had systems which consciously created a political balance of countervailing powers preventing both the concentration of powers and corruption.”

“The wealth of Venice lay in manufacturing, trading, and shipping.”

“If offered the dogeship, a Venetian nobleman was unable by law to refuse it. Once elected, his power was narrowly circumscribed. He was unable to travel outside Venice. Neither he nor his sons could marry foreigners without permission. Neither his sons nor his personal officers could hold public positions under him (except as ambassadors or naval commanders, where they could not make trouble at home), and his official councilors, without whom he could do nothing, not even open a formal letter, could not be chosen by him. His income was fixed and his expenses limited, and his authority over the citizens was reduced. He was not even allowed to give himself social airs or answer to honorific titles. To foreigners, as the representative of the wealthiest republic in Italy, he might be Serenissimo Principi (most Supreme Prince); at home, he was only Messer lo Doge. Finally, he could not even quit his job at will: Without the consent of his six councilors, ratified by the approval of the Greater Council, he could not even abdicate. Why then would an ambitious man want to be doge, and what could an ambitious man do if he were doge?”

“It was the essential character of the Venetian republic that all personality was ruthlessly subordinated to the state. Instead of the cutthroat private enterprise of Genoa, or the brilliant individualism of Florence, in Venice, we see only an impersonal state capitalism, an implacable reason of state, a culture entirely hostile to ‘the cult of personality.’”

“Before 1457, seven doges had been assassinated, nine had been blinded and exiled, twelve had abdicated, one had been sentenced to death and beheaded, two had been deposed. But after 1457, there is peace inside the republic. The Venetian constitution survived intact (...) and the city kept its independence when the other Italian states fell under foreign rule.”

Trevor-Roper, Hugh (2014): The Doge of Venice, New Word City.

¿El comercio
trae paz o la paz
trae comercio?

“... a venerable liberal tradition stretching back to the 18th-century German philosopher Immanuel Kant and the 19th-century British politician Richard Cobden. In his 1795 book *Perpetual Peace*, Kant argued that republics bound by trade and law would naturally forswear war, while Cobden, a free-trade evangelist, held that economic interdependence rendered armed conflict materially ruinous and therefore irrational.”

“The geopolitical case for free trade, however, rested on little more than wishful thinking (...) But in reality, the causal arrow points in the opposite direction. It is peace that makes trade possible – a crucial distinction for understanding both globalization and its current retreat.”

“Consider Britain’s ascent to imperial dominance in the 17th and 18th centuries. Its naval and colonial expansion was accompanied by mercantilist policies designed to draw in bullion to finance wars and suppress foreign competition. The Navigation Act of 1651 restricted trade to English ships and ports; colonial monopolies such as the East India Company consolidated imperial control; and tariffs, together with production ‘bounties,’ like those paid under the Corn Laws of 1815, reinforced the system.

Only after Britain established uncontested control of the seas did mercantilism lose its appeal. By the mid-19th century, the country needed cheap food and raw materials and sought new markets for its manufactures. Low tariffs and reciprocal trade agreements complemented new policies, such as the gold standard, that made London the world’s financial center. Britain’s ability to impose ‘peace’ thus paved the way for its embrace of free trade. The US found itself in a similar position after the end of World War II. As the new global hegemon, it had both the power and the incentive to promote free trade and monetary stability, using low tariffs and fixed exchange rates to expand markets for its mass-produced goods.

The result was the creation of the General Agreement on Tariffs and Trade, designed to reduce import barriers, and the International Monetary Fund, established to stabilize currencies and stop competitive devaluations. The ensuing *Pax Americana* seemed to validate Hull’s belief that economic nationalism had caused the geopolitical breakdown of the 1930s. In fact, it had been one of its symptoms.

Had the US not provided its trading partners with security guarantees, most notably through NATO, the postwar revival of trade and investment would never have been possible. Both France and the United Kingdom had initially resisted American efforts to promote European economic integration through the Marshall Plan, insisting that national self-sufficiency was necessary in the absence of US protection. The so-called liberal order was thus not spontaneous but deliberately constructed by the US and sustained by its military and monetary dominance.”

“The eras of *Pax Britannica* and *Pax Americana* revealed that peace does not come from disarmament or treaties prohibiting war (...) but from the presence of a global power willing and able to guarantee security. The European Coal and Steel Community, the precursor to the European Union, was founded on the premise that economic interdependence would make another continental war impossible. Europe’s postwar peace, however, rested less on markets than on American deterrence. It was an iron fist, and not an invisible hand, that safeguarded the global advance of free trade.”

“The relationship between the US and China is a case in point. Between China’s accession to the World Trade Organization in 2001 and the election of avowed protectionist Donald Trump in 2016, US-China trade increased fivefold. Yet over the same period, their security relationship deteriorated amid rising tensions over China’s aggressive behavior in the South China Sea, its growing cyberespionage operations, and America’s ‘pivot to Asia’ defense strategy.

Sino-American ties, of course, soured further when Trump began to impose tariffs and sanctions in 2018, even as bilateral trade rose by 14% from 2016-18. Since then, the two countries have become economically intertwined to a degree that deeply worries both governments: China struggles to overcome its dependence on US semiconductors, while the US is scrambling to reduce its reliance on Chinese rare-earth metals. Far from easing strategic anxieties, economic interdependence has amplified them, leaving each side increasingly vulnerable to disruptions in strategically important sectors.”

“While the liberal belief that trade raises the cost of war contains a kernel of truth, it is equally true that interdependence can just as easily breed mistrust and rivalry.”

“What lessons can we draw from this history? The liberal order – and, in particular, faith in the steady expansion of global trade – was underpinned by US security guarantees.”

“While economic globalization accelerated after the end of the Cold War, China’s trajectory since joining the WTO has vindicated (...) that the fusion of markets and state power would distort and politicize global prices. Rather than liberalizing, the Chinese regime used its newfound access to international markets to strengthen its state-industrial complex.

State-owned enterprises’ share of industrial output has risen sharply under President Xi Jinping, whose government directs massive amounts of capital into sectors deemed strategically vital through plans such as Made in China 2025 and China Standards 2035. Meanwhile, subsidized overcapacity in steel, solar panels, and electric vehicles has turned trade itself into an instrument of geopolitical ambition (...) In the spirit of Clausewitz, trade has become war by other means.

China’s economy today is roughly 14 times larger than it was when it joined the WTO, and its official defense budget has increased more than tenfold in nominal dollar terms (the real figure is likely far higher). Its growing military power, together with Russia’s revanchist ambitions and America’s profound disillusionment with the globalization project, has severely undermined the security foundation on which the liberal order rests. And even though world leaders continue to proclaim their commitment to globalization, it is far from clear that the multilateral trading system can endure without the security guarantees that sustained it.

As that foundation erodes, deglobalization will be anything but smooth.”

“Three developments will further undermine efforts to preserve rules-based trade. The first is the growing use of ‘national security’ exceptions at the WTO (...) The second development is the continued paralysis of the WTO’s Appellate Body (...) Lastly, the most-favored-nation principle is being severely eroded, as more and more countries are forced to violate it in order to reach temporary trade truces with the Trump administration.

When the Russian threat receded after 1991, Europeans convinced themselves that the project of economic and political integration championed by the EU's architects –together with the broader drift toward liberal democracy– had rendered traditional geopolitics obsolete. But Russia's invasion of Ukraine in 2022 revealed how completely peace had depended on the presence of the US as a security guarantor. America's reluctance to continue in this role reflects the growing belief among its electorate that the costs of sustaining a liberal world order now outweigh the benefits."

Benn Steil (2025): "Free Trade Can't Bring Peace", 14 Nov 2025

<https://www.cfr.org/article/free-trade-cant-bring-peace>

**Coordinación
internacional de
políticas industriales:
las subvenciones**

"Governments have steadily increased their market interventions since the global financial crisis, and show few signs of fatigue. Some have embraced industrial policy, supporting certain economic activities to address market failures or other objectives. Sometimes, that support is targeted at specific sectors or firms; in other instances, support takes the form of consumer tax credits. Those interventions can create distortions in the market with significant unintended consequences. In recent years, that has prompted discussions on how to rethink subsidies rules and industrial policy to minimize the negative repercussions of market interventions.

Experts agree that most industrial policy measures come (...) with high costs and trade-offs. For example, industrial policy typically fails to identify objectives or a plan for correcting a specific market failure, which can lead to a lot of wasteful and untargeted spending. One way to help address this is for governments to involve the private sector and focus on championing competitiveness to succeed. Furthermore, if support measures do not sunset, firms have little incentive to invest in expanding their capacity and know-how, and will instead simply lobby for more support. Despite evidence that suggests caution in the design of government interventions and challenges in measuring their impact, governments are diving head-first into this new wave of industrial policy.

Amid a rising tide of trade barriers and challenges to fair competition, countries also face an array of conflicting pressures, chiefly among them, whether to pursue unilateral policy remedies or address those economic concerns through international coordination, such as through the World Trade Organization (WTO). Part of the challenge facing WTO members today is that the world has fundamentally changed since the institution's founding, while the rules and tools to address those changes have not kept up."

"... as research from Global Trade Alert shows, the United States, China, and the European Union account for more than 50 percent of all global subsidies. In total, 70 percent of trade-distorting subsidy measures taken in 2023 were by advanced economies."

"Research also shows that, in addition to the growth of subsidies, there has been a notable shift in the justification for those interventions. Significantly, 57 percent of industrial policy actions taken between 2023 and 2025 cited strategic competitiveness."

“Analysis of industrial policy is a persistent challenge. Researchers cannot understand its impacts until after the policy has been implemented; however, it is then difficult to determine whether the policy was effective because it is impossible to know the counterfactual. That is, what would things have looked like absent the intervention?”

“International organizations, such as the Organization for Economic Cooperation and Development (OECD), have been studying industrial policy for decades. Their research has shown the importance of transparency and understanding the effects of subsidies on trade and economic competition, the need for best practices in designing industrial policies to limit negative spillovers, and the role of institutions in shining a light on the impact of subsidies on economic development, particularly in poorer countries. This is precisely why clear objectives are critical for evaluating any given policy.”

“Many researchers have also looked at country-specific examples of industrial policy to explore policy design. India, for example, has used a range of production-linked incentives to boost manufacturing and employment in sectors such as solar panels, electronics, and pharmaceuticals (...) Research has shown that India could better support its objectives if it were to focus on removing obstacles to investment, reforming land and labor markets, scaling back tariffs, and encouraging research and development.”

“While governments are engaging in widespread industrial policy, they are also addressing the harms of foreign subsidies on their domestic markets and looking for opportunities to coordinate those efforts with other countries. The European Union, for instance, has developed a set of rules called the Foreign Subsidies Regulation to address market distortions from foreign industrial policies. At the international level, some countries have called for reining in harmful subsidies and also providing more clarity on permissive subsidies that support global public goods.”

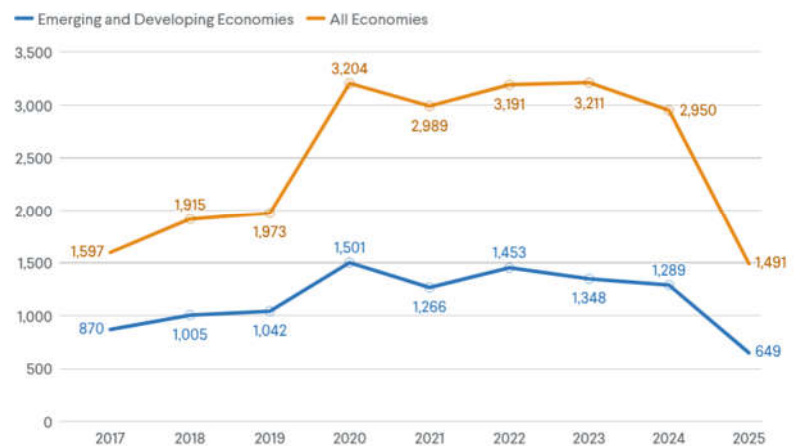
Inu Manak (2025): “Repositioning the Debate on Subsidies and Industrial Policy”, 03 Nov 2025

<https://www.cfr.org/article/repositioning-debate-subsidies-and-industrial-policy>

<https://www.cfr.org/report/rethinking-international-rules-subsidies>

Sustained Increase of Industrial Actions Since 2017

Number of announced industrial actions by year

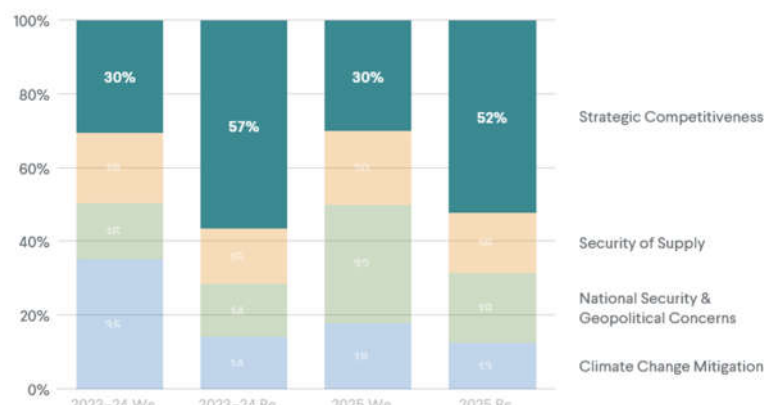


Source: New Industrial Policy Observatory, Global Trade Alert

COUNCIL OF
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RELATIONS

Stated Motives for Industrial Actions

Percentage of Actions by Stated Motive, Split by Country Group and Year



Data collected October, 2025.

Source: New Industrial Policy Observatory, Global Trade Alert

COUNCIL OF
FOREIGN
RELATIONS

¿Desarrollo = gobierno
+ emprendedores?

“Everything this book presents is—or at least was—well and widely known. Recently, however, much seems to have been forgotten. So this book tries ... to remind us ... how the American economy, again and again, was reshaped and reinvigorated by a loveless interplay of government making broad economic policy and entrepreneurs seeking business opportunities.”

“This book ... is about government and entrepreneurship. But it will not rehash the sturdy and well-known arguments that, to thrive, an entrepreneurial economy needs an environment characterized by a broad range of freedoms, protections, and incentives ... We are here to talk about the other important interplay of government and entrepreneurship ... Repeatedly, government in the United States opened a new economic space, doing what was needed to enable and encourage entrepreneurs to rush into that space, innovate, expand it and, over time, reshape the economy. Each time, and there were many, this was done pragmatically.”

“From a global, bird’s-eye view, three centuries ago the world’s high civilizations were roughly equal in prosperity. Today the North Atlantic nations (including a few ‘honorary’ North Atlantic countries like Japan and Australia) are richer by a factor of at least five. And the overwhelming bulk of that divergence is due to economic policy. The post-World War II reinvigoration of Western Europe, the post-1975 rise of China, and the post-1913 relative economic decline of Argentina were, no serious thinkers dispute, predominantly driven by good and bad economic policy.”

“That policy matters most is clear from this global record. In successful economies, economic policy has focused on what works for people who are trying to increase productivity on the ground, not on the voices heard by madmen in authority or the doctrines of academic scribblers. That is the lesson we draw from our reading of economic history. Getting ... economic policy right is and has been of overwhelming importance in generating prosperity. But a global, bird’s-eye view cannot provide us with enough detail to understand how, exactly, or what “getting the economic policy right” really means. For that, we have to focus. And so this book will focus on the United States, which is ... the place where economic policy has been, without a doubt, the most successful over the past couple of centuries.”

“When we look at the United States, we find not one design of economic policy, but rather sequential redesigns as the economic environment and the policies that offer the best chance of successful medium-term growth shift. Beginning with Alexander Hamilton, the architect of the first and most important redesign, and moving on to Abraham Lincoln and the Republican ascendancy, to Teddy Roosevelt, Franklin Roosevelt, and Dwight Eisenhower, the US government is always there, taking the lead, opening new economic spaces. It is doing so consciously. And it is doing so pragmatically—not ideologically. And it is doing so very successfully, at least until recently.”

Cohen, Stephen S.; J. Bradford De Long (2016): *Concrete economics. The Hamilton approach to economic growth and policy*, Harvard Business Review Press.

El estado
desarrollador

“The twentieth-century developmental state pursued an industrialization-led approach to economic growth. Indeed, economic growth in the nineteenth and

twentieth centuries was marked by the shift from predominantly agricultural economies to manufacturing-based economies (...) Thus a class compromise orchestrated and sustained by democratically elected governments became pervasive in advanced capitalist economies in the period after the Second World War. Powerful states could justifiably promote industrial development in the pursuit of a national economic growth that benefited the majority of citizens. Theorization of the state and development has thus far been predicated on a machine production-based, manufacturing-driven economy."

"However, by the late twentieth century, manufacturing was shrinking and incapable of sustaining a working class sizable and prosperous enough to create a general increase in well-being (...). Deindustrialization is not just a historical tendency in the Global North (...) The Global South has gone down the same path of deindustrialization. China and India have both seen jobs in manufacturing falling (...) Growth has become increasingly 'bit driven'. That is, value-added activities consist of new ways of arranging bits of information in formulas, software code and images or of delivering intangible, often poorly paid services rather than the physical manipulation of materials to make tangible goods (...) This restructuring of the world economy requires a new kind of state action and embeddedness (...) Evans makes a theoretical case for the twenty-first-century developmental state to retain the bureaucratic capacity and embeddedness that was the hallmark of the twentieth century but to go beyond the latter by assuming greater responsibilities. His premise is that growth in the twenty-first-century bit-driven knowledge economy depends on the expansion of human capabilities—ideas, education and health."

"The tripartite alliance of the classic developmental state—between the national state, domestic capital and international capital—is no longer the primary relationship that states have to nurture (...) Social developmentalism requires webs of relations between a wide range of social classes and the state at various levels. While intrastate and state–civil society relations are vital for twenty-first-century developmental states, the global economy also poses serious challenges for states (...) Developmental states often face hard choices between protecting policy autonomy, maintaining democratic accountability and ensuring national responsiveness to local pressures on the one hand and integrating with the global economy and the concomitant loss of state decision making in the economy on the other."

Williams, Michelle (2014): "Rethinking the developmental state in the twenty-first century", in Williams, Michelle; eds. (2014): *The end of the developmental state?*, Routledge, New York.

El estado emprendedor

"State Picking Winners vs. Losers Picking the State We are constantly told that the State should have a limited role in the economy due to its inability to 'pick winners', whether the 'winners' are new technologies, economic sectors or specific firms. But what is ignored is that, in many of the cases that the State 'failed', it was trying to do something much more difficult than what many private businesses do: either trying to extend the period of glory of a mature industry (the Concorde experiment or the American Supersonic Transport project), or actively trying to launch a new technology sector (the Internet, or the IT revolution).

Operating in such difficult territory makes the probability of failure much higher. Yet by constantly bashing the State's ability to be an effective and innovative agent in society, not only have we too easily blamed the State for some of its failures, we have also not developed the accurate metrics needed to judge its investments fairly. Public venture capital, for example, is very different from private venture capital. It is willing to invest in areas with much higher risk, while providing greater patience and lower expectations of future returns."

"The emphasis on the State as an entrepreneurial agent is not of course meant to deny the existence of private sector entrepreneurial activity, from the role of young new companies in providing the dynamism behind new sectors (e.g. Google), to the important source of funding from private sources like venture capital. The key problem is that this is the only story that is usually told. Silicon Valley and the emergence of the biotech industry are usually attributed to the geniuses behind the small high-tech firms like Facebook (...) Europe's 'lag' behind the USA is often attributed to its weak venture capital sector. Examples from these high-tech sectors in the USA are often used to argue why we need less State and more market: tipping the balance in favour of the market would allow Europe to produce its own 'Googles'. But how many people know that the algorithm that led to Google's success was funded by a public sector National Science Foundation grant (...)? Or that molecular antibodies, which provided the foundation for biotechnology before venture capital moved into the sector, were discovered in public Medical Research Council (MRC) labs in the UK? How many people realize that many of the most innovative young companies in the US were funded not by private venture capital but by public venture capital (...)?

Lessons from these experiences are important. They force the debate to go beyond the role of the State in stimulating demand, or the worry of 'picking winners'. What we have instead is a case for a targeted, proactive, entrepreneurial State, one able to take risks and create a highly networked system of actors that harness the best of the private sector for the national good over a medium- to long-term time horizon. It is the State acting as lead investor and catalyst which sparks the network to act and spread knowledge. The State can and does act as creator, not just facilitator of the knowledge economy.

Arguing for an entrepreneurial State is not 'new' industrial policy because it is in fact what has happened."

"'Foolish' businesses will not survive, as they all must take calculated risks related to product development and entry into new markets. Apple's success did not hinge on its ability to create novel technologies, it hinged on its organizational capabilities in integrating, marketing and selling those low-hanging technologies. In contrast, the flexibility of the State is an important asset, which should be allowed to make its 'foolish' investments in technology in a targeted and purposeful manner. Who would ever have guessed that technology created to preserve communication abilities during a nuclear war would become the world's go-to platform for knowledge, communication and commerce? How many back then thought the Internet was a 'foolish' way to invest millions in taxpayer dollars?"

"Three key implications arise from this analysis.

First, it is of course not enough to talk about the 'entrepreneurial State', one must build it – paying attention to concrete institutions and organizations in government that are able to create long-run growth strategies and 'welcome' the inevitable failure that this will entail. Indeed, it is not a coincidence that the weakest countries in the eurozone are precisely those that have low spending in areas that seem costly today, but which bring growth in the future: areas like R&D and human capital formation (...). Yet we are told they are countries that spent too much."

"Second, if the State is being asked to engage in the world of uncertainty, with the inevitable wins and losses (which also characterize private venture capital), then it is only right that when the wins arrive (the upside) there is also a return to cover the losses (the downside)."

"Third, by focusing on the role that the State plays along the bumpy risk landscape, acting actively and courageously rather than just 'de-risking' the private sector and correcting 'market failures', the analysis provided here has the potential to better inform policies that are directed towards other actors in the 'ecosystem' of innovation. This is important because (...) part and parcel of having undermined the role of the State has been the 'hyping' up of the role of other actors – from SMEs to venture capital and shareholders. Thus, acknowledging the different roles played in the ecosystem – over time and along the bumpy risk landscape – will make it more difficult for overhyped economic actors that have captured the public imagination to argue for handouts and subsidies."

Mazzucato, Mariana (2014): *The entrepreneurial state: debunking public vs. private sector myths*, Anthem.

El estado como promotor de desarrollo y diversificación

"... policymakers in developing countries need to understand that the key to achieving high-income status will be to induce rapid structural change by moving from traditional primary products to nontraditional industrial products, and to find niches in industrial products, consumer products with high-income elasticities of demand, and modern services.

Evidence, however, indicates that development is a path-dependent process. This means that it is easier for a country to develop new comparative advantage in some product if it already has comparative advantage in similar products. This makes development a slow process that requires stepping stones. Consequently, leapfrogging, that is, the development of comparative advantage in sophisticated and complex products (for example, advanced machinery, chemicals and pharmaceuticals) without having previously developed comparative advantage in similar products, is rejected by the empirical evidence."

"A frequent question in policy circles is whether it is possible to reduce or eliminate path dependence. This is because sophisticated products and services are usually associated with high wages."

"... achieving this will be possible only if countries engage in industrial policy; more precisely, 'modern industrial policy.' (...) Our focus is ... on the practice of modern industrial policy. This book came about after years of discussions with governments and policymakers across developing Asia, who are searching for answers to critical questions on how to achieve rapid industrialization;

transform, restructure and diversify their economies; move up the value ladder; determine what industries should be nurtured and who should decide this. The aim of all these countries is to eventually achieve high-income status (...) These countries are looking closely at the experiences of the region's economic success stories, especially the PRC, the Republic of Korea and Singapore, for guidance and lessons."

"One answer to all these questions could be along the lines of 'governments ought to stay out of the economy and let the market decide' and to recognize that government failures are large in developing countries (...), but we concluded that this was not a satisfactory answer. For better or worse, all governments get involved in the economy for one reason or another (...) We believe there are sound reasons for a government to facilitate the transformation of the economy and contribute to its diversification and upgrading, as neither are natural processes. Diversification can happen quite easily within a narrow range of products; that is, across products that require similar technologies and capabilities (for example, from simple textiles into slightly more sophisticated textiles or from garments into shoes). However, diversification into distant product lines— ... such as from garments into automobiles— requires mastering specific capabilities across many areas, as well as having well-developed supporting institutions. History teaches that this process is policy induced."

"Today, we understand that economic development is essentially about three key issues, which jointly provide the rationale for modern industrial policy. First, it is a process of accumulating productive capabilities... Capabilities are all inputs that go into the production process; more specifically, they refer to the ability to produce by using and developing new technologies and organizations... Second, the accumulation of capabilities leads to structural transformation, that is, the rise of new industries to replace traditional ones and the diversification of the productive structure and its upgrading."

"Not all activities have the same consequences for development... High-technology manufacturing is clearly better than traditional farming to enable countries to upgrade their productive capabilities. However, high-technology manufacturing does not develop naturally in backward economies. Unless governments promote such activities and help the private sector, the market will pull a backward economy toward the same type of activities that it was doing previously (for example, agricultural products or simple textiles), which are often based on its comparative advantage of natural resources or cheap labor."

"Third, in market economies, private firms are the agents of economic transformation, but their actions need to be inserted in a framework of public action. In today's world, economic development requires a mix of market forces and public sector support."

"The difference across countries is that some are still engaged in old-style industrial policy while others have evolved into the practice that we refer to as modern industrial policy. Old-style industrial policy is about picking specific sectors of the economy (known as 'vertical' industrial policy) for political reasons ... and about promoting these sectors through different strategies. The most criticized of these has been the use of subsidies not linked to performance measures. Unfortunately, this type of industrial policy has often led to rent-seeking behavior that undermines

the initial good intentions and, sooner or later, to losers that need to be bailed out, with the corresponding fiscal implications. This is not what modern industrial policy is about.”

Felipe, Jesus; ed. (2016): *Development and modern industrial policy in practice. Issues and country experiences*, Edward Elgar.

Estado y progreso tecnológico

“The most obvious observation that can be made about the international system is that for centuries, it has been in a state of flux. International leadership comes and goes. Today’s dominant powers are not the ones that controlled world politics 250 years ago.”

“Why is it that some countries have been able to rise to a position of international leadership? And why is it that some countries have been able to maintain this position for so much longer than others? Is it inevitable that a country’s rise will ultimately lead to its demise (...)? The type of leadership that is the focus of this book is *economic leadership* (...) Few things are more destabilizing to the international system than different powers growing at different rates. This is what makes weaker powers catch up and what ultimately dethrones the stronger power (...) To explain economic leadership is to explain long-term economic growth and development.”

“New technologies give rise to new industries, to growth and prosperity. But eventually, they grow old and obsolete, and are replaced by newer industries that draw on more recent technologies (...) They have been important first, because in general they have been generic industries, drawing on generic technologies. In other words, they have been industries with multiplier effects on the overall economy through their contribution to other sectors (...) Second, because they are industries that as a rule have drawn upon revolutionary technological breakthroughs. Technological breakthroughs have allowed major productivity improvements. But also, stemming from such breakthroughs, entire new industries have risen. Some of these new technologies have been so groundbreaking that they have transformed entire economies.”

“... diffusion of new technology is never immediate. It is usually a drawn-out process ... firms will try to protect the advantage provided by new technology to as great an extent as possible. Also, the necessary knowledge base for adopting new technology may not always be available yet to other firms. Moreover, diffusion across national borders is normally far slower than diffusion within a country (...) In such a way, new technology effectively serves as an entry-barrier against other actors. Hence, industrial leadership is inextricably linked to technological leadership.”

“The state has for centuries been the dominant actor in international relations. It has also been the most important political actor in general ... Since the Industrial Revolution, technological change has become the most important source of economic growth, and thus of power and leadership in the international system. Different rates of technological change lead to unequal rates of growth in different countries ... It is hugely beneficial for the countries that take advantage of it, but leads to stagnation, backwardness and ultimately obscurity for those countries less skilled at it (...) Is there something that it can do in order to encourage and promote technological change and industrial leadership? ... Is there a role for the state in achieving long-term economic dominance?”

"The British cotton textile industry is routinely considered the world's first *real* industry... When growth in cotton textiles could no longer spur on the British economy in particular, the iron industry took over ... For the third growth industry... toward the mid- to late nineteenth century, three new major industries emerged, growing to become as important as iron had once been—steel, electric industry and chemical industry (...) For the interwar years, the main new development was mass-production. However, since this is a mode of production, and not an industry, an industry still has to be selected, and the automobile industry is an easy choice. Finally, the present-day period sets the stage for a chapter on industries derived from information and communication technologies (ICTs)."

"Britain was the first industrial superpower ... And how was it that this power, which at its peak produced more than 50 per cent of the world's iron, two thirds of the coal, 50 per cent of world cloth production and generating roughly a quarter of world trade, half a century later was surpassed not just by the US, but by Germany as well? (...) Why is it that some countries have been able to ride the waves of technological change, in the process fostering new and prosperous growth industries, whereas others have not?"

"Historians and social scientists have identified *epochs of technological change*, and sought to come up with general characteristics of these epochs... while these accounts make inferences about technological change and industrial leadership, they rarely seek to explain what it is that causes change and leadership per se. In other words, in one sense, what is supposed to be explained—long-term growth and development—is essentially left unexplained by using a proxy for growth, namely technological change and industrial leadership, as the independent variable. Further, these accounts rarely have an institutional side, and they seldom make any conjectures about the role of the state beyond vague references to the importance of education, openness, cohesion etc. What is also often lacking is a comparative perspective."

"... technology is not a public good, but embedded in organizational structures. It is not necessarily easily transferable. Firms often do what they can to keep other firms from acquiring technology in order to stay competitive (...) Evolutionary theories are organic and biological where endogenous theories are mechanical. Evolutionary theories have a more realistic take on the accumulation of technology and knowledge, as well as the diffusion of these. Also, the growth process in evolutionary theories is more uncertain. Radical innovations are hard to predict, and institutional and historical contexts affect the way and the extent to which they successfully filter down into the economy. Thus, path-dependencies and historical accidents often play as significant a role in long-term technological trajectories as does the standard neoclassical assumption of rational actors with perfect foresight.

Another advantage of evolutionary theories is that from the outset these were conceived as disequilibrium theories. That is, unlike neoclassical theories, they do not see the economy as first and foremost characterized by a steady march toward economic equilibrium. Instead, they focus on periods of transition, on processes of structural change, on path-dependencies, and on the extreme long run."

“... a short typology of different types of growth. First, there is investment-led, or Solovian growth (after Robert Solow). Economic growth takes place when capital accumulates more rapidly than the growth of the labor force, thus leading to higher output per capita through increased productivity (although only temporarily). The second is Smithian growth, based on commercial expansion, also known as gains from trade—a more specialized division of labor leads to productivity growth. Third is growth based on scale or size effects. Without downgrading the importance of these types of growth..., this book deals with so-called Schumpeterian growth, based on increases in the stock of human knowledge and technological innovation... Without technological change, the three other forms of growth will sooner or later ... run into diminishing returns. Only Schumpeterian growth may escape this.”

“Technological progress is not a neutral process of gradual accumulation of incrementally more efficient technologies. We do not just add one extra unit of ‘technology’ to achieve so and so amounts of economic growth. To neoclassical theories all technologies are essentially the same ... In addition to improving productivity, evolutionists argue that some innovations are particularly important as they have the potential to transform the economy. Radical innovations disrupt existing economic structures and force new institutional setups and routines on the economy. They give rise to new growth industries and destroy old ones.”

“... some economic activities are more important than others. Countries that have mastered the core technology of a particular historical era, and have been successful in setting up industries employing this technology, are the ones that have forged ahead, grown in power, stature and economic strength. Hence, it is crucial for a country to perform well within those technologies and industries that are linked with the core technologies of a techno-economic paradigm.”

“Schumpeter reasoned that a monopoly position might be more conducive to technological progress than perfect market competition. It is the dynamic, imperfect competition in markets controlled by a limited amount of suppliers that fuels growth. Monopolistic conditions are necessary in order to promote the rapid adoption and innovation of new technologies. Large firms introduce new methods of production beyond the reach of smaller firms, and are thus able to produce cheaper goods in larger quantities than under conditions of free competition. Industrial activity within old, established businesses and methods of production rarely yields great returns. The greatest profits are made in new industries or in industries that adopt new methods or technologies.”

“Unlike neoclassicists, evolutionary theories recommend that an economy specialize within sectors that are particularly growth-inducive. These are typically sectors that require advanced technologies and/or specialized human skills and knowledge (...) On a nation-wide scale: A country’s prospects for long-term growth and development depends on its ability to perform well within new technologies, new industries and particularly growth-inducive sectors. And it depends on its ability to find sectors from which it can reap monopoly gains.”

“Pre-industrial growth has been primarily Smithian. But this logic does not necessarily apply to industrialization, which implies technological growth, which is Schumpeterian (...) While preconditions like well-functioning markets, property rights, infrastructure are necessary parts of a framework for industrial growth, this is not where the extra intellectual effort should be put in.

Instead, for the industrialized era and for Schumpeterian growth, the role of the state is about the promotion of new technology and industries. Hence, the first component that needs to be in place in a theoretical framework for Schumpeterian growth is human capital ... The role of the state thus also becomes one of promoting diffusion, that is, of seeking to put knowledge to good use."

