

UNCERTAIN GAINS: Labor in Chile's New Export Sectors*

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Abstract: Natural-resource-based export-oriented growth strategies have resurfaced as the dominant development approach in Latin America. While a growing literature exists on the economic, equity, gender, and environmental impacts of this development strategy, insufficient attention has been paid to its significance for labor. This article seeks to help fill this gap by analyzing its effects on Chilean workers. Based on a study of the fruit, forestry, and fishing sectors, my work shows that this type of development strategy can be very labor-absorbing and can offer significant benefits for labor when it leads to "agro-industrialization." Nonetheless, although working conditions clearly improved after the late 1980s, it is likely that the first decade of the twenty-first century will not be a repeat of the 1990s. The hypercompetition that now characterizes these sectors is putting tremendous pressure on firms to reduce costs, including that of labor. Stripped of basic state protections and left with little social power, Chilean workers are much more vulnerable than they were before.

For close to two decades, export-oriented growth strategies based on comparative advantage have been the rage among the world's leading financial institutions. Similarly, many policy makers in developed and developing countries alike have credited an outward-looking orientation with generating rapid economic growth, stimulating competition and technological progress, and raising standards of living. In staking such claims, these policy makers typically have pointed to the economic success of East Asia. Despite the turmoil of the last several years, three decades of rapid economic growth in Japan, South Korea, Taiwan, and Hong Kong are often taken as proof that an export orientation is the best route to economic development.

Lately, these ideas have enjoyed an increasingly enthusiastic reception from Latin American policy makers. Despite the region's distinct comparative advantage (natural resources rather than cheap labor), the idea of trade based

*I would like to thank Patrick Barrett, Peter Evans, Michael Goldman, Lovell Jarvis, Raka Ray, Bernard Schurman, David Tecklin, and four anonymous LARR reviewers for their useful comments on an earlier draft. I also appreciate Samuel Martland's and David Tecklin's able research assistance. Funding for this project was provided by the Hellman Family Faculty Fund at the University of California, Berkeley, and the Research Board at the University of Illinois, Urbana-Champaign.

on comparative advantage has again caught on. Reflecting this new thinking as well as the region's resource endowments, many Latin American governments have sought to liberalize their trade regimes and promote their natural-resource-intensive exports. Whereas the mantra of the 1940s, 1950s, and 1960s was "industrialize, industrialize, industrialize," the mantra of the 1980s and 1990s has been "export, export, export." What most Latin American countries are sending abroad are food, fibers, and raw materials.

This shift in thinking and development strategy has not gone unnoticed by students of Latin American development. As Michael Carter, Bradford Barham, and Dina Mesbah (1996) pointed out recently, a rich literature now exists on Latin America's new agricultural and natural-resource-based exports. This literature has considered impacts on economic growth and social equity (Barham et al. 1992; Thrupp 1994; Meller, O'Ryan, and Solimano 1996), the environment (Stonich 1991; Meller, O'Ryan, and Solimano 1996; Schurman 1996a; Claude 1997), the rural poor (Carter et al. 1996), and gender relations (Katz 1991; Délano and Lehmann 1993; Bee and Vogel 1997). Less analyzed have been the implications that this development strategy holds for Latin American workers. Although some studies have addressed the issue (e.g., Meller and Repetto 1996; Carter et al. 1996; and Barrientos 1997), the topic has not received the attention it deserves.

This article seeks to help fill this gap by considering natural-resource-intensive export strategies and their implications for labor in Chile. Specifically, it seeks to answer the following questions. Has Chile's export-oriented strategy based on natural resources raised the standard of living of the workers in these sectors? What has been the impact on different groups of workers? And what is this development strategy likely to mean for labor over the medium to long term?

Chile offers an excellent case for pursuing these issues. First, Chile has taken a natural-resource-intensive export strategy more seriously than any other Latin American country in recent decades. Between 1984 and 1996, the value of its exports (about 90 percent of them natural-resource-intensive goods) quadrupled from \$3.6 billion (U.S.) to \$15.4 billion (Banco Central de Chile 1997). Second, Chile's natural-resource export sectors currently provide jobs for one out of ten Chilean workers, and even more when indirect employment is included (Meller and Repetto 1996, 190). Third, the neoliberal policy approach that Chile has taken to stimulate exports closely resembles the one recommended by the World Bank and the International Monetary Fund to other developing countries. Chile has eliminated protectionism, struck down barriers to trade, devalued its exchange rate, and applied other measures to stimulate its export sectors. Thus the Chilean case should reveal a lot about export-oriented development and its implications for workers in the current policy context.¹ Finally, the Chilean case is significant because

1. Although the Chilean government has modified its policies over the years to become more pragmatic and less extreme, the basic institutional framework in which the country's

of its longevity. No other country in Latin America rejected the previously dominant paradigm of import-substitution industrialization and reembraced an export-oriented development strategy as early or as zealously as Chile.

This article will focus on labor in the fishing, forestry, and agriculture sectors—the new boom sectors in the country that offer the most significant lessons for the rest of Latin America.² The article consists of five sections. The first discusses the literature on natural-resource-intensive export strategies and their alleged relationship to economic growth, employment, and wages. The second and third sections consider the empirical evidence, examining the situation of workers in Chile's export sectors during two successive periods. A temporal analysis is presented because the Chilean economy has been highly dynamic over the last twenty-five years, and the situation of workers has changed substantially. In the first period (1975 to 1987), workers were paid extremely low wages, had no job security, and were subject to working conditions reminiscent of the Industrial Revolution. These conditions reflected a combination of factors, especially the new labor-market regime instituted by the military government of Augusto Pinochet. In the second period (1988 to 1998), workers' wages and working conditions improved markedly. This improvement reflected the effect of a tight labor market, which resulted from the continued growth and "industrialization" of the export sectors and the emergence of many linked industries. Unlike those who argue that a natural-resource-intensive and export-oriented development strategy cannot generate significant employment, productivity, and real wage gains, I contend that these activities can be highly labor-absorbing and can yield many of the same benefits for labor that manufacturing export strategies have provided, when they lead to "agro-industrialization."

Although conditions for workers in Chile's natural-resource-intensive export sectors clearly improved after the late 1980s, can it be assumed that this trend will continue? The fourth section speculates on this question by considering recent economic trends in the export sectors, the ways that Chilean firms potentially could respond to this changing economic environment, and the prevailing institutional and political context. Although such an exercise is admittedly risky, there is strong reason to believe that the next decade will not be a repeat of the last because of changes occurring in these sectors as well as globally. The final section presents my conclusions.

economic structure has evolved remains essentially neoliberal (Silva 1996; see also Bosworth, Dornbusch, and Labán 1994).

