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Mandatory Mediation for Farm Workers: A New Era in Farm Labor?

by

Philip L. Martin and Bert Mason

In September of this year, Governor Davis signed legislation that may fundamentally change the landscape of collective labor bargaining in California agriculture. The legislation compels mandatory mediation in certain instances. This article provides a historical perspective on the evolution of collective bargaining in California agriculture and discusses potential implications of the new legislation.

In September 2002, Governor Gray Davis signed into law SB 1156 and AB 2596, the first major amendments to the 1975 Agricultural Labor Relations Act (ALRA). If a farm employer and union are unable to negotiate an agreement after six or twelve months of bargaining, a mediator will be able to impose the terms of a collective bargaining agreement on the parties. Mandatory mediation will apply to farm employers with 25 or more workers, and will be limited to a maximum 75 labor disputes between 2003 and 2007. The purpose of the ALRA, enacted in 1975, is to "ensure peace in the agricultural fields by guaranteeing justice for all agricultural workers and stability in labor relations." This goal was to be accomplished by granting organizing and bargaining rights to farm workers and establishing a state agency, the Agricultural Labor Relations Board (ALRB), to supervise elections in which farm workers decided if they wanted to be represented by unions and to remedy unfair labor practices that employers and unions commit when they interfere with worker rights.

California has about 25,000 farm employers, and it appeared initially that many of the 600,000 to 800,000 workers employed on farms sometime during a typical year wanted to be represented by unions. Between 1975 and 2002, about 1,250 elections have been supervised by the ALRB, and two-thirds or 820 resulted in a union being certified to represent farm workers. Figure 1 on page 2 depicts the time path of elections and certifications from 1975-2001. But the number of collective bargaining agreements in California agriculture never exceeded 300, and is today about 225, and 80 percent of the current contracts cover three to four workers each under Christian Labor Association contracts with dairy and poultry farms. The UFW, Teamsters and other unions representing field workers have about 30 contracts covering fewer than 25,000 workers.

The United Farm Workers (UFW) asserted that, even when farm workers voted for unions, it was hard to negotiate contracts because employers dragged their feet in negotiations, and a remedy for unlawful bad faith bargaining was too cumbersome to encourage lawful behavior. The UFW's original goal was to have binding arbitration to settle farm labor disputes: the original bill, SB 1736 Section 1 (b), asserted: "extensive use of undocumented workers and farm labor contractors results in workplace injustice, and has greatly weakened the bargaining power of California farmworkers

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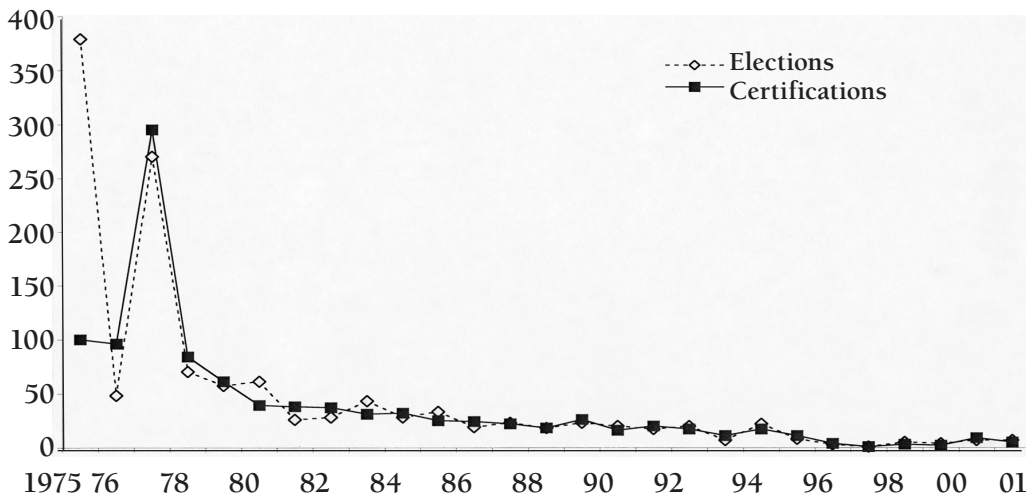
Figure 1. ALRB Elections and Union Certifications, 1975-2001



Source: ALRB, Calendar years

since the passage of the Agricultural Labor Relations Act….Binding arbitration will promote comprehensive collective bargaining agreements, and further peace and stability in labor relations in California's most vital industry."