"There will always be opposition against inventions and new technology. New knowledge displaces existing skills and reduces rents. Technological change leads to losses for those that have specific assets tied in with the old technology—formal skills, tacit knowledge, reputation, specialized equipment, ownership of natural resources, barriers to entry that ensured monopoly positions, etc."

"[Mancur] Olson's (1982) by now famous argument has to do with interest groups and vested interests. Too much institutional stability leads to institutional rigidity. Societies that have had to start over again, reforming their institutions and breaking up old monopolies of power and economic vested interests, are the ones that have been economically prosperous. Stability on the other hand, has led to a silting up of vested interests, to stasis, sclerosis and to an inability to alter the status quo. Economic policy becomes trivial as it is controlled by vested interest, unwilling and uninterested in change. As a result, the country gradually drifts into economic obscurity."

"Technologies come and go, and industries and interest groups come and go with them. Unlike the Olsonian world, the Schumpeterian world is in a constant state of flux. Hence, the first mover in Schumpeter's world is not institutional stability or rigidity (causing stagnation), but technological change (or its absence). When technological change, or for that matter, creative destruction, is allowed to occur, sclerosis from institutional rigidities will not happen. When the process of creative destruction is blocked, it will.

As with Olson, rigidities silt up in the Schumpeterian world too, but here because of vested interests springing from new technologies. New technologies sooner or later mature, becoming commonplace and obsolete, and thus give way to newer technologies and newer industries. This is the Schumpeterian dynamic, which gives the original Olsonian argument a different twist. It now allows for the state to actively promote and protect new technologies and new industries while they are still young and vulnerable, both against foreign competition and against blocking efforts by vested interests attached to old technologies and traditional industries. But if this promotion and protection is allowed to go on for too long, we are stuck in an Olsonian trap, where vested interests have once again been allowed to rise and grow economically and politically influential.

Hence, the role of the state entails at least two tasks, seemingly at odds: The state needs to promote new and potentially promising industries—that is promote structural economic change, away from old and stagnant industries and into new and promising ones... However, the state must also prevent these new industries from becoming so powerful that a few decades down the line, they themselves have a vested interest—as well as the political and economic influence—in blocking further structural economic change, and new and promising industries from arising. In other words, stagnant and obsolete industries should not be unduly overprotected."

"... the state must see to it that both the 'creative' and the 'destructive' part of the process of creative destruction are allowed to happen. The state needs to prevent technological progress from creating

the forces that will eventually destroy it (...) The role of the state becomes one of avoiding institutional rigidities, or to use the language of Mancur Olson (1982), of avoiding *sclerosis*."

"... very different regimes have been able to achieve technological progress, industrial leadership and long-term growth. States as dissimilar as laissez-faire Britain and laissez-faire (although highly protectionist) US, authoritarian Germany and Japan have been among the most successful states ever, and a common denominator is hard to find if the measure applied is too rough. Measures like centralized vs. decentralized, authoritarian vs. democratic etc. do not make sense. An insight derived from De Long ... provides a better clue: Contrary to popular belief, long-term growth is not a high priority of the state."

"One of the ideas of this book is that the more cohesive the state, the greater the chance of preventing sclerosis, and the greater the chance of preventing vested interests from gaining control over the state and from creating institutional rigidities favoring the status quo."

"If ... ultimately, technological change and long-term growth is not very high on the list of the state's priorities, the likelihood that the state will successfully pursue policies that seriously go against the interests of powerful vested interests (that is, policies of structural economic change), is small indeed, unless there is a fairly strong consensus about what policies to pursue. A truism of political science is that the most immediate concern of a regime is its own survival. The likelihood of survival diminishes greatly if controversial decisions, with potentially grave effects—concrete and obvious losers vs. less than concrete winners—have to be made... Hence, decisions with potentially grave redistributive effects are politically risky, and will with a much greater likelihood be made if there is a solid political consensus surrounding these policies. Consensus means less room for vested interests to exploit fragmentation within the political apparatus."

"First, there is political consensus, which applies to the political elites. Second, there is social cohesion, which applies to the people. To spell the implications out: 1) A lack of political consensus and/or a lack of social cohesion in the people, make it easier for vested interests to pursue their own interests. A lack of political consensus makes it easier to exploit differences of opinion between different parties or decision-makers. A lack of cohesion in the people makes it more risky for political parties or other decision-makers to pursue policies with potentially large redistributive effects (with concrete losers and not so concrete winners). 2) Political consensus and/or social cohesion in the people make it easier to promote structural economic change, that is, making decisions that are in the interest of society at large, going against those of vested interests. For practical purposes, this means an end to favoring old and stagnant industries on behalf of new promising ones. Political consensus makes it more difficult for vested interests to pursue continued protection and it makes it less risky for political parties or other decision-makers to pursue policies with potentially large redistributive effects. Social cohesion in the people makes it less risky for political parties or other decision-makers to pursue policies with potentially large redistributive effects."

Moe, Espen (2016): *Governance, growth and global leadership. The role of the state in technological progress, 1750–2000*, Routledge.

"The gap between the rich and the poor on this planet is larger than ever before and still growing (...) The human cost of poverty is enormous. The years of human life lost due to infant and child mortality, preventable disease and general low life expectancy add up to terrifying numbers. Civil wars and conflicts over scarce resources cause pain and suffering that in wealthy countries is mostly avoidable. To these can be added the likely impact of environmental degradation on the poor. In poor societies such vicious circles are easily created, where the only way to meet demands from an increasing population is to intensify the exploitation of nature."

"Neo-liberal economists argued that economic growth and welfare would be the default condition if market interventions were removed, rather than the result of a long-term process of building a particular form of economic structure ... We must move away from a theory which poses economic harmony as an automatic outcome of divinely or mathematically premeditated harmony, and move back to one in which economic harmony is a product of conscious policies."

"... what Enlightenment economists called emulation, rather than 'comparative advantage' and 'free trade', lies at the heart of successful development. In this context emulation means imitating in order to equal or excel. If the tribe across the river has taken the step from the Stone Age to the Bronze Age, your own tribe is faced with the choice of either sticking to its comparative advantage in the Stone Age or trying to emulate the neighbouring tribe into the Bronze Age. Before David Ricardo there was little doubt that emulation would be the best strategy, and historically the most important contribution of Ricardo's trade theory was that, for the first time, it made colonialism morally defensible. Today we have totally dismissed the idea that a strategy of emulation was a mandatory passage point for all nations that are presently rich: we have outlawed the key tools needed for emulation."

"For centuries Europeans offered a huge diversity of approaches to technology and to institutions. The combination of diversity and emulation created a multitude of theoretical schools and technological solutions across Europe. These multitudes of ideas and their products were continuously compared, moulded and developed in marketplaces. The competition between city-states - later between nation-states - financed flows of inventions that also emerged here as unintended by-products of the emulation between nations and their rulers in war and luxury. Once it had been observed that throwing resources at problems during wartime produced inventions and innovations, this mechanism could be replicated in times of peace.

Europeans observed early on that generalized wealth was found only in areas where agriculture was absent or only played a marginal role, and came to be seen as an unintended by-product when many diverse branches of manufacturing were brought together in large cities. Once these mechanisms were understood, wise economic policy could spread wealth outside these few 'naturally wealthy' areas. Policies of emulation could, indeed, also spread wealth to formerly poor and feudal agricultural areas, but they involved massive market interventions. For laggard nations market interventions and wise economic policies could substitute for the natural and geographical advantages that produced the first wealthy states (...) Thus rivalry, war and emulation in Europe created a dynamic system of imperfect competition and increasing returns. New knowledge and

innovations spread in the economy as increased profits and increased wages, and as larger bases for government taxation. European economic policy was based for centuries on the conviction that the introduction of a manufacturing sector would solve the fundamental economic problems of the time, creating much-needed employment, profits, higher wages, a larger tax base and a better circulation of the currency."

Reinert, Erik (2007): *How Rich Countries Got Rich and Why Poor Countries Stay Poor*, Constable.

**Política industrial: desarrollo,
coordinación y captura**

"Academic writing on industrial policy emphasizes the role of consultation and coordination with the private sector, both in designing appropriate public actions and in providing feedback.

But, in many cases, a close relationship between business and government can lead to capture and inappropriate policy choices. Managing the tension between close coordination and capture is a central challenge in the practice of industrial policy. The academic literature on implementing industrial policy, however, is remarkably light on practical guidance for policy makers as to how to achieve coordination without capture. There is perhaps no region of the developing world more in need of this guidance than Africa."

"Industrial policy is finally moving away from the fruitless debate on 'picking winners' versus 'levelling the playing field' towards the development policy mainstream. There is increasing recognition that the market imperfections on which theoretical arguments for industrial policies rest are widespread in low-income countries and that well-designed government policies can contribute to improved economic outcomes. There is also greater understanding that the private sector has a central role to play in formulating and implementing industrial policy."

"There is, however, less agreement on how government-business coordination should be structured, how its objectives should be defined, and how success should be measured. In fact, the academic literature on close coordination provides little guidance on how governments interested in developing a framework for public-private engagement should go about doing it. This is unfortunate, especially for Africa. Nowhere in the developing world is effective industrial policy more needed."

"A key role for industrial policy in developing economies is to speed up the process of structural transformation, the movement of labour from lower- to higher-productivity sectors. In Africa, structural transformation has contributed little to growth and job creation (...) Africa's economic structure has begun to change, but the shift has consisted largely of workers moving from agriculture into services such as trade and distribution. This is movement from very low-productivity to marginally higher-productivity jobs (...) Yet, industry, and especially manufacturing, has stagnated."

"The dominant view among economists during the past thirty years has been that industrial policy is a bad idea. The underlying argument is based on two lines of reasoning. First, governments do not have the information needed to 'pick winners' (...) Second, even if governments could solve the information problem, rent-seeking behaviour by private agents would undermine their well-

meaning efforts. For this reason, the prevailing argument has been that private actors should be excluded from designing public policies because they will lobby for actions that serve their particular interests (...) Where market failures are present, the mainstream view has been that policy makers should identify the distortions and then design taxes or subsidies to reduce the gaps between market prices and marginal social costs or values.”

“There has been considerable rethinking of this conventional wisdom in the last decade (...) There is greater agreement in the profession that markets do not by themselves lead to economic efficiency or a desirable distribution of income, and that market imperfections in low-income countries impede structural transformation. Many markets are incomplete and suffer from coordination failures. Collateral constraints combined with asymmetric information in credit markets can limit investment; and there are potentially large spillovers associated with learning, not just among firms, but also among institutions. In addition, the new economic geography has drawn attention to a major collective action problem—agglomeration.”

“Stiglitz argues that in addition to addressing market failures, industrial policies should attempt to influence the trajectory of growth in favour of greater income equality (...) As the theoretical case for industrial policy has strengthened, new insights have also challenged the traditional top-down model of policy-making. Industrial policy must, in practice, identify and respond to the need for public actions across a very broad front of industries and possible interventions. The growth of global value chains has blurred the boundaries between manufacturing, agro-industry, and tradable services; and these ‘productive sector’ activities share a number of traits. They rely on export markets for scale, are subject to agglomeration economies, and depend on the knowledge of managers and workers to raise productivity and quality (...) Faced with this complexity, public officials cannot know where all of the relevant constraints and distortions are in an economy. Firms have information crucial to policy design and implementation, making coordination with the private sector essential at two levels: first, to identify and remove constraints to the more rapid growth of the current set of high-productivity industries, and, second, to design and implement strategies to transform the economy.”

“Beyond the helping hand, industrial policy in the large implies thinking of an industry or an activity one would want to see develop, and then putting in place all the public inputs needed for it to succeed (...) The economic rationale for this type of industrial policy rests on the presence of imperfect markets (...) Stiglitz also argues that markets are not well suited on their own to support structural transformations. Imperfections in risk and capital markets mean that individuals, who should move from old to new sectors in low-income countries, cannot get access to the resources needed to make the shift; yet they have to bear the inevitable risks associated with the transition. Information externalities and coordination failures further inhibit structural transformation. Because there are high costs to private firms with regard to discovering the next new area in which an economy will be competitive (...) firms will tend to underinvest in new activities, even if they have high social returns. For this reason, implementing industrial policy in the large implies giving incentives to compensate first movers in a new sector for the positive information externalities they create by going where no business has gone before. Rent transfers can be in the form of a subsidy, such as trade protection or fiscal transfers, or by the provision of venture capital.”

“Any system of incentives designed to help private investors by removing constraints or through a system of incentives, may end up serving as a mechanism to transfer rents to corrupt businessmen or bureaucrats. This is what lies at the heart of some objections to public-private coordination: the fear that the state will be corrupted in the process (...) Managing the tension between coordination and capture is one of the central challenges in implementing industrial policy in practice.”

“Peter Evans’ (1995) influential study of South Korea introduced the term ‘embedded autonomy’ to describe a way of achieving balance between coordination and capture. The success of the Korean model, he argued, was due to the fact that the public institutions charged with industrial policy design and implementation were both autonomous and embedded in private sector networks (...) The objective is (...) to set up a framework that (i) engages the public sector in an ongoing conversation with the private sector; and (ii) has the capacity to respond selectively, using a range of policies, to the economic opportunities these conversations identify.”

“A defining characteristic of the East Asian deliberation councils was the high capacity of the bureaucracy charged with managing the process and with implementing decisions. As Lin and Vu note (...) ‘institutional initiatives that establish and support highly competent organizations dedicated to coordinate efforts for industrial diversification and upgrading, efficiency and productivity improvement, and export promotion, are critical to the success of a developing country’s industrial policy implementation’. They argue that a number of emerging Asian economies have developed such high-quality implementation mechanisms.”

“... there is no single ‘East Asian Model’ of industrial policy and public-private coordination. The objectives and instruments of industrial policy and the nature of the coordination process between government and business has varied across countries and over time within the same country (...) South Korea has adapted its approach to industrial policy several times over the past forty years in response to growing democratization and a changing power dynamic between the state and business. While there is considerable diversity, there are a number of common threads that run through the country cases. Four of these are of particular relevance to understanding business-government coordination in East Asia: commitment, focus, experimentation, and feedback.”

- **Commitment**

“A high level of commitment of senior government officials to the coordination agenda has been characteristic of Asian economies, ranging from Japan to Viet Nam (...) The public officials charged with coordination programmes were sufficiently senior to make the decisions needed for implementation and in most cases reported directly to the highest political authorities. In Japan, a powerful technocratic bureaucracy drove the early industrialization effort, supported by a consistent pro-industry, pro-export policy (...) In China, party and government officials at all levels ranging from the national to the municipal are actively engaged in the industrial development agenda and they are judged on results achieved.”

- **Focus**

“One way in which the flow of information between the public and private sectors was encouraged and the risk of capture was reduced was by focusing on specific constraints to firm performance. The key elements of the process were agreement with the private sector on a specific objective and

the proposed course of action. A timetable for resolution of the problem was announced and progress in implementation was monitored and reported, often within the context of a deliberation council. Another way in which focus was achieved was by creating localized enabling environments and extending the improvements across regions and sectors gradually in line with the government's available resources and implementation capacity."

- **Experimentation**

"East Asian industrial policy makers have shown a striking willingness to experiment. Ideas were often generated by observation of successful examples from elsewhere. Public actions were identified, developed, and then implemented. The results—measured in terms of specific outcomes—were subsequently carefully observed. When the chosen course of action failed to accomplish the desired outcome, it was usually modified or abandoned. Policies that were deemed successful were frequently replicated in other settings. This almost 'pharmacological'—observe, experiment, implement—approach to policy-making was heavily dependent on a strong two-way flow of information between firms and the government and a high degree of pragmatism on the part of the policy makers concerned."

- **Feedback**

"Feedback was an essential element of the Asian industrial policy process. Partly this was done ... by measurement of observable outcomes, for example, the rate of growth of jobs, output, or exports. Partly it depended on information gleaned from the private sector ... Meetings with the business community were held every year to identify obstacles to the operation and development of business, and equally importantly, to build trust. Hinh Dinh notes that in China local governments (prefectures, counties, townships, and villages) are directly connected to industrial clusters. By focusing on individual clusters and communicating frequently with local entrepreneurs, local governments devise policies clearly targeting specific industries (...) Using feedback was also an important means of building accountability."

"... one important outcome of public-private coordination is trust building. The African case studies reveal an uneasy partnership between the state and the business community, often characterized by shifting perceptions, mistrust, and lack of mutual comprehension."

"Effective coordination with the private sector and implementation of the public actions derived from the state-business dialogue require effective coordination within government (...) In the African case studies it often appears that the right hand of government is not aware of what the left hand is doing (...) Lack of intra-government coordination is also an important cause of the poor performance of SEZ [Special economic zones] programmes in Africa."

"The coordination mechanisms that evolved in Asia to manage the inevitable tension between coordination and capture have been likened to a contest. While the institutional forms varied, they featured three elements essential to all contests: rules, referees, and rewards (...) Kim emphasizes the role that 'carrots and sticks' played during South Korea's early industrialization drive. As the Park administration sought to transform the SBR [state-business relations] it used both access to resources and discipline. Dinh documents the role of contests in implementing China's decentralized industrial policies. The African case studies suggest that, in many cases, the rewards

have been present while the rules and the referees have not. According to Bhorat, Cassim, and Hirsch ... an unintended consequence of the structure of the South African economy has been to encourage rent seeking between key players. The corporate sector and trade unions have settled into a stable equilibrium, defined by high rents distributed between organized labour and big business."

"... how to strengthen business–government coordination in Africa. We can identify four key areas for action.

- **Leaders Must Lead**

High-level political commitment has been the hallmark of successful strategic coordination. One virtue of having a high-level champion is that it identifies the person who has the job of explaining the policy agenda and who can be held politically responsible for things going right or wrong ... A second reason why high-level leadership is critical to the success of strategic coordination is the need for coherence within government in following up and implementing the decisions reached as a result of public–private problem solving (...)

- **Go Local**

A defining feature of the public–private coordination mechanisms in such countries as China, South Korea, Viet Nam, and Ethiopia is that they were the result of a national effort to shape institutions and set policy objectives. While the need for national solutions to industrial development problems sounds self-evident, national control of the industrial policy agenda is more often the exception than the rule in Africa ... The public actions which should form industrial policy have been developed in Washington, instead of being a result of locally driven coordination between government and business ... Because the objectives were not owned by the participants, the coordination mechanisms degenerated into 'chat shops'. To make progress, African governments will need to undertake the difficult task of wresting their industrial development agenda away from donor control. Where local initiatives have occurred in Africa, they have been most successful when business has taken a leading role (...)

- **Clarify the Rules**

Successful coordination requires that both government and the private sector are clear about objectives and how success will be measured ... Clarity and transparency are also important tools for fostering accountability. Requests made by firms or business associations for government assistance should in principle be public information. Publication of the activities and decisions of coordinating bodies and periodic accounting of the expenditures made to implement their recommendation can increase public scrutiny (...)

- **Limit the Rewards**

The financial incentives offered under any industrial policy framework need to be commensurate with their social returns. Where governments have often erred in the past—and not just in Africa—is in overestimating the returns to the economy of new industrial activities. Set against that, however, is the risk of doing too little."

"These considerations suggest four rules that should govern the use of incentives in implementing industrial policy:

- Incentives should be limited to new activities where there is evidence that social returns exceed market values.
- There should be clear criteria for success and failure.
- There must be a built-in sunset clause.
- There must be monitoring, benchmarking, and periodic evaluation."

Page, John; Finn Tarp; eds. (2017): *The Practice of Industrial Policy*, Oxford University Press.

Política industrial: desarrollo y sociedad del aprendizaje

"A traditional criticism of industrial policies is related to 'political economy', that such policies are likely to be captured by special interests to advance themselves. However (...) not having an industrial policy—leaving it to the market, structured as it so often is by special interests—is itself a special-interest agenda. To avoid capture by special interests there must be openness, transparency, and a deeper understanding of the rationale for industrial policies."

"(1) Industrial policies (...) are not necessarily aimed at promoting industrialization. The term embraces any policy affecting the sectoral composition of the economy or the choice of technology. Thus, industrial policy in this sense should also be part of corporate governance, anti-trust and competition policy, and monetary policy and bankruptcy frameworks, as well as (more obviously) tax and expenditure policy.

(2) The success of industrial policy is not to be judged by the success or failure of any individual project, but rather has to be evaluated systematically (...) We made a case for an 'infant economy' argument for protection, which was distinctly different from an 'infant industry' argument (...) Moreover, good industrial policy incorporates risk taking, and risk taking means that there will be successes and failures. No oil exploration company would judge its performance by pointing out that it drilled some dry wells. What matters is its overall success rate—whether the successes sufficiently offset the failures. Too often, critics of industrial policy point to failures, without weighing against such failures the successes (...)

(3) Of course, if there are systematic, repeated failures, that points to a flaw in institutional design, which needs to be corrected. A central theme (...) is learning; that is, firms learn only by doing (e.g., the only way to learn to produce steel, and to become better at producing steel is to produce steel). However, the same point is true of institutions: the only way to learn how to do industrial policies is to carry out industrial policies, to learn consciously from one's successes and failures. One of the reasons for the renewed interest in industrial policies is that so many countries have successfully carried out such policies ... East Asia carried out industrial policies when their incomes were far lower than they are today, and where their institutional development was much more limited.

Few economists argue that a country should not have a monetary policy or a central bank simply because in the past its central bank mismanaged. Rather, there is a broad consensus that countries can learn how to conduct monetary policy in ways that promote growth and stability; and that there are institutional arrangements that enhance the likelihood of success. The same holds for industrial policies, and the analysis here suggest that these policies may be as important for the long-term success of a development strategy as any other.

(4) East Asia's successful industrial policies were based on export-led growth (...) East Asia's success was based not only on exports ... but on the exports of manufactured goods (...) There is a difference between exporting commodities and exporting manufactured goods: there are economy-wide benefits of learning (including institutional development) associated with the latter that are not typically associated with the former. However, global employment in manufacturing is likely to decrease, as a result of improvements in productivity outstripping increases in demand. China now has a formidable comparative advantage in a wide range of manufacturing goods, but as wages in China rise, its comparative advantage in basic manufacturing, requiring limited skills, is likely to diminish. This will open the opportunity for some other developing countries, at lower stages of development, to enter into manufacturing export-led growth."

- **Imperfect Risk and Capital Markets**

"Any investment in a new industry is risky, yet for reasons that are now well understood, financial markets provide far from adequate insurance against these risks. Industrial policies can help 'socialize' these risks, enabling projects that otherwise would not be undertaken to be implemented (...) Many of the industrial policies of East Asia were directed at correcting this market failure by providing access to funds at commercial or near-commercial rates. These two limitations are especially relevant to firms (and sectors) where learning is important (...) Moreover, the value of this learning is highly uncertain (...)

- **Structural Transformation**

An important part of development is structural transformation, moving from an agrarian economy to an industrial economy. Markets do not make such transformations on their own well (...) Those in the declining sector often have low incomes, and the value of their assets (including their human capital) has been diminished by the same forces giving rise to the necessity for structural transformation. The imperfections of risk and capital markets (...) mean that individuals who should move from the old to the new sectors of the economy cannot get access to the resources needed to make the shift, and they have to bear the inevitable risks associated with the transformation. The result is that the economy can be 'stuck', unable to make a transformation that would be beneficial to most citizens of the country (...) East Asia managed to break out of the resulting inefficient equilibrium by focusing on exports (...) Import substitution policies got a bad name, especially in Latin America, because the industries that were created often only survived as the result of protection (...) Countries often paid a high price for this kind of protectionism, and the maintenance of this protection was often associated with corruption. The protected industries generated rents, and, as always, the recipients of such rents were willing to share some of the rents with the politicians who granted the rents to them (...)

- **Learning and Imperfect Appropriability**

Market failures associated with learning received insufficient attention in earlier literature (...) there are inevitably large spillovers associated with learning—not only technological spillovers, but also institutional spillovers. The development of institutions like financial institutions and an education system that facilitate the functioning of the industrial sector have important spillovers for the rest of the economy. Whenever there are spillovers, private returns differ from social returns (...) For instance, firms that take the risk of trying out whether a particular product grows well in the

particular environment of the country will not be able to reap the full benefits—if the project is successful, it will be imitated, if it fails, the firm undertaking the experiment bears the losses.”

- **Macroeconomic Externalities**

“The pervasiveness of market failures means that governments necessarily have to focus their attention on the most important failures. Among the most important failures are those that affect the macro economy. Firms, on their own, may engage in too much borrowing, especially in foreign-denominated debt. Banks, on their own, may engage in excessive risk taking. The social cost of instability is enormous, and firms and banks, in their own decision-making, do not fully take into account these social costs (...) There are, for instance, long-term hysteresis effects, as informational and organizational capital is destroyed as firms go bankrupt, as educations are interrupted, and as young people, who otherwise would be learning skills on the job, suffer unemployment and see their skills atrophy. Thus, industrial policies also need to be designed to reduce the magnitude, structure, and consequences of the liabilities of corporations and banks, in an attempt to reduce the magnitude of economic fluctuations and the frequency of economic crises.

- **Inequality**

Inequality should be a concern to any society. Stiglitz (2012, 2015) explains why inequality is associated with better economic performance (higher growth and more stability) (...) Markets, by themselves, will pay no attention to their distributional impact. Thus, one of the objectives of industrial policies should be pursuing greater equality. For instance, policies that increase the demand for unskilled labour will reduce inequality.

- **Climate Change**

The objective of industrial policies is to address market failures (...) Climate change is perhaps the most important market failure facing the global economy. Charging a high enough carbon price would induce individuals and firms to significantly reduce carbon emissions, but with few exceptions, it has proven difficult to induce countries to impose carbon pricing. Instead, countries have been called upon to make commitments to reduce carbon emissions. One way that developing countries can succeed in reducing carbon emissions is industrial policies that encourage renewable energy, and discourage carbon-intensive industries and technologies.”

“... successful and sustained growth requires creating a learning society (...) The transformation to ‘learning societies’ that occurred around 1800 for Western economies, and more recently for those in Asia, has had a far greater impact on human well-being than improvements in allocative efficiency or resource accumulation (...) This implies that our focus should be on the impact of policies on technological change, and how it is brought about by learning, as well as research and development (R&D). In the case of developing countries, the focus should be on the diffusion of knowledge from developed to developing country and the diffusion of knowledge within the country (...) What separates developing from developed countries is as much a gap in knowledge as a gap in resources. However, even in developed countries, there are large gaps between the productivity of the best firms and others. Markets, on their own, are not efficient in promoting innovation and learning.”

“Because markets on their own will not do a good job in creating a learning society, there need to be systematic interventions by the government. The policies that do this are markedly different from those traditionally advocated by economists, which focus on improving the static efficiency of resource allocation and the accumulation of capital—including policies that constituted the Washington Consensus. Indeed, from the perspective of creating a learning society, those policies may be counterproductive. This analysis implies that a central question of growth and development should be: What should governments do to promote growth through learning (technological progress and innovation)?”

“Creating a learning society entails looking comprehensively at all the factors affecting learning: the education system; what has been called the economy’s innovation system, which includes the intellectual property rights (IPR) regime and technology policy; macroeconomic policies, including exchange rate policy; investment policies, and industrial and trade policies.”

The extent to which governments pursue macro-stability is itself an industrial policy and one that is especially important for creating a learning society.

“Stability is important to learning, for a number of reasons. Much of our knowledge resides within institutions and within organizations, like firms. Recessions destroy firms and the embedded knowledge that they contain. There is (...) negative learning. Moreover, recessions impede learning, as attention is focused on survival. In addition, recessions impede one of the most important aspects of human capital accumulation—on-the-job learning— with long-term consequences for growth and standards of living (...) There are significant long-term consequences of not having strong counter-cyclical policies. A focus on government debt can be short-sighted and counterproductive, since it can give rise to far more important adverse effects on real wealth accumulation.”

Stiglitz, Joseph E. (2017): “Industrial Policy, Learning, and Development”, capítol 2 a Page, John; Finn Tarp; eds. (2017): *The Practice of Industrial Policy*, Oxford University Press.

Política industrial: relación gobierno y empresas

“A key question is why the practice of industrial policy differs so much across countries: why do some economic policies succeed and others fail?”

“The debate on industrial policy has evolved considerably in recent decades. From the 1950s to the 1980s, the structuralists (...) suggested a policy of import substitution to promote heavy manufacturing and reduce commodity dependence. By the 1990s, it had become clear that the suggestions from the structuralists led to practical problems and the Latin American debt crisis followed. The Washington Consensus (...) emerged, which suggested a range of key market policies that did not foresee a role for industrial policies (...) This consensus also ran into problems because some countries that followed these policies (several Latin American countries) grew unsatisfactorily, whilst others that did not follow these policies (China, Viet Nam) grew rapidly.

The 2008 Growth Commission report marked some change. Its review of successful experiences of growth, mentioned, for example, the key role played by leadership in promoting economic growth,

along four other key ingredients of growth. Hausmann, Rodrik, and Velasco (2008) made a significant further step, by emphasizing that the binding constraints to growth are country specific."

"Which individuals and organizations can support and engineer the growth process? Recently, a range of new policy insights have emerged on promoting growth (...) they all seem to argue for a more pragmatic (between the extremes of free market and centrally-led concepts of growth) and gradual approach. Page (2012) discusses three ways for promoting economic growth: tilting production towards exports, supporting agglomerations, and attracting and building firm capabilities (...) Much of the literature thus points to the importance of policies to actively support the growth process. All of the approaches mentioned require an institutional setting for policies to work properly, one where the state and business can interact to agree on the best direction for the economy.

The question is no longer, whether industrial policy is important, but rather how to use such policies and to examine the institutional setting that determines the design and implementation of good policies. With some notable exemptions, this question of how the state and business interact to formulate good policies has been lacking from the literature on growth and industrial policies."

"SBRs are relations between the public and private sectors. As they are shaped by the way states and businesses interact (...) SBR forms can vary significantly, ranging from formal, regular coordination arrangements to informal, ad hoc interactions. They can cover the whole economy or target specific sectors types of firms, or policy processes. In some situations, they involve highly organized relationships in others they are loose relationships between the state and business. In some cases the formal aspects matter most ... but in other informal arrangements, rules, norms, and agreements dominate all other institutions."

"... in the invisible-hand model (...) the role of the state is limited to providing public goods (e.g., contract enforcement), but leaves allocative decisions to the private sector. However, in a helping-hand model, organized bureaucrats actively promote private sector activity, 'support some firms and kill off others, pursue industrial policy, and often have close economic and family ties to entrepreneurs' ... In a grabbing-hand model, bureaucrats are less well organized and pursue their own (corrupt) agendas. The government is above the law and uses its power to extract rents. The rationale for an effective role of SBRs in the growth process is that the invisible-hand model provides sub-optimal outcomes, and the grabbing-hand model leads to inefficient outcomes in the long-run, but the helping-hand model can be an effective way in which state and business can interact."

"... effective SBRs fulfil a helpful steering role in industrial development by overcoming two concerns: (1) there are market failures (...); markets can fail in areas such as education, innovation, or climate change; and (2) there are government failures (state actors may not be able to address market failures on their own). Governments can fail, as they are unlikely to have perfect information and perfect foresight, suffer from moral hazard problems (...) or are captured by elites. However, effective SBRs can address market, coordination, and government failures through effective communication and remove binding constraints to growth by improving the investment climate, providing market-enhancing public investment, and reducing policy uncertainty. The role of

agencies and their effective interactions complement the price mechanism in allocating resources and promoting industrial development.”

“Rodrik (...) lists three key elements for an appropriate institutional architecture: (1) political leadership at the top, (2) coordination and deliberation councils, and (3) mechanisms of transparency and accountability. Rodrik (...) has also argued that developing countries should be aiming for second best institutions, which means that developing countries should not be aiming for ‘best-practice’ institutions as used in developed countries but rather institutions that take into account both the local context as well as issues that cannot be quickly resolved. More recently, Rodrik has developed ... these key elements into three prerequisites required to promote policy reform— embeddedness, discipline, and accountability.”

Lemma, Alberto; Dirk Willem te Velde (2017): “State-Business Relations as Drivers of Economic Performance”, capítol 4 a Page, John; Finn Tarp; eds. (2017): *The Practice of Industrial Policy*, Oxford University Press.

**Acción colectiva y
ciclos de Olson**

“It has often been taken for granted that if everyone in a group of individuals or firms had some interest in common, then there would be a tendency for the group to seek to further this interest (...) The paradox ... is that (in the absence of special arrangements or circumstances...) large groups, at least if they are composed of rational individuals, will not act in their group interest.”

“It follows that if there is only voluntary and rational individual behavior, then for the most part neither governments nor lobbies and cartels will exist, unless individuals support them for some reason other than the collective goods they provide (...) In the case of governments... [they] are obviously supported by compulsory taxation (...) In the case of organizations that provide collective goods to their client groups through political or market action ... because they have been fortunate enough to find what I have called selective incentives. A selective incentive is one that applies selectively to the individuals depending on whether they do or do not contribute to the provision of the collective good (...) Any number of organizations with urban clients also provide similar positive selective incentives in the form of insurance policies, publications, group air fares, and other private goods made available only to members. The grievance procedures of labor unions usually also offer selective incentives, since the grievances of active members often get most of the attention.”

