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**Makhamreh, Muhsen Abdallah**

**DETERMINANTS OF LABOR-MANAGEMENT DISPUTES AND THEIR  
SETTLEMENT IN THE PRIVATE SECTOR IN JORDAN**

*The Ohio State University*

PH.D. 1981

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DETERMINANTS OF LABOR-MANAGEMENT DISPUTES AND THEIR  
SETTLEMENT IN THE PRIVATE SECTOR IN JORDAN

DISSERTATION

Presented in Partial Fulfillment of the Requirements for  
the Degree Doctor of Philosophy in the Graduate  
School of The Ohio State University

By

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\* \* \* \* \*

The Ohio State University

1981

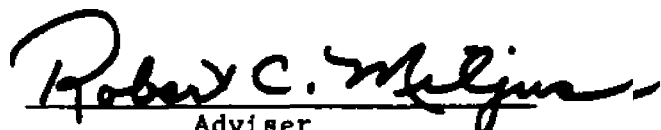
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## ACKNOWLEDGMENT

I am indebted to Professor Robert Miljus for his limitless support and guidance through my program, and who offered constructive suggestions and who sincerely and generously gave time and counsel on the various matters pertaining to the completion of this dissertation. Special gratitude is due to my reading committee: Professors A. Campagna and S. Kelley for their positive input and encouragement through my classes and dissertation.

Many people deserve special thanks for their help in facilitating the completion of this project: Dr. M. Malallah, the Director of the Jordanian Institute of Management, Dr. J. El-Anani, Jordan's Secretary of Labor, Mr. S. Al-Majali, Secretary General of the General Union, and Cathy Fisher who helped in editing this dissertation.

Special thanks to my family in Jordan and Cincinnati who provided me with unlimited support.

My thanks to the University of Jordan for their financial assistance.

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CHAPTER I  
INTRODUCTION

Purpose of the Study

The main purposes of this study are (a) to determine empirically the determinants of labor-management disputes in the private sector in Jordan, and (b) to evaluate the effectiveness of the Jordanian labor-management dispute settlement system.

Hypotheses

This study aims to test the hypotheses that the number of workers involved in disputes tends to rise with increases in (a) the firm's total employment; (b) the ratio of unionized workers to total employment in the firm; (c) the ratio of the worker's years of employment with current employer to his total working years in the labor force, and tends to rise with decreases in (d) the ratio of the workers wage increase in 1980 to inflation rate in 1979, and (e) the ratio of the number of disputes solved by the formal system of dispute settlement to total disputes which occurred in the firm. In addition, the study tests the impact of sociopolitical, economic, collective bargaining, work conditions, fringe benefits, and managerial factors on labor-management disputes.

With respect to the system of disputes settlement, the study tests the hypotheses that the ratio of disputes solved by the formal system of labor dispute settlement to total number of disputes which occurred in the firm tends to rise with increases in (a) the ratio of unionized workers to total employment in the firm; (b) the ratio of the worker's years of employment with current employer to his total working years in the labor force; (c) the ratio of group disputes to total disputes which occurred in the firm, and tends to rise with decreases in the (d) firm's total assets; (e) the ratio of the workers wage increase in 1980 to the inflation rate in 1979, and (f) the employee loss ratio. In addition, the study tests the impact of socio-organizational and human capital factors on the effectiveness of the dispute settlement system in Jordan.

The subject of labor-management dispute settlement has assumed increasing importance in the field of human resource management, especially in the industrialized societies. The reasons for this are: (1) the impact of labor in the final output as a significant factor in production; (2) the increasing growth of unions as a product of industrialization and their vital role in labor-management dispute and settlement, and (3) its impact on industrial peace which affects economic development in both developed and developing countries (Galenson, 1968).

The impact of labor-management disputes on economic development in developing countries is greater because most of the economic projects in these countries are labor intensive. Hence, labor participation in the final output is greater than that of capital.

The importance of labor, as an indispensable factor of production has been recognized by economists as a crucial element in economic development (Harbison and Myers, 1965; Schultz, 1960; Blaug, 1968; Kerr et al., 1965; Parnes, 1980). Human resources are an important part of the wealth of nations; such factors as capital accumulation and technological progress constitute at best only partial determinants of economic development. The thoughts, skills, and habits of workers and the nature of the institutions that bind them together are decisive factors in such development (Blaug, 1968; Kerr et al., 1965). Harbison (1973) pointed out that capital and natural resources are passive factors of production while human beings are the active agents who accumulate capital, exploit natural resources, build social, economic and political organizations and carry forward national development. Harbison added:

In the final analysis, the wealth of a country is based upon its power to develop and to effectively utilize the innate capacities of its people. The economic development of nations, therefore, is ultimately the result of human effort. It takes skilled human agents to discover and exploit natural resources, to mobilize capital, to develop technology, to produce goods, and to carry on trade. Indeed, if a country is unable to develop its human resources, it cannot build anything else, whether it be a modern political system, a sense of national unity, or a prosperous economy (Harbison, 1965: IX).

Since labor is considered a decisive factor in the production process then it goes without saying that the establishment of stable and equitable relationships between labor and management and the creation of a satisfied and motivated labor force are essentials in economic development. Gellerman (1976) indicated that sophisticated and expensive equipment in the hands of hostile, dissatisfied or

demotivated workers is no more productive in the long run than the manual machines or the antiquated equipment it has replaced, which in turn affect the course of economic development in any country.

For the last three decades, most of the countries of the world and especially the less developed ones have been engaged in the process of economic development. Their goals are basically to improve their socioeconomic status and to enhance the standard of living of their people. These development efforts have been explicated by many economic writers especially by Moore and Harbison.

Moore wrote:

Since World War II, everybody wants to get into the act. Virtually no country or culture, no tribe or civilization is immune to the sweeping ideological commitment to economic development in the broad sense if not industrialization in the precise sense (Moore, 1965:2).

Harbison added:

Most nations today are development minded. The less developed countries which have been poor and stagnant for centuries are in the state of revolt against poverty, disease, ignorance and dominance by strong nations, and they are no longer disposed to entrust their future exclusively to the forces of the market, the whim of nature and the judgment of colonial rulers (Harbison, 1964:1).

The preceding writings illustrate what Higgins (1968) called the "revolution of rising expectations" that has embroiled people in developed and developing countries. Every country is mobilizing its efforts and resources to cope with the spreading fever of economic development. This fever can be best observed in the economic activities that have been taking place in the Arab oil producing countries, where billions of dollars have been invested annually since the

tremendous increase in the oil revenues in 1974. For example, Saudi Arabia, a country of approximately six million people, has spent on its economic development plan (1976-1981) the amount of 143 billion dollars, or \$25,000 per person (Azzam, 1981:48).

However, the process of economic development brings with it many profound changes in the economic and social life of a country. It brings a change in the structure of the labor force, a transfer from agriculture to industrial activities, the rise of the factory worker, the emergence of the semi-skilled workers and with these perhaps, labor discontent and protest, etc. (Kerr et al., 1960; Sturmthal, 1966; Moore, 1965).

Jordan, as a developing country, is not an exception to the mainstream of the economic development fever. It has witnessed economic development since the early 1950's. A major portion of this development has occurred in the industrial sector with the establishment of the cement and phosphate industries in 1951 and 1952, respectively. With almost zero participation in the Gross Domestic Product (GDP) in the early fifties, the industrial sector has increased its participation to 19 percent in 1979 (Dabbas, 1979). During the same period the proportion of the labor force employed by the industrial sector increased to approximately 7 percent (Dabbas, 1979). These trends show the growing importance of industrialization in the Jordanian economy.

The industrialization process in Jordan has created new realities in the economic and social life of the country. There has been a change in the workplace from the agricultural field to the new factory location. The change in the workplace has been accompanied

by new rules and regulations which govern the employment relationship in the new organizational settings. These new rules are entirely different from those in the agricultural field.

In the new workplace the worker must report to work at a fixed time each day and keep fixed schedules for his work. The worker has to obey orders, to produce at a certain rate, and to deal with machines instead of his primitive agricultural tools. This new environment is something peculiar to him, and in turn he has to adjust to it or to reject, and neither one is easy to do.

In addition, the industrialization process has accelerated the emergence of labor unions which led to their legalization in 1953. These labor organizations have assumed the responsibility of protecting the interests of the workers. The principal unions are: The Transportation Workers Union, The Construction Workers Union, The Mining Workers Union, The Printing Workers Union, The Commercial Drivers Union, and the Shoemaking Workers Union.

The changes in the workplace have brought new dimensions into the organizational setting which make disputes between labor and management inevitable. In response, government in Jordan has enacted a law to help in settling these labor-management disputes. Labor Law No. 21, 1960 established three sequential steps in settling labor disputes: (1) the use of conciliation officers; (2) reference to a conciliation board, and (3) the industrial court (Kawar, 1977:79). Determining the causes of labor-management disputes and their expedient settlement are vital to the process of economic development.



### Significance

First, the most significant structural difficulty that characterizes the Jordanian economy is its dependence on foreign financial assistance. This financial assistance is subject to political considerations from the aiding countries, and in turn affects the political decisions of Jordan. Since political considerations change rapidly in that part of the world,<sup>1</sup> financial aid to Jordan is characterized by a high degree of uncertainty. The only course of action to minimize (if not to eliminate) Jordan's dependence on foreign aid is to intensify the economic development efforts of the country in order to create a situation of self-satisfaction in the long run (if not in the short run). Given the importance of a satisfied and motivated work force in the production process, this research is a significant step in that direction.

Second, no research has ever been undertaken in Jordan to analyze the determinants of labor-management disputes. Furthermore, since its enactment, Labor Law No. 21 has not been changed and no research has been undertaken to investigate its effectiveness in solving labor-management disputes in Jordan.

Third, there is a continuous complaint by labor unions about the delay, inefficiency and biases of the Ministry of Labor (which is responsible for executing the law) (Third Labor Convention, 1978; Central Council of the General Union of Labor Organization Report, 1979:12).

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<sup>1</sup> Those who are familiar with the history of the Middle East, are amazed with the high degree of change in the political alliance. One example in this context is the dramatic change from economic and political unity between Jordan and Syria in the period 1977-1980 to military conflict between them in 1980.

Fourth, an added significance to this research stems from the finding that the Ministry of Labor in Jordan is in the process of forming a committee to change Labor Law No. 21 to be compatible with the new economic and social situation in the country. The area of labor-management disputes settlements will be one of the areas that will be subject to change. The outcomes and recommendations of this research should be very helpful in this matter.<sup>2</sup>

Finally, the outcomes of this study and its methodology can be useful to the developing countries in general and to the Arab countries in particular, due to the relative similarity in the socio-economic structure and the degree of economic development in these countries and Jordan.

#### Methodology

Two regression models were utilized in order to achieve the purposes of this study. They are defined in Chapter IV. Those models are based on a prior knowledge of the economic and social phenomena that characterize the labor-management situation in Jordan.

Cross-sectional data (obtained entirely from primary sources) were utilized in this study. Secondary sources were used to obtain data needed to provide quantitative support to the different concepts explained in this study. In the empirical analysis, quantitative and qualitative data were used in the two versions of each statistical model.

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<sup>2</sup>Interviews with Jordan Secretary and Under-Secretary of Labor, January 1981.

### Limitations

The first limitation is related to the number of observations. Only 159 observations on a cross-sectional basis have been obtained. This number represents observations obtained from seventy firms in addition to governmental officials, union leaders and businessmen. The number of firms represents only 9 percent of the total business firms which employ five workers and more,<sup>3</sup> but it represents 18.5 percent of the total employment in the private sector (Shashah, 1980). Although these observations represent the actual realities in the private sector (as it will be explained later), still if more observations had been obtained, more reliable results would have been reached (at least from a statistical point of view).

The second limitation is related to the source of the data. In the process of data collection, management archival records were the principal source of the quantitative data; i.e., number of workers, number of disputes, etc. Since Jordanian management has the tendency to overinflate or deflate the figures related to such data (Eldridge, 1968), this limitation should be kept in mind.

The third limitation concerning the data is the absence of time series data. Time series data are very significant in longitudinal analysis to trace the trends of any phenomenon over time. This is actually a general limitation concerning social sciences studies in Jordan due to the lack of published data.

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<sup>3</sup>This percentage will be lower if firms employ five workers and less are included because it constitutes 65 percent of total private business firms (Shashah, 1980).

### Plan of the Study

Chapter II presents background information about the geographic location, population, form of government, social, religious and economic characteristics, labor force structure, and labor unions in Jordan.

Chapter III presents a theoretical perspective about the approaches, theories, causes, types, forms, and settlement methods of conflict.

Chapter IV presents specification of the equations, and broad definitions of the hypotheses and the variables used in the study.

Chapter V presents in detail the methodological procedures and the empirical findings of this study.

Finally, Chapter VI presents the conclusion and recommendations of this study, in addition to suggestions for future research.

## CHAPTER II

### BACKGROUND INFORMATION ABOUT JORDAN

Relevant information about different aspects of Jordan is included in this chapter in order to provide greater understanding of the union-management environment. The geographic location, population, form of government, social, religious and economic characteristics, labor force structure, and labor law are covered.

#### Location and Population

Lying in the arid zones of the Middle East and situated at the crossroads of three continents, Jordan covers an area of around 97,000 square kilometers. Its neighbors are Syria, Iraq, Saudi Arabia, and Israel. The country is land locked except at the southern extremity where nearly twenty-six kilometers of shoreline along the Gulf of Aqaba provides access to the Red Sea. The terrain of the country is similar to that of southern California, with rolling hills, deserts, plains, mountains, forests, sea coast, oases and fertile river valleys. Its climate also resembles that of southern California: semi-arid, pleasant sunny days, cool nights with an annual average temperature of 65°F.

Only about 5 percent of the total area is cultivable land. About 90 percent of such cultivable land is dependent on limited and irregular rainfall (International Bank for Reconstruction and Develop-

ment (IBRD, 1972:1). Irrigated agriculture is mainly confined to the Jordan Rift Valley, where new modern agricultural techniques have been introduced and have resulted in year around agricultural production.

The population of Jordan is about 2.5 million, of which 67 percent are urban, 29 percent are rural and 4 percent are nomadic tribes (Jordan Information Bureau, 1979:1). The population consists of 52 percent males and 48 percent females, growing at a rate of about 3.4 percent per annum (Department of Statistics, 1979:2). In mid-1979, various observers estimated that between 300,000-400,000 citizens are residing abroad, a number which is remarkably high for such a small domestic population (Kaplan, 1979:58).<sup>1</sup>

#### Government

The political system of the country is constitutional monarchy. The constitution of Jordan, promulgated in 1952, declares Jordan a hereditary monarchy with a two-house parliamentary system similar to the British parliamentary system. Islam is the religion of the state and Arabic is the official language.

The powers and functions of the government are divided into executive, legislative and judicial categories. The constitution assigns the legislative power to the bicameral National Assembly and the king, who is also vested with executive power. The monarch exercises his executive authority with the aid of his cabinet ministers, collectively known as the Council of Ministers. Judicial power is vested in independent courts. The authority and services of the

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<sup>1</sup>Most of those immigrants are skilled and professional workers who are badly needed in the country at this stage of economic development.

central government are extended to all corners of the kingdom through the five governorate (counties).

The monarchy remains the most important institution in the country. The king appoints the prime minister, the president and members of the Senate, Judges, and other senior government and military functionaries. He commands the armed forces, approves and promulgates laws, declares war, concludes peace and signs treaties. The king convenes, opens, adjourns, suspends or dissolves the legislature; he also orders and may postpone the holding of elections. The king, as head of state, is immune from all liability. Political parties are banned in Jordan except for the Muslim Brotherhood which is registered as a religious group, but it has political objectives.

### Society

In the pre-1948 East Bank of Jordan, the dominant sociopolitical order was tribalism. Included were not only the beduin nomads and seminomads upon whom the Hashemite rulers relied on for support, but also the great bulk of the village people and even of those who were technically urbanites (Kaplan, 1979:60). This system was affected by the influx of the palestinian refugees who came to the East Bank after the establishment of the state of Israel in 1948. This factor combined with other factors such as economic development and the increasing level of education in the last three decades, have reduced the dominance of tribalism but it did not eliminate it.

Many basic characteristics of tribalism are still affecting the social and the political life of the country. Tribalism is the dominant sociopolitical order among the beduin (including nomad and

non-nomad) nowadays. The tribal social structure is based on patrilineal ties among men. A tribe is a group of related families claiming descent from a supposed founding ancestor. Within this overall loyalty, however, descent from intermediate ancestors defines several levels of smaller groups. In cases of conflict, groups of kinsmen mass at the appropriate level of opposition. For example, the grandsons of brothers from two groups in opposition to each other, but they form one unit in opposition to the descendants of the brother of their common great father (Kaplan, 1979:66).

The principles of organization in settled communities (especially in villages of central and southern Jordan) resemble those of the Bedouin. Villages are organized around kin groups, and the most important elements of social identity are established at birth. Social control and politics in the village environment traditionally grow out of the interaction of kin groups at various levels. Blood ties between men supply the major outline and primary ideology of kin relations. The ties to other local kin groups through sisters, mothers, daughters and wives generally provide for most individuals direct or indirect access to most other persons and groups within the community. In cases of conflict, leaders of the appropriate kin sections or persons in intermediate positions between them, attempt to mediate the problem through kinship ties (Kaplan, 1979:68).

Social life in Jordan centers largely on the family. In principle and usually in practice, the individual's loyalty to his family overrides other obligations. Ascribed status--that assigned by virtue of one's membership in a kin group--often outweighs personal achievement in regulating social relationships (Kaplan, 1979:70).



Traditionally the individual subordinated his personal interests to those of his family and considered himself a member of a group whose importance outweighed his own.

In short, tribes and extended families, still provide the framework for sociopolitical relations. However, these sociopolitical relations have begun to show tangible change, especially among modern educated individuals. Increased opportunities for both social and physical mobility in the last decades have undermined the old familial ties and the values that subordinated the individual to his kin group. A growing individualism has appeared, especially among the modern educated young (Kaplan: 1979).

### Religion

Islam is the official religion of the state. Ninety percent of the people adhere to Sunni Islam, while Christians of various denominations constitute approximately 10 percent of the population. Difference of ethnic origin or religion distinguish several other groups in Jordan. Most of the Muslim population are Sunni Arab. The Circassians, a Sunni Muslim community of approximately 15,000 to 20,000 are descendants of families brought from the Caucasus in Ottoman times (Kaplan, 1979). Another much smaller group originating in the Caucasus are the Chechens, whose roughly 1,000 members are Shia Muslims, the only representative of this branch of Islam in Jordan. Other religious minorities include a very few Arabic-speaking Druzes and a small number of Samaritans. Most of the Christians in Jordan are Arabs. The largest group of non-Arab Christians are Armenians, perhaps one percent of the population (Kaplan, 1979:61).

### The Economy

The Jordanian economy is essentially an open and laissez-faire economy, although since the mid-1950's, the government has acted in a regulatory and promotional capacity in sponsoring industrial financing and in providing equity for industrial investment. Over the years the government applied a light hand to the economy. This role has been largely confined to creating a political climate and economic conditions stimulating to private investment while undertaking measures for the disadvantaged.

Since the country's independence in 1946, the economy has suffered many critical setbacks that has affected its growth. The Arab-Israeli War of 1948 and the formation of Israel aftermath cut Jordan from the Mediterranean ports and the commercial centers formerly used. Most important of all was the influx of Palestinian refugees which swelled the population from fewer than 500,000 in the mid-1940's to approximately 1.3 million by 1950. This, of course, created severe economic and social problems because the available resources were not enough to meet this sudden and new burden.

Prior to the 1967 war with Israel, the Gross National Product grew at about 8 percent annually. Substantial price stability prevailed over the period 1960-1967, and surplus in the balance of payments was achieved as a result of considerable foreign assistance (IBRD, 1972:3). Although domestic saving was negative, national saving as a result of factor income and transfer from abroad averaged around 12 percent of the GNP (IBRD, 1972:3). The 1967 war started a series of setbacks that continued over the next few years. The war

resulted in the loss of the West Bank and the influx of approximately 450,000 refugees in Jordan.

While the West Bank represented only 6 percent of Jordan territory, the loss of this area in 1967 resulted in a 35-40 percent loss in the GDP and a sizable reduction of tax revenue and foreign exchange earnings (Central bank of Jordan, 1968). The country lost over one-third of its best agricultural land and its primary tourist attraction (Kaplan, 1979:108). The Suez Canal was closed until June 1975, causing a rerouting of most imports and exports via ports in Syria and Lebanon. The limited capacity and the higher costs of the land routes adversely affected the flow of trade (Kaplan, 1979:108).

Between 1968 and 1971, Israeli retaliatory attacks against the PLO bases in Jordan, and subsequently Jordan's own civil war with the PLO created additional disruptions. Many farmers were driven out of the Jordan Valley, halting cultivation in the country's most productive area. The insecurity of the area diminished the flow of tourists; Syria closed its borders to Jordan for eighteen months in 1971 and 1972, and various Arab countries halted their financial aid to Jordan (Central Bank of Jordan, 1973:12).

By 1973, the effects of the 1967 War and subsequent events had been largely overcome. Since then, Jordan has benefited significantly from many events that have occurred in the Middle East. The first event was the tremendous increase of oil revenues to neighboring Arab states, especially Saudi Arabia. The huge influx of oil revenues helped the Jordanian economy in two ways: first, their financial aid to Jordan increased from approximately \$78 million in 1973 to \$989

million in 1979 (Central Bank of Jordan, 1981:24). Second, the huge investment in development projects in these countries generated additional demand on Jordanian products, especially construction and manufacturing materials. In addition, these development projects increased the demand for Jordanian skilled labor such that in 1979 approximately more than 250,000 Jordanians were working in the Gulf States (Eglin, 1979:112-113). Transfer payment from Jordanian abroad was \$524 million in 1978 or 34 percent of Gross Domestic Product (Eglin, 1979).

The second beneficial event was the Lebanese Civil War which started in 1975 and continues to this day. As a result of that war, Beirut lost its importance as a financial center for the Middle East, and many American and European firms moved their headquarters to Amman. In addition, many Lebanese businessmen left Beirut for Amman and established their business there.

Finally, the Iraqi-Iranian War gave Jordan's economy an important boost. Jordan became the only route through which the Iraqi's could buy and import most of their commodities. In addition, Iraq has promised additional aid to and investment in Jordan as a reward to Jordan's positive stand toward Iraq in that war.

By the late sixties, Jordan remained primarily an agricultural country. Agriculture, including animal husbandry, accounted for an average of 18 percent of the Gross Domestic Product and was the largest productive sector in the economy. It employed almost one-third of the labor force and earned around 45 percent of export revenues (Odeh, 1972:2).

Since the early seventies, the agricultural sector share in the GDP started to decline, while the GDP share of the industrial sector (manufacturing and mining) started to increase as shown in Table 1. This structural shift in favor of the industrial sector is due to the development efforts to industrialize the country, given the fact that cultivable land is limited coupled with the subsequent drought that occurred in the country. For example, between 1973 and 1979, only 1974 had relatively good rainfall; the other years were drought years seriously restricting harvest of major crops (Eglin, 1979:111).

