Institutionalization process within organizations:

A multilevel analysis of two functional activities of airlines in a

developing country

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ABSTRACT

Institutionalization Process within Organizations: A Multilevel Analysis of Two Functional Activities of Airlines in a Developing Country

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Organizations are embedded in a multilevel institutional environment where institutions at each specific level do not necessarily have uniform impact on various functions of organizations. In other words, institutionalization should not be viewed as a macro process that only affects the overall form or behavior of an organization as a whole. It is a process that has various kinds of influences on different parts of an organization. Similarly, different parts of organizations may change institutional norms differently. These are some of the promising areas found in a systematic review of the last twenty years of empirical research in the institutional theory literature. This review also indicates that markets, industries, organizations, and official institutions at national, regional, and local levels have mostly attracted researchers' attention in the last twenty years. However, this may not be the case in the twenty-first century since global institutions and global norms have gained more power and are becoming the main driving force even behind the norms of national and regional institutions. More than 95% of the empirical studies have used samples from developed nations. This is while institutional theory, as a natural/open system perspective at the ecological level of analysis, is known as one of the best theoretical frameworks for understanding organizations and their management activities in developing countries. These promising areas are explored using

samples from a developing context. The perceptions of top executives, managers, and experts of the Iranian air transportation industry are collected through interviews and survey questionnaires to examine these issues. It is claimed that as global arrangements and norms cover a broader scope of organizations and their activities, there will be less chance for national, regional, and local institutional pressures to influence them. Functional activities or strategies of the major players of an industry may change the norms of related national or local institutions.

Dedication and Acknowledgements

This study is dedicated to my wife whose patience and drive have made me successful in all my graduate studies.

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Introduction

As business activities become more international and geographical borders become less relevant, closer and more frequent interactions among organizations, firms, industries and institutions occur both within and between countries (Lindholm, 2000; Morosini, et al, 1998). Understanding how organizations adapt or adjust to or resist today's changing environment requires a close analysis of both internal and external factors. Therefore, viewing organizations as open systems, it is important to look both at their contexts as well as their component units. The importance of these two elements varies according to the nature of the industry and the macro-environmental forces within the context of the study. Most of the existing theoretical and empirical studies on organizations and management activities have been developed using samples from industrialized countries or organizations established in these types of contexts although more than 70% of the world population lives in the developing countries and most of the world's natural resources and future market opportunities are located in these nations. Both researchers and practitioners have tried to apply different theoretical frameworks to explain organizations and their activities in developing countries, but they have achieved very limited or even no success.

Kiggundu et al (1983) question the applicability of western theories in developing contexts, particularly given the radically different macro environments. Researchers have questioned the applicability of western theories on organizations and their management activities in developing countries (e.g. Clark, 1998; Gopinath, 1998; James, 1997). North (1994) and Olson (1992) argue that the successful national business systems of

industrialized countries may not be appropriate in other parts of the world. Sullivan and Weaver (2000) argue one cannot assume that theories and practices conceived in one culture are readily translated to and implemented in other cultures. Scholars also have realized the limitations of the applicability and universality of management and organization theories across cultures (e.g. Adler, 1997; Hofstede, 1980). But, is it really the origin of a theory that makes it inapplicable in other contexts? Is there any theory that can cross the cultural borders of other nations? These are the type of questions that have been on the agenda of researchers for at least half a century now. Searching for theoretical frameworks that can properly explain organizations and their management systems in developing countries has also been an on going process among researchers and practitioners.

Comparing the most common political, economic, and cultural dimensions of developing nations with the characteristics of various perspectives, one may conclude that natural perspectives at an ecological level of analysis that view organizations as open systems (as described by Scott, 1992) can most effectively explain organizations and their management systems in developing countries. One of the theoretical frameworks of this group that has recently become the centre of attention among researchers of this field is the institutional theory. It is argued that despite the fact that institutional theory is a western theory, it can easily cross cultural borders and effectively explain the behaviours of organizations in various nations including developing countries. The present study, as empirical evidence, demonstrates that a western theory can not only pass the borders of developing nations but can also fit with their environments and effectively explores their social phenomena.

For the last three decades, institutional theory has been used extensively to explore the forms and structures of organizations (Fligstein, 1991; Meyer, 1977; Scott, 1995; Tolbert, 1985). Researchers have tried to explain how the conformity of organizations to institutional norms has created isomorphic behaviours in each institutional environment (DiMaggio and Powell, 1991). Researchers in the field of management and strategy have recently become more interested in applying institutional theory to explain some of the managerial behaviours of organizations (Scott, 1995) such as their strategy for entering international markets (Davis et al., 2000). However, there are a limited number of systematic studies that have examined the application of institutional theory in the field of strategic management, especially in a developing context. Although one of the contributions of the present study is identifying institutional theory as an appropriate theoretical framework for understanding organizations in developing countries, more specifically, it demonstrates the power of institutional theory in describing organizations' strategies, particularly, their functional strategies.

A systematic review of empirical studies in the institutional theory literature, presented in the first part of chapter two of this study, indicates that there are at least four promising areas in this field that need more researchers' attention. The first one is the importance of multilevel nature of institutionalization process. Most of the existing empirical studies focus on a single level of institutions and its effects on organizations. Organizations reside in multi-layer institutional environments. These different levels of institutions are interrelated and affect organizations' activities directly or through their interactions with other levels of institutions. The second promising area is how possible it is to explain functional strategies of organizations using institutional theory.

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Historically organizational forms and structures have been the main focus of the empirical studies in this literature. The third area is exploring the reciprocal relationships between institutions and organizations and/or among different levels of institutions in a single study. Most empirical works look at the effect of institutions on organizations. Finally, researchers have paid less attention to the applicability of institutional theory in describing organizations and their activities in a developing context. Although there are studies on reciprocal relationships between institutions and organizational forms (Barley et al., 1997; Roberts, 1997) as well as the cross-national effects on these relationships (e. g. Cheng et al., 1998; Kostova, 1999; Orru et al., 1991), one can rarely find a single study that covers all these issues together.

The above-mentioned four promising areas are in fact used to shape the main model of the present study. The reciprocal relationships between two levels of institutions and two different functions of organizations of a single industry in a developing country are considered in this model. It is argued that the relationship between institutions and business firms vary among different levels of institutions, and the impacts of institutions on business firms vary across their functional activities. Thus, this study should be able to address questions such as:

- What levels of institutions exert pressure on business firms in a developing country?

- Do institutional pressures vary across different functions of business firms in a developing nation?

- How does the reciprocal relationship between institutions and business firms vary across different functions of these firms in a developing country?

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- Do institutions at different levels influence each other?

- If they do, which level has the dominant influence in a developing nation?

The operational and commercial activities of Iranian airlines are taken as two different functions of business firms of a developing country in this study. The global airline industry and the related Iranian national institutions are also the two levels of institutions selected to empirically test the suggested model of this study. The whole study is presented in six chapters. The first chapter explains how institutional theory has been selected as one of the most appropriate theoretical frameworks for studying organizations in developing countries. The second chapter provides a brief history of the Iranian national institutional environment and global airline industry. An overall view about the nature of these two different institutional spheres can be helpful in understanding more about the institutional continuity and/or the frequency and roots of the institutional change of these institutional environments. Chapter three has two parts; the first covers a systematic review of empirical works in the institutional theory literature and offers the most important promising areas of this literature. The second part describes details of the research model, the related research questions, and hypotheses of this study. It should be noted that the main model of this study is applied in a developing context to show the applicability of a western theory in understanding organizations and management systems of a developing country.

The sampling method and the content and procedures used for interviews and survey questionnaires, two cross-validating data collection methods, are described in detail in chapter four. This is one of the rare studies in which almost all executives and top decision makers or influential individuals of a single industry in a developing country

are interviewed. It is also worthwhile to mention that the data collection and data analysis methods of this study are selected based on the systematic review of empirical works in the institutional theory literature that is presented in chapter two and on the experience of researchers in this field who have performed empirical works in the developing countries. The outcomes of interviews and survey questionnaires and their analysis are explored in chapter five. Finally, based on the empirical evidences and supported hypotheses, major findings with respect to the research questions are discussed in chapter six. This chapter also provide some of the main concluding remarks on the implications of this study both for institutional theory and for studies on developing countries.

Chapter One

Analysis of Different Perspectives
and
Developing Countries

The main objective of this chapter is to assess some of the main perspectives of organizational studies and propose the most appropriate one(s) for studying the activities of organizations in "developing nations". The main idea is to look for a type of theory which has strongest fit with the overall situation in developing countries. For that reason, some of the main dimensions of the general business environment will be explored in the first part of the chapter. This will provide a common base for assessing different perspectives. Various approaches for organizational analysis will be elaborated by reviewing the existing literature of organization studies. A matrix built on Scott's (1992) rational/natural framework is used to compare the characteristics of different theories and the environmental dimensions of developing nations and to propose the most appropriate perspective(s). In this comparison process, five propositions are introduced at the end of this chapter. The last proposition is to be examined in this empirical.

1.1) National Environment in Developing Countries

Historically, countries have been segregated based on their economic condition using indicators such as GNP or GDP. There are many types of clusters for countries such as industrialized, developed, advanced developing, newly industrialized, developing, less developed, and underdeveloped. Researchers as well as institutions such as the United Nations and the World Bank have used various combinations of these classifications. Developed (industrialized) and developing countries are the two most accepted clusters among scholars and international institutions. However, developing countries are not nearly as homogenous as industrialized countries (Kugrman et al., 1994) and may vary in many respects. For example, in terms of industrialization, they may be clustered in three groups

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(Kim, 1998) as shown in Table 1.1. In spite of all the differences among these nations, they have common characteristics that have separated them from developed countries. It should be noted that social phenomena are perceived differently both within and between nations, and the commonalities identified here may not be taken as a source for making generalized rules. The common traits of developing nations discussed here serves only to separate them from developed countries. The objective is to create a common "space" in order to provide a better understanding about certain social constructs in developing countries, particularly for organizations and their management activities.

Table 1.1 Examples of Developing countries (adapted from Kim, 1998)

Newly industrialized	Second-tier newly industrialized	Late developing countries
Singapore	Indonesia	Bangladesh
Taiwan	Malaysia	Sri Lanka
Hong Kong	Thailand	Zimbabwe
Korea	Coastal China	Philippine
Brazil		
Argentina		

1.1.1) Regulatory and economic situations

Uncertainty is the cornerstone of regulatory and economic situations in most of the developing countries. For example, environmental regulations in developing countries are currently one of the most unpredictable factors facing potential investors (Walde et al., 1996). As noted by Verhoosel, (1998), "Not only has environmental legislation in

these countries changed rapidly and frequently in the last decade, it has also had a considerable interpretative margin and been enforced with varying degrees of zeal" (1998: 452). Commercial domination by powerful families, political groups, religious groups and/or business groups can impose or override institutional rules and regulations, based on their idiosyncratic interpretations and interests, making the regulatory regime even less predictable. Most of these countries are bearing significant costs for this regulatory uncertainty.

Besides these regulatory uncertainties, most developing countries have historical economic problems. Although global GDP has risen from $3 trillion to $30 trillion over the last 50 years, the wealth has been distributed unevenly, and the disparities between rich and poor have grown (Martinez, 1999). Fully 1.3 billion people in the developing world live on a little less than a dollar a day. With the exception of a few emerging economies, the majority in Africa, South Asia, and Latin America have experienced economic decline during the past 30 years (Garten, 1997). Developing countries have gone on a "foreign borrowing binge"; and the biggest part of the debt in developing countries is either public debt or public guaranteed debt (Backer, 1998).

These socioeconomic and regulatory uncertainties have impacted the nature and operation of organizations in developing countries. For example, the role of governments in building trust and a predictable environment has become crucial in formulating strategies for commercial enterprise. The public sector often plays a dominant role as the provider of basic commercial goods and services. Infrastructure facilities have been traditionally constructed and operated by governments due to their public sensitivity and interests. These infrastructure projects are one of the vital issues of the development

process in developing countries and provide an appropriate and effective environment for private sector participation (Park, 1998). Countries such as Malaysia and Indonesia, both of which have notable results in private infrastructure development, have downsized their private infrastructure programs due to recent financial and political crises. In many parts of Asia and in Eastern Europe, governments and other types of non-market institutions have traditionally been leading activities of commercial enterprise (Besley, 1995). Intricate relations between business and government appear to be the norm throughout the developing world (Khanna, et al., 1997), and as long as government officials have this discretion, commercial enterprises often end up working with them.

Business groups, defined as a collection of firms bound together in some formal and/or informal way, play a vital role in economic and social activities in most developing countries. For example, the *chaebol* in South Korea, the *grupos economicos* in Latin America, and *family businesses* in Indonesia, Taiwan and Pakistan all have a dominating presence in the decision-making processes of their countries. They may consist of diverse enterprises or coalitions of wealthy business people and families. Loyalty and trust are key elements of these business groups (Strachan, 1976). In some developing countries, the association of such business groups functions to infuse honesty and trustworthy competence on the part of high-level managers (Leff, 1978).

Business groups have significant social and economic power, which can be translated into political and capital power. The nature of their relationship with government has become crucial for both sides. Governments in most of the developing countries actively participate in the public and private sectors of the economy. In South Korea, state policies support business concentration (Sakong, 1980), while in Taiwan, the

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government owns and manages a range of public enterprises that provide import substitute commodities. In almost all developing countries, governments impose import controls on selected products and promote industrial development in export products through special tax incentive programs (Hamilton & Biggart, 1992). There are cases where business groups evolve independent of state influences or with an identity quite distinct from that of political groups (Camp, 1989). There are also cases where key government actors themselves form their own firms and business groups, such as the Suharto family in Indonesia. Policy distortion (as described by Ghemawat & Khanna, 1998) or social and cultural factors are the main reasons for the existence of business groups in developing countries. As these business groups become parts of the social and cultural fabric of the developing countries, their longevity and durability increase.

Developing countries can be characterized as having high degrees of environmental uncertainty and turbulence; a centralized control of the economic and political systems; relatively weak and unstable legal systems; underdeveloped infrastructures; and a lack of developed financial service institutions, such as stock markets and investment banking.

1.1.2) Cultural dimensions

The movements toward internationalization in the last three decades and globalization in the recent decade have brought more attention to the characteristics and effects of culture on management theories. There are two main theoretical approaches in cross-cultural management literature for describing the relationship between culture and management systems. The first argues that the main reason for differences in management activities is not cultural bias, but rather the effects of a varied and turbulent

socioeconomic environment in less developed and poor countries (Austin, 1990). A larger and second group of researchers argue that countries' differences on the value dimension scales are sharper than the countries' differences in management activities. This means values are approximately related to the country and that the influence of a country on management style arises through the values in which managers are socialized (e.g. Morris et al., 1998). This later perspective, that organization and management theories are culturally bound and that there is no such thing as a universal theory of management (Hofstede, 1993) seems to be widely accepted among researchers in this field. National culture is a major source of differences between developed and developing countries' organizations and their management activities (Hofstede, 1980). Specific examples of these differences have been demonstrated by Pelled and Xin (2000), Whitley (2000) and Camina (2000), among others.

One of the extensively used frameworks for cultural differences is Hofstede's (1980) five-dimensional model. Based on this framework, people in most of the developing countries accept the unequal distribution of power within institutions and organizations, creating relatively high degree of power distance (Jaeger, 1990). People in these countries are relation oriented and caring for others is more important than performance or acquisition of goods or money. This is labelled as a low degree of masculinity in Hofstede's cultural dimensions. High degrees of uncertainty in these societies have created a sense of continually being threatened by uncertain and ambiguous situational factors. This has created a behavioural pattern of avoiding risks and keeping away from sources of uncertainty and is defined as uncertainty avoidance (Hofstede 1997). Uncertainty avoidance varies both within and between developed and

developing nations. However, most developing countries have a higher degree of uncertainty avoidance (Jaeger 1990) than do developed countries. This can be seen by looking at the level of corruption in developing countries. A survey of senior officials from over 60 developing countries 'ranked public sector corruption as the most severe impediment to development and growth in these countries' (Gray et al. 1998). Getz and Volkema (2001) and Husted (1999) agree that a high level of corruption is significantly related to a low level of economic development and a high degree of uncertainty avoidance. This may be one of the reasons why organizations in developing countries strongly resist any types of change in their managerial worldview and organizational structures resulting in a reactive survival strategy. Finally, for people in developing countries, context plays an important role in determining an individual's perception, attribution, and behaviour. In many developing countries, traditional beliefs indicate that causality and control of outcomes are external to the individual, and cognitive associations to events may not have much logical or cause-effect relationship.

Although cultural dimensions vary both within and between nations, there seems to be some commonalities among developing countries. Those most often identified are high power-distance, high uncertainty avoidance, low individualism, and harmony with nature. Some of the common dimensions of developing contexts can be summarized as follows:

- Weak and ambiguous regulatory regimes (Walde et al. 1996; Verhoosel 1998)

- Powerful business families or groups (Ghemawat & Khanna 1998)

- Institutional regimes "bending" to wishes of powerful groups (Camp 1989)

- Wide wealth differences within the population (Garten 1997)

- A public sector central to provision of basic necessities(Besley 1995)

- Intricate interrelations between public and private sector (Khanna, et al. 1997)

- A high degree of environmental uncertainty (Seven et al. 1993; Dani 1991)

- Centralized control of economic and political system (Ramamurti 1999)

- A weak legal system (Verhoosel 1998)

- An underdeveloped infrastructure (Park 1998)

- An underdeveloped financial sector (Smoke 1999)

- Powerful informal organizations, such as guanxi or inhawa (Child 1994;
  Peng & Luo 2000)

1.2) Organizations in Developing Countries

1.2.1) Overview of Organizational Studies

Organizations, as one of the many types of social units, can be seen as collections of individual efforts that are coordinated to achieve things that could not be achieved through individual actions alone (Pfeffer and Salancik, 1978). Organizations and their behaviours have been studied in different fields of social science such as psychology (Markus & Zajonc, 1985), sociology (Burrell and Morgan, 1979; Durkheim, 1949; Weber, 1947), political science (Cyert & March, 1963; Simon, 1957), and economics (Dosi, 1995; Eisenhardt, 1989; Jensen & Meckling, 1976). Commercial enterprises are a specific type of organization, existing to mobilize economic resources to provide goods or services. An analysis of commercial organizations includes aspects such as performance, efficiency, effectiveness, size and other similar factors. Commercial enterprises have also been analyzed by looking at the outcomes of the interactions within their agents and

between these agents and their external environment, including more complex assessments, such as networks, groups, leadership and organizational culture (e.g. Burt, 1992; House & Baetz, 1979; Pfeffer, 1997; O'Reilly et al., 1996).