“The limited knowledge of public affairs is in turn necessary to explain the effectiveness of lobbying (...) Just as lobbies provide collective goods to special-interest groups, so their effectiveness is explained by the imperfect knowledge of citizens, and this in turn is due mainly to the fact that information and calculation about collective goods is also a collective good (...) That the benefits of individual enlightenment about public goods are usually dispersed throughout a group or nation, rather than concentrated upon the individual who bears the costs of becoming enlightened ... helps us to understand certain apparent inconsistencies in the behavior of modern democracies. The arrangement of the income-tax brackets in all the major developed democracies is distinctly progressive, whereas the loopholes are more often tilted toward a minority of more prosperous

taxpayers. Since both are the results of the same democratic institutions, why do they not have the same incidence? As I see it, the progression of the income tax is a matter of such salience and political controversy that much of the electorate knows about it... The details of tax laws are far less widely known, and they often reflect the interests of small numbers of organized and usually more prosperous taxpayers."

"... in the absence of selective incentives, the incentive for group action diminishes as group size increases, so that large groups are less able to act in their common interest than small ones."

"On balance, special-interest organizations and collusions reduce efficiency and aggregate income in the societies in which they operate and make political life more divisive."

"... the distributional coalitions ['or organizations that engage in what ... is called 'rent seeking'] do interfere with an economy's capacity to adapt to change and to generate new innovations and therefore do reduce the rate of growth ... When an industry is nationalized, regulated as a public utility, or for other reasons subject to political dictation, the pertinent lobbies may veto changes, or simply require consultation about them, and innovations and investments will take place less often and more slowly ... Special-interest groups also slow growth by reducing the rate at which resources are reallocated from one activity or industry to another in response to new technologies or conditions. One obvious way in which they do so is by lobbying for bail-outs of failing firms."

"Distributional coalitions, once big enough to succeed, are exclusive and seek to limit the diversity of incomes and values of their membership. To achieve their objectives, distributional coalitions must use their lobbying power to influence governmental policy or their collusive power to influence the market. These two influences affect not only efficiency, economic growth, and exclusion of entrants in a society, but also the relative importance of different institutions and activities."

"Peaceful prosperity leads to the emergence of interest groups, which use the tools of government for their own ends. Ultimately, their efforts stifle economic dynamism and destroy the prosperity that brought them into being. This progression can be called an 'Olson Cycle,' and we should worry about being caught in its turns." (Edward L. Glaeser)

"Another great experiment in laissez-faire was conducted in Great Britain itself. Britain generally followed laissez-faire policies at home as well as abroad from about the middle of the nineteenth century until the interwar period. (The United States in the same period had highly protectionist policies) (...) Nonetheless (...) laissez-faire did not prove to be dynamically stable —Britain abandoned it. Neither was it sufficient to prevent cartelization in many sectors. During the nineteenth and early twentieth centuries, precisely when and where laissez-faire policy was at its peak, Great Britain acquired a large proportion of its dense network of narrow distributional coalitions. It was in this same period, too, that the British disease emerged and British growth rates and income levels began to lag."

Olson, Mancur (2022 [1982]): *The Rise and Decline of Nations. Economic Growth, Stagflation, and Social Rigidities*, Yale University Press.

Productivismo

“Productivism is an approach that prioritizes the dissemination of productive economic opportunities throughout all regions of the economy and segments of the labor force. It differs from neoliberalism in that it gives governments (and civil society) a significant role in achieving that goal. It puts less faith in markets and is suspicious of large corporations. It emphasizes investment in productive activities over investment in financial products, and revitalizing local communities over globalization. It also departs from the Keynesian welfare state in that it focuses less on redistribution, social transfers, and macroeconomic management and more on creating economic opportunity by working on the supply side of the economy to create good, productive jobs for everyone. And productivism diverges from both of its antecedents by exhibiting greater skepticism towards technocrats and being less instinctively hostile to populism in the economic sphere.”

“Our core economic problems – poverty, inequality, exclusion, and insecurity – (...) are reproduced and reinforced (...) as an immediate by-product of firms’ employment, investment, and innovation decisions (...) These decisions are rife with externalities for society (...) Some of these externalities are well recognized in economics. Learning and innovation spillovers from R&D form the rationale for tax credits and other public subsidies. Environmental externalities and the effects of greenhouse gas emissions on climate change form the basis for environmental regulation.

But in our contemporary world, these externalities are broader and also include what may be called ‘good jobs’ externalities. ‘Good jobs’ are jobs that pay sufficiently well to allow for a reasonable living standard with some security and savings, are relatively stable and with safe working conditions, and offer some career progression (...) A shortage of good jobs comes at social, political, and economic costs (...) The prevalence of ‘bad jobs’ is also symptomatic of economic dualism, which creates its own inefficiency: productive technologies remain bottled up in a few firms and do not disseminate throughout the rest of the economy and the labor force.”

“When a company decides to automate its production line or outsource part of its production to another country, society may suffer long-term damage that is not ‘internalized’ by its managers or shareholders. Framing the problem in terms of an ‘externality’ – or as a ‘coordination failure’ (...) – clarifies that productivism is about productivity first and foremost, and not about redistribution or social/labor standards. But it does not presume productivity trickles down.”

“Productivism requires an explicit quid pro quo between private firms and public authorities. To prosper, firms need a reliable, healthy and skilled workforce, good infrastructure, an ecosystem of suppliers and collaborators, easy access to technology, and a sound regime of contracts and property rights. Most of these are provided through public and collective action, which is the government’s side of the bargain. Governments in turn need firms to internalize the various externalities they produce for their communities and societies when they make their labour, investment, and innovation decisions.”

“Productivism focuses on enhancing the productive capabilities of all segments and regions of a society (...) Policies must directly encourage an increase in the quantity and quality of jobs that are available for the less educated and less skilled members of the workforce (...) In the future the bulk of these jobs will come not from manufacturing, but from services.”

“This is important since so much of the policy effort in the U.S. is focused on promoting high-tech manufacturing (...) The initiative is aimed at both enhancing national security vis-à-vis China and creating good jobs. Unfortunately, (...) a strategy fixated on geo-political competition with China will not be very effective on the jobs front. The advanced semiconductor industries promoted (...) are highly capital and skill-intensive and do little for job creation.

A similar point can be made about the subsidies to green technologies that are a core component of the ‘Inflation Reduction Act.’ (...) But here too, governments cannot kill two birds with one stone. Green technologies will not create many new jobs on net, and the jobs they create will often not be in the distressed regions that need them the most. Policies that target climate change are not a substitute for good-job policies, and vice versa. Shoring up the middle class and disseminating the benefits of technology broadly through society requires an explicit good-jobs strategy.”

“If the future of good-job creation is mostly in the service industry, the question then arises: Is an industrial policy for services possible? Enhancing productivity in services is notoriously difficult.”

“My proposed program has both a local and a national component. The local approach would build on existing development and business assistance programs ... These are collaborative partnerships between local development agencies, firms, and other partners aiming to revitalize local communities and create good jobs. They are organized around an implicit (and evolving) quid pro quo: the provision of public services (such as business extension services, infrastructure, or customized training) in return for soft commitments by firms on investment and employment creation.

The federal initiative would be the establishment of an Advanced Research Projects Agency (ARPA) focused on the promotion of employment-friendly technologies: ARPA-W(orkers). Starting from the premise that innovations that complement rather than displace workers are feasible yet currently undersupplied, ARPA-W would promote early-stage investments in digital and other technologies that enhance prevailing worker skills and create good jobs.”

“In this paradigm, the conventional separation between growth policies and social policies no longer makes sense. Faster economic growth requires new technologies and productive opportunities to be disseminated among smaller firms and wider segments of the labour force and that their use not be confined to narrow segments of the elite. And reducing inequality and economic insecurity is more effective when it happens through better employment prospects than via fiscal redistribution only. The growth and social agendas effectively merge.”

“Neoliberalism promoted freer markets and freer trade, and discouraged government intervention (...) Aren’t those precisely the policy conclusions that students in economics courses are taught? And weren’t deregulation, tight money and fiscal austerity, weakening of labor market institutions, and hyper-globalization promoted using the ideas of (and by) leading members of the economics profession? Since the answers to both questions are yes, the demise of neoliberalism should perhaps prompt us to jettison mainstream economics as well.”

“Unlike what many of its critics believe, where policy preferences are concerned mainstream economics comes paradigm-free in its sophisticated, seminar-room version, and can be used to

support any number of conflicting policy paradigms. What disciplines this immense flexibility is logical rigor (which helps clarify the critical conditions under which any policy recommendation holds) and systematic evidence (which tries to map those conditions to the real world in specific settings) (...) Neoliberalism was in fact bad neoclassical economics."

Rodrik, Dani (2023): "A New Paradigm for Economic Policy and the Role of Mainstream Economics"

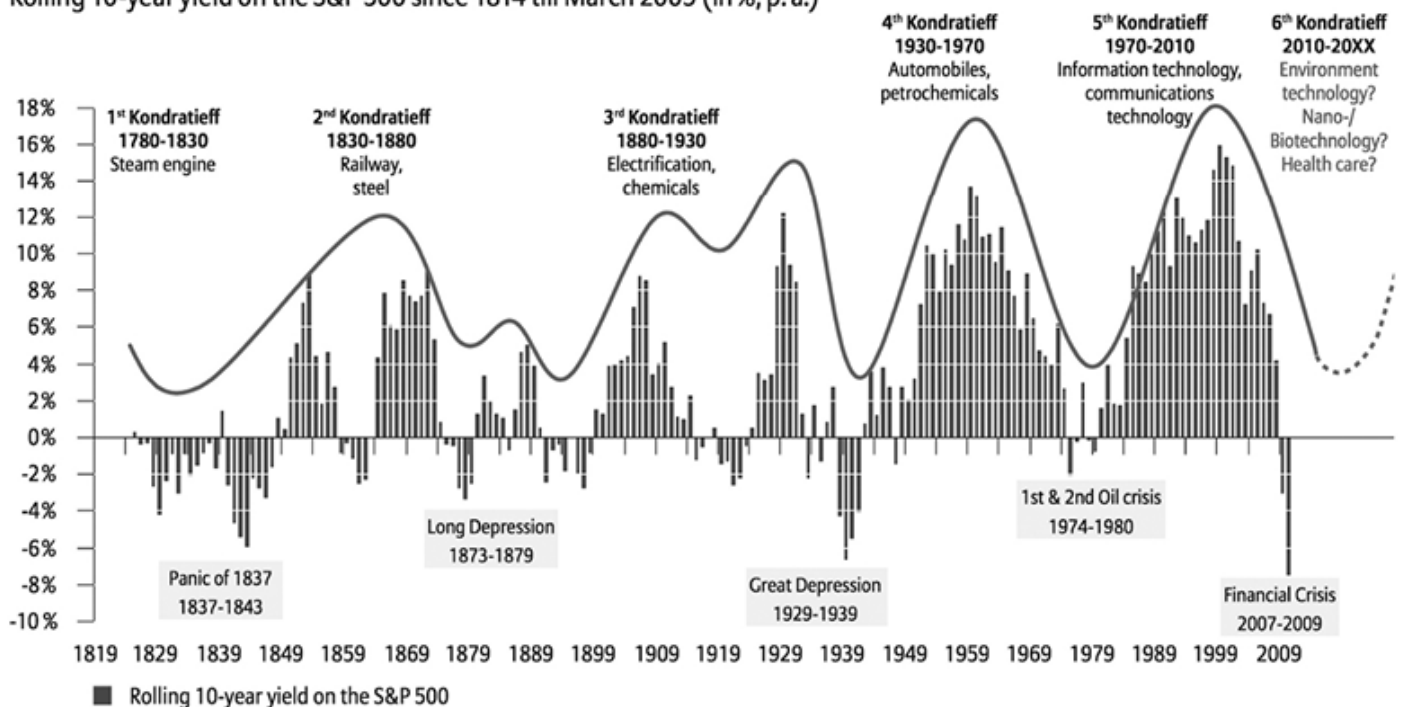
<https://www.postneoliberalism.org/articles/a-new-paradigm-for-economic-policy-and-the-role-of-mainstream-economics/>

Ondas de prosperidad

"How automation reshapes our economy and society therefore depends on the choices we make, the policies we adopt, and the institutions we create. While we have one group constantly working on what we *could* do, it's separate from those who decide what we *should* do. Automation managed for the common good could enable the creation of a society where an abundance of essential goods is generated sustainably, shared widely, and economic power distributed evenly and not just concentrated in the hands of a few. Yet there is every possibility that this new power could amplify existing inequalities within the economy, enabling those who own and control the machines and the data to also control the population."

Figure 1: Kondratieff cycles – long waves of prosperity.

Rolling 10-year yield on the S&P 500 since 1814 till March 2009 (in %, p. a.)



"Many recognise how rare and hard-earned these freedoms are, and will not let go of them willingly, nor forgive any attempts to retract them. The lack of courage shown by our leaders to defend these freedoms needs to be addressed, for they are priceless things that, once lost, will be difficult to recover. As in Rome, the elites have once again become fixated on their short-term needs and have forgotten the rights, aspirations and desires of those who built these countries, and whose votes and bloodshed provided them with this power (...) In times of great disruption we need to provide stability and order, not more chaos. The question is whether that order is obtained through

a re-establishment of foundational principles such as liberty, democracy and freedom, or via more centralised, authoritarian means."

"I believe that to help ensure the future is positive, we will need a new Glorious Revolution. A bloodless revolution designed to protect the fundamentals of Western society (...) We will once again need to ensure that the rights and freedoms of the individual are protected; the power and reach of those in power is limited, property is protected, technological bounty distributed, and responsibilities restated. The human must take priority over the machine, and sustainability over short-term profits. Business leadership needs to evolve to focus on wider stakeholders and society, not just immediate shareholders; and engage the talents of their people to determine how to use technology to provide long-term value for consumers, customers and communities. Our education systems need updating to allow people to create bespoke curriculums based around uniquely human skills such as creativity, empathy, reason, enquiry, responsibility and happiness, rather than forcing them to learn out-of-date industrial age skills. If we educate people simply to compete against machines, then we are educating them to lose. We need to recalibrate our economies to ensure that they provide equality of both opportunity and responsibility, while also supporting those affected by disruption. We also need to ensure that the development of artificial intelligence and other existential risks such as nanotechnology and genetic engineering is undertaken with extreme caution (...) A new AI Magna Carta needs to be composed, one fit for the digital age. One designed to ensure that the power of the sixth wave's technological windfall benefits the majority, not the minority."

"People need to be viewed as more than just economic agents of production, for that is easily automated. Instead, they need to be seen as value generators, rewarded for the quality of their output to society, not just to themselves. Capitalism and socialism should be seen not as opposites, but complements (...) Finally, we need to build societies and cultures that are strong and clear about their values and protect them in these

	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6
	First Industrial Revolution	The Age of Steam and Rail	Second Industrial Revolution	<i>The age of the auto-mobile</i>	<i>The Computer Age</i>	<i>Third Industrial Revolution</i>
Time Period	1760-1820	1820-1870	1870-1908	1908-1970	1971-2008	2008-2040
Length	60 years	50 years	40 years	62 years (two world wars)	37 years	32 years
Country/Regions affected	Great Britain	Great Britain	UK, USA, Germany	USA, Japan	USA, Western Europe, Japan	Global (Asia and India main benefactors)

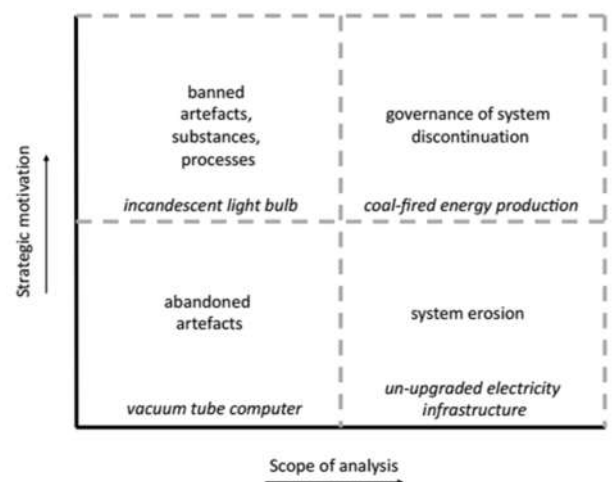
Power source	Steam engine, coal	Steam	Electricity	Electricity, petro-chemicals	Digital Communications	Renewable energy, especially solar
Transport Mechanism	Canals, sailing ships	Rail, steamships	Rail (especially in US), bicycle, transatlantic shipping	Road, rail, plane, ships	Road, plane, shipping containers	Autonomous vehicles, Internet of Everything
Communication Mechanism	Printing press	Telegraph	Telephone	Radio, TV	TV, video, mobile telephone, Internet	Global internet, 5G and 6G mobile telecommunications
Industry	Coal mining, cotton, pottery	Steam-powered factories, iron bridges and constructions	Steel-heavy engineering (civil, chemical, electrical and naval)	Mass produced automobile, consumer white goods	Computer hardware and software, smartphones, e-commerce, service	Mobile digitisation, VR, Internet of Things (IoT), robotics, autonomous, electric vehicles, solar power, vertical farming

disruptive times. And here lies the challenge. Creating smart machines is easy. Creating an equitable and aspirational society for over seven billion humans in a world of smart machines is not. One of the biggest lessons from the research behind this book has been the fact that culture matters. Enormously.”

Culey, Sean A. (2019): *Transition point. From steam to the singularity, Matador.*

Declive tecnológico

“The central question of this book is how technologies decline. Surprisingly, this question is fairly novel. The dominant interest ... has been to understand how novelty emerges and how innovation can open up new opportunities. This ‘innovation bias’ in the disciplines studying technology reflects how in recent centuries modern societies have embraced technology as a vehicle of progress ... In the last two centuries, technologies were figured as solutions to address societal problems. Yet, in a time of growing concerns related to the challenges of climate crisis, biodiversity loss, social inequalities or geo-political tensions, technologies increasingly figure as part of the problem, too ... Technologies that once embodied progress, such as pesticides or coal-fired power production, now embody problems and stand in the way of better directions. It is timely, therefore, to broaden the horizon of technology dynamics and the technology-society relationship: next to considering the rise of technologies, we should also consider their fall, too.”



Varieties of technological decline

“Two dimensions appear particularly relevant to make sense of the variety of perspectives: the scope of analysis (i.e., the perimeter of the technology, system or configuration in question) and the strategic motivations vested in a decline process (i.e., the extent to which decline is actively pursued or on the contrary a more emergent process) ... Decline can range from the abandonment of a particular artefact or substance (say, a specific product model) or the erosion of a socio-technical system’s relevance and centrality, to the more purposive ban of specific substances or products, or attempts to actively discontinue entire systems.”

Koretsky, Zahar; Peter Stegmaier; Bruno Turnheim; Harro van Lente (2022): *Technologies in decline. Socio-technical approaches to discontinuation and destabilisation, Routledge.*

Dos teorías económicas

“The message that east Asia –and indeed an historical understanding of development around the world– sends to economists is that there is no one type of economics. At a minimum, there are two. There is the economics of development, which is akin to an education process. This is where the people –and preferably all the people– who comprise an economy acquire the skills needed to compete with their peers around the world. The

economics of development requires nurture, protection and competition. Then there is the economics of efficiency, applicable to a later stage of development. This requires less state intervention, more deregulation, freer markets, and a closer focus on near-term profits. The issue is not whether there are two kinds of economics that exist at different stages of development. The question is where these two stages meet. This is the difficult and interesting subject to which economists could more productively apply themselves.

Unfortunately, the intellectual tyranny of neo-classical 'efficiency' economics –the natural subject matter of rich countries– means that it is all but impossible to have an honest discussion about economic development. Poor states can only be successful by lying. They have to subscribe publicly to the 'free market' economics touted by the rich while pursuing the kind of interventionist policies that are actually necessary to become rich in the first place."

"What seems most wrong in all this is that wealthy nations, and the economic institutions that they created like the World Bank and the International Monetary Fund, provided lousy developmental advice to poor states that had no basis in historical fact. Once again: there is no significant economy that has developed successfully through policies of free trade and deregulation from the get-go. What has always been required is proactive interventions – the most effective of them in agriculture and manufacturing – that foster early accumulation of capital and technological learning (...) Our unwillingness to look this historical fact in the face leaves us with a world in which scores of countries remain immiserated."

Studwell, Joe (2013): *How Asia works. Success and failure in the world's most dynamic region*, Grove Press, New York.

Reinert (2007) identifies two main types of economic theories. One (the conventional one) relies on metaphors from physics (invisible hands like gravity, equilibrium states) and builds the theories (and elaborates economic policy recommendations) down from those metaphors. This type of theory has eventually become disconnected with time (history) and space (geography). The other type invokes biological metaphors and starts the construction of theories (are experience-based) from the ground up. Policy recommendations often precede theoretical elaborations and rely on the identification of empirically relevant factors, like increasing returns, technological change, synergies and side effects. These theories accept diversity and heterogeneity as essential elements in the understanding and control of reality.

Each type of theory leads to a different view of globalization and development. The conventional type supports income convergence in the world economy. The 'Washington consensus' expresses its policy recommendations. The heterodox type holds that globalization reinforces differences: countries unable to emulate the richer ones will experience retrogression and primitivization (they fail to develop and enjoy progress). Hence, unless ready to emulate, it would be premature to participate in the globalizatin process. Regarding development, the first type tends to view it a capital accumulation; the second, rather as the result of emulation and knowledge assimilation.

Reinert, Erik S. (2007): *How rich countries got rich... and why poor countries stay poor*, Constable, London.

Marcos teóricos para la política industrial (y tecnológica)

En la teoría neoclásica (la dominante) la economía se representa como un sistema en equilibrio en el que los agentes toman decisiones con información considerada suficiente (esta información incluye expectativas, experiencia previa, la propia teoría económica). Frente a ella se sitúa una teoría económica de corte evolutivo, que enfatiza procesos (en lugar de estados, como el equilibrio), la incertidumbre, la innovación y el pragmatismo.

	Teoría neoclásica	Teoría evolutiva
Representación de la economía	Sistema en equilibrio (estado)	Sistema cambiante (proceso)
Toma de decisiones de los agentes	Con información completa o suficiente	Incertidumbre, ignorancia, realidad en proceso de comprensión
Objetivos	Maximización	Satisfacción
Racionalidad	Absoluta	Limitada
Qué define una economía moderna	Flujo circular de actividad económica	Actividades de innovación
Criterio de evaluación del funcionamiento de una economía	Optimalidad	Tipo y ritmo de creación de las innovaciones
Motivación de la política industrial	'Imperfecciones' de los mercados	'Hacer el trabajo' (<i>how best to get the work done</i>)
Estado 'natural' de la economía	Mercados autoorganizados	Coexistencia de sector público y privado (sistema de innovación)

Los dos cánones en teoría económica

"One cannot profitably add as much human capital to the job of washing dishes as to the job of being a lawyer. For this reason economists would often recommend for their children professions which require a university education, although by doing this they express what they – at the macro level of an African nation – would describe as 'a mercantilist preference for one profession to another'. On the macro level the same economists recommend nations to stick to their comparative advantage, whatever it may be. Compared to this modern logical inconsistency in advice between 'my children and the children of Africa', Adam Smith comes across as being much more consistent. He argues that the mechanisms that work on the macro also work at the micro level: all risks considered it is safer to let your son become a shoemaker's apprentice than to become a lawyer (Adam Smith had no children)."

"Renaissance economics saw no limits to progress (...) In Adam Smith's system, however, nations reach a stationary state where they can 'advance no further', when that 'full complement of riches which the nature of its soil and climate ... allowed it to require' had been reached (...) In today's setting, Smith's attitude to new knowledge might have made him into a believer in de-growth."

"In the understanding of wealth and poverty, the Cold War gave us a strange set of mutually exclusive countermovements: on the one hand, the Marshall Plan (1947) that emphasized the importance of manufacturing industry; but on the other hand, Paul Samuelson's revival in 1948–1949 of David Ricardo's 1817 trade theory (...) that 'proved' the exact opposite: whatever a country

produced there would be a tendency for the prices of the factors of production – capital and labour – to ‘equalize’. The latter became the centrepiece of post-war international trade policy.”

“My contention is that the cumulative effects of the blind spots listed below, in distorting the reality as it is seen by mainstream economics, are formidable, as are their effects on the inability to cure poverty.

TEN BLIND SPOTS

1. Synergies

The basic insight that synergies, based on the diversity of economic activities in an area, are an important wealth-creating mechanism creating a common good ... dates back to the Florentine philosopher and statesman Brunetto Latini (1220–1294) and to Niccolò Machiavelli (1469–1513) ... The growth of towns and cities brought these synergies into evidence. Towns permitted communication that unleashed individual freedom, creativity, diversification and synergies that together created unprecedented wealth. This was the fundamental observation of one of the earliest best-selling books in economics, *Delle Cause della Grandezza delle Città* written by Giovanni Botero (1543–1617) ... The subject was kept alive over centuries ... But in spite of all this accumulated knowledge the World Bank and the International Monetary Fund (IMF) fail to see the dangers when they fail to warn poor countries against monoculture and lack of economic diversity more than 500 years later.”

“Historically the most important of all synergies was specified already in 1767 by David Hume, Adam Smith’s best friend, when he discussed the reign of Henry VII (starting in 1485): ‘Promoting husbandry ... is never more effectually encouraged than by the increase of manufactures’ ... The introduction of manufactures creates employment, increases wages, and diminishes population pressure, and is at the core of the cumulative causations which we call development. As US Secretary of State George Marshall expressed in his Harvard speech in June 1947, announcing what came to be called the Marshall Plan: ‘the farmer has always produced the foodstuffs to exchange with the city dweller for the other necessities of life ... This division of labor is the basis of modern civilization’.”

2. Institutions

“The ability to create such Schumpeterian institutions [‘change-inducing and change-enabling institutions’] which enable the structural change that we call economic development, and to change these institutions when new conditions so require, comes across as a key feature of the organisational capability of any society.”

“Some institutional innovations are crucial to create economic growth. Primogeniture – the right of the first-born legitimate son (or child) to inherit his parents’ entire estate – has created stability in European kingdoms compared, for example, to the Arab world. In agriculture, primogeniture prevented farm sizes from diminishing into or beyond self-sufficiency.”

“It is generally most useful to see institutions as born out of problems in the production system ... The problem came before the solution: it is not that the Venetians invented insurance so that they could have long-distance trading, it is the other way around. In contrast, in their 2012 book *Why*

Nations Fail (...), Daron Acemoglu and James Robinson in practice come to the defence and salvation of neoclassical theory by blaming former European colonies for not ‘getting the institutions right’ ... They seem to disregard the key point that the ‘extractive institutions’ they blame for the lack of development represent the very essence of Western colonialism. When explaining that ‘North America became more prosperous [than Peru and Mexico] precisely because it enthusiastically adopted the technologies and the advances of the Industrial Revolution’ ..., **Acemoglu and Robinson leave out that Peru and Mexico for a long time were colonies, and that a key element in colonial policies was precisely to prohibit manufacturing there.** When Peru and Mexico later gained formal independence, they were still de facto colonies, as power just shifted from Spaniards in Spain to Spaniards residing locally, locked into the same system of exporting raw materials. In this way, **Acemoglu and Robinson appear to be blaming the victims of colonialism for their own poverty.”**

3. Knowledge/Technology Adding Value

“Giovanni Botero’s (1589) bestselling *On the Greatness of Cities* explains the wealth of cities mainly by the value added to raw materials, emphasising the difference between ‘a heap of logs and stones and a house’, and ‘a marble block and what Michelangelo does to it’. What Nietzsche called *Geist und Willenskraft* – Mankind’s wit and will ... – is there in Schumpeterian evolutionary economics, but not in mainstream neoclassical economics.”

“In 1994 the world’s most efficient producers of baseballs (which are hand-sown) worked in Haiti earning US\$0.30 an hour; whereas the world’s most efficient producers of golf balls (a mechanised production), in the United States, made at least \$9 an hour. In the mercantilist/Renaissance view, by exporting baseballs and importing golf balls Haiti exchanged 30 hours of labour (in baseball production) for one hour of labour (in golf ball production). At the time, Haiti had a very large share of the world market in baseballs... Whereas golf ball production is mechanised, all the capital of the United States has yet to mechanise the production of baseballs. **This uneven advance of technical change makes it possible for a nation to be locked into a comparative advantage of being poor and ignorant.** This possibility is ignored in today’s economic theory, but was clearly perceived by the more sophisticated Renaissance mercantilists, who held the variables of skill and knowledge up front.”

4. Time-Specific Technological Contexts Produce Different Windows of Opportunity for Growth

“Here also, Giovanni Botero’s 1589 book is an early mover. He finds that **there are more opportunities for innovation in city activities than in countryside activities.** Also, when we talk about historical periods as the Stone Age and Bronze Age we implicitly understand that at a certain point the opportunities for innovation are greater in Bronze Age activities than in Stone Age activities. We find this as a basis of the work of Carlota Perez (2003) and her **techno-economic paradigms.**”

5. Diminishing and Increasing Returns

“Former World Bank Chief Economist Justin Yifu Lin very succinctly writes: ‘**Except for a few oil-exporting countries, no countries have ever gotten rich without industrialization first**’ ... At the core of an explanation for this lies the **dichotomy between diminishing returns (in raw material) and**

increasing returns (in industry). Explaining wealth and poverty by contrasting increasing and diminishing returns entered economics in 1613, in a book written in a prison cell in Naples by a certain Antonio Serra.”

“If we ask ourselves why the most efficient farmers in the world, in the European Union (EU) and US, to such a large degree depend on protection and subsidies, the reasons are the same: diminishing returns, perfect competition (no market power), and price volatility due to variabilities in climates and harvests.”

“Alfred Marshall recommended taxing diminishing returns industries (agriculture, fisheries and mining) in order to give bounties to activities produced under increasing returns (industrial goods). The first part has proved difficult, due to the low income in the agricultural sector, but the second part – giving bounties (and protection) to manufacturing industry – has been necessary in all countries that have travelled the road pointed to by Justin Yifu Lin.”

“In 1981 –at the age of 28– later Nobel economist Paul Krugman briefly reintroduced Antonio Serra’s increasing/diminishing returns dichotomy in international trade ... Reintroducing this dichotomy, Krugman found what others had been finding for centuries: in a world with increasing and diminishing returns to scale, some countries may find themselves specialising in diminishing returns industries and consequently being poor ... Some years ago, I had a student go through Krugman’s later writings, and he never found the increasing/diminishing returns dichotomy used again.

Schumpeter had invented the ‘Ricardian vice’: the tendency for economists to make and test theories that are not troubled by the complexities of reality, resulting in theories that are mathematically beautiful but largely useless for practical applications ... I added the ‘Krugmanian vice’: having produced a much more relevant theory than Ricardo, but refusing to apply it in practical economic policy.

So, in practical policy this literature had no influence whatsoever on the policy recommendations of the Washington Consensus. Krugman had rediscovered the medicine that worked against poverty, but refused to use it, apparently for ideological and/or career reasons ... I find it deeply unethical that economists as a community – starting with the mature Alfred Marshall – have so systematically shown so much more loyalty to their models than to the fate of the poor. In my imagination this resembles a medical doctor having an effective medicine on the shelf, but refusing to use it for ideological reasons.”

6. How the Benefits from Innovations Spread

“The fruits of new knowledge and new technology may spread in the economy in two different ways, reflecting two different regimes of appropriation: in the classical mode, through reduction in prices to the consumer; in the collusive mode, through higher profits to the capitalist, higher wages to the producer, and a larger economic base for government to tax. Here, rents from new innovations are shared between capital, labour and government.”

“In industries that might be labelled ‘high-quality activities’, this profit-enhancing innovation can involve increasing the skill levels of workers. Note that this will increase workers’ value in the

labour market; this is precisely the US 19th century ‘high-wage strategy’ argument. Under Schumpeterian competition, a high degree of collusive spread is normal; the individual rent-seeking of the Schumpeterian entrepreneur is converted into collective rent-seeking on behalf of society. Under these conditions, what’s good for General Motors generally is what’s good for the country.”

“In avoiding ruinous price-competition, the dynamic process of Schumpeterian rent-seeking produces an ever-increasing diversity of products; competition is based on product differentiation and different quality levels. Development and the impact of innovation will – over time – fan out to encompass more and more of the economy.

In any system with differing degrees of increasing and diminishing returns, and with a mixture of collusive and classical means of distributing gains from technical progress, some nations will be better off under autarchy than under free trade; at least until they have secured a competitive base in increasing-returns/collusive spread activities. This is the basic reason why Werner Sombart and most other German historical economists were critical of free trade between nations at different levels of technological development.”

“In a world where the benefits from innovation spread in these two different ways, it is virtually impossible for an agricultural nation to innovate itself out of poverty. The only way to do this is by being part of an industrial society, and converting agricultural products into niche products, restricting the area in which the products are produced, such as Parmesan cheese and Parma ham. This strategy was first invented in 1716 with the Gallo (rooster) brand for Chianti wine by Grand Duke Cosimo III of Florence.”

“Since the end of the Cold War the economic strategy of Europe had, in the spirit of Friedrich List, been based on a symmetrical form of integration among nations at approximately the same level of industrialisation and technical sophistication. The underlying assumption, which was left from the spirit of the Marshall Plan, was that manufacturing matters.