TABLE 1  
SECTOR ORIGIN OF GDP AT FACTOR COST  
FOR THE PERIOD 1963-1979  
(IN PERCENT)

| Economic<br>Activity | 1963-     | 1971      | 1972      | 1973      | 1974      | 1975      | 1976      | 1977      | 1978      | 1979      |
|----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|                      | 1970*     |           |           |           |           |           |           |           |           |           |
|                      | %         | %         | %         | %         | %         | %         | %         | %         | %         | %         |
| Agriculture          | 19        | 14        | 15        | 9         | 12        | 10        | 10        | 10        | 11        | 8         |
| Industry             | 11        | 11        | 11        | 11        | 17        | 18        | 20        | 21        | 17        | 19        |
| Services             | <u>70</u> | <u>75</u> | <u>74</u> | <u>79</u> | <u>71</u> | <u>72</u> | <u>70</u> | <u>69</u> | <u>72</u> | <u>73</u> |
|                      | 100       | 100       | 100       | 100       | 100       | 100       | 100       | 100       | 100       | 100       |

\* Average

Sources: Hasem Dabbas, Jordan Industrial Policy, 1981.  
Central Bank of Jordan, Annual Report, 1979.

Between 1973 and 1979, GDP in current prices grew at an average of 20 percent a year, led primarily by the expansion of mining and manufacturing (Eglin, 1979:110). Industrial production increased rapidly after 1973 because of the booming domestic market and the opportunities for export sales in the oil states of the Arabian Peninsula after the rapid rise in oil prices (See Table 2). This remarkable performance of the industrial sector was achieved despite the existence of two major obstacles which continue to handicap industrial development: the scarcity of local raw materials and the smallness of the domestic market.

TABLE 2

INDEX NUMBER OF INDUSTRIAL PRODUCTION IN JORDAN  
1975-1980

| Year | Index of Industrial Production | Change in Index |
|------|--------------------------------|-----------------|
| 1975 | 100                            | ---             |
| 1976 | 125                            | 25              |
| 1977 | 129.7                          | 11.7            |
| 1978 | 159.2                          | 29.5            |
| 1979 | 188.0                          | 28.8            |
| 1980 | 232.1                          | 44.1            |

Source: Central Bank of Jordan, Monthly Statistical Bulletin, February, 1981.

Elaborating on the first of the obstacles, the country has few natural resources. Unfortunately, Jordan does not have oil, or has yet to be discovered, while all the surrounding countries (Saudi

Arabia, Iraq, Syria, Israel) produce large quantities of oil. However, by 1979 nonmetallic minerals existed in explorable reserves. Copper and Manganese ores had been discovered but not in commercial deposit. Only nonmetallic minerals provided the country with an extractive industry, the two most valuable being phosphates and potash. Other nonmetallic minerals included limestone (for cement and bricks), clays (for various purposes (including ceramics), gypsum (for building materials), sand (for glass and silicate bricks), and marble (for construction). By 1979 cement was the only relatively large industry using the minor non-metallic minerals (Eglin, 1979:138).

The major structural difficulties that characterize the Jordanian economy are: the rapidly growing population, a small domestic market, limited natural and capital resources, dominance of a fragile agricultural activity, a chronic balance of trade deficit, and dependence on foreign financial assistance in support of the government budget (Odeh, 1972:3).

### The Labor Force

Jordan's most valuable resource is its people, who are better educated and more skilled than most of its Arab neighbors (Eglin, 1979: 112). On the other hand, the labor force participation rate is very low compared to those of the developed countries. In 1980, the labor force participation was 20.02%. This low participation rate is due to three factors: (1) more than 50 percent of the population is under 15 years of age, (2) high emigration rate among workers, and (3) a very low participation rate of women (Royal Scientific Society, 1977:7). The female participation rate has increased rapidly since

1975 from 4.5 percent in 1975 to 15 percent in 1979 (Ministry of Labor, 1979:39).

The distribution of the labor force among the sectors of the economy is also changing over time. The obvious change is the decline of the agricultural sector, while the share of the other sectors is increasing as shown in Table 3.

TABLE 3  
LABOR FORCE BY SECTOR FOR THE PERIOD  
1961 TO 1985 (IN PERCENT)

| Economic Activity | 1961<br>%   | 1975<br>%   | 1980<br>%   | 1985*<br>%  |
|-------------------|-------------|-------------|-------------|-------------|
| Agriculture       | 33.5        | 32.8        | 27.9        | 23.3        |
| Industry          | 10.2        | 5.8         | 6.8         | 7.7         |
| Services          | 35.3        | 27.8        | 33.1        | 37.8        |
| Others**          | <u>21.0</u> | <u>33.6</u> | <u>32.2</u> | <u>31.2</u> |
|                   | 100.0       | 100.0       | 100.0       | 100.0       |

Source: National Planning Council, Population and Labor Force Study, 1980.

\* Estimate

\*\* Includes Military Personnel

The change in the distribution of the labor force among sectors is accompanied by an unbalanced distribution between urban and rural areas and among urban areas themselves. For example, in 1974, Amman, the capital of the country, had 57 percent of the population, 71 percent of the small industrial establishments and 85 percent of the



medium and large industrial establishments (Malkawi, 1978:13).

The major current problem facing the labor market in Jordan is the exodus of the skilled workers to higher paying jobs in other countries, throughout the world in general, and in the oil states in particular. This exodus created a labor shortage in the country, which forced the country to import foreign labor to continue its development project. In 1980, there were about 80,000 expatriate workers, most of whom were from Egypt, Syria and Pakistan (Ministry of Labor, 1979:10).

#### Labor Unions in Jordan

Organized labor unions in Jordan were born in 1953 with the passing of Labor Law No. 35.<sup>2</sup> Since that law, organized labor unions have passed through different evolutionary stages which can be divided chronologically as follows:

Stage I (1953-1955) - During this period labor leaders were very active in establishing legal unions without having any clear and definite objectives for their organizations. Thirty-six unions were established, in addition to the creation of the General Union of Labor Organizations,<sup>3</sup> of which all labor unions were members (Jawhar, 1969: 26-34).

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<sup>2</sup>The law indicates the right of seven employees or more who work in a certain occupation or one company to establish a union.

<sup>3</sup>This general union is equivalent to the AFL-CIO.

Stage II (1955-1960) - Sometimes called the Labor Legislation Period. It was during this time that Compensation Law No. 17 (1955) was passed, specifying employee rights to be compensated in the case of illegal firing or injury on the job. Five years later, Labor Law No. 21 was passed which included provisions concerning collective agreement, minimum wages, health, safety, welfare, working hours, holidays, annual leave, employment of women and children, workmen's compensations, labor unions, and the settlement of labor disputes (Kawar, 1977:5-92). During this period Tripartite Conciliation Committees of government representatives, employers and labor were established to solve disputes between management and labor (Jawhar, 1969:32).

Stage III (1960 - 1967) - In this period the number of unionized workers increased due to the passage of Labor Law No. 21 (1960). But many obstacles were created by employers to hinder the application of the law due to different legal interpretations and the inability of the Ministry of Labor in requiring management to abide by the laws (Jawhar, 1969:35-40).

Stage IV (1967-1970) - After the 1967 Arab-Israeli War, the Palestinian Liberation Movement emerged in Jordan. Workers joined the labor offices in these organizations and neglected their original unions. Collective negotiations started between the labor offices of these Palestinian organizations and employers; negotiations were carried out mainly under the threat of arms because these labor offices tried to achieve many benefits for the workers, not for their own sake but simply to encourage them to join the organizations,

and to show their ability to enforce things within the formal regime of Jordan (Al-Majali, 1973).

Stage V (1970-1973) - After the Civil War in September, 1970, and the dismissal of the Palestinian Organizations, some of the union leaders left the country with these organizations. The government was suspicious of labor unions as a result of their former ties to Palestinian organizations. The number of unionized workers dropped drastically and unions were inactive (Al Majali, 1973).

Stage VI (1973 - present) - After 1973 and concurrent with the economic boom in the country, labor unions resumed their activities, comprehensively evaluating their positions, and rebuilt on a more sound and objective basis (Al-Majali, 1973). The number of unionized workers has been increasing since 1972. It doubled during the period of 1974 to 1980 as shown in Table 4.

In 1980, 19 percent of the total labor force was unionized. Of this ratio, 10 percent are joining unions with a leftist ideology. Also, these leftist unions are very active in terms of demands, strike activities, and elections, etc. Fifteen to twenty percent of the unionized workers joined conservative unions which work in full cooperation with employers. The majority (70 percent) of the union members are moderates who try to be successful in protecting the rights of the workers and employers at the same time.<sup>4</sup>

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<sup>4</sup>Interview with Dr. Jawad El-Anani, Jordan Secretary of Labor.

TABLE 4  
 NUMBER OF UNIONIZED WORKERS DURING  
 THE PERIOD 1972-1980

| Year | Number of Unionized Workers |
|------|-----------------------------|
| 1972 | 34,846                      |
| 1974 | 42,638                      |
| 1976 | 61,753                      |
| 1978 | 72,134                      |
| 1980 | 84,384                      |

Source: General Union of Labor Organization records.

Two problems confronting the labor movement in Jordan are: employer opposition to unionization supported by the government, and the lack of responsibility and awareness on the part of some labor leaders.<sup>5</sup>

The latter problem is evident by the unrealistic demands of contract negotiations by some of the union leaders. These demands, which are sometimes motivated by political factors, increase management hardline attitudes toward labor and government suspicions about their real motives, which negatively affect the situation of the working class.

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<sup>5</sup>Interview with Mr. Khalil Abu Kurmah, Deputy Secretary of the General Union of Labor Organization in Jordan.

## CHAPTER III

### CONFLICT: A GENERAL THEORETICAL PERSPECTIVE

The concept of conflict has been of interest to scholars in such disciplines as psychology, sociology, anthropology, politics, economics and business. This interest is related to the fact that conflict is an essential and expected part of human behavior and life (Leininger, 1975:292; Coser, 1964:7). In this context, the understanding of the various causes, types of conflicts, and the process of resolving them is extremely important for the full personal, cultural, and socioeconomic development of human beings as well as for survival and new changes in life.

Thomas (1976:889) pointed out that conflict is one of those fascinating but frequently abused and misunderstood subjects, "Like any potent force, conflict generates ambivalence by virtue of its ability to do great injury or, if harnessed, great good." Himes (1980:27) adds that people have always been both fascinated and repelled by the excitement of horror and violence. He points out that "some individuals have gone further, seeking to understand and explain these striking phenomena. These are among those thoughtful people who through the ages have pondered the ancient problem of man's inhumanity to man."

The objective understanding of this complex phenomenon and its ramifications requires an exploration of conflict in different academic disciplines. This chapter is primarily concerned with the analysis of labor-management disputes or as it is generally known "industrial conflict." Given the fact that industrial conflict is highly interrelated to the general conceptual meaning of conflict, the concept of conflict will be explained briefly from the vantage of different related disciplines. Conflict theories, types, causes and settlement methods are also covered in this chapter.

#### Conflict Approaches

Four approaches to conflict and conflict resolution have been identified in the literature: the psychological approach, the anthropological approach, the economic-political approach, and a sociological approach (Leininger, 1965:283).

From a psychological point of view, "conflict refers to a situation in which a person is motivated to engage in two or more mutually exclusive activities" (Murray, 1968:220). In this context, conflict may occur on an overt behavioral level, verbal level, symbolic level, and on an emotional level (Murray, 1968; Himes, 1980). Incompatible responses cannot occur simultaneously, and motives are important in psychological conflict. This implies that the concept of psychological conflict is particularly significant in the areas of personal adjustment and mental disorder (Murray, 1968:220). The work of Sigmund Freud and Joseph Breuer on hysterical neuroses, Kurt Lewin's analysis of personality, Neal Miller's analysis in psycho-

pathology and social behavior are distinguished studies in this area of conflict (Murray, 1968).

The anthropological approach to conflict focuses on cultural conflicts, acculturation stresses, value conflicts, social structure, and conflicts in relation to personality and culture (Leininger, 1975:293). Conflict, in this case, results from competition between at least two parties. A party may be a person, a family, a lineage, a community or it may be a class of ideas, a political organization, or a religion (Nader, 1968:236). Nader (1968) indicated that anthropological conflict is occasioned by incompatible desires or aims and by its duration may be distinguished from strife or angry disputes arising from momentary aggravation. He added that some causes of anthropological conflicts are to be found "in the aggressive behavior that is almost universal among the vertebrates and is presumably adaptive in a broad range of environment."

The economic-political approach to conflict focuses on conflicts related to political interests, political-economic power games, political coalitions, economic conflict gains and losses and political conflict processes (Leininger, 1975:293). North (1968) pointed out that political conflict emerges "whenever at least one party perceives that one (or more) of his goals, or purposes, or preferences, or means for achieving a goal or preference is being threatened or hindered by the intentions of activities of one or more other parties." The parties may be seeking to move or expand into the same field or physical space, or in the same field of influence (Boulding, 1957:124).

The social approach focuses on group social behavior and interactional phenomena in relation to solving group conflicts, especially decision-making processes (Leininger, 1975:283). Coser (1964) pointed out that conflict is an important element of social interaction. From Coser's point of view "conflict may be defined as a struggle over values or claims to status, power, and scarce resources, in which the aim of the conflicting parties are not only to gain the desired values but also to neutralize, injure, or eliminate their rivals." Coser (1968:232) added that "such conflicts may take place between individuals, between collectivities, or between individuals and collectivities. Intergroup as well as intragroup conflict are perennial features of social life."

#### Theories of Conflict

Different theories have been advanced in the literature to explain the fascinating and complex concept of conflict. Himes (1980) mentioned five theories in his effort to explain conflict.

The "instinct theory" of conflict is found in the individual's heredity. McDougal (1908) argued that "every individual is born with a full complement of instincts that provide an adequate explanation of all his social behavior." Among these instincts were several--pugnacity, acquisitiveness, and self-protection--that were said to function to explain conflict action. The explanation of conflict consisted of identifying the proper instinct and indicating how it was triggered and how it operated.



The "tension theory" of conflict is related to the individual's social experience. Scholars have found conflict to develop "from the release of inner tensions that are built up within individuals by life in modern societies"(Raven & Kruglanski, 1970). Carstairs (1969) argues that the rapid population growth that produces human congestion is the root of the social conditions that generates tension. Bernard (1957) pointed out that tensions result from "experience of socialization, from structural conditions in modern industrial societies, and from the frustration of work."

Marx utilized a dialectical approach to construct a theory of conflict based on social class struggle. From Marx's point of view (Hamilton and Wright, 1975; Lenski, 1966) the development of capitalist society forces the creation of two sharply divided social classes--the bourgeoisie and the proletariat. The basic relationship between them is one of exploitation and oppression. The historical trend is toward increasing exploitation of the proletariat by the bourgeoisie and polarization of the classes. In the final stages of capitalist development, exploitation produces increasing class consciousness, political maturity, collective action and finally revolution (Himes, 1980:30).

Dahrendorf (1959:237-240) used a structural approach to formulate a theory of conflict. In his approach, Dahrendorf argues that "the initiating structure of conflict is composed of social categories (quasi-groups) of unequal rank and power and divergent interests between which there is an ongoing relationship of cooperation and conflict." He added that the degree of potential for increased

conflict implicit in this structural situation is conditioned by such factors as polarization of the categories by status and power disparity, diverse and unfocused interests, and definition of the categories as in-and-out groups.

The last theory of conflict is built on the frustration-aggression hypothesis. The concept of frustration was introduced first into literature by Sigmund Freud, but the major contribution to this theory of conflict was made by John Dollard. "The Dollard theory suggests a direct, somewhat mechanical nexus between socially generated frustration and widespread aggressive behavior" (Himes, 1980:33). Frustration can be caused by increasing material deprivation and rising expectations that cannot be met (Himes, 1980:34); by reversal or drop in social conditions (Davies, 1962:5-18); by status inconsistency (Lenski, 1954); by cognitive dissonance (Geschwender, 1968), and unreciprocity between collective actors (Palmer, 1970). In a similar vein, in his research, Turner (1974) identified two major conceptual reasons that cause conflicts: (1) the more deprived groups question the legitimacy of the existing distribution of scarce resources, the more likely they are to initiate conflict, and (2) the more a group's deprivations are transformed from absolute to relative, the more likely these groups are to initiate conflict.

#### Types of Conflict

Conflicts may be "realistic" or "non-realistic" (Coser, 1964, 1968; Leininger, 1975), "institutionalized" or "non-institutionalized" (Leininger, 1975), and "manifest" and "underlying" conflict (Deutsch, 1969).

Realistic conflict is characterized by opposing means and ends, by incompatibility of values and interests. It arises when individuals clash in the pursuit of claims and the expectation of gain. It is viewed as a means toward the achievement of specific goals, a means that might be abandoned if other means appear to be more effective. Non-realistic conflict arises from the need for tension relief, from deflected hostility, from historical traditions, from ignorance or error, and from aggressive impulses that seek expression no matter what the object is. Scapegoating provides an example of this conflict; the object of attack is secondary to the dispositional need for attack (Eldridge, 1968). Non-realistic conflict reflects continued hostility between groups whose actual conflicts have been resolved.

Institutional conflict is characterized by opposing forces related to explicit rules, normative behavior and continuity of expectations found within an organized social institution (Leininger, 1975:294), such as labor-management conflict in the U.S. or any industrialized societies. Non-institutional conflict reflects opposing forces related to informal and implicit rules in nonestablished social situations which have no normative behavior. An example of this conflict is the struggle and animosities between Catholic and Protestant in Northern Ireland, and the conflict in the Middle East over Palestine between the Arabs and the Israelis (Himes, 1980: 218).

Deutsch (1969) distinguished between "manifest" and "underlying" conflict. Manifest conflict arises from incompatibility with respect to goals, subgoals and means or paths to goals (Raven & Eachus, 1963; Thomas, 1957). The dispute between labor and management representatives over the appropriate wage scale or salary increase is an obvious example of this type of conflict. Underlying conflict includes manifest conflict but is broader in nature. Labor and management representatives may be quarreling with each other because they do not like each other and the appropriate wage scale gives them a rational excuse for quarreling (Raven & Kruglanski, 1970: 71). Other underlying bases for conflict may include "general distrust of the motives of the other, a masochistic desire for punishment, and a desire to overcome feelings of inferiority" (Raven & Kruglanski, 1970:70-71).

#### Variables Affecting Conflict

Leininger (1975:294) pointed out that there are several key variables that affect conflict and conflict resolution. These variables include:

1. The context, climate, or setting influences conflict behaviors, which may be of social, physical, cultural, political and psychological nature.
2. The goal, both implicit and explicit, which the parties involved wish to pursue.
3. The set of rules or the normative expectations by which conflicts operate between and among groups.
4. The human and material resources used in conflict situations.
5. Time, change, and geographic factors.

In addition to these variables, Coser (1964) has noted the frequency of occasions for conflict varies positively with the closeness of relations. It is natural then in this respect to expect disputes between labor and management in the organizational setting, due to the concentration of people in the workplace and the continuous contact between them.

### Labor-Management Dispute<sup>1</sup>

"Where people work together in an employing organization it would be expecting too much of human nature that disputes should not arise between employers and workers and for that matter between different groups of workers and within management" (OECD, 1979:5).

This statement implies that disputes are inevitable in the organizational setting. Much of the academic effort in analyzing conflict with respect to its concept, nature, types, causes, management, etc. is only an attempt to minimize its negative effect and to deal with it on a sound scientific basis. The statement also implies that there are other types of disputes, in addition to the major labor-management disputes, in an organizational setting. Stagner and Rosen (1977:393)

<sup>1</sup>The words "conflict" and "dispute" are used here interchangeably indicating the same meaning. Webster's Dictionary (1978) defined the two words to imply the same meaning (1978:383, 530). Other writers in industrial relations used the two words interchangeably. Jouvan (1971:6) indicated that "the category of labor disputes includes all conflicts relating to the term of employment or to any aspect of the employment relationship." OECD (1979:6) pointed out that "Labor disputes are conflicts of view between employers and workers." Stagner and Rosen (1977:395) prefer the term "industrial disputes" because of the negative emotional tone (i.e., violence, bloodshed) associated with the word conflict. However, they defined the concept of dispute to encompass competitive behavior and conflict behavior.

listed different kinds of industrial disputes: management-government disputes, intermanagement disputes, interunion disputes, union-government disputes, intramanagement disputes, intra-union disputes, and union-management disputes.

In this study the terms "dispute" and "conflict" mean labor-management disputes. And the word "labor" includes all workers in the organization whether they are unionized or not.

### Definition

Labor disputes have been generally defined to include differences between workers and employers concerning terms of employment and employment relationships (OECD, 1979:6; Hoffman, 1973:1; Braun, 1955:27; Jouvan, 1971:6; Dubin, 1958:199; Hartman, 1939:23; Crouch, 1977:18; Gross, 1965:121; Fisher, 1973:56; Stagner, 1965:90; Eldridge, 1968:20). However, the most comprehensive definition of a labor dispute is found in the National Labor Relations Act and the Norris-LaGuardia Anti-Injunction Act. Both define labor disputes as follows:

The term "labor dispute" includes any controversy concerning terms, tenure or conditions of employment, or concerning the association or representation of person in negotiating, fixing, maintaining, changing, or seeking to arrange terms or conditions of employment, regardless of whether the disputant stand in the proximate relation of employer and employee (Sanders, 1947:211).

Although this definition is meant merely to serve the limited purposes of the two acts, it is rather broad and comprehensive, since there are few matters of interest to management and labor which may not affect conditions of employment in one way or another (Braun, 1955: 27).

### Causes of Labor Disputes

Dubin (1957) emphasized that conflict between groups is a fundamental social process. In this context, social theorists as well as industrial relations theorists, have perceived conflict from two points of view. From a moralistic point of view, conflict is viewed as undesirable, even though it may be inevitable. In this case conflict is considered a "last resort" social process, a poor substitute for more civilized and less destructive modes of determining social policy (Dubin, 1958:237).

From the standpoint of stability, conflict is viewed from two positions:

1. It may be destructive to social stability and therefore "bad" because stability is good, or
2. It may be evidence of the breakdown of social control and therefore symptomatic of an underlying instability in the social order. Both positions express value preference for stability (Dubin, 1957:183).

Dubin pointed out that the moralistic and stability positions implicitly accept conflict as a fundamental social process. In this respect, labor-management disputes provide one of the most fruitful and fascinating areas for the examination of social conflict (Gross, 1965:121).

Some theorists have sought the explanation of industrial conflict in the individual's personality and aspiration (Hoppock and Spiegler, 1939:109; Gross, 1965:121). Great disparities in social and economic status give rise to real and cogent differences and in turn to conflict between individuals. Kerr and Siegel concluded that labor disputes were due to the workers' position in the society. They

wrote:

. . . industries will be highly strike prone when the workers from a relatively homogeneous group which is unusually isolated from the general community and which is capable of cohesion; an industry will be comparatively strike free when the workers are individually integrated into the larger society, are members of trade groups which are coerced by government or the market to avoid strikes, or are so individually isolated that strike action is impossible (Kerr and Siegel, 1954:195).