Make-whole Remedies

Farm workers were excluded from the National Labor Relations Act of 1935. The ALRA, which was enacted 40 years later to cover excluded farm workers in California, included several features to accommodate unique agricultural circumstances, including quick elections, a make-whole remedy for bad faith bargaining, and more extensive rights for unions vis-à-vis their members. In 1975, when the ALRA was drafted, Congress was considering a bill that would have allowed the NLRB to issue make-whole remedies for bad faith bargaining. The ALRA granted the ALRB authority to order that employers who fail to bargain in good faith "...take affirmative action including...making employees whole, when the Board deems such relief appropriate, for the loss of pay resulting from the employer's refusal to bargain" (ALRA Section 1160.3). Make-whole was intended to encourage employers to bargain in good faith by transferring any monetary savings from unlawful bad faith bargaining to the affected workers.

The make-whole remedy was expected to lead to contracts soon after unions won elections. This has not happened; the UFW says it was certified to represent workers on 428 farms, but it negotiated contracts at only 185 farms. This 45 percent election-to-certification rate shows, according to the UFW, that make-whole does not "work" or encourage lawful bargaining. The ALRB agrees that procedures for determining whether make-whole is owed, the amount of make-whole owed, and the distribution of make-whole funds to workers are slow, so that "a remedy designed to act as a goad to bargaining often produces years of litigation."

Negotiating collective bargaining agreements has been slow for many reasons, including wide gaps between union demands and employer offers in an industry that remains largely untouched by collective bargaining. For example, in 1979 the UFW demanded increases in wages and benefits that employers argued would raise their labor costs by more than 100 percent over three years. Employers countered with offers of wage increases of 20-25 percent, declared that bargaining was at an impasse, and made unilateral changes in wages. The UFW charged these vegetable producers with bad faith bargaining and the ALRB agreed in the *Admiral Packing* case [7 ALRB 43 (1981)]. The Court of Appeals, in dismissing the bad faith bargaining charge, concluded the employers were engaged in lawful hard bargaining, and cited the gap between the union's demands that would raise labor costs 123 to 190 percent, and the employer offer of a 21 percent wage increase, to justify the impasse (*Carl Joseph Maggio, Inc., et al., Petitioners, v. Agricultural Labor Relations Board, Respondent.* Court of Appeal of California, Fourth Appellate District. 154 Cal. App. 3d 40; April 2, 1984).

Even when it is clear that the employer has engaged in bad faith bargaining, the ALRB must decide what wages and benefits would have been if the employer had bargained lawfully, calculate the

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California Horticulture: Current Trade and Policy Issues

by
Hyunok Lee

California is the nation's leader in production of horticultural crops. This article surveys the current state of these industries and provides perspective on recent developments in international trade and government policies relevant to California's major horticultural crops. Ê

The horticulture crop industry in California comprises hundreds of individual fruit, tree nut, vegetable, melon, nursery and greenhouse commodities, and, because of seasonality, location and varietal differences, even more individual markets. Many commodities are produced mainly for fresh markets, others are used mainly in processed form and some products have important uses in both fresh and processed forms. This article outlines the current trade and policy situation and outlook for the industry

Background

In 2001, California farmers grew and sold about $25.9 billion worth of crops, livestock and livestock products, which is about 13 percent of the national total. About 55 percent or these receipts came from fruits, tree nuts, vegetables and melons, far more than the 11 percent for the rest of the United States. California produces about half the nation's horticultural food production by value.

California leads the nation in production of grapes, lettuce, tomatoes, almonds, strawberries, and dozens more fruit, tree nut, vegetable and melon crops. California is the sole producer of important commodities such as almonds, raisins, walnuts, pistachios, prunes and nectarines. California produces more than 80 percent of national production for avocados, strawberries, wine grapes, table grapes, lemons, plums, broccoli, celery, garlic, lettuce, processing tomatoes, and cauliflower among others. Table 1 provides a list of horticultural food crops in California that generated more than $300 million of cash revenue in 2000. The six vegetables in Table 1 accounted for 54 percent of total vegetable revenue in 2001, while the five fruit and nut crops accounted for 71 percent of the fruit and tree nut total.

Trade is important to many of these industries, but the United States remains that most important market overall. Per capita fruit, tree nut, vegetable and melon consumption in the United States is trending upward, with about eight percent per capita consumption growth over the decade through 2000. Consumption of fresh vegetables increased even faster by about 17 percent.

