The failure of Algeria's industrialization strategy (1967–1989): a new structural economics perspective

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Abstract

Following the theoretical framework of New Structural Economics, this article attempts to explain why Algeria's industrialization strategy failed over the period 1967–1989. Based on this approach, this paper shows that the overdevelopment of a big push industrialization strategy in Algeria since independence, which prioritized capital-intensive heavy industry, violates the comparative advantage principle identified by its factor endowments and gives rise to domestic market distortions and the misallocation of scarce resources. Simultaneously, to scaffold such a development mode, the Algerian government put forth an organic yet deeply distorted system. We conclude that the experience engendered serious weaknesses in Algeria's industrial structure and planning, and it resulted in an unbalanced economic structure. Thus, Algeria's industrialization strategy was disappointing in terms of economic outcomes and impact. This failure is often perceived as one of the main origins of the political, social and economic crisis faced by the country for more than a decade. Our findings suggest that the redesign of growth and industrialization strategies should better reflect Algeria's endowments structure and level of development. Indeed, consistency of a broad-based and industry-based economy with its comparative advantage is one of the best ways to achieve high sustainable economic growth in Algeria.

Keywords: industrialization, new structural economics, economic growth, Algeria.

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1. Introduction

When Algeria gained independence in 1962, Algerian political leaders looked forward to building a strong and prosperous country, and considered

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industrialization to be the cornerstone of economic development. Soon after its founding, Algeria implemented a planned economy and adopted a big push industrialization (BPI) strategy, prioritizing heavy industries, under ideological and nationalist agendas. The purpose was to develop, as soon as possible, advanced capital-intensive and technology-intensive industries to keep pace with the developed world, modernization and development (Lawless 1984; Bennoune 1988; Ruedy 2005).

In the mid-1960s, Algeria, like many other developing countries, was urged to seek modernization and industrialization. At that time, structuralism was the mainstream economic model for development, which advocated a big push strategy, that is, government-led resource allocation, import substitution policy, and development of modern capital-intensive industries (Rosenstein-Rodan 1943; Lin 2021). The first years after the strategy was implemented, Algeria witnessed rapid growth driven by investment, and made progress in transforming its economy in the mid-1960s and 1970s. However, since the early 1980s, the country saw a slowdown in growth followed by long periods of stagnation and frequent crises (Hill 2004; Lowi 2009; Talahite 2018).

Algeria poses a particular puzzle, given its limited economic transformation compared to other countries in the world. The BPI driven economic transformation record of the Algerian economy since independence has not been good. Since the 1980s, there has been growth, but it has not been accompanied by much economic transformation. Both internal and external factors – particularly higher international commodity (oil and gas) prices, new resource exploitation opportunities, and government spending fueled by increases in petroleum tax revenues and foreign aid – contributed to this growth, whose sustainability and equity are, however ,not fulfilled (Jomo 2019; Stiglitz 2021). Even with such growth, the average real per capita income has not greatly increased compared to that of 1980. Moreover, Algeria's development and welfare indicators have decreased vis-à-vis other countries.

With trade liberalization and the structural adjustment programs adopted since the late 1980s, Algeria has experienced a wave of deindustrialization and transformation from being a net exporter to a net importer of food (in large part due to low agricultural productivity). Consequently, a quarter of the population lives below the poverty line, unemployment and underemployment rates are high, and most of the population in the country depends on low-productivity informal sectors, including agricultural activities, as the primary income sources. At the turn of the twenty-first century, Algeria is less industrialized today than it was four decades ago, with an economy looking remarkably similar to what it was at the time of independence. The level of dependence on oil and gas revenues is increasing – hydrocarbons revenue account for approximately 60 percent of Algeria's gross domestic product (GDP) and for 97 percent of foreign earnings. The development of the hydrocarbons sector is therefore at the heart of maintaining the country's economic, social and political stability (Boucetta 2016).

All economies, including Algeria, that pursued the BPI strategy have failed. This failure is often perceived as one of the main origins of the political, social and economic crisis faced by the country for more than three decades. This paper explores reasons for the failure in Algerian industrialization after independence. Accordingly, many researchers agreed that the period 1967–1989 (which witnessed the emergence and disappearance of the industrialization strategy in Algeria) represents the only serious attempt to industrialize the country (Begga and Merghit 2014; Talahite 2016).

In fact, a significant body of literature has researched and debated this question. However, much current knowledge about the root causes of development failure in Algeria focuses on the symptoms or consequences of problems, not their true origins. In other words, the critique focused on how to implement BPI or whether it has costs, rather than if the strategy itself is applicable or not in a specific context. For instance, numerous authors have argued that the strategy had been given less than a decade to prove itself, not nearly long enough by any standard to produce results (see Bennoune 1988; Ruedy 2005). Some observers point to the fact that this strategy did not lead to building the technological capabilities required for the public-owned firms to become efficient and internationally competitive (see Benachenhou 1993; Temmar 2015). Common to the strongly-held conviction in contemporary Algeria, the political leaders decided right for their country. However, their "good" development strategy caused problems, as they were either inexperienced in industrialization, or they possessed weak management capabilities. Finally, several scholars have emphasized the important impact of the country's institutional inheritance on the industrialization process and highlighted various types of "government failure", lack of political commitment, "capture" by interest groups, and a lack of bureaucratic capabilities as reasons for the failure (Hill 2004; Lowi 2009; Begga and Merghit 2014; Talahite 2018).

This paper adopts the New Structural Economics (NSE) as an analytical framework to discern the success or failure of a development strategy (Lin 2009, 2012a, 2012b). The NSE constructs an innovative theory that addresses new approaches and initiatives currently under experimentation in developing countries. It informs the direction of successful structural transformation and key sectors in which a country should invest. Algeria is a particular focus area of this theory. The country deserves careful study and discussion by scholars conducting research on appropriate industrial policy, as well as those researching development more broadly. From our perspective, the NSE approach provides the best answer to why Algeria's post-independence industrialization strategy failed and offers some lessons for policymakers. According to this theoretical framework, the reason behind the failure of Algeria's industrial policy is related to the wrong strategic choice the government made, as far as the appropriate development mode is concerned. In other words, Algeria did not suffer incorrect implementation procedures or an inappropriate duration, rather the fallacies reside in the goals set by policymakers, which were inconsistent with their country's development level and its endowment structure at that time. We argue that development policy shaped by ideas embodied in dysfunctional development thinking was responsible for the failure of Algeria to catch up with the West. Structuralism (Hirschman 1958; Perroux 1963; de Bernis 1966) wrongly advised Algeria on how to achieve industrialization and modernization.

Indeed, Algeria has ignored the existing comparative advantages based on its factor endowments, and focused on developing its industries regardless of their economic efficiency. Therefore, Algeria's industrialization strategy was disappointing in terms of the economic outcomes and impacts: the government persisted with intervention in the wrong industries, which hurt the performance of the Algerian economy, and uncompetitive and inefficient public enterprises emerged. The consequences were disastrous: despite being formulated with good intentions, they were guided by the wrong ideas.

The paper is organized as follows. Section 2 briefly introduces the main ideas of New Structural Economics. Section 3 provides a general background to the industrialization process in Algeria, and examines the contradictions inherent in the development mode during the 1967–1989 period. Section 4 discusses the implementation and performance of the industrialization strategy in Algeria, and section 5 attempts to outline the causes of its failure. Some concluding remarks complete the paper.