Other writers place emphasis on economic factors such as the elasticity of product demand, wages or the fluctuations of the business cycle (Hoffman, 1973; Rees, 1952). A few attribute conflict to insecure union leadership or to ideological differences seeing revolutionary unions in life-and-death battle with reactionary bosses. Some have claimed that "key" industry and pattern-bargaining create conflict while others have pointed their fingers at certain dominant personalities like John Lewis and George Meany (Gross, 1965:121).

March (1973) identified the causes of conflict to fall within two broad groups which are not necessarily mutually exclusive. The first group attributes labor dispute to a variety of psychosociological causes imbedded in the social and technical circumstances created by modern industry. The size of factories, their impersonality, the remoteness of management, the repetitiveness of production, problems of communications, lack of worker involvement; all these have given rise to sizeable amounts of boredom, tensions, and finally conflict (Marsh, 1973:71; Blauner, 1964:22; Barbash, 1970:1). Kerr et al. (1960) and Parkison (1973) emphasized also that labor problems are a product of the industrialization process.



The other group attributes labor disputes to the inadequacies of regulations. The absence of rules, the decay of institutions, the question of fragmentation of behavior until it has become unmanageable; all these give rise to disorder which result in disputes (Marsh, 1973: 72; Kahn, 1964:138):

In sum, disputes between labor and management are related to the working conditions in the organizational setting and to broader economical, organizational, and social factors. Disputes may occur over the same goal, because of differences in goals, or over perceived pathways to goals (Stagner and Rosen, 1977:393; Stagner, 1956:152-153).

Conflict over the same goal, which is desired by labor and management, relates to the question of economic return, the distribution of disposable income between workers and manager-owners (Stagner, 1956: 152). Conflict results from labor and management seeking incompatible goals. Labor is seeking job security while management is seeking efficiency and higher profits; the path to each goal is blocked by the path of the other party which causes conflict as shown in Figure 1 (Stagner & Rosen, 1977:395).

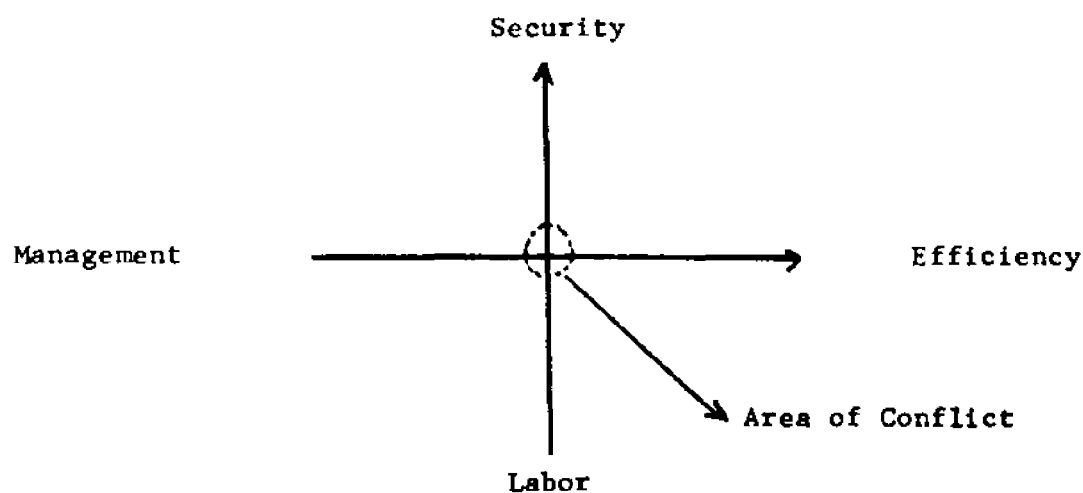


Figure 1. The area of conflict resulting from the difference between management and labor goals.

In spite of the overriding facts that support the negative and destructive meanings associated with conflict in societies, some writers consider conflict as not entirely bad. Sociologists tend to think that some conflict is necessary to make society work; that conflict resolves discontent as well as expressing them (March, 1973: 67). Katz (1964:155) emphasized that much organizational conflict has a rational basis. "This is not to say that such conflict is necessarily desirable, but only that it stems from consciously held goals and values. From the defence of self-interest rather than from unconscious and unrecognized motives."

In 1964, Boulding pointed out that conflict is not evil, the appropriate stance toward conflict is therefore not its abolition, but its management. He added that "conflict is a phenomenon omnipresent in social life that we tend to take it for granted, almost like speaking prose". Katz also argued that group conflict has positive social functions, just as individual conflict contributes to individual development.

What is inherently evil in conflict is its resolution through violence and destruction, for violence corrupts its users. Without conflict, however, there would be few problems, little stimulation, and little incentive for constructive effort. Organization without internal conflict are on their way to dissolution. A system with differentiated substructures has conflict built into it by virtue of its differentiated subsystems. If it moves toward complete harmony, it moves toward homogeneity and random distribution of all its elements. Entropy takes over (Katz, 1964:114).

### Types of Labor Disputes

Writers in the literature distinguish between disputes over rights and those over interest (Jouvan, 1971; Braun, 1955; Crouch, 1977), between demarcation and redundancy disputes (Eldridge, 1968), and between economic and noneconomic disputes (Hoffman, 1973).

Disputes over rights are related to the content of a right claimed by a party, that is, on the application or interpretation of existing law, whether it has its source in legislation, in a collective agreement or in the individual contract of employment. If either party insists on its alleged rights, it may be settled by a grievance procedure under a collective agreement, by arbitration, or litigation in the courts. In this case no new rights are established, but existing ones are enforced (Braun, 1955:29). For example, if the collective agreement indicates that seniority is the only criterion used for layoff in time of poor business, and management laid off workers on the basis of their performance evaluation and seniority together, then the workers may have the right to dispute management action; thus a dispute over rights occurs.

Disputes over interests are related to the change and improvement in existing law or even on the development of a new law through the channels normally open to the parties in collective bargaining (Jouvan, 1971:8; Axelrod, 1970:10). In this case the economic and social interests of the parties clash. Provided the disputants do not resort to industrial war, such controversies may be settled by conciliation or arbitration. Those procedures often result in the establishment of new rights. An example of dispute over interest is

the union demand for a new pay scale, new paid holiday, reduced hours of work, etc.

In addition, Jouvan (1971) distinguished between individual and collective disputes. He indicated that a labor conflict is individual if its object concerns only one employer and one employee without affecting a group. This type of dispute concerns definite rights to which the workers are entitled by law, and such conflicts are usually initiated by the worker because of his subordinate position which puts him in greater need for legal remedies. On the other hand, if the conflict affects the rights or interests of a group of workers, then it is called a collective dispute, and the two parties here are believed to be equally or at least comparably powerful.

Jouvan (1971) argued that the distinction between the two types of dispute is of fundamental theoretical importance because of different requirements involving the procedures established for their settlement. Procedures in the former must lean closer to settlement procedures enacted for ordinary types of disputes; i.e., grievance procedures. Procedures in the latter are necessarily more specialized because they lead to the creation of new law, i.e., conciliation, arbitration, etc.

The demarcation dispute is a form of conflict which arises when there is competition between occupational groups concerning the establishment or maintenance of job rights. It is a competition over a scarce resource, namely employment opportunities. It is a by-product of the search for job security. The shipbuilding industry has often been the case for this kind of conflict (Eldridge, 1968:92).

The redundancy conflict occurs when the question who should be dismissed first arises. Apart from the situation in which a firm closes, a redundancy situation happens most of the time. In this case, the potential sources of conflict over who should be dismissed are numerous. Most of these conflicts center around implementing the redundancy procedures; i.e., whether to apply the principle "last in first out" alone or to combine it with performance evaluation. The conflict arises also over the weight attached to each principle and whether to apply the criterion to all employees or to differentiate between occupational groups.

Lastly, the aforementioned types of disputes can be classified as economic and non-economic. Economic disputes are those aimed at determining wages, hours and other conditions of employment, while non-economic ones are those concerning the interpretation of a collective agreement as it applies to union jurisdiction, union security, management prerogative clause, etc.

#### Forms of Industrial Disputes

Parkison (1973) pointed out that industrial conflict is as old as civilization, but was not and is not a major problem in any society based on agriculture. This means that the current industrial conflict situation, in terms of its problem, impact, and the increasing attention given to it, has its roots in industrialization.

Basically, industrial disputes take two forms: strikes and grievances. Dubin (1958) indicated that industrial conflict in its most visible form means a strike. To the employer whose plant is on

strike, for workers who have ceased working, and to the consumer who is dependent on an uninterrupted flow of goods or services, the strike represents an obvious disturbance. Strikes have a negative meaning for most people and this is why it has a high attention value. Stagner (1956) pointed out that conflicts are always news, and they receive excessive media coverage because they are unusual.

Strikes can be defined "as a concerted withholding of labor supply in order to bring economic pressure to bear upon the employer to cause him to grant the employees' and/or the union demands" (Beach, 1980:119). Strikes, then, are a test of economic strength and a contest of staying power. Although some strikes are emotional outbursts, it seems likely that most strikes are the result of at least partially rational decisions made under conditions of uncertainty (Beal et al., 1976:220). Fisher (1973) considered work stoppages as a form of strike action. From his point of view, stoppages occur when employers or workers through group action decide that a more acceptable bargain, over the time period that concerns them, will be reached via a stoppage, rather than without one. Or management may declare a lockout. "A lockout consists of a shutdown of a plant or place of business by management in the course of labor disputes with its employees and their union for the purpose of forcing acceptance of its terms" (Beach, 1980:119). In general, a lockout is not a desirable practice for management because of the cost associated with it; i.e., production and sales interruption, company loss of its customers, etc. However, management sometimes resorts to a lockout after a strike has begun.

Industrial disputes may take the form of grievances. Beach (1980) indicated that in the course of human events in even the best managed company, employee discontent, gripes and complaints will certainly arise. Viewpoints as to just what constitutes a grievance vary among personnel management and industrial relations writers (Beach, 1980; Robbins, 1978; Chruden, 1980; Beal, 1976). However, the concept that will be used in this study is that "grievance is any dissatisfaction or feeling of injustice in connection with one's employment situation that is brought to the attention of management" (Beach, 1980:538).

Kerr et al. (1976) identified the forms of labor disputes through their analysis of the economic development process in industrialized societies. An important factor was the degree of labor force commitment to industrial development. The partially committed labor force may express protest through excessive absenteeism, turnover, theft, sabotage, and spontaneous or sporadic work stoppages. The committed labor force is more likely to organize industry-wide strikes and formal political activity, while day-to-day grievances are presented through dispute machinery or labor courts, largely without a stoppage.

Dunlop (1958) attributed the form of industrial disputes to the change in the course of economic development. He pointed out that there is a tendency for conflict at the early stages to involve riots, demonstrations, fights, direct action, and spontaneous outbursts. As organizations of workers develop, the forms of conflict tend to become more disciplined. According to both the Kerr and Dunlop analysis, at the early stages of economic development, the labor

force is only partially committed to industrial development but becomes fully committed in the advanced stages.

### Settlement Methods of Labor Disputes

Aaron (1971) discussed that the problem of establishing machinery for the settlement of labor conflicts depends in great part on the context of the industrial relations system in a given country at a given time. Settlement methods are often tailored to the type of labor disputes involved, while other methods focus on specific aspects of the confrontation.

Hoffman (1973:1-2) singled out the principal procedures in use:

1. Procedures to defer or restrain a strike or lockout. These include use of no-strike clauses in collective agreements that prohibit strikes during the term of an agreement, requiring a strike vote or prior strike notice, and cooling-off periods maintained by statutes and injunctions.
2. Procedures, usually involving the use of an impartial third party, to help the parties at variance to reach a settlement. They include the introduction of government conciliators or mediators to get the parties to compromise, and the establishment of a public fact-finding board to investigate the dispute, appraise the facts, and, through the publicity of the investigation, put pressure on the disputants to agree.
3. Procedures to decide the issues for the parties. These include voluntary or compulsory arbitration and judicial settlement.

Below are the most prevalent procedures of resolving labor disputes:

Direct Negotiations. When there are disagreements between labor and management, they ordinarily meet with one another to negotiate a settlement that will be acceptable to both parties. Negotiation, in this respect, includes disputes over matters of interest as well



as matters of rights. When an impasse is reached, other settlement methods may be brought to the picture before the two parties resort to economic forces available to them. Generally, direct negotiation is the first step in any dispute settlement process.

Grievance Procedures. "A grievance procedure is a formal arrangement under which decisions by one level of management may be appealed through channels to higher levels of management" (Vyvert, 1976:295). Normally, when a contract is negotiated, procedures are established for settling disputes about the application and the interpretation of the contract. This procedural machinery serves mainly to bring the dispute within rules, so that it can be handled in an orderly fashion through competition rather than conflict (Kennedy, 1954:280). Stagner and Rosen (1965) pointed out the existence of established grievance machinery is probably the most important single factor for reducing the intensity and frequency of labor management conflict. This may be the reason why formalized grievance procedures have become a regular part of the industrial relations system in most of the developed countries.

Mediation.<sup>2</sup> Warren (1954) broadly defined mediation as any noncoercive third-party intervention for the settlement of labor-management disputes. Mediation as a method of persuasion attempts to

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<sup>2</sup>The words "mediation" and "conciliation" have been used synonymously in the literature, and they will be used in the same way in this study. However, Webster's Dictionary (1978) does not use the two words synonymously. Moreover, Donnahoo (1973) pointed out that although that there is a technical distinction between the two words, they have become nearly synonymous in the U.S. labor relations vernacular.

settle disputes with the help of an outsider who assists the disputants in their negotiations. The mediator has no power to impose a solution on the parties, but he can use personal pressure to bring the disputants closer to a solution. The mediator may make suggestions and recommendations and add objectively to the often emotional negotiations. To have any success at all, the mediator must have the trust and respect of both parties and have sufficient expertise and neutrality to convince them that he will be fair and equitable (Schuler, 1981:427). Braun (1955) pointed out that the purpose of mediation is not to dispose of the dispute by a decision, but to conciliate the hostile elements and by imagination and persuasive power to develop a common ground upon which the parties can meet. Braun adds that the mediator's task is not to determine who is right or wrong in any sense, but merely to adjust conflicting interests in the most expedient manner.

In most countries (Hoffman, 1973), mediation service is provided by the state on a permanent formal basis. In the United States, this service is provided by the Federal Mediation and Conciliation Service.

Fact Finding. Fact finding involves the investigation of disputed issues by an ad hoc panel or board appointed by the President or some other governmental agency. Such boards may consist of several persons, all without special interest and usually are recognized national authorities. The power and responsibility of the board varies in accordance with the terms of its appointment (Warren, 1954:299). Fact-finding is normally used only in those situations where settlement of the dispute has not been achieved by normal

mediation efforts. It is actually only a strong form of mediation, and essentially, it is not a method so much for finding facts as for exerting pressure publically on the parties to speed up the settlement.

Fact-finding in the U.S. private sector is limited to a national emergency. However, the public sector, especially police and fire fighter disputes, relies heavily on it to resolve impasses in negotiations over new contract terms (Hoffman, 1973:40).

Arbitration. Arbitration is a procedure whereby third impartial parties intervene in disputes and bring about a binding settlement. The arbitrator derives his power from the parties or, in rare cases, from the state if compulsory arbitration exists (Marshall and Perlman, 1972:603). The arbitration process is either voluntary or compulsory. Voluntary arbitration means that the parties voluntarily agree to submit the issue to a third party. The decision rendered by the arbitrator usually is final and binding. In the U.S. it is understood to be binding, while in Britain, for example, the parties remain free to accept or reject the resulting award (Hoffman, 1973: 46-47).

Compulsory arbitration means that under law the parties must submit the dispute to arbitration and they must abide by the award of the arbitrator. Compulsory arbitration is unpopular with both labor and management in the U.S. It has been uniformly rejected by industrial relations experts on the ground that it would destroy the collective bargaining process by substituting government regulations for collective bargaining (Marshall & Perlman, 1972:604).

Compulsory arbitration is not currently used to settle contract negotiation disputes in the private sector in the U.S. However, several states have enacted statutes providing for compulsory arbitration for certain categories of employees in the public sector, especially police and fire fighters (Beach, 1980:120).

Two types of arbitration have developed. The first is an extension of bargaining, whereby the arbitrator attempts to reach a rational and equitable decision acceptable to the parties. The second type is called final-offer arbitration. In this type, the arbitrator selects the final offer of either the union or the employer as it stands without alterations. This, of course, will pressure both parties to make the best possible offer in order not to be forced to accept the arbitrator's decision and settle for the other's offer (Schuler, 1981:427).

An important procedure of arbitration, called expedited or mini arbitration (Mills, 1978; Hoellering, 1976), has been increasingly used in collective bargaining. The intention of this procedure is to shorten the time period needed for settling grievances to overcome the high cost and long delay associated with traditional settlement procedures. This procedure was pioneered by ten major steel producers and the United Steelworkers of America in 1971; then it was adopted by other companies such as Chrysler and the UAW (Mills, 1978).

Labor Courts. A labor court is a special court of justice with jurisdiction in labor disputes about rights (Braun, 1955:306). The jurisdiction of labor courts in settling labor disputes varies

among countries. The jurisdiction may be limited to individual disputes (as in France) or to questions relating to collective agreements (as in Sweden), or it may cover any type of legal labor disputes (as in Germany).

The establishment of labor courts is supported on the ground that it may speed up dispute settlement which in turn should minimize costs and harm to the parties, especially to the employee. This support stems from the peculiar nature of labor disputes, which arise from a specific relationship, namely, an employment or collective bargaining relationship (Aaron, 1971). Regular courts deal with the generality of human relations and only occasionally with specific employment relationships. Hence such courts are not strongly qualified to deal with specific subjects of labor relations whereas labor courts are (Braun, 1955).

This type of labor court is not available in the U.S. It started in France in the eighteenth century, then it spread to other European countries; i.e., Germany, Sweden, Belgium, etc.

### The Role of the State

The preceding discussion pointed out the importance of government influences in the settlement of labor disputes. There is no disagreement among nations--developed or developing--about the decisive role that the government plays in settling labor disputes. This consensus stems from the fact that labor disputes seriously affect the well-being of any nation. In this respect, government intervention (whether directly or indirectly) is indispensable in the dispute settlement process.

The role of government is discussed in general terms in each of the settlement methods mentioned before. However, the role of government in respect to labor dispute may be considered as falling within the following framework:

- a. Assisting the parties by information, advice, research and educational services.
- b. Providing conciliation, mediation and arbitration services for voluntary use by the parties.
- c. Setting up inquiries to make the circumstances of disputes known to the public.
- d. Providing compulsory conciliation, mediation and arbitration services.
- e. Requiring ballots to be held before strikes take place.
- f. Requiring a "cooling-off period" before strikes take place.
- g. Forceful intervention, including:
  1. Seizing and operating the enterprise in dispute;
  2. Conscripting the workers concerned into public service and requiring them to carry on work;
  3. Using the armed forces to carry on the strikers' work;
  4. Legislating terms to settle the dispute.
- h. Ensuring suitable arrangements for dealing with disputes in which it is involved as employer.
- i. Legislating a framework, as may conform to national circumstances, for industrial relations as a whole (OECD, 1979:26-27).

CHAPTER IV  
MODELS SPECIFICATION AND  
DEFINITION OF VARIABLES

This chapter reviews briefly the empirical analysis of labor disputes settlement in the literature. In addition, the models of the study are specified and the variables included in these models are broadly defined.

The growth of interest in labor dispute settlement has led many scholars in different fields to investigate and analyze dispute components, causes, and resolution processes. Most of these studies are qualitative in nature. The few quantitative studies that have been done in this respect are characterized by the following:

1) Most are limited in their analytical objectives. They concentrated on single factor(s) as a cause of dispute instead of comprehensive analysis. For example, only general economic indicators; i.e., wholesale price, output per man, GNP, wages, have been used instead of also including sociological, psychological, managerial, and political variables.

2) Most used time series data in a descriptive manner to compare labor disputes either on a inter-intra country basis or inter-intra industry basis to develop a trend or pattern of strike activity. Frequently powerful statistical techniques to test hypotheses

related to strikes were not used.

3) In most of these studies, strikes or stoppages are the only form of labor dispute used as a measure of industrial conflict. This means that only interest disputes are included in the analysis while disputes over rights are excluded.

Before proceeding further to the specification of models in this study, it is pertinent to mention briefly the major quantitative studies that have been done in this respect. Rees (1952) analyzed strike data in the U.S. for the period 1915-1950. He found that strike activities were positively associated with business activities. This means that that number of strikes tends to increase with an upswing of the business cycle and vice versa. His findings give support to earlier findings of Hansen (1921), Griffen (1938) and Yoder (1940). He used the number of strikes in each month as a dependent variable, and the index of general economic indicators as an independent variable. O'Brien (1965) extended Rees' study over the period 1949-61. Using the same methodological approach, he found that the cycle in the strike series coincides fairly well with that in business activity, thus lending support to Rees' empirical findings.

Ashenfelter and Johnson (1969) analyzed strike activity in the U.S. for the period 1952-1967. They found a significant relationship between the probability of strike occurrence (the number of strikes beginning in a period divided by the number of contracts expiring in a period) as a dependent variable, and the minimum acceptable wage increase to workers. Pencavel (1970) found similar results to those of Ashenfelter and Johnson. He applied their



methodology to the British strike experience with one major change. He used the number of strikes as the dependent variable.

Ross and Hartman (1960) analyzed strike trends in fifteen countries (13 being OECD countries) from 1900 to 1956. They isolated five major influences that affect strike activities in those countries: the stability of workers' organizations; leadership conflicts within labor movements; the status of union-management relations (such as acceptance of unions by employers and the nature of the bargaining structure); the political affiliation of labor organizations, and the role of the state in defining terms of employment and in dispute settlement (OECD, 1979:11).

Ross and Hartman also used various measures of strike activities: intensity of organization;<sup>1</sup> membership involvement ratio;<sup>2</sup> employee involvement ratio;<sup>3</sup> duration of strikes;<sup>4</sup> membership loss ratio;<sup>5</sup> and employee loss ratio.<sup>6</sup> They gave two of these measures, the membership involvement ratio and the strike duration ratio,

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<sup>1</sup>Intensity of organization is a ratio between union members and nonagricultural wage and salary earners.

<sup>2</sup>Membership involvement ratio is the ratio between the number of workers involved in strikes and union's membership.

<sup>3</sup>Employee involvement ratio is the ratio between the number of workers involved in strikes and the number of nonagricultural employees.

<sup>4</sup>Duration of strike is the ratio constructed by dividing the number of workers involved into the number of working days lost for that particular year.

<sup>5</sup>Membership loss ratio is the ratio between the number of union members (in hundred) and the number of working days lost.

<sup>6</sup>Employee loss ratio is the ratio which shows the average loss of time per hundred nonagricultural wage and salary earners.

prominence in their analysis because they appeared to reflect most sensitively the institutional and historical forces at work (Ross and Hartman, 1960:13). They concluded that strikes in these countries had been getting shorter and could be said to be withering away.

