

COMPARISON OF CONSTRUCTION SAFETY CODES IN UNITED STATES AND HONDURAS

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ABSTRACT: The purpose of this paper is to provide managers in multinational construction firms with a comparison between American and Honduran safety approaches, specifically, differences between the Honduran Labor Code and the U.S. Occupational Safety and Health Act. This research involved an extensive review of the safety laws in both countries and interviews with managers in the Honduran construction industry. Several differences in the safety approaches were identified. It was discovered that the Honduran Labor Code does not protect a large percentage of the construction workforce because most workers are considered temporary. Benefit compensation is low for permanently impaired workers who are covered under the workers' compensation program. Also, worker insurance compensation costs are evenly distributed among different industries; this means that safer industries pay for accidents of high-risk industries, and safer employers are penalized by having to pay for accidents caused by careless employers. Recommendations are provided to managers in multinational construction companies who are considering project work in Honduras and to the Honduran government for improving the labor regulations pertaining to safety. The findings of the present study may be applicable to other developing countries with similar laws related to worker safety.

INTRODUCTION

According to King and Hudson (1985), there are three times as many fatalities on construction sites in developing countries than in industrialized ones—caused in part by weak regulatory systems. "Codes of practice and standards of developing countries . . . have been adopted 'carte blanche' from various industrialized countries, with little critical evaluation or participation in the process of standardization by those who will use them" (King and Hudson 1985).

The present paper provides managers in multinational construction firms with a comparison between American and Honduran safety approaches as specified in the Honduran Labor Code and U.S. Occupational Safety and Health Act (OSHA). This information can be useful to those considering project work in Honduras and others who must be familiar with the differences in labor laws as they relate to construction-worker safety. The research approach involved a comparison of safety laws in both countries and interviews with managers in the Honduran construction industry. The role of labor organizations in establishing these safety codes is only briefly discussed in this paper.

First, we will review the Honduran Labor Code including such topics as the employer's duties, rights and duties of the employees, social security, and statistics. Next, a comparison is made of the American and Honduran

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safety approaches by investigating OSHA and the Honduran Labor Code, including a comparison of accident costs. Finally, recommendations are offered to managers in multinational construction companies who are considering project work in Honduras and to the Honduran government for improving the labor regulations pertaining to safety.

HONDURAN LABOR CODE

The *Codigo del Trabajo* or Labor Code condenses most laws enacted with the purpose of “protect[ing] workers while at work” (*Codigo* no date). The code corresponds to the Ministerio de Trabajo y Prevision Social—the Honduran government’s Secretariat, equivalent in function to the U.S. Department of Labor—the responsibility of which is to enforce this code. The Secretariat’s authority includes all private and public sectors. Some of its obligations are: (1) To watch for compliance with legislation and regulations related to health and safety in the workplace; (2) to examine employers’ and employees’ claims of transgression of those regulations; (3) to prevent careless work practices; and (4) to impose fines on those that repeatedly or negligently violate those regulations. The fines range between 50 and 5,000 lempiras (U.S. \$10–\$1,000) depending on the economic capability of the transgressor and the nature of the fault (*Codigo* no date).

Employer’s Duties

Under the Honduran Labor Code, employers have the general duty to guarantee the safety and health of their employees. To comply with this obligation, they have to supply a safe workplace and safe equipment. Additionally, they have the obligation “to permit and facilitate supervision and inspection by authorities” (*Codigo* no date). They have the “obligation to respect and to [comply with]” all those standards issued under the code. The code prohibits the use of drugs or alcohol, provides for suitable places for eating and sleeping, and limits the weight handled by workers to 50 kg (110 lb) (*Codigo* no date).

Employers with more than 10 “permanent workers” must prepare a set of regulations dealing with hygiene and safety. These regulations have to be approved by the General Labor Inspection Service (GLIS)—an inspectorate that acts as enforcer for the Secretariat—and must be posted in two places at the workplace. A key phrase, within the code, “permanent workers,” will be discussed later (*Codigo* no date).