2. New Structural Economics

The NSE is an original and helpful theoretical framework for scholars of international development, as well as a reference guide for policy and practice in government and business in many developing countries. Based on history, economic analysis and empirical evidence, Justin Lin (2009, 2012a, 2012b), former chief economist of the World Bank and proponent of the NSE approach, identified economic development as the process of continuous technological innovation and industrial upgrading that, in turn, caused structural transformation.

The NSE contains elements of both neoclassical and structuralist perspectives. According to this theory, industrialization is the core of development policy agenda. Lin started by analysing the economy's factor endowments as a major determinant of industrial and technological structure in the economy at a given time: the change in industrial/technological structure is driven by the change in endowment structure (as in the Heckscher-Ohlin approach).

Then, he examined the way of saving and investing the surplus produced in economy (echoes of some older structuralist ideas). Besides, Lin studied how this process brings about capital accumulation and structural change, involving the production of more technologically sophisticated goods (Dutt 2019; Lin and Zhang 2019).

Lin (2012a) believes that the surest growth path for a developing economy is through developing its industries by following the comparative advantages determined by its endowment structure. With such industries, and appropriate hard (such as power supply, road networks, and port facilities) and soft (such as institutions, social capital, and value systems) infrastructure, the economy will be more competitive, with the largest surplus, the highest possible returns on capital, and so the largest possible savings. Therefore, the fastest upgrade of the endowment structure will be ensured, and the most rapid industrial upgrade and income growth will be achieved, leading to convergence with high-income countries (Ju et al. 2015; Lin 2017, 2021).

Although Lin advocates the market as the engine of growth and structural change, he also accentuates information scarcity, infrastructure backwardness, coordination failure, and unwillingness of enterprises to invest in developing countries, which make it difficult for countries to rely on market mechanisms alone to explore and allocate resources efficiently to make use of their comparative advantages. Therefore, for the sake of accelerating growth, governments ought to facilitate structural transformation and industrial upgrade. In the new structuralist approach, an informed and competent state has a significant role to play as a leader of change and as a cushion to any market dysfunctionalities. Accordingly, the government has an active role as a facilitator in (i) guiding the economy by identifying the sectors of latent comparative advantages with low factor costs of production but too high transaction costs to be competitive, and in (ii) overcoming obstacles by means of providing information, coordinating infrastructure construction, offering incentives, attracting FDI and so on, to turn the latent comparative advantages to competitive advantages (Das 2015; Xiaoyang 2019). In Lin's view, an efficient market and a facilitating state are the two institutional preconditions for a country to develop according to its comparative advantages, as determined by its endowment structure (Lin 2021).

Indeed, consistent with the theory of comparative advantage, Lin identified two major types of economic development strategies: (i) to abide by comparative advantage (comparative advantage following (CAF) strategy), or (ii) to run contrary to comparative advantage (comparative-advantage defying (CAD) strategy). He believes that following the comparative advantage strategy allows developing countries to achieve faster economic growth and converge with developed countries sooner. If a country follows its comparative advantages in its development strategy, it will be an open economy, specializing in the export of whatever it has comparative advantage in and importing goods and services in which it has no comparative advantages. Due to its competitiveness, domestically generated macroeconomic crises will not be experienced, and the economy can withstand external shocks and will be able to sustain macroeconomic stability (Lin 2013; Zhang and Li 2018). For Lin, industrial upgrade and restructuring within the economy's existing comparative advantage determined by its factor endowments should be emphasized, in addition to the government's facilitating role in helping the private sector to exploit comparative advantage.

In contrast, Lin warns against protectionist policies that attempt to deviate too much from comparative advantage because they encourage the creation of unsustainable industries (advanced capital-intensive industries that are inconsistent with their comparative advantage driven by its factor endowments) for which the country lacks the required skills and infrastructure; in addition, such industries encourage corruption and rent seeking. According to NSE, countries need to be very careful about selecting options that are too "distant" from their capabilities, and the reason that industrial policies fail in some countries is because "they fix their sight and policy on an ideal industrial structure linked to modernisation, but this kind of structure is usually capital- and technology-intensive, a characteristic in countries where income is higher than in their own". "This kind of thinking is contrary to comparative advantage and the cost is high for quality governance in finance and government" (Lin and Chang 2009).

Finally, developing countries can learn three main points from NSE thought. First, economic development highly depends on gradual changes in the patterns of specialization and trade and on the growing technological and innovation capabilities of the country. Second, to successfully upgrade industrial structure, a developing country must adopt a comparative advantage following a development strategy based on its factor endowment. Third, despite a free, fair, and competitive market mechanism, governments of developing countries are advised to play a proactive role in facilitating industrial upgrading and structural transformation.

3. Algeria's industrialization process and comparative advantage defying strategy

Before its independence from France in 1962, Algeria was a dual society, characterized by a mixed industrialization pattern. Algeria was a poor and backward agrarian economy, and the corollary industry of the colonial French economic system was a minor sector (mainly dependent upon domestic manufacturing) that had insignificant contribution to economic growth, and that hired almost a colonial-urban-industrializing population. By contrast, a local majority (75 percent) of the population were dedicated to low-productive agriculture, as well as other manual activities such as mining and public works. The industry inherited from the colonizer was underdeveloped, mainly because the regime was more interested in extracting and exporting raw materials to metropolitan France. Meanwhile, an economic system heavily dependent on manufactured products from France was created (Lawless 1984; Benachenhou 1993).

When Algeria gained its political independence, most Algerian political and social elites considered the absence of industrialization – especially the large capital-intensive industries, which were the basis of military strength, political and economic power – to be the main reason behind Algeria's backwardness, poverty and weakness. Having advanced capital-intensive industries, therefore, was considered a major symbol of being a developed and politically powerful country. The leaders of the new regime had to decide which development strategy and administrative system to adopt. In response to the need for guidance in line with the political ideology and nationalism, many influential structuralist economists at that time advocated adopting a BPI strategy to transform the industrial structure and to reduce Algeria's dependence upon goods from colonial powers and other foreign economies (Rosenstein-Rodan 1943; Hirschman 1958; Perroux 1963; de Bernis 1966). According to Bennoune (1988), the goal of BPI was to liquidate the distorting effect of the colonial legacy, escape from dependence on primary exports, and break the vicious circle of poverty.

The central concern of the BPI strategy was to develop advanced capital-intensive industries with direct, administrative resource mobilization and allocation, similar to the practices of the Stalinist planning model in socialist countries. Therefore, Algeria implemented a form of the BPI strategy widely known as the "Industrializing Industries" model inspired by French economist Destanne de Bernis' work – a model that was rooted in Perroux's growth poles and Hirschman's unbalanced growth strategies. The Algerian economy took off during the late 1960s, and the BPI strategy seemed to be working.

During this time, some economies in Asia were pursuing an entirely different development approach. In the 1950s and 1960s, Japan and the four Asian tigers – Korea, Taiwan, Singapore, and Hong Kong – were quietly catching up with the developed countries. These newly industrializing economies grew rapidly from the 1950s to the 1970s by following an export oriented development strategy based initially on labour-intensive, small-scale industries and gradually climbing the industrial ladder to larger, more capital-intensive industries (Gereffi 1990; Naughton 2018; Lin 2021); contradicting the big push approach, which advocated import substitution to build up large heavy industries immediately. Table 1 provides a direct comparison of two contrasting industrialization strategies.