2. The mining sector is not considered here because it is atypical of the rest of Chile's resource-based export sectors in several respects. While mining is still central to the Chilean economy, generating almost half of its foreign exchange, mining does not employ that much labor. Furthermore, the enormous resource rents and strong unions that historically have characterized mining differentiate it from the new natural-resource-intensive export sectors in Latin America.

PREDICTIONS FROM THE LITERATURE

The question of how labor will be affected by the growth in natural-resource-intensive exports has not been central to the literature on export-oriented development strategies. This has been particularly true of the literature that has sung the praises of “outward-looking development strategies”—the neoclassical and neoliberal literature. But it is also true of the analyses of authors who have remained more agnostic about the promise of natural-resource-intensive exports in Latin America. At least two positions can be identified.

While not stated explicitly, the neoclassical position can be teased out of the theory’s assumptions about the gains from trade. A key assumption of neoclassical theory is that trade-oriented open economies lead to more rapid economic growth than closed ones do (Ram 1987; Balassa 1988; Lal and Rajapatirana 1987). If an open economy indeed grows faster than one subject to protectionism, this outcome should augment the demand for labor. Greater labor demand means more employment, which is good for a country’s workforce. Furthermore, if demand for labor exceeds supply, employers will have to pay more to attract and keep their workers. Hence greater trade should lead to higher employment and possibly to higher real wages. This line of thinking is essentially the neoclassical explanation as to why East Asia experienced more rapid growth in real wages than did other countries during the 1960s and 1970s (see World Bank 1993).³

A key point to recognize about neoclassical trade theory is that it does not distinguish among countries with different kinds of comparative advantages or among those that specialize in different types of goods and services (for example, raw materials versus heavy industry versus knowledge-intensive goods and services). The theory is assumed to hold regardless of where a country’s particular comparative advantage lies. Thus according to neoclassical theorists, Latin America should be able to attain levels of development achieved by East Asia, and its workers should attain East Asian wage levels, simply by relying on the region’s comparative advantage in natural-resource-intensive exports rather than by actively developing its industrial or knowledge-based sectors.

This assumption has been challenged by other views, old and new, on the development potential of particular kinds of trade strategies. For example, the Latin American “structuralist school” of the 1940s was extremely pessimistic about the prospects that agricultural and raw materials exports held for improving the living standards of the poor majority. In per-

3. This explanation does not go undisputed. Critics argue that additional reasons explaining why real wages rose have to do with efforts by the state to push these countries into processing that adds more value, the emphasis placed on worker education and training, and in South Korea, the strength of the domestic labor movement (Amsden 1989; Wade 1990; Haggard 1990).

haps the most famous treatise on the subject, Argentine economist Raúl Prebisch contended that only industrial activities could generate the kinds of productivity gains necessary to support higher wages and skilled jobs. He argued that natural-resource activities were low-productivity activities in which the possibility of real wage growth was limited (Prebisch 1950). Much of the literature on dependency and "development of underdevelopment" also took a negative view of natural-resource exports, even though these authors pointed to a divergent set of mechanisms to explain the impoverishment of the region and its peoples (compare Frank 1969; Santos 1970; Marini 1973; Emmanuel 1972; Amin 1976).

More recently, Stephen Bunker (1985, 1989) has contended that a marked difference exists between the development potential of manufacturing or "productive activities" and natural-resource extraction. According to Bunker, the difference between manufacturing and extractive industries is that the dynamics of scale work in opposite ways. In industrial systems, increasing the scale of production tends to lower unit costs, while in extractive systems, it tends to raise them because additional supplies of a resource can only be acquired by going deeper into the forest, mine, or ocean. As a result, whereas "industrial production tends to engender and control the techniques necessary to enhance the productivity of human labor . . . , [e]xtraction . . . leads directly to depletion, progressively diminishing the productivity of its labor. Thus only industry generates the means of its own acceleration and heightened productivity; extraction contributes directly to its own decline" (Bunker 1989, 592). Implicit in this analysis is the idea that extractive industries, which are characterized by declining labor productivity, cannot support continuous wage gains.

Bunker's theoretical argument has certain flaws. For example, there may be a large range over which unit costs fall with scale before they begin to rise, and even when they do, labor productivity could conceivably rise in natural-resource-intensive sectors if firms invested heavily in capital-intensive productive technologies.⁴ Nevertheless, Bunker's argument provides an important counterpoint to the standard neoclassical assumption that the nature of a country's comparative advantage is irrelevant to development outcomes and that the best thing a country can do is to specialize in those goods in which it has a (short-run) comparative cost advantage. Bunker's work highlights the importance of being sensitive to qualitative differences among industries, adding a note of caution about applying indiscriminately theories that treat all types of economic growth as if they were the same.

Another criticism frequently leveled at natural-resource-intensive industries is that they offer few possibilities for generating sustained economic growth, a limitation with important implications for employment (Freudenburg 1992). The most obvious reason is that natural-resource-

4. I thank an anonymous *LARR* reviewer for clarifying this point.

intensive industries often face the possibility of resource depletion. Occasionally, resource depletion takes the form of actual exhaustion, but more typically it works through the market, as particular sites are rendered economically uncompetitive when the productivity (or fertility) of their resource base declines.

Related to these “structuralist arguments” are those of the new trade theory and globalization literatures, which would seem to support the contention that export specialization makes a difference in the development process, and by implication in the condition of labor. According to these analyses, the most dynamic sectors in today’s world economy are industries based on skills and knowledge, which have the potential to generate continuous product demand based on an ongoing process of innovation (Porter 1990; Castells 1996; Evans 1995). A good example is informatics, which has fueled tremendous demand in the computer industry over the last several decades. Skill- and knowledge-based industries are also believed to provide the highest-paying jobs and the most desirable occupational structures.⁵

In sum, to the extent that the literature makes predictions as to how Latin American workers will be affected by the resurgence of natural-resource-intensive exports, two opposing positions can be identified. The neoclassical position views natural-resource-intensive exports as producing similar effects to manufacturing exports, while the structuralist position views natural-resource-intensive exports as decidedly inferior in their potential for growth and their effects on the material conditions for workers.

Discussion

Yet perhaps the line between these two “ideal types” has been overdrawn. Neither the CEPAL structuralists nor the dependency and world-systems theorists nor Bunker seriously contemplated the possibility that natural-resource-intensive commodities can be produced in an industrial fashion—virtually “manufactured.”⁶ While this possibility does not exist for all natural-resource-intensive commodities, it is increasingly the case for many such goods. Food and fiber products derived from industrial agriculture are two of the most obvious examples, but industrial capital has also managed to enter other natural-resource-intensive sectors, augmenting the role of human labor as well as that of nature. A range of fish and shellfish are now cultivated by using sophisticated aquacultural techniques, and var-

5. Unlike the new literature on trade, the globalization literature also identifies the downside of the new global economic trends, which is to bifurcate the social structure even further by creating simultaneously a large and poorly paid underclass of service-sector workers. See especially Sassen (1998).