Employers with more than 10 permanent workers are also required to establish safety committees containing an equal number of employees and employer representatives. The functions of these committees are to: (1) Examine the causes of occupational risks (defined as accidents or illness directly related to the job site); (2) propose standards; and (3) investigate infractions of the standards (*Codigo* no date).

The employer is responsible for consequences of an accident or occupational disease unless the Honduran Social Security Institute assumes responsibility. Follow-up care includes medical services and supplies, and an indemnification that is calculated according to the code and depends on: (1) The wages of the employee; (2) the severity of the accident or illness; and (3) whether the injury or illness is temporary or permanent.

All employers are required to keep and stock a first-aid kit. Employers with 100–400 permanent workers must have a dispensary or an agreement with a hospital within a two-hour range, and if more than 400 permanent

workers are employed, a hospital or an agreement with a hospital within a two-hour range is required (*Codigo* no date).

It is the obligation of all employers to “notify the [General] Labor Inspection Service ([G]LIS) or its representatives, and the appropriate labor court, of any accident that occurs within 24 hr”; however, if the accident results in immediate death, the employer must notify the GLIS immediately. A labor accident is defined by the Labor Code as “any unforeseen and sudden occurrence due to or by reason of labor and from which a worker suffers a permanent or temporary organic injury or functional disturbance” (*Codigo* no date).

Exceptions

The Labor Code lists at least 13 exceptions for which “an employer is relieved of all liability for occupational hazards.” Four of those exceptions are not applicable to the construction industry, six others deal with situations where the responsibility of the accident belongs to the worker or a third person, and two of them deal with small or family-run enterprises (*Codigo* no date). It is believed that a large number of contractors and subcontractors fall into the last two categories.

The final exception relates to workers who are contracted on a temporary basis. Any “person performing discontinuous or intermittent tasks” (Ramirez and Ramirez 1981) is considered temporary and is not protected by the laws condensed in the Labor Code (*Codigo* no date). It is common practice in the Honduran construction industry to hire construction workers for short periods of time only so they can be considered temporary. This practice was witnessed and confirmed by the first writer while conducting a research project related to improving construction safety in Honduras where a survey was conducted to identify: (1) Construction-worker profiles; (2) safety attitudes for craftsmen, supervisors, and upper-management personnel; (3) accident profiles; and (4) accident costs. For detailed results of this study, refer to Recarte (1991). This exception is believed to have serious repercussions to the construction industry.

Rights and Duties of Employees

Under the Labor Code, every employee that suffers from an occupational-related illness or injury as a result of a work accident is entitled to receive:

1. Medical and surgical care
2. Medicines and other curative materials
3. Indemnity compensation as fixed by the Labor Code
4. Expenses for moving and hospitalizing the victim, or for food and lodging payable to persons who care for them outside their customary residence or place of work (*Codigo* no date).

Information was not gathered on the expenses generated by the first, second, and fourth benefits. However, the cost of indemnity compensation can be easily calculated from the formulas given by the Labor Code. An example is given in Table 1, which compares benefits allowable to workers in Honduras with those of three U.S. states. In Table 1, it is assumed that the worker is a common laborer who earns minimum wage, as is common practice in Honduras, calculated at 8.00 lempiras per day (U.S. \$1.60 approximately) in January 1991; the benefits are calculated using the Labor Code tables (*Codigo* no date). Notice the significant differences between

TABLE 1. Comparison of Benefits for Permanently Impaired Workers in Honduras and in Three American States (in U.S. Dollars)

Impairment (1)	Honduras (2)	California (3)	Connecticut (4)	Texas (5)
Loss of a hand	560	43,540	100,044	32,550
Loss of a thumb	275	9,595	37,715	13,020
Loss of a foot	460	33,740	74,636	27,125
Loss of one eye	460	21,105	93,295	21,700
Death	970	225/week	397/week	217/week

benefit compensation for permanently impaired workers. Honduran workers who lose their hand will only receive U.S. \$560; whereas, in the United States, the benefit would be several thousands of dollars. This only represents 26.6% of what American workers are paid even when considering the substantially lower cost of living in Honduras. This is based on the per capita incomes in Honduras and the United States of \$850 and \$17,600, respectively (Howard-Reguindin 1992; "USA" 1991). The same calculation can be applied to other states and impairments as well $26.6\% = (17,600 \times 560) / (850 \times 43,540)$. When the employee recovers from the accident or illness, he or she has the right to be readmitted to his or her previous job, unless the worker incurs permanent and total incapacity or more than a year has passed after the event that incapacitated him or her. Honduran death benefits correspond to 30 days at minimum wage (\$48) to cover funeral expenses and 620 days at minimum wage (\$922) to which the survivors are entitled.