TABLE 1 ▪ *Patterns of industrialization strategies*

	Big push approach (Algeria, Brazil, India, Turkey, China pre-1978…)	Gradual approach (South Korea, Taiwan, Singapore, China post-1978…)
Comparative advantage	Defying	Following
Main industries	Strategic capital-intensive industries with most linkages (Oil, transport equipment, non-electrical machinery, petrochemicals, plastic materials…)	Begin with labor-intensive industries then gradually moving towards more complex industries
Major economic agents	Government, state-owned enterprises	Households, private business, government
Saving and investment decisions	Government	Private business, government infrastructure
Orientation of economy	Internal market	Internal and external markets
Coordination	Plan	Market, with some government "steerage"
Openness to world	Low	High
Trade policy	Import substitution	Import substitution/Export promotion

Sources: Adapted from Gereffi (1990); Naughton (2018).

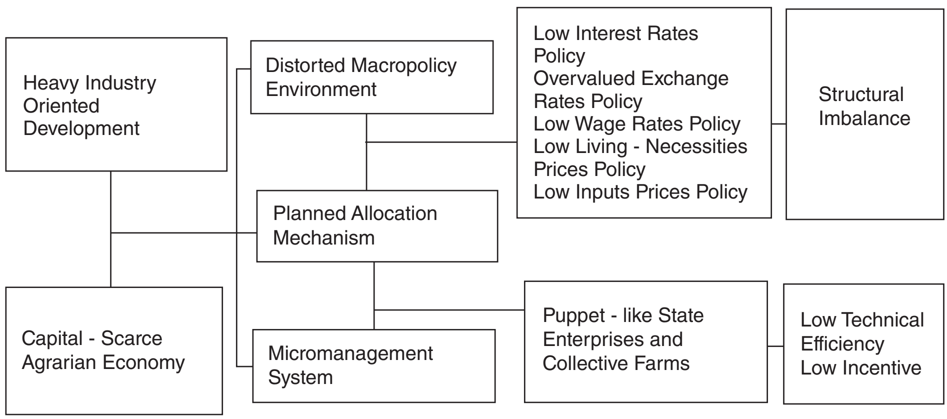
The mainstream view in international academia was that big push was essential for the success of economic transformation and various government interventions needed to be introduced all at once. Many countries, whether socialist or capitalist (such as Brazil, Egypt, India, Turkey, etc.), did adopt the big push approach. In the case of Algeria, de Bernis (1966, 1971) argues that industrialization consists of setting up a coherent industrial structure – defined as the completion of an industrial matrix, meaning the creation of complementarities between different industrial activities. According to this theory, industrializing industries were a group of industries with backward and forward linkages, automatically stimulating further industrialization by promoting investments and by allowing the creation of an economic surplus and availability of capital. The industrializing industries include: machine-building industries, producing capital goods required to equip other sectors (iron and steel, metallurgical, mechanical); the main branches of chemical industry (fertilizers, rubber, plastics), to produce basic and intermediate products for both industry and agriculture; and energy-related industries (petroleum and gas), which have enormous industrializing effects through their backward and forward linkages (fuel, feedstocks and finance for industrialization processes).

These industries are huge, capital-intensive industries, which then act as a motor of economic growth and serve as the main foundations of any industrial development. They produce raw materials and machinery for other industries, including vehicles, farm machinery, pumps and irrigation equipment, electrical goods and plastics. At the same time, they absorb minerals and agricultural products from the primary sector; and thus, they strengthen the inter-industry matrix. In turn, products of the new industry will contribute to the modernization of backward sectors, notably agriculture, by supplying inputs such as pumps, machinery and fertilizers, and by stimulating demand for outputs both in the form of industrial crops and food for the growing industrial workforce (de Bernis 1966; Lawless 1984; Ruedy 2005).

Based on model's vision, president Houari Boumediene (1965–1978) launched the industrializing industries program to modernize the country, and it became part of a planned development strategy from 1967 (the year of the first Three-Year Plan) (Ruedy 2005). Boumediene believed that such a development approach would create the prerequisite conditions for building and consolidating an independent, integrated, autocentric economy, capable of bringing about dynamic self-sustained growth, by setting in motion a chain reaction of investment and employment (Magland and Rangel-Mantilla 1982).

From the NSE perspective, a big push strategy that prioritized heavy industries is a CAD strategy, because developing such industries that were too capital-intensive for the country's level of development, were going against the comparative advantages determined by its factor endowments (at that time, Algeria was an agricultural country with a severe shortage of capital). Accordingly, firms in the priority sectors following such a strategy were non-viable in open competitive markets and could not survive without the government's protection and subsidy. If the government demands that those companies con-

FIGURE 1 ▪ *The traditional economic system in Algeria*



Source: Authors' own work.

tinue, it has to bear some "policy burdens" that are imposed by the government's development policy (Lin 2021).

From this analysis of the conflicting features of heavy industries and a backward agricultural economy, Algeria's government was forced to adopt a distorted institutional arrangement for the success of its industrial policy, and to ensure the development of heavy industries under the CAD strategy. From the perspective of the national interest, this system was, indeed, the best institutional arrangement available for the BPI strategy in Algeria. This traditional economic system consists of three elements: (1) a highly centralized planned resource allocation mechanism; (2) a distorted macropolicy environment; and (3) a puppet-like micromanagement system. The relation between the development strategy and the economic system in Algeria is summarized in Figure 1.

3.1. Central planning system

To achieve its strategic goal, a mechanism of highly centralized planned resource allocation was established to subsidize and protect these target sectors. In Algeria, planning is seen as a privileged instrument of mobilisation of the nation around the fundamental national objectives and a precious guide to the determination of different development phases (Magland and Rangel-Mantilla 1982). To ensure that all the factors of production are usable in the priority industries, the government could never count on market forces to allocate resources. Under such circumstances, it has to make a national prioritized plan for industries and for projects in each industry. From 1967 to 1989, five plans were implemented. The 1967–69 Three-Year Plan was a preliminary effort designed to put in place the bureaucratic and institutional framework necessary to create the basic conditions needed for the industrialization of the country. Then the 1970–73 First Four-Year Plan and the 1974–77 Second Four-Year Plan indicated the Algerian commitment to heavy industrialization. The years from 1977 to 1979 were a transitional period to assess prior development plans and to devise new strategies after the death of President Boumediene in December 1978. In the two subsequent plans that were enacted after the change of administration, for 1980–84 and 1985–89, a change of direction took place under the presidency of Chadli Bendjedid (1979–1992), putting greater emphasis on agriculture and social and economic infrastructure, and less focus on industry in general and on the capital-intensive sector in particular (Saad et al. 2004).

To support the plan, the government has to take in serious administrative measures to allocate its scarce capital, foreign exchange, and raw materials. To successfully implement the industrial policy, the state provides direct subsidies (or preferential tax policy) in those priority industries. In fact, the whole strategy condition consists in the availability of financial capacities for the implementation and, indeed, the survival of the de Bernis's model. During 1967–1989, internal savings financed only 24 percent (on average) of total Algerian investments. Meanwhile, oil revenues (32 percent), remittances from workers abroad (20 percent) and foreign (including loans) aid (24 percent) provided the other sources to finance the development plans. We can notice that, actually, the external sources of financing (oil revenues, remittances from abroad and foreign aid) already represented 76 percent of total sources (Lawless 1984; Magland and Rangel-Mantilla 1982; Sid Ahmed 1990).