Table 1. California's Leading Fruit, Nut and Vegetable Crops

Vegetables			Fruits and tree nuts		
Crop	Cash Revenue ($million)		Crop	Cash Revenue ($million)	
	2001	2000		2001	2000
Lettuce	1370	1,484	Grapes	2,654	2,836
Tomatoes, processed	497	617	Strawberries	841	767
Broccoli	438	537	Almonds	732	710
Carrots	434	347	Navel oranges	386	507
Tomatoes, fresh	269	334	Avocados	313	358
Celery	260	310			

Source: Resource Directory 2001, CA Department of Food and Agriculture and Economic Research Service Web site: www.ers.usda.gov/data/farmincome/finfidmu.htm

International Trade

The U.S. exported about $4.6 billion in fruits, fruit products and nuts (about $1.0 billion in tree nuts) and about $4.4 billion in vegetables and vegetable products in 2000. During this same time, fruit and nut imports to the U.S. totaled about $6.5 billion, with banana imports alone accounting for about $1.1 billion. Vegetable imports totaled about $4.7 billion. The expansion of imports and exports reflects the increasing availability of fresh produce in what is "off-season" in the local region. The U.S.

is a major exporter of table grapes and fresh tomatoes during the spring and summer season, but a major importer of these crops from Mexico and South America in the off-season months.

California has a significant share in the nation's exports of fruits, tree nuts, vegetables and melons. In 2001, California exported about 60 percent of the national total for fruits and about 70 percent of the vegetables, and is the only state that exports significant amounts of tree nuts. These commodities also comprise a substantial share of the state's agricultural exports.

To get a better handle on California agricultural exports, the University of California Agricultural Issues Center (AIC) has been assembling California agricultural export statistics annually. In 2001, fruit, tree nuts and vegetables accounted for 49 percent of agricultural exports from California, with 25 percent for fruit products (seven percent for wine alone), 15 percent for tree nuts and nine percent for vegetables. The top ten export products in 2001 are presented in Table 2. Processed tomatoes and lettuce are among the top ten export commodities, and there are another 13 vegetables on the list of top 50 commodities exported from California. Among fruits, all three major uses of grapes—wine, fresh grapes and raisins—are major export items.

Table 2 also presents the export share of total production. Almonds top the list with about 71 percent of the almond crop being exported, compared to about 40 percent of prunes and walnuts and about 27 percent of oranges. Among the vegetables, only about 13 percent of the processed tomatoes and eight percent of lettuce are exported.

Table 3 presents California's major export markets by commodity group. East Asia was the top export region in 2001, receiving about 41 percent of the total export value, followed by North America and Europe. While exports to East Asia include a substantial portion of field crops and animal products, exports to North America (most to Canada) and Europe are primarily horticultural crops. Canada alone received about 63 percent of vegetable exports and Europe received 51 percent of tree nut exports. Fruit exports are concentrated on the Pacific Rim, with 48 percent shipped to East Asia and 33 percent to North America.

Table 2. California's Top Ten Export Specialty Crops

Crop	Export Value ($ million)		Export Share (of total CA production)	
	2001	2000	2001	2000
Almonds	685.6	662.4	0.67	0.71
Wine	470.9	510.4		
Table Grapes	394.5	363.4	0.37	0.36
Oranges	295.5	284.5	0.27	0.27
Processed Tomatoes	211.7	208.1	0.13	0.13
Walnuts	179.1	169.3	0.33	0.46
Dried Plums	149.5	140.3	0.69	0.40
Raisins	144.1	145.9	0.31	0.30
Lettuce	142.6	148.2	0.08	0.08
Strawberries	136.1	137.5	0.13	0.15

Source: University of California Agricultural Issues Center

Recent issues for California horticultural exports include the Asian financial crisis of 1998 and the continuing economic problems in Japan. Most recently, the strength of the U.S. dollar relative to both customer and competitor currencies has limited export growth. The weakening of the dollar in 2002 has been welcomed news on this front. The North American Free Trade Agreement (NAFTA) has led to increased shipments to Mexico and Canada for a number of commodities (such as table grapes) while contributing to additional imports of some fruits and vegetables (such as avocados).

Government Policy

The U.S. provides large subsidies for grains, oilseeds and cotton, but very little direct subsidy for horticultural crops. Of the approximately $20 billion annual payments for crop producers projected for the Farm Security and Rural Investment Act of 2002 (FSRIA), horticultural crops will receive less than two percent despite accounting for about 30 percent of crop revenue. Small direct producer payments to horticultural crop producers are typically tied to ad hoc disasters. FSRIA also directs some additional funds to be used to purchase horticultural crops for school lunch programs and other government uses.

A more inclusive measure of policy support is the production support equivalent (PSE). The PSE is designed to capture the gross revenue transfer or cost reductions for producers under government farm

Table 3. California Export Share by Destination and by Commodity Category

	East Asia		Europe		North America		ROW
Commodity group	Japan	Total	EU-15	Total	Canada	Total	Total
Animal products	27%	61%	0%	1%	1%	9%	29%
Field crops	27	61	5	5	16	24	10
Fruits	18	48	11	12	28	33	7
Tree nuts	12	22	49	51	6	9	18
Vegetables	16	23	3	5	63	70	3
Wine	10	15	62	64	17	17	4
Other	6	11	12	12	49	73	4
All commodities	19	41	20	21	22	28	11

ROW: Rest of the world *Source: UC Agricultural Issues Center*

policies. A PSE for any given commodity includes the value of direct payments and also indirect assistance through import barriers, government research outlays, input assistance, marketing orders and any other support. The PSE is often reported as a share of gross revenue. The Organisation for Economic Cooperation and Development (OECD) and the U.S. Department of Agriculture (USDA) provide PSE calculations for major field crops, but official estimates are not available for horticultural crops. The AIC reported such estimates in 1997 for California, and, with no major change in policy for horticultural crops, these calculations continue to be roughly applicable in discussing current policy.