Burrell and Morgan (1979) have grouped different perspectives of organizational analysis in four worldviews: functionalist, interpretive, radical humanist, and radical structuralist based on their objectivity/subjectivity and regulation/radical change dimensions. Scott (1992) clustered different theories of organizational studies in a rational/natural framework. This has been reconfigured in a matrix form as shown in Figure 1.1 to present four distinctive groups of perspectives. The first dimension of this matrix classifies perspectives as rational and natural, and the second classifies organizations as closed or open systems. The rational perspective assumes goal specificity and formal structure, while the natural perspective assumes complex goals and informal structure. The model also includes three levels of analysis: individual (L1), structural (L2), and ecological (L3). The L1 level emphasizes the psychological contract between an individual and the organization, the L2 level stresses structural features and social processes within an organization, and the L3 level addresses the relationship between organizations or classes of organizations and the environment. Although the L3 level of analysis addresses relationship between organizations or class of organizations and the environment, it, like levels L1 and L2, has an underlying assumption of well-defined individual roles and responsibilities.

1.2.2) Organizations from Rational System Perspectives

Based on the rational (objective) system perspectives, organizations are seen as technical and efficient instruments or means with formalized and consciously designed structures; in other words, organizations are means to achieve specific ends (Scott, 1992). The focus of rational perspectives is on efficiency, equilibrium, bureaucracy, specialization and economic goals. According to these perspectives, individuals create social structures to support the collaborative pursuit of specified goals (Scott, 1992). Issues involving ownership and control, firms' relationships and competition, and strategy and structure are among their main concerns. For example, the basic assumption of economic models as one of the rational perspectives is that any social arrangement is designed to achieve efficiency. Adherents believe that the convergence of organizational forms occurs when firms are faced with similar constraints in their markets (Jensen, 1989). Economists have provided new economic theories of the firm based on the Coase's (1937) transaction cost theory and the "satisficing" concept introduced by Simon (1957) and March & Simon (1958). It means bounded rationality is one of the essential elements of economic theories of the firm. Thus, those organizations that realize this limitation of human rationality and the importance of information in their decisions and actions are more efficient and have more capability to survive. Since governance and its related costs are the bases of economic theories of the firms, they view organizations as governance structures to economize transaction costs (Williamson 1988). Based on transactional costs theory, market and hierarchies are alternative instruments for completing a set of transactions (Williamson, 1975). It is believed that almost every strategic move and/or behaviour that

FIGURE 1.1

Rational/Natural matrix of theories on organization

Rational (Goal Specificity, Formal Structure)	**Natural** (Goal Complexity, Informal Structure)
Type I **Closed System** (No or minimal interaction between organization and external environment) **Early managerial theories based on individual responsibility and efficiency** Examples by level ⎧ L1: Scientific management ⎩ L2: Administrative management, Bureaucratic theory	**Type II** **Closed System** (No or minimal interaction between organization and external environment) **Contemporary managerial theories based on communitarianism and equity** Examples by level ⎧ L1: Human relation ⎨ L2: Human relation, ⎩ Cooperative system
Type III **Open System** (Many interactions between organization and external environment) **Contemporary managerial theories based on individual responsibility and efficiency** Examples by level ⎧ L1: Bounded rationality ⎨ L2: Contingency theory, ⎪ Comparative structural analysis ⎩ L3: Transaction costs theory	**Type IV** **Open System** (Many interactions between organization and external environment) **Contemporary managerial theories based on communitarianism and equity** Examples by level ⎧ L1: Social organizing, Social interaction ⎨ L2: Socio-technical systems, Strategic contingency ⎩ L3: Institutional theory, Population ecology, Marxist theory

Note: L1= Individual level of analysis, L2= Structural level of analysis, L3: Ecological level of analysis.

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happens within and/or between organizations follows this contractual cost equation (Williamson, 1991a). This means that organizational forms and coalitions such as vertical integrations, multidivisional forms, strategic alliances, and networks are created because of specific economic transactions.

The agency theory, another example of the economic approach, views all social relations as a set of economic contracts and interactions between two groups of individuals (principals and agents). This means a firm is created by various contracts between principals and agents. It "has no power of fiat, no authority, no disciplinary action any different in the slightest degree from ordinary market contracting between two people" (Alchian & Demsetz, 1972). A firm is a system of property rights that defines a set of contractual relationships between agents and principals (Fama and Jensen, 1983a,b). It is the monitoring and structuring costs of these contracts (agency costs) that describe various forms of property rights or firms. For example, agency theorists claim that separation of ownership and control is an efficient way to keep agents working together with lower agency costs. This means the whole purpose of theses contracts is to increase efficiency by lowering costs. Therefore, from an economist's point of view, organizations are aggregations of individual preferences and actions; they are contractual relationships (Jensen & Meckling, 1976) or a continuation of market relationships through other means (Williamson, 1991b). Economic theories such as agency theory, transaction cost theory and human capital theory are imported and used most frequently in organizational theories (Pfeffer, 1997).

Based on strategic contingency theories as another example of rational perspectives (Donaldson, 1985, 1995; Lawrence & Lorsch, 1967), issues involving the environment,

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technology and competition are deterministic and virtually dictate what organizations must do. According to these perspectives rational actors can perceive the changes in their external world and would have the power to respond and act properly to protect their organizations. The relationship between environmental conditions (stable or unstable) and the type of organizational structure (mechanistic or organic) is one of the well-known applications of contingency theories in the organizational literature (e.g. Burns and Stalker, 1961; Woodward, 1965). This is in line with the functionalist paradigm in which "[the] organization is seen as an aspect of a wider societal system that serves the interests of its members. Functionalist theory has seen the problem of organization as synonymous with the problem of efficiency and more recently, of effectiveness" (Morgan, 1990).

Most of the studies using rational perspectives, take one of two approaches: they either view organizational characteristics as a context (environment) concerning individual roles and behaviour in organizations or they consider structural features and social processes as their major concerns in characterizing organizations. The latter approach considers components at the organizational level, such as hierarchy, communication networks, and specializations to describe organizations' activities. There are a few theories such as Williamson's (1975) transactional cost theory that focus on organizations as collective actors and consider rational relationships among organizations and their environment. In other words there are exceptional theories among rational perspectives that have used an ecological level of analysis rather than an individual or structural level of analysis (Scott, 1992). At the ecological level of analysis the main concern is an organization or a class of organizations, its macro-environment (market), its rational behaviour and the cause-effect relationship between them.

The focus on efficiency and effectiveness has made the rational (objective) perspectives the dominant approach among US business scholars. This is an idiosyncratic approach, limiting our understanding of organizations and commercial enterprises in developing nations. The matrix shown in Figure 1.1 is used to interpret organizations and commercial enterprises and their activities in developing countries. The two dimensions and three levels of analysis of this framework fit with most theories and perspectives in organization studies. Therefore, by considering some of the common characteristics of developing nations, one can assess the effectiveness of each classification of theories presented in this matrix for the better understanding of organizations and their management activities in developing countries.

1.2.3) Organizations in developing countries from Rational System Perspectives

Rational theories have been used in studies on organizations and their management activities at different levels in developing countries: Thomas and Mueller (2000), Griffith, Hu and Ryans (2000) and Ralston et al (1997) at the individual level of analysis; Evans et al. (1999), Goldsmith (1996), and Lindholm (2000) at the structural level of analysis; Chang et al. (1988), Jorgensen et al. (1986), and Shin et al. (1997) at the ecological level of analysis. For example, Evans, et al. (1999) claim that the economic success and growth in developing countries is associated with state bureaucracies; Chang et al. (1988) use the transactional cost theory to show how group-affiliated firms affect superior economic performance in Korean firms. However, the appropriateness of these theories in providing a clear understanding of organizations' activities in developing countries is questionable, because the underlying assumptions of rational theories are

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specific to western developed economies. In this study, three specific assumptions underlying rational theories are examined: 1) bounded rationality, 2) goal specificity, and 3) formalization.

Bounded rationality is based on three elements reflecting the cognitive state of the decision maker: values, skills, and knowledge. Social, cultural, educational, and economic conditions in developing countries have imposed extensive constraints on these elements, creating a fundamentally different cognitive state among decision makers in developing countries. The most subjective element of these three is values. In a context where values and conceptions of purposes are individualistic (such as in the United States), the decision process is more dynamic, and using a competitive management style becomes essential (Morris et al. 1998). There is a wider area of rationality for individuals, making administrative organizations seem less important. In a context where values are mainly communitarian (Lodge and Vogel, 1987), the decision process is less dynamic (as in most developing countries). There are more limitations for the area of rationality of individuals; and as a result of this, administrative organizations become more important. The latter is, in fact, the case in most of the developing countries. For example, a high degree of power-distance as well as a high degree of uncertainty avoidance (Jaeger, 1990) have made decision and authority processes less dynamic in the developing countries. In other words, constraints on individual rational decision making have centralized organizational structures in most of these countries.

Goal specificity and formalization, the other major assumptions of rational theories, may be integrated into the concept of bounded rationality (Scott, 1992). Organizations in developed countries are generally assumed to have considerable

autonomy and capacity to adapt to a changing environment or even to influence changes in the macro-environment. This implies that goal specificity and formalization will drive organizations' actions in developed countries. However, in developing countries goal ambiguity and lack of internal consensus about organizational goals dominates. In developing countries, the omnipotence of environmental forces, low degrees of masculinity, low levels of individualism, and high levels of uncertainty imply organizations are strongly shaped by their environment. This further leads to organizational goal ambiguity and the informal configuration of organizations. Thus, goal specificity, one of the underlying assumptions of rational models, can hardly be taken as one of the bases for understanding the nature of organizations in developing countries.

In developing countries, the high degree of centralization and the influence of government; social, religious, and business groups; and also powerful families have constrained the roles of individuals in organizations and the activities of those organizations. This leads us to question the appropriateness of focusing on the individual level of analysis for understanding organizations in developing countries. Structural contingency theories (e.g. Donaldson, 1996) suggest that an organic organizational structure is more effective in environments with a high degree of uncertainty. However, most organizations and commercial enterprises in developing countries use highly centralized structures imported from periods of colonial influence (Siffin, 1976), and these remain decades later. These countries have also had a large number of public organizations with a highly centralized government control (Kiggundu et al., 1983). Using organizational level components (such as structure and policies) for understanding organizations in developing countries will provide limited or even misleading results, due to the mismatch

of the organizational level components with the national culture. In developing countries, organizational structure does not follow the structural contingency theories due to the ambiguity of their goals and environmental reactivation. This is the same for other organizational components such as hierarchies and organizational policies. Gaining understanding of organizations in developing countries using rational models at the individual or structural level of analysis is unlikely.

Environmental factors are known as the main driving forces for organizations and their actions in developing countries (Kiggundu et al., 1983). Taking organizations and their actions in developing countries as collectives driven by environmental forces will be more useful. Jorgensen et al. (1986) argue that environmental factors can shape the structure of organizations in developing countries, demonstrating the power and effectiveness of the ecological level of analysis. In summary, the differences between the basic assumptions of rational perspectives and the nature of the environment in developing countries reduces the appropriateness of rational theories for studying organizations in these countries. However, among rational perspectives, those that take the ecological level of analysis and emphasize the environmental factors may provide a better understanding. Therefore, preliminary conclusions for application of rational perspectives in understanding organizations of developing countries can be stated as follows:

Proposition 1:

In developing countries, rational closed system perspectives are the least appropriate for understanding organizations and their activities.

Proposition 2:

Among rational open system perspectives those at the ecological level of analysis will provide a better understanding than those at either the individual or structural level of analysis.

1.2.4) Organizations from Natural System Perspectives

Based on the natural systems perspectives, organizations are more than instruments or means for attaining defined goals or ends. In the natural perspectives, organizations or commercial enterprises are viewed as collectives or organic systems with complex goals and informal structures whose participants have common interests in the survival of the organization in order to sustain the community and provide for the members of the collective. Complexities of goals lead to flexibility in organizational forms and structures and, consequently, are more difficult to understand. Goal complexity and informalization are two basic assumptions of natural perspectives. As shown in Figure (2), natural perspectives may also be considered as either closed or open systems. Moving from a closed to an open system in the natural perspectives will increase the role of environmental factors in organizations' activities.

In a closed natural system, multiple goals and social needs are aligned through internal arrangements and informal structures. Basic theories on leadership (House et al., 1979), commitment and organizational culture (O'Reilly et al., 1996), and socialization (Pascale, 1985) are examples for the natural closed system approach to organizations.

In an open natural system, external arrangements or environmental factors have a dominant influence in shaping organizational activities. The focus of an open natural

system is on the survival of the organization as an adaptive organism with emergent goals. In this approach, learning from past actions of the organization itself and from those of other organizations or class of organizations is crucial. Many theories, such as the institutional theory (DiMaggio, et al. 1983), social technical systems (Miller and Rice, 1967), social organizing (Weick, 1979), and organizational ecology (Hannan et al., 1989) are built on this perspective. Under this perspective, organization decisions are constrained by on-going social relations. This means that one must understand the social context of an organization to be able to understand the organization and its behaviour. Organizations are inescapably bound up with the conditions of their environment (Pfeffer & Salancik, 1978). From this perspective, economic behaviours are embedded in social relations, and it is very important to analyze the impact of changes on the social relations in order to understand the economics of the organization (Granovetter, 1985). Granovetter believes that, "what looks like irrational behaviour may be quite sensible when situational constraints, especially those of embeddedness, are fully appreciated." These natural, open system theories emphasize the context of behaviours, networks, and social actors' positions within the organization. Further, their social relations can be used for causal explanations (Pfeffer, 1997).

The three levels of analysis (individual, structural, and ecological) used in the rational perspectives are also used in natural perspectives. The individual (psychological) level of analysis has been most frequently used by social scientists studying American organizations (Nord and Fox 1996). Recently, there has been a shift toward sociological perspectives with emphasis on the social context. For that reason, natural perspectives (Scott, 1992) with greater concerns about subjective elements (Burrell and Morgan, 1979) at

organizational and societal (ecological) levels of analysis have become a major area of interest for social scientists and researchers.

For example, sociologists have criticized both the economic and the early contingency theories of organizations. They have in fact questioned the rational actor model of the economic perspectives and the rational adaptation model of the contingency perspectives. Sociologists believe that environments have significant effects on organizations' forms and activities, but they don't believe that environmental and organizational changes are as easy as contingency theorists suggest (Hannan & Freeman, 1977; Pfeffer & Salancik, 1978). Environments from the sociologist's point of view are social constructs that are difficult to understand and are themselves essential objects of study (Orru et al, 1991; Pfeffer, 1981).

The resource dependency theory (Pfeffer & Salancik, 1978), as one of the well-known natural perspectives, suggests that there are no self-sufficient organizations; in order to survive they are all continuously engaged in exchanges with the environment. Adaptation is the main emphasis of this theory. It views organizations as capable of changing as well as responding to the environment. The actors' ability to control and solve internal and external resource dependencies provides more power to them within the organization. Thus, a change in resource dependency may end-up with a change in the balance of power in an organization. How seriously an organization needs the scarce or competitive resources will determine the nature and the extent of organizational dependency. Theories such as organization networks, business groups, strategic alliances, joint ventures, and population ecology have been developed around resource dependency perspective. Scholars have used the resource dependency perspective to describe the network connections within suppliers

and/or firms and between firms and suppliers (i.e. Burt, 1983; Mizruchi & Stearns, 1988; Powell, 1990). Regional networks such as Silicon Valley have been effective in helping firms gain access to necessary resources to compete in a fast changing environment (Saxenian, 1994). Economists argue that business firms are related to each other because they employ common or complementary resources such as technology, brand names, or distribution systems (Peter & Waterman, 1982; Williamson, 1975).

Business groups, as long-term associations made up of a great diversity of firms and those who own and manage these firms, are built on resource dependency theories. They are collections of firms bound together in formal and/or informal ways (Granovetter, 1994). Granovetter (1994) believes that a business group is to a firm as a firm is to an individual economic agent. He claims that business groups are there because of resource dependence, the need for strategic alliances, the need for capitalists to form coalitions against other social interests, and the desire to extract rent. Industrial organizational literature indicates that firms create business groups in order to have stronger multiple market power. Policy distortions can also be one good reason for setting up business groups (Ghemawat & Khanna, 1998). It seems that various economic, social, and political reasons for the establishment of business groups have resource dependency roots.

Population ecologists (i.e. Hannan & Freeman 1977) have used resource dependency perspectives in describing the survival of each organization in a specific environment. They believe that market selection happens at the population level. As soon as a special organizational form has been accepted and selected by a population of organizations in an environment, further changes become very difficult. Organizations

must follow this form in order to survive. Therefore, organizations survive based on their ability to function under specific environment conditions.

Researchers have controversial views on the strength and weaknesses of the resource dependency theory. Some researchers believe that the resource dependency theory is capable of describing organizations' behaviour (e.g. Eliezer, 1995; Martinez, et al.1989). Others have shown that this theory is more effective when it is accompanied with other theories such as the neo-institutional theory (Halliday et al., 1993) or the transaction cost theory (White, 2000). Finally, there are studies that have questioned the ability of this theory to describe such organizational behaviours as inter-industry mergers (Finkelstein, 1997). The fact is that not all the behaviours of organizations are rooted in their dependency on the environment or on other organizations. Organizations may have habitual and/or mimetic types of behaviours in every specific social context that cannot be easily explained using the resource dependency theory. This means that even resource dependency relations among organizations can become institutionalised (Tolbert, 1985).

In summary, following the introduction of the contingency theory by Thompson (1967) and Lawrence & Lorsch (1967), major steps have been taken to explain the behaviours of organizations according to their environmental dimensions rather than their economic contracts both within and between organizations. Among those steps are the resource dependence theory (Pfeffer & Salanick, 1978), the resource-based view (Prahalad & Hamel, 1990; Barney, 1991), and the population ecology (Hannan & Freeman, 1977, 1989). The resource dependency perspectives stress the way organizations behave in order to secure resources required for survival. The resource-based view focuses on the market imperfection factor and the heterogeneity of firms'

behaviour. Population ecology focuses on the organizational forms under given environmental conditions. One of the major concerns of these perspectives is the actions and/or strategies within an organization, between organizations, or between populations of organizations in terms of economic or technical efficiency and effectiveness. These perspectives seek to explain "variations" among organizations or groups of organizations in terms of their structures and behaviours (DiMaggio and Powell, 1983). For example, they try to explain why firms have different structures and strategies using theories based on the resource dependency perspective.