Shalev (1976) extended the analysis of Ross and Hartman to cover the period 1950-1972. He used the number of days lost per thousand persons employed in mining, manufacturing, construction and transport as a measure of strike activity. He found that the forces determining the volume of strike activity in a particular country are to some extent peculiar to that country, and relatively unchanging, while some forces are common to a number of countries. He also pointed out that a significant factor underlying the number of strikes in a country is the bargaining structure. For example, countries with small bargaining units, a large number of collective negotiations and a high frequency of negotiations, have a greater risk of strikes than others (OECD, 1979:12).

In an interindustry comparison, Kerr and Siegel (1954) analyzed strike activity in eleven countries. They used the number of mandays lost by industry as a measure of strike activity to classify industries as to their propensity to strike. The results are shown in Table 5. They advanced two hypotheses to explain strike occurrence: the location of the worker in society and the character of the job and the worker (1954:191-195). They added that "the two hypotheses can be combined together to state that strikes occur most severely in industries which (1) segregate a large number of persons

who (2) have relatively unpleasant jobs."

TABLE 5  
GENERAL PATTERNS OF STRIKE PROPENSITIES

| Propensity to Strike | Industry   |
|----------------------|--|
| High                 | Mining, Maritime, Longshore  |
| Medium-High          | Lumber, Textile  |
| Medium               | Chemical, Printing, Leather,<br>Manufacturing, Construction,<br>Food, Kindred Products |
| Medium-Low           | Clothing, Gas, Water and Elec-<br>tricity Services                                     |
| Low                  | Railroad, Agriculture, Trade   |

Source: C. Kerr and A. Siegel, "The Inter-Industry Propensity to Strike: An International Comparison," In A. Kornhauser et al., eds., Industrial Conflict (New York: McGraw-Hill Book Company, Inc., 1964), p. 190.

Finally, Knowles (1960) in an inter-industry comparison conducted in the United Kingdom has classified causes of strike into three categories:

1. Basic issues which include wage increase questions, other wage questions, and hours of labor.
2. Frictional issues which include employment of certain classes and persons and other working arrangements, rules and discipline.
3. Solidarity issues which include trade union principle, and sympathetic action.

The aforementioned studies are plagued by many theoretical and measurement problems, the discussion of which is beyond the scope of this study. However, these studies were briefly summarized to demonstrate the different methodological approaches used in

analyzing strike activity and causes, and to help in identifying and specifying the variables that may affect labor disputes in Jordan as a special case of study.

THE FIRST MODEL: Determinants of  
Labor-Management Disputes in Jordan

To identify the possible determinants of labor disputes in Jordan, two equations have been developed to test the proposed hypotheses.

The First Equation hypothesizes that the number of workers involved in disputes in the firm is a function of five variables: the size of the firm; the ratio of worker's wage increase to inflation increase lagging for one period; the ratio of unionized workers to total employment in the firm; the ratio of worker's years of employment with his current employer to his total working years in the labor force; and the existence of effective formal dispute settlement system in the country. In its implicit form, the equation may be expressed as follows:

$$Y = f(X_1, X_2, X_3, X_4, X_5)$$

where:

- Y = the number of workers involved in disputes in each firm
- X<sub>1</sub> = the size of the firm measured by its total employment
- X<sub>2</sub> = the ratio of worker's annual wage increase in 1980 to inflation increase in 1979

$X_3$  = the ratio of unionized workers to total employment in the firm

$X_4$  = the ratio of worker's years of employment with current employer to his total working years in the labor force

$X_5$  = the effectiveness of the dispute settlement system in Jordan

The above variables are more broadly defined as follows.

Number of Workers Involved in Disputes in the Firm (Y)<sup>7</sup>

The number of workers involved in disputes in the firm include the total number of workers who are directly involved in disputes. Workers who are indirectly involved in disputes (Fisher, 1973:64) are not included due to the lack of available statistics. Disputes in this study mean any disagreement between the worker(s) and the employer that results in either (a) a negotiation session between the worker(s) and the employer to settle the dispute, or (b) a third party intervention, or (c) a work stoppage, strike or lockout. Examples of disputes include: individual disputes, group disputes, disputes over rights, and disputes over interests.

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<sup>7</sup>The writer has experimented with different measures of labor disputes; i.e., number of disputes, mandays lost through a dispute, employee involvement ratio, intensity of organization, and employee loss ratio, and found that number of workers involved in disputes is the best measure for labor disputes in Jordan.

The Size of the Firm ( $X_1$ )<sup>8</sup>

This variable will be measured by the total number of workers in the firm. Barbash (1971:4) indicated that concentration of employees will force the creation of complex management and labor problems, thus increasing the frequency of disputes between labor and management. Moreover, March (1973), Blauner (1964), Kerr et al. (1960), and Parkinson (1973) emphasized that the increasing size of the factory as a product of industrialization has an important effect on the level of conflict in the firm. Coser (1964) also noted that the frequency of occasions for conflict varied positively with the closeness of relations. It is natural in this respect to expect disputes between labor and management in the organizational setting due to the concentration of people in the workplace.

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<sup>8</sup>The writer has used the firm total assets as a proxy measure of technology in this equation. Empirically, this variable was found to be significant in affecting the dependent variable. However, it has to be dropped from the equation because it is highly collinear with the size of the firm ( $X_1$ ) although it has a theoretical explanation. For example, Barbash (1971:4) pointed out that one of the features of technology is the increasing scale of the modern corporate enterprise causing large concentration of capital investment and large physical plants. The increasing shift to capital intensive equipment will increase the insecurity of the workers about their jobs, thus increasing the level and number of disputes in the workplace. Moreover, dollar asset per worker (obtained by dividing the firm's total assets by its total employment) was used but it turned out to be insignificant. Furthermore, the elimination of this variable from the equation did not affect the explanatory power of the model.  $R^2$  dropped only by 3 percent, but it is necessary in order to comply with the statistical assumptions of regression analysis, and to retain variable ( $X_1$ ) which is more suitable to the situation in Jordan.

The Ratio of Worker<sup>9</sup> Annual Wage Increase in 1980  
to Inflation Increase in 1979 (X<sub>2</sub>)

This variable is expected to have an inverse relationship with the dependent variable. If the ratio is low, this means that the workers' wage increase did not match the increase in the inflation rate in the country. A low ratio means a decline in real wages thus affecting the workers' standards of living, which in turn will increase the dispute level in the firm. The construction of this variable indicates that the workers' wage increase is lagging one period behind the inflation increase. This means that inflation pulls wages and not the opposite as implied in the cost-push theory of inflation.

The Ratio of Unionized Workers to Total  
Employment in the Firm (X<sub>3</sub>)

The impact of this variable on labor disputes in Jordan stems from the fact that a high ratio of unionized workers to total employment reflects either strong worker support for their union, or an effective union leadership in recruiting a large number of workers in the firm. The situation in both cases results in strong union(s) capable of pursuing their rights even if it leads to a strike.

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<sup>9</sup>Data for the average wage increase for the firm as a whole, for the employees and for the workers have been collected from each firm. The worker's wage increase is found to be the most significant variable among the three wages increase. This study has distinguished between the term "employees" and the term "workers." The term "employees" means those individuals who work in offices and earn monthly income, while the term "workers" means those individuals who work outside the office and earn hourly or daily income.

Given the situation in Jordan and the favorable status that management enjoys there, this variable is expected to have a positive impact on labor disputes in Jordan. Data on the number of unionized workers were obtained from union and management records. If there was a difference between the two sources, then data from union records were used due to the writer's belief that they are more reliable than those of management because the union keeps accurate records of its membership for fees and election purposes. On the other hand management in Jordan, as observed, tried to undermine the power of unions by deflating the figures of union membership to show the lack of support to unions in their organizations.

$$\frac{\text{The Ratio of Worker's Years of Employment with Current Employer to the Worker's Total Working Years in the Labor Force } (X_4)}$$

The significance of this variable is justified on the ground that the longer the period which the worker stays on the job the better the position he will enjoy in the organization. The advantage of a long period of employment to the workers can be explained as follows: 1) it will allow him to move up in the organizational hierarchy, thus becoming more important to the job because of his skill and managerial position; 2) the worker will enjoy the seniority factor especially if seniority is protected by the contract or the law; 3) more important is the fact that the longer the period of employment, the deeper his roots will be in the organization. This will enable him to develop better relations with his fellow workers,



which in turn increases their loyalty to him,<sup>10</sup> thus supporting him in any conflict with management. The aforementioned factors allow the senior worker to enjoy a strong position in pursuing his rights without hesitation. Given the fact that management in Jordan is more powerful and does not yield to workers' demands easily, disputes are expected to arise in this situation.

The Effectiveness of the Dispute Settlement  
System in Jordan (X<sub>5</sub>)

The existence of an ineffective dispute settlement system will positively affect the level of labor disputes in any country (Eldridge, 1968:28). In this study, this variable was measured by the ratio of the number of disputes solved by the formal system in Jordan to the total number of disputes occurring in each firm. Given the writer's assumption that the formal dispute settlement system is ineffective in Jordan (as it will be explained later), this variable is expected to have an inverse relationship with the dependent variable.

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<sup>10</sup>Given the sociopolitical order of tribalism and the family that characterizes the social system in Jordan, senior workers in organizations (especially if they work in a rural area) try to give priority employment to their relatives (sometimes irrespective of qualifications). The larger the number of related workers, the stronger the support to any fellow worker.

In a mathematical form, the equation can be presented as follows:

$$Y = \alpha + \beta_1 X_1 - \beta_2 \text{Log} X_2 + \beta_3 X_3 + \beta_4 X_4 - \beta_5 X_5 + U^{11}$$

where:

$\alpha$  = the constant term (the intercept),

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$  = the Beta coefficients of the variable to be estimated

$U$  = the error term

The Second Equation<sup>12</sup> hypothesizes that labor-management disputes in the private sector of Jordan are a function of six factors: socio-political, economic, collective bargaining, work conditions, fringe benefits, and managerial factors. In its implicit form, the equation may be expressed as follows:

$$Y = f(F_1, F_2, F_3, F_4, F_5, F_6)$$

where:

$Y$  = the dependent variable

$F_1$  = a composite index of sociopolitical variables

$F_2$  = a composite index of economic variables

$F_3$  = a composite index of collective bargaining variables

$F_4$  = a composite index of work conditions variables

$F_5$  = a composite index of fringe benefits variables

$F_6$  = a composite index of managerial variables

The above factors are more broadly defined below.

<sup>11</sup>The writer has empirically verified different forms of the equation. Judging by the traditional tests, the empirical evidence has shown that this form of the equation is the best possible specification.

<sup>12</sup>The reason for testing two equations is that some of the independent variables lose their significance when combined in one equation which indicates the existence of statistical suppression among the independent variables.

The Dependent Variable (Y)

This variable constitutes the responses of the sample representatives on a question about the inevitability of dispute between labor and management in the workplace. An interval scale was used to measure the responses of the total sample representatives to the following question: Given the nature of the relationship and the scope of objectives between labor and management, do you think that disputes are inevitable between them:

| <u>Strongly<br/>Disagree</u> | <u>Disagree</u> | <u>Slightly<br/>Disagree</u> | <u>Slightly<br/>Agree</u> | <u>Agree</u> | <u>Strongly<br/>Agree</u> |
|------------------------------|-----------------|------------------------------|---------------------------|--------------|---------------------------|
| 1                            | 2               | 3                            | 4                         | 5            | 6                         |

Sociopolitical Factor (F<sub>1</sub>)

This is a composite index of many variables related to the sociopolitical order that characterizes the social system of the country and the impact of industrialization on that order. Jordan is basically considered an agricultural country, with agriculture constituting 19 percent of the GDP and employing 33 percent of the labor force (Odeh, 1972:2). This situation reversed itself after 1970, and by 1979 participation of the agriculture sector in GDP had dropped to 9 percent while this sector employed approximately 27 percent of the total labor force. On the other hand, during the same period, the percentage of the total labor force employed in the industrial sector had increased by approximately 3 percent, and its participation in the GDP increased by 8 percent (National Planning Council, 1980:1-13). These trends indicate that there is an outflow

of agricultural and rural labor into the nonfarm and urban sectors of the economy (World Bank Report, 1976:1).

Generally, people who live and work in agriculture have a different environment and characteristics from those who live in urban areas and work in industry and services. Therefore, agricultural workers need an adjustment period to the new situation as Galenson has written:

The backward peasant, bound to family and governed by seasons and the weather, is suddenly thrust into a world of new incentives and different types of exacting rules. He must report for work at a fixed time each day. His routine is determined by technological rather than natural phenomena. The rewards which he receives for his labor bear a much closer relationship to his own skill and effort. The adjustment process is not an easy one, and is often cited as a major obstacle to development. (Galenson, 1959:2)

The shift in the workplace from the agricultural field to the factory location creates problems in the adjustment process which in turn cause disputes at the workplace. Kerr et al. (1960) pointed out the role of the family in a traditional society on the life and dependence of its members. Disputes arise in this respect because of the protection given to the individual by his family in any dispute. Kerr also observed that the increasing degree of industrial unrest in the early stages of economic development in any country is due to the changes in the economic and social structure (1960:78). Since Jordan is at an early stage of economic development, it is not expected to deviate from this norm.

This factor also includes questions (No. 49 and 50 in Appendix A) related to the impact of political affiliation, ideology and class discrimination between Jordanians and Palestinians on labor disputes in Jordan. The reason for their inclusion is that their factor

loading in factor analysis was high as we shall see later in this study.

### Economic Factor (F<sub>2</sub>)

This factor measures the impact of wage level, wage increase and inflation on labor disputes in Jordan. Theoretically, economic issues are frequently the core of any contract negotiation between labor and management. Any disagreement on the economic items will result either in a third party intervention or a work stoppage. Writers in industrial relations literature have associated labor disputes with economic factors. Commons and the Webb's explained the development of labor organizations by economic variables; i.e., wages, work conditions (Dunlop, 1972:5-17). So this economic factor is expected to carry the same importance in affecting labor-management disputes in the case of Jordan.

### Collective Bargaining Factor (F<sub>3</sub>)

This factor measures the impact of such variables as the right to unionize, employer opposition to unionization, union security, etc. on labor disputes. Hoffman (1973) classified these variables as non-economic which are concerned with the interpretation of the collective agreement.

Work Conditions Factor (F<sub>4</sub>)and theFringe Benefit Factor (F<sub>5</sub>)

The work conditions factor (F<sub>4</sub>) and the fringe benefits factor (F<sub>5</sub>) can be explained in the same manner as the economic factor (F<sub>2</sub>). Hoffman (1973:1) defined economic variables to include the "bread and butter issues arising in the determination of wages, hours and other conditions of employment." They are divided into three factors in this study because each set of variables have different factor loadings on each factor.

Managerial Factor (F<sub>6</sub>)

This factor includes variables related to the managerial aspects of the job such as management prerogatives and nepotism, supervisor treatment of workers. Stagner and Rosen (1977) pointed out that goal differences and the paths to these goals between labor and management are a major source of labor disputes. Moore (1965) emphasized the importance of nepotism in labor disputes. He wrote:

The concrete manifestation or source of the difficulty is likely to be particularistic or nepotistic management, which may violate the worker's sense of justice and the equality of competitive opportunity, and is certain to impair efficiency.

. . .workers constantly complain about this nepotism, and often give it as a reason for frequent changes of job or for failure to exert themselves to secure better positions (Moore, 1965:126-127).

Given the individual loyalty and responsibility to his family and tribe in Jordan, and the particularistic bases of social relation in that social order, these managerial aspects are expected to

adversely affect labor disputes in Jordan.

In mathematical notations, the equation can be presented as follows:

$$Y = \alpha + \beta_1 F_1 + \beta_2 F_2 + \beta_3 F_3 + \beta_4 F_4 + \beta_5 F_5 + \beta_6 F_6$$

Each of the above factors will be measured by a composite index of a number of variables representing the attitude of the respondents on each of these variables. Factor analysis will be used to derive these indices, and in assigning each variable to its respective factor based on its factor loading.

THE SECOND MODEL: Determinants of the Effectiveness  
of the Formal Dispute Settlement  
System in Jordan

The second empirical analysis in this study will specify the variables that affect the effectiveness of the dispute settlement system in Jordan. Before doing that, it is important to explain that system.

The formal system of settling labor disputes consists of three sequential steps spelled out in Section 14 of Labor Law No. 21 (1960). These include: (1) the use of conciliation officers; (2) reference to a conciliation board, and (3) the industrial court. Settlement under this law entails "a settlement arrived at as a result of conciliation proceedings or of the judgment of the industrial court." The labor law distinguishes between two forms of conciliation

proceedings: (1) the conciliation officers, and (2) the conciliation board.

The conciliation officer is a governmental employee in the Ministry of Labor who is appointed and trained to assume the task of mediation for the settlement of labor disputes. He may be appointed to a specific geographic area or for specific industries either permanently or for a limited period. The conciliation officer may call for the inspection and examination of any documents which he believes to be relevant to the labor disputes, and may enter during working hours the premises occupied by any establishment concerned in a dispute where:

A labor dispute has arisen or is likely to arise, he may commence negotiations with both parties in the dispute with a view to setting out the conditions and terms of employment and concluding a collective agreement. If the conciliation officer finds that negotiations between parties are not likely to take place, or that any negotiations which he has commenced will not lead to a settlement of the dispute, he may carry out an investigation into the causes of dispute. Lastly, if the conciliation officer is unable to reach a settlement in the dispute within fourteen days from the date of commencement of his investigation, he shall send a full report to the Minister of Labor of the facts and reasons which prevented the reaching of a settlement (Kawar, 1977:81-82).

A Conciliation Board may then be convened by the Minister of Labor. The duties of the Conciliation Board are determined in Section 97 of the labor law as follows:

1. Where a dispute has been referred to the Conciliation Board, it shall make every endeavor to bring about an amicable settlement of the dispute and shall investigate in any manner that it may deem fit and without delay, the causes of disputes and the means of settlement thereof, and it may adopt any means which it may deem suitable to persuade the parties to arrive at an equitable, amicable settlement.



2. If the Board succeeds in reaching a settlement of the dispute, it shall send a report thereof, accompanied by a memorandum regarding the settlement signed by both parties to the Minister of Labor.
3. If a settlement is not reached, the Board shall send to the Minister of Labor as soon as possible after the termination of the investigation, a full report setting out the proceeding and the steps which were taken to ascertain the facts and the circumstances underlying the dispute, and the reasons which stood in the way of arriving at a settlement, and embodying the Board's recommendations with regards to the determination of the dispute.
4. The Board shall prepare its report within six weeks from the date on which the dispute was referred to it (Kawar, 1977:83).

The Board consists of a neutral chairman and two or more members representing the employer and the workmen in equal numbers elected by the representatives of the respective employer(s) and workmen's organization. This Board has the temporary job of settling a certain dispute and is dissolved automatically after that (Kawar, 1977:80).

In addition to the power granted to the Conciliation Officers, the Conciliation Board finds itself with the same power as a regular court in respect to the following matters:

- a. Compelling any person to appear before it and to be examined under oath.
- b. Requiring any party to produce such documents and other evidence as the Board may find necessary to determine the dispute.
- c. Selecting an expert to give advice in order to determine the dispute (Kawar, 1977:83).

The third and final step in labor dispute settlement in Jordan is the Industrial Court. It consists of three members of the Jordanian Judiciary or of persons qualified for a judicial post who have

been appointed by the Council of Ministers. These courts are part of the Jordanian judicial system and the term of office of a member of the Industrial Court is two years, subject to renewal.

In addition to the power granted to the Conciliation Officers and the Conciliation Board, the Industrial Court has the power of any regular court of the Jordanian Judicial system. The duties of the Industrial Court are to investigate the dispute and to reach a decision. The decision of the Industrial Court is final and is not subject to appeal.

The decision of an Industrial Court takes effect from the date agreed upon by the parties in the dispute. Furthermore, the law specifies that the settlement shall be binding on the parties in the dispute for the whole period agreed to by them. It remains binding upon them after the expiration of that period and until the lapse of two months from the date on which a party sends a written notice to the other party in the settlement of its intention to terminate it. The law adds that no workman may go on strike and no employer may declare a lockout of his establishment during the proceedings of the conciliation process or industrial court, and terms of employment remain unaltered during the proceedings.

To specify the determinants of the effectiveness of the dispute settlement system explained before, two equations have been developed to test the hypotheses proposed.

The First Equation hypothesizes that the effectiveness of Jordanian dispute settlement system is a function of six variables: the firm total assets in dollars; the ratio of worker's wage

increase to inflation increase lagging for one period; the ratio of unionized workers to total employment in the firm; the ratio of the worker's years of employment with current employer to his total working years in the labor force; the ratio of group disputes to total disputes occurred, and the employee loss ratio. In its implicit form, the equation may be expressed as follows:

$$Y = f(X_1, X_2, X_3, X_4, X_5, X_6)$$

where:

- Y = the ratio of disputes solved by the formal system to total number of disputes which occurred in the firm
- X<sub>1</sub> = the firm's total assets in dollars
- X<sub>2</sub> = the ratio of the worker's annual wage increase in 1980 to inflation increase in 1979
- X<sub>3</sub> = the ratio of unionized workers to total employment in the firm
- X<sub>4</sub> = the ratio of the worker's years of employment with current employer to his total working years in the labor force
- X<sub>5</sub> = the ratio of group disputes to total disputes which occurred in the firm
- X<sub>6</sub> = the employee loss ratio

The above variables are more broadly defined below.

The Ratio of Disputes Solved by the Formal  
System to Total Disputes Occurred(Y)<sup>13</sup>

This variable is a measure of the effectiveness of the Jordanian labor dispute settlement system. It is a product of dividing the number of disputes solved by the formal system by the

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<sup>13</sup>The writer has used different versions of the dependent variable such as number of disputes not solved to total disputes occurred, number of disputes solved by direct negotiations and by voluntary mediators to total disputes occurred, but found that this form of the dependent variable is the best version.

total number of disputes occurred in the firm. The lower the ratio the more ineffective the system is and vice versa.<sup>14</sup> Data on this variable were collected from firm records, because data on this variable are not published by the Ministry of Labor. The only data published are the number of collective agreement ratified and the number of workers covered by those agreements (Ministry of Labor Report, 1979:22). Additional data, such as, number of disputes processed in the system, number of disputes solved at each stage of the system, types of disputes (over rights or interest) are not available.

#### Total Assets of the Firm( $X_1$ )

This variable is a measure of the technological level of the firm. As it was explained before, technology is characterized by increasing the size of the organizational setting. The increase in size is reflected in the concentration of a large number of workers, and large concentration of capital investment in the workplace. Barbash (1971) pointed out that these factors directly affect the level of disputes in the firm.

In this equation, this variable is expected to have an inverse relationship with the dependent variable. This assumption is based on

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<sup>14</sup> It is not necessarily true that a high ratio means that the system is effective. For example, the system may solve 100 percent of the disputes that occurred in that firm, but it took a very long period of time to do that (as it is the case in some of the firms interviewed) which is also a sign of ineffectiveness. The time factor was not included in the analysis because the data were not available.

the ground that these characteristics of the firm give the worker stronger bargaining positions to pursue their demands, thus making it difficult to impose any settlement on them, which may delay or lengthen the settlement process. This position is reflected by the workers' feeling of indispensability to the firm because of their higher skill level. In addition to that, it is natural to feel strength when you are a member of a large group, because numbers count.