6. To be fair to Bunker, this possibility is considered irrelevant because of his exclusive concern with natural-resource extraction.

ious tree species are being produced based on intensive silviculture. Many natural-resource-intensive products can also be subjected to a considerable degree of processing after they are cultivated or extracted. Trees can be turned into fine furniture or high-quality paper products; fish can be ground into specialized types of fishmeal for demanding niche markets; and berries can be transformed into fancy juices and jams. Finally, genetic engineering in biologically based industries has the potential to industrialize and dynamize these sectors even further, as science transforms nature into a virtual factory of new (and old) commodities (Boyd et al. n.d.). While most of these observations are not novel, they underscore the point that broad spectrums exist between extraction and cultivation and between unprocessed and processed natural-resource-intensive goods.

Somewhere in the middle of this spectrum is where many Latin American countries can be found today, including Chile. Increasingly, Latin America's natural-resource-intensive exports are being cultivated rather than extracted, industrially processed before they leave the country, and sometimes produced by new genetic engineering techniques, a trend that is likely to grow over time. In many cases, these natural-resource-intensive commodities are being produced, processed, and traded with a level of technological sophistication that makes them virtually indistinguishable from manufactured goods.⁷ The growing complexity of natural-resource industries and Latin America's heightened ability to capture more and "higher" links in the commodity chain (Gereffi and Korzeniewicz 1994) should have important implications for labor in the quantity and quality (skill level) of labor demanded. Under these changing conditions, old assumptions about inherent constraints on raising the productivity of labor in natural-resource-intensive industries may no longer hold, or at least not as rigorously. In other words, it may be time to reformulate some of our ideas.

LABOR IN THE EXPORT SECTORS, CIRCA 1975 TO 1987

The evidence amassed on Chile's first twelve years of export-oriented development points to three central findings on labor in the export sectors.⁸ The first concerns workers' wages and working conditions; the second, the seasonal and temporary nature of employment; and the third, the widespread incorporation of women into the export sectors. I will first summarize these findings and then provide an explanation as to why wages and working conditions were so poor during the first decade of Chile's new development strategy.

7. See, for instance, Jarvis's (1992) work on the adoption of technology in the Chilean fruit sector.

8. This discussion is based on my own primary research in the fishing, aquaculture, and seafood-processing industries and on the secondary literature on the fruit and forestry sectors.

Studies of the export fruit, forestry, and fishing industries suggest that from the mid-1970s until well into the 1980s, the earnings of most Chilean workers were far less than what was needed to support a household, even at a minimal level. During the 1985–1986 growing season, for instance, the average daily wage for fruit workers in the Aconcagua Valley ranged between \$1.60 and \$3.75, with most workers earning around \$2.90 per day (calculated from Gómez and Echenique 1988, 82). Working twenty-six days a month translated into a monthly salary of \$75.00. A kilo of bread cost about half a dollar at the time; a kilo of lamb chops, about \$2.00; a large can of Nescafé (a staple in most households), \$3.75; and a pair of children's shoes, about \$10.00.⁹ If a family of six with two income earners bought the typical forty-five kilos of bread for the month, four kilos of meat, a can of instant coffee, and a pair of children's shoes, that would have left about \$30.00 to pay for the rest of the family's food, housing, electricity, and other necessities.

Workers' earnings in the forestry and fisheries sectors were not much better. In describing plantation forestry in the late 1970s, Harry Polo-Díaz reported, "for a sum only a little higher than the minimum wage, a worker must plant from six in the morning to eight at night" (1983, 162). Woodcutters also earned a truly miserable wage (*una miseria*) during this period, partly because an increasing number of forestry companies began to rely on sub-contractors, who were notorious for exploiting their workers (Polo-Díaz 1983; Contreras 1988). The average "unskilled worker" in a seafood-processing plant earned only \$85.00 a month as late as 1987, including overtime (Schurman 1996a).

The main exceptions to these low wages were found in fish harvesting and in the industrial wood products and fishmeal industries. The share system in the fishing industry allowed crew members to capture part of the resource rent associated with the catch, which varied from nothing to a sizable sum. In the 1970s and 1980s, most fishermen earned substantially more than the minimum wage, depending on their jobs, whether they owned the boat, and the size of the catch (Duhart and Weinstein 1988; Schurman 1996a). Wages in industrial wood products and fishmeal were also comparatively high because of these industries' capital intensity and the skill level of the workforce. But like most capital-intensive industries, neither the fishmeal nor the wood products sector employed large numbers of workers.¹⁰

The data presented thus far tell only about the wages of workers in the export sectors relative to the cost of living. How did these wages compare with those in other sectors of the economy in Chile and with wages in

9. Price estimates come from INE, *Anuario de Precios*, 1987.

10. Polo-Díaz noted that in 1980, pulp production (one of the most dynamic activities in the forestry sector) employed only 4.2 percent of the total forestry sector labor force, some 2,030 persons (1983, 156). In 1995 this area employed over 13,000 persons, or 12.5 percent of the labor force in the forest sector.

these sectors historically? Although good comparative data are hard to find, Sergio Gómez and Jorge Echenique (1988) presented some information that allows a limited comparison between earnings of workers in the primary sectors and those in other sectors. According to these data, workers in agriculture, forestry, and fishing earned just over half of what workers in the manufacturing and transport sectors earned, and about two-thirds of the wages of workers in the service sector. The only sector where workers made as little as those in agriculture and fishing was construction.¹¹ The historical picture was also not very positive, although good comparative data are limited. A 1982 study of the agricultural sector indicated that real wages were 10 to 20 percent lower than in 1965 (Maximiliano Cox 1992, as cited in Gómez and Echenique 1988, 76).

Motivated by low incomes and the seasonal character of many jobs in the export sector, most workers put in extremely long hours when work was available. Twelve- to fourteen-hour days were not uncommon, especially during harvest or when a load of seafood arrived (Rodríguez and Venegas 1988; Díaz A. 1991; Schurman 1993). Workers who did not want to put in overtime were pressured to do so by employers concerned about the deterioration of fresh fruit, fish, or shellfish. In one seafood-processing plant, workers recounted, their plant manager used to lock them in the plant overnight so that his sea urchins would not spoil.¹²

In most fruit-packing and seafood-processing plants, workers had to stand on their feet all day performing repetitive motions at tremendous speed. "We don't even feel our feet until we get home," one seafood worker lamented, "and then they are completely swollen."¹³ Some complained that their backs started hurting before the week was half over, and kidney disease was common among seafood processing and fruit workers, who worked in a cold, wet atmosphere for a prolonged period every day (Délano 1993; Medel and Riquelme 1994).