For the 1995 to 1997 period, fruits and tree nuts in California had a PSE of about six percent and vegetables had a PSE of about three percent. These figures compare to about 34 percent for dairy, 69 percent for sugar and 40 percent for rice in those years.

Unlike many field crops, trade barriers for California fruit and vegetable crops have been low and direct payments negligible. The small PSE for the horticultural crops reflect a wide variety of government services such as research and extension services, and marketing and inspection services. Crop insurance benefits, export marketing aids and irrigation water subsidies complete the list of government support.

Despite the low level of overall subsidy, it is useful to consider some of the roles that the government has taken in horticultural industries:

Marketing orders: Federal and state governments in the United States have authorized voluntary industry programs that often set minimum quality standards and may specify per unit assessments to fund research or generic promotion efforts on behalf of an industry. These programs do not offer a general subsidy, but they may provide industry benefits that are paid for by both consumers and producers. There are about 20 federal marketing orders for fruits, three for tree nuts and 12 for vegetables, including six for potatoes and four for onions. Most of these marketing orders cover limited areas (states or parts of states) and have limited mandate and scope. In some cases, these programs have implications for international trade, as marketing order rules also typically apply to imports under the notion that they too benefit from quality standards and generic promotion.

Research and extension programs and related services: Federal and state governments in the U.S. fund agricultural research and extension programs that benefit commodity industries broadly. No accounting is available for how much of these funds go to horticultural crops, but most evidence suggests that the share of research is roughly equal to the share of the crop value, or about 15 percent of the U.S. total. The federal research budget is about $2 billion per year, and the total of state contributions is several times this figure. The AIC estimates research outlays for commodity research and extension at about $160 million in California, with about 40 percent or $70 million going to horticultural industries. A significant share of this research is devoted to environmental improvement and related broad benefits, rather than productivity growth, and thus benefits are spread much more widely than simply to producers and consumers of a particular commodity.

The federal government and some state governments, especially California, also provide inspection and related services that limit the spread of exotic agricultural pests and diseases. These services also provide food safety and environmental benefits.

The budget costs are small, about $500 million per year nationally. Based on the shares of production and imports, I estimate that less than ten percent of this budget is attributable to California horticultural agriculture. Despite small direct budget costs, the benefits to the horticultural industry are thought to be very large because in many cases an outbreak of exotic pests can be devastating if not eradicated, or very expensive to control if allowed to spread.

Irrigation subsidy: Large irrigation infrastructure projects, most dating back 50 years or more, continue to provide relatively low-cost water to farmers. The irrigation subsidy in California, according to the AIC, is about $240 million per year. However, most of the subsidy goes to crops such as cotton, rice and hay, and to irrigated pasture. Perhaps 15 percent is applied to tree crops and vegetables grown in the Central Valley. Processing tomatoes and grapes are likely to be the largest single beneficiaries of irrigation subsidies among the vegetable and fruit crops.

Crop Insurance: Federally subsidized crop insurance has been available for most field crops and about 25 tree crops. However, the federal government has been expanding its role for several years in providing subsidized crop insurance for vegetable crops and more tree crops, and the USDA has a mandate to provide crop insurance programs for as many crops as is feasible. Of the total crop insurance outlays of approximately $2 billion per year, only about ten percent is provided as insurance subsidies to horticultural crops. Through the Non-insured Assistance Program, free crop insurance for crop disasters is provided for horticultural crops with outlays averaging $100 million in recent years. Of this money, somewhat less than half would be allocated to California crops.

The USDA Federal Crop Insurance Corporation is mandated by Congress to provide crop insurance for selected vegetables in 2003. However, program design for vegetable crops is particularly complex due to seasonality, price variability, quality issues and very localized growing conditions. In California, the news of crop insurance expansion is receiving mixed reactions from growers because some growers do not want to encourage additional planting of crops in less favored areas motivated by incentives to collect insurance benefits.