Under the law, every worker is obligated to comply with the following health and safety rules:

1. Employee must report all hazardous conditions
2. Employee must abstain from knowingly creating hazards that might endanger him or fellow workers
3. Employee must observe health and safety measures.
4. Employee is prohibited from working under the influence of drugs and alcohol.

If any worker fails to meet his or her duties under the Labor Code and is injured, he or she might lose his or her rights under the Labor Code. Any worker who causes an occupational hazard might be found legally responsible for it (*Codigo* no date).

Social Security

The Honduran Social Security Institute (IHSS) is an autonomous institution of the Honduran government created in 1959, with its first regulations enacted in 1962. The purpose of IHSS is to provide coverage of the workforce for work-related accidents and occupational illness, among other hazards or risks (Ramirez and Ramirez 1981).

According to Banco Central de Honduras (Honduras 1988), only 603,061 workers in Tegucigalpa, San Pedro Sula, and 15 other cities and towns were insured by the IHSS out of a workforce of 1,218,200 (Banco Central de Honduras 1986–1988). According to the code, it is mandatory that every employee be insured by the institute. However, the IHSS covers workers

only in some parts of the country and there are other exceptions that make workers ineligible for insurance (e.g. temporary workers).

The IHSS is funded with fixed contributions equivalent to 10% of every insured worker's wage: the worker contributes 2.5%, the employer contributes 5%, and the state of Honduras provides 2.5% (Ramirez and Ramirez 1981).

As previously stated, whenever a work accident occurs, the employer has the responsibility to notify GLIS of the accident. The employer must provide, within three days, the following information: (1) Name of the worker; (2) trade; (3) time and place of accident; (4) witnesses; (5) worker's residence; (6) place where the worker was taken after the accident; (7) wages; (8) in case of death, dependents' name; (10) name of enterprise; (11) name and address of insurance company if covered for occupational hazards; and (12) medical reports about severity of the injury or illness (*Codigo* no date). The information collected is used primarily to determine responsibilities and, if the worker has not caused the accident, estimate the sum that the worker should receive as compensation.

Compensation is determined according to the following guidelines. A worker suffering from an occupational illness or a work accident receives medical care; if temporarily disabled, is compensated at 66% of his or her daily wage (for a period no longer than a year); if totally or partially disabled, receives "an income fixed in accordance with regulations"; and if the worker dies, his or her dependents receive a pension and funeral expenses (Ramirez and Ramirez 1981). If the worker is not insured because he or she is considered a temporary worker, no compensation is provided.

COMPARISON OF AMERICAN AND HONDURAN SAFETY APPROACHES

Among the most important considerations in motivating construction companies to be concerned with safety performance are legal and other costs. The former requires enforceable stringent legislation without loopholes to be an effective motivator. The latter requires—as Levitt and Samuelson (1987) have indicated—that first, accident costs are high enough to motivate contractors to control them. Second it also requires that contractors be aware of those costs.

An ideal situation would be a combination of legal and cost awareness that would encourage contractors to manage safety with the same care as their schedule or budget. To get an adequate perspective of the effectiveness of Honduran safety, both current legislation and accident costs will be compared to their American counterparts.

OSHA and Honduran Labor Code

An analysis of the differences that exist between American and Honduran approaches to safety is useful in understanding the ineffectiveness observed by the writers in the study concerning safety of the Honduran construction industry. Although some authors, like MacCollum (1990) or Fullman (1984), may think that OSHA's approach to construction safety is erroneous or at least not perfect, it can serve as a good yardstick against which to measure the Honduran approach.