The integration of Spain into the EU had taken place in the 1980s by gradually reducing Spain’s import duties – which had been very high – in order to make sure that advanced industries, such as the car industry, survived. We later found the opposite mechanism – a shock therapy type of integration – and documented how this form of integration of former Comecon (...) countries very

	The collusive mode	The classical mode
La dos formas de difusión de la productividad		
<i>Characteristics of mode</i>		
Divisibility of investments	Indivisible, comes in 'chunks'	Divisible
Degree of perfect information	Imperfect (e.g., patents, internal research and development)	Perfect (competitive market for technology itself)
Source of technology from user company point of view	Internal, or external in big chunks = high degree of economies of scale	External
Type of innovation	Product innovation	Process innovation
Barriers to entry	Increase	No change
Industry structure	Increases concentration	Neutral
Economies of scale	Increase	No change
Market shares	Very important	Unimportant
<i>How benefits spread</i>		
Gross national product as measured	Highly visible	Tends not to appear (Solow paradoxes)
Profits level	Increases stakes: possibilities for larger profits or losses	No change
Monetary wages	Increase	No change
Real wages (nationally)	Increase	Increase
Price level	No change	Decreases
Terms of trade	No change	Turns against industries experiencing technological progress
Examples of innovations in the two groups	New pharmaceuticals, mainframe computers, automotive paint production	Electricity, telephones, sewing machines, use of personal computers, dispersion paint production, containers
Where found	Mainly in industry, in recent products and processes	In primary and tertiary sectors, use of new generic technologies, mature industry

frequently led to a de-industrialisation of these countries. As a consequence, the social structures of these countries became more like those found in Latin America.”

“... we noticed what we called the **Vanek-Reinert effect: with rapid trade liberalisation the most efficient industries in the least developed of the trading partner countries are the first to become extinct.**”

7. The Two Roles of Human Beings: Consumers and Producers

“During the 19th century US debate on protectionism, the Americans granted the English free traders the point that locally produced goods in the US initially would become more expensive, punishing the US consumers. But, the Americans countered, in the long run this would be more than compensated by the much higher wages the same consumers would receive as producers in an industrialised economy, rather if they had stayed employed as farm hands.

In a dynamic setting, high wages would also be driving technological development, forcing employers to make productivity-enhancing investments (...) The failure of neoclassical economics to see the advantages of high wages, combined with a lack of understanding of any positive role of unions (after all, trade unions increase demand), has clearly prevented technological development and caused unnecessary poverty in the US.”

9. Separating Productive Capital from Mammon

“A key element in Western culture has been the prevention of hoarding. In other words, making sure that money was circulating, not idle. The biblical term for idle money is

Starting point for the standard canon	Starting point for the ‘Other Canon’
Equilibrium under perfect information and perfect foresight	Learning and decision-making under uncertainty (Schumpeter, Keynes, Shackle)
High level of abstraction	Level of abstraction chosen according to problem to be resolved
Man’s wit and will absent	Moving force: <i>Geist- und Willenskapiel</i> : Man’s wit and will, entrepreneurship
Not able to handle novelty as an endogenous phenomenon	Novelty as a central moving force
Moving force: capital per se propels the capitalist engine	Moving force: new knowledge which creates a demand for capital to be provided from the financial sector
Metaphors from the realm of physics	Metaphors (carefully) from the realm of biology
Mode of understanding: Mechanistic (<i>begreifen</i>)	Mode of understanding: Qualitative (<i>verstehen</i>), a type of understanding irreducible only to numbers and symbols
Matter	<i>Geist</i> precedes matter
Focused on Man the Consumer A. Smith: ‘Men are animals which have learned to barter’	Focused on Man the Innovator and Producer. A. Lincoln: ‘Men are animals which not only work, but innovate’
Focused on static/comparative statics	Focused on change
Not cumulative/history absent	Cumulative causations/ ‘history matters’/ backwash effects (Myrdal, Kaldor, Schumpeter, German Historical School)
Increasing returns to scale and its absence a non-essential feature	Increasing returns and its absence essential to explaining differences in income between firms, regions and nations (Kaldor)
Very precise (would rather be accurately wrong than approximately correct)	Aiming at relevance over precision, recognises the trade-off between relevance and precision as a core issue in the profession
‘Perfect competition’ (commodity competition/ price competition) as an ideal situation = a goal for society	Innovation- and knowledge-driven Schumpeterian competition as both engine of progress and ideal situation; with perfect competition, with equilibrium and no innovation, capital becomes worthless (Schumpeter, Hayek)
The market as a mechanism for setting prices	The market also as an arena for rivalry and as a mechanism selecting between different products and different solutions. (Schumpeter, Nelson and Winter)

Los dos enfoques en la comprensión de la realidad económica y la riqueza y la pobreza de los países

Starting point for the standard canon	Starting point for the ‘Other Canon’
Equality Assumption I: No diversity	Diversity as a key factor (Schumpeter, Shackle)
Equality Assumption II: All economic activities are alike and of equal quality as carriers of economic growth and welfare	Growth and welfare are activity-specific: different economic activities present widely different potentials for absorbing new knowledge
Both theory and policy recommendations tend to be independent of context (‘one medicine cures all’)	Both theory and policy recommendations highly context-dependent
The economy largely independent from society	The economy as firmly embedded in society
Technology as a free good, as ‘manna from heaven’	Knowledge and technology are produced, have cost and are protected; this production is based on incentives of the system, including law, institutions and policies
Equilibrating forces at the core of the system and of the theory	Cumulative forces are more important than equilibrating ones, and should therefore be at the core of the system
Economics as <i>Harmonielehre</i> : The economy as a self-regulating system seeking equilibrium and harmony	Economics as an inherently unstable and conflict-rich discipline; achieving stability is based on Man’s policy measures (Carey, Polanyi, Weber, Keynes)
Postulates the representative firm	No ‘representative firm’; all firms are unique (Penrose)
Static optimum; perfect rationality	Dynamic optimisation under uncertainty; bounded rationality
No distinction made between real economy and financial economy	Conflicts between real economy and financial economy are normal and must be regulated (Minsky, Keynes)
Saving caused by refraining from consumption and a cause of growth	Saving largely results from profits (Schumpeter) and saving per se is not useful or desirable for growth (Keynes)

mammon (...) Continental European economics has always continued this in a sense Biblical separation of the financial economy from the real economy.”

“In good times the financial economy serves as scaffolding for the real economy; as a bridge in time, as Keynes put it. If allowed to grow in ways that do not positively impact upon the real economy – by making money on money without going through production in the real economy – the financial sector will become like a parasite which grows at the expense of the real economy. Since the times of Hammurabi, 1500 BC, societies which survived have managed to cancel unpayable debt. Bankruptcy, like bookkeeping, was a necessary invention in the early centuries of capitalism.”

10. Unlearning the Balance of Countervailing Powers

“The most successful and powerful states of the Renaissance – Venice and Florence – both had systems which consciously created a political balance of countervailing powers preventing both the concentration of powers and corruption. In Venice the head of government, the Doge, was elected in a process so full of checks and procedures that to modern eyes it seems exaggerated. With the privilege and honour of being Doge came the duty to give up all his business interests, and he was in a sense a prisoner in his own city (...) In Florence the Prince ruler was not elected, but his government of eight or ten persons – *la Signoria* – all represented different branches of trade and industry. So this government only had a minority of one single person representing both bankers and dealers in gold and silver. This prevented the problems listed under point 7 above.

The importance of institutions creating a balance of countervailing powers was again brought into focus by Charles Montesquieu (1689–1755), and is reflected in Western constitutions. The freedom from arbitrary power is an important goal of these institutions. It was this freedom that eventually – in some areas well into the 20th century – killed feudalism in Europe.

In his 1952 book *American Capitalism: The Concept of Countervailing Power*, US economist John Kenneth Galbraith (1908–2006) explained to us how capitalism functioned at its best when subject to three countervailing powers: big business, big government and big labour. Neoliberalism removed big government and big labour, and left big business, inside which finance gradually took on more and more power.”

Reinert, Erik S.; Ingrid H. Kvangraven; eds. (2023): *A Modern Guide to Uneven Economic Development*, Edward Elgar.

Política para el desarrollo

“The story of development policy in the post-Second World War international economic order is often conceptualized as a series of paradigm shifts (...). On this story, the Keynesian embedded liberal consensus was displaced by neoliberalism, which has in turn given way to the post-Washington Consensus (...) I distinguish between four policy nexuses (...) First, in the 1950s, there was a *productivist nexus* that emerged from the combination of bankers’ and engineers’ professional norms and the demands of American hegemonic leadership. Second, as large numbers of academically trained economists entered the World Bank in the 1960s and 1970s, a *neoclassical growth nexus* formed around neoclassical ideas and models. In the 1980s, a third nexus centered on *neoliberal growth* policies formed as broader political

imperatives interacted with developments in neoclassical knowledge. While the Washington Consensus bolstered growth-centric policies in the 1980s, the focus on growth outlasted the neoliberal wave, persisting through the late 1990s and into the 2000s. Bank rhetoric shifted again in the 1990s, as critics pushed poverty and other factors back onto the Bank's policy agenda. However, when poverty returned in the 1990s, it did so either as 'per capita income' or within 'human capital' discourse, which muted the impact of the rhetorical shift on Bank policy. In forming this multidimensional growth nexus, the neoclassical core of Bank discourse and practices again adapted to change, but maintained that growth was the central end of development policy."

Allan, Bentley B. (2019): "Paradigm and nexus: Neoclassical economics and the growth imperative in the World Bank, 1948-2000", Review of International Political Economy, DOI: 10.1080/09692290.2018.1543719.

Teorías económicas del desarrollo

"To understand development requires knowledge of how this subject has evolved as well as the major theoretical approaches that have defined it." [La expresión 'brecha Norte-Sur' conceptualiza el desarrollo geográficamente.]

- Economic growth theory. "Keynesianism is the approach most associated with economic growth theory, and it came to exert an enormous influence upon governments throughout the world after 1945. Named after the British economist John Maynard Keynes (1883–1946), it emerged from the crisis of confidence in the market following the Great Depression of the early 1930s (...) Keynes emphasized the positive role that governments could play in stimulating economic growth through investment in new infrastructure projects and the like, even if this meant them having to borrow money to do so".
- Modernization theory. "The common theme running through the various modernization theories is a linear conception of history, which sees countries moving from traditional to modern societies (...) Different modernization theorists have had their own remedies for enabling developing countries to 'take off'. It could require: increased savings and investment; the West providing its expertise; the formation of westernizing elites or ... the dissemination of liberal capitalist values."
- Structuralism. "Structuralism gained influence in the 1950s, particularly among Latin American governments, and was so named because its exponents focused upon the structures of the international economy in accounting for patterns of development and underdevelopment (...) Structuralism was often presented by its advocates as an alternative paradigm –devised by social scientists from the South– to the modernization paradigm of the North, although it never challenged either capitalism or the capitalist route to development and merely sought reform of the capitalist trade system (...) Drawing on the work of Keynes, structuralists also viewed governmental intervention as a means of stimulating economic development (...) First, the governments of developing countries should actively encourage industrialization through measures such as planning and providing financial and infrastructural support because they could not rely upon the free market to achieve this end. Structuralism therefore shares with modernization theory a faith in industrialization. Second, governments should adopt protectionist policies."

- Import-substitution industrialization (ISI). “During the 1950s and 1960s, many governments in the developing world believed the most effective way of breaking out of unequal trading relationships with the West was by becoming more self-reliant and pursuing a policy of ISI. Consequently, there was an attempt to end reliance upon imports and to concentrate on developing domestic manufacturing and creating more employment. This approach was intended to facilitate industrialization to the extent that products could be manufactured with export value. In practice, ISI entailed the state driving economic development through a combination of measures such as subsidizing industries, nationalization, the discouragement of FDI and protectionist trade policies (...) The recurring charge raised against structuralists and all those who advocated statist theories of development was that they had unrealistic expectations of the state, ignoring the bureaucracy, incompetence and corruption that have plagued many states throughout the world. For many of the preceding reasons, most developing countries from the late 1970s onwards became more geared towards export-oriented industrialization.”
- Dependency theory. “The origins of this approach can in part be traced to dissatisfaction with many of the claims made by modernization theorists, with critics noting the dearth of evidence that modernization theory was actually working. By the 1960s, the lack of economic development in the South and the persistence of global inequality meant that attention was increasingly directed towards explaining this state of affairs, especially among radical and neo-Marxist critics, some of whose writings came to constitute what became known as dependency theory. Their general position is that international capitalism increases disparities in levels of development because it is based upon a series of imperialistic and exploitative relationships which enables the North to extract wealth from the South (...) Following decolonization, the ex-colonies entered an international economy that had already been shaped by their former colonial masters, and they had to do so on their terms. As a result, the levels of debt of countries in the South has continued to grow, ensuring that they remain dependent upon western countries for loans and have to accept their terms and conditions (...) In sum, radical and neo-Marxist writings, ... during the 1960s and 1970s, were dominated by the idea that international capitalism blocks development by ensuring that countries of the South remain dependent upon the industrialized North.”
- World-systems theory. “While still part of the radical tradition, world-systems theory nevertheless sought to refine the sense within dependency theory that capitalism perpetuated a permanent core–periphery dualism. In this regard, Immanuel Wallerstein (1974, 1979), who first developed world-systems analysis, offers a more fluid conception of international economic and spatial divisions under capitalism, identifying ‘core’, ‘periphery’ and ‘semi-periphery’ categories, with the latter made up of the NICs of East Asia and Latin America. Most importantly, from his perspective, it is possible for countries to move in and out of these categories as they develop or suffer relative economic decline as other countries catch up with or overtake them. This also means the fate of countries is not simply determined by global economic patterns and structures and can in fact be influenced by internal dynamics.”
- Neo-liberalism. “At the heart of neo-liberalism lies a particular conception of the state, one that performs a minimum of functions but also facilitates entrepreneurial freedom, private ownership, free markets and free trade (...). From a development viewpoint, the purpose of

establishing such conditions is that they encourage the free operation of global markets, which in turn is seen as an essential tool for development. Ultimately, from the neo-liberal perspective, even the particular characteristics of societies are relatively unimportant in the development process as what is more relevant is that countries operate under market conditions and allow for individual freedom, both of which entail the role of the state being kept to a minimum (...) As well as trade liberalization, other neo-liberal themes like privatization, deregulation, fiscal austerity, financial liberalization and currency devaluation are seen as a means of achieving economic growth and attracting more FDI. Neo-liberals argue that such a policy shift would lead to increased employment and poverty reduction within developing countries."

Hopper, Paul (2018): *Understanding development. Issues and debates*, 2nd edition, Polity Press.

**¿Cómo tendría que ser la
Economía del siglo XXI?**

"What is needed in economics

In the twenty-first century, economics should focus:

- More on realism, less on rigor
- More on equity, less on efficiency
- More on humility, less on hubris

The prevailing emphasis on mathematical and logical rigor has given economics an internal consistency that is missing in other social sciences. But there is little value in being consistently wrong. Economics must move on from the infinitely rational, farsighted, and asocial beings whose decisions have been the central topic of analysis in recent decades (...)

Three decades in which market liberals have pushed policies based on ideas of efficiency and claims about the efficiency of financial markets have not produced much in the way of improved economic performance, but they have led to drastic increases in inequality ... Economists need to return their attention to policies that will generate a more equitable distribution of income.

Finally, with the collapse of yet another economic 'New Era,' it is time for the economics profession to display some humility ... economists can contribute to a better understanding of the strengths and weaknesses of markets, firms, and other forms of economic organization, and the possibilities for policy action to yield improved economic and social outcomes.

Every crisis is an opportunity. The Global Financial Crisis gives the economics profession the chance to bury the zombie ideas that led the world into crisis, and to produce a more realistic, humble, and above all socially useful body of thought."

Quiggin, John (2010): *Zombie economics: how dead ideas still walk among us*, Princeton University Press.

**Argumentos contra la
política económica**

Hirschman (1991) condensa en tres tesis los ataques retóricos que desde posiciones conservadoras se emplean para oponerse al cambio social impulsado desde la política económica. Considera que las tesis son expresión de una 'retórica de la intransigencia' que no contribuye a un debate constructivo.

- La tesis de la perversidad (*perversity thesis* o tesis del efecto perverso) consiste en alegar que el intento de transformación de la realidad social en un sentido la transformará en el sentido opuesto. En concreto, solucionar un problema mediante la intervención pública sólo agrava el problema. Ejemplo: el argumento de que establecer o incrementar un salario mínimo reduce el empleo y así la masa salarial cae en vez de subir.
- La tesis de la futilidad (*futility thesis* o tesis del efecto inútil) se fundamenta en la idea que intentar transformar la realidad social no logrará cambiar nada. La intervención pública no cambia las cosas, sólo crea la ilusión de que cambian. Ejemplo: el argumento de que ciertas ayudas monetarias dirigidas a grupos desfavorecidos ('Renta garantizada de ciudadanía') son baladíes porque estos grupos no tienen medios (ordenadores, móviles) o conocimiento (son gente muy mayor o desconocen la existencia de la ayuda) para pedirlos.
- La tesis del daño (*jeopardy thesis* o tesis del efecto destructor): intentar transformar o reformar la realidad no sale a cuenta porque se pierden logros previos. Ejemplo 1: el argumento de que el control del precio de los alquileres (porque el precio del alquiler se considera elevado) reduce la oferta de alquileres, desplaza a demandante de alquileres al mercado de compra de la vivienda y se incrementa el precio de la compra de viviendas (y hace que ahora el precio de compra sea elevado). Ejemplo 2: la tesis de que el estado de bienestar (y toda expansión en el ámbito de actuación del sector público) son una amenaza a la libertad individual (si no hay consenso en una política pública, ésta debe imponerse coercitivamente y, por tanto, habrá una pérdida de libertad).

Hirschman, Albert (1991): *The Rhetoric of Reaction. Perversity, Futility, Jeopardy*, Belknap Press.

El trilema de la voluntad política

Nacho Álvarez, Secretario de Economía del partido político Podemos entre 2014 y 2023, sugirió en 2018 un 'trilema de la voluntad política', formulado para los países periféricos de la eurozona, según el cual un gobierno no puede satisfacer a la vez las demandas de tres actores económicos: la ciudadanía, las élites nacionales y las élites internacionales. El argumento: atender las expectativas de la ciudadanía (respecto a la consolidación o extensión de derechos sociales o económicos) requiere una financiación adicional que choca con la exigencia de austeridad de las élites internacionales (las reglas fiscales de la Comisión Europea, por ejemplo) o que tendrá que recaer sobre las élites (financieras, empresariales) nacionales vía reforma tributaria.

"Según Rodrik, conservar niveles elevados de soberanía nacional y democracia interna exige una integración selectiva y parcial en la globalización. A la inversa, un país plenamente integrado en la globalización económica tendrá que sacrificar elementos cruciales de su soberanía o, peor aún, de su democracia.

Algunos autores han querido entender a partir de este trilema la crisis que atraviesa la socialdemocracia desde hace varias décadas. Parte de razón no les falta: las fuerzas desatadas por la mundialización del capital y la libre movilidad financiera han dificultado el avance, e incluso la continuidad, de políticas de corte socialdemócrata. Sin embargo, comprender la crisis que atraviesa hoy la socialdemocracia exige pensar, al menos, en otro trilema adicional: el trilema de la voluntad

política. Este trilema quizá podría formularse –en términos de Economía Política Internacional– del siguiente modo: en los países periféricos de la zona euro no parece viable satisfacer al mismo tiempo las exigencias de la ciudadanía, las exigencias de las élites nacionales y las exigencias financieras internacionales (cristalizadas en las normas de Bruselas). Hay que elegir y descartar, al menos, uno de estos tres vértices (o, en este trilema, incluso dos).”

“En países con débiles regímenes fiscales, como los países periféricos de la eurozona, una expansión fiscal que permita reconstruir los derechos que las políticas de austeridad se han llevado por delante, y ampliar otros nuevos, ha de financiarse con cierto déficit público –anatema para Bruselas–, o con cargo a una reforma tributaria, que necesariamente debe descansar sobre las élites del país, dado que en estas latitudes las clases medias y populares ya soportan buena parte de la carga tributaria.”

“El Gobierno de Pedro Sánchez ha alcanzado un acuerdo con Unidos Podemos por el cual se compromete a revertir los recortes que fueron aplicados por el Partido Popular en educación, sanidad y dependencia (...) Cumplir (plenamente) este acuerdo exigirá que el Gobierno de Sánchez confronte, o bien con la tecnocracia de Bruselas, o bien con las élites económicas y empresariales españolas. O se financia imponiendo una flexibilización del objetivo de déficit, o se financia con cargo a una reforma tributaria. O, en tercer caso, se defraudan las expectativas de la ciudadanía y el acuerdo se queda en fuegos de artificio.”

<https://ctxt.es/es/20180905/Firmas/21589/pedro-sanchez-unidos-podemos-austeridad-deficit-reforma-fiscal-dani-rodriknacho-alvarez.htm>

“La paradoja de nuestro tiempo”

Según David Held (2010) la ‘paradoja de nuestro tiempo’ radica en que los problemas globales fundamentales (asociados con cómo compartimos el planeta, el sostenimiento de las sociedades y el establecimiento de regulaciones globales) trascienden cada vez más las fronteras políticas, pero las herramientas para abordarlos son inadecuadas o insuficientes (los problemas se abordan ad hoc, con instituciones internacionales/globales que carecen de coordinación y rendición de cuentas).

Esta paradoja expresa un problema de gobernanza global: los problemas globales no pueden resolverse plena o satisfactoriamente a nivel nacional ni por las naciones actuando solas. Peor aún, la brecha entre la necesidad de soluciones globales y la incapacidad de las instituciones multilaterales para satisfacerla es cada vez mayor.

Held, David (2010): *Cosmopolitanism: Ideals and realities*, Polity Press.

'for studies of how institutions are formed and affect prosperity'

"The Royal Swedish Academy of Sciences has decided to award the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2024 to

Daron Acemoglu

Massachusetts Institute of Technology, Cambridge, USA

Simon Johnson

Massachusetts Institute of Technology, Cambridge, USA

James A. Robinson

University of Chicago, IL, USA

'for studies of how institutions are formed and affect prosperity'

They have helped us understand differences in prosperity between nations

This year's laureates (...) have demonstrated the importance of societal institutions for a country's prosperity. Societies with a poor rule of law and institutions that exploit the population do not generate growth or change for the better. The laureates' research helps us understand why.

When Europeans colonised large parts of the globe, the institutions in those societies changed. This was sometimes dramatic, but did not occur in the same way everywhere. In some places the aim was to exploit the indigenous population and extract resources for the colonisers' benefit. In others, the colonisers formed inclusive political and economic systems for the long-term benefit of European migrants.

The laureates have shown that one explanation for differences in countries' prosperity is the societal institutions that were introduced during colonisation. Inclusive institutions were often introduced in countries that were poor when they were colonised, over time resulting in a generally prosperous population. This is an important reason for why former colonies that were once rich are now poor, and vice versa.

Some countries become trapped in a situation with extractive institutions and low economic growth. The introduction of inclusive institutions would create long-term benefits for everyone, but extractive institutions provide short-term gains for the people in power. As long as the political system guarantees they will remain in control, no one will trust their promises of future economic reforms. According to the laureates, this is why no improvement occurs.

However, this inability to make credible promises of positive change can also explain why democratisation sometimes occurs. When there is a threat of revolution, the people in power face a dilemma. They would prefer to remain in power and try to placate the masses by promising economic reforms, but the population are unlikely to believe that they will not return to the old system as soon as the situation settles down. In the end, the only option may be to transfer power and establish democracy.

'Reducing the vast differences in income between countries is one of our time's greatest challenges. The laureates have demonstrated the importance of societal institutions for achieving this,' says Jakob Svensson, Chair of the Committee for the Prize in Economic Sciences."

<https://www.nobelprize.org/prizes/economic-sciences/2024/press-release/>

**Acemoglu y Robinson sobre
por qué los países no prosperan**

“This book is about the huge differences in incomes and standards of living that separate the rich countries ... from the poor (...) Egypt is poor precisely because it has been ruled by a narrow elite that have organized society for their own benefit at the expense of the vast mass of people. Political power has been narrowly concentrated, and has been used to create great wealth for those who possess it.”

“... poor countries are poor for the same reason that Egypt is poor. Countries such as Great Britain and the United States became rich because their citizens overthrew the elites who controlled power and created a society where political rights were much more broadly distributed, where the government was accountable and responsive to citizens, and where the great mass of people could take advantage of economic opportunities.”

“... the reason that Britain is richer than Egypt is because in 1688, Britain (or England, to be exact) had a revolution that transformed the politics and thus the economics of the nation. People fought for and won more political rights, and they used them to expand their economic opportunities. The result was a fundamentally different political and economic trajectory, culminating in the Industrial Revolution.”

“The Industrial Revolution and the technologies it unleashed didn’t spread to Egypt, as that country was under the control of the Ottoman Empire, which treated Egypt in rather the same way as the Mubarak family later did. Ottoman rule in Egypt was overthrown by Napoleon Bonaparte in 1798, but the country then fell under the control of British colonialism, which had as little interest as the Ottomans in promoting Egypt’s prosperity. Though the Egyptians shook off the Ottoman and British empires and, in 1952, overthrew their monarchy, these were not revolutions like that of 1688 in England, and rather than fundamentally transforming politics in Egypt, they brought to power another elite as disinterested in achieving prosperity for ordinary Egyptians as the Ottoman and British had been. In consequence, the basic structure of society did not change, and Egypt stayed poor.”

“Egypt has had revolutions in the past that did not change things, because those who mounted the revolutions simply took over the reins from those they’d deposed and re-created a similar system. It is indeed difficult for ordinary citizens to acquire real political power and change the way their society works. But it is possible, and we’ll see how this happened in England, France, and the United States, and also in Japan, Botswana, and Brazil. Fundamentally it is a political transformation of this sort that is required for a poor society to become rich.”

“Central to our theory is the link between inclusive economic and political institutions and prosperity. Inclusive economic institutions that enforce property rights, create a level playing field, and encourage investments in new technologies and skills are more conducive to economic growth than extractive economic institutions that are structured to extract resources from the many by the few and that fail to protect property rights or provide incentives for economic activity. Inclusive economic institutions are in turn supported by, and support, inclusive political institutions, that is, those that distribute political power widely in a pluralistic manner and are able to achieve some amount of political centralization so as to establish law and order, the foundations of secure

property rights, and an inclusive market economy. Similarly, extractive economic institutions are synergistically linked to extractive political institutions, which concentrate power in the hands of a few, who will then have incentives to maintain and develop extractive economic institutions for their benefit and use the resources they obtain to cement their hold on political power.”

“These tendencies do not imply that extractive economic and political institutions are inconsistent with economic growth. On the contrary, every elite would, all else being equal, like to encourage as much growth as possible in order to have more to extract ... What is crucial, however, is that growth under extractive institutions will not be sustained, for two key reasons. First, sustained economic growth requires innovation, and innovation cannot be decoupled from creative destruction, which replaces the old with the new in the economic realm and also destabilizes established power relations in politics. Because elites dominating extractive institutions fear creative destruction, they will resist it ... Second, the ability of those who dominate extractive institutions to benefit greatly at the expense of the rest of society implies that political power under extractive institutions is highly coveted, making many groups and individuals fight to obtain it. As a consequence, there will be powerful forces pushing societies under extractive institutions toward political instability.

The synergies between extractive economic and political institutions create a vicious circle, where extractive institutions, once in place, tend to persist. Similarly, there is a virtuous circle associated with inclusive economic and political institutions. But neither the vicious nor the virtuous circle is absolute ... some societies have been able to break the mold and transition toward inclusive institutions. Our explanation for these transitions is historical ... Major institutional change, the requisite for major economic change, takes place as a result of the interaction between existing institutions and critical junctures. Critical junctures are major events that disrupt the existing political and economic balance in one or many societies, such as the Black Death...; the opening of Atlantic trade routes ... ; and the Industrial Revolution.”

“Why does the path of institutional change differ across societies? The answer to this question lies in institutional drift ... two otherwise similar societies will also drift apart institutionally—albeit, again, slowly. Conflict over income and power, and indirectly over institutions, is a constant in all societies. This conflict often has a contingent outcome, even if the playing field over which it transpires is not level. The outcome of this conflict leads to institutional drift. But this is not necessarily a cumulative process. It does not imply that the small differences that emerge at some point will necessarily become larger over time. On the contrary ... small differences open up, and then disappear, and then reappear again. However, when a critical juncture arrives, these small differences that have emerged as a result of institutional drift may be the small differences that matter in leading otherwise quite similar societies to diverge radically.”

“There should be little doubt that in fifty or even a hundred years, the United States and Western Europe, based on their inclusive economic and political institutions, will be richer, most likely considerably richer, than sub-Saharan Africa, the Middle East, Central America, or Southeast Asia.”

“... nations likely to grow over the next several decades—albeit probably under extractive institutions—are those that have attained some degree of political centralization.”

“Our theory also suggests that growth under extractive political institutions, as in China, will not bring sustained growth, and is likely to run out of steam. Beyond these cases, there is much uncertainty. Cuba, for example, might transition toward inclusive institutions and experience a major economic transformation, or it may linger on under extractive political and economic institutions. The same is true of North Korea and Burma (Myanmar) in Asia.”

“Even greater caution is necessary in drawing policy recommendations from this broad account of the origins of prosperity and poverty (...) Of course, our theory is all about how nations can take steps toward prosperity—by transforming their institutions from extractive to inclusive. But it also makes it very clear from the outset that there are no easy recipes for achieving such a transition.”

“In this, as in most things, avoiding the worst mistakes is as important as—and more realistic than—attempting to develop simple solutions. Perhaps this is most clearly visible when we consider current policy recommendations encouraging ‘authoritarian growth’ based on the successful Chinese growth experience of the last several decades. We next explain why these policy recommendations are misleading and why Chinese growth, as it has unfolded so far, is just another form of growth under extractive political institutions, unlikely to translate into sustained economic development.”

Acemoglu, Daron; James Robinson (2012): *Why Nations Fail*, Crown Publishers.

**Instituciones
políticas ‘adecuadas’
explican el desarrollo**

“... the two fundamental features of the world economy in our times re-emerge. One is the gap between rich and poor countries. Two hundred years ago, there was no such gap, at least not on the scale we are used to today; nor, most probably, will there be one in 200 years’ time. But the present reality is of astounding difference: the same people can live in abject poverty in one country, yet be prosperous once they move to another.

This book takes the graphic example of the twin towns of Nogales, one on the Mexican side of the border, the other on the American side: why does a border make such a difference?”

“Scholars have struggled for decades to find a convincing answer. Often, the direction of search has been technocratic. In the 1960s, the dominant explanation was that poor countries lacked capital; by the 1980s, it was that they had poor economic policies.

The last decade has appeared to offer a new and potent clue: the ascent of China, which is the other fundamental feature of our times. China’s growth is an economic phenomenon without precedent that has implications both for poverty and geopolitics. It has lifted millions out of penury and the country is projected soon to topple America from its position as the world’s largest economy. The beacon offered by China has been widely interpreted, especially by African elites, as demonstrating the benefits of autocracy.”

“Far from seeing China as the clue to spreading prosperity, Acemoglu and Robinson see it as yet another instance of a society rushing into a cul-de-sac. China is not, on their analysis, on course for our own level of prosperity. Their argument is that the modern level of prosperity rests upon political foundations. Proximately, prosperity is generated by investment and innovation, but these

are acts of faith: investors and innovators must have credible reasons to think that, if successful, they will not be plundered by the powerful.

For the polity to provide such reassurance, two conditions have to hold: power has to be centralised and the institutions of power have to be inclusive. Without centralised power, there is disorder, which is anathema to investment.”

“China resoundingly fails to tick the box of inclusive institutions. Acemoglu and Robinson quote a summary of the structure of Chinese political power: ‘The party controls the armed forces; the party controls cadres; and the party controls the news.’”

“Their argument is that order without inclusive institutions may enable an economy to escape poverty, but will not permit the full ascent to modern prosperity. Their explanation is that if the institutions of power enable the elite to serve its own interest – a structure they term ‘extractive institutions’ – the interests of the elite come to collide with, and prevail over, those of the mass of the population.

“... it is only in the interest of the elite to cede power to inclusive institutions if confronted by something even worse, namely the prospect of revolution. The foundations of prosperity are political struggle against privilege.”

Collier, Paul (2012): “Why Nations Fail by Daron Acemoglu and James Robinson – review”, 11 Mar 2012

<https://www.theguardian.com/books/2012/mar/11/why-nations-fail-acemoglu-robinson-review>

**Instituciones políticas
'adecuadas' explican
el desarrollo?**

“Why Nations Fail ... makes an argument that is appealingly simple: countries with ‘inclusive’ (rather than ‘extractive’) political and economic institutions are the ones that succeed and survive over the long term.

Ultimately, though, the book is a major disappointment. I found the authors’ analysis vague and simplistic. Beyond their ‘inclusive vs. extractive’ view of political and economic institutions, they largely dismiss all other factors—history and logic notwithstanding. Important terms aren’t really defined, and they never explain how a country can move to have more ‘inclusive’ institutions.

For example, the book goes back in history to talk about economic growth during Roman times. The problem with this is that before 800AD, the economy everywhere was based on sustenance farming. So the fact that various Roman government structures were more or less inclusive did not affect growth.

The authors demonstrate an oddly simplistic world view when they attribute the decline of Venice to a reduction in the inclusiveness of its institutions. The fact is, Venice declined because competition came along. The change in the inclusiveness of its institutions was more a response to that than the source of the problem. Even if Venice had managed to preserve the inclusiveness of their institutions, it would not have made up for their loss of the spice trade. When a book tries to use one theory to explain everything, you get illogical examples like this.”