A second feature of export-sector employment that received a lot of attention in the early literature was its seasonal and temporary character (Gómez and Echenique 1988, Contreras 1988; Rodríguez and Venegas 1988; Polo-Díaz 1983). In most manufacturing and service-oriented industries, production is carried out more or less continuously. In natural-resource-intensive industries, in contrast, production tends to proceed unevenly because of these industries' direct dependence on biological and geophysical

11. These data (published in Gómez and Echenique 1988, 79) pertain only to workers in firms belonging to the Asociación Chilena de Seguridad and refer to 1986. Given their restricted coverage, they should be interpreted at best as broadly indicative of sectoral differences. Note also that these data do not specifically isolate export-sector workers from other workers in these same sectors.

12. Author's interviews with workers in a Quellón seafood-processing plant, Jan. 1991.

13. Author's interview in the seafood-processing sector, Puerto Montt, Jan. 1991.

processes. In the plantation forestry sector, for example, the difference between the number of workers needed in high season versus low season in the late 1970s varied by as much as 50 percent (Polo-Díaz 1983; Unda and Stuardo 1996). Seasonal labor demand in the fruit sector also varied markedly (Gómez and Echenique 1988). This phenomenon, while neither new nor specific to Chile, constitutes a significant characteristic of work in Chile's most labor-intensive export industries: fruit, plantation forestry, aquaculture, and fishing.

Seasonal labor demand and employers' insistence on temporary contracts translated into extreme job instability for Chilean export-sector workers, few of whom could maintain steady employment throughout the year (Venegas 1992). This work pattern reflected the particular needs of these natural-resource industries. It was also facilitated by changes in the labor-market regime instituted by the Pinochet government, which will be discussed in more detail.

Finally, the literature has stressed the impacts of growth in the export sector on women (Falabella 1994; E. Díaz 1991; Délano and Lehmann 1993; Bee and Vogel 1997; Barrientos 1997). In the late 1980s, about three-quarters of the country's workers in fruit-packing plants and two-thirds of the seafood-processing workers were women (CEM, cited in Díaz A. 1991, 50; Schurman 1993). Largely because of women's widespread incorporation into the export sectors, their rates of participation in the labor force rose by almost 10 percentage points between 1976 and 1993, from 25 to 35 percent (Mizala and Romaguera 1996).

Women's increased participation in the export sectors affected them positively as well as negatively. On the one hand, poor women gained access to a new source of employment, and often to a better income (Délano and Lehmann 1993; Schurman 1993; Bee and Vogel 1997). The opportunity to work in the fruit-packing and seafood-processing plants also increased women's autonomy from husbands, fathers, and boyfriends, helping them develop an increased sense of self-worth (Délano 1993; Falabella 1994). As one seafood worker explained, "Now I have my own money and I can buy things for myself and my children. . . . I don't have to be asking him [her husband] for money" (cited in Délano 1993, 264). On the other hand, women paid a high price for improved job options, autonomy, and increased self-confidence. As in most societies, Chilean women bear the responsibility for domestic work, a situation that did not change when they took jobs in fish factories or fruit-packing plants. The guilt associated with failing to meet both sets of responsibilities successfully added further to their burden.

Although the changes women experienced as they were incorporated into the export sectors were not uniformly positive, many believed nonetheless that their lives had changed for the better (Délano 1993; Bee and Vogel 1997). Thus the effects observed are the same kind of contradictory and complex effects of capitalist development that Ong (1987), Safa (1990), and Wolf

(1992) identified in their studies of women factory workers in Malaysia, the Dominican Republic, and Indonesia.

Explaining Low Incomes and Poor Working Conditions

Most of the severe working conditions that prevailed during the initial phase of export-oriented growth reflected the weak position of the Chilean working class vis-à-vis the owners of the country's new export-oriented businesses. This weakness can be attributed to several mutually reinforcing phenomena, including labor repression, changes in the country's labor-market legislation, and the worsening state of the economy.

The harsh repression of the labor movement in the early years of the dictatorship was a critical factor in weakening workers in relation to their employers. As soon as the military government came to power, it began to direct violence against worker's organizations (Barrera and Valenzuela 1986). Labor leaders were singled out for harassment, intimidation, and even death. Such repression produced a generalized climate of fear among workers and discouraged them from joining unions or otherwise challenging their employers for better working conditions. Reflecting the waning power of organized labor, union activity declined substantially.¹⁴

Perhaps even more important in the long run was the new labor-market regime established by the Pinochet government. Embodied in a series of laws passed between 1976 and 1981, this new institutional framework sought to increase "the flexibility" of the labor market and eliminate obstacles that employers faced in running their businesses (Piñera 1990; Leiva and Agacino 1994; Romaguera et al. 1995). Among the obstacles the military government identified as onerous were the laws on terminating employment. Under legislation passed in the 1960s, employees could not be fired without due cause, and any firm that wanted to lay off more than ten workers in a single month had to obtain authorization from the Ministerio del Trabajo and the Ministerio de Economía (Ruíz-Tagle 1985, 62). Moreover, when a worker was let go (justly or unjustly), significant severance costs had to be paid that created a strong disincentive for layoffs.¹⁵

Changes in protective labor law took the form of several new statutes. Decreto Ley 2.200, passed in 1978, gave employers the right to dismiss workers at will, without any statement of cause or appeal procedure. This same law also extended the maximum length of a temporary contract from six months to two years in order to increase employer flexibility in labor

14. Between 1973 and 1982, union membership fell from 934,000 to 347,000 workers (data from Frías 1989, 29; PET 1996, 286).

15. As Romaguera et al. have pointed out, the issue of severance pay takes on great importance in Latin America because it represents many workers' only line of defense against unemployment, given the generalized lack of unemployment insurance (1995, 97).

contracting.¹⁶ Ley 18.018, passed three years later, broadened employers' power by reducing the amount of severance pay for which they were liable.¹⁷ These new laws slashed the cost of worker dismissals and facilitated the hiring of workers on a temporary basis.

The state of the Chilean economy throughout much of the 1970s and the first part of the 1980s also undermined labor's position. In the decade following the military coup, two events dramatically altered the situation of the working class. The first was the opening of the economy (*la apertura*). While it helped stimulate investment in natural-resource-intensive export sectors, this opening depressed other parts of the economy. The closing of hundreds of manufacturing firms in the late 1970s greatly reduced workers' chances of finding gainful employment (Gática 1989; Muñoz Goma 1989). The second economic blow came from the exacerbating effects of the recessions of 1975 and 1982–1983. National unemployment rates soared from less than 5 percent in 1973 to 14 percent in 1975 and to over 19 percent in 1982.¹⁸ Not until 1988 did these rates come back down below 10 percent (PET 1998, 268–69).