Both pieces of legislation—Occupational Safety and Health Act (OSHA) and the Honduran Labor Code—were enacted with a similar purpose, namely, to provide a safe work environment. They both attempt to fulfill their objective through legislation, but the similarities end there.

Administration

The most obvious difference is the administrative structure created by OSHA, acting within the U.S. Department of Labor to expressly carry out its duties. In Honduras, the enforcement of the Labor Code related to occupational health and safety was added to the duties of the Secretariat of Labor and Social Security. King and Hudson (1985) explain that this is a common problem in developing countries: safety administrators "have only a fraction of the legal apparatus needed to control modern construction methods. . . . The safety inspectors for the industry are generally inadequate in numbers and powers."

Also, civil penalties differ greatly in both pieces of legislation. Under OSHA, penalties range between \$5,000 minimum for a willful violation to \$70,000 maximum for each willful violation ("New OSHA Penalty . . ." 1991; "OSHA Regulatory . . ." 1991). In Honduras, penalties range from \$10 to a maximum of \$1,000.

Employer Responsibilities and Rights

With regard to employers' responsibilities and rights, OSHA and the Honduran Labor Code share some similarities, but also have serious differences. Both OSHA and the Honduran Labor Code require that the employer provide a safe work place, that the employer be responsible for reporting any fatal accident and any serious accidents, and that the employer be responsible for the safety of its employees.

One major difference between the two safety agencies is that under OSHA, employers are responsible for informing employees about OSHA, OSHA standards, safety performance, citations, and so forth. Employers are also responsible for keeping records of occupational injuries and illness. Such activities are not required by the Honduran Labor Code.

With regard to employers' rights, it is easy to note the difference between OSHA and the Honduran Labor Code: under the Honduran Labor Code employers have few rights. As previously mentioned, the Labor Code lists at least thirteen exceptions for which employers are relieved of all liability for occupational hazards.

Employee Responsibilities and Rights

There are certain similarities between employee responsibilities under both administrations. Under both OSHA and the Honduran Labor Code employees must: (1) Report hazardous conditions; (2) comply with applicable standards and employer's rules; and (3) wear required protective equipment.

However, other rights are provided under OSHA that are not provided by its Honduran counterpart. First, under OSHA, employees have the right to exercise their rights without reprisal. Second, they have provisions that protect their rights to be informed about OSHA and its regulations, hazards and preventive measures, about safety performance, and variances. Third, they have the right to request inspections and to protect their identities. Fourth, the workers have the right to have representatives present during inspections. Finally, employees may comment on standards, adoptions, or revocations.

Statistics

The way in which each agency handles accident data demonstrates another difference between the approaches. OSHA requires that every employer of

11 or more employees record and keep records of occupational injuries and illness as they occur (*All about OSHA* 1985).

Under OSHA, different accidents resulting in injuries of varying severity are recorded, e.g. death, one or more lost workdays, restriction of work or motion, loss of consciousness, transfer to another job, or medical treatment. In Honduras, employers are not required to keep records of those types of accidents. The GLIS is notified only of those accidents that result in death or serious injury that requires medical attention, and notification is provided primarily to calculate the worker's indemnity compensation and other expenses that are covered under the code.

OSHA's record-keeping system is designed to provide valuable information. OSHA's forms No. 200 and No. 101 record detailed information about each injury or illness, and the Bureau of Labor Statistics survey helps to pinpoint areas with poor safety performance. Another purpose of this system is to provide workers with information about their employers' records, in every work site (*All about OSHA* 1985).

While the Secretariat of Labor and Social Security publishes a catalog of preventive measures, it is frequently not available to the public. Also, employers, under the Honduran Labor Code, do not have any obligation to inform their employees about safety performance.

Standards

Fullman (1984) suggests that OSHA's construction regulations may be ineffective due to their details, complexity, and volume. However, the procedure of standards development permits the participation not only of different government institutions, but also different parts of the private sector. Before a standard is adopted, there is a period to consider arguments received from the public. Additionally, the standard may be appealed. Once a standard is in effect, any employer that is not able to comply with it may request an appeal or a variance (*All about OSHA* 1985).