The definition of  $X_2$ ,  $X_3$ , and  $X_4$  in this equation is exactly the same as those of  $X_2$ ,  $X_3$ , and  $X_4$  in the first equation of the first model. The inclusion of these variables in both models is based on the ground that some of the variables that cause labor disputes are also affecting its settlement. These variables are expected to maintain the same relationship with the dependent variable in both models.

#### The Ratio of Group Dispute to Total

##### Disputes Occurred ( $X_5$ )

This variable is expected to have a positive relationship with the dependent variable. This assumption is based on the ground that the Ministry of Labor is more concerned with group disputes than individual disputes. The larger the number of workers involved in a group dispute, the more important it becomes to find a solution, and it is given first priority. This awareness of the Ministry of Labor to solve group disputes is based on two reasons: first, a large number of workers involved in a dispute is considered by the government as a sign of unrest, especially if a strike materialized.

In this case, the Ministry of Labor will be under constant pressure to solve it by any means. A labor unrest in any developing country is considered by the outside world as a sign of political instability, a situation which is not acceptable to the political leadership in that country. Jordan, as a developing country, is not expected to depart from this theme. Second, these kinds of disputes will affect drastically the flow of commodities to the market. Given the fact that most of the firms producing the basic commodities (whether to the consumer; e.g., gasoline, electricity, cigarettes or to the economy like phosphates, cement, potash) have no competitors, enjoying a monopolistic status. In this case it becomes very important to settle the dispute to keep the flow of commodities uninterrupted.

#### The Employee Loss Ratio ( $X_6$ )

This variable reflects the intensity degree of the dispute in the firm. It is measured by the number of working days lost in a dispute per hundred workers in the firm (Kerr et al., 1955: 13-14). This variable is expected to have an inverse relationship with the dependent variable in Jordan. This assumption is based on the ground that the higher the ratio, the more difficult it is becoming to settle it, because both the employers and the workers have incurred losses through that dispute. Employers lose production and workers lose income and that may delay and make it difficult to settle the dispute because: (1) the loss will harden the position of the disputants since the loss cannot be avoided; (2) the workers will

be hurt more because they lack the financial resources<sup>15</sup> to support them in a dispute which makes them less conciliatory than management, which can sustain such a loss.

In mathematical notations, the equation can be presented as follows:

$$Y = \alpha - \beta_1 X_1 - \beta_2 \text{Log}X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 - \beta_6 X_6 + U$$

The second equation hypothesizes that the effectiveness of the Jordanian labor dispute settlement is a function of two factors: socio-organizational and human capital factors. In its implicit form, the equation may be expressed as follows:

$$Y = f(F_1, F_2)$$

where:

Y = a composite index of effectiveness

F<sub>1</sub> = a composite index of social and organizational variables

F<sub>2</sub> = a composite index of human capital variables

The above factors are more broadly defined below.

#### The Dependent Factor (Y)

This factor is measured by a composite index of the responses of the sample representatives to a set of questions (No. 66,74,82, 86 in the questionnaire, Appendix A) about the effectiveness

<sup>15</sup> Unions in Jordan charge their members small fees, enough only to cover the union administrative cost, but not enough to support the workers when they lose their income. This low fee may be a union leadership policy to encourage the workers to join the union.

of the Jordanian labor dispute settlement system. An equal interval scale was used to measure the responses on the above questions.

### Socio-organizational Factor (F<sub>1</sub>)

This factor is a composite index of a number of variables related to the bureaucratic system and the sociopolitical order of the country. In developing countries, bureaucracy is associated with inefficiency and ineffectiveness (Blau, 1971:3-4). It refers to delays in processing a certain issue due to the amount of paperwork, the unnecessary steps and signatures required for the file, or the intended delay in making a decision on any issue by the official to show his power. These bureaucratic characteristics are common phenomena in most of the developing countries, and they stem from the nature of the government as a major source of organized social power (Berger, 1957:15). Governments in those countries are respected and feared because of the close connection between political and economic power. In this case employees in governmental positions are expected to be feared and respected; they can achieve this only through their intentional decision making delays regarding issues within their jurisdiction (1957:15).

This factor also includes the impact of nepotism, which is a product of the sociopolitical order in the country. This impact is reflected in the lack of fairness by officials in the system in solving labor disputes.



Human Capital Factor (F<sub>2</sub>)

This factor is a composite index of questions related to the qualifications of the personnel appointed to run the system. The lack of training (in terms of education and experience) in this specialized area will adversely affect the effectiveness of the system and vice versa. This variable is expected to have a positive effect on the dependent variable in the case of Jordan because in most cases the personnel in the system are appointed on such factors as class and nepotism rather than qualifications.

In mathematical notations, the equation can be presented as follows:

$$Y = \alpha + \beta_1 F_1 + \beta_2 F_2$$

Each of the above factors was measured by a composite index of the variables related to them as explained in the first model.

## CHAPTER V

### THE STUDY METHODOLOGY AND FINDINGS

This chapter discusses the methodological procedures followed in this study: sample selection, data collection, and the statistical techniques. In addition, the empirical findings are presented and evaluated.

#### Sample Selection

The original plan of this study was to include all Jordanian business firms whose total employment was one hundred employees or more. The firms that fall under this criterion numbered sixty-two in 1978 (Department of Statistics, 1979). The latest figures showed that the actual number was fifty-eight firms (Social Security Foundation Records, 1981). At this point it was decided to increase the size of the sample to include at least seventy firms. To do that, the criterion had to be expanded to include some of the firms in which their employment is between fifty and ninety-nine employees.

Thirty firms from the last category were chosen at random to be included in the sample. This number includes the twelve firms needed to make up the difference between the fifty-eight firms (which employ one hundred employees or more) and seventy (the size of the sample needed for this study), and eighteen firms used as stand by firms to be interviewed in case of any reason (such as delay, lack of cooperation, etc.) that might affect the speed of collecting the

data. In the final form, the sample turned out to include fifty firms which employ a hundred employees or more, and twenty firms that employ between fifty and ninety-nine employees.

The rationale underlying the choice of the sample is based on the following assumptions: (1) large firms in Jordan tend to employ professional management which is more apt to follow, relatively speaking, modern approaches in industrial relations; (2) large firms maintain better statistical records where relevant data to the study can be obtained; (3) large firms are well known which makes it easier to contact them, and (4) labor in large organizations may enjoy a considerable countervailing power to that of management. This means that labor leadership will pursue its rights even if it will result in a conflict. This felt conflict requires negotiations or involvement of the dispute settlement system to deal with it. This should provide a real picture of the actual interaction among the actors in the industrial relations system in Jordan.

The firms in the sample employ 18.5 percent of total employment in the private sector, and 82 percent of total employment in the firms which employ fifty employees or more. This means that the findings of this study can be truly generalized to all large and intermediate sized firms in the private sector, because most of these firms were represented in the sample.

Finally, the sample size was restricted to this number because of time and cost considerations.

Two copies of the questionnaire were filled out in each firm. A representative of management (normally the personnel manager or any

official who performs such duties) filled one, and the second one was completed by a representative of labor. If the firm was unionized, then the president or any member of the Central Committee of the union at that firm was asked to fill out the questionnaire. In case the firm was not unionized, a representative of the employees chosen at random was asked to do that.<sup>1</sup> A total of 70 respondents (35 union and 35 nonunion) completed the labor questionnaires.

In addition to the sample members, nineteen questionnaires were filled out by Ministry of Labor officials, well-known businessmen, and members of the Central Committee of the General Union of Labor Organizations. Those respondents were chosen because their opinion reflects the outlook of the three actors in the industrial relations system in Jordan. They were chosen at random from their three respective groups, contacted and interviewed by the writer.<sup>2</sup>

#### Data Collection

A questionnaire was designed to collect data from firms in the sample (see Appendix A). Part of the data is related to the firm as a unit; i.e., number of employees, total assets, etc. The other part of the questionnaire gathered data about the attitude or the perception of the respondents related to the objectives of this study. A

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<sup>1</sup>The personnel manager in the firm was to provide me with at least five names of known members of the workers in the firm and I was to choose one from the list at random.

<sup>2</sup>The records of the Ministry of Labor, the Chamber of Commerce, and the General Union of Labor Organizations were used to select the representatives of each of the three groups in the sample.

modified version of Likert (1932) type scale was developed to measure the responses of the sample members on these issues. In this scale, the neutral position of the respondent (do not know, or undecided) was eliminated.

Shaw and Wright (1967:21), Krech et al. (1962:177), Krech and Crutchfield, (1948) pointed out that as attitudes are defined to be evaluations, feelings, and/or action tendencies, they should be either positive or negative. To be neutral is not to have an attitude at all. Moreover, if a large number of persons in a sample, are neutral or undecided on an issue, then very little information (if any) can be obtained on that issue. On the other hand, if few numbers are neutral on an issue, then a bimodal distribution may develop, thus violating the assumption of normality in the data. The best way to deal with this situation is either to eliminate the neutral position or to introduce two categories such as slightly insignificant and slightly significant (Krech et al., 1962:137-179; Ginter, 1980).

The second method was used in this scale in order to develop an equal interval scale. The development of equal interval scales allows the use of parametric statistics to test the hypotheses proposed (Tull and Albaum, 1973:83-86; Anderson, 1971:38; Stevens, 1971:113; Ginter, 1980). The scale was divided into six equal categories from 1 "very insignificant" to 6 "very significant" (see Appendix A). This implies that an individual's attitudes can be placed along a continuum from positive to negative (Krech et al., 1962:157,; Krech and Crutchfield, 1948; Ajami, 1979).

The original version of the questionnaire was written in English. To obtain better understanding and more valid responses, the questionnaire had to be translated into Arabic, the native language of Jordan. To do this, the questionnaire was translated three separate times. The writer did the first translation, then the questionnaire was given to two professors in the business department at the University of Jordan to do the translation independently.<sup>3</sup> After that, the three translators met together to compare translations in order to produce the final form of the translated questionnaire. This triple translation was necessary to make sure that the exact meaning of the words in the English and Arabic versions were the same, thus increasing the validity and reliability of the responses.

During that period, I met with the Dean of the Faculty of Economics and Commerce at the University of Jordan, the Secretary and Assistant Secretary of Labor, the head of the Department of Industrial Relations at the Ministry of Labor, and the Secretary General and Assistant Secretary General of the General Union of Labor Organizations. The objectives of the meetings were to obtain an up-to-date description of the general situation that characterizes labor-management relations in Jordan, and to gain their cooperation in this study. They were very pleased about the subject of the study, and pledged full cooperation and assistance in this matter.

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<sup>3</sup>Both professors hold a Ph.D. degree in Business Administration from colleges in the United States.

Three cover letters of recommendation were obtained from the Dean, the Secretary of Labor, and the Secretary General of the General Union of Labor Organization (see Appendix C. D, E) at the end of those meetings. We also agreed to meet another time after finishing my data collection to exchange ideas about my preliminary findings and to answer any additional questions which might exist.

A pilot sample of ten firms (14 percent of the sample) was chosen at random to pre-test the questionnaire. The pre-testing process resulted in a few minor corrections in language and the items, after which the final copy of the questionnaire was developed.

Personal visits were used to distribute and collect the questionnaire from the firms in the sample. This method was used because of the opportunity it provided to meet officials, to explain the study to them, to answer their questions, and to develop personal contacts with them, a process which proved to be helpful in getting their cooperation. Moreover, this method proved to be the best way to insure that the questionnaire would be delivered and collected in a fast, reliable way.

In the beginning, the writer tried to interview the respondents in each firm and get the questionnaire filled out at the same time. It turned out that this method consumed more time than was originally planned, because some data needed to be prepared and compiled from the firm's records. This method was changed, after three days of work in the field, to a much more reliable and faster method.

The new method included two visits to each firm. The first visit was a short one. Its purpose was to deliver the questionnaire,

explain it, and arrange an appointment to see the respondent for a longer interview in the second visit. On the average, the second visit was scheduled 2-4 days after the first one. This period of time provided an ample opportunity for the respondents to study the questionnaire, answer it at ease, prepare the required data, and generate any questions they might have for the second interview. This method proved to be very helpful in getting accurate data and consumed less of the writer's time.

Two other factors helped in facilitating the ease and speed of collecting the data. First, the Social Security Foundation, which was established in 1979 to take care of the workers in the private sector, has compiled the names, addresses, and phone numbers of all firms employing fifty or more employees. By obtaining this information, much time was saved. Second, in most of the firms interviewed, there was an acquaintance whom I knew personally or was known to my colleagues; e.g., the director of the Jordanian Institute of Management, the director of the Jordanian financial market, or the Dean of the Faculty of Economics and Commerce. These personal connections proved to be tremendously helpful in facilitating the data collection in terms of speed and accessibility.

### Statistical Techniques

Multiple regression and factor analysis are used in this study. Multiple regression is a general statistical technique through which the relationship between a dependent variable and a set of independent variables can be analyzed (SPSS, 1975:321). It enables researchers



to examine the relationship among a large number of variables simultaneously because it can:

1. Determine the simultaneous impact of a number of variables on a single dependent one.
2. Find out the predictive accuracy of the independent variables combined.
3. Determine the amount of variance in the dependent variable explained by each of the independent variables.
4. Write a regression equation that will enable us to predict the dependent variable for various values of the independent variable (Palumbo, 1977:147-148).

Factor analysis is a technique for reduced space analysis characterized by its data-reduction capability (Green and Carroll, 1978:341-345). This technique enables the researcher to see whether an underlying pattern of relationships exists where the data may be rearranged or reduced to a smaller set of factors or components (SPSS, 1975:469).

The principal-component method is the most popular approach to factor analysis. It is a method of transforming a given set of variables into new linear composite variables (indices) that are orthogonal to each other (Green & Carroll, 1978:342). The most common applications of the method may be classified into one of the following categories:

1. Exploration uses-the exploration and detection of patterning of variables with a view to the discovery of new concepts and a possible reduction of data.
2. Confirmatory uses-the testing of hypotheses about the structuring of variables in terms of the expected number of significant factors and factor loadings.
3. Uses as a measuring device-the construction of indices to be used as a new variable in later analysis (SPSS, 1975: 469).

In this study, the first and the third applications were used.

Though regression and factor analysis can be laborious, fortunately computer programs are available through an SPSS program. The SPSS program "Regression" (available at Ohio State University Computer Center) performs a stepwise regression in which the variables are taken into the regression equation in the order of their importance in explaining variation in the dependent variable. The SPSS program "Factor" (also available at OSU Computer Center) performs principal component factor analysis with and without iterations as we will see in the following pages.

### The Findings

The models specified in the previous chapter have been empirically verified with cross-sectional data obtained for the year 1980. A report on the statistical results obtained for the models is presented as follows.

#### THE FIRST MODEL: Determinants of Labor-Management Disputes in the Private Sector in Jordan

1. The First Equation of the First Model. The statistical results of the first equation are presented in Table 6, and can be evaluated as follows:

a. The signs of the partial regression coefficients (Betas) obtained are similar to expectations. A positive relationship was found between the total number of workers involved in disputes (the dependent variable) and the size of the firm ( $X_1$ ), the ratio

TABLE 6

THE DETERMINANTS OF LABOR-MANAGEMENT DISPUTES:  
 STATISTICAL RESULTS OF THE FIRST EQUATION

| Variable       | Beta  | Partial F | R <sup>2</sup> | $\Delta R^2$ |
|----------------|-------|-----------|----------------|--------------|
| X <sub>1</sub> | 0.57  | 71.77*    | 0.37           | 0.37         |
| X <sub>3</sub> | 0.40  | 53.15*    | 0.58           | 0.21         |
| X <sub>4</sub> | 0.23  | 18.34*    | 0.63           | 0.05         |
| X <sub>2</sub> | -0.19 | 9.62*     | 0.65           | 0.02         |
| X <sub>5</sub> | -0.12 | 5.42**    | 0.67           | 0.02         |
| a <sub>0</sub> | 0.0   |           |                |              |

F = 58.5\*

R<sup>-2</sup> = 0.65

S.E. = 437.4

\* significant at  $\alpha = 0.01$

\*\* significant at  $\alpha = 0.05$

X<sub>1</sub> = The firm's total employment.

X<sub>3</sub> = The ratio of unionized workers to total employment in the firm.

X<sub>4</sub> = The ratio of worker's years of employment with current employer to his total working years in the labor force.

X<sub>2</sub> = The ratio of worker's annual wage increase in 1980 to inflation increase in 1979.

X<sub>5</sub> = The ratio of disputes solved by the formal system to total number of disputes occurred in the firm.

a<sub>0</sub> = The constant term (the intercept). It is always equal to zero when Beta is used.

Beta = The standardized regression coefficient.

Partial F = the F statistics for each independent variable in the equation.

F = The overall F statistics for the equation.

R<sup>2</sup> = The coefficient of determination.

R<sup>-2</sup> = The adjusted coefficient of determination.

S.E. = The standard error of estimate of the equation.

of unionized workers to total employment in the firm ( $X_3$ ), and the ratio of worker's working years with current employer to his total working years in the labor force ( $X_4$ ), while an inverse relationship was found between the total number of workers involved in disputes and the ratio of number of disputes solved by the formal dispute settlement system to total disputes which occurred in the firm ( $X_5$ ),<sup>4</sup> and with the ratio of worker's wage increase in 1980 to inflation rate in 1979 ( $X_2$ ).

Two important aspects can be concluded from the last variable ( $X_2$ ). First, there is a time lag between the workers wage increase and inflation increase. This lag may be related to the imperfection of the market, where information about change in inflation reaches the worker only after a certain lapse of time, thus their reaction to it is delayed. The second conclusion is that only the worker's wage increase was found to be significant, while the firm total salary increase and the employee<sup>5</sup> salary increase were found to be insignificant.

This result was expected because the office employees earn more than the workers in the Jordanian firms. In 1980, the average annual salary increase for the employees was 10.5 percent while it was 7.6 percent for the workers in the firms surveyed. This, of course, is very low compared to a 20 percent inflation increase in 1979 and

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<sup>4</sup>The negative sign obtained for this variable with the dependent variable means that the formal system of disputes settlement in Jordan is ineffective as Eldridge (1968) pointed out.

<sup>5</sup>In this study the term "employees" means those individuals who work in offices and earn monthly income. The term "workers" means those individuals who work outside the office and earn hourly or daily income. This distinction was observed in the data collection and the subsequent analysis in this study.

17 percent inflation increase in 1980 (Central Bank of Jordan, 1981). Given the fact that the workers constitute the major portion of employment in the firm and their real earnings are less than those of the office employees, their militancy is expected to be higher with management, thus increasing the number of workers involved in disputes in the workplace.

b. Tests of significance were carried out and found that all of the variables in the equation were significant at  $\alpha = .01$  and  $.05$  (as shown in Table 6). In this case, the null hypotheses for all the independent variables in the equation were rejected, thus retaining them in the equation. This means that all five independent variables ( $X_1, X_2, X_3, X_4, X_5$ ) set forth in the equation are significant in affecting the number of workers involved in disputes (the dependent variable).

c. The coefficient of determination ( $R^2$ ) for the equation is found to be 0.67. This means that 67 percent of the variance in the number of total workers involved in disputes in each firm is explained by the independent variables set forth in the equation. Stepwise regression analysis has ordered the independent variables according to their importance on the dependent variable as shown in Table 6. The results reveal that the size of the firm ( $X_1$ ) has the highest value of  $R^2$ , thus explaining the major portion of the variance in the dependent variable. It is followed by  $X_3, X_4, X_2$  and  $X_5$ .

The adjusted coefficient of determination ( $X^{-2}$ ) is found to be 0.65. This measure takes into account the number of explanatory variables in relation to the number of observations (Kmenta, 1971:

365). It indicates that the level of accuracy in  $R^{-2}$  is more than  $R^2$ .

d. The standard error of estimate is found to be 437.4. It is used to evaluate the accuracy of the prediction by examining the amount of absolute errors in prediction (Ezekiel and Fox, 1959:192). In this case it means that the predicted Y values will deviate from the actual values by 437.4 units. This relatively high figure is not unusual since the average means of Y is 1700 workers and 35 percent of the variance in Y is unexplained by the equation set forth.

e. The standardized partial regression coefficients (Betas) of the variables are also presented in Table 6. These coefficients show how much change in the dependent variable will occur for a unit change in the independent variable. For example, a one standard deviation change in the firm total employment will contribute a 0.57 standard deviation change in the total number of workers involved in disputes, holding  $X_2$ ,  $X_3$ ,  $X_4$ , and  $X_5$  constant. Similarly, the partial regression coefficients of the other variables can be explained. The comparison of the Beta weights show that  $X_1$  (the firm's total employment) contributes more effect on Y (the total number of workers involved in disputes) than any of the other variables in the equation and  $X_5$  contributes the least.

f. The correlation matrix shows a low degree of correlation between some of the independent variables, a sign of the existence of multicollinearity. The highest correlation is 0.31 between  $X_3$  and  $X_4$ . This correlation is expected due to the nature of the variables. This low degree of multicollinearity is acceptable in

such an equation. Moreover, when multicollinearity exists in an equation, a multiple regression equation correctly predicts the dependent variable (Nemmers and Myers, 1966:170).

In short, the statistical results presented in Table 6 show that all the hypotheses proposed in the first equation are accepted. The mathematical form of the equation is:

$$Y = 0.0 + 0.57X_1 - 0.19\log X_2 + 0.40X_3 + 0.23X_4 - 0.12X_5$$

2. The Second Equation of the First Model. The statistical results for the second equation are obtained through the following steps:

First. Factor analysis and stepwise regression analysis were carried out on 23 variables (V48-V70 in Appendix B). Both analyses were needed to help in identifying the variables that have a high factor loading on the factors, and at the same time are significant in their impact on the dependent variable (V98, Appendix B: The inevitability of disputes between labor and management). This step was necessary to reduce the number of variables in order to perform factor analysis, given the number of observations available. Considering the statistical outcome of both analyses, the maximum number of variables that can be dropped were six variables, thus retaining seventeen variables to perform the second step.

Second. Factor analysis using principal component method was carried out on seventeen variables to create a new smaller set of factors (indices) which contain a larger portion of the information in the original set of variables, and eliminating, at the same time,

multicollinearity among the variables. Principal factor without iteration<sup>6</sup> was used in this analysis. The computer output extracted seventeen factors. Only six factors were retained based on their eigenvalues.<sup>7</sup>

The varimax rotated factor matrix is provided by the computer output. This matrix shows the loadings of the variables on the factors. This loading also represents both regression weights and correlation coefficients between factors and variables. Table 7 reveals the loadings between factors and variables and the number of variables used to extract each factor based on the factor loadings between the variables and the factors.

The computer output also provided a factor score coefficient matrix, which was used to calculate factor scores for individual data cases. These new cases represent scores on the composite index scale for each of the six factors. These composite index scales were then used as variables in the regression equation to test their significance on the dependent variable, which is step number three.