NEW HOPE FOR THE WORKING CLASS, 1988–1998

In the latter part of the 1980s, Chilean labor's economic fortunes in the export sectors and in the country as a whole began to change for the better. Nationwide, the index of real wages rose 21 percent between 1987 and 1992, bringing it just above the 1970 level (PET 1998, t. 14).¹⁹ Over the next five years (1993 to 1998), it rose another 22 percent (see table 1). Although no official wage data exist on the export sectors, an annual survey of manufacturing firms carried out by the Instituto Nacional de Estadísticas (INE) allows estimates of changes in the wages of workers processing Chilean fruit, forestry, and seafood products. According to this source, between 1988 and 1995 (the latest year for which data are available), real wages of unskilled workers grew 58 percent in the export-oriented fruit-canning industry, 39 percent in

16. In 1981 this law was modified so that temporary contracts could be renewed only once. If renewed a second time, they were automatically converted into indefinite contracts, meaning that the worker would become a "permanent" rather than "temporary" employee (Ruíz-Tagle 1985, 64). But even with this more labor-friendly modification, a worker could still be hired under temporary contract for up to two years.

17. In the past, labor law specified that employers had to pay one month's worth of severance pay for every year of service. In 1981 this requirement was modified so that the maximum an employer would have to pay was five months of severance pay (see Romaguera et al. 1995, 155).

18. When workers in the country's emergency employment programs are added in, these figures rise to 17 percent for 1975 and 29 percent for 1983 (PET 1998, t. 6).

19. This figure is based on the real wage index for all workers and is published by the INE. In 1993 the way in which this index was calculated was changed, making the results incomparable with earlier years.

TABLE 1 Selected Economic Indicators in Chile, 1993–1999

Indicator	1993	1994	1995	1996	1997	1998	1999
Gross domestic product	7.0%	5.7%	10.6%	7.4%	7.6%	3.9%	-1.1%
Unemployment rate (October–December)	4.5%	5.9%	4.7%	5.4%	5.3%	7.2%	8.9%
Index of real hourly wages (as of April)	100.0	107.3	112.1	115.9	119.5	122.5	125.0
Index of real labor costs (as of April)	100.0	103.7	107.4	110.7	114.2	117.0	120.0
Real exchange rate ^a	92.7	94.6	100.0	103.7	113.3	111.3	

Sources: Data on GDP, real hourly wages, and real labor costs from the Banco Central de Chile official website (<http://www.bcentral.cl>), Dec. 2000. Data on unemployment from the Instituto Nacional de Estadísticas (INE), *Encuesta nacional de empleo* (reprinted in PET 1998, t. 6 for 1993–1997), and from the INE official website (<http://www.ine.cl>) for 1998 and 1999. Real exchange rates from the International Monetary Fund, *International Financial Statistics Yearbook 1998* (Washington, D.C.: IMF, 1998).

^a1995 = 100

seafood processing, 68 percent in the pulp and paper industry, and 61 percent in the cardboard container industry.²⁰ The scant information available for the primary sectors shows a similar trend. For example, the real wage index for the mining sector rose by nearly 50 percent between 1990 and 1997 (Banco Central de Chile 1997, 2943), while real wages in the fruit-growing and -packing sector appear to have risen between 20 and 40 percent from 1994 to 1997, depending on the job.²¹

While certain working conditions remained impervious to change (such as the seasonality of work and the physical working environment), others clearly improved as the 1990s drew to a close. Workers were given more legal rights (Romaguera et al. 1995; Cortázar 1998), employers became more reluctant to violate labor laws flagrantly, and some unjust employment practices such as intimidating workers into working overtime became less

20. Following Meller and Repetto (1996), an industry is defined as export-oriented if 30 percent of the gross value of production is sold outside the country. These figures apply to *obreros* in industrial firms with fifty or more employees, which represent the vast majority of companies in these sectors. All figures were calculated using data from INE's *Anuario de Industrias Manufactureras* (for various years) and were price-deflated using the Banco Central de Chile's consumer price index.

21. These figures were kindly provided by a large fruit export firm, Pandol Chile, and were deflated using the consumer price index published by the Banco Central de Chile for each year (annual average). Because they come from a single firm, they should be treated as suggestive rather than definitive. Gómez and Echenique (1988) have proposed that wages in the fruit export sector actually began to rise as early as 1986, an observation that seems supported by other (mainly anecdotal) sources of information.

common.²² What gave rise to these improvements and the wage increases just noted?

At least three explanations are plausible. First, these improvements could have reflected the changing political climate in Chile. As specified in his Constitution of 1980, Pinochet was forced to put his popularity to the test in 1988 in a national plebiscite on whether or not he should continue as president for the next eight years. To his surprise, the “no” vote won, setting in motion a presidential election in 1989. Patricio Aylwin, the candidate of a Center-Left coalition of political parties known as *La Concertación*, took the election with a strong majority. His victory signaled that the pendulum of power had swung away from the military government and toward a ruling coalition more concerned with social issues, including the situation of workers.²³

After taking office, the Aylwin government showed its greater concern with social equity by modifying several laws and policies governing the operation of the labor market.²⁴ For example, a modicum of worker protection against arbitrary dismissals was reinserted into the labor law. Another law permitted bargaining over a wider range of issues, gave unions the right to obtain information pertaining to the financial condition of the company, and augmented the legal sources of union funding (Leiva and Agacino 1994). Finally, Aylwin increased the real minimum wage by nearly 10 percent within a few weeks of assuming office. Some of these changes may have improved marginally the situation of workers in the export sectors, but their overall impact appears to have been slight.²⁵ Nor did the Aylwin administration try to alter the central orientation of the labor-market regime and its emphasis on employment flexibility (Leiva and Agacino 1994; Romaguera et al. 1995).

A second plausible explanation is that a partial revival of the union movement contributed to better wages and working conditions after the late 1980s. This influence appears to have been minor, however. Union membership rose between 1986 and 1991 but dropped again after 1991, and unions have remained organizationally weak (Barrett n.d.). Moreover, little union organizing occurred in the export sectors. One reason was that the continued exclusion of temporary workers from collective bargaining limited union activity among fruit and forestry workers. In addition, seasonal and inse-

22. These observations are based on the author's interviews with workers in the seafood sector in the Lakes region, Apr. 1994.

23. See, for instance, the edited collection *Social and Economic Policies in Chile's Transition to Democracy*, which assesses the achievements of the Aylwin government and was written by many of its main political actors (see Pizzaro, Raczynski, and Vial 1996).

