



BUSTING THE 'FREE-MARKET' MYTH:

A CASE STUDY OF HOW CHILE USED INDUSTRIAL POLICY TO PROMOTE HIGH-VALUE AGRICULTURE EXPORTS



This case study busts the myth that Chile's rapid economic growth was the result of a 'free market miracle'. In fact, even at the height of the neo-liberal period from the mid-1970s and through the 1980s, Chile used a range of targeted industrial policy measures to develop successful high-value agricultural exports.

Chile's experience demonstrates that:

- Real-world policymaking rarely follows narrow ideology, and the use of industrial policy measures can be pursued even within an economy that has a broader free-market framing.
- The state and state-backed organisations can effectively play a venture capitalist role identifying market niches, providing 'big push' policy interventions and even creating firms which demonstrate the viability and profitability of a sector, 'crowding in' other private sector actors.
- Effective sectoral development requires consistent policy support from governments and the creation of supportive institutional frameworks.
- Governments can play a vital long-term role in building the technological and human capabilities and business ecosystems required to sustain high-value export sectors.
- Industrial policy is not confined to the manufacturing sector, it can also be employed to develop highly technical agricultural export sectors which can in turn create jobs and linkages to the wider economy in support of structural economic transformation.

The idea of Chile as a 'free market miracle', first advanced by Milton Friedman, is one of the most enduring myths associated with recent economic development history.¹

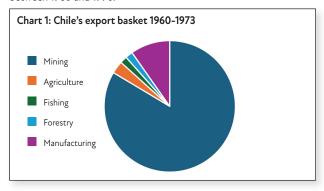
POLICY QUESTIONS FOR CONSIDERATION

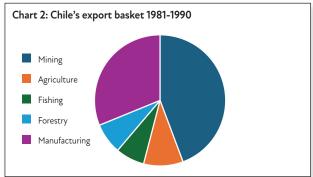
- What would be the national and international political and economic constraints on pursuing industrial policy measures in your country? Fiscal space? Policy space?
 Challenging received wisdom? How can these be overcome?
- What do you already do well in your country and how can you build on this?
- How can you think more ambitiously about building competitive advantage?
- How does the institutional structure in your country help or hinder this approach?

CHILE'S ECONOMIC JOURNEY

From 1938 until 1973 successive governments played an important developmental role in Chile's economy, with state intervention in the economy peaking during the Allende government from 1970-1973. Following the 1973 CIA-backed coup, the Pinochet military dictatorship pursued a broadly neo-liberal economic model removing restrictions on foreign direct investment, privatizing manufacturing industries and commercial banks and bringing down tariffs. But alongside this, the regime maintained active state support for new export sectors, particularly high-value agriculture, as part of a strategy to diversify exports and reduce reliance on copper.

Charts 1 and 2 demonstrate the diversification of Chile's exports between 1960 and $1990.^2$

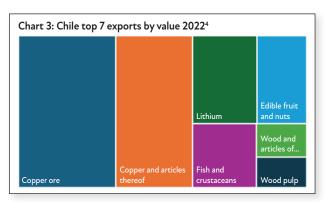




Today, Chile's main exports are copper, lithium, fresh fruit, salmon, wood pulp and wine. The economy is less vulnerable to fluctuations in the copper price, is earning more (and more stable) foreign exchange and has created new employment opportunities. The current Boric administration is seeking to revive industrial policy (for example plans to nationalise the lithium industry), with a greater emphasis on social justice and environmental sustainability.³

Chile's success in translating favourable climatic conditions into highly successful export industries was by no means inevitable, nor was it the result of releasing market forces. Rather, it was the product of targeted and consistent government interventions to build and mobilise the necessary human and technical capabilities.

There are, of course, limits to Chile's approach and what has been achieved. Its use of industrial policy in the agriculture sector was ad hoc and therefore suboptimal in terms of broader planning and cross-sectoral vision, begging the question what could have been achieved with a more well-coordinated approach. The country has not yet followed the path of East Asian economies into higher technology manufactured goods, although its agricultural exports are clearly highly complex and knowledge intensive. Progress was facilitated by the authoritarian nature of the Pinochet regime, which paid little regard to community land rights and environmental degradation and has led to concentrations of wealth in a handful of elite families. As with all economic development, this experience involved serious contradictions.