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<sup>6</sup> Principal factor with iteration was used also and produced similar results.

<sup>7</sup> Based on Kaiser's criterion, only factors with eigenvalues exceeding unity are retained.



TABLE 7

DETERMINANTS OF LABOR-MANAGEMENT DISPUTES, THE FIRST MODEL:  
 FACTOR LOADING MATRIX FOR VARIABLES AND FACTORS  
 FOR THE SECOND EQUATION

| Variables | Factors        |                |                |                |                |                |
|-----------|----------------|----------------|----------------|----------------|----------------|----------------|
|           | F <sub>1</sub> | F <sub>2</sub> | F <sub>3</sub> | F <sub>4</sub> | F <sub>5</sub> | F <sub>6</sub> |
| V60       | 0.66           |                |                |                |                |                |
| V61       | 0.75           |                |                |                |                |                |
| V62       | 0.85           |                |                |                |                |                |
| V63       | 0.79           |                |                |                |                |                |
| V66       | 0.50           |                |                |                |                |                |
| V48       |                | 0.84           |                |                |                |                |
| V49       |                | 0.91           |                |                |                |                |
| V50       |                | 0.75           |                |                |                |                |
| V56       |                |                | 0.76           |                |                |                |
| V57       |                |                | 0.83           |                |                |                |
| V58       |                |                | 0.71           |                |                |                |
| V51       |                |                |                | 0.86           |                |                |
| V52       |                |                |                | 0.78           |                |                |
| V54       |                |                |                |                | 0.83           |                |
| V55       |                |                |                |                | 0.83           |                |
| V68       |                |                |                |                |                | 0.77           |
| V69       |                |                |                |                |                | 0.67           |

Only loading  $\geq |0.50|$  are shown.  
 Varimax orthogonal rotation.

F<sub>1</sub> = The Sociopolitical Factor (Index) which has a high loading on five variables:

- V60: Employer's interference in union affairs is strong.
- V61: Government interference in union affairs is strong.
- V62: Political affiliation is favored.
- V63: Class discrimination is strong.
- V66: Family and tribe protection is strong.

F<sub>2</sub> = The Economic Factor (Index) which has a high loading on three variables:

- V48: Wage level is too low.
- V49: Wage increase is insufficient.
- V50: Inflation erodes wages.

- $F_3$  = The Collective Bargaining Factor (Index) which has a high loading on three variables:
- V56: Right to unionize is limited.
  - V57: Employer opposition to unionization.
  - V58: Grievance procedures are not available or are slow.
- $F_4$  = The Work Conditions Factor (Index) which has high loading on two variables:
- V51: Overtime payment is low.
  - V52: Working hours are too long.
- $F_5$  = The Fringe Benefit Factor (Index) which has high loading on two variables:
- V54: Medical insurance is inadequate.
  - V55: Disability benefits are inadequate.
- $F_6$  = The Managerial Factor (Index) which has high loading on two variables:
- V68: Nepotism in treatment and promotion is strong.
  - V69: Management prerogatives are strongly defended.

The statistical results of the second equation are presented in Table 8, and can be evaluated in the same manner as equation one.

The results show that the sociopolitical, economic, collective bargaining, work conditions and the fringe benefits factors were significant in affecting labor-management disputes, while the managerial factor was insignificant. However, when only labor respondent observations were used in the equation, the managerial factor turned out to be significant at  $\alpha = 0.10$ . This outcome may be explained by the fact that management representatives in the sample tried to ignore any negative implications connected with their behavior and tried to appear fair, objective, and to be following sound managerial policies. The statistical results obtained for V68 and

TABLE 8

DETERMINANTS OF LABOR-MANAGEMENT DISPUTES:  
STATISTICAL RESULTS OF THE SECOND EQUATION

| Variable        | Beta   | Partial F | R <sup>2</sup> | ΔR <sup>2</sup> |
|-----------------|--------|-----------|----------------|-----------------|
| F <sub>1</sub>  | 0.30   | 18.1*     | 0.09           | 0.09            |
| F <sub>2</sub>  | 0.24   | 11.4*     | 0.15           | 0.06            |
| F <sub>5</sub>  | 0.17   | 6.1**     | 0.18           | 0.03            |
| F <sub>4</sub>  | 0.16   | 5.1**     | 0.20           | 0.02            |
| F <sub>3</sub>  | 0.14   | 4.1**     | 0.22           | 0.02            |
| F <sub>6</sub>  | 0.11   | 2.6***    | 0.24           | 0.02            |
| a <sub>0</sub>  | 0.0    |           |                |                 |
| F               | = 7.9* |           |                |                 |
| R <sup>-2</sup> | = 0.21 |           |                |                 |
| S.E.            | = 0.30 |           |                |                 |

\* significant at  $\alpha = 0.01$

\*\* significant at  $\alpha = 0.05$

\*\*\* not significant

F<sub>1</sub> = The Sociopolitical Factor.

F<sub>2</sub> = The Economic Factor.

F<sub>5</sub> = The Fringe Benefits Factor.

F<sub>4</sub> = The Work Conditions Factor.

F<sub>3</sub> = The Collective Bargaining Factor.

F<sub>6</sub> = The Managerial Factor.

a<sub>0</sub> = The Constant Term (the intercept). It is always equal to zero when beta is used.

Beta = The Standardized regression coefficient.

Partial F = The F statistics for each factor.

F = The overall F statistics for the equation.

R<sup>2</sup> = The coefficient of determination.

R<sup>-2</sup> = The adjusted coefficient of determination.

S.E. = The standard error of estimate for the equation.

V69 (that constitutes the managerial factor) support this explanation as it is shown in Table 9. The table shows that the deviation of management scores on these variables from the overall means score of the sample is higher than those of labor. This explains the insignificance of the factor in the whole sample because management scores accounted for more weights in the calculation than those of labor.

TABLE 9  
AVERAGE SCORES OF MANAGEMENT AND LABOR RESPONDENTS  
ON SELECTED VARIABLES IN THE STUDY

| Variable | (1)  | (2)                                       | (3)                                  | 2-1  | 3-1  |
|----------|--|---|--------------------------------------|------|------|
|          | Average Score<br>for the Sample<br>N = 159 | Average Score<br>for Management<br>N = 70 | Average Score<br>for Labor<br>N = 70 |      |      |
| V68      | 4.6  | 3.2                                       | 4.9                                  | -1.4 | 0.03 |
| V69      | 4.2  | 3.8                                       | 4.4                                  | -0.4 | 0.02 |

Six separate computer runs were carried out on this equation for labor, management, unionized firms, nonunionized firms, rural firms, and urban firms respondents. The objective of these additional runs was to find out the order of importance of the sociopolitical, economic, fringe benefits, work conditions, collective bargaining and managerial factors from different points of view which exist in the firms.

The results (summarized in Table 10) show that the sociopolitical factors such as employer's interference in union affairs, political affiliation, class discrimination etc. came first from the vantage point of labor and unionized firms. In contrast, the economic factors such as wage level, wage increase, inflation etc. came first from the vantage point of management and non-unionized firms. This difference may be explained by the differences in attitude of both management and labor toward the different aspects of the working life.

Management, in Jordan, still tends to believe that workers are only concerned with money, and if this need is satisfied, then the other issues are unimportant to the worker.<sup>8</sup> Workers, on the other hand, are concerned with other issues in their life in addition to money. Maslow (1965) in his need hierarchy theory explains the individual aspiration to move to higher needs. Bakke et al. (1960: 44-45) pointed out that workers through collective bargaining "are carrying on a never slackening pressure for a higher share in the social sovereignty as well as for more welfare, security and liberty for its individual members."

Statistical results also show the similarity between labor and unionized firms' attitudes toward the factors and their importance. The same similarity is shown between management and non-unionized firms on the other side. The first case indicates the dominance of

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<sup>8</sup> This conclusion is based on the writer's findings during his interviews with management representatives in the sample.

TABLE 10

DETERMINANTS OF LABOR-MANAGEMENT DISPUTES, THE FIRST MODEL;  
 STATISTICAL RESULTS FOR SEVEN RUNS OF THE SECOND EQUATION<sup>9</sup>

| Sample Total<br>N=159 | Labor Respond-<br>ents<br>N = 70 | Mgmt. Respond-<br>ents<br>N = 70 | Unionized Firms Re-<br>spondents<br>N = 70 | Non-<br>Unionized<br>Firms<br>Rspndnts<br>N = 70 | Rural Firms<br>Respond-<br>ents<br>N = 50 | Urban Firms<br>Respond-<br>ents<br>N = 90 |
|-----------------------|----------------------------------|----------------------------------|--|--|---|---|
| F <sub>1</sub> *      | F <sub>1</sub> *                 | F <sub>2</sub> *                 | F <sub>1</sub> *                           | F <sub>2</sub> *                                 | F <sub>1</sub> **                         | F <sub>1</sub> *                          |
| F <sub>2</sub> *      | F <sub>3</sub> <sup>+</sup>      | F <sub>5</sub> *                 | F <sub>3</sub> *                           | F <sub>5</sub> ***                               | F <sub>2</sub> ***                        | F <sub>2</sub> ***                        |
| F <sub>5</sub> *      | F <sub>6</sub> **                | F <sub>1</sub> **                | F <sub>5</sub> *                           | F <sub>4</sub> ***                               | F <sub>5</sub> ***                        | F <sub>5</sub> ***                        |
| F <sub>4</sub> *      | F <sub>5</sub> **                | F <sub>6</sub> ***               | F <sub>4</sub> **                          | F <sub>6</sub> ***                               | F <sub>4</sub> ***                        | F <sub>4</sub> ***                        |
| F <sub>3</sub> *      | F <sub>4</sub> **                | F <sub>3</sub> ***               | F <sub>2</sub> **                          | F <sub>1</sub> ***                               | F <sub>3</sub> ***                        | F <sub>3</sub> **                         |
| F <sub>6</sub> ***    | F <sub>2</sub> **                | F <sub>4</sub> ***               | F <sub>6</sub> ***                         | F <sub>3</sub> ***                               | F <sub>6</sub> ***                        | F <sub>6</sub> ***                        |

\* significant at  $\alpha = 0.05$ .

\*\* significant at  $\alpha = 0.10$ .

\*\*\* not significant

F<sub>1</sub> = The Sociopolitical Factor.

F<sub>2</sub> = The Economic Factor.

F<sub>3</sub> = The Collective Bargaining Factor.

F<sub>4</sub> = The Work Conditions Factor.

F<sub>5</sub> = The Fringe Benefits Factor.

F<sub>6</sub> = The Managerial Factor.

<sup>9</sup> Factors are ordered according to their importance in the equation.

management's attitude in the workplace, especially if it is not unionized, while labor's attitude is more dominant in the second case because unionization lends more support to workers.

The distinction between rural and urban firms was not significant in changing the order of importance of the factors in the equation. This may reflect the impact of industrialization in terms of better communication, transportation, per capita income, etc. on the social structure, and the growth of individualism in the society. In addition, most of the respondents interviewed are located in small geographical areas but are connected by modern highways and facilities; e.g., housing and electricity.

In its final form, the second regression equation can be presented as follows:

$$Y = 0 + 0.30F_1 + 0.24F_2 + 0.14F_3 + 0.16F_4 + 0.17F_5$$

This equation explains only 24 percent of the variance in the dependent variable. Combined together, the variables in the two equations explain 91 percent of the causes of labor-management disputes. The study found another cause of disputes such as lack of communication between labor and management, hidden unemployment, and law violations by management.

In addition, the study showed that 39 percent of the firms surveyed engaged in contract bargaining in 1980; 6 percent experienced the occurrence of a strike; 14 percent reported periodic work stoppages, and all the firms reported the occurrence of grievances. The average number of grievances per firm was 19

grievances. Of this number, 95 percent were individual grievances while group grievances constituted 5 percent. The key issue that caused strikes was wages, while the key issue in work stoppages was illegal firing. The first principal issue that caused grievances was unfair work distribution among workers followed by unfair performance evaluations by supervisors.

The average duration of strikes and work stoppages<sup>10</sup> was 1.04 and 1.12 days, respectively. This short duration may be explained by the speed in which the Ministry of Labor interjects to settle the dispute in order to contain labor unrest. On the average, 135 workers were involved in each strike; 52 per work stoppage and four workers per grievance.

The average working years of the respondents in the labor force was 14.5 years while the average years of employment with the current employer was 7.4 years.

Among the firms surveyed, 6 percent were operating in mining, 36 percent in manufacturing, 11 percent in construction, 4 percent in utilities, 17 percent in commerce, 4 percent in transportation, 11 percent in services, and 10 percent were classified as others. Fifty percent of these firms were unionized. The highest degree of unionization was in utilities and commerce, while the lowest was in construction firms.

The average number of total employment in the surveyed firms was 386. A high degree of unionization exists among firms with a larger number of employees. Eighty-five percent of the 18 firms which employed 500 people or more were unionized. This

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<sup>10</sup> Stoppages are distinguished from strikes in the study on the basis of their shorter duration and their instantaneous occurrence.



proportion was 50 percent of the 32 firms which employed between 100-500 people and only 20 percent of the 20 firms which employed less than 100 people.

The average age of the respondents was 37 years. Thirty-six percent of all respondents have less than 12 years of education (less than high school), 49 percent have between 12-16 years of education, while only 15 percent have more than 16 years of education. Age and education were used in the first regression equation as independent variables affecting the total number of workers involved in disputes in the firm (the dependent variable). They are statistically insignificant in affecting the dependent variable and were excluded from the equation.

THE SECOND MODEL: Determinants of the Effectiveness  
Of Formal Dispute Settlement System in Jordan

1. The First Equation of the Second Model. The statistical results of this equation are presented in Table 11. The signs of the partial regression coefficients (Betas) are similar to expectations. A positive relationship was found between the ratio of disputes solved by the formal system to total disputes that occurred in the firm (the dependent variable) and the ratio of group disputes to total disputes that occurred ( $X_5$ ), the ratio of the worker's working years with current employer to his total working years in the labor force ( $X_4$ ), and the ratio of unionized workers to total employment in the firm ( $X_3$ ), while an inverse relationship was found between the ratio of disputes solved by the formal system to

total disputes occurred and the ratio of worker's wage increase in 1980 to inflation rate in 1979 ( $X_2$ ), the employee loss ratio ( $X_6$ ), and the total assets of the firm ( $X_1$ ).

Although these variables were broadly defined in Chapter IV, an important point should be mentioned here, based on the statistical outcomes obtained. Variables  $X_3$  and  $X_4$  have a positive relationship with the total number of workers involved in disputes (the dependent variable in the first equation of the first model) and they have a positive relationship with the dependent variable in this equation. In the former case, the positive relationship represents a growing degree of strength and self-confidence among older workers and labor leaders, which most of the time, increases the degree of militancy in their attitudes toward management positions.

This growing degree of militancy is supposed to hinder the job of the formal dispute settlement system by rejections of perceived unfair settlements imposed by the system. In this context, those same variables should have an inverse relationship with the dependent variable in the latter case. On the contrary, they have a positive relationship which means that those variables help in facilitating the job of the formal system in reaching settlements instead of hindering it.

In my view, this conclusion reflects a sign of growing responsibility and awareness among the leadership of labor in Jordan. Labor leaders (including older workers) are able to create unity and cohesion among the mass of workers under their leadership. This enables them to lead the workers effectively in times of hostility and peace with management.

TABLE 11

DETERMINANTS OF THE EFFECTIVENESS OF THE FORMAL DISPUTE  
SETTLEMENT SYSTEM IN JORDAN, THE SECOND MODEL:  
STATISTICAL RESULTS OF THE FIRST EQUATION<sup>11</sup>

| Variable       | Beta  | Partial F | R <sup>2</sup> | ΔR <sup>2</sup> |
|----------------|-------|-----------|----------------|-----------------|
| X <sub>5</sub> | 0.49  | 51.1*     | 0.25           | 0.25            |
| X <sub>2</sub> | -0.16 | 4.9**     | 0.29           | 0.04            |
| X <sub>4</sub> | 0.25  | 9.9*      | 0.30           | 0.01            |
| X <sub>6</sub> | -0.46 | 14.9*     | 0.32           | 0.02            |
| X <sub>3</sub> | 0.38  | 10.8*     | 0.36           | 0.04            |
| X <sub>1</sub> | -0.15 | 3.6***    | 0.37           | 0.01            |
| a <sub>0</sub> | 0.0   |           |                |                 |

F = 15.2\*

R<sup>-2</sup> = 0.35

S.E. = 0.06

\* significant at  $\alpha = 0.01$   
 \*\* significant at  $\alpha = 0.05$   
 \*\*\* significant at  $\alpha = 0.10$

X<sub>5</sub> = The ratio of group disputes to total disputes which occurred in the firm.

X<sub>2</sub> = The ratio of the worker's annual wage increase in 1980 to inflation increase in 1979.

X<sub>4</sub> = The ratio of the worker's years of employment with current employer to his total working years in the labor force.

X<sub>6</sub> = The employee loss ratio.

X<sub>3</sub> = The ratio of unionized workers to total employment in the firm.

X<sub>1</sub> = The firm's total assets in dollars.

a<sub>0</sub> = The constant term (the intercept). It is always equal to zero when Beta is used.

Beta = The standardized regression coefficient.

Partial F = The F statistics for each independent variable in the equation.

R<sup>2</sup> = The coefficient of determination.

<sup>11</sup> The mean of the ratio of disputes solved by the formal system to total disputes occurred was 0.06. This ratio is very low which only reflects a sign of ineffectiveness of the system in solving labor disputes.

Table 11. Continued.

$R^{-2}$  = The adjusted coefficient of determination.

S.E. = The standard error of estimate of the equation.

The conceptual explanation of the statistical indicators obtained can be explained in the same manner as before. These indicators show that all the variables in this equation are statistically significant and can explain 37 percent of the variance in the dependent variable. The ratio of group disputes to total disputes occurred came first in affecting the dependent variable while the total assets of the firm came last.

In mathematical notations the equation can be presented as follows:

$$Y = 0.0 - 0.15X_1 - 0.16\text{Log}X_2 + 0.38X_3 + 0.25X_4 + 0.49X_5 + 0.46X_6$$

2. The Second Equation of the Second Model. The statistical results for the second equation were obtained through the same approach followed in equation number two in the First Model. First, Factor analysis and stepwise regression analysis were carried out on 21 variables (V72-V78, V80-V86, V88-V94 in Appendix B). Both analyses were needed to help in identifying the variables that have a high factor loading on the factors and at the same time are significant in their impact on the dependent variable. This step was necessary to reduce the number of variables in order to perform factor analysis, given the number of observations available.

Considering the statistical outcomes of both analyses, the maximum number of variables that can be dropped were four variables, thus retaining seventeen variables to perform the second step.

Second. Factor analysis using principal component methods without iteration has been carried out on seventeen variables. The computer output extracted seventeen factors. Only two factors were retained based on their eigenvalues. The varimax rotated factor matrix, provided by the computer, shows the loadings of the variables on the factors. Table 12 depicts the loadings between the factors and variables. It also reveals the number of variables used to extract each factor based on the factor loadings between the variables and the factors.

The computer output provided a factor score coefficient matrix, which was used to calculate factor scores for individual data cases. These new cases represent scores on the composite index scale for each of the two factors. These composite index scales were then used as variables in the regression equation to test their significance with the dependent variable.

Another separate factor analysis was carried out on four variables (V79, V87, V95, V100, Appendix B) to obtain a third factor which is a composite index of the ineffectiveness of the formal disputes settlement system in Jordan. The results for both factor analyses are tabulated in Table 12. Regression analysis was carried out to test the hypotheses proposed earlier in Chapter IV.

TABLE 12

DETERMINANTS OF THE EFFECTIVENESS OF THE FORMAL DISPUTE  
SETTLEMENT SYSTEM, THE SECOND MODEL: FACTOR  
LOADING MATRIX FOR VARIABLES AND FACTORS  
FOR THE SECOND EQUATION

| Factors   |                |                |                |
|-----------|----------------|----------------|----------------|
| Variables | F <sub>Y</sub> | F <sub>1</sub> | F <sub>2</sub> |
| V79       | 0.98           |                |                |
| V87       | 0.98           |                |                |
| V95       | 0.96           |                |                |
| V100      | 0.94           |                |                |
| V75       |                | 0.70           |                |
| V76       |                | 0.81           |                |
| V77       |                | 0.84           |                |
| V78       |                | 0.81           |                |
| V83       |                | 0.70           |                |
| V84       |                | 0.80           |                |
| V85       |                | 0.87           |                |
| V86       |                | 0.83           |                |
| V92       |                | 0.63           |                |
| V93       |                | 0.66           |                |
| V94       |                | 0.72           |                |
| V72       |                |                | 0.68           |
| V73       |                |                | 0.71           |
| V80       |                |                | 0.80           |
| V81       |                |                | 0.72           |
| V88       |                |                | 0.80           |
| V89       |                |                | 0.88           |

Only loading  $\geq |.60|$   
Varimax orthogonal rotation

F<sub>Y</sub> = The Ineffectiveness Factor (Index) which has high loading  
on four variables:<sup>12</sup>

- V79: Firm's satisfaction with conciliation officers.
- V87: Firm's satisfaction with conciliation boards.
- V95: Firm's satisfaction with industrial court.
- V100: Firm's overall satisfaction with the formal system.

F<sub>1</sub> = The Socio-organizational Factor (Index) which has high loading  
on eleven variables:

- V75: Conciliation officers know their jurisdiction.
- V76: Conciliation officers are fast to respond.
- V77: Conciliation officers are fast in reaching settlements.

<sup>12</sup>The mean score of these variables was: 2.57, 2.59, 2.72, 2.46,

Table 12. Continued.

- V78: Conciliation officers are fair and unbiased.
- V83: Conciliation boards know their jurisdiction.
- V84: Conciliation boards are fast to respond.
- V85: Conciliation boards are fast in reaching settlements.
- V86: Conciliation boards are fair and unbiased.
- V92: Industrial courts are fast to respond.
- V93: Industrial courts are fast in reaching settlements.
- V94: Industrial courts are fair and unbiased.

$F_2$  = The Human Capital Factor (Index) which has high loading on six variables:

- V72: Conciliation officers are educationally qualified.
- V73: Conciliation officers have enough experience for their job.
- V80: Conciliation boards are educationally qualified.
- V81: Conciliation boards have enough experience for their job.
- V88: Industrial court members are educationally qualified.
- V89: Industrial court members have enough experience.

The statistical results of the second equation, which examines the impact of socio-organizational and human capital factors on the ineffectiveness of the formal dispute settlement system, are presented in Table 13. These results show that the socio-organizational and human capital factors have a significant positive impact on the ineffectiveness of the system. Jointly they explain 78 percent of the variance in the equation. The socio-organizational factor came first and the human capital factor came second in their impact on the dependent variable. This order was maintained when regression analysis was carried out on the equation for labor respondents, management respondents, unionized firms respondents, and non-unionized firms respondents. In mathematical notation the equation can be presented as follows:

$$F_y = 0.0 + 0.63F_1 + 0.37F_2$$

respectively. This shows that the respondents perceived the formal system as ineffective.