24. This discussion draws on Leiva and Agacino (1994), Romaguera et al. (1995), González (1996), and Cortázar (1998).

25. For example, few workers in the export sector were affected by the increase in the minimum wage because they were already earning more than the minimum.

cure jobs and extensive worker movement among firms made it hard for workers to organize. Third, after suffering the harsh repression of union leaders and members under the dictatorship, Chileans remained reluctant to join unions. As late as 1997, union organizers in the seafood-processing sector were complaining about how hard it was to get workers to fight for their rights. One organizer reported, "We've got seventeen years of dictatorship weighing on us. The people are afraid and they don't say anything" about their conditions.²⁶ To the extent that the growth in union membership affected export-sector workers positively, it had to do more with the linked character of labor markets than with export sector workers' organizational successes.

The third plausible explanation—and the most convincing—is that the main source of improvement in wages and working conditions was economic rather than political or institutional. After 1986 the forestry, fishery, and mining sectors joined the fruit sector in a period of sustained expansion. Between 1985 and 1996, agriculture and forestry grew by 87 percent in real terms, fishing by 127 percent, and mining by 66 percent. The economy as a whole grew at an average rate of 6.7 percent from 1984 to 1996 (PET 1998, tt. 2, 3).

Growth in the export sectors in turn stimulated the growth of a large group of "linked activities." These included industries supplying inputs (such as wood pens for salmon farms or wooden crates and cardboard packaging for the fruit sector); secondary industries based on primary-product processing such as fishmeal, canned seafood, and industrial wood products; and tertiary industries providing an array of services to these other sectors, from transportation to computer expertise to financial services. In some cases, the impetus was located at the raw material end of the commodity chain, where large supplies of raw material created conditions for profitable investments in downstream processing activities. This was the case with forestry, where a rapidly expanding supply of plantation-grown radiata pine and eucalyptus together with Chile's existing native forests stimulated investments in pulp and paper plants, plywood production, and furniture factories. In other sectors, the process worked in the opposite direction. In the seafood industry, for instance, investments in processing plants provoked upstream investments in a larger and better equipped fishing fleet. Regardless of where the process originated, the linkages that developed around Chile's new export sectors were extensive. What emerged over time was a diverse set of natural-resource-based export-production complexes with dense linkages among firms engaged in extracting or cultivating resources, processing raw materials, providing goods and services, and conducting

26. Interview with Gladis Videla of the Departamento de la Mujer of the Federación de Sindicatos de Trabajadores de Industrias Pesqueras, Puerto Montt, 4 Apr. 1997. Despite her pessimistic comment, the seafood sector is the one export sector in which workers are more likely to be organized.

foreign trade (A. Díaz 1995; Meller 1996; Díaz and Ramos 1998). The existence of these export-production complexes challenges the notion that Chile's new natural-resource-intensive export industries are "enclaves" with few multiplier effects on the rest of the economy.

The simultaneous emergence of a varied set of natural-resource-based production complexes powerfully increased the demand for labor. Employment rose by almost 50 percent between 1985 (the first real year of economic recovery) and 1996, from 3.5 to 5.3 million workers (INE, reprinted in PET 1998, t. 7). Between 1985 and 1996, agriculture and fishing absorbed some 230,000 new workers; industry, another 373,600 workers; commerce, 279,500 workers; and services, 380,000 workers (PET 1998, t. 7). Although these figures include all workers rather than just export-sector workers, a broad consensus holds that the continued growth of the export sectors drove this employment boom (A. Díaz 1995; Meller 1996).

The big jump in industrial employment reflected in part the changing nature of the export sectors themselves, which underwent an industrial upgrading and a move into activities that added higher value (A. Díaz 1995). Between 1988 and 1995, industrial employment in the export-oriented wood products industry grew by 18 percent, employment in the industrial seafood-processing and fruit- and vegetable-processing sectors grew by more than 40 percent, while industrial employment in the pulp and paper sector rose almost 70 percent (see table 2). According to data assembled by Alvaro Díaz (1995, t. 4), the share of total exports attributable to processed natural-resource-intensive goods grew by 4 percent between 1987 and 1994, while that attributable to primary product exports fell by 13 percent (the difference is attributable to manufactures that are not natural-resource-intensive). These same data indicate that while primary-product exports grew at an average annual rate of 8.6 percent between 1987 and 1994, processed natural-resource exports grew almost twice as fast (15.3 percent per year). These changes indicate a shift from specialization in exports of primary products to one increasingly founded on natural-resource-intensive commodities that are industrially processed. As Díaz has argued, Chile by the mid-1990s had successfully entered a second phase of export-oriented development.

The dramatic growth in employment just described had a big impact on the labor market. In 1992 national unemployment hit its lowest rate since the early 1970s, a remarkable 4.4 percent (INE, in PET 1998). Low unemployment made it increasingly difficult for firms to find enough workers, particularly in the summer, when labor demand peaked. Tight labor markets meant that employers had to offer better wages and working conditions to attract and keep a high-quality, reliable labor force. In the fruit industry, firms began offering off-season employment to retain their best employees through the packing season (Newman and Jarvis n.d.). Workers in seafood processing based their decisions about where to work in part on

LABOR IN CHILE'S NEW EXPORT SECTORS

TABLE 2 Changes in Industrial Employment in Selected Export-Oriented Industries, 1988-1995

Industry (SIC Code) ^a	Number of Skilled Workers		Number of Unskilled Workers		Total Workers		Percent Change in Skilled Workers 1988-95	Percent Change in Unskilled Workers 1988-95	Percent Change in Total 1988-95
	1988	1995	1988	1995	1988	1995			
Fruit and vegetable processing (3113)	1,848	2,373	8,663	12,868	10,511	15,241	28.4%	48.5%	45.0%
Seafood processing (3114)	2,318	3,016	15,354	21,706	17,672	24,722	30.1%	41.3%	39.9%
Industrial wood products (331)	3,090	4,345	20,814	23,938	23,904	28,283	40.6%	15.0%	18.3%
Pulp and paper (341)	3,119	4,040	4,708	9,187	7,827	13,227	29.5%	95.2%	69.0%
Total	10,375	13,774	49,539	67,699	59,914	81,473	32.8%	36.7%	36.0%

Source: Instituto Nacional de Estadísticas, *Anuario de Industrias Manufactureras* 1988, 1995 (Santiago: 1989, 1996).

^a Standard Industrial Classification

the different working conditions offered by firms.²⁷ The fact that they had any choice indicated the improved condition of the labor market. In short, a burgeoning economy led to high rates of labor absorption, declining unemployment, and rising real wages as labor became scarce.