THE SECTORS THAT CHILE'S GOVERNMENTS BACKED



From a very low base in the 1980's, Chile is now the world's largest exporter of Pacific Salmon with 30% of the global market, ahead of Norway. In 2023 the sector was the second largest contributor to national exports after copper and ahead of lithium.⁶ Salmon are not native to Chile. Atlantic and Pacific species were introduced in the late 1970s and from then on the country's technological and human capabilities in the sector were deliberately supported by government. The Japan-Chile Project ran between 1969-1989 as a joint scientific and technical venture between Chile's National Fisheries Service (SERNAP) and Japan International Cooperation Agency (JICA). It included transfer of technology about vital processes in salmon farming such as fish disease control and feed production. In 1982 the quasi-government agency Fundación Chile directly established

a company, 'Salmones Antarctica', demonstrating that the sector could be profitable. The number of salmon farming firms grew from around four in 1980 to 219 in 2017. The government also supported knowledge, skills and technological developments through the establishment of new university programmes needed by the salmon farming industry, such as marine sciences, pathology and aquaculture business administration.⁷

From the 1990s on, the sector matured, and linkages were created with manufacturing and services. For example, firms emerged to manufacture cages, to provide maintenance services, to produce and maintain tanks, to manufacture feed and to provide pathological services thus contributing to the development of a sectoral ecosystem.

²Data extracted from tables in Alvarez R (2004) "The export performance of Chilean firms: some stylised facts" CEPAL Review

³Novoa, R.B (2024) "Evolution of Industrial Policy in Chile: Analysis of the Period 1990-2022" SciELO Preprints

⁴ITC trade map data

⁵Data from SalmonChile

 $^{^6 \}mbox{ITC}$ Trade Map data and Central Bank of Chile data

Forestry and wood pulp (\$)



Today Chile is the 7th largest exporter of wood pulp globally.9 As with salmon, the industry is based on non-native trees - pine and eucalyptus. Having identified that Chile has good climatic conditions for these species, from 1974 onwards the military regime (under the influence of a powerful elite) supported the forestry sector through significant subsidies for planting, coupled with a package of complementary sectoral industrial policy measures. The subsidy programme, called Decreto Ley 701, granted cash subsidies amounting to 75% of the costs of planting and managing forests as long as 75% of the seedlings survived for at least a year. Between 1974 and 1994, US\$135 million in subsidies and grants were spent under this programme. The Central Bank also provided subsidized credit for investment in the forestry sector.¹⁰ While state support for the plantation sector boomed during the military dictatorship, state involvement in forestry processing industries declined, as privatisations led to concentration of power and profits in a handful of large conglomerates. Exports during this period consisted largely of unprocessed logs. It was not until the early 1990s when foreign investors moved in that links to manufacturing industries such as cellulose and furniture were developed.¹¹

Fruit exports



Fruit was identified after the First World War as a potential alternative to nitrate exports, a previously thriving export sector which had suffered with the invention of synthetic nitrate. Through a range of government support measures, by the 1960s the government developed the ability to export apples and grapes. Under the military regime from the 1970's Chilean fruit exports really took off - increasing almost 10-fold. Chile is now the fourth largest – and fastest growing - fruit exporter in the world.14 Government policies included the 1965 Chile-California Programme which saw more than 80 Chilean graduate students sent to California to learn how to cultivate and export fresh fruit, as well as the direct establishment of pilot company, 'Berries La Union' in 1985 by Fundación Chile. 15 The company, similarly to Salmones Antartica, demonstrated that berry cultivation in Chile was possible and profitable, as well as establishing underpinning logistics and technologies such as cold-storage systems, which would go on to support the development of subsequent fruit exports, including fresh cherries where Chile is now a world-leader (see box overleaf).

military government made what amounted to a strategic bet on a non-existent but potentially profitable sector.12

SUCCESS FACTORS

While national history and context is always unique, there are aspects of Chile's experience that may be useful for other countries to consider, particularly those keen to diversify their export baskets.