Conservation and environmental programs: Fruit, tree nut and vegetable producers have always been eligible for conservation funds to idle land, but typically these lands are far too valuable to make participation economically feasible. However, the FSRIA expands funds for environmental programs such as Environmental Quality Incentive Program (EQIP) and creates a new Conservation Security program. The FSRIA also provides subsidies to undertake environmentally friendly practices on land that remains in production. However, the new program funds are small (less than 0.1 percent of industry revenue).

Trade Programs: For many years, the U.S. has operated programs which provide matching funds for industries and firms that undertake promotion programs in foreign markets. The FSRIA expands this funding to $200 million per year, after ten years of spending less than half that amount. More than half of these funds go to fruit, tree nut and vegetable industries. Almonds, wine, walnuts and oranges have been among the major participants. Funds are used for trade shows, direct in-store displays and even media advertising in many markets—Europe and Asia especially.

Conclusion

The horticultural industry in the U.S. is large and diverse but California has the largest. Horticultural industries face considerable international competition in the U.S. market, and for many horticultural industries in California, exports are important to improving market prospects.

For the most part, the large U.S. farm subsidy programs do not benefit horticultural crops. The relatively small programs that do exist provide little direct subsidy and have relatively little impact. The role of government is crucial in providing public good services. For horticultural crops, one vital but relatively low-cost, public good is border protection against exotic (non-indigeneous) pests.

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Do Polluters Head Overseas? Testing the Pollution Haven Hypothesis

by

Ann Harrison

Critics of globalization have long alleged that multinationals essentially export pollution to developing countries by putting their dirtiest operations there. A new study says that is not true.

Foreign Economic Setting

In 2001, direct foreign investment was the most important source of external finance for developing countries. Following the virtual disappearance of commercial bank lending to these countries in the 1980s, many countries liberalized their restrictions on incoming foreign investment in the 1990s. Some even tilted the balance toward foreign firms by offering special incentives. Until recently in the Czech Republic, joint ventures paid lower income taxes than domestic enterprises and foreign firms in much of the Caribbean received income tax holidays, import duty exemptions and subsidies for infrastructure.

The pro-investment policies of the 1990s were very different from the wave of nationalizations which drove out foreign investment in many regions during the 1960s and 1970s. The new attitude was in part driven by the need for alternative sources of new capital, and in part driven by increasing skepticism about import-substituting trade and investment strategies.

Research Focus

My research (conducted jointly with Gunnar Eskeland at the World Bank) tests for the possibility that foreign investors are drawn to so-called "pollution havens"—regions in which environmental regulations are either less severe or not well enforced. This research focuses on the manufacturing sectors in four countries: Mexico, Venezuela, Ivory Coast and Morocco. In the late 1980s, the share of foreign assets in manufacturing varied from 38 percent in Ivory Coast to seven percent in Venezuela. Foreign investment accounted for about 15 percent of total assets in Moroccan manufacturing, and ten percent in Mexico.

The analysis of pollution havens and foreign investors is divided into three parts. First, we examine whether foreign investors in these four developing countries are attracted toward "dirtier" sectors, defined as product groups where either pollution emissions are high or pollution abatement costs are high (such as cement or oil refining). Second, we then compare the energy efficiency of domestic enterprises and multinationals in these same countries. This allows us to see whether foreign investors played an important role in improving the environment by using more energy-efficient technology as well as cleaner sources of energy. Finally, we examine whether the pattern of outward U.S. foreign investment is skewed toward sectors with high pollution abatement costs.

We first analyzed whether the pattern of foreign investment in the four developing countries provides any evidence of pollution havens. Is there more foreign investment in sectors with high pollution abatement costs or high emissions, after controlling for other factors that affect the pattern of foreign investment? This means that we need to control for such factors as the degree of competition, the size of the domestic market, domestic wages and other factors that make the market attractive. Once we control for these factors, we then analyze whether there is more foreign investment in sectors where pollution abatement costs in the United States are high, using annual, sector-level data drawn from U.S. surveys on pollution abatement costs among manufacturing plants.

The results suggest that pollution abatement costs in the U.S. have no impact on the pattern of foreign investment in these four countries. In other words, there is no more investment in Mexico in petroleum refining or cement, sectors with high abatement costs, than there is in other sectors. As a follow-up, we used emissions data from the U.S. toxic release inventory (TRI) to analyze whether or not there is more foreign investment in these four developing countries in areas of manufacturing where U.S. pollution emissions are high. As measures of

Table 1: Correlations Between Pollution Emission Intensities and Abatement Costs

	Total Particulates (TP)	Biological Oxygen Demand (BOD)	Total Toxic Releases (TOX)	Pollution Abate-ment Cost (PAC)
TP	1.0			
BOD	-0.08	1.0		
TOX	0.03	-0.10	1.0	
PAC	0.12	**-0.13**	**0.80**	1.0

***BOLD** indicates statistical significance at the 5 percent level.*

emissions, we use total particulates (TP), a measure of air pollution; biological oxygen demand (BOD), which is a broad measure of water pollution; and total toxic releases (TOX).