One other phenomenon apparent in table 2 deserves mention. Despite the fact that total industrial employment in Chile's export-oriented sectors grew dramatically, the rate of increase in unskilled employment was greater than the rate of increase in skilled employment (36.7 percent versus 32.8), at least for the four industrial classifications studied here. This difference is all the more noteworthy on considering that the rate of change in skilled employment is calculated from a smaller base and hence is more sensitive to variation than unskilled employment. This finding suggests that while industrial upgrading occurred in the sense that more industrial jobs were created, the kind of industrial employment that the export sectors were most successful at stimulating was unskilled jobs.

27. Author's interviews with seafood plant workers in Puerto Montt and Chiloé, Jan. 1992, Apr. 1994.

THE FUTURE OF LABOR IN THE EXPORT SECTORS

As the previous discussion has shown, the situation of labor in Chile's natural-resource-intensive export sectors clearly improved in the decade after 1988: employment increased rapidly while wages and working conditions improved too. Yet can these positive trends be expected to continue? Although it is impossible to predict the future, there are several reasons to suspect that the answer may be "no," at least for most workers in the Chilean export sectors.

One reason is that Chile has experienced a major economic slowdown over the last few years that has undermined employment. Between 1997 and 1998, growth rates in gross domestic product fell by more than half, from 7.6 percent per year to 3.4 percent (see table 1). In the last trimester of 1998, GDP growth actually turned negative and remained so for the first three trimesters of 1999.²⁸ As the economy has slowed, the demand for labor has fallen. National unemployment rates grew by almost 60 percent between 1997 and 1999, from 6.1 percent to 9.7 percent, reflecting a considerable loosening of the labor market.²⁹ Given the prevailing institutional context in which wages depend heavily on the tightness of the labor market, it seems unlikely that real wages will keep rising when official unemployment is as high as 8 to 9 percent. In fact, aggregate data on real hourly wages suggest that real wage growth has already slowed. Whereas real wages increased 7.3 percent between 1993 and 1994 and 4.8 percent between 1994 and 1995, real wage growth has hovered around 3 percent for the last three years (see table 1).

The economic situation just described was largely conjunctural, reflecting the effects of the Asian crisis. But other changes more structural in nature have also occurred that do not bode well for the future of employment in Chile.³⁰ To begin with, economic conditions for firms in the export sectors have worsened significantly in recent years and have induced a certain amount of industrial restructuring.³¹ Profit rates of these firms have generally fallen due to three mutually reinforcing phenomena. One is a rise in domestic production costs. While the increase in wages has helped workers, it has not been positive for employers, whose costs of production have increased as a result. According to data from the Banco Central, the real cost of labor (the total labor cost paid by the firm) rose by 20 percent between

28. For the year 1999 as a whole, Chile's gross domestic product fell by 1.1 percent. In the first trimester of 2000, economic growth resumed but at 5.5 percent, a slower pace than in the 1990s. See the official web site of the Banco Central de Chile (www.bcentral.cl).

29. As of May 2000, unemployment remained as high as 8.9 percent.

30. One could argue that there is a structural aspect to the situation just described in that Chile's high level of integration into the global economy has made it increasingly vulnerable to world economic downturns.

31. This discussion is based on a wide variety of sources, including personal interviews, academic studies, consultants' reports, and media reports.

1993 and 1999 (see table 1). Rising labor costs have hampered particularly the industries that use large amounts of labor, such as fruit production and seafood processing, where labor costs typically represent 40 to 60 percent of production costs. Capital costs have increased because of heightened competition from other economic sectors and Chile's burgeoning stock market in the 1990s. Specific sectors have also experienced increases in the price of certain inputs. For example, industry expansion and a change in the land-tax system have raised land costs for the fruit industry;³² a significant increase in the price of salmon feed (over half of a salmon farm's direct costs) has raised costs for salmon producers;³³ and overexploitation of fish and shellfish stocks has driven up the costs of raw material for the country's fresh seafood exporters.³⁴

While domestic production costs have been rising, international market competition has become much fiercer as new suppliers of fresh fruits and vegetables, wine, wood, wood products, fish, and shellfish have entered the market and existing producers have increased their output (DEA-UC 1993; Achurra 1995; Escobar and Contreras 1995; Rossi 1995). In some cases (such as table grapes and salmon), greater world-market supplies have depressed prices, causing a problem for Chilean exporters. Somewhat ironically, the tremendous success of Chile's export-oriented firms has aggravated the problem of market oversupply and stagnant or even falling prices. To take one example, while world exports of table grapes rose 55 percent from 1981 to 1991, Chile's table grape exports grew by more than 400 percent over this same period. By 1991, Chile was providing a quarter of the world's table grapes, compared with 7 percent some ten years earlier (DEA-UC 1993, anexo estadístico). Another structural change affecting the export sectors is greater international competition, which has led in some cases to price depression. Adding to exporters' problems has been an appreciating *peso*, which has made Chilean products less competitive overseas (see table 1). These rising costs, stagnant or falling prices, and currency appreciation have combined to squeeze the profit margins of export-oriented firms.³⁵

In a 1994 article, Rafael Agacino argued presciently that firms in small, export-oriented countries like Chile are critically constrained in how they can deal with the problem of declining profits. Because most Chilean export

32. Telephone interview with John Pandol, of Pandol Bros. USA, 30 July 1998. The California-based Pandol Bros. holds large fruit-sector investments in California and Chile.

33. Author's interviews with managers of salmon farms, Puerto Montt, May 1997.

34. Author's interviews with Luís Schmidt, Luís Pichott, and Hernán Low, Puerto Montt and Arend, Apr. 1994, Apr. 1997.

35. For some products and producers, profit margins fell to zero or even became negative at certain moments during the 1990s. See Jarvis et al. (1993), DEA-UC (1993), Schurman (2000), and Escobar and Contreras (1995). While profit margins are not the same as total profits (which can rise if volumes increase enough), there is a definite relationship when the profit margin is zero or negative.

firms operate in highly competitive industries where they are “price takers” rather than “price makers,” passing rising costs on to buyers in the form of higher prices is not a viable option (Agacino 1994). As is true of all “commodities,” firms that come into the market with higher prices than those of their competitors have a hard time finding buyers. Why should European importers agree to purchase Chilean Granny Smith apples if they can buy identical apples from New Zealand for less?

In lieu of passing their rising costs on to consumers, an alternative strategy that firms can pursue to bolster profits is to try to raise the demand for their goods. In the mid-1990s, in fact, Chilean fruit exporters embarked on a major media campaign to increase fruit consumption in the United States. Chilean exporters in general have become aggressive marketers, seeking to stimulate demand outside as well as inside the country. While these efforts have had some impact, supplies have continued to rise faster than demand, keeping a lid on prices.