1.2.5) Organizations in developing countries from Natural System Perspectives

Organizations in developing countries normally avoid dealing with environmental uncertainty. Organizational identity as the pattern of response in dealing with uncertainty (Thompson 1967) is almost absent in developing countries. Researchers have found that even the most cosmopolitan and technical sectors of developing countries have not completely converged in their values and managerial behavior (Morris et al., 1998). Indeed, technical efficiency and organizational values are not the main concerns in the organizations of developing countries. Rather, they are bound by strong social values and norms, which shape both organizational objectives and ways to achieve those objectives. Government controlled economic systems have reduced the scope and the role of decisions made by managers of organizations in developing countries (Badran et al., 1981). Together, the dominant impact of environmental forces, the limited role of

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managers in making major decisions, and the lack of organizational identity have reduced the impact of internal arrangements in achieving emergent goals. Looking at organizations of developing countries as closed systems may take us away from the actual nature of their activities.

Formal organizations are highly influenced by informal interactions in most of the developing countries. The informal systems, such as friendship or group and family relations, play essential roles in keeping members of organizations together in these countries. This creates opportunities for the informal organizations to grow and dominate the formal ones. The "*guanxi*" in China, the "*inhwa*" in South Korea, and tight personal and family relations as the foundation of organizations in Arabic countries are some of the examples for the significant role of informal organizations in these countries.

High degrees of uncertainty along with other cultural dimensions, especially the belief in omnipotence of environmental forces, have made it difficult for organizations in developing countries to define specific goals. The unpredictable environmental changes have caused the goals to become emergent rather than planned and more communitarian based. In these nations, the formal structures of organizations seem to have less impact on organizations' actual activities than do the informal structures of groups or organizations. The characteristics and activities of organizations in developing countries are best understood under conditions of goal complexity and informalization, the two basic assumptions of natural perspectives. Organizations in developing countries have been most often studied using natural perspectives at the structural level of analysis (e.g. Goldsmith, 1996; Grindle, 1997; Rondinelli, et al., 1989) and at the ecological level of analysis (e.g.

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Hamilton et al, 1992; Zutshi, 1998). However, it is rare to identify an organizational research in developing countries using a natural/ecological analysis.

Thus, organizations in developing countries can best be analyzed using natural, open system perspectives. In these contexts, the importance of environmental factors, along with the roles of informal organization and business groups, suggests using an ecological level of analysis. This leads to the following conclusion for natural perspectives:

Proposition 3:

Comparing basic assumptions of rational and natural perspectives to the common characteristics of developing countries, one may conclude that natural system perspectives seem to be more appropriate for understanding organizations and their activities in developing countries.

Proposition 4:

Among natural perspectives, in developing countries, open systems will provide better understanding than closed ones.

Proposition 5:

In developing countries, there will be a more effective understanding of organizational processes if natural open perspectives are used at the ecological level of analysis.

1.3) Conclusion

The existing literature of organizational studies indicates that researchers have proposed several approaches and theories to explain and understand organizations and firms in developing countries. They have described organizations based on economic or market conditions, cultural dimensions, and even authority or political perspectives (Adler, 1997; Clark, 1998; Hofstede, 1980). Researchers have also used a combination of perspectives. For example, Hamilton and Biggart (1994) argue that an authority or political economy approach with a Weberian emphasis produces the best explanation for industrial organizations in developing countries. Hamilton and Biggart consider two main factors in their study: first, the relationships between state and business sector, and second, the structure of authority in each type of business network. This is a combination of market and cultural approach. Their perception is that the market explanation concentrates on immediate factors and the cultural approach on distant ones.

It is suggested that both the type of theory (rational versus natural) and the level of analysis (individual, structural or ecological) are essential in assessing the appropriateness of studies on organizations in developing countries. Understanding an organization is inseparable from the organization of understanding (Jeffcutt, 1994). The way by which theory and the level of analysis are organized has a significant effect on our understanding of organizations in developing countries. The rational/natural framework along with the level of analysis clarifies some of the major problems that exist in studying organizations in developing countries. Orru et al. (1991) clearly show how a natural open system perspective at the ecological level of analysis may properly fit a

western theory in developing contexts. High degrees of uncertainty, goal complexity, informalization, and the emergent nature of organizations' actions imply that organizations in developing countries may not follow the rational patterns suggested in western based theories. Rational open system theories are less applicable than natural open system theories. Rational open theories at the ecological level of analysis will provide some understandings of environments with more stability and less uncertainty. It is argued that the open natural system perspectives at the ecological level of analysis are the most appropriate theoretical framework for analyzing organizations and their activities in developing countries.

This literature also indicates that economists and sociologists with rational or natural perspectives have realized the need for complementary theoretical frameworks to explore the environmental dimensions and their vital roles in shaping the forms and behaviours of organizations. Economists such as Arthur (1989) argue that economic processes for organizational arrangements are dynamic up to a certain point where institutions are developed or "locked-in" around a specific type of organization. Market processes that follow this model are called "path dependent". Based on this "neo-evolutionary" economic theory, once new technologies or even new property rights are organized, they will provide institutional structure to new industries and organizations. At the same time, those with natural perspectives argue that the interactions within organizations as well as between organizations and their environments create formal and informal rules for these interactions, thereby forming organizational fields (DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Scott & Meyer, 1994). As these fields become institutionalized, they have a powerful normative effect on organizations and on the way

they interact with other organizations. Therefore, the legitimacy of socially defined institutional environments become more powerful in changing organizational forms than rational adaptation (of contingency theories) or economic efficiency. These perspectives are more interested in what DiMaggio and Powell (1983/1991) call "homogeneity of organizational forms and practices" rather than their heterogeneity and variations.

It is believed that "efficiency", "legitimacy", and "power" as the main concerns for economists, sociologists, and political scientists respectively, are socially constructed (Fligstein, 1990; Fligstein et al., 1995). For that reason, attention toward institutional theory as a potential theoretical framework has been gradually increasing in the last three decades. Researchers believe that institutional theory as a complementary approach to other perspectives brings more attention to both the normative and technical dimensions of the environment in which organizations exist (Orru, Biggart, and Hamilton, 1991). Extensive studies have explored the impact of institutions on organizations' behaviours and the influences of organizations on institutions' arrangements in the last three decades (i.e. DiMaggio, 1988; DiMaggio & Powell, 1983 and 1991; Kondra & Hinings, 1998; Meyer & Scott, 1983; Scott, 1995; and Zucker, 1977). Different fields of social science such as economy (e.g. North, 1986), political science (Ostrom, 1986), and sociology (Powell and DiMaggio, 1991b) have considered institutionalization and institutional impacts in their studies.

The appropriateness of natural open system perspectives at ecological level of analysis for understanding organizations in developing countries and the growing attention to the power of institutional theory in organizational studies among researchers in the developed nations are the theoretical foundations of the present study. It is believed

that institutional theory, albeit a western theoretical framework developed on samples from industrialized nations with their specific cultural dimensions, can effectively explore the functional behaviours of organizations in developing countries. In other words, this is a western theory that not only passes the borders of developing nations but also provides the most appropriate explanation for complex social phenomena in these nations.

The present study is an effort, along with previous ones, to examine the effectiveness of institutional theory in explaining not only the organizational forms and structures but also their functional behaviours and strategies. In the next chapter, a brief history of the Iranian national institutional environment and the global airline industry is presented to provide a better understanding about the institutional continuity and/or the frequency and roots of the institutional change of these institutional environments.

Chapter Two

Contexts

One of the major elements in defining the boundaries between institutions and organizations is the nature of their context (Tayeb, 1994). Management practices and organizational structures are embedded in their idiosyncratic national institutional regimes (Gooderham et al 1999). Each society has its own economic, political and social institutions that define and fit its organizational forms (Orru, Biggart, and Hamilton, 1991). For example, the level of uncertainty and interconnectedness of social institutions, may create a significant variance in the relationship between institutions and business firms. In a developed context, marketing and competition are the main driving forces for organizational activities. Because regulatory systems and institutions are considered stable and well established, the level of uncertainty for organizations and their activities is perceived as low. The stable (regulative and normative) institutional environment of developed countries has established intermediate institutions such as industries which play a major role in controlling and managing the institutional pressures exerted on organizations in these countries. In fact, a combination of competitors, suppliers and buyers has created a powerful intermediate arrangement (institution) which sometimes takes the position and responsibility of some of the national institutions. Government authorities and legal agencies of a developed country generally do not (or even cannot) intervene in the activities of organizations as they do in a developing country because these industries are so well established in developed nations. In other words, organizations in a developed country are mainly institutionalized based on the industries' expectations.

Uncertainty is the cornerstone of the regulatory and economic situations in most developing countries. Domination of powerful families, political groups, religious groups

and/or business groups who can impose or override rules and regulations based on their own interpretations and interests have made the regulatory environment even less predictable in these nations. In other words, the centralized power structure of these nations has made their (regulative and normative) institutional environment even less stable. Most of these countries are bearing significant costs for this regulatory uncertainty. Lack of a comprehensive system of commercial laws as formal constraints, normally leads to high transactional costs (North, 1990). In developing countries, the socio-economic and regulatory uncertainties have constructed specific characteristics for organizations and for their operations. The role of governments in building trust and a reliable environment has become crucial in nearly all organizational activities in these countries. In fact, the public sector plays a dominant role as the provider of basic commercial goods and services. In many parts of Asia and Eastern Europe, the governments and other types of "non-market" institutions have traditionally lead organizations' activities (Besley, 1995). Therefore, intricate relations between business and government actually appear to be the norm throughout the developing world (Khanna, et al., 1997); as long as government officials have discretion, companies often end up working with them.

Considering the above mentioned differences between developed and developing contexts, it is reasonable to claim that organizations conform to or resist national and industry level institutions for different reasons and in different ways. Studies such as Orru et al. (1991) explore how each society creates political, economic, and social institutions that limit and lead organizations to special forms. Cheng et al. (1998) also show how the government institutions may have different impacts on the growth of firms in South

Korea and Taiwan. Institutions in a developed country mainly seek an efficiency fit (e.g. Lamertz et al., 1998), and those in a developing country seek a legitimacy fit (e.g. Peng et al., 2000). In fact, legitimacy in developed countries is defined by efficiency. Legal coercion, compared to market diffusion, is most often used as a means of exerting institutional pressures in a developing country. In contrast, market diffusion is most often used in a developed country. Therefore, the nature of contexts (environments) can significantly shape and change the relationships between institutions and organizations. This is in line with the traditional contingency theories.

Both regulative and power-related institutions seem to be paramount in explaining the complexity of international variations in organizational practices (Gooderham et al 1999). From the cultural theorists point of view, institutionalized cultural rules define the meaning of the patterns of appropriate economic, political, and cultural activities (Meyer, Boli, and Thomas, 1987). Therefore, it is imperative to have a general knowledge about the cultural, social, and political aspects of a society in order to understand its institutional patterns and norms (Strang and Meyer (1993). This is the main objective of this chapter. National institutions of Iran and the global airline industry, as the two levels of institutions in this study, are embedded in varying contexts. For that reason, a brief overview of Iran's history along with some of its social, economic, and cultural characteristics is presented in the first section of this chapter. The general business environment and, more specifically, the Iranian air transportation industry are also explored in this section. Some of the major aspects of the global airline industry are elaborated in the second section. In order to understand the institutional forces at this

global organizational field level, some of the major events and driving forces of this industry are discussed in this latter section.

2.1) Iran and its National Institutions

2.1.1) A very brief history of Iran

The word Iran means the "Land of Aryans". This is a country with a history of at least three thousand years (Clive, 1979). Around 900 B.C, Medeans were the first migrants to this land; Persians joined them 100 years later. In 630 B.C., Cyrus I laid the foundation of the Persian Empire (Achaemenian dynasty), one of the first powerful, centralized states. Cyrus the Great (grandson of Cyrus I) and Darius divided an enormous and ethnically diverse empire into twenty-eight satrapies. This may be one of the first machine organizational structures in history. In this form of governmental arrangement, those smaller and semi-independent provinces (or satrapies) received laws and protections from the emperor in exchange for their loyalty and taxes. Darius believed in justice, and some historians consider the laws that he established were the basis of the Torah and Roman law (Daniel, 2001). Creating an efficient postal service with stations located a one-day ride apart and standardizing gold and silver coinage are some of the practical accomplishments in the Darius era. Following the Achaemenian dynasty, the Parthians and Sassanid dynasties reinforced the existing centralized institutional structure with, however, a major difference between Achaemenian and Sassanid dynasties. While the former tried to be a symbol of justice and mercy, the latter were ruthless oppressors. Sassanian rule revived the Persian culture; they believed that religion (Zoroastrianism)

and royal rule must work hand in hand to resurrect Persia (Frye, 1993). The Sassanian kings believed that the throne was given to them by God. Nevertheless, Iran and Iranians experienced a relatively stable institutional environment during 1100 years of these three dynasties in power. After the Arab conquest in A.D. 637, the stable, centralized social structures began to shake and a growing trend of institutional turbulence developed in Iran.

After this shake-up in the institutional structure of the Iranian empire, several succeeding dynasties came to power, most of which had to consider Islamic norms in their institutional arrangements. Despite very close ties between Moslem leaders and some of these dynasties, some kind of conflict has usually arisen between those in power and the national, Islamic groups. There are similarities and differences between the institutional environment of Iran prior the 13 centuries before and the 13 centuries after the Arab conquest. The most common similarity between these two eras is the existence of a centralized power structure dominantly controlled by specific families sometimes in conjunction with a distinct class of society ruling all national institutions. Conforming to these powerful centralized regulating institutions has become part of Iran's culture.

Major differences between the institutional environments of these two eras include 1) a more stable institutional environment during the first era; 2) a greater frequency of institutional changes in the second era, resulting in institutional turbulence and shorter life for institutional arrangements; 3) religion and the related religious institutions playing a greater role in national institutions during the second era; 4) more institutional arrangements (such as state structures and even constitution) imported from other nations and cultures during the second era; and finally 5) democratic and national

movements becoming building blocks of the institutional environment in the second era but not in the first era.

There has always been an increasing trend in the changes of institutional arrangements, especially since religion (Islam) has become one of the major sources of institutional pressure and change in Iran. The nature and frequency of these changes in the last century of Iranian history has made it exceptionally different from other centuries. In 1906, during the last years of the Qajar Dynasty era (1779-1925), a constitutional revolution was carried out by the Ulama (the religious leaders), the Bazaaris (the merchant class and businessmen), and the intellectuals. Its goal was to establish a democratic government with an elected parliament. It made a significant change in the history of the region (Momayesi, 2000). It was a move to diminish the arbitrary power of the kings and give more power to the parliament in order to control the influence of foreign powers such as Britain and Russia. It changed the power structure and historical institutional arrangements of the country. But, this democratic movement did not last long, oil and British interests, brought the venture to a stop. In 1925, Reza Khan came to power after a coup supported by the British government. Reza Khan, as the head of the Cossacks (the only effective military force of the country), defeated the Qajars and established the Pahlavi dynasty. The outcome of this coup was a highly centralized feudalism with a powerful kingdom regime supported by Britain. This was another shock to the institutional arrangements of the country in less than two decades. Reza Khan became the major landowner of the country. He made significant changes in the Iranian culture and their daily life. He even changed the way men and women

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dressed, ate, and communicated with each other. This is why some historians believe that the Pahlavi dynasty was a starting point for modernization in Iran (Ghani, 1998).

During Reza Khan's 25 years of absolute monarchy, resistance against him grew among liberal and Islamic groups. Muhammad Mossadegh, Prime Minister in 1951, led a second revolution for national independence. Nationalization of the oil industry by Mossadegh threatened the interests of western countries and led Americans, inspired by Britain, to implement a coup. This coup demolished the democratic movement and brought Muhammad Reza Shah (the son of Reza Khan) to power in 1953 (Momayesi, 2000). He constructed a powerful, centralized, technocrat state with a modern military machine. The Pahlevi dynasty was keen on transforming Iranian society into a modern westernized society. Having a royal family in charge of every aspect of the society was an inseparable part of Iranians' life for more than 2,500 years. Even after the 1906 constitutional revolution and the 1951 nationalist revolution, the royal families retained their control of all aspects of the country, including the parliament. The four major powers (i.e. executive, legislation, judiciary, and military) were led and controlled by the Royal families and/or those connected to them. This means that even the earlier national movements and major changes of institutional arrangements did not change the historical family monopolization of power in Iran. An unequal distribution of power is rooted in the history of Iran. This may be one of the reasons that Iran was considered a country with large power-distance in Hofstede's (1980) cultural framework. Pleasing those in power is an institutionalized behaviour among individuals and organizations. Organizations including business firms have historically conformed or at least declared that they conform to national institutional expectations.

Nationalists (liberals, socialists, democrats) and religious groups fought with the Pahlevi regime for more than 25 years. These opposition forces were dominantly led by Shi'ites clergy (Ulama). The Shi'ite Islam, as the official religion of the country for the last 500 years, has been widely accepted by about 90% of Iran's population. When Reza Shah transformed Iran's parliament to a subjugated institution for approving all his policies, he reduced the number of clerics in parliament from 14% to none (Gill et al., 1999). His policies against Ulama and his son's (Mohammad Reza Shah) harsh military policies helped the seeds of a new revolution to take roots everywhere in the country. Shi'ite leaders, those authoritative individuals that predominantly control and dissipate Shi'ite theology, separated themselves from the Shah and his state. Despite the Shah's power in the region and the generous international political support, his monarchy and military machine collapsed in the 1979 Islamic revolution. This was the most severe quake in the history of Iranian empires. It changed the political, economic, and military relations of the countries in the Middle East region. As the life of autocratic regimes became shorter, the institutional changes became more frequent. This was a revolution carried out by the masses from all strata of society but led by Ulama and the intellectuals with the economic support of Bazaaris.

By March 1980, a referendum legitimatised a new Islamic Republic. The old constitution was replaced by a new Islamic constitution, and all the old arrangements of the legislative, executive and judiciary powers were changed to new Islamic arrangements. New Islamic norms were institutionalized at various levels of these three powers. The ongoing institutional change created a highly unstable environment. Initially a liberal provisional government, composed from the educated middle class and under the

leadership of Bazargan (the first prime Minister after the 1979 revolution), was installed by the religious leaders of the revolution. But, Ulamas' expectations were far beyond the capacity of this first liberal and revolutionary government. While there were serious disputes between liberals and Ulama, Iraqi forces attacked Iranian cities and created a full scale war for Iran. The outcome was further instability in an environment which was already unstable because of the extensive institutional changes after the 1979 revolution. In spite of this, specific economic, cultural and management norms became institutionalized among both public and private organizations. Internal disputes, along with the war with Iraq, supported and justified the idea of establishing an extremely centralized power system. This was not something new in Iranian history. It was the Islamic nature of this system that made it an exceptionally new experience in the institutional arrangements of this country.