TABLE 13

DETERMINANTS OF THE EFFECTIVENESS OF THE FORMAL DISPUTE  
SETTLEMENT SYSTEM IN JORDAN, THE SECOND MODEL:  
STATISTICAL RESULTS OF THE SECOND EQUATION

| Variable               | Beta | Partial F | R <sup>2</sup> | ΔR <sup>2</sup> |
|------------------------|------|-----------|----------------|-----------------|
| F <sub>1</sub>         | 0.63 | 213.6*    | 0.68           | 0.68            |
| F <sub>2</sub>         | 0.37 | 75.9*     | 0.78           | 0.10            |
| a <sub>0</sub>         | 0.0  |           |                |                 |
| F = 288.5*             |      |           |                |                 |
| R <sup>-2</sup> = 0.78 |      |           |                |                 |
| S.E. = 0.36            |      |           |                |                 |

\* significant at  $\alpha = 0.01$

F<sub>1</sub> = The Socio-organizational Factor.

F<sub>2</sub> = The Human Capital Factor.

a<sub>0</sub> = The Constant Term (the intercept). It is always equal to zero when Beta is used.

Beta = The standardized regression coefficient.

Partial F = The F statistic for each factor.

F = The overall F statistic for the equation.

R<sup>2</sup> = The coefficient of determination.

R<sup>-2</sup> = The adjusted coefficient of determination.

S.E. = The standard error of estimate for the equation.

Analysis reveals that the unfairness and biases of the officials in the formal disputes settlement system came first as an important variable adversely affecting the effectiveness of the system, while the speed to respond and reaching a settlement came second. Education and experience of the officials in the system came third in adversely affecting the effectiveness of the formal dispute



settlement system.

From labor's point of view, management's impact and control over the officials in the system was a factor in affecting the ineffectiveness of the system. In contrast (from the management point of view), unions' unrealistic demands were a factor in affecting the ineffectiveness of the system and the speedy settlement of disputes.

Both labor and management respondents indicated that the lack of knowledge of the economic realities by the other party was a factor in affecting the ineffectiveness of the system.

The study showed that 50 percent of strikes which occurred in 1980 were solved by conciliation officers, 25 percent by conciliation boards and 25 percent by direct intervention by the Secretary of Labor and the industrial court. Fifty percent of the work stoppages that occurred were solved by direct negotiations between labor and management; 20 percent by conciliation officers, and 30 percent by firing the workers involved in the stoppage.

Of the 1,347 grievances (individual and group) that occurred in 1980, approximately 80 percent were solved by direct negotiation and voluntary mediation.<sup>13</sup> Only 5 percent were solved by the formal system as a whole, 1 percent by the civil court, and 2 percent by firing. The remaining 12 percent were not solved at the time of the study.

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<sup>13</sup> Voluntary mediation is a process of settling disputes through a third party, who has no official status in the formal system, but is known and respected by the disputants. He volunteers to mediate after he is asked to do so by the disputants.

As indicated, direct negotiation and voluntary mediation were able to solve most of the grievances that occurred. This does not necessarily mean that they are more efficient than the other methods. The workers involved preferred to settle the issue, at this stage, even if it required sometimes a major compromise on their side, instead of going through the costly and inefficient process of the formal system.<sup>14</sup>

Finally, only 6 percent of total disputes (individual and group) which occurred and 17 percent of group disputes were solved by the formal system of dispute settlement.

These low figures, in addition to the aforementioned statistics, are clear indicators of the ineffectiveness of the formal system of dispute settlement in Jordan. The reason for that, in my view, is due to the fact that the firms which are owned by the family are still under their own tight control and following the traditional paternalistic approach in dealing with labor problems in the work place. On the other hand, large firms are witnessing a breakdown in the traditional approach because of the heterogeneity of employment in the work place. This new development in the organizational setting is not accompanied by compatible developments in the institutions that are supposed to deal with labor problems, thus creating a gap between the two which could be bridged by new legislation.

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<sup>14</sup> Interviews with labor leaders in most of the firms surveyed made this observation.

CHAPTER VI  
SUMMARY, CONCLUSIONS  
AND RECOMMENDATIONS

Summary

This study has attempted to analyze and investigate the closely interrelated subjects of labor-management disputes, and the effectiveness of the formal dispute settlement system in the private sector in Jordan.

A sample of 70 firms, drawn from the largest firms in the private sector in Jordan, were surveyed to collect data for the year 1980. A representative of labor and management in each firm was requested to fill out the questionnaire designed to measure their attitudes and perceptions about the central subjects of the study.

In addition to the sample members, nineteen questionnaires were filled out by the Ministry of Labor officials, well-known businessmen, and members of the Central Committee of the General Union of Labor Organizations.

Factor analysis and multiple regression were the statistical techniques used to test the proposed hypotheses in this study.

Conclusions

Four equations were developed to test the proposed hypotheses in this study. The first two equations were concerned with the determinants of labor-management disputes. The first equation

hypothesizes that the number of workers involved in disputes (the dependent variable) is determined by the firm's total employment, the ratio of the worker's annual wage increase in 1980 to the inflation increase in 1979, the ratio of unionized workers to total employment in the firm, the ratio of the worker's years of employment with his current employer to his total working years in the labor force, and the ratio of total disputes solved by the formal system to total disputes which occurred in the firm.

The second equation hypothesizes that labor-management disputes are determined by sociopolitical, economic, collective bargaining, work conditions, fringe benefits, and managerial factors.

The statistical indicators obtained for the determinants of labor-management disputes in the private sector in Jordan in the above two equations were found to be significant and reliable, except for the managerial factor. The increase in the size of total employment and the degree of unionization in the firm were found to be the major determinants of labor disputes. These two variables alone, explain 58 percent of the variation in the number of workers involved in disputes in the firm. The sociopolitical and economic factors were found to explain 15 percent of the variation in labor-management disputes, followed by the ratio of the worker's years of employment with his current employer to his total years of employment in the labor force, which explains 5 percent of the variation. The other variables (fringe benefits, work conditions, collective bargaining, the ratio of worker's wage increase to inflation increase lagged for one year, and the number of disputes solved by the formal

system of dispute settlement to total disputes which occurred in the firm) were able to explain only 11 percent of the variation in labor-management disputes.

From labor's point of view, the study found that the socio-political and collective bargaining factors are the most important determinants of labor-management disputes. This finding was also supported by the attitudes of the union representatives in the sample. On the other hand, management representatives believed that disputes in the firm were mainly caused by economic and fringe benefit factors.

The study showed that disputes on wages were the key issues which caused strikes in the firm. The average wage increase in 1980 was 11 percent less than the inflation increase in 1979, and 8 percent less than the inflation rate in 1980. Illegal firing was the key issue that caused work stoppages, while unfair work distribution and performance evaluation by supervisors were the key issues that caused grievances in the firm.

The next two equations were concerned with the determinants of the effectiveness of the Jordanian formal system of disputes settlement. Included in this formal system are the conciliation officers, the conciliation boards and the industrial court.

The first equation regarding system effectiveness hypothesizes that the ratio of total disputes solved by the formal system to total disputes which occurred in the firm (the dependent variable) is determined by the firm's total assets, the ratio of the worker's annual wage increase in 1980 to the inflation increase in 1979, the ratio of unionized workers to total employment in the firm, the ratio of the worker's years of employment with his current employer to his total working years in the labor force, the

ratio of group disputes to total disputes which occurred in the firm, and the employee loss ratio.

The second equation regarding the formal dispute settlement system hypothesizes that the effectiveness of the system is determined by socio-organizational and human capital factors.

The statistical outcomes obtained showed that the socio-organizational and the human capital factors are the major determinants of the ineffectiveness of the system followed by the ratio of group disputes to total disputes which occurred in the firm. The other variables were found to be of less importance but statistically they were significant and reliable.

There was a general consensus among labor, management and non-unionized worker representatives about the importance of socio-organizational and human capital factors in affecting the effectiveness of the formal system. This was in contrast to their differences about the determinants of labor-management disputes. The consensus is related to the fact that both labor and management (as I observed in my interviews) perceived the system of being biased and unfair to the other party.

The study revealed that only 6 percent of all the disputes which occurred were solved by the formal dispute settlement system in Jordan, while 80 percent were solved by direct negotiations, 2 percent were solved by firing the workers involved in disputes, and 12 percent were not solved at the time of the study. In all cases of strike and work stoppages, the workers returned back to work shortly, but the issues that caused these disputes took a long period

of time to settle, thus creating frustration and dismay among the workers.<sup>1</sup>

In 1980, only 5 percent of the total grievances which occurred were solved by the system while 80 percent were solved by direct negotiations, 1 percent by the civil court, 2 percent by firing the workers involved in the disputes, and 12 percent remained unsolved.

### Recommendations

The findings of this study necessitate some recommendations to the three actors in the industrial relations system in Jordan: management, labor, and the Ministry of Labor.

Management in the private sector in Jordan is not giving enough attention to the needs and aspirations of the human element in their organizational settings. Their main concern appears to be production and profit. Management has to realize, sooner or later, that their paternalistic approach in dealing with labor problems is inappropriate in modern managerial thinking. Large and complex organizations need managerial cadre capable of dealing adequately with their problems on a sound scientific basis instead of the traditional paternalistic approach.

Logically, management in Jordan cannot reduce the size of employment or capital investment in the workplace to minimize conflict, nor can it curtail the growing trend of unionization

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<sup>1</sup>Interview with labor leaders in the firms concerned with these disputes.

among its workers. These are a by-product of the industrialization process which is an inevitable stage in enhancing the level of economic development in the country.

Presumably, an ideal solution is an industrial order in which no disputes occur. Although some disputes are avoidable, the elimination of disputes in the workplace is far from reality. Stagner and Rosen (1965) pointed out that competition is normal and "as long as people have differentiated roles, each man is going to contend for greater rewards to his role. We must therefore seek to avoid eruption of violence and to control these competitive forces under generally accepted rules, not to eliminate industrial disputes." In this case it is almost a tautology to say that the greatest single contribution to avoiding disputes within the firm are sound managerial industrial relation practices.

Management in Jordan needs qualified personnel who can change the traditional philosophy, and who can cope with modern thinking in industrial relations. In the short run, intensive training programs for higher and middle management are necessary to acquaint them with modern concepts in human resource management in general and industrial relations in particular. The Jordan Institute of Management may well serve these objectives in the short run. But in the long run, it is the duty of manpower planning, as an essential part in economic development planning, to insure the availability of qualified managers for business firms.



Further, management in the private firms should establish effective internal grievance machinery that will, fairly and quickly, solve grievances which occur. This should change negative employee perceptions about management and at the same time absorb their dissatisfaction. Studies in the U.S. have shown that employee dissatisfaction clearly is related to turnover, absenteeism, excessive waste, interpersonal bickering, etc. (Porter and Steers, 1973; Lawler, 1973; Draut, 1975).

Management in the private sector should not unduly fear unionization. A labor leadership that unifies the workers is easier to deal with rather than scattered groups which disagree on practically everything.

With respect to labor, it was obvious that some union leaders were not responsible enough in serving the interests of the working class. They were distracted from their main responsibility by political and ideological considerations. Those, in my view, are not the leaders that the workforce needs at this stage of the country's stride to economic development.

It was also evident that most of the labor leaders were not experienced enough to deal with the present requirements of industrial life in the country. A lack of knowledge in the basic economic and social facts, and the game of power in collective bargaining, was obvious in some of their recent collective negotiations.

There was an apparent lack of sincerity among some of the labor leadership for the common cause of the working class. One of the influential and knowledgeable businessmen told me that in most firms (especially those which are privately owned and dominated

by the extended family) at least one labor leader is an agent of management, and cooperating fully in providing information and counterplans to those of labor in the firm.

The study showed that the educational level of the working class was not high enough to enable them to verify objectively the motives behind the actions of their leaders.

The situation of workers and labor leadership in Jordan necessitates the establishment of educational programs to raise the educational level of the industrial worker. The objective of these programs would be to enlarge the workers' thinking horizon and give them an understanding of the necessary principles and requirements of their industrial lives. This, of course, would hopefully lead to the election of sincere, honest, and sophisticated leaders who will eventually lead the working class to what is best for them and who will enhance positively the image of unions in the community.

The Labor Education Institution may be the nucleus to this expanded effort, in spite of its limited capacity and capability. The cooperation of government agencies, management, and labor organizations would be a very important step to enhance, significantly, the efforts of labor education in the country.

Finally, the Ministry of Labor plays a prominent role in the industrial relations system in Jordan, because of the legislative and executive power it has over that system. The present state of the industrial relations system in the country is not serving the interests of the working class on an equal footing to those of management. The shortcomings of that system can be concluded from

the recommendations presented here which are:

First. The Ministry of Labor should provide equality in the collective bargaining process in Jordan. This equality can be obtained by being neutral and fair as a third actor in the system, and by allowing unions to go on strike if necessary. Labor unions in Jordan are not free to strike except with the permission of the government. While the law granted to labor the right to strike, in most cases, strikes do not materialize. This is due mainly to the lengthy settlement procedures through which the dispute has to go through before having the legitimate right to strike, or because of political considerations.

Regarding procedures, the law specifies up to two weeks of hearings for the conciliation officers, six weeks for the conciliation boards, and did not specify any period of time to the industrial court within which they should rule on the dispute. Moreover, the decision of the industrial court is final and binding on the parties. Following these sequential steps, each dispute is expected to be solved; thus, there is no place for the strike to materialize. What actually happens is that the settlement procedure takes more time than is specified by the law,<sup>2</sup> thus creating frustration and desperation among the workers. This, in turn, frequently results in "illegal" strikes.

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<sup>2</sup>In one dispute, between labor and the management of one of the largest banks in the country, six months have passed and the dispute was not yet resolved.

With respect to political consideration, the government believes, to a certain degree, that most labor leaders are tied to communist and socialist parties. Since these parties are illegal in Jordan, workers are reluctant to join unions. Also, unions are very cautious in declaring strikes because of the fear of association in the people's minds between their acts and communism. Moreover, the government in Jordan (and probably in most of the other developing countries) is very careful to keep things under their control in order to ensure authority and stability in the country. Since labor is a major potential source of internal disturbances, the government tries to interfere with labor unions and their leadership, which is called the "politicalization" of trade unions (Galenson, 1959:16). Furthermore, the role of government in Jordan can be clearly seen in Bruce Millen's book in which he write:

In certain Middle East countries, the political elites have, for the most part, attempted to control the labor groups instead of including them in the mass front. As a consequence, the union leadership is likely to engage in maneuvers that are still highly political but uninspired by an ideology (Millen, 1963:9-13).

It is important to note that my argument here does not hold that strikes per se are a healthy phenomenon in the settlement of labor disputes. But I do maintain that strikes assist in achieving equality in power in the collective bargaining process between labor and management. If labor loses this right, then the resulting situation will be in favor of management, which affects adversely the labor position.

Second. The Ministry of Labor should require that the conciliation officers meet certain levels of education, experience and honesty before they assume the role of mediation. Moreover, the successful mediators should be rewarded satisfactorily in order to retain them on the job, because I learned that some of the best mediators left the Ministry of Labor for the higher paid jobs in the private sector.

Third. The conciliation board's job is repetitious with those of the conciliation officers, and thus should be either eliminated or made an optional step to the parties involved.

Fourth. The role of the industrial court should be expanded to include all disputes related to the employment relationship in the workplace. This includes disputes over rights, interest, individual, and group. Moreover, a certain period of time should be established for each type of dispute within which it should be decided in order to speed up the settlement process. The decision of the industrial court remains final and binding.

Equally important is that only qualified judges, knowledgeable in industrial and human relations, should be appointed to serve on these courts. In my view, this recommendation is of extreme importance and should have highest priority on the Ministry of Labor agenda.

It is important to note that the above four recommendations should be considered together, as one unit. Otherwise the effectiveness of the dispute settlement system will not be enhanced. For example, if the ability of the worker to strike remained the same as it is now, then the conciliation board should not be eliminated or

made optional. It should remain as a step in the system to provide better chances for fair settlement, but the six weeks period given to the board to present its recommendations should be cut to two or three weeks.

Fifth. The Ministry of Labor should increase its financial support to the Labor Education Service to expand its facilities and capacity in order to achieve its stated objectives, in enhancing the educational level of the industrial worker.

Finally, the Ministry of Labor<sup>3</sup> should improve its data base and make it available to researchers.

#### Future Research

Three research projects may be suggested to complement this study:

First. The same study should be conducted on small firms in the private sector, because of their large number and the type of management existing there. Most of the small firms are family owned and operate in different markets, thus providing a unique environment to study.

Second. The determinants of intra-worker group disputes should be studied because of its major impact on worker productivity. This stems from the fact that different ethnic groups with different ideological and religious beliefs work together. Personal clashes are inevitable in this situation. This type of dispute cannot be

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<sup>3</sup> It is important to note that these recommendations are suggested in consideration of the fact that the Ministry of Labor in Jordan was established in 1976. Before that, it was a department in the Ministry .

isolated from labor-management disputes. On the contrary, in some of the cases I found in my study, these intra-worker disputes were expanded to include groups of workers, which finally forced management to become involved in the situation.

Finally, the determinants of labor-management disputes in the public sector is another research area. Given the fact that the government is the largest employer in the country,<sup>4</sup> then it goes without saying that the outcomes of such a study should help in enhancing worker satisfaction and performance. This, in turn, should be reflected in the overall effectiveness of the economy.

The objectives of these suggested research projects are to provide tangible results upon which specific policies --public, management, union--can be adopted and implemented. These policies should aim to increase the productivity of the labor force and the effectiveness of the principal actors, which in turn should further enhance the economic development of the country and citizen well-being.

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of Social Affairs and Labor. But given the quality of personnel in the top two positions, the Ministry of Labor will pursue its effort to achieve its stated objective in improving the welfare of the working population

<sup>4</sup>In 1980, the government (including the Army) employed approximately 33 percent of the Jordanian labor force (National Planning Council, 1980:30).

APPENDIX A  
THE STUDY QUESTIONNAIRE



Dear Respondent:

I am in the process of collecting data about the determinants of labor-management disputes and their settlement in the private sector in Jordan. The data will be used for my doctoral dissertation currently prepared at Ohio State University in the United States of America.

This research attempt is a part of the overall effort to improve the labor-management situation in Jordan to help the country's strides for economic development. The outcomes and recommendations of this research will be made available to all parties concerned to help them in that overall effort.

The data collected will be used for research purposes and it will be treated with a high degree of confidentiality.

Please fill out all the data needed and answer all the questions in this questionnaire. I will be in contact with you to answer any questions that might arise.

Thank you for your cooperation.

The researcher,

Muhsen Makhamreh

THE 1980 SURVEY OF THE DETERMINANTS OF LABOR-MANAGEMENT  
DISPUTES AND THEIR SETTLEMENT IN THE PRIVATE SECTOR IN JORDAN

Date of Interview: \_\_\_\_\_

1. Name of Respondent: \_\_\_\_\_ Phone No. \_\_\_\_\_
2. Respondent's position or title (area of responsibility)
  1. Management (title/position) \_\_\_\_\_
  2. Labor (title/position) \_\_\_\_\_
  3. Other (title/position) \_\_\_\_\_
3. Name of the organization: \_\_\_\_\_
4. Address of the organization: \_\_\_\_\_
5. Geographical location of the firm:
  - \_\_\_\_\_ 1. Rural area (if it is located 5 miles or more  
outside the city limits).
  - \_\_\_\_\_ 2. Urban (within 5 mile limit).
6. Classify your firm in one of the following categories:
  1. Mining and quarrying
  2. Manufacturing
  3. Construction
  4. Utilities (gas, water, etc.)
  5. Commerce (trade, banking, etc.)
  6. Transport
  7. Services (hotel, restaurant, etc.)
  8. Other (not classified elsewhere)
7. Respondent's age: \_\_\_\_\_
8. Respondent's education: \_\_\_\_\_
9. Respondent's working experience (in years):
  1. Number of years in the labor force: \_\_\_\_\_
  2. Number of years with current employer: \_\_\_\_\_
10. Total assets of your firm at the end of 1980: \_\_\_\_\_
11. Number of employees in your firm at the end of 1980: \_\_\_\_\_
  1. Proportion who belong to a union: \_\_\_\_\_
  2. Type of union: \_\_\_\_\_
12. About how many employees had left your organization in 1980?  
\_\_\_\_\_
13. What percentage of those employees had left voluntarily, i.e.,  
resignation, sickness, etc. \_\_\_\_\_%
14. How many days lost due to absenteeism this year? \_\_\_\_\_
15. All in all, what was your inexcused absenteeism in 1980? \_\_\_\_\_%
16. What was the average salary increase in your organization in 1980?
  1. For employees (skilled white collar) \_\_\_\_\_%
  2. For workers (blue collar) \_\_\_\_\_%

INVENTORY OF DISPUTES

During the year 1980 did your organization (and union) participate in any labor-management contract bargaining?

17. Yes No

18. Duration:

Start End

19. Did a strike occur?

Yes No

Start End

20. Number of total workers involved in the strike?

21. How resolved? (Check ( ) appropriate answer)

- 1) By direct negotiation \_\_\_\_\_
- 2) By voluntary mediation \_\_\_\_\_
- 3) By conciliation officers \_\_\_\_\_
- 4) By conciliation board \_\_\_\_\_
- 5) By industrial court \_\_\_\_\_
- 6) Not resolved \_\_\_\_\_

22. Key issues:

1)

2)

3)

4)

During 1980 did your organization (and union) participate in any work stoppages?

23. Yes No

24. If yes, how many?

25. Duration of each.

Start

End

26. Number of total workers involved in each.

27. How each resolved?

- 1) By direct negotiation \_\_\_\_\_
- 2) By voluntary mediation \_\_\_\_\_
- 3) By conciliation officers \_\_\_\_\_
- 4) By conciliation board \_\_\_\_\_
- 5) By industrial court \_\_\_\_\_
- 6) By firing workers involved  
in disputes \_\_\_\_\_
- 7) Not resolved \_\_\_\_\_

TOTAL 100%

28. Key issues in each:

- 1) sympathetic
- 2) political
- 3) \_\_\_\_\_
- 4) \_\_\_\_\_

During 1980 did your organization (and union) participate in any grievances?