Impact of Emissions

Total particulates, which capture small and large dust particles, are closely related to phenomena such as the (now historic) London smog and to air pollution in cities with emissions from fuel and diesel oil combustion, energy-intensive processes such as steel and cement, two-stroke engines, coal use, and burning of wood and residues. Analysis in the World Bank and elsewhere indicates that the release of particulates is the main air pollution problem in many third world cities (as judged by health impact). Biological Oxygen Demand (BOD) indicates how discharges to water bodies deplete their oxygen levels, and is widely accepted as a broad measure of water pollution. Total toxic releases (TOX) is an unweighted sum of releases of the 320 compounds in the U.S. EPA's toxic chemical release inventory. All of these measures are by weight. Emissions are divided by the total output of the firm, measured in monetary terms, to arrive at sector-specific emission intensities for the three pollutants.

Data Collected

Table 1 reports the correlations between these three measures of emission intensity and U.S. pollution abatement costs (PAC). Correlation coefficients are a measure of the statistical relationship between two variables. They range from –1.0 (perfect inverse correlation) to 1.0 (perfect positive correlation). A correlation coefficient near zero implies little relationship between the two variables. Table 1 shows that, in a comparison among different manufacturing subsectors within the United States, there is no significant correlation between air pollution, water pollution and toxicity. Thus, although these three measures of pollution are very broadly defined, there is no general tendency that a sector which pollutes in one medium also pollutes in another medium. However, Table 1 does report a statistically significant correlation between abatement costs and toxic releases. Industries which on average have high abatement costs typically also emit toxic substances. If we use these alternative measures of pollution intensity in our analysis, we again find no relationship between high emissions in the U.S. and the pattern of foreign investment abroad.

The second part of the study examines the behavior of foreign and domestic enterprises in these four host countries. We find that multinational firms are significantly more efficient in their use of energy than domestic plants. In addition, multinationals tend to use cleaner types of energy, such as electricity and natural gas. Even if we take into account the fact that multinational enterprises are typically younger than domestic firms, we still find that multinational firms of the same vintage are more energy efficient. To the extent that energy use is a good proxy for pollution emissions, this suggests that multinationals in developing countries tend to use cleaner technologies than domestic firms.

To test whether energy use is a good proxy for emissions, we explore the relationship between energy use and toxicity across sectors, using U.S. data. We show that even in the U.S., where respectable air pollution control programs have been in place for more than 20 years, and the choice of fuels and electricity is highly varied, there is a strong statistical relationship between air pollution coefficients and energy use. As in Table 1, we use three measures of emissions: particulates, which measure air pollution; BOD, which measures water pollution; and toxics.

We report the rank correlations between those emissions and six different factor inputs in Table 2: the share of unskilled labor in total value of shipments, the skilled labor share, capital share, manufactured input shares, raw material input shares, and the share of energy inputs in total output. Energy use is highly correlated with different measures of emissions. The correlation between energy use and particulates is .58; between toxics and energy use

the correlation varies between 0.52 and 0.55. The correlation with BOD is lower at 0.22, though also significantly different from zero. Table 2 also shows that the correlation between pollution and energy use is much higher than for other factor inputs.

Table 2: Energy Intensity and Pollution Emissions Across Industries: Rank Correlation Coefficients

	Particulates	BOD	TOC	Unskilled Labor	Skilled Labor	Capital	Manufactured Inputs	Raw Material Inputs	Energy
Particulates	1.00								
BOD	**0.29**	1.00							
TOX	**0.30**	**0.19**	1.00						
Unskilled Labor	**-0.15**	**-0.16**	**0.10**	1.00					
Skilled Labor	**-0.25**	**-0.35**	0.05	**0.36**	1.00				
Capital	**0.28**	0.09	**0.38**	0.01	**0.48**	1.00			
Manufactured Inputs	**-0.19**	**-0.13**	0.06	-0.01	**-0.20**	**-0.33**	1.00		
Raw Material Inputs	**0.44**	**0.34**	**0.17**	**-0.33**	**-0.42**	0.06	**-0.24**	1.00	
Energy	**0.58**	**0.22**	**0.52**	**0.04**	0.04	**0.62**	**-0.19**	**0.34**	1.00

BOLD indicates statistical significance at the 5 percent level.