In Honduras, a standard is developed and adopted by the executive branch of the government. No provisions to hear arguments, appeals, or to obtain a variance are found under the Labor Code.

Coverage

The American Occupational Safety and Health Act provides coverage for workers in diverse fields, excluding only self-employed persons, farms operated by families, and federal employees protected by other agencies. The Honduran Labor Code makes several exceptions, one of which excludes those defined as temporary workers, a high percentage of the construction workers in the field, as previously illustrated.

Employee Information

OSHA requires that the employer keep his or her employees informed of their rights under the act, requests for variances from standards, record-keeping procedures, OSHA citations for violations, records of occupational injuries and illness, and hazardous materials in the work area (*All about OSHA* 1985).

The Honduran counterpart requires only that the employer post in two visible places in the workplace a set of special regulations for hygiene and safety. It was observed that none of the construction projects visited by the first writer, as part of this research, had posted safety regulations (Recarte 1991).

Research

In addition to developing regulations, OSHA also promotes research to develop new approaches to safety and health issues, and it monitors accident and illness statistics, and provides training programs, among other activities (*All about OSHA* 1985).

These types of provisions are not made by the Honduran Labor Code. Furthermore, research in Honduras is the victim of the same obstacles that Frame (1983) has identified in other less-developed countries, especially the lack of resources.

Accident Costs

Accident costs, if they are high enough, may be a powerful reason for contractors to care about their safety performance. These costs, besides being influenced by factors related to the accident itself (e.g. injuries sustained, severity of injuries, and materials or equipment damaged), are also influenced by other factors inherent to the country where the accident occurs.

A similar accident in Honduras and the United States does not have similar costs; therefore, contractors in one country may be more or less motivated to stress safety than those in another country. To illustrate this point, Laufer (1987) in Israel, and Leopold and Leonard (1987) in Great Britain found that accident costs were not high enough to serve as an incentive.

A comparison of direct and indirect accident costs between the United States and Honduras follows to demonstrate that Honduran contractors are not motivated to make construction site safety a high priority.

Direct Costs

Direct costs refer to those costs incurred as a result of insurance against accidents. They include coverage for restitution to the injured worker, medical costs, settlement to third-party claims, property damaged, and damage to plant, equipment, or facility (Levitt and Samelson 1987).

In the United States, these costs are covered under worker's compensation insurance laws. The insurance costs can be, according to a New Business Roundtable study, "as much as 20% of [the employers'] direct labor costs" ("Improved" 1991). The aim of worker's compensation is to promptly provide injured workers with medical attention and compensation for their lost work time. The tradeoff is that injured workers waive their right to sue their employers.

Worker's compensation was designed to distribute the costs of accidents among employers and to provide an incentive to those with better safety records. The worker's compensation insurance cost to the employer is based on two components: the manual rating and the experience modification rating (EMR). The manual rating is calculated yearly by rating bureaus to cover medical costs and restitutions for the past period (Levitt and Samelson 1987). The manual rate is calculated for each work classification per \$100 of insured payroll. To obtain the manual insurance cost of each work classification, the contractor multiplies the rate for that classification by its respective base salary. The second component, EMR, is designed to raise or lower the manual rate depending on the contractor's record of claims for the three years prior to the immediate past year (Levitt and Samelson 1987).

The original intent of the EMR, to serve as an incentive for better safety performance, is frequently not fulfilled (Levitt and Samelson 1987). Con-

tractors with a high incidence of accidents have a higher EMR because the rating bureaus give more weight to the number of accident claims rather than their cost. Also, a contractor that does not follow up on claims processing, could obtain a higher EMR than deserved if the contractor deals with a more conservative insurance company that usually retains larger amounts of money for unsettled claims. However, for those safety-aware contractors, it is possible to obtain savings up to 12% of direct labor costs, according to a recent Business Roundtable study ("Improved" 1991).

Now let us consider these two American contractors: company A with an excellent record (EMR = 0.60) compared to another, company B, with a poor safety record (EMR = 1.40), bidding for a project with \$10 million direct labor costs and with the same manual rate of \$15 per \$100 of labor cost and let us compare their insurance costs to two Honduran contractors (C and D) with identical records to A and B, respectively, bidding for a similar project in Honduras. For comparison purposes, assume that all Honduran workers qualify for IHSS insurance. The results are shown in Table 2.