“Another surprise was the authors’ view of the decline of the Mayan civilization. They suggest that infighting—which showed a lack of inclusiveness—explains the decline. But that overlooks the primary reason: the weather and water availability reduced the productivity of their agricultural system, which undermined Mayan leaders’ claims to be able to bring good weather.”

“The authors believe that political ‘inclusiveness’ must come first, before growth is achievable. Yet, most examples of economic growth in the last 50 years—the Asian miracles of Hong Kong, Korea, Taiwan, and Singapore—took place when their political tended more toward exclusiveness.”

“... even under the best conditions, growth doesn’t sustain itself. I don’t think even these authors would suggest that the Great Depression, Japan’s current malaise, or the global financial crisis of the last few years came about because of a decline in inclusiveness.

The authors ridicule ‘modernization theory,’ which observes that sometimes a strong leader can make the right choices to help a country grow, and then there is a good chance the country will evolve to have more ‘inclusive’ politics. Korea and Taiwan are examples of where this has occurred.

The book also overlooks the incredible period of growth and innovation in China between 800 and 1400. During this 600-year period, China had the most dynamic economy in the world and drove a huge amount of innovation, such as advanced iron smelting and ship building. As several well-regarded authors have pointed out, this had nothing to do with how ‘inclusive’ China was, and everything to do with geography, timing, and competition among empires.

The authors have a problem with Modern China because the transition from Mao Zedong to Deng Xiaoping didn’t involve a change to make political institutions more inclusive. Yet, China, by most measures, has been a miracle of sustained economic growth.”

“This points to the most obvious theory about growth, which is that it is strongly correlated with embracing capitalistic economics—independent of the political system. When a country focuses on getting infrastructure built and education improved, and it uses market pricing to determine how resources should be allocated, then it moves towards growth. This test has a lot more clarity than the one proposed by the authors, and seems to me fits the facts of what has happened over time far better.”

“... we’ve offered a simple theory and used it to explain the main contours of economic and political development around the world since the Neolithic Revolution.

Gates, Bill (2013): “Inclusive vs Extractive. Good ideas, but missing analysis”, 26 Feb 2013

<https://www.gatesnotes.com/Why-Nations-Fail>

<http://foreignpolicy.com/2013/03/12/what-bill-gates-got-wrong-about-why-nations-fail/>

Jared Diamond sobre
Why nations fail

“The fence that divides the city of Nogales is part of a natural experiment in organizing human societies. North of the fence lies the American city of Nogales, Arizona; south of it lies the Mexican city of Nogales, Sonora. On the American side, average income and life expectancy are higher, crime and corruption are lower, health and roads are better, and elections are more democratic ... The reasons for those differences between the two Nogaleses are the differences between the current political

and economic institutions of the US and Mexico. This example, which introduces *Why Nations Fail* by Daron Acemoglu and James Robinson, illustrates on a small scale the book's subject. Power, prosperity, and poverty vary greatly around the world. Norway, the world's richest country, is 496 times richer than Burundi, the world's poorest country (average per capita incomes \$84,290 and \$170 respectively, according to the World Bank). Why? That's a central question of economics.

Different economists have different views about the relative importance of the conditions and factors that make countries richer or poorer. The factors they most discuss are so-called 'good institutions,' which may be defined as laws and practices that motivate people to work hard, become economically productive, and thereby enrich both themselves and their countries. They are the basis of the Nogales anecdote, and the focus of *Why Nations Fail*."

"In their narrow focus on inclusive institutions, however, the authors ignore or dismiss other factors. I mentioned earlier the effects of an area's being landlocked or of environmental damage, factors that they don't discuss. Even within the focus on institutions, the concentration specifically on inclusive institutions causes the authors to give inadequate accounts of the ways that natural resources can be a curse. True, the book provides anecdotes of the resource curse (Sierra Leone cursed by diamonds), and of how the curse was successfully avoided (in Botswana). But the book doesn't explain which resources especially lend themselves to the curse (diamonds yes, iron no) and why. Nor does the book show how some big resource producers like the US and Australia avoid the curse (they are democracies whose economies depend on much else besides resource exports), nor which other resource-dependent countries besides Sierra Leone and Botswana respectively succumbed to or overcame the curse."

"My overall assessment of the authors' argument is that inclusive institutions, while not the overwhelming determinant of prosperity that they claim, are an important factor. Perhaps they provide 50 percent of the explanation for national differences in prosperity. That's enough to establish such institutions as one of the major forces in the modern world."

<http://www.nybooks.com/articles/archives/2012/jun/07/what-makes-countries-rich-or-poor/>

<https://www.nybooks.com/articles/2012/08/16/why-nations-fail/>

<http://marginalrevolution.com/marginalrevolution/2012/05/jared-diamond-reviews-why-nations-fail.html>

"Dictatorship, not democracy, is the default form of government. This is pretty clear from the historical record. The question then, is not why countries aren't democracies, it's why they aren't dictatorships. ... 'Why do dictatorships decay?' or 'Why do dictatorships fail?' Why does power move from the center to the periphery? (...) In this framework, democracy is a decayed form of dictatorship... It is a process, not a destination. Thus, 'democracy' in Argentina is not forced to be the same as 'democracy' in Norway. Dictatorship has decayed more in the latter than in the former."

Comment by Steven Kopits

<http://marginalrevolution.com/marginalrevolution/2012/05/jared-diamond-reviews-why-nations-fail.html>

“Trouble with this sort of stuff: it's called ‘teleosis’ in historical criticism and it's a form of ‘anachronism’, meaning the reason fits the data perfectly only because it is backward looking and, like many economic models, tweak parameters to fit the data but has no future predictive value. Like any nth-order polynomial curve that can fit the data but, depending on the degree chosen (i.e., the highest polynomial in the Taylor series expansion) can predict either that the curve will flatten, will rise, or will fall (MATLAB has a demo on this).”

Aristotle, the Greek scientist, first coined the theory of teleosis to explain why an acorn grows into an oak tree: basically, ‘it's just destiny, the way things are meant to be’ kind of like a ‘winning team wins and a losing team loses’ sort of circular logic but often... ‘past performance is an indicator of future success’. Another trick: in math often the initial conditions determine future paths, hence a country that was in the lead 200 years ago might still be in the lead today.”

“Nowadays, agriculture is less a factor so I would say ‘initial conditions’ matter more ... meaning ‘Hollywood favors movie producers and they flock there from all over the world’, ‘Silicon Valley favors computer designers’, ‘China manufacturing’. All of this being a form of Aristotelian teliosis but it does predict the future and explain the past pretty well.”

Comment by Ray Lopez

<http://marginalrevolution.com/marginalrevolution/2012/05/jared-diamond-reviews-why-nations-fail.html>

“Doesn't explain why some countries had rule of law, property rights, etc. before other countries. Partial innovations don't seem to guarantee success - Italian city-states invented bonds. The Hanseatic League entrenched banks. The Dutch invented the recognizably modern corporation. So why was the 19th century an account of British empirehood?”

Comment by david (sobre Ferguson, Niall (2011): *Civilization: The West and the Rest*, Penguin)

<http://marginalrevolution.com/marginalrevolution/2012/05/jared-diamond-reviews-why-nations-fail.html>

“China did engage in long-distance trade: they were not a hermit kingdom like Japan or North Korea. However they did not need to go far abroad to do that trading: the long distance trade came to them, notably all that silver from the mine of the New World.

Europe didn't have anything that the world wanted which couldn't be found at closer remove; so the Europeans had to go abroad to trade for silk, spices and so forth. China could sit back and let the trader come to China. That did work to China's disadvantage in the long term (though only after the Industrial Revolution left Europe towering above the rest of the world), but it did not mean China was an isolated backwater.”

Comment by JonF

<http://marginalrevolution.com/marginalrevolution/2012/05/jared-diamond-reviews-why-nations-fail.html>

El ‘pasillo estrecho’

“Liberty needs the state and the laws. But it is not given by the state or the elites controlling it. It is taken by regular people, by society. Society needs to control the state so that it protects and promotes people’s liberty rather than quashing it ... Liberty

needs a mobilized society that participates in politics, protests when it's necessary, and votes the government out of power when it can.

The Narrow Corridor to Liberty

Our argument in this book is that for liberty to emerge and flourish, both state and society must be strong. A strong state is needed to control violence, enforce laws, and provide public services that are critical for a life in which people are empowered to make and pursue their choices. A strong, mobilized society is needed to control and shackle the strong state ... without society's vigilance, constitutions and guarantees are not worth much more than the parchment they are written on.

Squeezed between the fear and repression wrought by despotic states and the violence and lawlessness that emerge in their absence is a narrow corridor to liberty. It is in this corridor that the state and society balance each other out. This balance is not about a revolutionary moment. It's a constant, day-in, day-out struggle between the two. This struggle brings benefits. In the corridor the state and society do not just compete, they also cooperate. This cooperation engenders greater capacity for the state to deliver the things that society wants and foments greater societal mobilization to monitor this capacity.

What makes this a corridor, not a door, is that achieving liberty is a process; you have to travel a long way in the corridor before violence is brought under control, laws are written and enforced, and the state starts providing services to its citizens. It is a process because the state and its elites must learn to live with the shackles society puts on them and different segments of society have to learn to work together despite their differences."

"The story of women's liberation isn't unique or exceptional. Liberty almost always depends on society's mobilization and ability to hold its own against the state and its elites."

"Our main argument is that as the world changes, the state must expand and take on new responsibilities, but this in turn requires society to become more capable and vigilant ... We need the state to develop additional capabilities and shoulder fresh responsibilities, but only if we can find new ways of keeping it shackled, mobilizing society and protecting our liberties."

Acemoglu, Daron; Simon Johnson (2019): *The narrow corridor: states, societies, and the fate of liberty*, Penguin.

Respuesta de los países a una crisis según Diamond (2020)

"Gardels: What is the main lesson from how nations dealt with this pandemic?

Diamond: The main new lesson concerns an extension of national identity, which is important for nations facing a crisis. The current crisis may help us develop a global identity by making it obvious that we are all in the same boat, all people everywhere in the world. We are realizing now that COVID-19 is everyone's problem — as is climate change, resource depletion, inequality and the risk of nuclear weapons.

Gardels: In the historical frame, what are some examples of nations successfully navigating challenging experiences?

Diamond: Germany is high on my list. Over decades, it came to grips with the legacy of World War II, while at the same time laying the groundwork for reunification when the Cold War ended. Germany acknowledged the Holocaust in such a convincing and thorough way, including in its education system, that it left no doubts about all those “never again” pledges. I remember Willy Brandt kneeling in humility and penance in 1970 at a monument to the Warsaw ghetto uprising. By contrast, though Japan has been successful on other counts, it has really failed in this respect.

Though no West German chancellor alone was able to bring about reunification, Brandt’s ‘Ostpolitik’ in the 1970s prepared the way. If he had not opened to the East, Russia and even France and Britain would not have tolerated reunification later on. This is another element in how nations resolve crises: the qualities of leadership at historic junctures.”

“**Gardels:** In Japan, there has been a kind of seesaw experience. First, you had the Meiji reforms of the 19th century, which had the quality of a realistic self-appraisal and selective adoption: Its leaders understood they had fallen behind the West in industrial modernization but gradually renovated their system by borrowing from the West, cognizant of the restraints of local resistance from the traditional political order. They didn’t go too far, too fast.

Then, within decades, you had the next stage, an overbearance and an overconfidence on the part of the military elite after the Russo-Japanese War, in which an Asian nation bested a European power for the first time. That led in turn to overreach, which resulted in the disaster of World War II, total defeat and the nuclear devastation of Hiroshima and Nagasaki.

But then, after the war and the American occupation, you had yet another phase of adaptation based on realistic self-appraisal, making Japan a prosperous member of the advanced nations. Is there a pattern there?

Diamond: Well, yes, in the sense of recurrent crises. The fact that Japan succeeded so well in the Meiji era didn’t guarantee that it would succeed or fail later on ... There are some major areas where Japan has been dragging its feet. The Japanese did the opposite of Germany by not achieving a meaningful reconciliation with Korea and China ... Japan remains relatively underequipped compared to heavily armed neighbor countries that have good reason to loathe it.

Japan has also never really come to terms with the role of women in modern society. Then there is Japan’s policy of immigration — or, rather, of non-immigration (...) In a shrinking nation, who will provide childcare so women can reenter the workforce, or eldercare in a society where people live longer on average than almost anywhere else? Then ... there are the large fiscal issues of how to pay for pensions when the active workforce is shrinking. I’d say Japan is at yet another turning point.”

“**Diamond:** I don’t think one can generalize about some cause and effect of successful and then failing generations. In the case of Japan, you’re correct that after their victory in the Russo-Japanese War, the Japanese learned the wrong lesson. But there is the opposite case: After being defeated in Vietnam, the U.S. nonetheless didn’t learn the lessons and went on to invade Iraq and suffer many of the same consequences.”

“**Gardels:** The essence of realistic self-appraisal is to know others and how, as a nation, you fit into the balance of power that exists. How did Japan’s leaders miss this before the war?

Diamond: Realistic self-appraisal was lacking for a particular reason. In the Meiji era, the reformist leaders had all been to the West after the opening of 1853. One of the first things that Meiji Japan did was to send out an observer team that spent a year and a half going around the West, studying best practices. They made a conscious effort to learn from the West. In the 1930s, many of those in the Japanese military who took control had not spent much time in the West (...) What matters is whether those in charge in the governing class share a worldview based on knowing the world, not just the part of it that fits with their inclination."

"Gardels: Clearly, the Japanese militarists ... misread the challenge they were inviting. A parallel strikes me today. While Deng Xiaoping followed the notion of 'bide your time and hide your strength' as China developed, Xi Jinping has discarded any such restraint and boasted that the Middle Kingdom has returned to the center of the world stage and would even overtake the U.S. in technological supremacy. This proved too much for the Washington foreign policy establishment, no less Donald Trump and his team, who fought back with a trade war.

Xi's problem is that he seems to have moved too soon — China's technology advances still depend heavily on the West, for example with semiconductor chips. This seems a costly misapprehension not unlike the Japanese militarists vis-à-vis American steel production capacity before World War II.

Diamond: What was true of the Japanese militarists and may be true of Xi as you suggest, also applies to the U.S. today — people's mindset, the narrative they choose to believe, often overrides their perception of reality and the facts in front of their faces. This is likely true of the virtual paranoia many Americans feel today about China and the prospect of an 'Asian century' in which it dominates.

China's disadvantage, however, is that, having never been a democracy, it is much harder to challenge any misperception of reality. Despite its faults, in a democracy, you can debate big ideas and alternative scenarios. There is no real experience of the body politic as a whole debating big ideas in China. What springs from the top rules.

In the millennia since state government was first established in the Fertile Crescent, the record certainly shows that dictatorships can do things faster. Yet no one has yet figured out how to ensure that the faster decisions of dictatorships are good ones. China seems a good illustration of the problem.

Democracies also make bad decisions, of course. But they can more easily correct them."

"Gardels: But the lesson for the U.S. these days, and for other divided democracies, is that peril beckons when the spirit of compromise evaporates. Compromise and the ability to arrive at a governing consensus fails when the civic discourse is degraded and there's no trust in impartial institutions. The whole thing can collapse.

Diamond: I see the possibility of that in the U.S. today. It is a process of erosion that at some moment reaches a point of no return. If democracy ends in the U.S., it's not going to be the way it ended in Chile with a military coup. It will end through a slow erosion, a continuation of trends we see now: restrictions on the ability of people to register to vote, decreasing voter turnout, executive

interference with the judiciary, struggles between the executive and the Congress. I don't take it for granted that democracy in the U.S. is going to overcome all obstacles (...) Why the breakdown? My best analysis all these years later is that we had then already entered a period of sharp decline in face-to-face communication in the U.S. — more than in any other country and before any other country. This was a result both of the culture of mobility — people moving far from their original communities, often to the other end of this large country — as well as growing inequality resulting from de-industrialization in the Rust Belt and the rise of the global economy that had the impact of segregating communities along class and educational lines.”

“**Gardels:** I would add that, today, you have two elements reinforcing each other: the demise of socializing institutions and the rise of polarizing ones. For example, we don't have a military draft anymore, or nearly universal attendance in public schools, where once all ethnicities, races and classes were thrown together in face-to-face interaction. At the same time, the mainstream media plays to cultural niches in highly competitive markets while the big social media conglomerates promote virality among the like-minded as their business model.

Diamond: I agree ... But in the U.S., we have a long-standing low level of social capital and trust compared to other countries, partly because of our geographic distances. Sometimes when Americans move, they move 3,000 miles away, from coast to coast. When Germans move, they move a short distance, like from Hannover to Berlin. You can still take the train for the day and see your friends in Hannover ... We move often, and we move long distances, whereas Germans and Italians, for example, move less often, and their countries are small so they go shorter distances.

I stress this because spatial mobility in America is so common, we take it for granted and don't grasp its social consequences. Now they are coming to bear.

Gardels: In the last presidential election, analyses show that one indicator of sympathy with Trump's populist agenda was how far voters moved from their birthplaces ... The British journalist David Goodhart discovered the same correlation in the Brexit vote, between the ‘anywheres’ — mobile elites — and the ‘somewheres,’ who remained local. The mobile folks voted to remain in the European Union, while the locals voted to exit.

Diamond: This is not at all surprising. And it is worsening since the anywheres and the somewheres have little crossover in their daily life experience.”

“**Gardels:** Let's move on to the planetary crisis of climate change. You note in your book that the ability to properly assess realities and take effective action is most successful for those individuals and nations who have a precedent for coping with a crisis. ‘We were challenged in the past and surmounted the challenge, so we can again,’ goes the logic (...) On the planetary scale, there is no precedent for all nations and societies facing a common crisis and overcoming it. What resources or experience can we draw on in this present challenge to civilization as a whole?

Diamond: When I discussed this issue in the first version of the book, I was pessimistic because I said that there is no precedent; the world has never faced and dealt with a challenge of the scope of climate change. However, I revised my thinking by the time I finished the book.

In fact, the world has a track record over the last 40 years of having solved really difficult problems

in diffuse and unflashy ways — for example, eradicating smallpox. To eradicate the threat of smallpox contagion, you had to eradicate it in every country in the far reaches of the world...

Then there was the agreement about defining economic zones in shallow waters. So many countries in the world have overlapping zones to which they claim sovereignty. Nevertheless, though it took quite a while, an agreement was reached by international treaty.

All nations also joined an agreement to eliminate chlorofluorocarbons from the atmosphere to reduce damage to the ozone layer. Mining the seabed is another case where international agreement was reached, even by landlocked countries.

Still, in the end, what has enabled nations to face and surmount a crisis is a sense of common identity that can mobilize allegiance to a course of action. Today, especially given the revival of nationalism, there is no such solid global identity. That is the chief challenge in battling climate change."

"Gardels: What about the fundamental cultural attributes that contribute to a failed or successful nation? I'm thinking of how the Confucian-influenced societies of East Asia — Singapore, Taiwan, South Korea, Japan, China — all rose from underdevelopment to prosperity over recent decades. Yet many nations in Africa or Latin America seem to have stalled.

Diamond: This is a valid point, though mainstream anthropology disdains any talk of 'sick societies,' only those with different cultural roots and practices.

Confucian cultures have a low level of individualism and a higher level of community compared to others. There's an interesting argument that attributes this to the development of rice agriculture, a form of economic activity that requires cooperation and collective effort, in contrast to wheat agriculture, which needs only individual farmers.

As a geographer, I have other thoughts on North America and Latin America. In my undergraduate geography course ... I discuss why North America is more successful economically. There are several factors involved.

One factor is that temperate zones, in general, are economically more successful than the tropics because of the higher productivity and soil fertility of temperate agriculture, which in turn relates to the public health burden. All of North America is a temperate zone. South America only has a small temperate zone. It's in the far south in Chile, Argentina and Uruguay. Those are the richest countries in Latin America. The richest part of Brazil also lies in the temperate zone.

The second factor is a historical one related to the sailing distance from Europe to the Americas. The sailing distance was shorter from Britain to North America. It was longer from Spain to Argentina and still longer from Spain around the horn to Peru. A shorter sailing distance meant that the ideas and technology of the Industrial Revolution spread much more quickly from Britain, where it originated, to North America, than from Spain to Latin America.

Still another factor is the legacy of Spanish government versus the legacy of British government (...) Democracy did develop in Britain rather than Spain, and so North America inherited British government and British democracy while Latin America inherited Spanish centralist government and absolutist politics.

Then still another factor is that independence for the U.S. was a more radical break than it was in South America. After the Revolutionary War, all the royalists in the U.S. either fled or were killed. So there was a relatively clean break from Britain. Canada did not have that break, and the break in Latin America was much less abrupt and came later.

Gardels: Octavio Paz, the Mexican Nobel laureate poet, always added the cultural element when he spoke about ‘the border of time’ between north and South. The U.S. was a child of the Protestant Reformation and the Enlightenment, he often said, while Latin America was the child of the Counter-Reformation. This imprinted a distinctive mentality on each culture, one with a mind open to the future and less enamored by authority, the other closed and traditional.”

Gardels, Nathan; Jared Diamond (2020): “Jared Diamond: Why Nations Fail Or Succeed When Facing A Crisis. An interview with Jared Diamond about his latest book, ‘Upheaval: Turning Points for Nations in Crisis.’”, 28 Jul 2020

<https://www.noemamag.com/jared-diamond-why-nations-fail-or-succeed-when-facing-a-crisis/>

Extra: Premio Nobel en Ciencias Económicas 2025

‘for having explained innovation-driven economic growth’

“The Royal Swedish Academy of Sciences has decided to award the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2025 to Joel Mokyr, Philippe

Aghion and Peter Howitt ‘for having explained innovation-driven economic growth’

with one half to

Joel Mokyr

Northwestern University, Evanston, IL, USA,

Eitan Berglas School of Economics, Tel Aviv University, Israel

‘for having identified the prerequisites for sustained growth through technological progress’

and the other half jointly to

Philippe Aghion

Collège de France and INSEAD, Paris, France,

The London School of Economics and Political Science, UK

Peter Howitt

Brown University, Providence, RI, USA

‘for the theory of sustained growth through creative destruction’

They show how new technology can drive sustained growth

Over the last two centuries, for the first time in history, the world has seen sustained economic growth. This has lifted vast numbers of people out of poverty and laid the foundation of our prosperity. **This year’s laureates (...) explain how innovation provides the impetus for further progress.**

Technology advances rapidly and affects us all, with new products and production methods replacing old ones in a never-ending cycle. This is the basis for sustained economic growth, which results in a better standard of living, health and quality of life for people around the globe.

However, this was not always the case. Quite the opposite – stagnation was the norm throughout most of human history. Despite important discoveries now and again, which sometimes led to improved living conditions and higher incomes, growth always eventually levelled off.

Joel Mokyr used historical sources as one means to uncover the causes of sustained growth becoming the new normal. He demonstrated that if innovations are to succeed one another in a self-generating process, we not only need to know that something works, but we also need to have scientific explanations for why. The latter was often lacking prior to the industrial revolution, which made it difficult to build upon new discoveries and inventions. He also emphasised the importance of society being open to new ideas and allowing change.

Philippe Aghion and Peter Howitt also studied the mechanisms behind sustained growth. In an article from 1992, they constructed a mathematical model for what is called creative destruction: when a new and better product enters the market, the companies selling the older products lose out. The innovation represents something new and is thus creative. However, it is also destructive, as the company whose technology becomes passé is outcompeted.”

“ ‘The laureates’ work shows that economic growth cannot be taken for granted. We must uphold the mechanisms that underly creative destruction, so that we do not fall back into stagnation,’ says John Hassler, Chair of the Committee for the prize in economic sciences.”

<https://www.nobelprize.org/prizes/economic-sciences/2025/press-release/>

La cultura del crecimiento

“... not much has been done to show that much of what happened in the economies of the world in the past three centuries was a function of what people believed. Above all, modern economic growth or ‘the Great Enrichment’ depended on a set of radical changes in beliefs, values, and preferences—a set I will refer to as ‘culture’.”

“... the Enlightenment was not a mass-movement. It was an elite phenomenon, largely confined to intellectuals, scholars, a literate and educated minority that included not just physicians and philosophers but also practical people such as engineers, industrialists, and instrument makers, yet still a small sliver of the population. New scientific insights, the invention of new techniques, their successful application to production—all were the result of the actions of a fairly small proportion of the population. I also have maintained that what mattered was not only what people believed about social contracts, political pluralism, religious tolerance, human rights and so on, but also what they believed about the relationship between humans and their physical environment and role of what they called ‘useful knowledge’ to improve material well-being. The fundamental belief that the human lot can be continuously improved by bettering our understanding of natural phenomena and regularities and the application of this understanding to production has been the cultural breakthrough that made what came after possible.”

“... ‘early modern’ Europe prepared the ground for the vast changes in the eighteenth century: the Enlightenment, the Industrial Revolution, and the rise of useful knowledge as the main engine of economic history.”

“If economic growth before the Industrial Revolution, such as it was, was largely driven by trade, more effective markets and improved allocations of resources, growth in the modern era has been increasingly driven by the expansion of what was known in the age of Enlightenment as ‘useful knowledge.’”

What had started in a few counties in the English midlands and the Scottish lowlands soon spread to the European continent and to America. By the end of the nineteenth century, the Industrial Revolution had transformed the economies of much of Europe and the European offshoots, and it began to spread to Japan and other non-Western economies. Transformative technological change turned from an unusual and remarkable phenomenon to something routine, expected. By 1890, one might not know what kind of and where a wave of technological progress would erupt, but one got accustomed to something happening. The results were inescapable: nearly everywhere on the planet men and women lived longer, ate better, enjoyed more leisure, and had access to resources and delights that previously had been reserved for the very rich and powerful, or more commonly, had been utterly unknown.”

“I propose a new explanation, largely based on events in Europe. It is one that relies on something I call ‘culture,’ but unlike most accounts that rely on this vague concept, the notion of culture I deploy will be circumscribed and defined with precision.”

“... much of the literature in economic history that is trying to explain differences in economic performance and living standards, both by economists and historians, has accepted in one way or another Douglass North’s call for the integration of institutions into our narrative of economic growth (...). An economy that grows as a result of favorable institutions requires a world of well-delineated and respected property rights, enforceable contracts, law and order, a low level of opportunism and rent-seeking, a high degree of inclusion in political decision making and the benefits of growth, and a political organization in which power and wealth are as separate as is humanly possible. Such institutions (...) are credited with many positive economic developments in the past (...) But (...) the puzzle is that better markets, more cooperative behavior, and more efficient allocations simply do not in themselves account for modern economic growth. What is far harder to explain is the growth of technological creativity and innovation in Europe and especially the surge following the middle of the eighteenth century. The Industrial Revolution, in the sense of an acceleration of technological progress, at first blush does not seem to have been a response to any obvious institutional stimulus. We actually know remarkably little about the kind of institutions that foster and stimulate technological progress and more widely, intellectual innovation.”

“If the generation and continuous improvement of new ‘useful knowledge’—both scientific and technological—is at the core of modern economic growth, the riddle is one of motivation or incentives. Knowledge, as has long been understood, is an unusual commodity, subject to rather serious public good properties: it is very hard to exclude others from using it, and the cost to the owner from sharing it is negligible or zero. As a result, economists suspect that knowledge tends to be chronically underproduced (...) The issue of the exact role of science in the Industrial Revolution is still debated, but there can be no doubt that as growth accelerated, the input from science increased and became the dominant motive power at some point after 1830 (...) My focus is on the

period from 1500 to 1700, during which the cultural foundations of modern growth were laid. These foundations grew out of a set of political and institutional developments and cultural changes that were not intended to produce these results."

"The drivers of technological progress and eventually economic performance were attitude and aptitude. The former set the willingness and energy with which people try to understand the natural world around them; the latter determines their success in turning such knowledge into higher productivity and living standards (...) The proposition I put forward here is that the explosion of technological progress in the West was made possible by cultural changes. 'Culture' affected technology both directly, by changing attitudes toward the natural world, and indirectly, by creating and nurturing institutions that stimulated and supported the accumulation and diffusion of 'useful knowledge.'"

*"Culture is a set of beliefs, values, and preferences, capable of affecting behavior, that are socially (not genetically) transmitted and that are shared by some subset of society (...) First, **beliefs** contain statements of a positive (factual) nature that pertain to the state of the world, including the physical and metaphysical environments and social relations. Second, **values** pertain to normative statements about society and social relations (often thought of as ethics and ideology), whereas **preferences** are normative statements about individual matters such as consumption and personal affairs. Third, culture is decomposable, that is, it consists of separate cultural elements or features. Much like genes, these traits are largely shared by people of the same culture."*

"For my purposes it seems best to regard culture as something entirely of the mind, which can differ from individual to individual and is, to an extent, a matter of individual choice. Institutions are socially determined conditional incentives and consequences to actions. These incentives are parametrically given to every individual and are beyond their control."

*"Technology is above all a consequence of human willingness to investigate, manipulate, and exploit natural phenomena and regularities, and given such willingness, the growth of the stock of knowledge that underpins and conditions the exploitation of knowledge. The willingness and ability to acquire, disseminate, and harness such knowledge are themselves part of culture and thus determine the intensity of the search for knowledge of nature, the agenda of the research, the institutions that govern the community doing the research, the methods of acquiring and vetting it, the conventions by which such knowledge is accepted as valid, and its dissemination to others who might make use of it. It is in this general area that the roots of modern economic growth should be sought—specifically in events and phenomena that precede the eighteenth-century Enlightenment and Industrial Revolution in the centuries (...) roughly speaking between the first voyage to America by Columbus and the publication of the *Principia Mathematica* by Newton. It is the basic argument of this book that European culture and institutions were shaped in those centuries to become more conducive to the kind of activities that eventually led to the economic sea changes that created the modern economies."*

"Why did China not have an Industrial Revolution? (...) The famous 'Needham question'—why Chinese science and technology, after first pulling ahead of Europe, were unable to keep pace—remains, however, irrepressible (...) Before the Industrial Revolution in Europe, China and Europe

had both experienced spells of technological progress. It is impossible to say where technology was more developed by 1700 and 'who was ahead.' In some areas Europe had advanced beyond China, in others it was still trying to catch up."

"To sum up, then, what could explain the Needham puzzle? One tantalizing clue is a famous remark by Nathan Sivin that China had sciences but no Science (...). In this view, China paradoxically lacked a unifying single coordinating mechanism such as a competitive market in which new ideas were tested. In Europe, despite the political fragmentation, the market for ideas worked well enough to allow new entrants to challenge incumbents. At times, such new entrants coordinated a wholesale overthrow of a paradigm. Europe's market for ideas allowed such cultural entrepreneurs to flourish, even if they were perhaps few and far between. Such a focal point in a market for ideas, as long as it does not degenerate into an incontestible authority figure, is a sign of a well-functioning competitive market (...). The competitive process compared the logic and evidence, and the various biases of cultural evolution ended up settling on certain paradigmatic beliefs, coordinated on key players. Isaac Newton played exactly that role, as did Paracelsus, Vesalius, Descartes, Galileo, Lavoisier, Linnaeus, Darwin, Einstein and numerous others. What made such successful entrepreneurs possible was that in Europe the market for ideas was not just contestable, but that ideas were actually continually contested. Intellectual sacred cows were increasingly being led to the slaughterhouse of evidence."

Mokyr, Joel (2016): *A culture of growth. The origins of the modern economy. The Graz Schumpeter Lectures, Princeton University Press.*

"One could view the process of economic growth and the design of growth policy as consisting of several layers. A first layer is that of direct incentives to innovation and capital accumulation: subsidies to capital investment, R&D subsidies, tax credits that encourage innovation, or income tax policies that balance individual incentive considerations with the need to create broad opportunities. A second layer is that of institutions and structural reforms. For example, product and trade liberalization, the structure of educational spending, the organization of financial systems, the design of constitutions, and the allocation of control rights in government and firms. These institutional features affect growth indirectly, in particular through their effects on innovation incentives.

But there is also a third, and perhaps more fundamental, layer of growth: it is that of culture and beliefs. A new literature has been developing over the past five years on the impact of 'culture' on economic outcomes. The word 'culture' in the economic literature refers to individual and collective beliefs, social norms, and various attributes of individuals' preferences that are somehow influenced by their environment, but typically slow moving."

Aghion, Philippe; Peter W. Howitt (2009): *The Economics of Growth, The MIT Press.*

Componente político del crecimiento

"Historically, most of human experience was defined by stagnation or episodic progress. Until roughly two centuries ago, economic advancement rarely persisted across generations. The laureates' work

helps explain how the world moved from this ‘pre-growth’ regime into what we today consider the ‘new normal’, as persistent and innovation-driven expansion.

Joel Mokyr’s contribution lies in tracing how useful knowledge, a symbiosis of propositional (scientific, theoretical) knowledge and prescriptive (practical, implementation) knowledge, became the engine of a self-reinforcing growth trajectory.”

“Aghion & Howitt formalize the notion of creative destruction. Their 1992 model posits that economic growth is driven by successive waves of innovation, each new entrant displacing older firms, products, or methods. They embed this process into a general equilibrium framework, revealing tensions (e.g. between incumbents and entrants, between private incentives and social returns) and policy levers (R&D subsidies, competition policy, patent design) that influence the pace and distribution of growth.”

“... growth is not a passive byproduct of factor accumulation, but a dynamic process that depends on institutional conditions, openness, conflict resolution and incentive structures (...) The laureates’ insights help us interpret not only how past growth emerged, but also how we might manage future transitions.”