Survival became the main objective of this system during the eight years of war with Iraq (1980-1988). The government was in charge of almost all economic activities. In addition, certain events led the country to enjoy a strong national solidarity in the first decade after the revolution:

- Radical students attacked the U.S. embassy in Tehran, and held 53 U.S. diplomats as hostages in the American embassy for 444 days.

- The U.S. and major European governments supported Iraq during the eight years of war with Iran.

- Washington's economic sanctions against Iran created major limitations and difficulties for Iranians, especially, during the war with Iraq.

From 1979 to 1989, the per capita income of Iranians dropped by 50 percent and the public sector grew dramatically (Karbassian, 2000). The country lost a huge amount of its resources, especially the younger generation of the 1979 revolution. In such an atmosphere, the leaders and the majority of the people gave the complete implementation of the new constitution the least priority. Hashemi Rafsanjani, who was elected as the President of Iran in 1989, questioned the Prime Minister's position in the hierarchy of the executive power. With Rafsanjani's initiation, the hierarchical arrangement of the government in the constitution changed and suppressed the position of prime minister, thereby demonstrating the extent to which religious leaders can make institutional changes in Iran. Rafsanjani tried to reinvigorate the economy and made modest liberalization of government controls over social and cultural practices. His relinquishment of pro-private, free-market-oriented policies came at a very high social cost to Iran. One of the significant results of this strategy was the way many public organizations became involved in the private sector. Various ministries in Rafsanjani's administration were accused of creating, with public funds, several hundred new semi-public enterprises with no clear sector affiliation. Ministries and state agencies deliberately held minority shares of these legally dubious enterprises, which acted as profit making concerns in trade and procurement in order to avoid accountability to the State Auditing Agency. In summary, the eight years of war and the eight years of Rafsanjani's presidency brought complex social problems and a turbulent institutional environment to Iran. Throughout the Rafsanjani era internal disputes and conflicts grew which cultivated the seeds of a new social change in Iran. In fact, the necessary foundation for a new reform movement was gradually developed during these years.

The explosion of the population after the Islamic revolution has led to a major demographic change with significant effects on the political and social situation. Most of the authorities and leaders of the regime have ignored this element in their plans. More than 60% of Iran's 68 million inhabitants are under the age of 25 (ISR, 1997; Geneive, 2000). This new generation never knew the Shah's regime, never saw the revolution, and most were even too young to have taken part in the Iran-Iraq War. Since these young people did not participate in the revolution, they are unconstrained by a psychological need to remain loyal to it or its ideals. They question the current social norms and ask for their rights based on their understandings of justice, personal freedom and democracy. In fact, this generation played a major role in the development of the new reform movement. It should also be remembered that a high percentage of the older generation who were faithful to the revolution either lost their lives in the war or became involved in economic activities by the early 1990s. The younger generation of that time considered that, to a great extent, the general public had been deprived of their individual, social, and political rights. The level of injustice in the society was unacceptable to most people, especially the young. So many of the positions that the regime had taken on the issues of the day were unacceptable to the younger generation.

In 1997, the election of a reformist president, Muhammad Khatami, brought legitimacy to contention and challenged some of the more conservative Islamic rules. The revolution's security rested on a complex legal framework. Each of the contenders rejected previous institutional arrangements and replaced them with new beliefs and new regulatory mechanisms. Contention and institutional change became a regular feature of Iranian political life. The populace and business alike were at a loss to understand what

was acceptable behavior and what was not. The Pahlevi and Islamic regimes had clear contrasts; but, in the minds of individuals and firms, their practices were not very different. Inconsistent and short-lived leadership, extreme behaviours, lack of democracy, and unclear rule of law, all contributed to confusion. Elaine Sciolino (2001) describes the struggles that are presently taking place among the multiple views and institutions that cross Iranian society.

Large business firms such as airlines have been subsidized and protected by the government of Iran both before and after the 1979 Islamic revolution. An indefinite period of government commitments and protections was in place for most of Iranian domestic industries during the Shah's era (Karshenas, 1990). Those with close access to government resources took advantage of both credit and input subsidies along with beneficial trade and industrial policies (Salehi-Isfahani, 1989). This developed less flexible types of structures among Iranian business firms during the high oil-exporting revenue era of the country before the 1979 revolution. The extensive government protection also kept most Iranian business firms as immature competitors in the international environment. Economists suggest that the lack of industrial growth and/or development in the oil-exporting countries is, in fact, the result of low productivity rather than low investment (Karshenas and Pesaran, 1995). In other words, government intervention has consistently constrained Iranian economic development.

The 1979 Islamic revolution was followed by a nationalization movement in almost all Iranian industries and economic activities. The public sector became the owner of 70% of the nation's capital in the first year of the revolution, before the new Islamic Republic Constitution was written (Rashidi, 1994). Based on the new constitution all

properties acquired through non-Islamic means were eligible for confiscation by the state. Thousands of companies were forcibly confiscated and transferred to the state or quasi-public conglomerates known as Bonyads. Major large-scale manufacturing and service firms in various industries (such as consumer goods, appliances, textile, banks, transportation, and insurance) were nationalized. The government even established twelve different Procurement and Distribution Centers in the Ministry of Commerce to control foreign trade. Firms from any type of industry, including the airline industry, had to go through a specified center to be able to trade with a foreign supplier. In other words, any order for equipment, raw material, parts or finished products had to be approved by these centers. By the end of the 80s, the Iranian government was controlling more than 80% of the nation's resources and economic activities with very low productivity. The war with Iraq, the political and economic isolation of Iran, and the reduction of oil-exporting revenues were additional crucial factors that made the post-revolutionary economy of Iran worse than ever. In 1988, the industrial sector was operating at barely 40 percent of its capacity, unemployment rose to 40 percent, domestic production collapsed, and per capita income dropped by half (Ehsani, 1994). Since 1988 (the end of the 8-year war with Iraq), the government of Iran has tried to restructure and rehabilitate this economy through three consecutive five-year plans. However, slow growth, rising prices, budget shortfalls, chronic unemployment, and low productivity are still some of the main characteristics of this highly centralized economy (Karbasian, 2000).

These days, the government, various foundations or semi-public organizations (usually Bonyads), cooperatives, and the private sector (mainly the businessmen at the bazaars and certain influential families) are the principal players of Iranian business

activities. Although the role of each player varies with the nature of each industry and its social and political implications, the government and powerful authorities have indeed the determinant role in almost all Iranian industries, especially, the airline industry. In summary, Iran, the first and most stable institutional arrangement of the world (2,500 years ago), has become one of the unpredictable and highly volatile institutional environments. The government and the religious leaders are the most influential figures for the organizational activities in the country. Uncertainty is the corner stone of their business activities and their institutional environment. Since the 1979 revolution, two or three religious groups have become the major driving forces behind changes in the Iranian institutional arrangements. This brief history of the Iranian institutional environment makes it easier to understand the following overview of the Iranian air transportation system, one the youngest industries in the country.

2.1.2) The Iranian Air Transportation

The history of Iran's air transportation began shortly before 1927 when the government of Iran passed a bill a bill which granted a five year exclusive right of air transportation in Iran to a German company called "Junkers" (Razavi, 1998). It was a cooperation between Junkers and the Ministry of Post, Telegraph and Telephone to carry mail and small parcels and occasionally passengers (Atrvash, 1997). In fact, a special air mail department was established in this ministry which was also called the "State Air Company" (Razavi, 1998). Civil air transportation was mainly performed through this department using both Russian and German airplanes until 1944 when a new privately

owned airline (Iranian Airways) was established in Iran. Trans World Airlines (TWA) bought 10% of this airline and contracted to cooperate with management and provide operational support in the very early years of Iranian Airways' operation (Atrvash, 1997). In 1953, Trans Ocean Airlines, a less well known American carrier, contracted with Iranian airways to lease them aircraft and assist them in their management, operation, maintenance, administration, finance, and even marketing and sales activities. This contract was terminated in 1961 (Atrvash, 1997). During 1952 a second airline, Persian Air Services, was created in Iran by the private sector. It was smaller in size and associated first with a British company named Skyways and then Belgian national airline "SABENA". Both of these airlines operated domestic and international flights. In 1961, for a very short period of time these two privately owned airlines merged to establish a United Iranian Airlines. This merger did not last long, because both airlines had financial, operational, and management problems. Razavi (1998) suggests that the problems of Iranian Airways were the reasons for the government stepping in 1962 and nationalizing the air transportation industry of Iran. A new government owned company named Iran National Airline, internationally known as Iran Air, was founded in that year. This company acquired the assets of the United Iranian Airlines. During the 1960s and 1970s, this new national airline was one of the fastest growing airlines of the world as well as one of the ten safest airlines.

The government of Iran first got involved in air transportation activities through the Ministry of Post, Telegraph and Telephone, as discussed above. Then, the Ministry of Transportation opened up an independent department called the "civil aviation bureau" (CAO, 1996) to implement the 1944 Chicago convention and other international civil

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aviation rules and regulations. This bureau became an organization and was transferred to the Ministry of War in 1975. It was responsible for implementing international safety standards and civil aviation regulations; controlling Iranian air space; and constructing, maintaining and operating all Iranian civil airfields. The nationalization of air transportation, the establishment of Iran Air in 1962, and the establishment of the CAO in 1949 made the Iranian airline industry highly regulated and controlled by the government. The air force was one of the major suppliers of experts to the CAO; and, until the 1979 revolution, the head of this organization was an air force officer, as was the CEO of Iran Air . Thus, the Iranian Air Force, which was organized and managed by the U.S. Air Force during the Shah's regime, became one of the main sources of institutional pressure for the Iranian air transportation industry.

During 1960s and 1970s, Iran Air built an image of being an excellent airline in terms of safety and gained a respectable reputation among airlines and international organizations such as IATA and ICAO. This gave more power and control to Iran Air compared to other players of the Iranian air transportation industry, including the CAO of Iran. Since the CAO was short of experts, it started to assign Iran Air experts to control Iran Air operation and maintenance activities and, consequently, made Iran Air yet another source of institutional pressure for the Iranian air transportation industry and Iran Air's way of operating airlines became a taken-for-granted norm among the players of this industry. Thus, the Iranian air force, Iran Air and global institutions like ICAO, the FAA, and IATA were major sources of institutional pressure for the air transportation industry of Iran. A global institution like ICAO, as a regulative and normative institution, has tried to institutionalize the behaviors of all players of civil aviation industry according

to the 1944 Chicago Convention on International Civil Aviation and its eighteen Annexes. The CAO and airlines of Iran have also been conforming to these global rules and regulations. As pointed out earlier, the history of Iranian air transportation indicates that organizational structures and functional procedures of the airlines and the CAO of Iran have been shaped by European and, more dominantly, American organizations. Hierarchies, titles and even job descriptions of airlines were defined by these organizations. Therefore, the American way of managing airlines was institutionalized among the major players of the Iranian airline industry.

Immediately after the 1979 revolution, the CAO was returned to the Ministry of Road and Transportation and its president became one of the deputies of this ministry. Thus, the ministry of road and transportation assumed in charge of Iranian carriers and the main regulative organization (i.e. the CAO). Iran Air and Asseman were the only two Iranian carriers in those days. Iran air, with about 12,000 employees, controlled more than 90% of both domestic and international flights. Asseman, as another government owned carrier, was established to control and manage the assets of Pars Air (a small regional carrier which was established before the revolution) and a few small airplanes previously owned by the authorities of the Shah's regime. It was the responsibility of the Minister of Road and Transportation to keep Iran Air operational, and, at the same time, to enforce the international rules, regulations and safety standards in the Iranian airline industry. Assigning individuals with no military experience as the CAO's president or as the CEO of Iran Air by the Ministry of Road and Transportation, was a move against the taken-for-granted norms of this industry. Disregarding the historical norms of organizations became the usual practice among the top executives of the country. For

example, individuals with no experience in air transportation were assigned as the president of the CAO, the CEO of Iran Air and the CEO of Asseman. A turbulent institutional environment was in place not only in air transportation but in all sectors after the victory of the Islamic revolution.

Managing the conflicts between revolutionary values and those values that had been historically institutionalized formed the main part of daily activities of managers in all industries. However, it was a much more serious issue for the air transportation industry in which some of these historical norms and values were directly related to the safety of daily operations of airplanes and airports. Since, those norms related to international rules and standards and were less vulnerable to the new revolutionary values, they became the most powerful means for players, especially for the CAO of Iran, to practice their authorities. Since the new management system of the CAO was not committed to either the air force or Iran Air, the CAO of Iran began to resist institutional pressures from the Iranian Air Force and Iran Air. A new chapter of conflicts between the CAO and the Iranian Air Force on one hand and the CAO and Iran Air on the other hand opened. These conflicts were serious enough that at some point of the time, during the war with Iraq, authorities were thinking of returning the CAO to the Ministry of Defense (called the Ministry of War before the revolution) in order to better coordinate the Iranian air space. The CAO's efforts in exercising its regulative authorities were sometimes perceived as changing the norms by Iran Air and other players of this industry. It took the government and the Ministry of Road and Transportation close to two decades to reduce the influences of the Iranian Air Force and Iran Air on the air transportation industry. A lack of required resources, the eight years of war with Iraq, and the

importance of reducing disputes between these politically important organizations are among the major reasons for taking this long to change some of the norms of the air transportation industry.

As soon as the eight year war ended in 1989, a new era for the Iranian air transportation industry began. Traveling became one of the major means for Iranians to find relief from their past stressful years; and demand in all sectors of transportation, including air transportation, went up dramatically. Yet Iran Air's airplanes were 10 years older, it had lost two Boeing and one Airbus aircraft, the U.S. economic sanctions were in place, and no airplanes had been added to the Iranian fleet. On the other hand, the Iranian Air Force was overstaffed with hundreds of pilots and experts who had been involved in the war. As a result of this staff inflation, commanders of the air force cooperated with top authorities of the country to start domestic charter flights, using old air force Boeing 707s to fly military members and their families to leisure destinations . At the same time, certain air force pilots were rewarded by being transferred to Iran Air. During these years major political changes were taking place in Russia, Iran's most powerful neighbor. This meant that low priced Russian airplanes were easily available to the Iranian market which was constrained by the U.S. economic sanctions and desperately looking for more airplanes. Thus, the combined social pressure of a high demand for more air transportation, an over abundance of the air force expertise and equipment, American economic sanctions, and the availability of Russian airplanes made historical changes in Iranian air transportation industry. First, the air force experts found more important roles for themselves in the civil aviation industry. The president of the CAO announced that he had approved the establishment of a new airline called SAHA operating the Boeing 707

airplanes of the air force flown by military pilots who would obtain their civil licenses from the CAO. Iran Air made the strategic move by changing one of its subsidiaries in the tourism business (Iran Air Tour), to an airline operating wet-leased (airplanes with pilots and maintenance) Russian airplanes. This was a move by Iran Air to control the traffic of Mashhad, the second major hub after Tehran for both domestic and international flights. This is a holy city for Shiite Moslems. Pilgrims from all around the country and neighboring countries such as Pakistan, Afghanistan, Iraq, Kuwait, Bahrain, and Emirate travel to this city. For that reason, more than 90% of the flights to and from this city have always been full for almost the last four decades. This city became the home base for the Iran Air Tour as the new airline.

The air transportation industry of Iran moved quickly to do business with the Russian aviation industry and to hire air force staff (mainly pilots). In less than ten years 6 more airlines operating Russian airplanes entered the market. Most of these airlines were run by the government authorities or air force commanders. The usual western, and more specifically American, aviation norms of the Iranian Civil Aviation Organization (CAO) and of Iran Air were gradually replaced by either Russian norms or newly emerged national norms. Since the Iranian CAO was the main government organization for developing these norms, it became a major source of institutional pressure for Iranian air transportation. Iran Air, which put all its efforts to stick with the western aviation norms by purchasing six Fokker-100 jets from the Netherlands and two Airbus 300-600 airplanes from France during these years, lost a considerable share of the market and its influences on the norms of this industry. The huge manufacturing facilities which were essentially designed to produce Bell helicopters before the 1979 revolution is now used

for a joint manufacturing project between Iran and Ukraine. A small Russian airplane (AN-140), which can carry 50 passengers and is called Iran-140, is produced in these facilities now.

The appearance of several new airlines in the Iranian airline industry increased the number of airports and their operational hours. The government realized that it is not economically feasible to operate and manage Iranian airports with a regulative organization such as the CAO. For that reason, the government passed a bill four years ago that removed the departments related to operating, managing and even constructing airports from the CAO's control and established a business firm called the Iranian Airports Company, which now handles all Iranian airports. These days there are over 28 domestic airports in the country that are operating around the clock, seven of which are international airports. There are also six exclusive airports of the National Iranian Oil Company and another airport in Tehran's suburbs (Payam Airport) that are affiliated with the Ministry of Post, Telephone and Telegraph. Before the revolution, six domestic airports operated around the clock, two of which were international airports. More than eight million passengers inside and close to two million outside the country use Iranian air transportation annually. The most recent statistics provided by the CAO (CAO, 2001) indicates that there are 26 organizations, airlines, or some combination of both organization and airline operating 326 owned or leased civil registered planes in Iran. Only 193 of these planes have airworthiness certification and are operational; of these, forty two are leased and the rest are domestically owned airplanes. Figure 2.1 shows the break-down of these airplanes, based on the types of services.