Given these constraints on the price side and the difficulty of raising demand enough to overcome the growth in supply, it seems reasonable to expect firms to turn their attention to the cost side, which is somewhat more under their control. In fact, interviews in the wild seafood, salmon aquaculture, and fruit sectors suggest that this is the course that firms are taking. A key way of seeking to lower unit costs is exercising more careful control over the size and quality of their labor forces. One fish-processing plant owner in southern Chile estimated that the profit squeeze of the early 1990s had reduced employment in the local industry by about a fifth. He reported that his own firm had laid off a quarter of its workforce in 1994.³⁶ In addition, workers who are being retained are being pushed to work harder. The managing director of a large salmon company in Puerto Montt boasted, “This year we are probably going to produce 20 percent more with 30 percent fewer workers.”³⁷ Such a trend is occurring through the widespread use of piece rates, which reward workers financially for working harder, albeit at a high cost to their bodies.³⁸ Mechanization is a third means by which some firms are trying to lower unit costs and increase productivity.³⁹ Although mechanization does not have to be labor-replacing, it typically is and is often initiated for this reason.

As firms seek to reduce costs by controlling the size of their labor forces by keeping only their best workers and in some cases mechanizing

36. Author’s interview with Luís Pichott, Puerto Montt, Apr. 1994.

37. Author’s interview with the manager of a large salmon company, Puerto Montt, May 1997.

38. As one worker commented, “You’re earning money against your body, but after a while, your body collapses.” Author’s interview with workers in the seafood-processing sector, Chiloé, Jan. 1991.

39. Interviews with union leaders in the wild seafood and salmon aquaculture sectors suggest a marked move toward mechanization, although I did not document this empirically.

production, the number of workers needed by these industries will presumably fall, *ceteris paribus*. If so, labor markets will slacken, which would reduce the pressure on wages and working conditions in much the same way that Chile's recent recession has operated. This trend could be offset if Chile's export sectors were to continue to grow rapidly or if some new economic activities were to emerge. But is this likely to happen? It seems improbable that Chile's existing export industries are going to attract much new investment with profits down and world supplies of many of these goods growing faster than demand. Expansion could also take the form of increasing the value added, which has been the trend in recent years. Yet there is only so much a firm can do to a salmon fillet, clam, or peach before it is ready to be eaten, and many are already doing it. As for the scenario in which some new economic activities might emerge that would absorb some of this labor, this outcome remains a distinct possibility and will depend on the future investment behavior of Chilean capitalists. Unfortunately, the recent trend appears to be that many of Chile's largest firms are investing their capital outside the country in places like Argentina, Mexico, and Brazil.⁴⁰

Two other actors could, at least in principle, intervene to change the hypothesized outcome of a less rosy future for the country's workers in the export sectors. One consists of labor unions, which have historically been a critical voice in forcing firms to share the benefits of their productivity gains with workers. The Chilean labor movement remains weak, however, and seems unlikely to regain the power lost under Pinochet anytime in the near future (see Barrett n.d.). The other potential agent of change is the state. Here too the likelihood of significant intervention seems remote. The two civilian administrations that came to power after 1990 showed no proclivity to alter the labor-market regime established by the military government, choosing instead to maintain the flexibility it provides for employers. Unless this basic institutional edifice is changed by the administration of Ricardo Lagos, the condition of the labor market will continue to exert the greatest influence on the living standards of Chilean workers.

CONCLUSION

Chile's recent experience with natural-resource exports offers valuable lessons for those interested in alternate development strategies in this age of global economic integration. Chile rejected earlier and to a greater extent than any other country in Latin America its old policies of protectionism and import-substitution industrialization and replaced them with a trade-oriented open regime based on comparative advantage. In many ways, Chile has become a key testing ground for neoliberal claims about the gains

40. This observation is based on various press articles that have appeared in the last few years.

to be reaped from trade by firms and workers alike, regardless of export specialization. The country's experience also offers an opportunity to revisit critical theories questioning whether a strategy based on exporting natural resources can offer the same benefits to workers as one founded on manufacturing.

The evidence presented here suggests that the consequences of Chile's new economic strategy and policy orientation have varied for different groups of workers and over time. In the initial phase, labor's experience was extremely negative. Although the export sectors offered some new employment opportunities (including some especially significant for women), wages in the fruit, forestry, and fishery industries were generally poor and working conditions abysmal. Workers enjoyed minimal access to the huge economic rents generated by these sectors and scarcely shared in the benefits of economic growth. The state's physical repression of the labor movement, its clear pro-business orientation, and a high level of national unemployment jointly produced these outcomes. Also contributing heavily was the Pinochet government's effort to revoke the policies and dismantle the programs that had provided Chilean workers with a modicum of market protection in the past. With the government's embrace of "labor-market flexibility," workers—that is, people—were increasingly treated like any other commodity, despite the violent fiction that this implied (see Polanyi 1944).

If this were the end of the story, scholars would probably conclude that the structuralists were right that a specialization in natural-resource exports does not offer much hope for bettering the situation of workers in developing countries. But this is not the end of the story. Conditions for Chilean export-sector workers began to improve in the second half of the 1980s—quite markedly in some cases—because a set of integrated "industrial-production complexes" formed around extracting, cultivating, processing, and exporting natural-resource-intensive commodities. As these complexes developed, a wide array of related businesses started to demand more labor. The resulting employment growth culminated in a tight national labor market that pushed up workers' wages. Aspects of this process of "agro-industrialization"⁴¹ are consistent with the predictions of neoclassical trade theory and also with my earlier contention that the distinction between natural-resource and manufacturing export strategies has been overdrawn. As the Chilean case shows, natural-resource-intensive exports can be produced in an industrial fashion, can involve a high level of technological sophistication, and can generate numerous backward, forward, and consumption linkages. They can also be labor-intensive.

Yet once again, the story does not end here. In a direct challenge to

41. The term *agro-industrialization* is obviously something of a misnomer in that Chile's export sectors include not only agriculture but other nature-based industries as well. I use it because of its familiarity to many readers.

theories of modernization, which assume a linear and “progressive” development process, Chile’s new export sectors have entered a third phase, the outcome of which may be less and less positive for labor—and for capital, for that matter. As I suggested, international market competition for many of the goods that Chile exports has intensified in this age of idolatry of global trade and increased economic integration. Chile’s savvy and dynamic capitalist class (Montero 1990, 1997; Schurman 1996b), its educated professional classes, well-developed infrastructure, and head start in the production of many natural-resource-intensive commodities may have provided the country with some impressive starting advantages, but they are not enough to maintain its position in the international market forever. Many newcomers to Chile’s niches in the world market (as well as longtime producers) have the potential to outcompete Chile and to force it to reduce its production costs even further. The meaning of this hypercompetition for Chilean workers is uncertain. What is certain is that stripped of the benefits of basic state protections and left with little social power, Chilean workers are far more vulnerable than they were before.

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