- **“Reinforcing knowledge feedback loops.** Mokyr’s framework suggests that when propositional and prescriptive knowledge interact closely, innovation becomes cumulative and self-sustaining. AI, with its capacity to accelerate scientific discovery, automate translation of theory into prototypes and generate new insights, may strengthen this feedback loop. We may be entering a phase where the pace of useful knowledge accumulation accelerates in non-linear ways.
- **Intensified creative destruction.** Aghion & Howitt warn that innovation inherently displaces incumbents and the more radical the innovation, the greater the disruption. AI-driven change may intensify this process, making entire industries or occupations obsolete at an accelerated rate. Thus the challenge is not whether disruption will come – it’s how society accommodates it.
- **Conflicts and resistance.** As firms and vested interests lose ground, they may resist change, lobby for regulations or protection, or slow the diffusion of new technologies (...)
- **Limits, externalities and sustainability.** Acceleration of growth doesn’t guarantee benevolent outcomes. Technological change can bring negative externalities – environmental degradation, inequality, job polarization, displacement, concentration of monopoly power and threats to democratic accountability. Mokyr (...) cautions that growth isn’t always sustainable without policy correction.”

“From the laureates’ theories and the current technological landscape, we can draw several actionable lessons:

1. **Cultivate institutional openness and intellectual freedom.** Growth requires societies that tolerate dissent, accommodate new ideas and limit capture by entrenched interests (...)

2. **Balance competition and stability.** Innovation benefits from both experimental risk-taking and institutional safeguards. Too much market concentration or dominance by a few tech giants may stifle downstream innovation. Too much instability may discourage investment. Policies must manage this tension: antitrust, open standards, platform regulation and thoughtful patent regimes have a role to play.
3. **Subsidize knowledge spillovers.** Because the social return on new knowledge often exceeds the private return (owing to spillovers and cumulative learning), optimal growth trajectories frequently justify public support, such as, R&D grants, tax credits, collaborative platforms and public research institutions (...)
4. **Support human capital, mobility and adaptive institutions.** In a volatile innovation regime, workers will need continuous reskilling, mobility across sectors and social safety nets that guard people, not jobs (...)
5. **Monitor and manage systemic risks and externalities.** Technological growth may generate climate pressures, resource overuse, algorithmic biases, concentration risk and social fragmentation. Governments and institutions must govern innovation, ensuring that growth is sustainable, ethical and inclusive.
6. **Mind the geopolitical dimension.** In a world where leading-edge AI and biotechnology confer strategic advantage, growth is not purely a domestic concern. Nations must balance openness with security, protect core capabilities and avoid zero-sum rivalries that inhibit global knowledge flows.”

“This year’s Nobel Prize is (...) a reminder that growth is fragile, contested and institutionally mediated. If we think of AI, climate tech, biotech, renewable energy or next-generation manufacturing as potential engines of progress, their promise will only be realized in an ecosystem that manages conflict, rewards experimentation, stewards transitions and shares gains broadly.”

“Business leaders and investors must internalize that innovation strategy is deeply political. They should consider that sustaining growth requires tolerance for disruption, reinvestment and engagement with regulation (...) Growth is not guaranteed; it must be engineered.”

<https://www.strategers.org/reflections-on-the-2025-nobel-prize-in-economics-innovation-driven-growth-and-the-political-economy-of-creative-destruction/>

Sesgo del Premio Nobel en Economía

“... we should be clear on what the grand-sounding Nobel Prize in Economics is about. The uninformed might be seduced into thinking this prize is part of the tradition established by Alfred Nobel in 1895. You would be wrong. It is in fact a conservatively-biased award that is not part of the Nobel Prizes set out in Alfred Nobel’s will. The status of the Economics Prize clearly comes from it being mistakenly associated with the legitimate awards established by Nobel.

In fact, it was established in 1968 by the ultra-conservative Swedish central bank and the prize is awarded by the Royal Swedish Academy of Sciences.

The prestigious awards established in Nobel's 1895 will are given to:

... those who ... shall have conferred the greatest benefit on mankind.

In the case of the non-Nobel Economics prize the criteria seems to be largely to those 'who have damaged people the most through their errant input to the policy process'.

There have been many calls to have the economics prize abandoned given it has displayed a strong bias over the years to mainstream economists. Many of these economists have had a pervasive influence on economic policy which has led to policies that have unambiguously worsened the prospects of humanity (...) So my view is that the prize does not recognise insightful or great work. It is a reward for those who reinforce the conservative neo-liberal paradigm (mostly)."

<https://billmitchell.org/blog/?p=11893>

1.4. ¿Ha vuelto la política industrial?

Ignorancia académica sobre política industrial

“As countries openly embrace industrial policies, social science—and economics in particular—is faced with a knowledge deficit. Put simply, scholarship around industrial policy has left us bereft of a systematic understanding of these policies. We are missing an empirical roadmap for how to perform industrial policy.”

“Where industrial policies are multidimensional and complex, our understanding is inadequate across nearly every dimension. The abandonment of industrial policy as a serious object of study has left us with an oddly piecemeal understanding of practice ... We need evidence, data, and concreteness, and we needed it yesterday. After a decades-long intellectual hiatus, industrial policy must be taken seriously as an object of study by the economics discipline. In doing so, scholars need to interrogate how industrial policy is practiced *in practice*.”

“... since the 1980s, industrial policy has receded as a serious object of inquiry in economics. The height of globalization and, with it, the triumphalism of the Washington Consensus, signaled the nadir of industrial policy as a serious subject of study within mainstream economics. Academic economics saw industrial policy as *old hat*, part of the structural developmentalism of the previous generation of economics.

Yet while industrial policy was declared dead, practice hummed along anyways. Academic economics may have turned away from policymaking, but the exigencies of the real world meant that industrial policy never truly went away; it merely faded from the view of mainstream academia, and public oversight. In the early 1980s, Robert Reich observed that governments always end up doing industrial strategy, only without a coherent strategy.”

“The rise of international agreements constrained industrial policy in its most conspicuous forms, yet these interventions never went away ... industrial policy merely mutated and took new forms.”

“Gary Becker perhaps best exemplified the spirit of the debate in 1985: ‘The best industrial policy is none at all.’”

“To this day, much work in economics has been dedicated to demonstrating that industrial policy does not work, even empirically. This ‘impossibility theorem’ view of industrial policy permeates the conversation surrounding industrial policy to this day. Inspired by debates about central planning, some of the most vocal critics have followed a Hayekian and Austrian route, claiming that ‘industrial policy is literally impossible.’ Confronting the details of actual practice is largely second order.”

“... it is a tall order to claim that industrial policy is, literally, impossible. Whilst important for intellectual debates, it is often lateral to the realities of practice. These claims are also open to being falsified by empirical work. Historically, for example, they require social scientists to confront episodes where industrial policy featured conspicuously in post-war development, including the experiences of Taiwan, Singapore, Japan, South Korea, and, more recently, China. Today, these

claims implore us to erroneously reject emerging work on the efficacy of place-based policies, or innovation policy and R&D, two literatures where empirical evidence has rapidly expanded.”

“To the extent that the mainstream economics permitted the role of industrial policy, such as the World Bank’s post-mortem of the East Asian growth miracle, it nevertheless located success with largely getting market fundamentals right. It was largely left to political scientists, comparative sociologists, and heterodox economists in seminal qualitative work to unpack the practice and role of industrial policy in the East Asian growth miracle (...) However, the empirical turn in development economics has slowly challenged the impossibility theorem-style arguments against industrial policy. As industrial policy re-emerged over the past decade, empirical work has begun evaluating the tenants of these policies (...) When subject to serious empirical study, it turns out that the theory of industrial policy is very much relevant.”

“Yet, although the empirical turn in economics has finally reached the industrial policy debate, practitioners of industrial policy still lack fundamentals. Not only is the econometric work on industrial policy still in its infancy, the policy world lacks something more fundamental: empirical basics. Specifically, we do not yet understand the descriptive facts, nor do we have measures of contemporary policy practice.”

“... goal-oriented actions aimed at changing the composition of economic activity – the definition of industrial policy.”

“We see that the industrial policies used today are a far cry from caricatures of overt post-war protectionism. Policies tend to take the form of financial lending and export support, and much less so tariffs. These industrial policy levers also tend to be granular, often targeted toward specific clusters of industries. Although, like the past, manufacturing is an omnipresent feature of targeting: economies across the income distribution target capital goods, as well as heavy industry. Given the seemingly technocratic nature of industrial policy that emerges, we find a strong relationship between the flow of new industrial policy and a country’s income.”

“According to our data, high-income countries implement about five times as many industrial policies, on average, as low- to middle-income economies. Among these latter countries, it is mostly industrialized, middle-income economies using industrial policies.”

“Simply put, advanced, high-income countries have the state capacity to deploy technocratic industrial policies, and doing so may be challenging for lower-income countries. Thus, the patterns in our data suggest the need to invest in state capacity, as well as the need to understand the institutional demands of advanced industrial policies.”

“... industrial policy never went away—it’s been alive and well in the developed world, even while academic economists read its eulogy. As the world starts to take industrial policy seriously, economics should take these policies seriously, too, as an object of study. Economists must perform the hard work of establishing the basic facts surrounding these controversial policies. We’re already late.”

Lane, Nathaniel; Réka Juhász (2023): “Economics Must Catch Up On Industrial Policy”

<https://www.promarket.org/2023/03/14/economics-must-catch-up-on-industrial-policy/>

**Argumentos a
favor de una
política industrial**

“... you can say one thing for President Biden: he’s gone large on industrial policy. The Inflation Reduction Act (IRA) is America’s biggest ever piece of legislation to combat climate change. It contains \$400 billion in subsidies for solar, wind, electric vehicles, and other green activities.”

“... the U.S. is finally getting serious about climate policy. But it’s doing so using industrial policy, not carbon pricing, which economists believe to be the single best way to limit greenhouse gas emissions. With a carbon price, polluters pay the true social cost of carbon, and people—rather than the government—choose how to adapt. Unfortunately, there is massive political opposition to the high levels of taxation this would entail, not just in gas guzzling America, but also in Europe, as the French Yellow Vest movement amply demonstrated.”

“It’s tempting then to see the choice of subsidies over market mechanisms as a purely political move, without any economic backing. But that’s a mistake. The transition to net-zero emissions is about more than taxes and regulation: it is fundamentally a growth story where we seize opportunities to speed up the adoption of clean technologies and boost green innovation.”

“The reason why climate change policy is so hard is that global warming is the mother of all market failures. The cost of greenhouse gas emissions isn’t captured in prices, and so markets can’t address them. That’s the massive failing that carbon prices are designed to solve. But there are other market failures in play as well. In the international arena, there’s a free rider problem: Every country has a strong incentive to free-ride off the efforts of other countries, and even ‘binding’ international agreements such as the Paris Agreement are devilishly hard to enforce. Countries see the need to lower emissions, but each one wants the other to act first.”

“Finally, the transition to clean energy is a technology problem and there are significant market failures involved there, too. The natural course of events is that new ideas build upon old ideas. Since humanity has a big stock of fossil fuel knowledge this makes dirty innovation easier than clean innovation. Shifting the technological trajectory is like changing the direction of a supertanker. Carbon prices help re-direct the ship, but only slowly as consumption patterns change. Green R&D incentives can complement carbon taxes to make the change much more quickly.”

“When there are market failures due to learning by doing, technology spillovers, and financial constraints, government subsidies can help—think of China’s solar industry or South Korea’s phenomenal growth ... And if investing in green industries helps a nation build up the new industries of the future, this can help overcome this global free rider problem ... There are strong benefits of a single country’s taxpayers subsidizing green innovation both for global growth and for tackling climate change: knowledge flows across international boundaries, just like pollution.”

“The potential downsides from industrial policy should not be ignored. Managerial attention can shift from competing for customers to competing for state handouts. Furthermore, it stimulates protectionism. The ‘Buy American’ provisions of the IRA mean, for example, that the full value of electric vehicle tax credits can only be claimed when a car is built in North America. The aim is to stimulate more demand for U.S. based production and jobs.”

“Subsidies always have both a scale and substitution effect. The real benefits of the IRA come from

increasing the overall scale of clean technologies, it is not accomplishing so much if it simply substitutes activity from Europe to America.”

“A subsidy war between the U.S. and other countries can lead to more distortions. Beggar-thy-neighbor policies can mean production being diverted to who pays the biggest subsidies, rather to where it is most efficient. The *raison d’être* of the rules-based international trade system (e.g. the much-maligned World Trade Organization) is to reduce government-imposed barriers and distortions to trade and investment.”

“There is a better way. The IRA already expands the definition of domestic content to include Canada and Mexico in many of its provisions. Moving to ‘friendshoring’ instead of ‘onshoring’ is a good middle way of maintaining a political coalition and enacting green subsidies. Europe and other liberal democracies could also be embraced in this, even if countries like China are left out.”

“The Biden administration is not just applying this strategy to climate policy—it hopes to use industrial policy to accelerate science and raise productivity across the U.S. economy. In addition to the IRA, the Infrastructure Act invests \$1.2 trillion and the Chips and Science Act a further \$280 billion.”

“First, there is an emphasis on the importance of technology as the critical way of reviving productivity growth. Whether it’s broadband infrastructure in the Infrastructure Act, green tax incentives in the IRA, or semiconductors in the CHIPS Act, these are all ways to raise productivity. Second, the ‘science’ part of CHIPS has authorized \$174 billion for non-semiconductor tech—NASA, climate research, NSF, ARPE-E, etc. This wide-ranging, basic research potentially creates larger spillovers. Third, there are provisions to share benefits with strong labor standards and efforts to include under-represented groups and left-behind areas.”

“One problem with these support packages is the risk of the government getting it very wrong in which technologies and firms to support. The more ‘horizontal’ approaches such as general public R&D funding and a more generous R&D tax credit have less of this industrial policy risk.

Van Reenen, John (2023): “The Case for Green Industrial Policy”

<https://www.promarket.org/2023/02/14/the-case-for-green-industrial-policy/>

**Contra la
política
industrial**

“An ‘industrial policy’ is government action that encourages or directly subsidizes the expansion of some economic sectors over others. Dani Rodrik famously suggested that the core question about industrial policy is not ‘why?’ but ‘how?’. Few mainstream economists believe either that all pricing and resource allocation decisions should be made by the state, or that markets will flourish in a setting with no state contract enforcement, police protection, or dispute adjudication at all.”

“Industrial policy is different from regulations that seek to limit or correct ‘market failures’ such as externalities or information asymmetries. In the case of regulation, state action is focused on restoring Pareto optimality to commercial settings, by imposing taxes and subsidies or licensing requirements. Industrial policy, by contrast, is an evaluation of the direction and speed of the overall growth path of different sectors of the economy.”

“Capitalism automatically has a self-executing industrial policy, described by Joseph Schumpeter as ‘creative destruction.’ Profits are a sign that additional resources devoted to a sector produce greater social welfare; losses are a sign that the opportunity cost of resources being expended in that sector would be better reallocated elsewhere. Industrial policy operates on the margins of these investment decisions, offering subsidies and tax breaks for ‘good’ industries—green energy in the U.S. right now, for example—and increased taxes on industries (such as tobacco products) that the government seeks to limit.”

“Skeptics about industrial policy often take an Austrian perspective, which doubts the bureaucrats, or anyone else for that matter, would have the information necessary to direct an economy better than the signals of profit and loss, or a Public Choice perspective, which doubts that elected officials and the bureaucrats who report to them have any incentive to direct an ‘optimal’ industrial policy even if they possessed perfect information about the future.”

“These two objections, bad information and wrong incentives ... reinforce each other. The tendency of politicians to use taxes and subsidies to threaten enemies and reward supporters actually distorts the profit signals in industry, meaning that the information sent out to investors is misleading and biased toward cronyism rather than producing what consumers actually want. Unsurprisingly, the two iconic examples of ‘good’ industrial policy ... have not held up very well: Japan’s spending on industry created a zombie economy that has never recovered. More recently, China’s huge government spending on industry has at best had no positive effect if the analysis accounts for the opportunity cost of the investments.”

“The seductive mirage of industrial policy thus connects two dangerous illusions ... First, the idea that we (meaning elite experts, which is not ‘we’ at all) could use central planning and direction to do better than the set of investments implied by the profit/loss test is hard to resist. Second, given that we could do better, any suspension of democracy and accountability to the public seems justified, because experts will only use this power responsibly, and for our own good. But the information problem means that experts can rarely do better, and the incentive problem shows that even if they could the contest to control just who would get to appoint the unaccountable benevolent despots would consume all the resources of the society in conflict.”

Munger, Michael C. (2023): “Industrial Policy Is a Seductive Mirage”

<https://www.promarket.org/2023/01/24/industrial-policy-is-a-seductive-mirage/>

Vieja y nueva política industrial

“... emphasizing a limited role for government in response to market failures while at the same time warning about the risks of government failure—came to dominate industrial and innovation policy debates in late 1980s. This orientation did allow for some government activity, but of a limited nature. Certain elements of innovation policy, in particular early-stage research and development, can be considered public goods, and thus a case could be made for government stepping in where markets failed to provide for them.”

“The market and government failure perspective takes the (...) view (...) that the private sector is the more efficient innovator in bringing goods to market. From this perspective, private firms

possess greater entrepreneurial capacity under the pressure created by competition. By contrast, the state is viewed as risk-averse and in danger of creating government failure if it becomes too involved by ‘picking winners’ —that is, by supporting specific firms, technologies, or sectors.

As a result of these views, the industrial and innovation policies of the past have largely been horizontal rather than vertical. Instead of articulating system-wide missions and fostering the economy-wide learning required for their achievement, the role of the state has been confined to leveling the playing field for commercial actors—mostly through supply-side inputs such as better skills or the removal of market frictions—and then getting out of the way. At the macroeconomic level, the market failure approach to industrial policy limits the role of the state to ‘stabilization’—mitigating the impact of the business cycle—and remains neutral about which markets are being created. Governments have accepted externally imposed rules-based frameworks limiting discretionary interventions. Fiscal policy is constrained by the ‘discipline’ of tight budget deficit targets, and central banks are limited by tight mandates oriented toward price stability above and beyond other goals (...)

The financial and pandemic crises of the last fifteen years and escalation of the climate and environmental emergency make it clear that such an approach is not enough. We need a different approach to policymaking: a mission-oriented framework that focuses government action on solving fundamental challenges rather than waiting for the solution to trickle down through competitive market forces.”

“First, the state should do far more than passively react to market failures. It should play an active role in creating and shaping markets in the direction of well-defined missions, using the full arsenal of policy instruments at its disposal.”

“Second, building the state's capacity and willingness to make high-risk investments depends on developing dynamic public sector organizations that welcome experimentation and the possibility of failure, all while creating the conditions for cross-sectoral learning and progress.

Third, assessing public investment and evaluating mission success requires new measures of progress in place of those used by the market failure approach, which emphasizes cost-benefit analysis, the efficient allocation of resources in the short term rather than over the long term, and tightly constrained budgets.

And fourth, sustaining successful industrial policy requires rethinking the way risks and rewards are distributed between the state and the private sector to ensure the government is rewarded for its successes.”

Mazzucato, Mariana; ed. (2021): *Public Purpose: Industrial Policy's Comeback and Government's Role in Shared Prosperity*, Boston Review Forum.

¿Qué se sabe sobre política industrial?

“Governments around the world have rediscovered industrial policies as a means to accelerate development outcomes. Despite this growing interest, we still know surprisingly little about what works.”

“The renaissance of industrial policy. Between 2017 and 2023, the use of industrial policy increased nine-fold. Advanced economies have driven most of this growth. In 2023 alone, two-thirds of new industrial policies were put in place by advanced economies. But emerging market and developing economies (EMDEs) were not far behind: Almost all have increased the use of industrial policies. In 2023 alone, EMDEs implemented more than 500 new industrial policies.

Historical evidence suggests that industrial policies can tackle market failures, such as environmental pollution, and drive meaningful structural change (...) Yet, history has not been kind to industrial policy. The consensus that emerged from the industrial policies of the 1970s and 1980s is that, more often than not, these policies have failed.

Partly inspired by past lessons from East Asia and Latin America, contemporary industrial policies tend to be smaller in scale, as failed industrial policies in the past often had heavy fiscal costs.

In addition, industrial policies today are more outward-oriented and focus on integrating into global value chains. They are less likely to be driven by import substitution industrialization than they were in the 1970s to 1990s. Specifically, the use of tariffs has declined substantially (...) Similarly, the use of measures restricting global investment flows has declined.”

“Based on the lessons from past industrial policy, a few guiding principles emerge that can help increase the likelihood of success of industrial policy (...)

- **Technology adoption.** Industrial policies are more likely to succeed if they focus on the adoption of existing advanced technologies rather than innovation. Brazil, for example, taxed foreign intellectual property and subsidized domestic patenting in the early 2000s, as part of an innovation-driven growth strategy. The result was a host of low-quality patents and anemic growth (...)

- **Competition.** If targeted industries face market competition, the goals of industrial policy are more likely to be achieved. Greater openness to global trade and investment could help generate the productivity gains associated with competition while also expand access to larger markets. The success of industrial policy in South Korea relied on intense competition in both domestic and international markets (...)

- **Avoidance of trade-restricting measures.** The need for competitive markets is also why industrial policy should avoid measures that restrict trade. One alternative to trade-restricting measures is investment in infrastructure. While this may not be industrial policy in the traditional sense, it can boost specific sectors over others depending on the location and design of investment. In India, for example, the 3.4 percent of GDP infrastructure spending envisaged in the 2024-25 budget specifically targets renewable energy and digital infrastructure to boost the country’s global competitiveness.

- **Transparency and accountability.** Industrial policies can be expensive, either because subsidies incur fiscal cost or because trade restrictions generate costly misallocation. Hence, industrial policy needs to be accompanied by transparent implementation and monitoring to curb favoritism and ensure accountability.”

“Data gaps. The revival of policy interest in industrial policy is fairly recent and data are still lagging. Thus far, there is no publicly available database that would allow a comparison over time

and across countries. The New Industry Policy Observatory (NIPO) classifies and tracks industrial policies implemented or announced since 2023, but does not include policies implemented before 2023 (...) The closest and most comprehensive proxy that has been published, courtesy of the Global Trade Alert, is a detailed database of all the trade measures that could potentially be considered industrial policy."

"The unknown unknowns: The curse of partial equilibrium. Even with better data, it may be difficult ex ante to anticipate all the potential spillover effects of industrial policies. And because the policy by design chooses specific sectors or places to promote, there is inherent endogeneity. That is why empirical evaluation of industrial policy is particularly challenging (...) These within-country studies also find mixed impacts of government interventions, but again they focus only on a small segment of the economy and cannot measure the aggregate impact of industrial policy."

"It is ... prudent to remain focused in the application of industrial policy and ready to adjust as more evidence emerges. Generating such evidence should be a high priority. And in the meantime, there is plenty of work for governments to make markets more open and competitive and invest in human capital and infrastructure, and thereby increase the chances of industrial policy success."

Franziska Ohnsorge; Martin Raiser; Zoe Leiyu Xie (2024): "The renaissance of industrial policy: Known knowns, known unknowns, and unknown unknowns", 29 Oct 2024

<https://blogs.worldbank.org/en/developmenttalk/the-renaissance-of-industrial-policy--known-knowns--known-unknown>

**Política industrial:
¿política invisible
que se vuelve visible?**

"Industrial policy was once so out of fashion that it was jokingly called 'the policy that shall not be named.' Now it's back in a big way. On issues ranging from clean energy to semiconductors to Covid-19, governments are trying to improve the performance of key business sectors. Can they manage to do so without subverting competition and subsidizing special interests?"

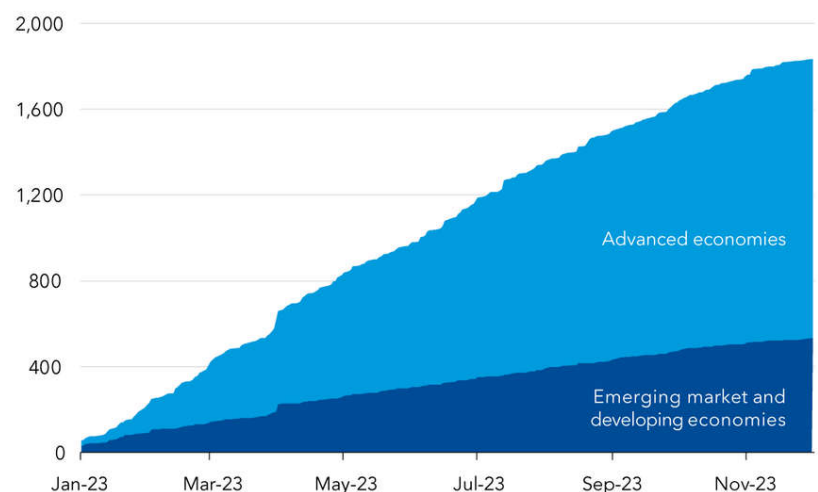
<https://www.promarket.org/category/news/series/industrial-policy/>

**Política industrial: entre
el acierto y el error**

"Governments have traditionally used targeted interventions known as industrial policy to make domestic producers more competitive or promote growth in selected industries. While some developing countries continued to use it, industrial policy fell out of favor across most of the world for years, because of its complexity and uncertain benefits.

Now, industrial policy appears to be back everywhere. The pandemic,

Number of industrial policy measures implemented in 2023

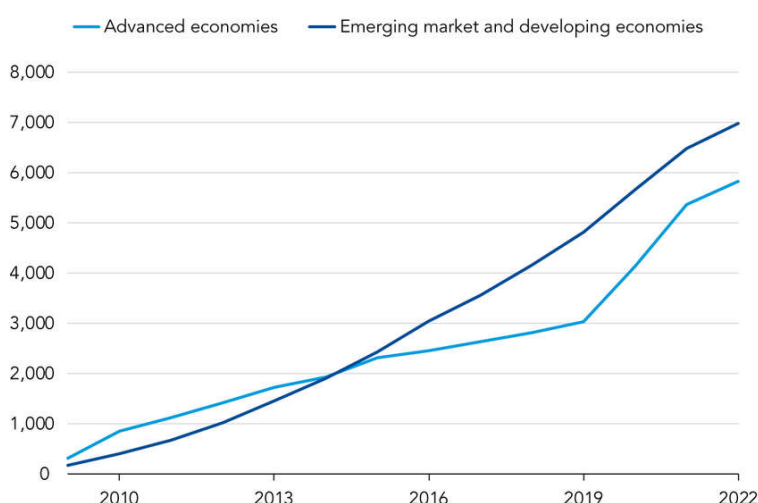


heightened geopolitical tensions, and the climate crisis raised concerns about the resilience of supply chains, economic and national security, and more generally about the ability of markets to allocate resources efficiently and address these concerns. As a result, governments came under pressure to have a more active industrial policy stance."

"... industrial policy is costly, and can lead to various forms of government failures ranging from corruption to mis-allocation of resources. Industrial policies can also lead to damaging cross-border spillovers, raising the risk of retaliation by other countries, which can ultimately weaken the multilateral trading system and worsen geoeconomic fragmentation. More data, more analysis and more dialogue are needed to avoid costly mistakes."

"The IMF recently joined forces with the Global Trade Alert to monitor developments. Our new research shows that there were more than 2,500 industrial policy interventions worldwide last year. Of these, more than two thirds were trade-distorting as they likely discriminated against foreign commercial interests. This data collection effort is the first step toward understanding the new wave of industrial policies."

Number of subsidy policies in force



"The recent surge in such measures has been driven by large economies, with China, the European Union, and the United States accounting for almost half of all new measures in 2023. Advanced economies appear to have been more active than emerging markets and developing economies."

"... the use of subsidies has historically been more prevalent in emerging economies (...) Recent measures focus more on the green transition and economic security, and less on competitiveness. Competitiveness was the objective for one-third of all industrial policy measures last year. The remaining two-thirds were motivated by climate mitigation, supply chain resilience, and security considerations."

Méritos de la nueva política industrial

"The rise of 'Bidenomics' and its signature economic legislations, such as the Infrastructure Investment and Jobs Act (IIJA), Creating Helpful Incentives to Produce Semiconductors Act (CHIPS), and Inflation Reduction Act (IRA), has thrust industrial policy to the fore of economic policy discussions. With similar packages emerging across the OECD and beyond, there is renewed interest in understanding the workings of industrial policy."

"We define industrial policies as those government policies that explicitly target the transformation of the structure of economic activity in pursuit of some public goal. Importantly, these policies are selective; they target some activities, but not others. Moreover, they are intentional in the sense that

changing the structure of the economy is what they want to do (...) The goals of industrial policy may be broad. While historically, these policies were primarily aimed at facilitating structural transformation and industrialization in particular, today, goals include climate goals, the creation of 'good jobs', supply chain resiliency, national security, and more."

"The economic rationale for industrial policy falls into three main categories: (1) market failures such as positive externalities which imply that the market will not provide enough of a positive activity (for example, modern manufacturing, green energy, good jobs); (2) coordination failures whereby a desirable activity may only be individually profitable if everyone else is also producing; and (3) the provision of activity-specific public inputs which are public goods (for example, the charging infrastructure needed for the uptake of electric vehicles)."

"Skeptics worry that the cure will be worse than the disease. There are two broad concerns: (1) information problems which prevent even a well-intentioned government from picking the correct activities to target; and (2) political capture, which implies that even if the government knows which activities to target, self-interested actors will divert the government away from those that create benefits to society at large. Both reasons create doubt about whether governments can 'pick winners'.

We acknowledge these challenges, yet argue that the ultimate test of the effectiveness is not whether governments can 'pick winners' but whether they are able to 'let losers go'."

"While economists turned away from the study of industrial policy, the world kept using them. In fact, industrial policies are ubiquitous – and growing ... economists should study them in order to inform the question of how to do industrial policy better. The New Economics of Industrial Policy is doing just that."

"... three types of industrial policy: infant industry, public R&D, and place-based industrial policy."

"The Asian miracle constitutes not only one of the most important episodes of modern economic development, but it remains the focal point of debates surrounding the efficacy and desirability of industrial policy."

Juhász, Réka; Nathaniel Lane; Dani Rodrik (2023): "The new economics of industrial policy"

<https://cepr.org/voxeu/columns/new-economics-industrial-policy>

Inconveniencia de la política industrial

"Should developing economies follow the United States and China by building national champions? Geopolitics is rapidly changing the landscape of world trade... During the reform period of the 1990s and 2000s, developing and transition economies opened up their markets and embraced globalization. That period saw the creation of the World Trade Organization, establishing a rules-based system of nondiscriminatory trade. It was also marked by an absence of geopolitical tensions as China focused on growth and Russia struggled with stabilization.

Now policymakers debate the future of globalization. They worry about the fragmentation of the world economy and the flouting of global trade rules. Trade interventions are on the rise, in the

form of industrial policies and subsidies, import restrictions based on national security and environmental concerns, and export controls to punish geopolitical rivals and ensure domestic supply.”

“The debate about whether developing economies should step into or back from the world economy is perennial. In the 1950s, many observers were pessimistic about the export prospects of low-income countries and feared they faced ever declining terms of trade. Global economic forces were seen as exacerbating inequality and pushing developing economies further behind. Import-substitution policies were needed, it was thought, to make their economies more self-reliant and less dependent on other markets.”

“The belief that richer countries were successful because they protected manufacturing gave respectability to industrial policy. That turned out to be a misreading of history. Despite high tariffs, the United States developed as an open economy—open to immigration, capital, and technology—and one with an exceptionally large domestic market that was fiercely competitive.”

“While across-the-board import substitution fell out of favor decades ago, the debate over industrial policy continues to this day. The experience of successful East Asian countries has given it a positive gloss ... In 1960, South Korea was saddled with an overvalued currency and exports of just 1 percent of GDP ... After devaluing its currency in the early and mid-1960s, Korea’s exports became more competitive and exploded, reaching 20 percent of GDP by the early 1970s. The main policy involved setting a realistic exchange rate that allowed exports to flourish along with cheaper credit for all exporters, not targeted industries ... Industrial policy did not really start until the Heavy and Chemical Industry Drive of 1973–79, which was later terminated because of its excessive costs and inefficiency. But Korea’s rapid growth had already been unleashed before the industrial policy era. The debate over industrial policy has long been locked in a stalemate. Some see it as essential to productivity growth and structural transformation, while others see it as abetting corruption and fostering inefficiency.”

“What is new is that the United States has joined China in an explicit embrace of industrial policies (...) With the CHIPS Act and the Inflation Reduction Act, the US introduced subsidies to ‘reshore’ production of semiconductors and adopted restrictive national content regulations for electric vehicles to ensure domestic production. And the European Union has always had industrial policies, announcing in 2020 an industrial strategy to enhance its ‘open strategic autonomy’ in the transition to a green and digital economy.”

“Where does this leave developing economies? Should they follow the new Washington-Beijing-Brussels Consensus of building up certain national industries through government subsidies and trade restrictions? That would be a risky strategy. The subsidies could end up being expensive, and the benefits could prove elusive.”

“Large-scale industrial subsidies seem to be a luxury that rich countries can indulge. Just because the US, China, and the EU can afford subsidies does not mean that others should follow.”

“China illustrates how industrial subsidies can be an inefficient way of spending scarce resources. In 2006, China identified shipbuilding as a ‘strategic industry’ and began massive production and

investment subsidies, mainly through cheap loans. Evidence suggests that these policies did not produce large benefits but were wasteful (due to excess capacity) and distorted markets (forcing more efficient countries to adjust by reducing their output)."