Figure 2.1
Iranian Civil Air Transportation Fleet (2001)
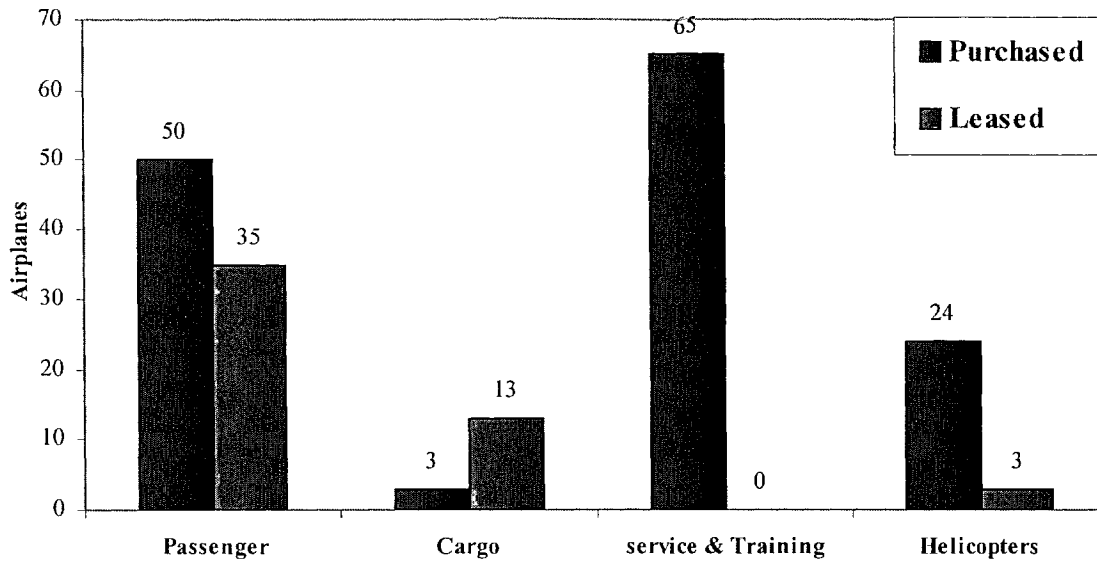
2.2) Global Airline Industry

The airline industry, less than 100 years old, is considered one of the youngest and most complex service industries. The nature of this industry is locked in with safety and standards. This is why almost all the arrangements have been developed around safety and standard issues in this industry. For example, the International Civil Aviation Organization (ICAO) was founded with the signing of the Convention on International Civil Aviation on December 7, 1944, to set the international standards and regulations necessary for the safety, security, efficiency and regularity of air transport. It serves as the medium for cooperation in all fields of civil aviation among its contracting states (188

states to date). Over the years, ICAO has tried to establish technical uniformity in international civil aviation through the standards and recommended practices that have been developed in the form of 18 technical annexes to the Chicago Convention. The International Air Transport Association (IATA) is another international institution which was established around safety and standards with a greater emphasis on economic and business issues. It was founded in Havana, Cuba, in April, 1945, to promote safe, reliable, secure and economical air services. This international association is in fact the successor to the International Air Traffic Association founded in Hague in 1919, the year of the world's first international scheduled services. It now has more than 280 members from more than 140 nations. In 1958, after major mid-air collisions in the 1950s, the Federal Aviation Act was passed in the U.S. to establish another regulative institution. As a result, the Federal Aviation Administration (FAA), charged with developing an air traffic control system, was born. FAA is another major institution, besides ICAO and IATA, to control safety standards that have played a considerable role in the development of airline industry norms. Standardization has become an inevitable cultural norm of this industry.

The modernization of planes and the introduction of jet service in 1959 provided even faster cross-country services. The airline industry became one of the fastest growing industries of the world with a critical role in the economic growth of the nations. Tretheway and Oum (1992) suggest that, if the world economy increased by one percent, the air traffic level would increase by about two percent (income elasticity of two). Oum and Yu (1998) have confirmed this for the 1970s and 1980s. Total air traffic growth for

the 1970s and 1980s was about 10% and 6%, respectively, while economic growth for these two decades was, respectively, 4.6% and 3%.

During the early years of the airline industry's history, governments all around the world became deeply involved in their national airline industries. Having a single flag carrier became the pride of each nation. Governments were in charge of all aspects of the aviation markets. There have been ups and downs in the airline industry just as in other industries; however, the 1970's marked a turning point for the industry when forces such as higher fuel prices and operating costs of airlines brought major changes to this industry, changes that were initiated by the U.S. airline industry. In October, 1978, the U.S. domestic industry was deregulated when the Airline Deregulation Act was passed by President Carter. This meant all domestic services within the U.S. were free from traditional regulations such as pricing control and economic control over route entry and capacity. In less than a decade, this deregulation movement spread to most developed nations. In 1986, the European Court of Justice made a historical judgment by ruling that the Competition Articles of the Treaty of Rome should apply to intra-EC air services. This was a turning point for liberalization of intra-EC aviation markets. This move was completed in April, 1997, with the creation of a single European aviation market. An airline from one member state can now fly passengers within another member's domestic market. Domestic deregulation spread beyond North America and Europe to the Asia-Pacific region.

The 1980s were marked by the deregulation of the industry, which resulted in the growth of smaller carriers and the mergers of larger carriers (Shaw, 1990). It was a decade of institutional change in the airline industry all around the world. Regulative

norms, such as restricted pricing policies, government ownership, and highly regulated airspaces, were replaced by newly established deregulated norms. Competition and competitive forces became the main driving forces behind pricing policies, ownership, and operation of airlines in most of the developed nations. The role of all the regulative institutions including government organizations and even IATA in pricing and market control were eroded. These new norms intensified the competitive forces of the growing airline industry. Although the first half of 1990s is known as the worst in the history of the airline industry (a result of the Gulf War), it did not altar the trend towards institutional change in this industry. Some of the main driving forces of this industry's taken-for-granted norms include safety and standardization based on new technologies, privatization, alliances, and reservation and pricing systems.

2.2.1) Safety and standardization based on new technologies

Technology has been able to harmonize this fast changing industry with increased opportunities for efficiency and growth. The most updated technologies have historically been used in various parts of this industry. They have gone from the covers for the passenger seats to the electronic systems for the glass cockpits. This is why the airline industry has become a competitive battlefield for innovation and changes for several other industries. Every industry has tried to introduce its most innovative products to the airline industry. Although the ongoing demands of ICAO and FAA for the improvement of safety and standards have brought the most up-dated technologies in the civil aviation industry, every technological item introduces a specific norm for the industry.

Technology is one of the driving forces that have been institutionalizing airlines' operations through the rules and regulations of institutions like ICAO and FAA. For example, when an airline is equipped with glass-cockpit airplanes, its flight and maintenance crew members must follow specific uniform procedures designed for this new generation of airplanes implemented by ICAO or FAA. In other words, manufacturers of aircraft and aircraft component have played major roles in shaping the operational norms of this industry. This has been true for airports and their navigation systems. Therefore, despite the fact that safety and standards form the backbone of the airline industry, technology has been significantly shaping the safety and standard norms.

2.2.2) Privatization

Following the 1978 deregulation movement, historical institutional changes happened in the airline industry. Perhaps the second most significant trend, after deregulation (Shaw, 1990), is privatization. Before deregulation, most states owned their national airlines. Majority government ownerships have generally a significantly negative impact on an airline's productive efficiency (Oum and Yu, 1998). This is why privatization has become known as the key for success in the airline industry. Although, it appears that privatization has spread at a slower pace in the Asia-Pacific region than in Europe, it has become the norm for having an economically successful airline. These days, being owned and regulated by government is viewed as a handicap even by international institutions like ICAO and IATA. Privatization has not limited itself to the airlines; it has spread even to the communication systems used in national airspaces. The

most salient example is the establishment of the Civil Air Navigation Service Organization (CANSO) in November, 1997. This business organization was founded to commercialize air navigation services and make the first step toward the privatization of the airspace of different nations. ICAO has stated that CANSO has autonomous authorities who ensure that, as a self-financing and cost efficient business firm, it is still regulated by the governments. Thus, privatization has conquered the most untouchable peaks of this industry, a feat that no one could have imagined 25 years ago. This is why it should be considered both as a strong driving force and taken-for-granted norm of the global airline industry.

2.2.3) Alliances

Despite the fact that deregulation is widely spread in almost all the domestic markets of developed nations that together control more than 80% of the world's air traffic, most international air traffic is still based on bilateral or, more recently, multilateral air services agreements. Airlines make alliances with other carriers to expand their network around the world and gain access to new markets. Alliances can range from a simple code sharing for a single route (interline) to broad commercial and even equity partnership. Code sharing has become a common feature of bilateral agreements. The inherent instability of the traditional alliances between two airlines (Gudmundsson, 1999) has led the industry toward mega alliances among many airlines such as the "star" alliance group. The union of the mega alliance groups is one of the key success factors in this deregulated industry. The emergence of large free trade areas–

such as the European Union, NAFTA, WTO, and Asian agreements– has helped establish these alliance groups. In fact, strategic alliances have become an inevitable element of competition in the airline industry.

2.2.4) Reservation systems and pricing

Since the market and its competitive forces have become the major driving forces behind the commercial activities of airlines after the deregulation move in 1978, airlines have made huge investments to be able to control and instantly identify market changes. Many factors contribute to sudden changes in airfares, negatively affecting the airlines' pricing policies. At the same time, the high fixed costs of airline operations have played a critical role in optimizing the sales and operational management of airlines. This is why reservation systems have become more sophisticated and a competitive advantage for the major airlines. Some airlines, such as American Airlines, have made extensive investment in their reservation system to the extent that they are able to profit more by selling their reservation system services to other carriers than by selling their own tickets. Reservation systems became a powerful force to bring certain airlines under the same mega alliance umbrella. Reservation systems have gone even further by including ground transportations and hotel reservations. In recent years, a combination of the Internet and reservation systems has provided great opportunities to customers to find the best deal that fit their particular travel preferences.

In summary, global airline industry norms, especially those related to the operational activities of airlines, will be officially in place when approved by institutions

such as ICAO, IATA and the FAA; however, the roots of these norms are connected to the market (competition) and technology forces. This was not the case 25 years ago. If governments were one of the main sources of institutional pressure for airlines during 1970s, they are not these days, at least not in most developed nations. The private sector and market forces drive airline activities. Safety and standards are still the main foundation of this industry, but they are not entirely under the control of governments. A close cooperation between the private sector and institutions like ICAO, IATA, and the FAA has gradually developed and has brought about most of the new arrangements of this industry. Although the Civil Aviation Department or Organization of each country is still a government institution, these institutions (at least in developed nations) have realized that market and competitive forces play dominant roles in the global airline industry.

2.3) Conclusion

Iranian airlines are operating in two markedly different contexts, each with its own powerful norms. On one hand, their national context is a fast changing institutional environment in which government and powerful authorities control every aspect of the aviation industry. Political forces have strongly surrounded their aviation industry. These forces have changed their national institutional arrangements and even the way that authorities rule this industry (i.e. moving from the American to the Russian systems). On the other hand, airlines have an ongoing interaction with the global airline industry in which the market and competition are the main driving forces. Somehow they have to

follow the norms of the global airline industry to be able to operate internationally. In fact, these global norms have forcefully penetrated the activities of the Civil Aviation Organization and domestic carriers of Iran; but this penetration is not easily observable because of the power of national institutional pressures. Iranian airlines operate in two conflicting institutional environments, an extremely confusing situation for those in charge.

Chapter Three

Institutional Theory, Research Model and Hypotheses

Based on the analysis of different perspectives presented in chapter one, the institutional theory as one of the natural/open system perspectives at the ecological level of analysis was selected to explore organizations in a developing country. In this chapter, the institutional theory literature is systematically reviewed to find out more about the gaps and to identify the promising areas of this literature. Then, the research model, the related hypotheses, and pertinent research questions are presented.

3.1) Overview of the Institutional Theory

The classical definition for institutions goes back to Hughes (1936) who talked about institutions as stable and slowly changing social systems. Then, Selznick (1949) used the role and effects of values on organizations to explain institutionalism. He viewed institutionalization as a process by which organizations or social entities are infused with values beyond the technical requirements of their tasks (Selznick, 1957). This perspective became known as the old institutionalism (e.g., Powell & DiMaggio, 1991) after Meyer's (1977) idea of macro influences on local phenomena was introduced as the foundation for the new institutionalism. Based on work by Berger and Luckmann (1967), institutional theorists (e.g., Zucker, 1977; Meyer and Rowan, 1977) argue that institutions are socially constructed templates for actions generated and maintained through ongoing interactions. They view institutions as providers of frameworks and procedures that a particular set of organizations should follow. Burns and Flam (1987) define institutions as shared rules that categorize social actors, their activities, and their relationships.

The new view of institutions and institutionalism has been perceived differently in various fields of social science. Researchers like Goldsmith (1992) have defined institutions from a different standpoint. He argues that management and organizational theorists view an institution as a role or an organization, but economists and sociologists view it as a rule and a convention. The fact is that, there is a consensus among researchers in all fields of social science about the existence of institutions and their effects on organizations in different contexts. For example, organizational economists believe that institutions (as structures of governance) exist and persist as long as the benefits they provide are greater than the transactional costs of creating and sustaining them (e.g., Williamson, 1985). From Williamson's (1993) point of view, "the institutional environment is a set of political, social and legal ground rules that establishes the basis for production, exchange and distribution". Institutional economists (e.g., North, 1986) get closer to the sociological perspective by arguing that institutions are sets of repetitive interactions, customs and rules that will provide both incentives and disincentives for individuals. Political scientists, on the other hand, look at institutions as prescriptions for required, permitted, or prohibited actions (Ostrom, 1986). They also believe that institutions reflect the preferences and power of the units constituting them and, at the same time, shape those preferences (Keohane, 1988).

Finally, sociologists reject the rational-actor model used mainly by economists and some political scientists and turn toward the cognitive and cultural explanation for institutions. They believe in supra-individual units of analysis that cannot be reduced to aggregations or direct consequences of individuals' motives (Powell and DiMaggio, 1991). There are sociologists like Barley and Tolbert (1997) who believe that institutions

are "abstract algebras of relations among members of social sets", and consider the behavioural and structural instead of the cognitive and cultural explanation for institutions. Institutionalization from sociologists' point of view is both a "phenomenological process by which certain social relationships and actions come to be taken for granted" and shared cognitions that define " what has meaning and what actions are possible" (Zucker, 1983). From their perspective, the institutional environment is a pattern of social relations and embedded interpretation (Burns et al., 1993; Meyer & Rowan, 1977). Table 3.1 provides a summary of definitions of institutional environment from different perspectives.

There is a long debate on similarities and differences of the new and old approaches to institutionalization. In an extensive study, Powell and DiMaggio (1991) have described some of the main differences between the old and new institutionalism. For example, both the new and old institutionalisms accept that institutions constrain organizational rationality, but the old view focuses more on the interests within organizations; in contrast, the new view focuses more on the relationship between legitimacy and stability (e.g., Zucker, 1983). The old view believes that organizations are embedded in the local community (Clark, 1960), while the new view believes that they are embedded in broader organizational fields (e.g., Scott & Meyer, 1991). Values and norms are the key forms of cognition in the old perspective (Selznick, 1957), but routines and taken-for-granted scripts are the key forms of cognition in the new perspective (Zucker, 1983). In summary, old institutional theorists are more concerned about issues such as influences, values, moral frames, and the ways by which group interests divert the formal mission of an organization (Greenwood, 1996). The new institutional theorists (e.g., Meyer and Rowan, 1977) are more concerned about issues

such as legitimacy, taken-for-granted norms, and routines; they emphasize the cognitive, the normative and the regulative dimensions of institutions.

Table 3.1: Institutional environment from different perspectives

Perspectives	Define Institutions as:
Economic	Political, social and legal ground rules (Williamson, 1993) Repetitive interactions, customs and rules (North, 1986)
Political	Prescriptions for required, permitted or prohibited actions (Ostrom, 1986) The reflection for the preferences and power of units constituting them (Keohane, 1988)
Sociological	Cognitive, legitimate, and regulative social settings (Meyer and Rowan, 1977)

In spite of the above mentioned differences among institutional theorists, there is a common belief that institutional theory explores significant dimensions of social organizational experience that have not been explored by other theories (DiMaggio, 1988; Zucker, 1988). Both the new and old institutional theorists have questioned rational-actor models; they emphasize the importance of the relationship between organizations and their environment and specifically the effects of culture on organizations' behaviour. Institutional theory, especially as it relates to the new institutionalism, is viewed as one of the most appropriate approaches to explain the behaviour of organizations (e.g., DiMaggio &Powell, 1983/1991; Meyer & Scott, 1983; Oliver, 1991; Zucker, 1987) and their competitive advantage (Oliver, 1997). While Selznick (1996) has questioned the wisdom of drawing a sharp line between the old and the new institutionalism, he has recognized some of the main contributions that the new view has brought to the institutional theory.

As Scott (1995) argues in his extensive review of the literature, institutional theorists have been able to answer both the *why* (Why is there a direct relationship between organizations and institutions?) and the *how* (How do they affect each other?) questions for the relationships between institutions and organizations by using variance and process theories respectively. They have also been able to elaborate reasons for organizational conformity or resistance to institutional rules and expectations (e.g., Oliver, 1991). Since the new institutional theory has become the focus of researchers in the last two decades, it is reasonable to give an overview of the main dimensions of this perspective before implementing it in different contexts.

According to Meyer and Rowan (1977) organizations make socially prescribed and accepted stories about their actions. In fact they may act differently but these stories are made to affirm their legitimacy. This was the basic idea upon which DiMaggio and Powell (1983/1991) built their concept of isomorphism. They argued that organizations are similar because they want to attain legitimacy in their environment. DiMaggio and Powell (1983) believe that there are competitive and institutional types of isomorphism since both competition and structuration (or interactions) can be sources of pressure for the organizations' isomorphic behavior. By *competitive isomorphism*, they mean organizations are similar because of the market competition. This type of isomorphism is the focus of population ecologists (Hannan and Freeman, 1977). The institutional isomorphism is in fact organizational competition for social legitimacy. This can be political, economic, and even market legitimacy. Then, DiMaggio and Powell (1983) introduced coercive, mimetic, and normative mechanisms as three methods of institutional isomorphism . In their later studies, DiMaggio and Powell refer to these three methods as different types of isomorphism.

Organizations with coercive isomorphism are constrained by other powerful organizations that they depend on for their legitimacy. These powerful organizations can be large corporations, government institutions, and even various forms of cultural and social expectations. Coercive isomorphism is, in fact, consistent with the resource dependency model introduced by Pfeffer and Salancik (1978). Mimetic isomorphism has its roots in uncertainty. Organizations have mimetic isomorphic behaviour when they feel uncertain in their environment. They view the strategies and actions of larger and more successful organizations as the most socially constructed (in DiMaggio and Powell's words) and efficient means of achieving their legitimacy. Finally, normative isomorphism is related to professions, and has its roots in the type of training and in the professional institutions. Pilots, medical doctors, and scholars are examples of professions that follow well-accepted standards all around the world. This is why normative isomorphism can be seen more often among airlines, hospitals, universities, and similar organizations that should follow worldwide common taken-for-granted norms. Therefore, a combination of network theory and institutional theory can better explain the normative isomorphism. As DiMaggio and Powell (1983/1991) clearly explained it, one may not be able to separate these three kinds of isomorphism from each other in the real world. They follow separate processes but operate simultaneously. However, the mimetic kind of isomorphism has been the socially constructed focus of the researchers in this field (Mizurchi et al., 1999). Based on an analysis of 26 articles published in six leading American Journals, Mizurchi et al. (1999) argue that researchers who are centrally located in this field have made a selective interpretation of isomorphic mechanism introduced by DiMaggio and Powell. Their findings indicate that mimetic isomorphism has received more attention from North American

organizational theorists since they concentrate more on the voluntary actions of organizational leaders rather than on the external power and coercion. This is an obvious example of normative isomorphic behaviour among scholars.