Yet even if energy intensity could provide a good proxy for emissions across industries, energy intensity may not be a good proxy for differences in emissions between plants within the same industry. To investigate this issue, we used a cross section of U.S. manufacturing firms to examine the relationship between different types of factor inputs and plant-specific emissions, one industry at a time. The strength of the relationship between energy use and emissions varies with the type of industry. Specifically, particulates are highly correlated with energy use at the plant level for only four industries: chemicals, petroleum refining, lumber and wood products, and non-electrical machinery. Two of the most polluting activities in manufacturing—chemicals and petroleum refining—are included in these four sectors. Consequently, we repeated the analysis, restricting ourselves to only those four sectors where energy use serves as a reasonable proxy for emissions. We find that in those sectors, foreign firms are indeed more efficient in their use of energy.

U.S. Foreign Investment

The third part of the study shifts the focus from developing countries to the United States. We examined the pattern of outbound U.S. foreign investment, asking whether, after controlling for other factors, there is any indication that most foreign investment originating in the United States and relocating abroad is located in pollution-intensive sectors. We find some evidence in support of this hypothesis, but the results are too weak to make strong claims.

Conclusion

In summary, our research provides little evidence for the hypothesis that foreign investors are drawn to pollution havens. There is no tendency for multinational firms to locate in dirtier sectors, although there is weak evidence that they do locate in sectors with higher abatement costs. These conclusions are consistent with earlier studies which find no evidence that multinationals are drawn to pollution havens. One reason is that pollution abatement costs are typically not a major component of operating costs for firms. Another reason is that foreign investors find other factors more important in deciding to relocate abroad—such as the size of the domestic market.

The results of this study were featured recently in the June 24, 2002 issue of *Business Week*. As I pointed out to the reporter, multinationals are becoming increasingly sensitive to their image both in the host country and in the U.S. One important outcome of shareholder and consumer activism has been to put greater pressure on corporations to treat the environment well. The firms know they have an image problem, and eventually regulations in developing countries will begin to resemble those in developed countries. For these reasons, it is not surprising that foreign firms are not flocking to pollution havens. My study, which used data from the 1980s and 1990s, would have probably led to even stronger results if we had used data solely from the 1990s.

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difference between "good faith" wages and benefits and actual wages and benefits, collect the funds from the employer, and then distribute them to workers—a process that can take years. These calculations are complicated by several factors. First, there can be delays in determining how much an employer owes because a 1987 Court of Appeals ruling allows employers, after the ALRB determines there was bad faith bargaining, to present evidence that, even with good faith bargaining, there would not have been an agreement negotiated with higher wages, and thus no make-whole is owed (*Dal Porto and Sons v. ALRB*. 191 Cal. App. 3d 1195, Third Appellate District, 1987). Second, there are no reliable data on wages and benefits of union and nonunion workers. The ALRB often proposes a comparable contract to set the amount of make-whole, and the employer counters that the contract is not comparable because it covers a different commodity mix, is in a different region, or covers a different size farm, which produces litigation and delays.

Finally, after the employer has exhausted appeals to the courts, the ALRB collects make-whole monies and distributes them to workers. However, in a farm labor force with ten percent annual turnover and that is more than 50 percent unauthorized, it is easy to see why make-whole may seem to be a hollow remedy. Since 1975, the ALRB ordered employers to pay $34 million in make-whole, but workers received only $4.5 million or 13 percent of the amount found owing. Many of the growers ordered to pay make-whole went out of business, while others settled for a fraction of the original remedy, because the ALRB knew that more litigation would make it harder to locate the workers owed money. For example, Abbatti Farms, whose $1.6 million make-whole payment was 35 percent of the entire make-whole paid in the past 27 years, was originally assessed $19 million.

Mandatory Mediation

Despite a steady erosion of contracts and members since 1980, the UFW has been reluctant to push for amendments to the ALRA, fearing that they may open the door to pro-grower amendments as well. However, the UFW pushed for SB 1736, introduced by Senate Majority Leader John Burton (D-SF), citing the 45 percent election to contract rate and asserting that the only way to level the playing field at the bargaining table would be to "replace [make-whole] litigation with mediation and arbitration."

The UFW first pushed for binding arbitration. SB 1736 would have added Section 1164 to the California Labor Code to provide for binding arbitration for a first contract if a certified union and farm employer could not reach agreement within 90 days, and a mediator was unable to help the parties to reach agreement in another 30 days. The arbitrator would hold a hearing and then "establish the terms of a collective bargaining agreement and direct specific performance of that agreement."

With Governor Davis widely expected to veto SB 1736, mandatory mediation became the last-minute compromise. Under the bills signed into law, SB 1156 and AB 2596, unions and employers would bargain for 180 days for a first contract (for negotiations beginning after January 1, 2003), and then a mediator would try to help the parties reach agreement for another 30 days. If mediation failed, the mediator would, within 21 days, recommend the terms of a collective bargaining agreement to the parties and provide reasons for his wage recommendations. Either the employer or the union could petition the ALRB within ten days to modify the recommendations, and the ALRB would review them, and either allow the recommendations to go into effect or modify them. Either side could appeal the agreement imposed on them to the state Court of Appeals and eventually to the California Supreme Court.