However, due to limited tax-collection capacities, and the volatile nature of external sources of finance (especially oil earnings), large-scale subsidies could not be sustained. As an inward-looking strategy, alternatives to subsidies include creating trade barriers to keep similar products from developed countries from entering the domestic market, imposing prohibitive tariffs, and eliminating competition by establishing monopolies for the supported companies in the domestic market. For instance, by the end of 1971, the state monopolized the leading sectors of the economy through a tide of foreign capital nationalization: mining resources like hydrocarbons, banking and insurance, the import–export trade and other major industrial sectors. This state control of the main sectors granted the national public industrial enterprises a monopoly over import, export, and internal distribution activities in order to enhance their control of internal demand and marketing (Bennoune 1988; Ruedy 2005). In addition, since 1970, the organs of central administration – notably the National Planning Secretariat, and the Finance and Industry ministries – were expected to monitor and allocate priorities among various corporations according to overall national development plans.

3.2. Distorted macropolicy environment

The Algerian government had to distort macroeconomic policies suppressing interest rates, exchange rates, wages, prices of raw materials and intermediates inputs. Such a strategy also includes agricultural prices, to be able to execute its heavy industry-oriented development strategy (Sid Ahmed 1990; Lin 2009; Yu 2020). The strong demand for capital urged the government to control interest rates to reduce the cost of capital. In addition, the Algerian government needed to overvalue its own currency in order to divert demand for imported consumer goods to domestic manufactures, and to lower the cost of required imported capital goods (machinery and equipment). Algeria appreciated its currency (ADA) from AD 4.93 per dollar in 1970 to AD 4.88 per dollar in 1983, a 100 percent appreciation during this period (World Bank 2019). Funding these imports required increasing exports in existing comparative advantage areas, such as agriculture and oil. Besides, wage regulation remained strict for urban workers, whose purchasing power was held down due to the artificially low wages. If the market had set the prices of agricultural goods and necessities, urban workers could not have afforded most of the products. Therefore, as in many other developing countries, the government of Algeria had to generate "price scissors" by lowering agricultural goods prices in favor of urban workers against rural peasants (Lin 2009; Yu 2020).

3.3. Micromanagement system

Finally, this distorted institutional arrangement pushed the Algerian government to take on an equivalent micromanagement system. In particular, the state took quasi-total control over major sectors of the economy by creating state-owned public enterprises (SOEs) based in urban areas, despite the People's Cooperatives that operated in rural areas. There was a dearth of the human capital and skills needed to initiate, implement, and manage private sector industrial projects; hence, the type of ownership must be state-owned. To deprive SOEs of any sort of autonomy, many administrative restrictions on their operations were maintained by the state. Thus, SOEs were in de facto dependence on the central and local bureaucracy. The People's Cooperatives mandated agricultural production in the Algerian rural areas to ensure the state's monopoly of products purchase and marketing, and its accumulation of sufficient capital for heavy industries (Temmar 2015; Yu 2020).

4. Achievements and shortcomings of the CAD strategy

The Algerian strategy's major objectives, theoretical framework, and inherent contradictions have been outlined in previous sections. We will examine in this section some of the more specific problems that influenced the strategy's implementation and achievements. In the Algerian case, the CAD strategy and the policies that sustained it had mixed results. When analyzing this issue, we need to distinguish short-term and long-term results.

4.1. From 1967 to 1978: launch and expansion of the CAD strategy

In the short term, between 1967 and 1978, pressing ahead with its bold capital-intensive projects, Algeria (at a time when it was still a poor country) achieved high investment rates, an average of 54 percent of real GDP in 1978 compared to 24.4 percent of real GDP during the 1967–69 Plan, indicating very effective mobilization of the resources during that period under the austerity policy (Table 2). Correspondingly, the industrial investment, being the focus of public investment, was mainly dedicated to heavy industries (including hydrocarbons), which increased from 50 percent during the 1967–69 Plan to 52.0 percent in 1978, and absorbed more than 80 percent of the total industrial investment during 1967–1978.

TABLE 2 ▪ *Sectoral allocation of investment (in percent), 1967–1989*

Sector	1967–69	1970–73	1974–77	1978	1980–84	1985–89
Heavy industries*	50.0	54.0	57.0	52.0	30.0	21.5
Light industries**	6.0	3.0	4.0	9.0	8.0	10.5
Total industry	56.0	57.0	61.0	61.0	38.0	32.0
Agriculture	16.0	13.0	5.0	7.5	11.0	14.0
Other sectors	28.0	30.0	34.0	31.5	51.0	54.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Investment (% GDP)	24.4	33.5	46.8	54.7	48.6	30.67

** Hydrocarbons, iron and steel, mechanical, chemical industries.*

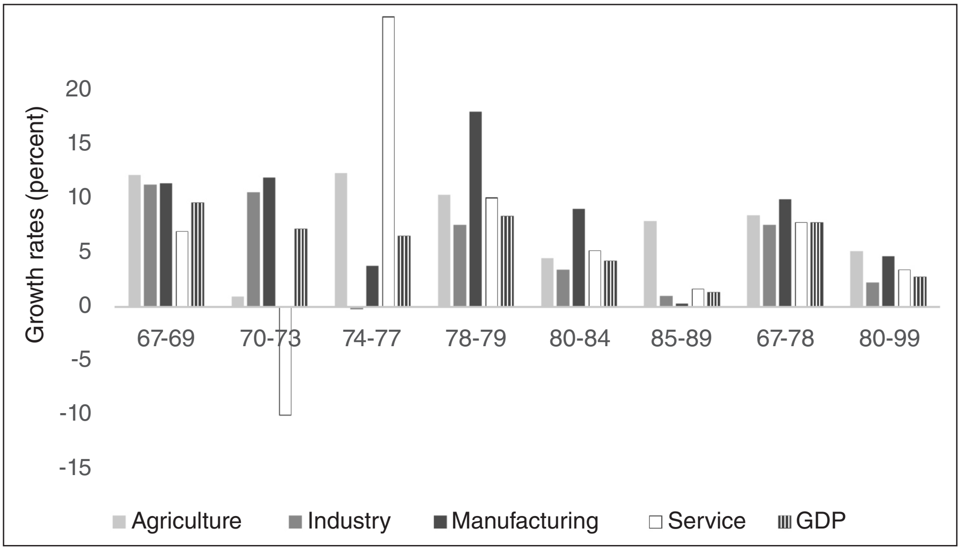
*** Food and drink, textiles, shoes, leather, wood, paper, and others.*

Source: ONS, Statistical Retrospective (1962–2011).

Clearly, the data show that a high priority was given to heavy industries while agriculture and light industries were negligible in terms of investment share, suggesting that heavy industry received positive government subsidies. Because planners were pouring resources into industry, Algeria considerably succeeded in the 1970s through its state-led push for industrial development. During the period of 1978-1979, manufacturing value added recorded the most rapid growth (17.9 percent on average) in history of the country (Figure 2). Official statistics indicate an increase in the GDP share of manufacturing value added, from around 14.3 percent to 16.5 percent during the same period (World Bank 2019). As mentioned before, initial BPI in a backward setting required high technology and large, capital-intensive factories. High levels of investment in plant, leading to high capital-intensity (capital–output ratio) in the manufacturing sectors. To some degree this can be attributed to the tendency on the part of government to concentrate much of its efforts on the introduction of the most modern and expensive technology in large-scale manufacturing sectors (i.e., iron, steel, metal processing, basic chemicals, construction materials and mechanical/electrical engineering) at a relatively early point of industrialization.[1] In addition, given the relative scarcity of skilled labor force in Algeria, the government had to rely on capital-intensive projects to economize on skilled labor force. This seems to explain the upward tendency of the capital–labour ratio shown across the manufacturing sectors

1 Government heavily encouraged the use of capital in Algeria through subsidies and price distortions, as evidenced by a higher degree of capital intensity in industries and a lower degree of employment creation. Data show that at a similar level of per capita GDP, the capital–output ratio in Taiwan and South Korea was about 1.7 from 1960 to 1969, while this ratio reached on average 3.0 in Algeria from 1967 to 1977. This suggests that Algeria has over-invested in heavy industries (Sid Ahmed 1990; Wade 1990).