This brief review of how institutions are perceived from various perspectives and particularly the later explanation of sociological views of institutional environments imply that institutions as cognitive, legitimating, and regulative social settings may provide a better understanding of organizations and their activities in developing contexts. This is mainly true because sociologists' view of institutions is in fact, a natural/open system perspective at the ecological level of analysis as described in chapter one. Thus, their definition of institutions and institutional environment will be used through out this study. The next section offers a systematic review of empirical studies over the past twenty years in which institutional theory is one of the main theoretical frameworks; this section also discusses the gaps in and promising areas of this literature.

3.2) Review of the Empirical Studies on Institutional Theory

In this section, a research synthesis aggregate analysis of empirical studies grounded in the institutional theory is presented. Empirical works that have considered institutional theory as one of their main theoretical frameworks and published from 1983 to the end of first quarter of 2002 are reviewed. The purpose of this review is to identify some of the main promising areas of this literature. I used the key words *institution*, *institutional theory*, and *developing countries* to include the broadest sample of research

reports grounded in institutional theory. Since my primary interest is institutional theory as it is used in the administrative sciences, the search was limited to journals included in the ABI Inform, global, trade and industry databases along with the traditional books in which certain empirical articles have been published. In addition, I separately reviewed all the issues of journals such as *Academy of Management Journal* (AMJ), *Administrative Science Quarterly* (ASQ), and *Organization Studies* for the last twenty years (up to the end of the first quarter of 2002) to make sure I am not overlooking articles published in major journals.

A four-step refining procedure was used to refine the collected articles. First, all news and trade magazines such as Business Time, Fortune, News Week, Oil and Gas Journals were eliminated. Second, all articles that dealt with subjects other than organizations and their management activities were eliminated. In the third step, all those articles that have not considered institutional theory as their theoretical framework were eliminated. Finally, conceptual and non-empirical articles were removed from the sample. After this refining process, I found a sample of eighty-five studies that clearly identified institutional theory, broadly defined, as part of the theoretical justification for their reported empirical study. It should be noticed that majority of researchers who have performed these empirical works, have sociological backgrounds. In order to understand these studies and identify specific patterns among them, I codified eleven characteristics, as shown in Figure 3.1. I applied these characteristics to the sample of eighty-five articles and summarized the results in Table 3.2.

Figure 3.1

Variables used to codify the reviewed articles

1. Year of publication

2. Name of the publication

3. Region(s) or country(ies) of the setting

4. Type of organization used in the study

5. Focus of the study particularly of institutional investigation

6. Original data source(s) used in the study (one or a combination of the following

   sources):

   - Historical data

   - Archival data

   - Survey questionnaires

   - Interviews

   - Observation

   - Documents (These are companies' documents such as their management

     meetings' notes or other forms that can be a source of information).

   - Articles (these are articles in newspapers and magazines).

   - Reports (Mostly published reports within an organization or specific

     industry).

7. Research design (1. Longitudinal, 2. Cross-sectional)

8. Analytical Methodology (1. Statistical analysis, 2. Case analysis, 3. Content analysis,

   4. Event analysis, 5. Combination).

9. Nature of the study (1. Quantitative, 2. Qualitative, 3. Combination).

10. Direction of institutional effects (1. Top down, 2. Bottom up, 3. Both).

11. Number of institutional levels

Almost 85% of these studies were published after 1990, which clearly indicates a

growing trend to consider institutional theory as one of the main theoretical frameworks

for exploring organizations and their activities. AMJ and ASQ, the two top journals in the

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administrative and management literature, have published more than 62% of these studies, further indicating the importance of this theory.

In terms of methodology, the majority of the works published during 1980s and up to 1991 are longitudinal and qualitative studies using historical and archival data. Cross-sectional and quantitative types of works with survey questionnaires and statistical analysis have become more popular only in recent years. All these trends are clearly shown in Table 3.2. It should also be noted that interviews have been considered as one of the major sources of data in the last twenty years. This trend of moving away from historical and archival data indicates that obtaining individual perceptions about institutions and institutional pressures through survey questionnaires and interviews has become a valid and powerful data collection method in conducting such empirical studies.

Table 3.2: Characteristics of empirical studies in the last 20 years

Authors	Year	Pub.	Region	Type	Q/Q	Dir.	Data	Method	L	Organization	Focus
Tolbert, Zucker	1983	ASQ	U.S.	Long.	Qual	T-D	HD	CaseA	1	Civil Services	Structure
Meyer, Scott	1983	in M&S	U.S.	Long.	Qn.	T-D	HD	CaseA	1	Education	Structure
Tolbert	1985	ASQ	U.S.	Long.	Qual	T-D	AD	CaseA	1	Education	Structure
Flegstein	1985	ASR	U.S.	Long.	Qual	T-D	AD	SA	1	Many firms	Structure
Zucker	1986	in S&C	U.S.	Long.	Qual	T-D	HD	CaseA	1	Education	Structure
Meyer, et al.	1987	ASQ	U.S.	Long.	Qn.	T-D	S	SA	1	Education	Structure
Carroll, et al.	1988	ASQ	11	C/S	Qn.	T-D	HD, S	SA	1	Cooperatives	Performance
Powell	1988	in Z. Eds	U.S.	Long	Qual.	T-D	HD	CaseA	1	Publisher/TV	Organizational field
Covaleski et al.	1988	ASQ	U.S.	Long.	Qual.	B-U	I, AD, A	CaseA	1	Education	Budgetary practices
Eisenhardt	1988	AMJ	U.S.	C/S	Both	T-D	I, AD	SA	1	Specialty stores	Compensation policy
Boeker et al.	1989	ASQ	U.S.	Long.	Qn.	T-D	I, AD, A	SA	1	Semiconductor firms	Importance of functions
Galaskiewicz et al	1989	ASQ	U.S.	Long.	Qn.	T-D	I, AD	SA	1	Corporations	Decision Making
Mezias	1990	ASQ	U.S.	Long	Qn.	T-D	HD	SA	1	Many firms	Changes in financial reporting practices
DiMaggio	1991	in P&D	U.S.	Long.	Qual	T-D	AD	CaseA	1	Museums	Form
Galaskiewicz	1991	ASQ	U.S.	Long.	Qual	B-U	HD	CaseA	1	Leaders	Social Control
Brint, Karabel	1991	in P&D	U.S.	Long.	Qual	T-D	HD	CaseA	1	Education	Form
Leblebici, et al.	1991	ASQ	U.S.	Long.	Qual.	B-U	HD	CaseA	1	Radio stations	Institutional practices
Orru, et al.	1991	in P&D	Asia	Long.	Qual	T-D	D,R	CaseA	1	Many firms	Isomorphism
Singh, et al.	1991	in P&D	Canada	Long.	Qn.	T-D	HD	CaseA	1	Ecology	Form
D'Aunno et al.	1991	AMJ	U.S.	C/S	Qn.	T-D	AD	SA	1	Mental health centers	Form
Baum et al.	1991	ASQ	Canada	Long	Qn.	T-D	HD, AD	SA	1	Day care centers	Survival & legitimacy
Elsbach, Sutton	1992	AMJ	U.S.	C/S	Qual	T-D	AD, I,Ob	CaseA	1	Social Org.	Conformity
Judge et al.	1992	AMJ	U.S.	C/S	Qn.	T-D	I, AD	SA	1	Many firms	Strategy
Edelman	1992	AJS	U.S.	Long.	Qn.	T-D	HD, AD	SA	1	Many organizations	Personnel Practices
Burns, Wholey	1993	AMJ	U.S.	Long.	Qn.	T-D	S	SA	1	Hospitals	Structure
Haverman	1993	ASQ	U.S.	C/S	Qn.	T-D	HD	SA	1	Saving & Loan Associations.	Structure & diversification Strategies
Palmer et al.	1993	ASQ	U.S.	Long.	Qn.	T-D	HD	SA	2	Corporations	MDF (form)
Mezias, Scarselletta	1994	ASQ	U.S.	Long.	Qual	B-U	Doc	ContA	1	Many firms	Institutional Building

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Elsbach	1994	ASQ	U.S.	C/S	Qual	B-U	Doc, 1	ContA	1	Cattle Ind.	Conformity
Blum, et al.	1994	AMJ	U.S.	Long.	Both	T-D	I,S,AD	SA	1	Many firms	Strategy
Davis et al.	1994	ASR	U.S.	Long.	Qn.	T-D	HD	SA	1	Many firms	Structure
Goodstein	1994	AMJ	U.S.	C/S	Qn.	T-D	S,AD	SA	1	Many firms	Strategy
Ocasio	1994	ASQ	U.S.	Long	Qn.	T-D	HD	SA	1	Many firms	Political dynamics in organizations
Weber	1994	IO	E-Europe	Long	Qual	Both	HD	Case A	?		
Kikulis, et al.	1995	JMS	Canada	Long.	Qn.	T-D	AD	SA	2	Sport Org.	Structure
Holm	1995	ASQ	Norway	Long	Qual	Both	HD	CaseA	2	Mandated Sales Orgs	Creation of institutions
Shanks-Meile & Dobratz	1995	HR	U.S.	C/S	Qn.	T-D	S	SA	1	Blindness rehabilitation agencies	Structure and client outcomes
Christensen et al.	1995	in S&C	Denmark	Long.	Qual	T-D	HD	CaseA	1	Red Cross	Organizational characteristics
Deephouse	1996	AMJ	U.S.	Long.	Qual	T-D	A,R	ContA	1	Banks	Conformity
Goodrick et al.	1996	ASQ	U.S.	Long.	Qn.	Both	AD	SA	1	Hospitals	Cesarean surgery practices
Kraatz et al.	1996	ASR	U.S.	Long	Qn.	T-D	HD, AD	SA	1	Private Liberal Arts Colleges	Organizational behavior and performance
Stearns et al.	1996	ASR	U.S.	Long	Qual	T-D	HD	EA	1	None	Corporate merger wave
Dacin	1997	AMJ	Finland	Long.	Qn.	T-D	HD	SA	1	Newspapers	Organizational founding
Haunschild et al.	1997	ASQ	U.S.	Long	Qn.	T-D	AD	SA	1	Acquisition	Imitation strategies
Westphal et al.	1997	ASQ	U.S.	Long	Qn.	T-D	S, AD	SA	1	Hospitals	Innovation & TQM programs
Kirby, et al.	1998	JHM	U.S.	C/S	Qn.	T-D	S	SA	1	Care Org.	Strategy
Austin	1998	RCSA	Canada	Long.	Qual	T-D	HD	Case A	1	Education	Form
Lamertz, Baum	1998	RCSA	Canada	Long.	Qual	T-D	A,R	Cont A	1	Many firms	Strategy
Cheng, et al.	1998	JDS	Asia	C/S	Qual	T-D	HD	Case A	1	Many firms	Strategy
Ruef et al.	1998	ASQ	U.S.	Long	Qn.	T-D	HD, AD	SA	1	Hospitals	Organizational Structure
Homburg et al.	1999	JM	G/US	C/S	Qn.	T-D	S,I	SA	2	Many firms	Marketing influences
Mizruchi et al.	1999	ASQ	U.S.	C/S	Qn.	T-D	A	SA	1	None	Isomorphism
Gooderham et al.	1999	ASQ	6 EU Cs	C/S	Qn.	T-D	S, AD	SA	1	Many firms	HRM Style
Hoffman	1999	AMJ	U.S.	Long	Qn.	Both	HD, A	SA	2	Chemical firms	Institutional change
Thornton & Ocasio	1999	AJS	U.S.	Long	Both	T-D	I, HD	EA, SA	1	Higher Education Publishing Ind.	Executive power and succession
Peng, Luo	2000	AMJ	China	Long.	Qn.	B-U	S,I	SA	1	Many firms	Performance
Davis, et al.	2000	JIBS	U.S.	C/S	Qn.	T-D	S	SA	2	MNC	Strategy

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			6	C/S	Qn.	T-D	S	SA	1	None	Entrepreneurship
Busenitz, et al.	2000	AMJ	6	C/S	Qn.	T-D	S	SA	1	None	Entrepreneurship
Fussel et al.	2000	ISMO	Denmark	C/S	Qual	T-D	I,AD	Case A	1	A hospital	Greening of an organization
Randall	2000	IJM	Russia	C/S	Qual.	T-D	HD		1	None	Legitimating structure & goal
Casper	2000	OS	Germany	Long	Qual.	T-D	HD	Case A	1	Pharmaceuticals industry	Entrepreneurship and innovation
D'Aunno et al.	2000	ASQ	U.S.	Long.	Both	T-D	AD, HD	Cont A, EA	2	Hospitals	Organizational change
Arndt et al.	2000	ASQ	U.S.	C/S	Qual	T-D	AD	Cont A	2	Hospitals	Structure
Lawton	2000	PMM	UK	C/S	Qn.	T-D		SA	1	Public organizations	Performance measurement
Young et al.	2000	JMS	U.S.	C/S	Qn.	T-D	AD	SA	1	Hospitals	CEO's Performance
Budros	2001	RCSA	Canada	Long.	Qn.	T-D	HD	EA, SA	1	Universities	Faculty retirement programs
Wicks	2001	OS	Canada	C/S	Qual.	T-D	HD	Case A	1	Westray Mines	Institutionalization of mindsets
Hargadon et al.	2001	ASQ	U.S.	Long	Qual.	B-U	HD	Case A	1	Thomas Edison	Changing institutional expectation
Henisz et al.	2001	ASQ	Japan	Long	Qn.	T-D	HD, AD	SA	1	Many firms	Entry into new geographic markets
Russo	2001	ASQ	U.S.	Long.	Qn.	T-D	HD, I	SA	1	Energy facilities	Organizational foundlings
Lounsbury	2001	ASQ	U.S.	Long	Qn.	T-D	AD, S	SA	1	Colleges and universities	Organizational practices (staffing/form)
Carpenter	2001	AOS	U.S.	C/S	Qual	T-D	HD, AD		1	4 State Governments	GAAP adoption
Greenwood et al.	2002	AMJ	Canada	Long	Qual	B-U	I,AD	Cont A	1	Accounting Professional Associations	Change in institutionalized practices of accounting organizational field
Thornton	2002	AMJ	U.S.	Long	Qn.	T-D	I, HD	SA	1	Book publishing industry	How market pressures change institutionalized new organizational forms
Sherer & Lee	2002	AMJ	U.S.	Long	Qn.	B-U	HD, Doc, I	EA	1	Law firms	Scarce resources of innovative law firms have made them to legitimize changes in institutional norms.
Kraatz & Moore	2002	AMJ	U.S.	Long	Qn.	B-U	HD, AD	SA	1	Liberal Art Colleges	How migration of leaders with specific skills can change institutionalized norms
Lee & Pennings	2002	AMJ	Dutch	Long	Qn.	B-U	HD, AD	SA	1	Accounting service firms	How performance of firms can change institutionalized organizational forms
Townley	2002	AMJ	Canada	Long	Qual	T-D	I,AD	Case A	1	Museums	How political forces can be the cause of the introduction of new performance measures.
Casile & Davis-Blake	2002	AMJ	U.S. & Canada	C/S	Qn.	T-D	HD, AD	SA	1	Colleges and universities	Institutional and market factors affect responsiveness of these organizations to changes in accreditation standards
Guard et al.	2002	AMJ	U.S.	Long	Qual	B-U	AD	Case A	1	Sun Microsystems	How Java technology changes the existing taken-for-granted norms of the software industry.
Kostova & Roth	2002	AMJ	7 developed 3 developing	C/S	Qn.	T-D	S	SA	2	MNCs	Adoption of organizational practices of MNCs' subsidiaries

				C/S	Qual	B-U	Ob, AD, I, D	Cont A, Case A	1		
Zilber	2002	AMJ	Israel						1	A rape crisis center	How individuals change the institutional meanings
Lounsbury	2002	AMJ	U.S.	Long	Qn.	B-U	HD	SA	1	Financial associations	Development of financial expertise and its effect in shaping new professionalization norms
Glynn & Abzug	2002	AMJ	U.S.	Long & C/S	Qn.	T-D	AD, S	SA	1	Corporate names	Organizational identities as isomorphic behavior
Lawrence et al.	2002	AMJ	Palestine	C/S	Qn.	B-U		Case A	1	An NGO for enfants' nutrition	How interorganizational collaboration can create new institutions

Notes: HD: Historical Data, AD: Archival Data, S: Survey questionnaires, I: Interviews, Ob: Observation, Doc: Documents, A: Articles, R: Reports
CaseA: Case Analysis, ContA: Content Analysis, EA: Event Analysis, SA: Statistical Analysis,

JHM: Journal of Healthcare Management

RCSA: Revue Canadienne des Sciences de l'Administration

JM: Journal of Marketing

in Staw & Cummings eds. Research in Organizational Behavior

OS: Organization Studies

AJS: The American Journal of Sociology

in S&C ed.: In W. R. Scott & S. Christensen (Eds.), The institutional construction of organizations: International and longitudinal studies: 67-90. Thousand Oaks, CA: Sage.

AOS: Accounting, Organizations and Society

ISMO: International Studies of Management & Organization

IJM: International Journal of Management

JMS: The Journal of Management Studies

HR: Human Relations

PMM: Public Money & Management

IO: International Organization

Table 3.3 : Main promising areas for future empirical research

		# of studies	% of total
Region	Developed (US)	75	88%
	Developing	10	12%
Direction	Top Down	66	78%
	Bottom Up	15	17%
	Both	4	5%
Institutional levels	One	74	87%
	Two	9	11%
Type	Longitudinal	57	67%
	C/S	28	33%
Q/Q	Quantitative	48	56%
	Qualitative	33	39%
	Both	4	5%
Source of Data	Interviews/Survey	32	38%
	Others	52	61%
Method	Statistical Analysis	48	56%
	Others	34	40%
Focus	Strategy	22	26%
	Others	62	73%

Interesting patterns were found in some of these characteristics as summarized in Table 3.3. These patterns are promising areas for future research in this field. They call for researchers' attention to at least four major areas: 1) the different levels of institutions, 2) the reciprocal relationships among institutions as well as between institutions and organizations, 3) the impact of institutional pressures on functional behaviors or strategies of business firms, and finally 4) the use of samples from developing countries

in empirical studies. Since these four areas construct the main research model of the present study, each one is briefly explained in the following sections.