Mandatory mediation would apply to a maximum 75 contract disputes in five years, and apply to farms covering 25 or more workers. Relatively few farm employers, but most farm workers, are potentially covered by mandatory mediation (See Table 1). There were 3,770 agricultural employers with 20 or more workers during the third quarter of 2001—normally the period of peak farm employment. Farm labor contractors (FLC), who are included with agricultural support activities (ASA), are not considered employers under the Agricultural Labor Relations Act, so a farm that hires five workers directly, and has a FLC bring a crew of 20 to a farm, may be eligible for mandatory mediation. ASA employers tend to be larger—a third had 20 or more employees—and they accounted for 45 percent of the 470,000 agricultural employees in September 2001. Most farm workers are employed by employers who qualify for mandatory mediation: 83 percent of all workers employed in agriculture, and 94 percent of those employed by ASA employers, were employed by reporting units with 20 or more employees in the third quarter of 2001.

Table 1. California: Employers and Employees by Size of Firm, 3rd Quarter, 2001

	Number of Employers by Firm Employment-Size Categories					
	All Employers	Less than 20	20-99	100-999	1000+	20 or more
CA Total	1,075,523	941,566	110,687	22,359	911	133,957
Agriculture	22,626	18,856	2,875	870	25	3,770
Crop Production	14,221	12,090	1,744	265	10	2,131
Ag Support Activities	3,934	2,675	769	475	15	1,259
	Number of Employees by Firm Employment-Size Categories					
	All Employees	Less than 20	20-99	100-999	1000+	20 or more
CA Total	14,997,165	3,284,794	4,587,853	4,958,800	2,165,718	11,712,371
Agriculture	451,039	78,755	119,385	212,091	40,808	372,284
Crop Production	223,306	48,367	70,909	40,251	18,714	129,874
Ag Support Activities	193,173	11,947	35,777	123,355	22,094	181,226

Source: www.calmis.cahwnet.gov/htmlfile/subject/INDSIZE.HTM

We see three potential issues with mandatory mediation. First, it seems easy to imagine that, with the prospect of mandatory mediation, a union might push for very high wages in negotiations and during mediation, while an employer might counter with reasons why it is not possible to pay what the union demands and survive. Instead of negotiating behind closed doors to narrow differences, hard positions in private negotiations could become public debates in mediation hearings, which could become the scenes of rallies and demonstrations.

Second, the mediator will be handicapped by the same lack of data that has impeded quick resolution of make-whole compliance hearings. What data will the mediator use to establish the terms of a collective bargaining agreement? Should the mediator rely on the available data on farm worker wages in the region, or on comparable contracts? What weight should be given to assertions that an employer cannot pay more than is being offered and stay in business? The mandatory mediation law includes no guidance to the mediator. Mediators may have credibility problems, since they will first try to mediate farm labor disputes, and then recommend the terms of a collective bargaining agreement.

Mandatory mediation is expected to ensure that workers who vote for union representation will soon work under contracts. However, there may be unanticipated effects that slow progress toward contracts. For example, election campaigns may become more contentious if a contract can be imposed by a third party, and employers who now delay bargaining by refusing to bargain could continue to delay bargaining by filing objections to the election that the ALRB must resolve before certifying the union and starting the mandatory mediation clock.

Conclusion

Collective bargaining has not become widespread in California agriculture. There are about 225 contracts between unions and the state's 25,000 farm employers, representing less than one percent of the state's farm employers. There are perhaps another 250 farms on which workers voted for union representation, but there has been no contract. Mandatory mediation is aimed at getting contracts for certified unions within a relatively short period of time.

The purpose of collective bargaining is to allow the parties closest to the work place, employers and unions, to establish "fair" wages and benefits in private negotiations, with both sides using the economic leverage they have under government-set rules. A cardinal principle of collective bargaining has been that the government does not look to the content of the agreements negotiated, only the procedures used to reach agreement. The make-whole remedy for bad faith bargaining required the ALRB to impinge on this hands-off-the-content-of-bargaining rule. Mandatory mediation goes further, and puts unions and employers in front of an arbitrator to make their case.

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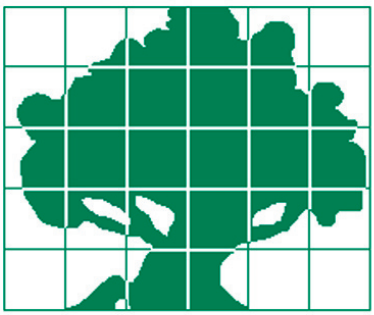

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