FIGURE 2 ▪ *Growth rates in five economic plans (in percent), 1967-1999*



Source: Data from World Bank (2019).

(Sid Ahmed 1990). Under CAD, the ratio of value added in light industry to value added in heavy industry moved from 4 to 1 in about 15 years (around 1965–1980). It took Japan 25 years (1910–1935) to achieve a similar ratio, while Britain, the United States and Germany took around 45–55 years just to move from a ratio of 2 to 1 (Sid Ahmed 1990; Wade 1990).

Meanwhile, by 1978, the public sector (comprising 49 state companies involved in industrial production, 19 national offices and eight banking and financial organisations) provided 70 percent of industrial production, 80 percent of value added, and 76.9 percent of total industrial employment. While concentrating on promoting large SOEs, the strategy failed to bring in the private sector to this national agenda (Saad et al. 2004).

Compared with other countries, Algeria achieved high growth of 7.7 a year during the period of 1967–1978.[2] At the beginning of the period, under the structuralist policies, the high growth was a result of investment-led growth. It had a large scale of production capacity in heavy industries, and its newly created capital-intensive industries had large economies of scale. Indeed, such high-growth performance in Algeria was achieved at the time when the state closed the market and mobilized resources through radical nationalization,

2 However, as Naughton (2018) argued for the case of China, this growth rate greatly exaggerates Algeria's performance, as official data show, because the pricing system allocates relatively high prices to the fast-growing industrial sector and relatively low prices to slow-growing agricultural staples. This means that fast-growing sectors are overweighted in aggregate GDP calculations.

confiscation, land reform and collectivization, in other words, by forced savings, to facilitate an ambitious heavy industry. It looked like the Algerian model might really be the best way for a poor country to develop.

4.2. From 1978 to 1989: retrenchment and crisis

In the long term, however, the trend of industrialization reversed and started quickly to lose steam, and by 1978, growth of the heavy and manufacturing sectors had begun to lag GDP growth. By the 1980s, the state-led industrialization effort had reached its limits in Algeria. From the mid-1970s to 1989, because of external shocks and inappropriate domestic policies, the industrial sector and the Algerian economy as a whole suffered a severe worsening in economic and financial performance.[3] As Figure 2 shows, a steady slowdown in the growth of industrial output occurred between 1980 and 1989, falling from 3.42 percent during 1980–1984 to 1.02 percent during 1985–1989. Furthermore, government faced high pressure to expand agricultural and mineral exports, mainly to fulfill the increasing demands for foreign exchange in order to keep the new industries operating. As a result, Algeria's manufacturing base became less diverse, and production concentrated on less sophisticated products. Contrary to what the import substitution strategy aimed at, imported capital and intermediate goods became heavily relied upon in industry, so that between 1980–1985, imports increased to more than 50% of investment expenditures. Moreover, public investment exceeded the state's fiscal and management capacities.

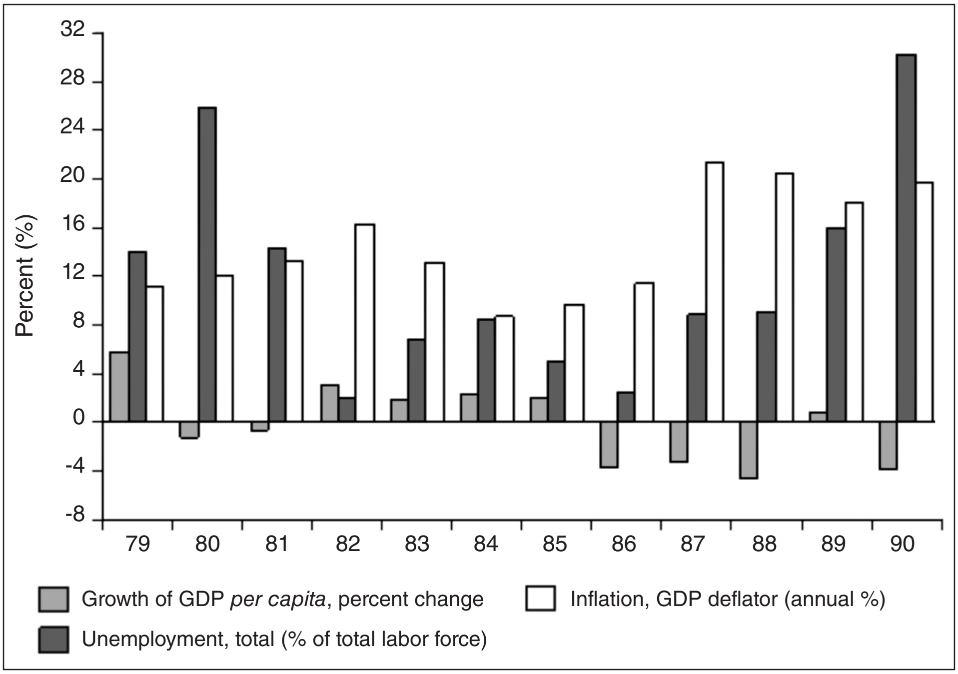
The 1979–1989 period was characterized by the restructuring of investment and a decrease in the overall investment rhythm in line with Bendjedid's new economic strategy (Table 2). There was, as can be seen, a relative stagnation of the annual investment volume during the 1980–1989 period, which was due to the political will to limit external indebtedness, to select investments more precisely, and to derestrict consumption to a certain degree. It can be observed that the overall accumulation rate on average went from 48 percent of the GDP for the 1980–84 period to 30.6 percent during the 1985–89 period. When we look at the evolution of the composition of overall investment, the agriculture and light industry shares increased from 11 to 14 and from 8 to 10.5 percent, respectively. Whereas the share of heavy industry went from 30 to 21.5 percent between 1979 and 1989, which clearly reflects the relative recession of industry in the overall volume of investments and the larger share

3 Among these were continued balance of payments deficits, severe foreign exchange shortages, low growth rates, inflation, unemployment, overcapitalization, and an inefficient industrial structure. In other words, most of the ills which BPI was supposed to remedy reemerged with a vengeance.

offered to the social infrastructure sectors (housing, education and training, and health care).