1. The state as venture capitalist

Despite being the 'poster child' for liberal economies, the Pinochet regime identified markets and market niches and then successfully married these with products where Chile had potential. It then actively backed the take-off of these sectors through industrial policies such as the forestry subsidy programme, as well as the direct creation of firms such as Berries La Union and Salmones Antartica. The state effectively played the 'venture capitalist' role. There were zero or low initial rates of return, but long-term gains were made for the wider economy in terms of employment creation and export growth and diversification.

2. Persistent development of sectoral capabilities

Successive Chilean governments supported the building of technical and human capabilities over many years in priority sectors. This included: developing sector specific research and development programmes via universities and other organisations which mirrored the research and development function of a large multinational; on-going technical support programmes run by government agencies; and provision of financing. The persistence and continuity of these policies helped to create sustainable sectoral ecosystems which were less likely to falter, and which were adaptable as new products and markets were identified.

⁸World Bank (2020) Chile's Forests: A Pillar for Inclusive and Sustainable Development

¹⁰Lebdioui, A. (2019) "Chile's Export Diversification since 1960: A Free Market Miracle or Mirage?" Development and Change

¹¹Clapp, R.A. (1995) "Creating Competitive Advantage: Forest Policy as Industrial Policy in Chile" Economic Geography also reference World Bank paper

¹² Agosin, M, Grau, N & Larrain C (2010) "Industrial Policy in Chile" Inter-American Development Bank (IDB) Working Paper series

¹³Fruit data from Fruits from Chile

3. Effective organisations

Successive governments, including during the so-called free market period, established and supported effective organisations, including development finance institutions and export promotion and technical support agencies, that provided a sustainable institutional basis for building the sectoral infrastructure, skills base and technological capabilities for the development of high-value agricultural exports. These included:

- CORFO (Corporación de Fomento de la Producción) founded in 1939 was one of the first development finance institutions in Latin America. Over the years it has played a varied role depending on the government of the day, from a pivotal role in the 1960s and 1970s, to a more facilitative role during the military dictatorship.
- Fundación Chile is a non-profit semi-public entrepreneurial institution created in 1976 by an endowment. Its initial aim was the "joint creation of a scientific and technological research foundation" and it emerged to become a particularly important player in the 1980s, directly creating and acquiring companies as well as working closely to support the private sector.
- ProChile was created in 1974 as the Export Promotion Agency
 of the Chilean Government, and it has played a significant role
 in promoting the salmon, fruit, forestry and wine sectors in
 external markets. Although ProChile has largely employed more
 horizontal export promotion activities, it has often collaborated
 with CORFO to enhance the impact of sector-specific policies.

4. Leveraging of international partnerships to infuse new technologies and capabilities

The adoption and adaptation of foreign technologies has been key to Chile's success in developing new export sectors. Collaborations with Japan (salmon) and the United States (fruit) were successfully leveraged to ensure the transfer of skills and technologies that would ultimately enable Chile to overtake its formers mentors in terms of global production and market share.

SWEET SUCCESS: THE DEVELOPMENT OF CHILE'S FRESH CHERRY EXPORTS



Today Chile is the largest exporter of fresh cherries in the world. The sector focuses on a very specific niche market - fresh cherry exports, largely to China, with peak season being Chinese New Year celebrations. Fresh cherries can achieve between 70-100% higher returns than cherries exported for processing as the technological requirements are much higher. The rapid expansion of this sector, with its demands for high-technology production, packaging and logistics systems, has been enabled by the infrastructure, skills and capabilities previously developed for other Chilean fruit exports.

FURTHER READING

Agosin, M, Grau, N & Larrain C (2010) "Industrial Policy in Chile" Inter-American Development Bank (IDB) Working Paper series

Clapp, R.A. (1995) "Creating Competitive Advantage: Forest Policy as Industrial Policy in Chile" Economic Geography

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ABOUT SOAS DEVELOPMENT LEADERSHIP DIALOGUE (DLD)

Economic and social development requires many actors: however, typically these have operated in separate spheres, not understanding each other well and even seeing each other as adversaries. In a world characterised by profound changes and heightened uncertainties, overcoming this 'silo- ization' and the lack of mutual understanding it leads to is ever more important.

DLD brings people and disciplines together to generate more creative and strategic solutions to difficult development challenges.

DLD is generously supported by Hyundai Motor Group UK Ltd and Kia UK Ltd.

March 2025