29. Yes No

30. Total number of grievances. \_\_\_\_\_

31. Type of grievance:

1) one worker involved (individual grievance)

number: \_\_\_\_\_

2) two workers or more involved (group grievance)

number: \_\_\_\_\_

32. How resolved?

1) By direct negotiation \_\_\_\_\_

2) By voluntary (informal mediation) \_\_\_\_\_

3) By conciliation officers \_\_\_\_\_

4) By conciliation board \_\_\_\_\_

5) By industrial court \_\_\_\_\_

6) By civil court \_\_\_\_\_

7) By firing workers involved in disputes \_\_\_\_\_

8) Not resolved \_\_\_\_\_

TOTAL: 100%

33. Major type of grievances:

1)

2)

3)

4)

5)

34. Total number of workers involved in all grievances: \_\_\_\_\_

CAUSES OF LABOR-MANAGEMENT DISPUTES

A number of variables which are considered to be the causes of labor-management disputes will follow. Please indicate the degree to which each variable caused disputes during 1980 between labor and management in your organization, by circling your answer.

|   | VERY INSIGNIFICANT      VERY SIGNIFICANT |   |   |   |   |   |
|---|--|---|---|---|---|---|
| 35. Wage level too low (compared to the average wages paid by similar firms in the market).   | 1  | 2 | 3 | 4 | 5 | 6 |
| 36. Wage increase insufficient (needed to match performance and perceived equity).            | 1  | 2 | 3 | 4 | 5 | 6 |
| 37. Inflation eroding wages and standards of living.  | 1  | 2 | 3 | 4 | 5 | 6 |
| 38. Your overtime payment compared to that of similar firms is lower.                         | 1  | 2 | 3 | 4 | 5 | 6 |
| 39. Hours worked are too long.  | 1  | 2 | 3 | 4 | 5 | 6 |
| 40. Paid holidays are not sufficient compared with other firms in the same market.            | 1  | 2 | 3 | 4 | 5 | 6 |
| 41. Medical insurance is inadequate.  | 1  | 2 | 3 | 4 | 5 | 6 |
| 42. Disability benefits inadequate in terms of availability and sufficiency.                  | 1  | 2 | 3 | 4 | 5 | 6 |
| 43. Right to unionize is limited.   | 1  | 2 | 3 | 4 | 5 | 6 |
| 44. Employer opposition to unionization is strong.  | 1  | 2 | 3 | 4 | 5 | 6 |
| 45. Grievance procedures are not available (or are too slow).                                 | 1  | 2 | 3 | 4 | 5 | 6 |
| 46. Union security (in terms of facilitation inflows of membership by employer) is uncertain. | 1  | 2 | 3 | 4 | 5 | 6 |
| 47. Too much employer interference in internal union affairs is alleged.                      | 1  | 2 | 3 | 4 | 5 | 6 |
| 48. Too much government interference in internal union affairs is claimed.                    | 1  | 2 | 3 | 4 | 5 | 6 |

VERY INSIGNIFICANT      VERY SIGNIFICANT

|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| 50. Class discrimination is too strong (this is related to discrimination between Jordanian and Palestinian workers). | 1 | 2 | 3 | 4 | 5 | 6 |
| 51. Worker level of education is inadequate.  | 1 | 2 | 3 | 4 | 5 | 6 |
| 52. Management level of education is inadequate.  | 1 | 2 | 3 | 4 | 5 | 6 |
| 53. Family and tribe (clan) protection to their members (in initiating dispute and through it) is very strong.        | 1 | 2 | 3 | 4 | 5 | 6 |
| 54. Differences between urban and rural workers (Bedouin and peasants) is very crucial.                               | 1 | 2 | 3 | 4 | 5 | 6 |
| 55. Nepotism in treatment and promotion by management is obvious.   | 1 | 2 | 3 | 4 | 5 | 6 |
| 56. Management prerogatives are strongly defended.  | 1 | 2 | 3 | 4 | 5 | 6 |
| 57. Supervisor treatment of his/her worker is unpleasant and arrogant.  | 1 | 2 | 3 | 4 | 5 | 6 |
| 58. Other:  |   |   |   |   |   |   |
| _____   | 1 | 2 | 3 | 4 | 5 | 6 |
| _____   | 1 | 2 | 3 | 4 | 5 | 6 |
| _____   | 1 | 2 | 3 | 4 | 5 | 6 |

EFFECTIVENESS OF DISPUTE SETTLEMENT SYSTEM

In my study I am also interested in the effectiveness of the labor-management dispute settlement process in Jordan. Based upon your experience and knowledge, please indicate the extent of your agreement with each of my statements below:

|  | <u>Strongly Disagree</u> | 1 | 2 | 3 | 4 | 5 | <u>Strongly Agree</u> |
|--|--------------------------|---|---|---|---|---|-----------------------|
| I. <u>Conciliation Officers:</u>                                     |                          |   |   |   |   |   |                       |
| 59. They are qualified in terms of <u>education</u> for their job.   | 1                        | 2 | 3 | 4 | 5 | 6 |                       |
| 60. They are qualified in terms of <u>experience</u> for their jobs. | 1                        | 2 | 3 | 4 | 5 | 6 |                       |

|   | <u>Strongly Disagree</u> |   |   | <u>Strongly Agree</u> |   |   |
|---|--------------------------|---|---|-----------------------|---|---|
| 61. Their paperwork and procedures are <u>not too complex</u> (easy to work with and understand).   | 1                        | 2 | 3 | 4                     | 5 | 6 |
| 62. You strongly feel that conciliation officers know their <u>jurisdiction</u> (i.e., what are their responsibilities and how much authority they have to help settle disputes). | 1                        | 2 | 3 | 4                     | 5 | 6 |
| 63. Conciliation officers are <u>fast to respond</u> when disputes arise.   | 1                        | 2 | 3 | 4                     | 5 | 6 |
| 64. They are <u>fast</u> in helping reach a settlement.   | 1                        | 2 | 3 | 4                     | 5 | 6 |
| 65. All in all, you feel that they try to be <u>fair and unbiased</u> to both sides.  | 1                        | 2 | 3 | 4                     | 5 | 6 |
| 66. While you never get everything you want, your firm is <u>satisfied</u> with their services.   | 1                        | 2 | 3 | 4                     | 5 | 6 |
| II. <u>The Conciliation Board(s)</u> :  |                          |   |   |                       |   |   |
| 67. Their members are qualified in terms of <u>education</u> for their job.   | 1                        | 2 | 3 | 4                     | 5 | 6 |
| 68. Their members are <u>qualified</u> in terms of experience for their job.  | 1                        | 2 | 3 | 4                     | 5 | 6 |
| 69. Their <u>paperwork</u> and <u>procedures</u> are not too complex (easy to work with and understand).  | 1                        | 2 | 3 | 4                     | 5 | 6 |
| 70. You strongly feel that the Board(s) knows their <u>jurisdiction</u> (i.e., what is their responsibility and how much authority they have to help settle disputes).            | 1                        | 2 | 3 | 4                     | 5 | 6 |
| 71. They are <u>fast</u> to respond when disputes arise.  | 1                        | 2 | 3 | 4                     | 5 | 6 |



|  | <u>Strongly Disagree</u> |   |   |   | <u>Strongly Agree</u> |   |
|--|--------------------------|---|---|---|-----------------------|---|
|  | 1                        | 2 | 3 | 4 | 5                     | 6 |
| 72. They are <u>fast</u> in helping reach a settlement.  | 1                        | 2 | 3 | 4 | 5                     | 6 |
| 73. All in all, you feel that the Board(s) tries to be <u>fair and unbiased</u> to both sides.   | 1                        | 2 | 3 | 4 | 5                     | 6 |
| 74. While you never get everything you want, your firm is <u>satisfied</u> with their services.  | 1                        | 2 | 3 | 4 | 5                     | 6 |
| III. <u>The Industrial Court</u>   |                          |   |   |   |                       |   |
| 75. Its judges are qualified in terms of <u>education</u> for their job.   | 1                        | 2 | 3 | 4 | 5                     | 6 |
| 76. Its judges are <u>qualified</u> in terms of experience for their job.  | 1                        | 2 | 3 | 4 | 5                     | 6 |
| 77. Its <u>paperwork and procedures</u> are not too complex (easy to work with and understand).  | 1                        | 2 | 3 | 4 | 5                     | 6 |
| 78. You strongly feel that the judges know their <u>jurisdiction</u> (i.e., what is their responsibility and how much authority they have to help settle disputes. | 1                        | 2 | 3 | 4 | 5                     | 6 |
| 79. The industrial court is <u>fast</u> to respond when disputes arise.  | 1                        | 2 | 3 | 4 | 5                     | 6 |
| 80. The industrial court is <u>fast</u> in helping reach a settlement.   | 1                        | 2 | 3 | 4 | 5                     | 6 |
| 81. All in all, you feel that they try to be <u>fair and unbiased</u> to both sides.   | 1                        | 2 | 3 | 4 | 5                     | 6 |
| 82. While you never get everything you want, your firm is <u>satisfied</u> with their services.  | 1                        | 2 | 3 | 4 | 5                     | 6 |
| 83. Please discuss any other factor(s) that you feel affects the effectiveness of the system:  |                          |   |   |   |                       |   |

84. Do you have any suggestions that may help in increasing the effectiveness of the Jordanian dispute settlement process:

Final Questions:

85. Given the nature of the relationship and the scope of objectives between labor and management, do you think that disputes are inevitable between them?

| <u>Strongly<br/>Disagree</u> | <u>Disagree</u> | <u>Slightly<br/>Disagree</u> | <u>Slightly<br/>Agree</u> | <u>Agree</u> | <u>Strongly<br/>Agree</u> |
|------------------------------|-----------------|------------------------------|---------------------------|--------------|---------------------------|
| 1                            | 2               | 3                            | 4                         | 5            | 6                         |

Why:

86. Through your experience and interaction with the formal system of dispute settlement, are you satisfied with the overall effectiveness of the system in solving labor-management disputes?

| <u>Very<br/>Dissatisfied</u> | <u>Dissatisfied</u> | <u>Slightly<br/>Dissatisfied</u> | <u>Slightly<br/>Satisfied</u> | <u>Satisfied</u> | <u>Very<br/>Satisfied</u> |
|------------------------------|---------------------|----------------------------------|-------------------------------|------------------|---------------------------|
| 1                            | 2                   | 3                                | 4                             | 5                | 6                         |

THANK YOU FOR YOUR COOPERATION

APPENDIX B

LIST OF THE VARIABLE LABELS AS SHOWN  
ON THE COMPUTER OUTPUT

V1 RESPONDENT POSITION  
V2 FIRM GEOGRAPHICAL LOCATION  
V3 FIRM CLASSIFICATION  
V4 RESPONDENT AGE  
V5 RESPONDENT EDUCATION  
V6 RESPONDENT TOTAL WORKING YEARS  
V7 RESPONDENT WORKING YEARS WITH FIRM  
V8 FIRM TOTAL ASSETS IN DOLLARS  
V9 NUMBER OF WORKERS IN THE FIRM  
V10 NUMBER OF UNIONIZED WORKERS IN FIRM

V11 NUMBER OF WORKERS LEFT FIRM IN 1980  
V12 NUMBER OF WORKERS QUIT FIRM IN 1980  
V13 NUMBER OF ABSENTEEISM DAYS LOST  
V14 NUMBER OF INEXCUSED ABSENTEEISM DAYS LOST  
V15 TOTAL SALARY INCREASE  
V16 EMPLOYEE SALARY INCREASE  
V17 WORKERS SALARY INCREASE  
V18 OCCURRENCE OF CONTRACT BARGAINING  
V19 DURATION OF CONTRACT BARGAINING  
V20 OCCURRENCE OF STRIKE

V21 DURATION OF STRIKE  
V22 NUMBER OF WORKERS INVOLVED IN STRIKE  
V23 HOW STRIKE WAS RESOLVED  
V24 KEY ISSUES OF STRIKE  
V25 OCCURRENCE OF WORK STOPPAGES  
V26 NUMBER OF WORK STOPPAGES OCCURRED  
V27 DURATION OF WORK STOPPAGES  
V28 NUMBER OF WORKERS INVOLVED IN STOPPAGES  
V29 HOW STOPPAGES ARE RESOLVED  
V30 KEY ISSUES OF STOPPAGES

V31 OCCURRENCE OF GRIEVANCES  
V32 NUMBER OF GRIEVANCES OCCURRED  
V33 NUMBER OF INDIVIDUAL GRIEVANCES OCCURRED  
V34 NUMBER OF GROUP GRIEVANCES OCCURRED  
V35 NUMBER OF WORKERS INVOLVED IN GRIEVANCES  
V36 GRIEVANCES SOLVED BY DIRECT NEGOTIATIONS  
V37 GRIEVANCES SOLVED BY VOLUNTARY MEDIATION  
V38 GRIEVANCES SOLVED BY CONCILIATION OFFICERS  
V39 GRIEVANCES SOLVED BY CONCILIATION BOARDS  
V40 GRIEVANCES SOLVED BY INDUSTRIAL COURTS

V41 GRIEVANCES SOLVED BY CIVIL COURTS  
V42 GRIEVANCES SOLVED BY FIRING WORKERS INVOLVED IN DISPUTES  
V43 GRIEVANCES NOT SOLVED  
V44 FIRST KEY ISSUE  
V45 SECOND KEY ISSUE  
V46 THIRD KEY ISSUE  
V47 FOURTH KEY ISSUE

V48 WAGE LEVEL TOO LOW  
 V49 WAGE INCREASE INSUFFICIENT  
 V50 INFLATION ERODES WAGES  
  
 V51 OVERTIME PAYMENT IS LOW  
 V52 WORK HOURS ARE TOO LONG  
 V53 PAID HOLIDAYS INSUFFICIENT  
 V54 MEDICAL INSURANCE INADEQUATE  
 V55 DISABILITY BENEFIT INADEQUATE  
 V56 RIGHT TO UNIONIZE IS LIMITED  
 V57 EMPLOYER OPPOSITION TO UNIONIZATION IS STRONG  
 V58 GRIEVANCE PROCEDURES ARE NOT AVAILABLE OR SLOW  
 V59 UNION SECURITY IS UNCERTAIN  
 V60 EMPLOYER INTERFERENCE IN UNION AFFAIRS IS STRONG  
  
 V61 GOVERNMENT INTERFERENCE IN UNION AFFAIRS IS STRONG  
 V62 POLITICAL AFFILIATION IS FAVORED  
 V63 CLASS DISCRIMINATION IS STRONG  
 V64 WORKERS EDUCATION IS INADEQUATE  
 V65 MANAGEMENT EDUCATION IS INADEQUATE  
 V66 FAMILY & TRIBE PROTECTION IS STRONG  
 V67 URBAN & RURAL WORKERS DIFFERENCES ARE VERY CRUCIAL  
 V68 NEPOTISM IN TREATMENT & PROMOTION  
 V69 MANAGEMENT PREROGATIVE IS STRONGLY DEFENDED  
 V70 UNPLEASANT SUPERVISORS TREATMENT OF WORKERS  
  
 V71 OTHER VARIABLES CAUSING DISPUTES  
 V72 CONCILIATION OFFICERS ARE EDUCATIONALLY QUALIFIED  
 V73 CONCILIATION OFFICERS HAVE ENOUGH EXPERIENCE  
 V74 CONCILIATION OFFICERS PAPER WORK IS NOT COMPLEX  
 V75 CONCILIATION OFFICERS KNOW THEIR JURISDICTION  
 V76 CONCILIATION OFFICERS ARE FAST TO RESPOND  
 V77 CONCILIATION OFFICERS FAST IN REACHING SETTLEMENT  
 V78 CONCILIATION OFFICERS FAIR & UNBIASED  
 V79 FIRM SATISFACTION WITH THEIR SERVICES  
 V80 CONCILIATION BOARDS ARE EDUCATIONALLY QUALIFIED  
  
 V81 CONCILIATION BOARDS HAVE ENOUGH EXPERIENCE  
 V82 CONCILIATION BOARDS PAPER WORK IS NOT COMPLEX  
 V83 CONCILIATION BOARDS KNOW THEIR JURISDICTION  
 V84 CONCILIATION BOARDS ARE FAST TO RESPOND  
 V85 CONCILIATION BOARDS FAST IN REACHING SETTLEMENT  
 V86 CONCILIATION BOARDS FAIR & UNBIASED  
 V87 FIRM SATISFACTION WITH THEIR SERVICES  
 V88 INDUSTRIAL COURT JUDGES ARE EDUCATIONALLY QUALIFIED  
 V89 INDUSTRIAL COURT JUDGES HAVE ENOUGH EXPERIENCE  
 V90 INDUSTRIAL COURT JUDGES PAPER WORK IS NOT COMPLEX

V91 INDUSTRIAL COURT JUDGES KNOW THEIR JURISDICTION  
V92 INDUSTRIAL COURT JUDGES ARE FAST TO RESPOND  
V93 INDUSTRIAL COURT JUDGES ARE FAST IN REACHING SETTLEMENT  
V94 INDUSTRIAL COURT JUDGES ARE FAIR & UNBIASED  
V95 FIRM SATISFACTION WITH THEIR SERVICES  
V96 OTHER VARIABLES AFFECTING EFFECTIVENESS  
V97 SUGGESTIONS TO INCREASE EFFECTIVENESS  
V98 INEVITABILITY OF DISPUTES BETWEEN L & M  
V99 REASONS FOR THIS INEVITABILITY  
V100 OVERALL SATISFACTION WITH THE FORMAL SYSTEM OF DISPUTE SETTLEMENT  
V101 INFLATION INCREASE IN 1979  
V102 INFLATION INCREASE IN 1980  
V103 FIRM UNIONIZATION  
V104 CURRENT EMPLOY. TO TOTAL EMPLOY.  
V105 UNIONIZED WORKERS TO TOTAL WORKERS  
V106 OVERALL TURNOVER RATE  
V107 QUITTING TURNOVER RATE  
V108 OVERALL ABSENTEEISM RATE  
V109 INEXCUSED ABSENTEEISM RATE  
V110 TOTAL SALARY INCREASE TO 79 INFLATION  
V111 TOTAL SALARY INCREASE TO 80 INFLATION  
V112 DOLLAR ASSET PER WORKER  
V113 TOTAL WORKERS INVOLVED IN DISPUTES  
V114 EMPLOYEE INVOLVEMENT RATIO  
V115 NUMBER OF DISPUTES OCCURRED  
V116 GROUP GRIEVANCES TO TOTAL GRIEVANCES  
V117 GRIEVANCES SOLVED BY DIRECT NEGOTIATION TO TOTAL  
V118 GRIEVANCES SOLVED BY DIRECT NEGOTIATION AND VOLUNTARY MEDIATION TO TOTAL  
V119 GRIEVANCES SOLVED BY V. MED. TO TOTAL  
V120 GRIEVANCES SOLVED BY FORMAL SYSTEM TO TOTAL  
  
V121 EMPLOYEE SALARY INCREASE TO 79 INFLATION  
V122 EMPLOYEE SALARY INCREASE TO 80 INFLATION  
V123 WORKERS WAGE INCREASE TO 79 INFLATION  
V124 WORKERS WAGE INCREASE TO 80 INFLATION  
V125 MAN DAYS LOST DUE TO DISPUTES  
V126 EMPLOYEE LOSS RATIO  
V127 GRIEVANCES SOLVED TO TOTAL  
V128 INDIVIDUAL GRIEVANCES TO TOTAL

APPENDIX C  
LETTER OF RECOMMENDATION WRITTEN BY THE  
DEAN OF THE FACULTY OF ECONOMICS  
AND COMMERCE,  
UNIVERSITY OF JORDAN

The University of Jordan  
Faculty of Economics and Commerce  
Amman, Jordan

Number: 1/7m/2556  
Date: January 10, 1981

To Whom It May Concern: \*

Mr. Muhsen Makhamreh is collecting data about labor-management disputes in the private sector in Jordan for his doctoral dissertation at Ohio State University in the U.S.

I request that you kindly facilitate Mr. Makhamreh's efforts and project by offering him every possible assistance necessary for the completion of his study, knowing that all the data collected will be kept confidential and the outcomes of this study will serve the interest of both labor and management in this country.

Thank you for your assistance,

Dr. Wadie Sharaiha, Dean

\* Letter translated from Arabic to English by the writer.



APPENDIX D  
LETTER OF RECOMMENDATION WRITTEN BY  
JORDAN'S SECRETARY OF LABOR

The Hasemite Kingdom of Jordan  
Ministry of Labour  
Amman, Jordan  
P.O. Box 8160

Number: 7/1/170  
Date: January 12, 1981

To Whom It May Concern:\*

Mr. Muhsen Makhamreh is preparing his doctoral dissertation about the determinants of labor-management disputes and their settlement in the private sector in Jordan. This subject is of extreme importance to the labor-management situation in the country at this stage of its strides to advance economic development.

I request you to kindly offer Mr. Makhamreh every possible assistance that he needs to conduct his research, knowing that all the information obtained will be used for research purposes only.

Thank you for your cooperation,

Secretary of Labor,

Dr. Jawad El. Anani

\* Letter translated from Arabic to English by the writer.

APPENDIX E

LETTER OF RECOMMENDATION WRITTEN BY THE  
SECRETARY GENERAL OF THE GENERAL  
UNION OF LABOR ORGANIZATIONS,  
JORDAN

The General Union of Labor Organizations  
Amman, Jordan  
P.O. Box 1065

Date: January 11, 1981

To All Fellow Unionized Labor:\*

Mr. Muhsen Makhamreh is collecting data about the determinants of labor-management disputes and their settlement in the private sector in Jordan. The outcomes of this research will be of great help in affecting, positively, the labor situation in this country.

The General Union requests you to facilitate Mr. Makhamreh's research by offering him every possible assistance available.

Thank you very much for your help,

Mr. Shaher Al-Majali, Secretary General

\* Letter translated from Arabic to English by the writer.

APPENDIX F

NAMES OF PERSONS IN JORDAN WHO PARTICIPATED  
IN THE MAJOR INTERVIEWS FOR THIS STUDY

1. Dr. Jawand El-Anani, Secretary of Labor.
2. Dr. Tayseer Abd-Eljaber, Assistant Secretary of Labor.
3. Mr. Bahjat Odeh, Head of the Industrial Relations Department, the Ministry of Labor.
4. Mr. Samir Fakhoury, Head of the Conciliation Officers, the Ministry of Labor.
5. Mr. Mohamad Abd-Elhadi, Head of the Research Department, the Ministry of Labor.
6. Mr. Shaher El-Majali, Secretary General, The General Union of Labor Organizations.
7. Mr. Khalil Abu Kurmah, Assistant Secretary General, The General Union of Labor Organizations.
8. Mr. Mohamad Jawhar, Ex-Secretary General of The General Union of Labor Organizations.
9. Mr. Hamad El-Farhan, Chairman of the Board of Directors, The Jordan Shipping Company.
10. Mr. Jawdet Shashaah, Chairman of the Board of Directors, The Cairo-Amman Bank.
11. Mr. Zeid Shashaah, Chairman of the Board of Directors, The Jordan Insurance Company, The Overall Manufacturing Company.
12. Dr. Wadie Sharaiha, Dean of the Faculty of Economics and Commerce, The University of Jordan.
13. Dr. Mouhamad Malallah, Director of the Jordan Institute of Management.
14. Dr. Bassam El-Saket, Director of the Economic Department, The Royal Scientific Society, and Economic Advisor to Crown Prince Hassan.
15. Dr. Hashem Sabagh, Director of the Jordan Financial Market.
16. Dr. Adeeb Hadad, Economic Researcher, The Central Bank of Jordan.
17. Dr. Nadem Aref, Professor of Law, The University of Jordan.
18. Dr. Hamzeh Hadad, Professor of Law, The University of Jordan.
19. Dr. Adnan El-Bakeit, Professor of History, The University of Jordan.
20. Miss Lila El-Saket, Labor Researcher, The National Planning Council.
21. Mr. Isam El-Ajlouni, Mayor of Amman and ex-Secretary of Labor.

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