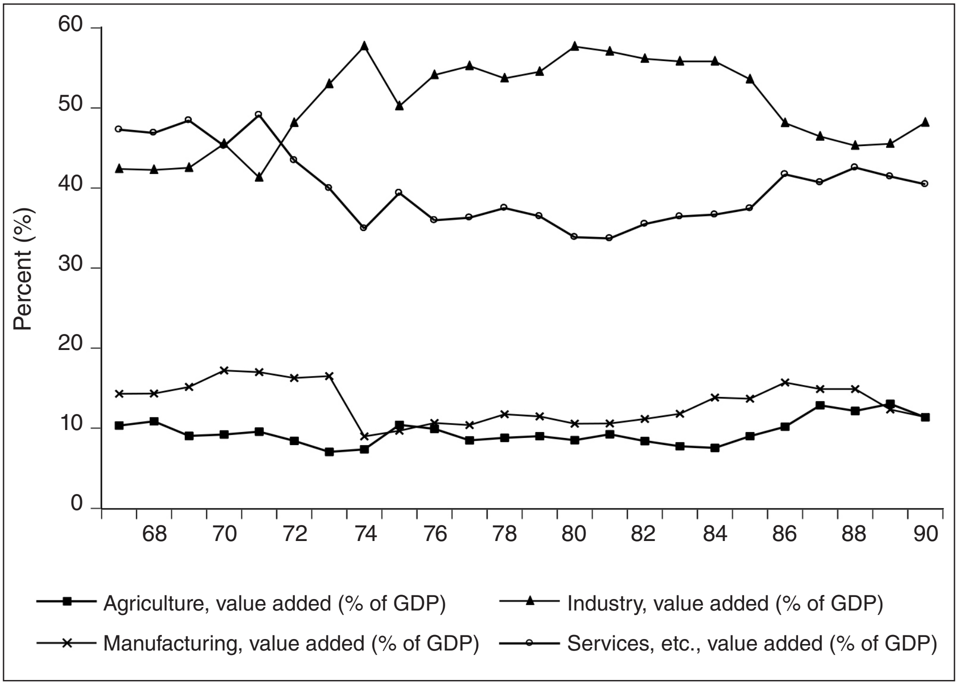
In addition, the Algerian government pursued a number of inappropriate macroeconomic policies that had negative effects on the industrial sector and the economy, including large fiscal deficits financed primarily by borrowing from the domestic financial sector, leading to sharp increases in money supply and resultant inflationary pressures, an increasingly overvalued exchange rate and a high lending rate (Sid Ahmed 1990; Haouas et al. 2021). Throughout the late 1970s, these structural bottlenecks resulted in a decline in the growth of the economy, wherein real GDP declined 3 percent per annum between 1979 and 1982. The country recorded three consecutive years of negative growth in per capita GDP between 1986 and 1988 (Figure 3). In 1986, the year marking the collapse of the oil price, real GDP recorded 0.4 percent growth and per capita income declined by 2.9 percent as well as a 50 percent drop in Algeria's terms of trade. When oil prices fell in 1985, however, the negative shock cut GDP by more than 15 percent. The heavy industry-oriented development strategy adopted by Algeria required protection or subsidies. Not surprisingly, economic growth slowed down once domestic resources and the pos-

FIGURE 3 ▪ *Major macroeconomic indicators in Algeria, 1979-1990*



Source: Data from World Bank (2019).

FIGURE 4 ▪ *Structural transformation of the Algerian economy, 1967–1990*



Source: Data from World Bank (2019).

sibility of borrowing abroad were exhausted. With the slowdown in growth performance, the economic crisis was inevitable.

The experience in the first half of the 1980s exposed profound weaknesses in Algeria's industrial structure and planning, which engendered an unbalanced economic structure. Analysing the evolution of Algeria's GDP components indicates that there has been a small but gradual structural transformation of the economy, away from agriculture, which represented an average annual share of 10 percent of GDP during 1967–1970 and 9.8 percent during 1980–1985, toward industry, which produced an average annual share of 42.4 percent of GDP in 1967–1970 and 52.1 percent in 1980–1989, with manufacturing staying at roughly 13 percent of GDP for the whole period (Figure 4). Any real transformation that has taken place has reallocated resources within the industrial sector, within which the hydrocarbons sector is important to the economy in terms of its share of GDP (30 percent), and it seems to have benefitted the most from this internal reallocation of resources.[4] However, given that Alge-

4 This structure reflects the fact that more resources had to go to the hydrocarbon sector in order to generate the foreign exchange needed to import capital goods for the industrial sector. Therefore, the economy was transformed from being agriculture dependent to hydro-

ria's GDP growth declined, the high industrial share of GDP suggests that Algeria's economy was distorted, contrary to the fact that the increase in the industry share of GDP and the decrease in the agriculture share would enhance the rate of economic growth.

The CAD development strategy is based upon two priorities: (i) industrialization over the development of agriculture, and (ii) capital accumulation over consumption. The distorted structure of the economy that created serious difficulty was the crisis caused by the slow growth of agriculture at a time when population growth and rising urban incomes were causing demand to soar. The decline of the GDP share of agriculture constrained the government to import food to cover shortages during population growth since the late 1970s (Metz 1994).

4.3. Socio-economic and political implications

The 1980s were a crucial period in Algerian economic history. At the beginning of the decade, as oil prices first tapered off and then fell sharply, the country was highly exposed to the international oil market. Oil, gas, and related minerals provided about two thirds of government revenue and almost 95 percent of merchandise exports. Algeria could well have followed other major developing OPEC members – notably Mexico and Nigeria – into a debt crisis. The Algerian government was forced to plunge deeper into debt due to many factors, such as worsened terms of trade, borrowing abroad, and balance of payments deficits. This is reflected in the sharp increase in the country's external debt which, in the main, was long-term and used to finance investment projects and not government consumption. By 1984, total external debt stood at $14.7 billion and its servicing absorbed about 32.2 percent of foreign currency earnings.

Meanwhile, state budgets fell into chronic deficit beginning in 1986, averaging about 5 percent of GDP for the rest of the decade. Additionally, oligopolistic enterprises, protected by tariffs and import controls, raised domestic prices to cover rising unit costs and profits. This helped trigger double-digit inflation that was worsening as the decade ended (increased from 1.9 percent in 1983 to 30 percent in 1990). Unemployment grew to an estimated 21 percent by 1987 (Figure 3).

It is not much of an exaggeration to say that the implementation of the CAD strategy not only distorted Algeria's industrial structure but also effec-

carbon dependent. The Algerian development project appeared as needing a resource boom in order to achieve its claimed goal of building an "independent and national economy". Hence, in the Algerian context, it is the resource boom that constitutes an objective factor for the implementation of a diversified economy (of which the manufacturing sector constitutes an essential element).

tively worsened the people's living standards. These improved little (in terms of education, health care, housing, and so on) with the implementation of the CAD development strategy, wherein priority was given to development of heavy industries to which almost all limited materials were allotted (Hill 2009; Temmar 2015). Therefore, the economy was deficient in materials needed to develop light industries and to improve living standards. Consumption stagnated during these years, and for the majority of the population, austerity measures meant no wage increases, a limited range and quantity of even essential goods in the shops, and delays in the provision of certain social infrastructures, notably health care and housing. In the rural areas, peasants were badly affected by the unfavorable terms of trade of agricultural products relative to industrial commodities. Hence, it was hardly impossible to enhance their living standards (Lawless 1984; Bennoune 1988; Hill 2009).

As suggested earlier, and as the name implies, capital-intensive industries are incapable of absorbing additional labor. Therefore, in many cases fewer jobs per dollar invested are provided by those industries than by the smaller firms they replaced. Although the industrial sector covered half of Algeria's GDP in 1986, employment in such sectors only accounted for 13 percent. Simultaneously, more than 86 percent of employment was still in the agricultural and lower value added service sectors (especially in the informal sector) – an irrational allocation of resources.[5]

A common belief among economists is that Algeria, like many other oil-dependent economies, has done very little to diversify its economy, and its attempts have been mostly unsuccessful. Efforts to spur industrial development in Algeria largely vanished with the perverse industrialization policies, economic collapses and adjustment programs of the 1980s and 1990s. Since 1980, manufacturing industry in Algeria has declined in its share of both GDP and trade, and today Algeria's manufacturing sector is in many ways less advanced than in the first decade following independence. In contrast to much of the rest of the developing world, Algeria has "deindustrialized". With the encouragement of International Monetary Fund (IMF) advisors, in late 1987 Algeria began dismantling the structures of state capitalism and moving in the direction of a market economy. Premature import substitution industries in highly sophisticated activities, owned by the state, went bankrupt following trade liberalization and privatization because they were not competitive. The upshot was the observed trend of deindustrialization. The remaining low sophisticated manufacturing activities that survived were more competitive, but

5 While Algerian government policies favored larger SOEs, the smaller firms were squeezed out of local markets. Some experts viewed this bias as the informal sector's fertile potential for entrepreneurial activities. With growing unemployment, as much as half or more of urban dwellers struggled to survive in this sector.

they have failed to grow robustly and keep pace with those of other middle-income countries.