3.2.1) Different levels of Institutions

Researchers have used different levels of institutions along with specific theoretical models to explain institutionalization, but most of them focus on one specific level (Scott, 1995/2001). In Scott's terms, they are working at the intra-organizational, the organizational field, or the societal level. There is an obvious lack of multilevel studies in this literature. Tables 3.2 and 3.3 show that more than 87% of the empirical studies that I reviewed focus on institutions or sources of institutional pressures at one specific level. For example, they have considered global institutions (e.g., Edelman, 1992; Thornton, 1995), national institutional environment (i.e. Carpenter, 2001; Carroll, 1988; Cheng et al., 1998; Dacin, 1997; DiMaggio, 1991; Singh et al., 1991), institutions of specific geographic areas (i.e. Deephouse, 1996; Goodstein, 1994; Tolbert et al., 1983), organizational fields (i.e. Austin, 1998; Davis, 2000; Hoffman, 1999; Palmer et al. 1993), or even the intra-organizational sources of institutional pressure (Homburg et al., 1999).

Institutions are defined as laws, regulatory structures, government agencies, interest groups, and professions (Scott, 1987, 1992) and may be formed at different levels, including global, national, regional, (DiMaggio & Powell, 1983/1991), organizational, and intermediate levels (Scott & Meyer, 1983). They may also have various perceptions about the legitimacy of organizations, which lead organizations to respond to each one of them differently. Thus, an organization lives in a complex and

dynamic institutional environment, driven by all kinds of institutional forces. The ongoing interactions among these forces have made the organizational responses very complex and hard to understand. This means that the strategic responses such as acquiescence, compromise, avoidance, defiance, or manipulation discussed by Oliver (1991), should not be viewed as a simple outcome of an organization's interaction with a single institution at a specific level. What we observe as an organizational response is indeed a combination of various responses to institutions at different levels. The resultant response may be related to both the power of institutional pressures and obviously the organizational factors, such as its age, size, and competitiveness (Oliver, 1991). It is argued that institutions at different levels can significantly influence the strategy of an organization when confronting each level of institutional pressure. For example, in a market-oriented type of environment, even the most powerful regulatory institutions follow taken-for-granted norms of the market institutions such as various organizational fields (industries). Strategies of organizations in these types of environments are not only influenced by market institutions (e.g., industries) but also by the interaction between market institutions and other institutions such as local authorities and communities. It is believed that organizations are embedded and operate in a multilevel institutional environment with different norms, expectations, opportunities, and threats at each level. Each layer of this institutional environment may have a direct impact on organizations or create a stronger impact when they interact with institutions at other levels. Thus, in applying institutional theory, one must consider more than one institutional level in analyzing organizations and their management activities.

Very few studies have compared the influences of two levels of institutional pressures in this literature. As Table 3.2 shows, most of the studies that do compare these levels were published after Scott's (1995) call for multilevel studies in the institutional theory literature (i.e., D'Aunno et al., 2000; Davis et al., 2000; Hoffman, 1999; Homburg et al., 1999; and Kostova et al., 2002). For example, using 1383 business unit managers of U.S. based firms competing in the pulp and paper industry, Davis, et al. (2000) claim that the mode in which firms enter the international arena is a function of institutional pressures at both the country and organizational (internal) levels. In another study Palmer, et al. (1993) use a sample of 105 corporations from the largest 500 industrial corporations in 1962 and argue that diffusion of multidivisional form by these firms during 1960s is a function of both industry level and organizational level isomorphism.

National institutions have historically been viewed as the major source of pressure for organizational forms and behaviors (i.e. Tolbert, 1985; Zucker, 1986; Meyer et al., 1987; Singh et al., 1991, Kostova, et al., 2002). Since organizations operate in both national and competitive environments (Roberts et al., 1997) and since the latter has become more global these days, it is crucial to understand the role of global institutions in organizational behaviors and strategies. In a study of the Danish Red Cross, Christensen and Molin (1995) suggest that the support of global institutions for individuals' rights has increased the number of voluntary associations. Similarly, Edelman (1992) explains that civil rights legislation created a normative environment that motivated the adoption of non-mandated grievance procedures for employees. In another study, Thornton (1995) describes how global changes affect the waves of acquisitional activities.

My review indicates that studies concerned with two levels of institutions usually focus on a combination of institutional pressures at the organizational level and either the national or industrial level. Although in studies such as Davis et al. (2000) and Kostova et al. (2002), MNCs' headquarters as a source of institutional pressure may be perceived as a kind of global institution; but both of these studies clearly describe the source of pressure as coming from the internal and corporate level, not from global institutional level. It is rare to find an empirical study in which institutional pressures at both national and global levels are considered simultaneously. Global institutions have become very strong, especially in the last decade. All three dimensions of global institutional environment (i.e. cognitive, legitimate and regulative) exert pressure on organizations and even national institutions all around the world these days. Therefore, it seems that global institutions, just like national institutions, have become inseparable elements of every institutional analysis of organizations and their management activities.

One of the major sources of global pressures for organizations comes from organizational fields. DiMaggio & Powell (1983:148) consider four parts for institutionally defined fields:

"an increase in the extent of interaction among organizations in the field; the emergence of sharply defined inter-organizational structures of domination and patterns of coalition; an increase in the information load with which organizations must contend; and finally the development of a mutual awareness among participants in a set of organizations that are involved in a common enterprise."

It is argued that suppliers, consumers, regulatory agencies, and other organizations of an industry (field) constitute a certain institutional life (DiMaggio &

Powell, 1983; Powell, 1985). This institutional life is formed around "issues that become important to the interests and objectives of a specific collective of organizations" (Hoffman, 1999:353) which can be at regional, national, and most recently global levels. But the least attention has been given to the global industrial arrangements in the institutional theory literature. This is why the national institutions and the global industry (in the institutional theory literature, called an organizational field at the global level) are the two levels of institutions whose impacts on organizations are explored in my study.

The norms and expectations of a global industry are widely accepted across nations. Considering global industry as a major source of institutional pressure along with national institutions can shed light on some of the unknown dimensions of organizational behaviors and strategies. Exploring these two levels of institutions will clarify some of the dimensions of the relationships between institutions (especially when involving recent issues such as institutional change) and the institutionalization of institutions: new concepts in the institutional theory literature. Such a study will provide a clearer distinction between the impact of national institutions (including national industries) and global institutions. Furthermore, having two levels of institutions in a single study provides a great opportunity to examine the relationship between institutions at different levels, their interactions, and a comparison of their impact on organizations.

3.2.2) Reciprocal relationship among institutions and between organizations and institutions

As indicated in Table 3.3, 78% of the empirical studies have considered deterministic or top-down relationships between institutions and organizations. This is in line with Barley and Tolbert's (1997) argument about the dominancy of top-down approach in this literature. Empirical studies usually have tried to explore the impact of institutional pressures on certain aspects of organizations, such as their forms, structures, performance, and growth (e.g., Carroll et al., 1988; Cheng et al., 1998; Flegstein, 1985; Meyer et al., 1983; Meyer et al., 1987; Powell, 1988). Researchers have theoretically described the impact of organizations on institutional norms (e. g. Barley et al., 1997; Boons et al., 2000; Giddens 1984; Roberts, 1997) and have recognized that the density-dependent nature of legitimacy is important to institutional norms (e.g., Aldrich & Fiol, 1994; Fligstein, 1991). They also have suggested that organizations may strategically use the links to institutionalized procedures to demonstrate the organization's worthiness and acceptability (Oliver, 1991). But, the bottom-up relationships between institutions and organizations have rarely been explored empirically. Structuration theorists (i.e. Giddens, 1984) have tried to reduce the differences between top-down (deterministic) and bottom-up (voluntaristic) notions of structures (or institutions) by arguing that they are two realms of social order. They believe that institutions exist since they are part of our everyday activities.

Barley and Tolbert take a leaner position by arguing that institutional expectations are relevant to the "activities and patterns of interaction characteristics of particular settings" (1997:99). By claiming that enacting organizational rules and procedures may

or may not take place intentionally, they agree with Jepperson (1991) who argues that institutions are not reproduced through conscious choices. This means that the consequences of organizational impact on institutions take more time to develop and are much more complex than top-down impact. In other words, institutions constrain organizations' behavior synchronically, while social behaviors of organizations constitute institutions diachronically (Barley et al., 1997). The complex nature of reverse impact is, in fact, one of the main reasons for having fewer studies about the process by which institutional norms are constructed, changed or maintained. Authors such as Brint and Karabel (1991), Covaleski et al. (1988), Galaskiewicz (1991), Hargadon et al. (2001), Mezias et al. (1994), and Peng, Luo (2000) are exceptional researchers who have empirically explored this reverse impact over the past 20 years. Brint and Karabel (1991) explained how the American Association of Junior Colleges promoted the legitimacy of vocational colleges by developing legitimate recruiting, guidance, and placement programs. Covaleski et al. (1988) use the 1985 case of interchanges between the University of Wisconsin and the Wisconsin's governor and legislature to examine the bottom up relationship of the institutionalization process. They argue that specific individuals in both the organization and the larger social context invent and articulate institutionalized expectations. They look at the budgetary practices and claim that, within the organization and its extra-organizational relations, the process of institutionalization is infused with power and self-interest.

The importance of this bottom up relationship between institutions and organizations and its resulting institutional changes created enough incentive for the editor and the editorial board of the AMJ to make the first 2002 issue a special issue on

institutional change. Most of the articles published in this issue talk about the main sources of change in institutional norms. Some of these studies clearly explain the bottom up relationships in changing institutional norms. They describe how individuals (Zilber, 2002), the performance of firms (Lee & Pennings, 2002), the migration of leaders with specific skills (i.e.Kraatz & Moore, 2002), and the scarcity of resources (Sherer & Lee, 2002) may change institutional norms or institutionalize new norms. However, even these studies have not specifically talked about the reciprocal relationship between institutions and organizations.

Since an organization may influence the norms of a specific institution and affect its responses to other institutional pressures, it is worthwhile to pay more attention to these bottom-up relationships in future empirical works. If an organization as a social unit operates under the pressures and constraints created by institutions at a specific level without being able to change the norms and expectations of those institutions, then it may use these taken-for-granted norms to protect itself from other institutional pressures and even to change the norms of institutions at other levels. In fact, an organization's responses and strategies are the result of a combination of all these interactions. It will oversimplify this impact if we consider them the result of a simple deterministic relationship between the organization and institutions of a specific level. My study is, in fact, an effort to explore this reciprocal relationship between two levels of institutions as well as between institutions and organizations. It is an effort to examine how institutions at different levels can influence the norms and expectations of each other and how an organization's activities or strategies may change institutional norms. It may also provide

an opportunity to see how interactions between institutions at a specific level and an organization can affect the norms of institutions at other levels.

3.2.3) Functional behavior of business firms

Most of the empirical studies have focused on non-profit organizations and sectors such as educational organizations, museums, social and health services, hospitals, high schools, colleges, and universities (e.g., Arndt et al., 2001; Brint et al., 1991; Budros, 2001; Burns et al., 1993; DiMaggio, 1991; Kirby et al., 1998; Meyer et al., 1983; Singh et al., 1991). They are essentially concerned with the forms and structures of these organizations. Very few studies have described the behaviour of business organizations; and most of these explore their structures and forms (e. g. Carroll et al., 1988; Davis et al, 1994; Flegstein, 1985; Palmer et al., 1993) or their overall strategies (e.g., Cheng, et al., 1998; Henisz et al., 2001; Judge et al., 1992; Lamertz, Baum, 1998). Hinings et al. (1988) argue that domain, form, and criteria for evaluation are three general aspects of organizational operations that may be institutionalized in a set of norms. In other words, organizations' behaviours have been generally defined as the forms or states of organizations (Davis et al., 2000). Regardless of the type of organizations, most of the empirical studies are alike in assuming a significant role for institutionalized environments. By emphasizing the spread of isomorphism among organizations subject to similar institutional pressures (DiMaggio and Powell, 1983/1991), researchers have made their analyses at what Zucker (1991) calls the macro-level approach. They have taken institutionalization for granted by focusing on the effects institutions have on only a few dimensions of organizations. In some of these studies (e. g. Cheng et al., 1998;

Tolbert, 1985), making a clear distinction between the resource dependency theory and the institutional theory is very difficult. That is why Zucker (1991) has made a call for a micro-level approach in which institutionalization is seen as a process. To understand this process, one needs to analyze various dimensions of an organization's behaviours and their relationship to institutional norms.

There are few studies (i.e. Blum, et al., 1994; Cheng, et al., 1998; Davis, 2000; Judge et al., 1992; Lamertz, Baum, 1998) in which strategy rather than the structures or forms of business organizations are explored empirically. Judge et al. (1992) have used both the institutional perspective and the strategic choice perspective to examine the level of board involvement and its relationship to the performances of firms in four different industries. Based on variables like age, ownership, level of diversification and insider representation, they have concluded that there is an institutionalized decision-making process among less diversified firms. In another study, using a systematic content analysis of 110 articles published over a seven-year period, Lamertz and Baum (1998) explore the delayering strategy as a legitimate organizational practice among Canadian companies. Despite the fact that, in recent years, few studies have explored the relationships between specific strategy of firms and institutional pressures (Kostova et al., 2002; Davis et al., 2002), further empirical research, particularly to explore the impact of institutional pressures on the functional strategy of firms, is still needed. There is a lack of both theoretical models and empirical works for understanding functional behaviors of firms using institutional theory.

Business firms with similar forms and structures may behave extremely differently especially in terms of their functional strategies. A specific institutional

pressure may be able to shape the structure of a firm but not necessarily its strategy. Since practices and behavior patterns are not equally institutionalized (Tolbert et al, 1996), different parts of an organization respond differently to the same institutional pressure, and there could be different degrees of institutionalization among various activities of the organization. In her study Eisenhardt (1988) explores the sales-compensation policies of 54 retail specialty stores using both agency and institutional theories. She argues that compensation practices reflect the institutional environment of the stores at the time of their founding and "both institutional- and agency-theory variables affect choice of compensation policy (Eisenhardt, 1988:505)." Homburg et al. (1999) have indirectly addressed the relationship between functional strategy and institutional pressures. They interviewed 72 general, marketing, sales, and research managers of 27 U.S. firms and 20 German firms. They used the results of these interviews, along with survey responses from 280 U.S. and 234 German mangers of SBUs, to examine how attitudes toward marketing (institutionalized at the firm, industry, and country levels) are related to the relative influence of marketing. They look at marketing as a specific function of firms that has been institutionalized differently from other functional activities. They suggest that, by introducing functional dimensions of organizations' behavior into institutional models, one will have a better understanding of institutional impacts. They also argue that by, moving from the structural level of firms' behaviors to their functional level, the applicability and power of institutional theory may be examined in a broader micro level scope. For that reason, my study defines the behavior of business firms beyond the traditional organizational form, the structure, or the overall strategy and explores the impact of two different levels of institutions on two functional activities of business

firms. By considering the functional behaviors of firms, I will be able to examine the actual behaviors of organizations and, at the same time, make a major step toward what Zucker (1991) calls institutionalization as a process rather than a state.

Figure 3.2

A general Model for the relationship between institutions and activities of organizations
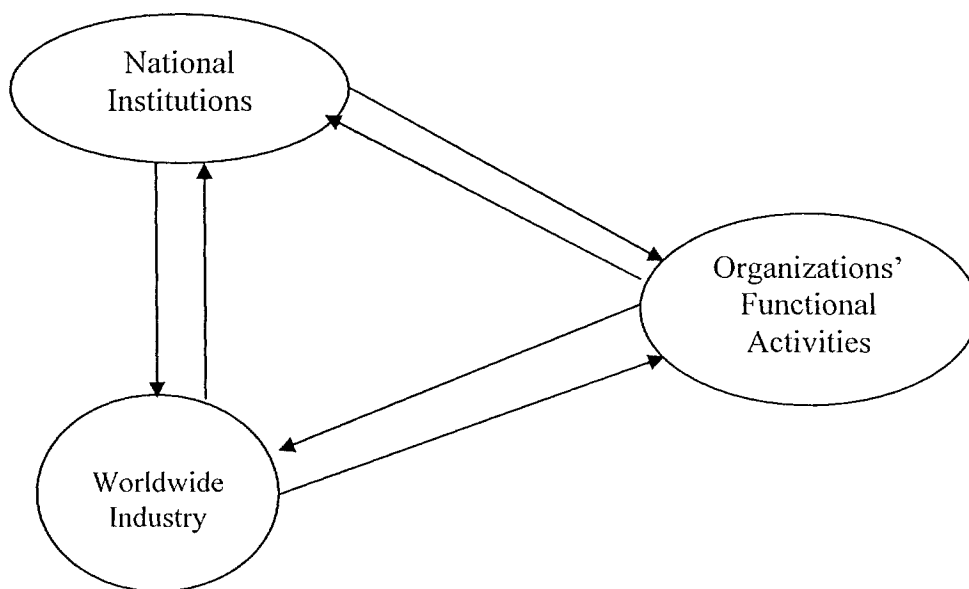
Thus, the three main areas of the institutional theory literature that have been discussed up to this point can be summarized as follows:

- Multilevel of institutional pressure,

- Reciprocal relationship within institutions and between organizations and institutions,

- Functional behaviors (strategies) of business firms.

Figure 3.2 shows a general framework for the research model of this study, which includes these three elements.

3.2.4) Contextual differences

In addition to the three patterns in the institutional theory literature already discussed, context is another striking element. The interaction between institutions and organizations varies according to their national contexts (Hofstede, 1980). The majority of the reviewed studies (88%) have used cases, institutions, or organizations from such contexts as the U.S., Canada, or Western European countries. In fact, more than 75% of them have selected their samples from the United States. Institutional theory is not exceptional from other fields of social science in using samples primarily from developed countries. Very few studies (e.g., Cheng et al., 1998; Orru et al., 1991; Peng, et al., 2000; Lawrence et al., 2002) have actually examined institutional theory in contexts other than developed world. Research suggests that organizations' behaviour, structures, and practices vary across countries (Grindle, 1997; Jorgensen et al., 1986; Lincoln et al., 1986). Cross-cultural studies of issues at the organizational level, such as human resource management (Adler, 1997) and power distribution in organizations (Hofstede, 1980), are far more extensive than those at the institutional level. Selznick (1996) argues that the interaction of culture and organization is mediated by constructed minds or patterns of perceptions and evaluations. People cope with uncertainty by relying on routines. Many of the routines and regularities are external to organizations, but they incorporate them as taken-for-granted parts in their agenda (Zucker, 1983). Thus, the level of uncertainty in the organizational environment and the degree of interconnectedness in the institutional environment are two dimensions for every context; for example, they may change the reasons for organizations conforming to institutional pressures, reasons that range from efficiency to legitimacy or from coercion to diffusion. This means that reasons for

conformity or resistance are embedded in a social context. In fact, the boundaries between institutions and organizations depend on the nature of the national culture (Tayeb, 1994).