While A saves \$1.2 million compared to B because of its safety performance, C and D have identical insurance costs. Furthermore, differences among American and Honduran insurance costs are significant. And as stated before, in Honduras, only permanent workers are entitled to receive medical attention and compensation in case of an accident, and only a small number of construction workers in Honduras are considered permanent under the Labor Code. Therefore, the cost calculated here for the Honduran contractors does not represent reality in that regard. As is evident, the insurance costs do nothing to motivate Honduran contractors to prevent accidents.

In the United States, contractors carry insurance for bodily injury and property damage (third party) and other insurance to protect against loss of equipment and materials. In Honduras, these types of insurance are rarely used, and none of the companies approached carried these types of insurance.

The cost of insurance follows the escalating trend described by the study of the Business Roundtable. According to that study, the "premium costs for industrial, utility and commercial construction jumped from \$2.74 billion

TABLE 2. Typical Insurance Costs for Contractors in United States and Honduras (All Figures in US Dollars)

Contractor (1)	U.S. Contractors ^a		Honduran Contractors	
	A (2)	B (3)	C (4)	D (5)
Manual Rate	1,500,000 ^b	1,500,000	—	—
EMR	0.60	1.40	0.60 ^c	1.40
IHSS ^d	—	—	500,000	500,000
Total insurance	900,000	2,100,000	500,000	500,000

^aSource: "Improved" (1991).

^bManual rate results from the product of \$10,000,000 of direct labor cost multiplied by 15/100 = \$1,500,000.

^cAssumes similar safety performance between A and C, and between B and D.

^dAmount of IHSS insurance results from 5% contributed by the contractor from \$10,000,000 of direct labor cost.

to \$5.26 billion" during the decade from 1979–89, and it seems that this trend will not be reversed in the near future ("Improved" 1991).

Indirect Costs

In the United States, Hinze (1990) demonstrated that "the ratio of indirect to direct costs for medical case injuries is 4.2:1 and for restricted activity or lost workday injuries, it is 20.3:1," higher than was previously estimated by other authors (Levitt and Samelson 1987). Despite the high level of these indirect costs, they are usually not covered under the previously mentioned insurance categories because they are difficult to identify and quantify. They include costs related to lost time and productivity of the injured worker, his or her crew, other crews nearby, and supervisory staff; cost of replacement worker(s); transportation of the injured worker; and the cost of processing claims (Levitt and Samelson 1987).

While in Honduras limited information was collected regarding indirect costs as only one contractor of those approached in the survey (Recarte 1991) was able to quantify indirect costs when a list was presented. This contractor thought that indirect costs amounted to approximately 2% of his yearly revenues. This lack of awareness of indirect costs indicates that either these costs are low enough to be unnoticed or they are not being properly accounted for. In any event, more research will be necessary before making any conclusion about indirect costs in the Honduran construction industry.

Effect of Honduran Labor Organizations

In general, the labor movement in Honduras has had limited success in establishing strong safety legislation for its workers—this is evident when one compares the safety codes and worker benefits for both countries. Ironically, the Honduran labor movement traditionally has been considered to be the largest and most vigorous in Central America whose stated goal is to improve difficult conditions of the labor force (Rudolph 1983). In the early 1980s, there were roughly 200 individual unions, which claimed to have a total of approximately 200,000 worker and peasant members representing about 20% of the economically active population. These unions were organized into three major labor federations and a large public employees' collective. The most important of these unions were the Confederation of Honduran Workers and the General Workers' Center.

Despite its size, political influence, and formal consultative role, the Honduran labor movement was able to win important benefits for only a small fraction of Honduran workers. Skilled unionized workers in the most modern sectors of agriculture (e.g. North American-owned banana plantations or industry, earned fairly good wages and enjoyed some employment protections under legal contracts and a generally progressive labor code). The great majority of Hondurans, including many construction workers, were unskilled, poorly organized, and underemployed workers in the least modern and least productive sectors of the economy in which the Honduran labor code and minimum wage protections did not really apply (Rudolph 1983).