Perverse Algerian industrialization aggravated the factors that caused the crises of the late 1980s. Algeria started changing its economic policies when its oil market collapsed in the mid-1980s, but the damage had already been done. The CAD industrialization strategy was disappointing in terms of economic outcomes and impact. Consequently, Algeria's economy became more deeply enmeshed in the vicious cycle of poverty and repression. The powerful, unceasing nation-wide protests that broke out throughout the country in October 1988 were a response to accumulated grievances against the regime, whose failure had attained staggering proportions for years. And, consequently, contributed to increasing inequality, social marginalization, high unemployment rates – especially among youth and women – and deteriorating standards of living, especially in the interior and desert regions (Lowi 2009; Zoubir and Aghrout 2012). The economic outcomes of this strategy and the political conditions combined to create the context in which social destabilization led to a tide of violence in the 1990s (Haouas et al. 2021). Finally, the CAD strategy appeared to come to an end or fall apart in conditions of economic collapse and social and political upheavals, of a violent nature.

5. What went wrong?

Policy-making is inevitably dependent upon learning from past experiences, and the case of Algeria is no exception. Indeed, understanding the mistakes of the past is a key prerequisite for moving forward more confidently in the quest for prosperity. Careful observation of the apparent causes of Algeria's economic failure denotes that they were in reality the consequences of bad strategic choices in industry selection – and the necessity of maintaining firms that were inherently not viable given the prevailing circumstances in the country. They were endogenous to the strategic choices made with a noble goal of development.

The problem with past experiment was not the intention of the ambitions but their unrealistic nature and their inconsistency with a low level of development; and they were guided by the wrong ideas. Unfortunately, Algeria's industrial strategy was formulated under the influence of the early mainstream structuralism that wronged the Algerian leaders and economic policies of the country at the dawn of independence. Indeed, the push for advanced heavy industries by political leaders in Algeria was a sign of their misunderstanding of what could be called the endogeneity of economic structure. Because they did not perceive that the structural differences between a developed country and a developing country such as Algeria was endogenous to the differences in their endowment structures, so they blindly adopted different policies derived from various development theories of their time, which explained differences in economic structure between industrial powers and low-income countries mainly by the prevalence of market failures arising from structural rigidities in the low-income countries (Lin 2012a, 2012b).

The poorer productivity performance under central planning is widely considered a fiasco resulting from an imported Soviet model of industrialization that completely ignored Algeria's comparative advantage. Because Algeria is relatively rich in labor and natural resources but not in capital, advanced capital-intensive industries were not adapted to the endowment structures of this poor country at the time – or aligned with its comparative advantage. As a result, Algeria could not fully participate in the global industrial chain. Structuralism recommended that Algeria use massive government interventions in order to overcome market failures and alter the production structure of its economy with the hope of achieving the same level of development as advanced countries. Once protection and subsidies were eliminated, heavy industries would quickly collapse, resulting in mass unemployment, poverty, and social and political instability.

The actual problem that impeded many of the ambitious industrial ventures initiated by Algeria's leaders and eventually made them unsustainable and bankrupt was the viability of these development projects in the first place. There was a perception that many investments suffered from bad planning, poor project management and corruption, and in some cases implied high inefficiencies – the so–called 'white elephants'. However, even if they had been entrusted with the best managerial capacities, the most effective institutional arrangements, and the optimal incentive systems for good performance, they could not have competed with firms from advanced countries in an open market and generated acceptable rates of return.[6] If the idea for development is wrong – for example, the structuralism for development and neoliberalism for transition – even a country with a strong state capacity, such as the Soviet Union, with bountiful resources, such as Argentina and many other Latin America countries, or with a good institution at the beginning, such as the Philippines, India and other post-colonial developing countries, the development performance will be poor. Therefore, the fundamental determinant for development success or failure in any country under any preconditions is ideas (Lin 2013).

6 It should be noted that many countries introduced the rule of law and other regulations but failed to achieve sustainable economic growth. The key is not whether the rule of law is introduced but that it is accompanied with a development strategy to promote industrial development in line with a country's comparative advantage. A right approach guided by a right idea is more important than a strong state as recommended by some economists. If the development strategy is wrong, a strong state may cause more harm to its people and country than a weak state.

As mentioned previously, the BPI strategy is CAD, given that Algeria was an extremely capital-scarce country. It can engender a distorted industrial structure, and can make it difficult for the economy to upgrade its manufacturing structure. Clearly, the state's protection and subsidies through the CAD strategy led to interventions and various distortions in the market, giving rise to misallocation of resources, rent seeking, corruption, soft budget constraints, and political capture (Yu 2020; Lin 2021).

In addition, Algeria's industrialization was facing many other related difficulties. The weak growth effect related to its structure of industry was often the result of low productivity, which suffered because of the low level of managerial, technical, and vocational skills. At the same time, many Algerian industries operated at between 10 to 65 percent of capacity. The evolution of utilizing productive capacity by the industrial sector was bound to be influenced by the inadequate environment (either because sufficient inputs were not yet available or because markets for their products had yet to develop) in which it had to function, at least in the short and medium run. Furthermore, a third factor in the low productivity of Algerian industries was the impossibility to realize economies of scale, because their products faced insufficient demand in the domestic market, and they lacked competitiveness in international markets. As a result, they quickly ended up with excess capacity and severe losses (Lawless 1984; Bennoune 1988; Laouisset 2011; Talahite 2016).

Following a catch-up path drawn from the currently developed nations' "best practices" leads to a hotchpotch of policy recommendations that have no analytical basis and are impossible to follow in practice. It is obvious that advanced economic structures are based on what the successful country already looks like, which was achieved over decades or even centuries. Furthermore, the BPI strategy does not take into consideration the initial conditions (administrative capacity, physical and human resources, infrastructure) as well as political will and ability as prerequisites for its vast agenda, and these may simply not exist in many developing countries (Hobday 2013).

The CAD industrialization strategies undertaken by the Algerian government failed to promote diversification of its economy in a self-sustaining way. Structural adjustment programs not only ended these non-viable firms, but they also demanded that productive sector firms compete on their own in liberalized markets. This led to the Algerian economy reaching an equilibrium based on comparative advantages that existed at independence: extractive industries and agricultural commodity exports. Thus, after reaching macroeconomic stability in the late 1990s with the oil boom, and the help of aid flows, Algeria found itself back at square one: needing to diversify an economy dependent on a few commodity exports.

As the last three decades of Algeria's development process suggests, neither structuralism nor neoliberalism generated strategies that successfully altered these generally perverse characteristics. Today, despite many economic reform efforts, their impacts on Algerian industrial performance remain disappointing. SOEs, suffering from low productivity and inefficiency, still dominate the economy, which impedes private sector development and industrial diversification. The country has also failed to diversify its economy, exports, and fiscal revenues despite its various attempts (Begga and Merghit 2014; Kim 2014).