"China did not get rich through industrial policy but by improving productivity in agriculture, allowing foreign investment in manufacturing, and unleashing the private sector. India's 1991 reforms to dismantle the "License Raj" of red tape that stifled private enterprise and open the economy continues to propel growth, although more reforms are needed."

"Developing economies would be ill-advised to turn their backs on the global economy and give up the idea of supporting exports and acquiring technology from beyond their borders. They still have much to gain from the rest of the world."

<https://www.imf.org/en/Publications/fandd/issues/2023/06/the-return-of-industrial-policy-douglas-irwin>

¿Es la globalización la mejor política industrial?

"History suggests the path to taming inflation is through more international trade—not less. Today's surge in inflation grows out of the interplay of supply chain disruptions with large fiscal deficits. The pandemic, followed by Russia's invasion of Ukraine, upended supply chains and produced scarcities. Rich industrial countries responded to the shortages, inequalities, and social stress with large fiscal packages. In the ensuing spiral, increased spending led to more demand, which led to more shortfalls. Another vicious spiral may follow. Rising food and fuel prices could spark discontent, protests, even revolutions and government breakdowns around the world.

The inflationary spiral may appear to herald a quite different world, split into competing blocs that pursue costly 'friendshoring' strategies of steering trade to friendly nations and regimes while attempting to hobble rivals. Large states rethink the benefits of globalization and attempt to protect what they see as vital or strategic resources. This adds up to a recipe for freezing global economic growth."

"The hunger crises of the mid-19th century and the oil shocks of the 1970s at first ignited explosive rounds of worldwide inflation. In both cases, new technologies dramatically altered global supply systems, expanding globalization and leading to lengthy periods of disinflation. Thus, rampant inflation eventually drove the world to more rather than less globalization, with broad benefits."

"There is a historical pattern of globalization driving disinflation. What is usually thought of as the first age of modern globalization began in the middle of the 19th century with the hunger crises. It was interrupted by World War I, followed by the Great Depression. Eventually, a new style of globalization took off in the 1970s. Both turning points—in the 1840s and 1850s and in the 1970s—started with shortages and inflationary surges (...) In both cases, technological breakthroughs in transportation then drove an innovative globalization. It was the steam engine that opened up continents with railroads and oceans with steamships. Following the 1970s, the shipping container sharply reduced the cost of transporting goods."

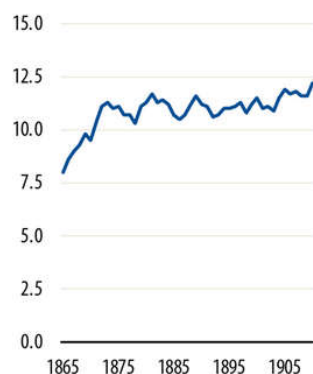
"It took a dramatic shock in each case to turn intriguing ideas into transformational technologies: the hunger crises of the mid-19th century and then the oil price surges in the 1970s. It was disruption

caused by big price increases that created the circumstances to realize the transformative power of the innovations. The big payoff came only through conditions of shortage. The widespread adoption of innovation depended on policy choices, starting with the removal of impediments to commerce.”

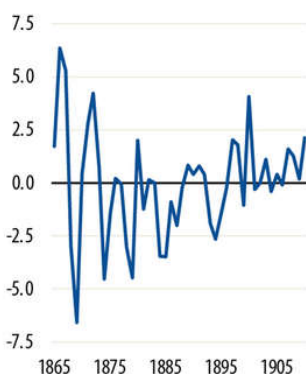
The first era of globalization

As steam locomotives and steamships slashed transportation costs in the 19th century, world trade increased while inflation of the Great Famine eased.

World trade in goods
(as a percent of GDP)



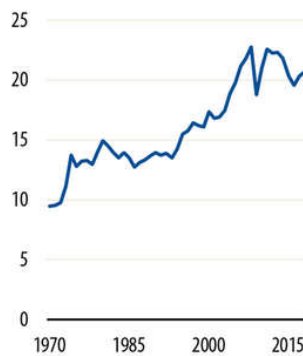
Consumer price inflation proxy
(UK consumer price inflation in percent)



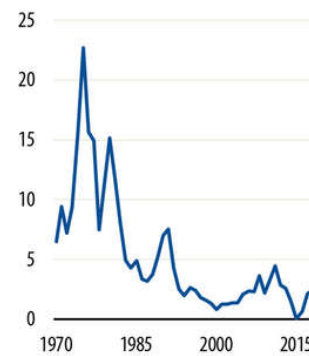
Globalization and inflation

Following the inflationary surge set off by the 1970s oil shocks, new container shipping technology helped spur renewed expansion of world trade while consumer price increases slowed dramatically.

World trade in goods
(as a percent of GDP)



Consumer price inflation proxy
(UK consumer price inflation in percent)



“In the midst of the previous transitions, few people felt comfortable. There was instability. In the mid-19th century, governments were overthrown around the world, and it was not immediately obvious that the successors were better, more competent, or more effective. They needed to learn. In the 1970s, there was widespread, corrosive doubt about the viability of democracy (...) In the mid-19th century and also in the 1970s, it soon became clear that governments that did not open to the world performed worse.”

“... we can see the new technologies that will produce better growth and a superior capacity to tackle the wide range of contemporary issues—health, energy policy, climate, and even security. They all require cross-border action and coordination. The equivalents to the steam engine or the container ship are scientific breakthroughs that already exist. The messenger RNA vaccine, for example, had been under slow development since the 1990s, mostly as an answer to rare tropical diseases (...) Similarly, the technical possibilities of remote medicine or education were there well before the pandemic. Under pressure of necessity, their application quickly became commonplace and set off a revolution that might make for broader and cheaper access. Remote working—also across political frontiers—is the equivalent of communications revolutions of the past.”

“An initial globalization centered around the Industrial Revolution saw the exchange of manufactured goods from a few countries for commodities from many in the rest of the world. The 1970s created globalization through increasingly complex supply chains. The current crises are generating a different sort of globalization, shaped by information flows. There will be marked contrasts in the competence with which societies respond to the new data revolution. Today’s globalization dynamic has the potential to create a revolution of system optimization, making the result of prior technical change cheaper and more accessible.”

<https://www.imf.org/en/Publications/fandd/issues/2023/03/in-defense-of-globalization-harold-james>

La inflación como fenómeno político

“‘An effective way to write the history of the last thirty years of the twentieth century,’ economist Albert Hirschman wrote in 1985, ‘may well be to focus on the distinctive reactions of various countries to the identical issue of worldwide inflation.’”

“... fear of the great inflation of the 1970s still dominates the thinking of the Federal Reserve”.

“Economists lack a good understanding of what causes inflation. In introductory macroeconomics curricula, the mantra of Milton Friedman remains central: ‘inflation is always a monetary phenomenon.’ ... But ... increases of the monetary base have occurred without any inflationary episodes, and inflationary episodes have happened with only very small increases in the monetary base.

Contra Friedman, Hirschman suggested that uncontrolled inflation is primarily a political phenomenon that occurs when groups compete over resources. The rapid increase of the price level is a signal that the state can no longer control this competition.”

“The term ‘Minsky moment’ — the point where a bubble caused by the accumulation of private debt bursts — was coined by PIMCO’s Paul McCauley in the context of the 1998 Russian financial crisis... But Minsky’s Financial Instability Hypothesis (FIH), the idea that capitalism has a tendency toward financial crisis, was part of a more elaborate theory of advanced capitalist economies. Minsky believed that as a financial system, capitalism was best defined by the fact that all economic units, including individuals and households, must survive by making cash inflows and matching commitments. This is what he called a [survival constraint]; everyone from industrial firms to individual workers must have cash on hand to pay their debts or else find credit to roll their liabilities over to some future date when they will have cash flows.”

“Minsky analyzed what he called ‘big government’ capitalism ... He argued that postwar governments which boosted inflation through private profits contradicted Keynes’ original system. Keynes believed that the state should facilitate long term economic development by directly planning economic activity, including the distribution of investment over the long run. Postwar American policymakers, however, created a policy that protected private sector profits during downturns (...) Government was forcing ‘overinvestment’ in capital intensive industries like auto manufacturing and aerospace. While this created good jobs, it also meant that workers would have more money to spend on things made by less capital intensive, nondurable consumer goods industries. Wage inequality between these two sectors caused increasing industrial conflict. In the United States and Western Europe ... managers made wage concessions to the most highly productive workers to keep at bay demands for greater union participation in company decisions, thereby further increasing the demand for consumer goods.

Because returns to capital intensive goods were high, the investment capital needed to expand capacity in consumer goods was scarce. With rapidly increasing demand, the price of these goods began to rise, leading to a wage-price spiral. In industries with no anticipated profits, capitalists had no incentive to expand capacity. Consequently, output remained stable while prices rose. In the labor market, some workers held on to their jobs while others were relegated to chronic underemployment.”

“In Minsky’s world, it is not the supply of money that drives the inflationary process but rather developments in the real economy. It is the demand for money that causes the expansion of the availability of the means of payment through the issuance of privately-issued bank credit that can be used to purchase goods. Thus, the supply of money is endogenous to the economic system (...) It’s not the ability of central banks to print money, but their ability to contract and expand the issuance of credit money, that fuels economic expansions.”

“While the hydraulic Keynesians sought to restore long-term equilibrium through short-run interventions aimed at preserving private profits, Keynes held that there was no equilibrium course set by supply and demand. Instead, the key relationship was between the profit expectations of investors and the workers’ final consumption of produced goods. Propping up private profits would do nothing to help rectify these imbalances and instead only create financial instability, driving markups by capitalists realizing their investments. Stable when supported by a highly regulated banking system, ‘big government capitalism’ was therefore vulnerable to bottlenecks caused by the maldistribution of demand across social groups.”

“The 1970s infamously became an era of ‘stagflation’—high inflation and slow growth—across the industrialized world. To deal with stagflation, governments transitioned to a system which Minsky labeled ‘money manager capitalism.’ This new system was marked by a rapid deregulation of finance and the creation of an economy in which managers of large concentrations of privately-created credit money met credit commitments through quick returns on investment. As a system, it was less stable and more anemic than its big government predecessor, but also less prone to inflation. Importantly, the latter shifted from wages and consumer good prices to financial assets. Credit expansion enabled the purchase and repurchase of financial assets, bidding up their prices irrespective of investment. In doing so, it allowed governments to halt inflation in consumer goods, at the cost of shifting investment away from the real economy and into the financial sector.”

“It wasn’t the reduction of the state’s money supply, but the absolute destruction of the private economy that ended the great inflation ... What Minsky did not predict was that this situation would persist for a very long time. In the United States and around the world, deflationary political coalitions have proved to be very durable.”

“... the processes which allowed for the formation of deflationary coalitions exhibited some common features: governments empowered rentiers, gave some citizens nominal gains as consumers, ensured access to certain classes of growth assets for powerful constituencies, and repurposed the institutions of ‘big government capitalism’ to support financial deregulation. Redistributing gains away from workers, financial deregulation integrated global economies in a manner that allowed states to pursue growth strategies benefiting an exclusive class of rentiers. This new class supported deflationary policies long after inflation posed an imminent threat.”

“The creation of deflationary coalitions around the world supported the shift from wages to capital gains. However, outside these economies, the world did in fact see a second round of inflation, concentrated in post-Communist economies ... Workers and managers avoided attempts at improving production due to a lack of rewards—a situation summed in the phrase, ‘they pretend to pay us, we pretend to work.’”

The liberalization and eventual collapse of Communist economies brought the problem of inflation into the open. To deal with these consequences, post-Communist regimes, including China, controlled the expansion of bank credit and the accumulation of foreign exchange through persistent trade surpluses. Mechanically, this was accomplished by lowering wages relative to productivity. Workers in these economies produced more than they could consume, creating a surplus that could be exported."

"The surpluses of exporting countries were sustained at the expense of the American tradeable goods sector and its high paying jobs, thereby continuing to suppress inflation. In turn, however, exporters needed to purchase assets with their dollar-denominated receipts. The American financial sector was more than happy to provide them, financing the consumer credit that made the cycle possible. The demand for dollar assets in the mid-2000s helped fuel the American housing boom that ended in 2008. This cycle of funding and asset distribution connects 'money manager capitalism' with 'asset capitalism' and is the reason for its durability despite its financial instability."

"Why have neoliberal ideas persisted despite their apparent failures?" The question seems less perplexing when we conceive of neoliberalism as a set of economic practices performed by institutions designed to protect the interests of the deflationary coalition."

"In Europe, pro-austerity, right-wing coalitions have come into power to maintain the infamous 'schwarze null'—the budget surplus so central to conservative politics in Germany and other Northern European surplus economies. Meanwhile, in China, authoritarian retrenchment is rooted in fear of the financial instability posed by the debts of local governments and the need to maintain the consumer repression of households."

"... since 2008 ... visions of an alternative to the deflationary consensus have come from a surprising actor: independent central banks (ICBs). A cornerstone of the deflationary policy shift of the 1980s, ICBs are now uniquely positioned to fight for the growing portion of the population that has lost out from the system of asset price inflation, low wages, low goods inflation, and easy financing which has dominated policymaking in recent decades."

"The European Central Bank and the Federal Reserve have begun to re-evaluate the legacy of prioritizing inflation targeting over full employment ... The ability of central banks to jump the barrier between the financial and real economies means that their power over the creation and limitation of credit can be used to 'socialize finance'—as Minsky advocated for in his recovery of Keynes from the hydraulic Keynesians. Socializing the flow of investment in order to ensure broad prosperity will require institutionalization, perhaps separating the traditional function of central banks from a new kind of national or supranational investment authority designed to rationally distribute credit in ways that would neither be inflationary nor deflationary."

"The control of the inflation-deflation cycle cannot be reduced to apolitical interventions in the supply of money. Rather, breaking this vicious cycle at the heart of capitalism will require us to understand how to best spend that money in a way on the appropriate capacities and goods for each phase of an evolving economic system. Establishing such an 'investment rule' should be at the task of a post-deflationary economics. An activist central bank ... might be the path to achieving

Hyman Minsky's dream of stopping the boom and bust of inflation and deflation, through the socialization of finance."

Feygin, Yakov (2021): "The Deflationary Bloc. Hyman Minsky and the politics of inflation"

<https://www.phenomenalworld.org/analysis/deflation-inflation/>

Reducción de riesgos

Se reproduce a continuación un debate sobre la reducción de riesgos (*derisking*), en relación con la política industrial y la descarbonización.

"A discussion on industrial policy and decarbonization"

JW Mason

What are the fundamental economic constraints that industrial policy needs to overcome in the climate transition? What are the barriers to the required private investment? Is it just that private returns are too low, making subsidies an insufficient solution? Or are there other problems that require a public sector involvement—problems of finance, coordination, uncertainty, and so on? In other words, what is it that we would like industrial policy to do?

Skanda Amarnath

The conventional wisdom about carbon taxes was that if you put a certain price on carbon and keep it in place, substitution will happen over time, and therefore it's the only thing that needs to be done. What's changed in the thinking is an acknowledgement that decarbonization is an investment challenge. It's a capital stock challenge. What does it actually take to get the requisite capital stock to support decarbonized consumption? Emissions are both a production and consumption phenomenon. There is demand for oil, gas, and coal across the world, and viable substitutes have to be made available. But those substitutes require investment, which can happen but doesn't always—hurdle rates and certainties interfere. Then there's the technological element. There are parts of the transition that aren't yet fully solved for, especially with regards to commercial scale.

JWM

So the question is, why do we need industrial policy at all?

Chirag Lala

I think we have to answer a few questions first. What do we expect investment to do? And why is investment not happening at the requisite speeds or the requisite volume in the areas we would need for decarbonization? We need not just new generation systems, but new heating systems, industrial equipment, transportation equipment, and so on. I want to dig into the work of Alex Williams at Employ America, who notes the difficulties of obtaining a stable cash flow and stable gain over time, which presents a challenge to both private and public enterprises. An example of this in energy projects—if you're trying to put up a new solar project or a new battery, but you get stuck in an interconnection queue, there's no risk premium that can compensate you for getting stuck in that queue. If your project doesn't get built, it doesn't generate income, which means undertaking that investment in the first place might not be something you even attempt. This is just

one barrier for energy generation. We can conceptualize industrial policy and evaluate it for whether it is sparking capital expenditure by asking how it addresses the various barriers to decarbonization across different sectors and projects. Is it opening up new capital investment opportunities for both private and public enterprises? This is industrial policy's primary purpose.

JWM

It's not simply about prices being wrong, but there are hard barriers that you can't overcome with a subsidy or by changing prices. You need to identify specific hard constraints and try to remove them. This is a panel on derisking, and in our world, that term is associated with Daniela Gabor more than anybody else. Daniela, you've described the 'derisking state' in both the US and perhaps even more so in Europe. You've identified a number of policy characteristics that fit this model. The derisking state focuses on the production of investability; the fundamental problem is enabling or convincing private capital to take ownership of the assets we want them to take ownership of. The derisking state works primarily through price signals, making some investments more attractive. It shifts economic risk from the private sector to public balance sheets, maintains the primacy of the central bank, and does not require any kind of central coordination or planning. That's just a broad description, but could you explain what distinguishes this 'derisking' approach from other forms of economic management? Where does the IRA fit in?

Daniela Gabor

How you frame problems of decarbonization is shaped by your understanding of the political economy of derisking. To me, Chirag framed the question of decarbonization through a derisking logic, where the problems are risks to private investment, and you have to remove them, not just by granting subsidies or tax credits, but also through what the World Bank would describe as 'regulatory derisking.' I'll take a different starting point to describe problems of decarbonization: in our current climate crisis, private capital is engaged in systemic greenwashing. From there, you get a very different diagnosis.

I also wanted to make it very clear that although I have spent the last few years theorizing the derisking state, I did not invent the term. Deutsche Bank introduced the term in a 2011 report for the United Nations Development Programme. They argued that private investment into renewables in the global South would require regulatory or financial derisking to escort private capital into those public policy priorities. Derisking was born in Europe as a logic of statecraft. It's not a particular policy framework or a particular industrial policy approach. It was adopted by the World Bank in 2017 upon the introduction of 'maximizing finance for development.' What is interesting now is that we have moved from saying, 'We should de-risk private investment, and we need private investment from institutional capital, like BlackRock and other asset managers, to be put towards Sustainable Development Goals (SDGs) in the global South.' Now, we are saying, 'We should guide capital towards industrial policy priorities.' That's the big shift exemplified by the Biden Administration. What are the geopolitical factors that have put derisking at the center of green industrial policy? At its core, derisking sets up a particular type of relationship between the state and private capital.

It's important to resist the temptation to celebrate a paradigm shift. Derisking offers a plausible political compromise to bring together Republicans and Democrats. It doesn't require fundamental change, it just requires more fiscal resources for bribing private capital to support certain policy priorities. But it does not change the relationship between the central bank and fiscal authorities, and it does not reform institutional capital.

The developmentalist literature in the work of Robert Wade or Dani Rodrik emphasizes disciplining private capital. Derisking is not consistent with discipline. This is the difference between derisking and earlier experiments with industrial policy (...)

CL

One aspect of Daniela's derisking definition that I really like is the concept of the production of investability. Whatever we end up defining derisking as, it's important to acknowledge investment as such in certain sectors. What would happen under the right circumstances that often doesn't happen, and why not? Where I would disagree with Daniela is that I think the production of investability happens both for private and public actors. There are factors that also prevent public actors from undertaking investment, and if those can be mitigated, then in some sense you've de-risked public investment as well. In certain cases, the public sector is not dealing with so-called risks—things you can assign probabilities to or try to hedge against, using interest rates or the pricing of capital or subsequent gains from the investment.

The state is often certifying lines of activity for accumulation by private actors or for possible capital expenditure by public actors. These barriers cannot be compensated for by the price system. I could critique a carbon tax on this basis as well: a carbon tax functions on the idea that a high enough price carbon emissions will spark investment in alternatives, so that substitution effects can take place. The problem with this, of course, is that the carbon tax might not address any of the actual barriers to undertaking certain kinds of capital expenditure in energy. We can talk about planning, we can talk about industrial policy, but we're ultimately talking about a space where activities are made possible or not.

DG

Why do I understand derisking as the intervention in price signals? I would argue that I define derisking through how European technocrats and politicians think about it—steering price signals without fixing them. You don't have price controls, you don't deal with inflation with a muscular state. But you steer price signals, even where they don't exist. For example, the Germans are creating a green hydrogen market where it didn't exist before, through a series of derisking measures that compensate private investors and reduce the uncertainty of the price signal for private investors. I'm very comfortable standing behind that definition of derisking, because that makes it conceptually clear that derisking is about the relationship between public and private capital, between the state and private capital. The state cannot de-risk itself unless it offers or has companies that operate as market companies. There are examples of the Danish state ownership of 51 percent of companies like Ørsted, who are doing energy infrastructure.

I think it confuses things to argue that there is a public derisking. To me, derisking is about shifting risks from the private sector onto the state balance sheet, not just by fiscal measures but also by regulatory measures. The World Bank, the UNDP, and the Deutsche Bank have, from the beginning of this discussion, emphasized the importance of regulatory derisking—removing obstacles to the formation of a price signal and market. I don't think anybody goes around thinking that the state de-risks itself, though raising the question of the state is important. We can argue whether or not state companies should care about price signals. But there are models of capitalism where state companies do not care about price signals, where they buffer the end users from the consequences of market volatility (...) The IRA is not just a question of greening or incentivizing private investment, manufacturing, or clean tech. It's also a question of shrinking fossil fuels and carbon capital. That's a very different story from the standard story of industrial policy in the developmental state literature (...)

Melanie Brusseler

As several people on this panel have already argued, there's now a greater shared understanding that decarbonization is a problem of investment and divestment. We need to transform existing capital and infrastructure stocks through investment and divestment very rapidly and at a spectacular volume. It's important to stress that, when we talk about investment, we're talking about capital equipment installation, not necessarily financial flows. The policy paradigm for so long has been to let market coordination more or less take over, relying on the constitutive elements of private investment—private profitability and the liquidity preference, which guide private investment but also hinder the multiple criteria that we're trying to address right now. But market coordination is a fundamental issue for decarbonization. I'm borrowing the language of Yakov Feygin in a very Leontief vein—the fossil system and the renewable system are both very complex integrated machines. You can't just swap parts from one to the other. They are very incongruous, so you need to synchronize investments to make sure we don't have mass economic turbulence, in terms of price stability but also in terms of the functioning of our productive systems.

How do you build a coherent renewable energy system and an economy on top of that? I don't think market coordination can do that. What would be different about non-market coordination? Regardless of the decarbonization imperative, economic democracy is an end in itself. But within the decarbonization paradigm, we want to see public coordination take over through institutions of public investment, public asset ownership, public enterprise, and pluralistic decision making, which would deliver investment and divestment directly, by having the state undertake essential activities and investments, and then coordinating amongst public institutions and private actors. There would be a much stronger hand for state bureaucracy. Macrofinancially, the price policies of the transition would move away from monetary dominance. More broadly, we would embrace the risk bearing capacity of the state through public ownership. I would like to provocatively call this the potential for 'democratic derisking'—taking whole sectors into public utility models and having systemic public options for capital investment in order to stabilize and expand green production networks, as well as to stabilize green industry.

I think of democratic coordination as institutionally moving towards a green mixed ownership economy, with much more systemic public ownership and using equity stakes not just to passively subsidize private investment but to have strong control rights (...)

DG

(...) I like the idea of democratic derisking, but I think it's fundamentally inconsistent with how I understand derisking. There's a bigger question: Can we or should we expect to tackle the climate crisis through private capital? I'm not sure the answer is yes. Skanda and I agree on trying to change the behavior of private capital. But after living in Europe and following the policies there, I see derisking as a macrofinancial issue, not just an industrial policy issue. For the last five years, the European Commission and European governments have been trying to change behavior through discipline and penalties. You can change the cost of capital and stimulate fixed investment not just by increasing returns, but by making it far more expensive or to invest in dirty assets. There are different kinds of pathways to changing behavior of private capital (...) These policies in Europe weren't perfect, and they were open to political contestation and watering down, but the ECB tried to discipline fossil capital and change risk return profiles, changing investability and behavior through penalties on dirty credit. We don't need democratic derisking. (...)

MB

On discipline, I think it can be tricky to talk about the role of credit guidance and the greening of the financial system. Credit guidance is a necessary tool in the macrofinancial toolkit, but I think positive and negative credit guidance is often overplayed in terms of driving capital expenditure and divestment. It's unhelpful to think that penalizing carbon investments through the financial system would lead to an orderly divestment from fossil fuels. Ultimately, the phase out of fossil fuels will have to happen on the state balance sheet, because you have to maintain a certain level of capacity and then phase out. Credit guidance can help that along but it's not the fundamental mechanism by which it'll happen.

Our conversation on derisking is circling around the question: what should we be publicly invested in? And what will rely on private investment alone as a result of political constraints? The language of derisking can still be quite helpful as we turn from financial market shenanigans to the actual governing of capital expenditure. For example, in the UK, the Contracts for Difference model¹ is a

¹ "The UK's Contracts for Difference (CfD) model is a government-backed scheme providing a guaranteed revenue stream for low-carbon electricity projects, ensuring stable investment and lower energy costs for consumers. Developers receive payments based on a pre-agreed 'strike price,' with their actual earnings determined by the difference between this strike price and the fluctuating 'reference price' (average market electricity price). If the market price is high, the developer pays back the difference to the scheme, and if it's low, they receive a top-up, stabilizing their income and protecting consumers from volatility." (Google)

"The Contracts for Difference (CfD) scheme is the government's main mechanism for supporting low carbon electricity generation. CfDs incentivise investment in renewable energy by providing developers of projects with high upfront costs and long lifetimes with direct protection from volatile wholesale prices, and they protect consumers from paying increased support costs when electricity prices are high." (<https://www.gov.uk/government/collections/contracts-for-difference>)

classic form of derisking—it entails backstopping private investment. But there are currently some issues with it, as we face inflation and higher interest rates. Wind turbine developers claim they need to raise their prices to expand capacity because their profits have been eroded, because private generators are fueling the lessening of subsidies through these contract pressure models, also called a reverse auction. They're fighting for profit share in this space, we're left with the question: which capacity do we want to be expanding? Do we want to govern the capacity to produce private wind turbines, or do we want public generation that directs that investment and stabilizes that production network? As we move into fixed capital investment, there's a way to be appropriating this language of derisking. I don't even know a better term for it.

SA

Financial investment and fixed investment look very different when it comes to decarbonization. Decarbonization is about the real capital stock, both for divestment and investment purposes. The derisking logic is in the financial context, targeting certain risk financial instruments. Leaving aside the normative aspects, I'm not sure that this is going to be a key lever for how we'll drive fixed investment. A running theme of the last few decades is that if we just give finance certain conditions, it'll lead to certain fixed investment conditions, and I'm not convinced that this is true (...)

CL

I want to add onto this concept of discipline. I think of industrial policy more generally as creating the possibility of spaces for investment—public or private—that didn't exist previously. It reduces the salience of the carrot v. stick differentiation. When you look at how policies end up sparking capital expenditure, you start to miss the point where the policy goes from being an inducement to being a disciplining device on capital. One example is the American Rescue Plan. Firms were pressured to consider certain kinds of capital investment that they might not otherwise have, relative to what they might have done with free cash flow—either discard it in buybacks, return it to shareholders somehow, or just not use it and have it sitting on their balance sheet. In one sense, the ARP was an inducement because it gave firms potential customers and potential profitability opportunities. But it was also a disciplining device—the one aspect of financial capital that would have demanded certain cash flows became relatively less powerful. Other industrial policy devices can also be thought of in this way. Carrots can open a large opportunity for firms to make them consider a space that they hadn't before. In some sense, the distinction between discipline and carrots is blurred.

DG

Chirag, we can play language games in which everything sounds like conditionality or discipline for private capital, but I'm not particularly interested in that. I agree that putting penalties that change risk returns on dirty assets is a necessity that also plays with a price signal. And yes, that doesn't take us into state control of the pace or nature of credit creation. But the excessive amount of lobbying in Brussels and in London against these measures makes me think that there is something at stake that we should not discard simply because it doesn't take us into a universe where the state is much more powerful in terms of disciplining private capital.

My observations simply have to do with the fact that the derisking logic of statecraft accommodates greenwashing and is inconsistent with Paris targets. I am worried that it doesn't take us where we want to be, for reasons that Melanie pointed out. When market conditions change, some private actors may change their mind, and we cannot afford this. I use the notion of the close control of credit, which requires the state to do much more work than credit guidance. I'm putting political impossibility aside for a second, but the state must do more to restrict the free flow of capital across and within borders, and this is why decarbonization is fundamentally a macrofinancial issue. We need changes in the structures of finance, in institutions of coercion.

I was very dismissive of the CHIPS Act at first, but Twitter conversations have persuaded me that there is some level of discipline. The Biden administration is far more ambitious than Europe, in terms of operational milestones like a restraint on share buybacks or prior due diligence. The purpose of disciplining institutions is that strategic industrial policy must ensure that capital doesn't go in another direction when market conditions change. The state needs to have the capacity to closely steer investment. The CHIPS Act does this more than the IRA. It would require the IRA to say, we can't shift from small electric cars to electric tanks, because that does not solve the problem of climate change (...)

MB

There's been a lot of European activity on how to respond to the IRA. The EU was certainly concerned about the trade aspects, but there were also internal politics, with some actors wanting more fiscal spending and industrial policy. In the UK, there's a really exciting development with the potential of a Labour Government, which has pledged to spend upwards of 300 billion pounds across ten years on a 'green prosperity plan,' which is still largely undefined. But it does feature a commitment to create British energy—a public renewables generator. They want to be a green energy superpower akin to Électricité de France (EDF) in France. They've also proposed creating a sovereign wealth fund with a green mandate, which is quite rare, and closer to the National Investment Authority proposal in the US context.

One lesson that the UK could take from the UK experience is to think creatively around fiscal constraints. Discussions around debt and fiscal stability should account for the fact that public assets generate revenue. In the UK, Rachel Reeves and the Labour Party still emphasize maintaining fiscal discipline. The IRA, on the other hand, is made up of uncapped tax credits—for better or for worse. The UK political project could question this fiscal rule.

JWM

Daniela, what would be the dangers if the EU were to follow the US example? Was there a more promising model in Europe that is in danger of getting sidelined by the IRA approach?

DG

I'm not as optimistic as Melanie. I understand the sovereign wealth funds as derisking machines, as opposed to machines for creating public ownership. They are not articulated towards a public or state-driven decarbonization project. While this conversation is about derisking, I'm working in

parallel on what I call a big green state. It summarizes a range of approaches, but it does not allow private capital to set the pace and direction of decarbonization, as is currently happening. The dangers in Europe resemble the way that different US states are competing for the IRA money. But in Europe, it's far more obvious, because the macrofinancial relationship is far more delicate and open to political contestation. With the IRA, we have moved from the EU wanting to decarbonize quickly, even with Chinese clean tech imports. The EU now wants the global market share in clean tech. In other words, it's industrial policy in the old, traditional way.

In the paper, I look through the scenarios where the European Commission uses the term 'derisking multiplier,' making some bizarre approximation for the amount of money you need for a percentage of the global market share. But it's the politics of how to get European capitals to agree on a Europe-level budget. The difficulty of the delicate arrangement, then, is that France, Germany, and countries with more fiscal space are not allowed to promote their own industries through state aid. Since the pandemic, however, the easing of these restrictions which were meant to level the playing field has mainly benefitted France and Germany. It turns back to the same problem that Melanie identified — in the end, the immense challenges we face cannot rely on market coordination. What we need is big state balance sheets and state capacity that do not repeat the mistakes of communist enterprises. My postgrad studies focused on central banks actions in post-communist countries, where they needed to dismantle state-owned companies. Now, I'm going to study how we put them back together.

SA

I think Daniela's piece is very provocative—is derisking a race to the bottom or the top? There's going to be a need for experimentation and overcapacity, erring on the side of redundancy. Many countries and companies will try to figure out how to push down cost structures in a way that leads to more investment and capacity. The developed world must use its fiscal policy space to allow emerging and underdeveloped countries to also pursue decarbonization paths. We have to make that space available, and part of the IRA and derisking is worth rescuing and celebrating.

CL

The private sector is an existing set of institutions that will continue to exist for the foreseeable future, and we need them to undertake decarbonization activities as well, in many cases against their previously expressed interest and intentions. If our policies succeed in creating a boom in green capital equipment, then we would have the political responsibility for the next steps—the fight doesn't end there. I think if you're looking to spark a politics of democratic investment, you have to be prepared for what comes next.

MB

Ultimately, I think we have to view social transformation as an iterative, uncertain process of transforming institutions, tools, and enterprises. It's going to be a constant fight. It's up to us to move the politics towards the socialization of investment, abolition of fossil fuels, and the eventual flourishing of the planetary cooperative commonwealth.

I think the distinction between financial capital and capital investment is a bit too neat in this panel, but I am a bit more hopeful after this. I'm generally quite skeptical, but I will go with Melanie's insight that all small political changes might take us somewhere better."

<https://www.phenomenalworld.org/interviews/derisking/>

El trilema de la innovación

Brummer y Yadav (2019) proponen un trilema de política (*The innovation trilemma*) en relación con la regulación de la innovación financiera. El trilema parece aplicable a regulaciones de otras actividades económicas en las que la innovación es frecuente e importante.