Summary

Table 3 summarizes the significant differences between the American and Honduran safety approaches. As demonstrated in the table, the Labor Code does not provide the incentives for safety awareness that are currently pro-

TABLE 3. Summary of Differences between American and Honduran Safety Approaches

American approach or result (All about OSHA 1985) (1)	Honduran approach or result (Codigo no date) (2)
(a) Standard Procedure	
A fully dedicated enforcement agency	Only a fraction of the legal apparatus needed. Safety inspectors inadequate in numbers and strength
Civil penalties range from \$5,000 to \$70,000	Civil penalties range from \$10 to \$1,000
Employers responsible for informing employees about safety	Employer not required to inform employees about safety issues
Guarantees employers' and employees' rights	Few employers' and employees' rights guaranteed
Accident and illness information collected to pinpoint troubled areas	Accident and illness information collected only to calculate worker's benefits
Standards development permits public participation	Standards adopted by executive branch's decision
Wide coverage of workforce	Only covers about 50% of workforce, and believed to be less in construction industry
Strong commitment to research	Research lacks resources and commitment
(b) Accident Costs	
High direct and indirect accident costs, enough to be a powerful reason for contractors to care about their safety performance	Low direct accident costs (indirect costs are believed to be low as well)

vided by OSHA. Significant weaknesses in the Honduran Labor Code relate to the fact that only a small portion of the workforce is covered, inadequate civil penalties are imposed for contractors who experience accidents, and accident and illness information is not collected to pinpoint troubled areas. In addition, there is no incentive for the construction industry to reduce accidents because all employers pay the same percentage of direct labor costs; therefore, the cost of accidents is evenly distributed among all industries. Consequently, safer industries pay for accidents of high-risk industries, and safer employers must share in the cost of accidents caused by more careless employers.

RECOMMENDATIONS

It is unrealistic to assume that Honduran contractors will improve their safety performance without some form of incentive or creation of an appropriate environment. Reforms of the Honduran Labor Code are necessary and they should be oriented to provide strong enforcement systems, guarantee employers' and employees' rights especially allowing more participation in the process of adoption and appealing of standards, give adequate protection to all workers including temporary workers, and provide em-

ployees with more safety-related information. Labor organizations will need to take a stronger role in shaping construction safety legislation.

Furthermore, the government's role is crucial in creating incentives necessary to motivate construction companies to improve construction safety. By making reforms in the way the employer contribution to the IHSS insurance is estimated, thereby providing incentives for good safety performance, the government could rapidly create a motivating factor for improved safety practices (as long as the incentives are visible and address high-priority concerns).

Through the Ministerio de Trabajo y Prevision Social and the Honduran Social Security Institute the government could sponsor indispensable research to adapt standards (such as those developed by OSHA, International Labor Office (ILO), and others) to the Honduran construction environment. Additionally, arrangements with international organizations such as the ILO could help to promote that necessary research, and also develop training programs, conferences, and literature.

It is recommended that managers in multinational construction firms who currently have operations or are considering work in Honduras be made aware of the significant features of the Honduran Labor Code. The code, by itself, does not provide the necessary incentive for safe construction operations. To ensure that safety guidelines meeting the standards of the international firm are present, additional training and implementation efforts will be required when using the local construction workforce.

CONCLUSIONS

The present paper investigated differences between the American and Honduran safety approaches. Several weaknesses were identified in the Honduran approach: (1) The Honduran Labor Code does not protect a large percentage of the construction workforce because most workers are considered temporary and are therefore not covered; (2) benefit compensation is low for permanently impaired workers who are covered under the workers' compensation program; and (3) worker insurance compensation costs are evenly distributed among all industries. The effectiveness of Honduran labor organizations in improving work conditions was also discussed. Furthermore, recommendations were made to improve the Honduran safety approach. This information can be useful to construction firms operating or considering operations in Honduras or in other similar developing countries as it will provide them with knowledge of current practices and enable them to develop more successful operating plans that include effective safety programs.

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