It is widely recognised that structural transformation and diversification in Algeria's economy remains a big challenge as well as a high priority. There are plenty of reasons for Algerians to make a serious attempt to industrialize. The Algerian economy becomes ever-more reliant on the oil sector and on the low-productivity sectors. With oil making up 97 percent of export incomes and the oil sector representing roughly two thirds of both GDP and government revenues, the economy is caught in a trap in the sense that it is unable to diversify away from its dependency on a single valuable natural resource (Haouas et al. 2021). This fact may explain why the economy has become more vulnerable to external shocks and is unable to achieve sustainable high growth rates. Hence, the NSE calls for a redesign of growth and industrialization strategies to better reflect Algeria's endowment structure and level of development, which old structural economics neglected or even contradicted. A broad-based and industry-based economy (the most effective way of mitigating the volatility of natural resource revenues) consistent with its comparative advantage is one of the best ways to achieve high sustainable economic growth in Algeria.

6. Conclusion

Every process of industrialization entails mistakes, sacrifices, and hardships that not a single industrialized country has escaped. It is wrong to denounce these mistakes without regard to their historical, political and economic context in an attempt to disguise the real causes underlying the failure of the industrialization of a country. It is fair to acknowledge a great degree of logic and consistency on the part of the Algerian authorities in the selection of the development model after independence. It is not that the Algerian political leaders were more visionary; actually, there was not a great range of viable options at that time. Guided by the early development economics thought, the Algerian political leaders believed that concentrating only on existing comparative advantage industry would have missed a unique opportunity to speed up the rate of growth of the country. However, the big push strategy of the 1960s to 1980s brought harmful or even disastrous consequences: the wrong ideas overshadowed their good intentions. Hobday (2013) argued that direct policy lessons could not be drawn, neither analytically nor empirically, from the West to apply to the context of other developing countries. In contrast to many experts' recommendations, Algeria – among other developing nations – ought not to imitate successful advanced economies' paths nor choose similar sectors or technologies to directly compete with them.

The reasons behind the failure of Algeria's industrializing industries approach were manifold and interconnected, but most were related to the frenetic speed of development through inaccurately implementing the heavy industry-oriented development strategy, which is essentially a CAD development strategy. This created distorted sectoral and branch imbalances to meet unrealistic targets. The advanced, yet less competitive, industrial structure after independence was the result of defying Algeria's comparative advantages as determined by its existing factor endowment structure. Over time, the legacies of the CAD industrialization strategy, including distortions in the factor markets, financial structure, resource levies, and monopoly in the service sector, are still widely causing the suppression of incentives, the misallocation of resources, and economic inefficiencies. Thus, Algeria's inclusive and sustainable growth is hampered due to significant hurdles.

Drawing lessons from history and economic analysis, the failure case of structural transformation and manufacturing upgrading in Algeria has significant implications and helpful lessons for the current government. The NSE argues that a successful industrial strategy must reflect the country's factor endowment at a given moment. Targeting completely new industries that do not match a country's factor endowment and comparative advantages may easily fail, and the risks flagged by the NSE are real and cannot be ignored: attempts to leapfrog gradual process by investing in comparative advantage defying industries at an early stage are likely to lead to expensive dead ends. A desirable industrial policy should aim to facilitate the growth of industries, which are the country's latent comparative advantage: sectors in which production costs are low by international standards, but where higher transaction and information costs prevent firms from gaining a competitive edge. The government could actively intervene to lower transaction costs in these sectors by creating enclaves with strong infrastructure and making the business environment attractive.

In practice, this means that Algeria – and certainly most developing countries – should study the experience of slightly more advanced countries with similar factor endowments, learn from their histories of moving up the value chain, and ready itself to provide incentives to attract domestic or foreign companies within the latent comparative advantage industries, eventually promoting its diversification and prosperity in the twenty-first century.

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Author contribution statement

The authors contributed equally to the article.

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El fracàs de l'estratègia d'industrialització d'Algèria (1967-1989): una nova perspectiva d'economia estructural

RESUM

Seguint el marc teòric de la Nova Economia Estructural, aquest article intenta explicar per què va fracassar l'estratègia d'industrialització d'Algèria durant el període 1967-1989. Basant-se en aquest enfocament, es demostra que, des de la seva independència, l'excessiu desenvolupament d'una estratègia de ràpida industrialització, que va prioritzar la indústria pesant i intensiva en capital, va violar el principi d'avantatge comparatiu, d'acord amb la dotació de factors d'Algèria, i va provocar distorsions en el mercat intern i una assignació inadequada d'uns recursos escassos. Simultàniament, per sustentar aquest model de desenvolupament, el govern algerià va dissenyar un sistema orgànic, encara que profundament distorsionat. Concloem que aquesta experiència va generar greus deficiències en l'estructura i la planificació industrial del país i va donar lloc a una estructura econòmica desequilibrada. L'estratègia d'industrialització d'Algèria, doncs, va ser decebedora pel que fa a resultats i impacte econòmics. Aquest fracàs es percep sovint com un dels principals orígens de la crisi política, social i econòmica a què s'enfronta el país des de fa més d'una dècada. Les nostres evidències suggereixen que el redisseny d'una estratègia de creixement i industrialització hauria de reflectir més bé l'estructura de dotacions i el nivell de desenvolupament algerians. De fet, una de les millors maneres d'aconseguir que Algèria tingui un creixement econòmic elevat i sostingut és mantenir una coherència entre una economia de base àmplia i industrial i l'avantatge comparatiu del país.

PARAULES CLAU: industrialització, nova economia estructural, creixement econòmic; Algèria.

CODIS JEL: O14, O2, O55, L52.

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El fracaso de la estrategia de industrialización de Argelia (1967-1989): una nueva perspectiva de economía estructural

RESUMEN

Siguiendo el marco teórico de la Nueva Economía Estructural, este artículo intenta explicar por qué fracasó la estrategia de industrialización de Argelia durante el periodo 1967-1989. Basándose en este enfoque, se demuestra que, desde su independencia, el excesivo desarrollo de una estrategia de rápida industrialización, la cual priorizó la industria pesada e intensiva en capital, violó el principio de ventaja comparativa de acuerdo con la dotación de factores de Argelia y provocó distorsiones en el mercado interno y una asignación inadecuada de unos recursos escasos. Al mismo tiempo, para sustentar ese modelo de desarrollo, el gobierno argelino diseñó un sistema orgánico, aunque profundamente distorsionado. Concluimos que esta experiencia generó graves deficiencias en la estructura y la planificación industrial del país y dio lugar a una estructura económica desequilibrada. Así pues, la estrategia de industrialización de Argelia fue decepcionante en términos de resultados e impacto económicos. Este fracaso se percibe a menudo como uno de los principales orígenes de la crisis política, social y económica a la que se enfrenta el país desde hace más de una década. Nuestras evidencias sugieren que el rediseño de una estrategia de crecimiento e industrialización debería reflejar mejor la estructura de dotaciones y el nivel de desarrollo argelinos. De hecho, una de las mejores formas de lograr un crecimiento económico elevado y sostenido en Argelia es la de mantener una coherencia entre una economía de base amplia e industrial y la ventaja comparativa del país.

Palabras clave: industrialización, nueva economía estructural, crecimiento económico, Argelia.

Códigos JEL: O14; O2; O55; L52.