Para un mercado financiero caracterizado por la innovación financiera, el trilema de la innovación postula que el regulador del mercado puede alcanzar, a lo sumo, dos de los tres objetivos siguientes:

- establecer normas claras;
- preservar la integridad del mercado;
- estimular la innovación financiera.

Una justificación del trilema sostiene que un regulador que quiera dar prioridad a la integridad (seguridad) del mercado estableciendo normas claras deberá establecer prohibiciones (más o menos genéricas); estas prohibiciones serán un obstáculo a la innovación.

Alternativamente, si el regulador pretende estimular la innovación con reglas claras, entonces la regulación deberá ser simple o muy flexible, lo que pondrá en riesgo la integridad del mercado (dado que las innovaciones se realizan para obtener beneficios y no para garantizar la estabilidad o viabilidad del mercado).

Por último, si el regulador quiere promover la innovación y proteger la integridad del mercado, deberá establecer un complejo sistema de reglas y excepciones. Esto contradice el objetivo de claridad en la regulación.

Brummer, Chris; Yesha Yadav (2019): "Fintech and the Innovation Trilemma", *The Georgetown Law Journal* 107, 235-307.

El trilema de los minerales

"La era del 'big oil' —el petróleo— ha pasado su cenit; bienvenidos a la era de las 'big shovels' o grandes palas. Los minerales críticos son el nuevo elemento básico de la economía internacional, y los gobiernos se están dando cuenta rápidamente de que sin ellos se arriesgan a una vulnerabilidad económica y estratégica.

La transición a las energías renovables, la digitalización de la economía y la presión para seguir el ritmo de los avances en tecnología de vanguardia dependen de unos pocos minerales (el litio, el cobalto, el cobre, el grafito, el níquel y las tierras raras se conocen comúnmente como los 'big six', pero también pueden considerarse otros como el zinc y el manganeso). Es esencial que las

estrategias sobre minerales críticos se apliquen de forma que promuevan la cooperación internacional y, al mismo tiempo, minimicen la fragmentación debida a la rivalidad geopolítica.”

“A la hora de diseñar estrategias en materia de minerales críticos, los responsables políticos se enfrentan al trilema de equilibrar prioridades contrapuestas:

- Seguridad: Garantizar un suministro fiable de minerales críticos y autonomía estratégica.
- Coste: Garantizar la asequibilidad y equidad de los minerales y recursos.
- Sostenibilidad: Promover la extracción y el uso sostenibles desde el punto de vista ambiental y social.

Lograr un equilibrio entre estas prioridades es vital. Los países no deben dejar de lado las prioridades ambientales en nombre de la seguridad nacional. Del mismo modo, deben garantizar que los minerales baratos no provoquen o exacerben prácticas mineras y laborales perjudiciales.”

“Tomemos, por ejemplo, la producción de electricidad. Los combustibles fósiles siguen siendo una fuente barata de energía, pero las emisiones de carbono que producen tienen implicaciones negativas para la sostenibilidad. También plantean problemas de seguridad cuando se depende de proveedores beligerantes. El conflicto de Ucrania ha obligado a muchos países europeos a considerar las implicaciones estratégicas de su dependencia de hidrocarburos rusos.

La transición a las energías renovables ofrece una solución a los problemas de seguridad y sostenibilidad de los países europeos; sin embargo, es probable que el coste asociado a corto plazo siga siendo elevado. Las cadenas de suministro de los minerales críticos necesarios para impulsar la transición a la energía verde son complejas y menos maduras que las de los combustibles fósiles. Además, existe una gran incertidumbre en cuanto a las cantidades de minerales críticos necesarios para alcanzar los objetivos de carbono neto cero. Recientes estimaciones de la Agencia Internacional de la Energía basadas en objetivos climáticos nacionales sugieren que la demanda de minerales críticos se cuadruplicará en 2040.

Además, el coste ambiental de la extracción de minerales críticos pone en cuestión la viabilidad de la transición. Vlado Vivoda, del instituto de educación Rabdan Academy, señala: ‘Sencillamente, no hay suficientes [minerales críticos] disponibles para producir [económicamente] con estándares ambientales y sociales elevados’.”

“El aumento de la competencia estratégica entre las grandes potencias, como EE. UU. y China, además de estrategias como desvinculación (‘decoupling’), reducción de riesgos (‘de-risking’), ‘friendshoring’ y ‘onshoring’, crea el riesgo de que la carrera por asegurar minerales críticos conduzca a una tragedia de los comunes, en la que bloques políticos rivales exploten recursos escasos y pasen por alto los costes ambientales.

Este escenario debe evitarse. En su lugar, hay que priorizar la cooperación internacional para garantizar la disponibilidad a largo plazo de minerales críticos.”

“Cualquier estrategia verdaderamente internacional que aborde los minerales críticos debe situar en su centro los intereses de los países en desarrollo. Esto es esencial, en parte porque una parte significativa de los minerales críticos se encuentra en las economías en desarrollo (como el África

subsahariana, que posee el 30% de las reservas minerales del mundo, con la República Democrática del Congo representando el 70% del suministro de cobalto). Además, los intereses de estos países corren el riesgo de verse eclipsados por las prioridades geoestratégicas y económicas del mundo desarrollado.”

<https://es.weforum.org/stories/2024/08/los-minerales-criticos-son-clave-para-la-tecnologia-del-siglo-xxi-este-es-el-trilema-de-extraerlos/>

Minerales críticos y política industrial

“Should countries treat critical minerals as a matter of critical national policy and rely on government to organize the means of production and control? Many governments are now doing this. China (...) has already achieved a dominant position in mining and especially processing through active industrial policy. Programmes such as those for diversification of cobalt supplies, and especially those for diversification of production methods and supplies of lithium, are matters of national policy in western countries.

It’s not clear whether this national strategic approach works better than relying entirely on market forces – or whether, perhaps, for particular critical minerals and jurisdictions, a more active, interventionist approach might be best (...) Today’s concentration of supplies in a few countries and use of abhorrent mining methods is the result of markets not seeing the right price signals. Fixing that could be a task for industrial policy (...) Or it could be fixed through market reforms. If the latter approach is taken, then the reforms adopted will need to be designed and implemented in a multilateral context since the supplies and demands for these materials are global.”

“It is all but certain that the energy transition will create rising dependence on critical minerals (...) Policy will play an essential role because market forces, on their own, seem unlikely to address all the key challenges of dependence on critical minerals. Policy should aim to help those market forces work more effectively – in particular by allowing market forces to send price signals about long-term scarcity – which can reinforce incentives for innovation, reduction in demand and expansion of supply.”

“Creating an effective policy response will require careful political attention. The bigger the group of governments implicated the less likely that effective solutions will emerge – because, given deep uncertainties, gaining agreement and cooperating on policy will be challenging and will require approaches, such as experimentation and learning, that are adaptive. A coalition of motivated governments can lead this effort; with success, others can join.”

<https://www.weforum.org/publications/energy-transition-and-geopolitics-are-critical-minerals-the-new-oil/>

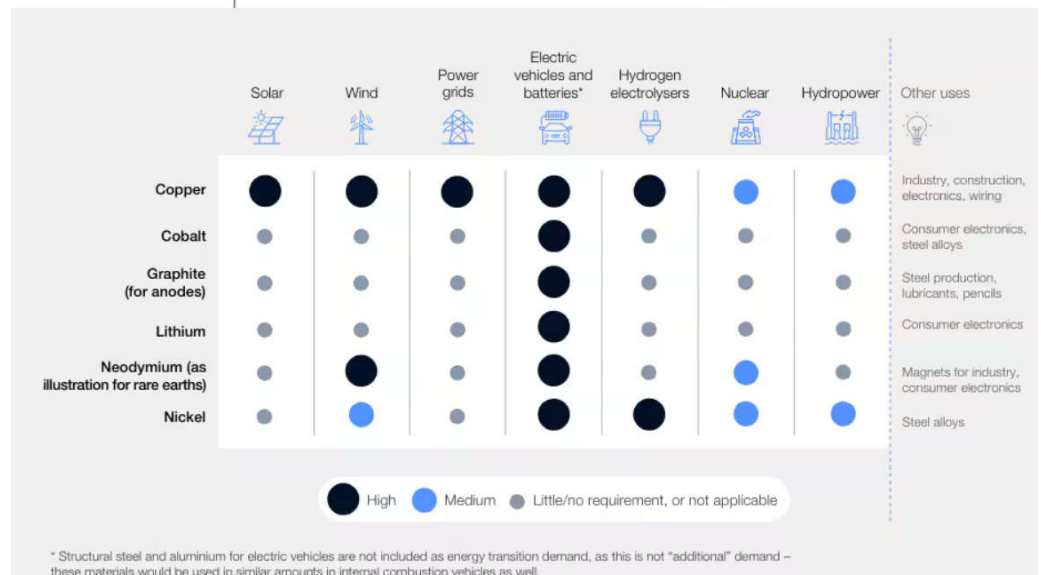
https://www3.weforum.org/docs/WEF_Energy_Transition_and_Geopolitics_2024.pdf

Importancia de los minerales críticos

“La transición hacia las energías limpias ‘va a ser una de las mayores oportunidades económicas desde la Revolución Industrial’, según el experto en política energética global Jason Bordoff. En 2022, las inversiones en energías renovables alcanzaron la cifra récord de 1,3 billones de dólares, lo que supone un aumento

del 70% respecto a los niveles previos a la pandemia de 2019 (...) 'Hoy en día, la minería se concentra en determinados lugares. Más de la mitad del cobalto procede del Congo. Más de la mitad del litio procede de Australia. Más de la mitad de las tierras raras proceden de China. Así que hay un cierto número de países con una posición muy significativa hoy en día", dijo."

FIGURE 1 | Importance of critical minerals in clean energy transition



<https://es.weforum.org/stories/2024/06/la-transicion-energetica-podria-desplazar-el-centro-del-poder-mundial-este-experto-explica-por-que/>

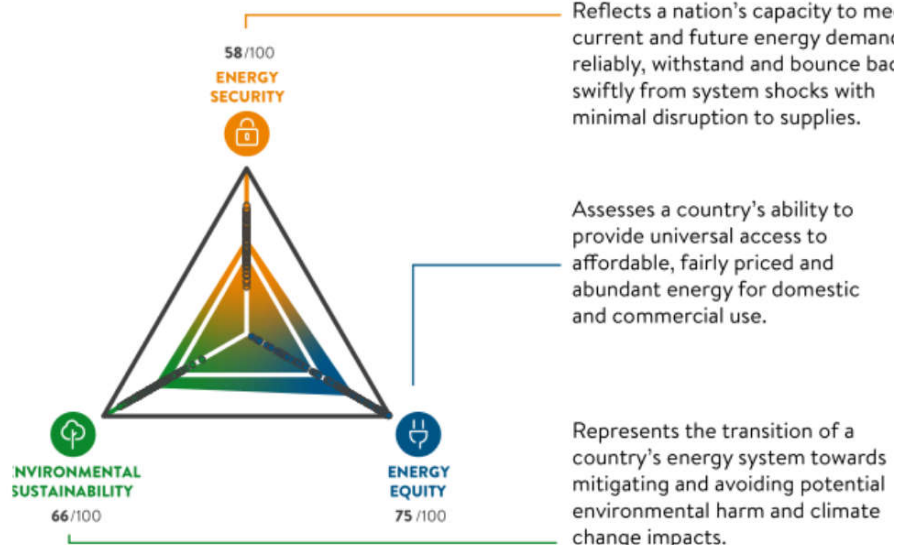
El trilema energético

"The 'energy trilemma' is a framework of three objectives that energy policymakers need to balance, and which is often used as a guide in designing energy policy. The trilemma comprises:

- **Sustainability**: decarbonising energy
- **Security**: ensuring the security and reliability of energy supplies
- **Affordability**: minimising the cost of energy to consumers

Successive UK Governments have used the trilemma as a basis for policy. This is not unique to the UK; countries around the world use it in the same way. The World Energy Council, a UN partner organisation acting as a forum for the global energy transition, publishes an annual World Energy Trilemma index which assesses how well countries around the world are meeting the energy trilemma."

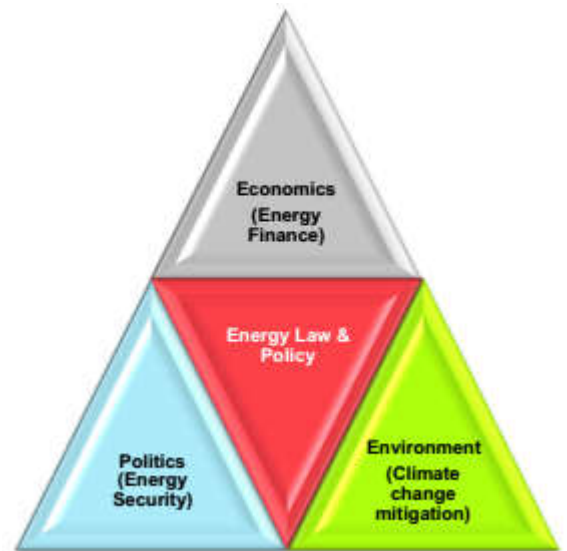
World Energy Trilemma Index



<https://commonslibrary.parliament.uk/research-briefings/cdp-2023-0074/>

<https://www.worldenergy.org/publications/entry/world-energy-trilemma-report-2024>

“Carbon dioxide emissions continue to increase to the detriment of society in many forms. One of the difficulties faced is the imbalance between the competing aims of economics, politics and the environment which form the trilemma of energy policy. This article advances that this energy trilemma can be resolved through energy justice. Energy justice develops the debate on energy policy to one that highlights cosmopolitanism, progresses thinking beyond economics and incorporates a new futuristic perspective.”



“The energy trilemma is emerging as a key problem for government. There are many variations to what the trilemma entails but they all have the same problems at its core – those emanating from economics, politics and the environment. The energy trilemma is visualized as a triangle and it is advanced here as emanating from the energy law and policy triangle-this is illustrated simplistically below in Fig. 1. The aim of trying to achieve a balance between the competing demands (of economics, politics and the environment) of the energy law and policy triangle is known as the energy trilemma; i.e. in essence, the challenge of balancing the energy law and policy triangle raises the question of the energy trilemma and how society aims to resolve this?

Energy law and policy is in the center of the triangle and on the three vertices of the triangle are economics (for example, energy finance), politics (for example, energy security) and environment (for example, climate change mitigation) (...) In essence, effective and efficient energy law and policy will balance these three aims to deliver the best outcome to society. However, if one examines energy law and policy in more detail often it is just one of these points that dominates the energy agenda; more often than not it is economics.

It is proposed here that the solution to resolving the Energy Trilemma is through ‘Energy Justice’. Energy justice can achieve a just and equitable balance between the three dimensions of the Energy Trilemma.”

“This energy-climate union is fraught with some peculiar problems. Broadly, these issues are: the dilemma, the trilemma and the quadrilemma.”

Dilemma: energy and economic development lead to increased greenhouse gases (GHGs) emission, especially carbon dioxide (CO₂) emissions (...) Energy has the confounding characteristic as a force of both human progress and ecological destruction. The predicament is the clash between the rising global energy demand and the need to radically reduce CO₂ emissions. This dilemma has led to calls for increased integration of more sustainable (renewable) energy sources in global energy systems.

Raphael Heffron, Darren McCauley, and Benjamin Sovacool (2015): ‘Resolving Society’s Energy Trilemma through the Energy Justice Metric’, Energy Policy 87, 168-176.

“The energy quadrilemma adds the fourth element (of social dimensions of energy) that focuses on people, their involvement, and the acceptance of decisions in the energy industry. This fourth issue concerns itself with providing energy in a just and sustainable way. Generally referred to as ‘energy justice’, it is concerned with identifying when and where injustices occur in energy systems and how best law and policy can respond. Conceptualized as having three principal tenets (distributional justice, procedural justice, and recognition justice), it deals with both macro-justice (on societal impacts of energy and how fair and just their institutional decisions are) as well as micro-justice (how individuals are impacted by systemic outcomes).”

Moya Mose, Tedd (2020): “Energy and Climate: The Dilemma, Trilemma, and Quadrilemma”, ICPAC

<https://icpac.medium.com/energy-and-climate-the-dilemma-trilemma-and-quadrilemma-839a8d657369>

Trilema de la post-sostenibilidad

“The paper introduces the Post-Sustainability Trilemma (PST) and argues that it provides a novel description of current environmental politics which is alternative to the one provided by the narrative of sustainability.

According to PST, the three policy goals of (i) economic growth, (ii) participation, and (iii) environmental protection cannot be simultaneously attained. The three possible combinations of PST are then analysed: (i)–(ii) techno business-as-usual; (ii)–(iii) post-growth approaches; (i)–(iii) environmental authoritarianism ... That at least two policy goals could be obtained is a debatable ... claim. In this sense, PST might be considered an over-optimistic framework to organise environmental politics.”

“Until a few years ago, environmental politics was dominated by the sustainability narrative, according to which environmental governance should be neo-liberal, growth-oriented, and optimistic about institutional capacity. This article takes a critical view of the sustainability narrative and argues in favour of a novel ‘post-sustainability’ framework – according to which current environmental politics is best understood not as an attempt to realise all the policy goals ... but, rather, by the impossibility of it.”

“... the category of political participation is intended as a proxy for Western forms of democracy: it comprises all the public and private avenues through which is possible to have an impact on the policy of one’s chosen political jurisdiction, be it by running for elections, adhering to associations, partaking to protests marches, or using the power to buy, sell, and boycott to change the behaviour of powerful market actors who have an impact on environmental policy.

More problematic is the category of environmental protection. It is fair to say that there seems to be a class of environmental problems for which all three policy outcomes can be attained. Cases of localised pollution – like a polluted river – are sometimes successfully internalised into the local economy... The focus of this article is on global environmental problems – climate change, in particular – and environmental protection here refers to the policies which would allow the states – or other political entities – implementing them to stay within the planetary boundaries established by the literature.”

“The first combination – economic growth + political participation, without environmental protection – is the most obvious continuation of the policies of sustainable development in the XXI century ... Techno business-as-usual shares with the narrative of sustainability the idea that our political institutions should merely provide the conditions for the individuals to pursue what is valuable to them ... There is some evidence that liberal democracies have a positive impact on the environment compared to autocracies ... This would *prima facie* falsify the claim that economic growth, political liberties, and environmental protection cannot all be pursued at the same time. The literature on this matter, however, remains contentious.”

“The second combination – political freedoms + environmental protection, without economic growth – ... maintain[s] that individual wellbeing could only be achieved if growing material desires are curbed and, thus, try to explore how needs can be met and human flourishing achieved without economic growth.”

“Environmental authoritarianism represents the position that a strong and undemocratic central authority might assume in order to protect the environment while continuing to pursue economic growth, which is considered a proxy for political power in international relations, as well as domestically necessary to alleviate poverty. This is the path that China has started pursuing ... Implicit in the theory underpinning environmental authoritarianism is the idea that competition – for positional goods among individuals and for natural resources among firms – is what is truly damaging to the environment.”

Sconfienza, Umberto Mario (2019): “The post-sustainability trilemma”, *Journal of Environmental Policy & Planning* 21 (6), 769-784.

Trilema de la economía de los servicios

“The expansion of manufacturing employment in the wake of the industrial revolution and continuing into the 1960s was a result of two main forces of change. First, the demand for manufactured goods was rapidly increasing as growing incomes allowed people to spend proportionally less money on necessities, such as food and shelter, and more on nonnecessities, such as consumer durables ... Second, because the perceived need for material goods was high, demand for manufactures was price elastic: lower relative prices translated into large increases in demand. The latter condition is important because it created a positive link between productivity growth, demand, and employment.”

“In contrast to this golden age of industrial expansion, the period since about the early 1960s has been marked by decreasing income and price elasticity for manufactured goods. The decline is due to a combination of market saturation and increasingly wealthy and choosy consumers who are more concerned with the quality than with the quantity of manufacturing consumption. Under these conditions increases in productivity will no longer result in sufficient increases in demand to compensate for their labor-saving effects.”

“The decline in manufacturing has been accompanied by a shift in demand toward services, and in this sense the service sector has assumed the role previously played by manufacturing as the main source of employment growth.”

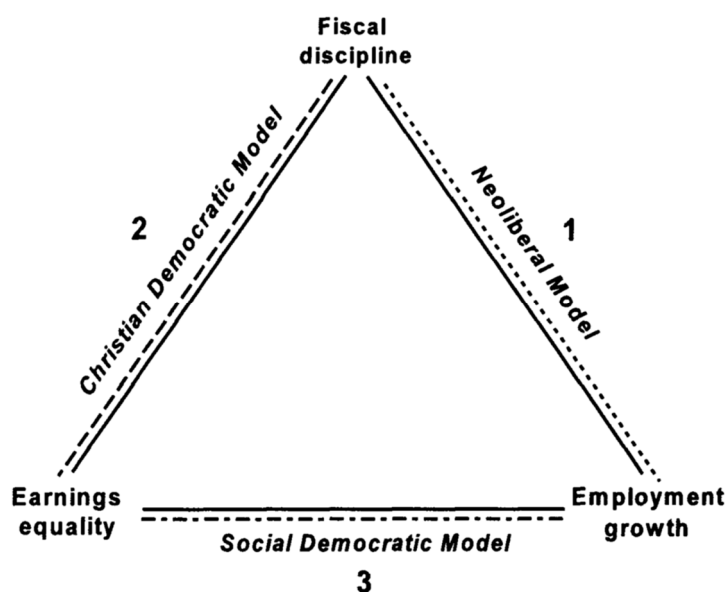
“Whatever the size of the productivity gap between manufacturing and the majority of services, the obvious consequence of the shift in demand toward the latter is that it becomes increasingly difficult to combine rising wages with lower prices. The virtuous circle between falling prices and rising real demand, as experienced during the expansion of manufacturing employment, is therefore broken. Instead, the most important source of market-generated expansion of employment in services, apart from the effects of changing consumption patterns, becomes lower wages, which translate into cheaper prices and higher effective demand. Consequently, if wages in services are tightly coupled with wages in manufacturing—where productivity growth is faster— private service production will contract Baumols cost disease and employment expansion will be slowed down.

High growth in market-provided services—necessary to compensate for declining manufacturing employment—therefore presupposes a more *inegalitarian* wage structure”

“There are essentially two responses to this problem: (1) wages in services, especially in the lowest paid occupations, can be permitted to fall in order to lower prices and increase demand and employment, or (2) the government can assume the responsibility for employing workers at relatively high wages by expanding public sector consumption. The latter option, heavily favored by social democratic governments, has the obvious drawback that taxes and/or public debt must be increased to finance the growing public wage bill. Socializing production of services can also create difficult incentive problems that are liable to undermine economic efficiency.

Budgetary restraint in the sense of no or only moderate government spending on services is therefore difficult to combine with earnings equality and high employment in the emerging service economy. This set of trade-offs is what we call the ‘trilemma of the service economy’.”

“The argument is illustrated in Figure 1. Each of the three corners of the triangle is a desirable objective for economic policies, but at most two of these can be satisfied simultaneously. Because budgetary restraint precludes any rapid expansion of public



sector employment, governments wedded to such discipline must either accept low earnings equality in order to spur growth in private service employment or face low growth in overall employment. Alternatively, governments may pursue earnings equality and high employment, but they can do so only at the expense of budgetary restraint.

The trilemma suggests three ideal-type political economies ... In some respects our discussion will be closer to Kitschelt's account of the tensions between the French Revolution's triple objectives of liberty, equality, and fraternity ... “

“The first ideal type is called neoliberal because market-generated inequality is traded for budgetary restraint and high private sector employment. Ideologically, this model is grounded in a

belief that freely operating markets are inherently welfare maximizing, whereas state involvement in the economy leads to a misallocation of resources.”

“The second model also emphasizes budgetary restraint, but it places greater weight on equality and less on individual self-reliance and freemarkets than does the neoliberal type. This model has its origins in corporatist and Christian democratic thought where community, church, and family are seen as bulwarks against the dehumanizing and alienating effects of unfettered markets, as well as against the potential encroachments of state power on the independence and freedom of associational life. Although society is recognized as inherently hierarchical and status differentiated, stark market-generated inequalities are seen as a potential danger to the social order. High employment levels, by contrast, are a relatively low priority in this model because women are viewed as the guardian of the traditional family and hence are encouraged to stay at home and care for children and spouse.”

“The third ideal type prioritizes earnings equality and high employment performance, but sacrifices budgetary restraint. This model has its origins in the European labor movement and in social democratic ideology, and it combines a strong egalitarian ethos with a work ethic that emphasizes employment as the root of collective identity and pride ... Unlike the other models of society, social democracy sees the state as a necessary tool to achieve its egalitarian and full-employment objectives, and this has involved a certain measure of deliberate sheltering from the inequalitarian effects of the market through an expansion in public services and employment.”

Iversen, Torben; Anne Wren (1998): “Equality, Employment, and Budgetary Restraint: The Trilemma of the Service Economy”, *World Politics* 50, 507-546, doi:10.1017/S0043887100007358

Estudios econométricos en política industrial

“Recent years have seen interest grow once again in industrial policy, specifically micro-interventionist industrial policy (...) In international academic circles of economics also, there has been a notable increase in interest in industrial policy. For example, the European scholarly publication *Journal of Industry, Competition and Trade*, compiled a special issue on industrial policy that was guest edited by Professor Karl Aiginger of the Vienna University of Economics and Business and Professor Dani Rodrik of the Harvard University. Both pointed out in their editorial notes ‘Rebirth of Industrial Policy and an Agenda for the Twenty-First Century’ that ‘After a period of decline in interest and premature predictions of demise, industrial policy is back on the scene.’

This academic interest in industrial policy has also extended to the United States. The American Economic Association's Summer 2019 issue of the Journal of Economic Perspectives included an article ... entitled ‘A Toolkit of Policies to Promote Innovation’ ... (that) evaluated evidence for the effectiveness, cost-benefit differences, as well as other outcomes related to a total of nine policy tools that included R&D grants, R&D tax credits, and patent boxes (preferential tax systems on revenues generated from patents).

This same trend has also manifested in the topics of articles published in the so-called ‘top five journals’ which are regarded as the most authoritative journals in the field of economics.”

“The article by ... Aiginger ... points out that this increased interest in industrial policy is due to a growing demand in the developing world for changes in industrial structure, long-term labor market malaise and financial crisis in advanced economies, as well as major technological changes. Moreover they cite the presence of China looming behind all these trends.

China has not sought to merely expand its economy, but, as implied in its strategic plan ‘Made in China 2025’ issued in 2015, the nation has employed industrial policy targeting advanced technology sectors in its aim to be the world leader even in terms of state-of-the-art technological development ... However, the reality of the current situation is not the only factor behind the high interest in industrial policy in economics. The development of methods for conducting empirical research founded upon econometrics has been a key in enabling scholars to rigorously and quantitatively identify and evaluate the effectiveness of industrial policies.”

“In a 2014 *Quarterly Journal of Economics* (QJE) article by Patrick M. Kline and Enrico Moretti ... the authors evaluated development policies for the Tennessee River Valley in the United States over the period of the 1930s to 1950s. The Tennessee Valley Authority (TVA) was a core part of President Franklin Delano Roosevelt's New Deal. It is also a typical example of a place-based industrial policy similar to Japan's new industrial city construction and regional revitalization policies.”

“The original reason why the Tennessee River Valley was chosen as the object of development policy was its severe underdevelopment and other unique attributes ... The authors therefore performed an econometric analysis for comparison using six other regions for which development policies similar to the TVA were proposed but not implemented due to political reasons as controls.

Their findings showed that the growth rate of manufacturing employment was relatively larger in the Tennessee River Valley not only during the period when public investment was provided, but also after the investment ended; whereas the growth rate of agricultural employment, despite being high while public investment was the greatest, fell below other regions after public funding was terminated. These effects show that regional development policies where public investment is intensively furnished to a specific region are able to produce sustainable positive effects in industrial growth through the effect of agglomeration.

In another AER [*American Economic Review*] article published in 2017, Sabrina T. Howell ... employed a method known as a regression discontinuity design (RDD) to evaluate the effects of R&D grants. Her focus was a U.S. Department of Energy (DOE) research and development grant program. During the selection process for companies to whom grants would be provided, the DOE ranked companies based upon their applications.

Although there is continuity in the rankings, discontinuity occurs where companies above the threshold for a particular award receive grants and those below do not ... The results of the analysis found that the award significantly increased subsequent cite-weighted patents as well as the chances of receiving venture capital funding for the recipient companies. The natural experiment and regression discontinuity design which were employed in these two articles have been widely utilized in recent years in the field of economics as empirical analysis methods to identify causal relationships. These methods have provided a solid empirical basis for evaluating industrial policy effectiveness.

In addition, economic disparity among regions, which was the major factor determining the creation of the TVA, is also a major issue in Japan today ... The important thing is that recent research has not only provided insight into the effectiveness of industrial policy, but also effective methods for implementing such policies ... Howell's article demonstrated that R&D grants are more effective when allocated to younger companies and to companies in new industries.

In addition, Harvard University Professor Philippe Aghion and his co-authors used a dataset of enterprises in China to verify the type of cases where industrial policy was most effective in raising productivity. Their results showed that industrial policies can foster productivity growth to a larger extent in cases where they are designed to promote competition among companies, such as cases where benefits are allocated to many companies within one sector or to younger and more productive enterprises."

Okazaki Tetsuji (2020): "Twenty-First Century Industrial Policy Emphasizing Framework Design and Encouraging Competition", <https://www.rieti.go.jp/en/papers/contribution/okazaki/08.html>

¿Nueva
Macroeconomía
empírica?

"The most important problem with macro over the past few decades has been that it has been too theoretical (...) Theory is an essential element of a healthy science. But a healthy science needs a balance between theory and empirical work. Macro lost this balance in the 1980s and is only regaining it now.

Most narratives about the evolution of macro focus on the evolution of macroeconomic theory and the rational expectations revolution in particular. An under-appreciated part of this story is that the rational expectations revolution shifted the field away from empirical work. This was partly because building models that met the higher standards of rigor set by Lucas and his co-revolutionaries was a challenging and therefore highly absorbing task."

"... a very substantial fraction of macroeconomists came to believe that the Lucas critique implied that quasi-experimental empirical methods could not be used in macro. The idea that changes in policy could radically alter empirical regularities (i.e., the Lucas critique) somehow came to be interpreted to mean that the only way to do empirical work in macro was to write down fully specified general equilibrium models of the whole economy and evaluate the entire model It seems that this line of thinking led large numbers of macroeconomists astray in terms of how to think about empirical work in macro for several decades."

"There were isolated pockets of empirical work in macro that employed instrumental variables methods — e.g., using lags as instruments when estimating Phillips curves or Euler equations. The structural VAR literature also managed to carve out some limited understanding of using 'identifying assumptions' to move away from whole-model inference. And throughout, there was a small minority of empirical macro researchers that understood the value of quasi-experimental methods. But a large fraction of macroeconomists rejected such analysis as being un-sound".

"This misunderstanding seriously held back progress in empirical macroeconomics for a generation. Over this period, applied micro experienced a credibility revolution which led various types of quasi-experimental methods to become vastly more important in many subfields of

economics. Macro was largely left behind on this front ... As macro has been catching up on the empirical side, it seems that more and more researchers in applied micro have ... started embracing ... the complementarity of quasi-experimental methods and serious structural modelling.”

“... but being so dominated by theory, the field was very exposed to another problem: models in which markets work well are (usually) easier to solve than models in which market work poorly ... Since models in which markets work well are easier to solve, researchers tend to work with such models. The default assumption about a market is typically that it is perfectly competitive. Researcher will often introduce a carefully constructed friction in a critical place in their model and focus their analysis on the implications of this friction. But all other markets in the model are typically modeled as being perfectly competitive for simplicity.”

“The typical researcher is so used to assuming that virtually all markets are perfectly competitive that they are often completely blinded as to the consequences of these assumptions ... One example of this that resonates strongly with me is the notion that MPCs [marginal propensity to consume?] are trivially small in many macro models.”

“One of the critical roles of empirical work is to confront theorists and policymakers with facts that help them see that the models they are using are not well suited ... Without a robust set of such estimates to guide the development of theory, the theoretical literature is rudderless and is at risk of getting lost at sea.”

“It is, for example, becoming better and better understood that with the help of an instrument (or some other source of exogenous variation) one can estimate various types of causal effects without specifying a full structural model of the whole economy. (Panel data methods and various non-traditional datasets have also helped a lot.)”

“The upside of this is that credible estimates of more and more critical empirical statistics are emerging in macro and this is starting to guide theoretical and policy work in a more and more serious way. Let me take a few examples: We now have a substantial body of high quality work indicating that MPCs are quite large. This is the basic empirical fact favoring HANK [Heterogeneous Agent New Keynesian] models over traditional NK models. But this fact also has important consequences when it comes to the macroeconomic effects of policies that supplement people’s incomes during recessions. We also have a substantial body of high quality work indicating that fiscal multipliers are large in the cross-section. This fact points in a similar direction as the high MPC fact: macro stimulus can raise output substantially in circumstances when monetary policy is accommodative (e.g., at the ZLB). Furthermore, we have more and more work indicating that the slope of the Phillips curve is modest. This implies that a boom that leads to overheating of the economy will have modest effects on inflation as long as inflationary expectations remain anchored.”

“... one can reasonably argue that the field is trending strongly towards a healthy balance between theory and empirical work.”

Steinsson, Jón (2021): “EfIP Online Panel: A New Macroeconomics?”, Policy Brief 32

<https://econfip.org/policy-briefs/efip-online-panel-a-new-macroeconomics/>