Despite the vital role of the characteristics of social contexts, there are very few comparative studies to examine the variance of the relationships within institutions as well as the relationships between institutions and organizations in different contexts. Following the introduction of the multidimensional institutional theory by DiMaggio and Powell (1991a), Kostova (1999) made a major step in building a theoretical framework for understanding the differences between institutions in different contexts. Her country institutional profile (CIP) model is based on regulatory, cognitive and normative dimensions of institutions (DiMaggio and Powell, 1991). She argues that "a country's social environment can be characterized by its CIP: a three-dimensional construct defined as the set of regulatory, cognitive, and normative institutions in that country" (1999:317). However, the applicability of Kostova's (1999) model is still to be tested empirically since it is not clear how to draw a line and separate these types of institutions in different cultures. For example, in highly collective societies like China, where personal ties and networks have a critical role in institutional and organizational relationships (Xin et al., 1996), these three types of institutions are mixed and hardly separable.

Despite researchers' efforts, there is still a lack of both theoretical and empirical studies for understanding institutions and their relationships with organizations (particularly business firms) in contexts other than developed nations. Context is not only a major reason for organizations' conformity or resistance to certain institutional pressures; it is also a strong mediator for other reasons, such as legitimacy, efficiency,

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coercion, and diffusion. The present study is an effort to test a multilevel institutional analysis in a developing context and, as such, is concerned with both contextual and multilevel institutional effects on the relationships between institutions' expectations and organizations' behaviors. Considering the contextual effects, the two levels of institutions, the reciprocal relationships, and the functional behavior of organizations, the main arguments and related questions for the study can be summarized as follows:

The relationship between institutions and business firms vary among different levels of institutions. There is a reciprocal relationship among different levels of institutions and between institutions and business firms' behaviours (strategies). The impact of institutions on business firms varies across their functional behaviours. In other words, each institutional level influences the different activities of organizations in different ways. Finally, each level of the institutional environment may change the impact that institutions at other levels have on the functional behaviours of organizations.

Related Questions:

1. What are the major levels of institutions that exert pressure on business firms in a developing country?

2. Does the institutional pressure of each level vary across different functions of business firms in a developing country?

3. Is there a reciprocal relationship between institutional norms and functional behaviours of business firms in a developing country? If so, how does it vary across different functions of these firms?

4. In a developing nation, do institutions at different levels influence each other's norms? If so, which level has the dominant influence?

3.3) Hypotheses and Research Model

The hypotheses for this study are grouped according to deterministic (top-down) and voluntaristic (bottom-up) relationships between institutions and organizations in a developing context. Deterministic relationships are defined as the impact of macro level institutions on micro level institutions and also the impact of institutions in general on organizational forms and behaviors. Global organizational fields (industries) and national institutions are two salient examples of different levels of institutions with deterministic relationships. National institutions of different countries are more or less under pressure from various global level institutions. This is while the impacts of both national and global institutions on organizations' behaviors are viewed as deterministic relationships between institutions and organizations. Voluntaristic relationships are defined as the opposite to the deterministic ones; they describe how institutions at lower levels (e.g., national institutions) may change the norms of institutions at higher levels (e.g., global institutions). These types of relationships also explain how organizations and their activities may change the norms and expectations of an institution. Since a global organizational field and the national institutions of a developing country are taken as the main sources of institutions in this study, they need to be clearly defined. The following sections discuss each of these institutional levels and explain the reasons for selecting specific types of institutions at each level.

3.3.1) Global Organizational Field

Researchers believe that different institutional fields or industries may exert various types of pressures on their affiliated organizations. Industries may provide inconsistent signals and follow various practices (e.g., DiMaggio and Powell, 1991; Oliver, 1991; Powell, 1991; Scott, 1991). Greenwood et al. (1996) argue that organizational structures and practices vary across institutional sectors. For example, organizations in governmental sectors are usually under regulatory pressures (Kikulis, et al. 1995). Sectors with well-developed networks of regulatory agencies–such as accounting, law, and education–normally have mimetic and normative types of conformity to institutional norms. Therefore, organizations from different sectors or industries can create confounding results for a study in which an organizational field is one of the main levels of institutional pressure. Consequently, a single industry (global organizational field) provides less confounding results in the present study.

The institutional theory literature indicates that researchers have a tendency to choose service industries for their empirical studies (Table 3.2). One reason may be the high degree of fit between the nature of service firms and institutional perspectives. Institutional perspectives are more concerned with social interactions, and service firms have more social interaction than manufacturing firms do. The frequency and complexity of social interactions in service industries provide a great opportunity for researchers to observe the development of social arrangements (institutions) and their impact on organizational forms and behaviors. Health and social services (Burns et al., 1993; Kirby et al., 1998), educational institutions (Austin, 1998; Meyer, et al., 1983, 1987; Tolbert, 1985; Kraatz & Moore, 2002), museums (DiMaggio, 1991; Townley, 2002), law firms

(Sherer & Lee, 2002), and broadcasting agencies (Leblebici et al., 1991) are some of the examples of service industries used in the literature. Based on the model shown in Figure 3.2, an industry should have a global scope in order to be considered a source of global institutional pressure. The organizations of this industry should also be subject to globally accepted norms or taken-for-granted values. Finally, a systematic review of this literature (discussed in section 3.2) found that most empirical studies have explored the institutionalization process in non-profit organizations. Although, in recent years, the institutional theory literature has included more studies on business firms and their behavior (e.g., Lamertz, Baum, 1998; Cheng, et al., 1998; Homburg et al., 1999; Davis et al., 2000; Henisz et al., 2001, Kostova et al., 2002), more room is still available for research on business firms that use institutional theory. This is why, for this study, I have selected a global industry from the business sector that seeks economic profit. In other words, the service industry for this study is in a business and competitive environment.

Since the required global organizational field is *a global competitive service industry*, I have chosen the airline industry, a highly developed and competitive business field of the service sector, as a perfect candidate for this study. In addition to the above-mentioned characteristics, this industry has both highly standardized and less standardized types of activities. The operational activities of airlines as the main players of this industry are standardized globally while their commercial activities are less standardized globally. This young industry has attracted the attention of several other industries and national or global institutions because of its broad social, economic, and technical implications. Prior to the 1978-deregulation movement, most countries had one major airline which was known as their flag carrier and carried the norms and values of its own nation. For that reason, this

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industry is a perfect example of a field with a high degree of national ties. The airline industry is an international field with globally accepted rules and norms. Safety, a significant factor in the existence and survival of this industry, necessitated the foundation of The International Civil Aviation Organization (ICAO). Representatives of 52 nations created this framework for world civil aviation 47 years ago at Chicago. Today, more than 185 nations are members of ICAO. This institution is responsible for developing international rules governing all areas of civil aviation activities. International Air Transportation Association (IATA) is another international institution whose core concern is the commercial activities of airlines. IATA, originally founded in 1919, now links nearly 300 airlines. These institutions (ICAO and IATA) were established to institutionalize the operational and commercial behaviour of airlines. The global nature of this service industry and the variations in its global standards provide a great opportunity for researchers to examine different aspects of the institutional theory in a business environment. With its worldwide dimensions, the airline industry is a perfect setting for the model presented in Figure 2.2.

3.3.2) National Institutions

Many issues must be considered in doing any kind of social research in a developing country, but being familiar with the culture, knowing the language, and having appropriate access to pertinent data are among the most important ones. In fact, one needs to know the culture and language to be able to access the data. Because of my background as an Iranian and as a former employee of Iran Air, Iran is the best candidate as the developing nation for my study. National institutions in every country can be defined as the social, governmental, and legislative institutions; more specifically, these

include religious associations, political parties, state authorities, parliaments, auditing institutions. However, since it is not feasible to include all national institutions in a single study like this, I have chosen those institutions that are closely related to air transportation and exert a direct influence on airline activities as the national institutions for this study, namely, the Ministry of Transportation and Civil Aviation Organization of Iran. Every institution including these national institutions have cognitive, normative, and regulative dimensions (DiMaggio and Powell, 1991), but it should be noted that the salience of one or another kind of legitimacy may vary over time and place (Dacin, 1997). For example, normative legitimacy is more salient than regulative or cognitive legitimacy for industries with global professional associations (Kraatz et al., 1996). Considering the nature of the airline industry and the national institutions of a developing country like Iran, regulative and normative legitimacy seems to be more appropriate in this study.

Thus, the airline industry, the related Iranian national institutions, and the commercial and operational activities of Iranian carriers correspond to the worldwide institution, national institutions, and functional activities shown in Figure 3.2 and produce the main model for this study as shown in Figure 3.3.

Figure 3.3

**Main model for the relationships between institutions at two different levels
and two functional activities**
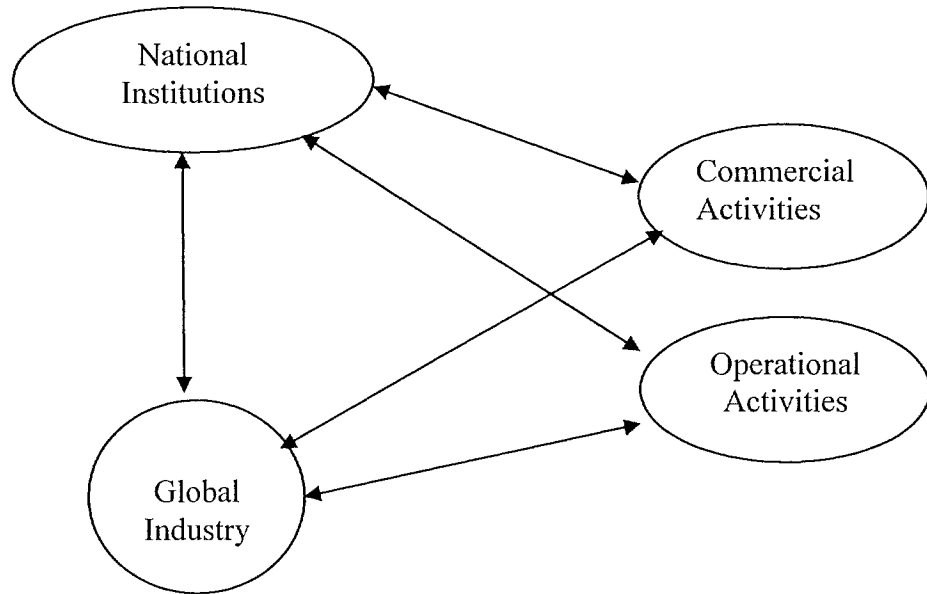
3.4) Hypotheses for the deterministic relationships

Institutional frameworks influence organizations' actions (Aldrich & Fiol, 1994) and define the acceptable actions within their frameworks (Hillman & Keim, 1995). The impact of institutions on organizations' forms and activities has long been studied (Fligstein, 1991; Jepperson, 1991; Leblebici, 1991; Martinez, 1989; Meyer, 1977, 1987; Scott, 1995; Tolbert, 1985). Institutions set boundaries for rationality of organizations by limiting their opportunities and alternatives (Barely et al., 1997). Organizations must continuously follow certain behaviors to keep themselves socially and economically legitimate. This is called isomorphism or consistency to the institutional environment (Meyer et al., 1977; Powell et al., 1991). Meyer and Rowan (1977) argue that

"organizations are driven to incorporate the practices and procedures defined by prevailing rationalized concepts of organizational work and institutionalized in society". Therefore, researchers have viewed institutions as the main macro level source of independent variables (Scott, 1995/2001) for organizations behaviors. The institutional environment has been viewed at both organizational field and national levels. Researchers such as Scott and Meyer (1991), Powell (1988), and Carroll et al. (1988) explore how the structure of organizations is related to the degree of conflicting demands in their environment. It has been shown that national institutions have considerable impact on organizations' behaviors (e.g., Davis et al., 2002; Gooderham et al., 1999; Godstein, 1994; Haunschild et al.; 1997; Henisz et al., 2001; Kikulis et al, 1995; Lounsbury, 2001; Meyer, Scott, Strang, 1983; Orru, et al., 1991).

Studies have also examined the effects of government agencies on firms and industries (Baron et al., 1986; Vivian, 2001). Campbell et al. (1990) argue that the state exercises its influence on organizations in two ways: as a *collective actor* and as an *institutional structure*. As collective actors, government agencies may use different actions such as imposing taxes, allocating critical resources, and regulating controls to shape the behavior of firms. As institutional structures they may provide "distinctive configuration of organizations", adjudicate the conflicts within and between organizations and systems of organizations, and "define and enforce property rights" (Campbell et al., 1990). While states as collective actors exert regulative pressure on firms, states as institutional structures exert cognitive and normative pressure on firms.

One of the main arguments of the present study is that institutional pressures vary across different functional activities of organizations. For example, activities such as

flight operations or aircraft maintenance have to be performed according to the globally accepted rules and regulations. It does not matter if an airline is based in the U.S. or Iran, it still has to follow certain globally defined standards in its operational activities and strategies; otherwise it will not be considered a legitimate operator in this field. But an airline based in Iran may follow a different path in terms of its commercial activities and strategies compared with an airline based in the highly competitive U.S environment. Less standardized tasks are generally more open to environmental pressures since they are less guarded by external forces; as a result of this, less standardized tasks are more dynamic in their interaction with institutions. Therefore, a variance in the interactions between institutions and different functional activities/strategies of organizations is expected. Lack of a clear distinction in various kinds of relationships that exist between institutions and the different parts of an organization may result in misinterpretation about the impact of institutions on organizational behaviors. Different pieces of a strategic puzzle shape the overall strategy of an organization. One needs to understand how each part of an organization is institutionalized in order to make any kind of conclusion about the institutionalized strategy or behavior of that organization.

In a developing country such as Iran, where economic activities are highly regulated and controlled by the government, state agencies like the Ministry of Transportation and Civil Aviation Organization may have a strong impact on the behavior of airlines. But, this impact may not be the same for all activities of these airlines. Since the operational activities of Iranian airlines are highly institutionalized by the industry norms, national institutions may have less room to exert pressure on these activities. In other words, national institutional pressures have the least effect on airlines'

operational activities because airline activities are significantly institutionalized by strong global industrial norms. Although national institutions, especially government institutions in a developing country, dominantly control organizations and their strategies, certain activities of organizations (such as operational activities of airlines) follow global norms. However, since the airspace and airports are highly regulated by national institutions in a developing country, these institutions influence the operational strategies of airlines to a certain degree. Thus, the related deterministic hypotheses for the impact of national institutional norms on two different functional activities (or strategies) of the airlines in a developing country such as Iran can be worded as follows:

Hypothesis 1d: Iranian National institutions have a significant impact on the commercial activities of Iranian airlines.

Hypothesis 2d: Iranian National institutions have a moderate impact on the operational activities of Iranian airlines.

Hypothesis 5d: The less standardized a functional activity of organizations in a developing country, the more institutionalized it is by the national institutions.

In response to institutional environmental pressures to standardize their activities, organizations often establish collective arrangements or actions and create new but related organizational fields or industries. An established industry may have regulative, normative, and cognitive elements, just like other institutions. Studies have shown how

these types of collective arrangements affect organizational behavior (Kaplan et al., 1993; Scott and Backman, 1990). The pressure of this level of institutions is most often experienced in business fields because business firms are embedded in industry and adhere to national institutional norms and values. Firms in a field with well-defined networks of regulative bodies must conform both to the industrial standards and norms and to the regulations of national institutions to be able to survive (Powell, 1988).

The extent to which organizational fields can exert pressure on a firm's activities varies with the nature of these fields and their social implications. The airline industry, with its many social and economic implications (both nationally and globally), may exert significant pressure on air carriers. International arrangements such as ICAO have both regulative and normative effects on airlines. IATA is more involved in commercial activities and basically has cognitive and normative effects on airlines' behaviors. Thus, the worldwide airline industry (as another level of institutions) may have a different impact on each function of an airline. In developed countries, such as Canada and U.S., airlines are viewed as firms that provide better services in order to become more competitive and profitable according to the airline industry norms. In contrast, in a developing country such as Iran, airlines have been historically viewed as air transportation organizations rather than profit making firms. Thus, the airline industry as a global organizational field may influence airlines differently depending on the context. The impact of the airline industry on airlines varies across different parts of these organizations. There is a difference between the impact of airline industry norms on the commercial activities (less globally standardized) of airlines and the operational activities (globally standardized). Airlines in most nations, including developing

countries, need to follow certain industrial norms if they are to operate in this industry. Even those related national institutions, such as the Iranian Civil Aviation Organization and the Iranian Ministry of Transportation, follow these norms to maintain their international legitimacy. Therefore, the deterministic hypotheses concerning the impact of the global airline industrial norms on two different functional activities (or strategies) of airlines in a developing country such as Iran can be worded as follows:

Hypothesis 3d: The airline industry has insignificant impact on the commercial activities of Iranian airlines.

Hypothesis 4d: The airline industry has a moderate impact on the operational activities of Iranian airlines.

Hypothesis 6d: The more standardized a functional activity of organizations in a developing country, the more institutionalized it is by global industry's norms.

Institutionalization of institutions is another major issue among institutional theorists that this study will examine. The deterministic hypotheses for the relationship between the two levels of institutions are based on the effects that the airline industry norms have on national institutions' expectations and norms. On one hand, the powerful members of an industry or organizational field formulate the rules of the game and enforce them (Fligstein, 1990). On the other hand, national institutions shape economic activities (Whitley, 1992). In a developed country, national institutions are more market

oriented and conform to competitive norms. Most global institutions like the World Bank, IMF, World Commission on Environment and Development, ICAO, and IATA have less difficulty in implementing their rules in developed countries than in developing countries. They often ask for necessary changes in the national institutions of developing countries in order to adapt the behaviour of the organizations of these countries to international standards (e.g., Krueger, et. al., 1999; Hecht, 1999). These institutions exert pressure on national institutions of both developed and developing countries essentially for the purpose of isomorphism. However, national institutions of a developing country like Iran are strongly influenced by local social, religious, and political values rather than the economic and competitive norms of the global market. Thus, the rules and expectations of Iranian national institutions tend to have limited conformation to the airline industry norms. The deterministic hypothesis for the relationship between these two levels (global and national) of institutions is as follows:

Hypothesis 7d: The airline industry norms have a limited impact on the norms of Iranian national institutions.

Differentiating two different activities of airlines, the main model of this study for deterministic hypotheses can be shown as Figure3.4.

Figure 3.4

Deterministic relationships among institutions and between institutions and airlines' functional activities
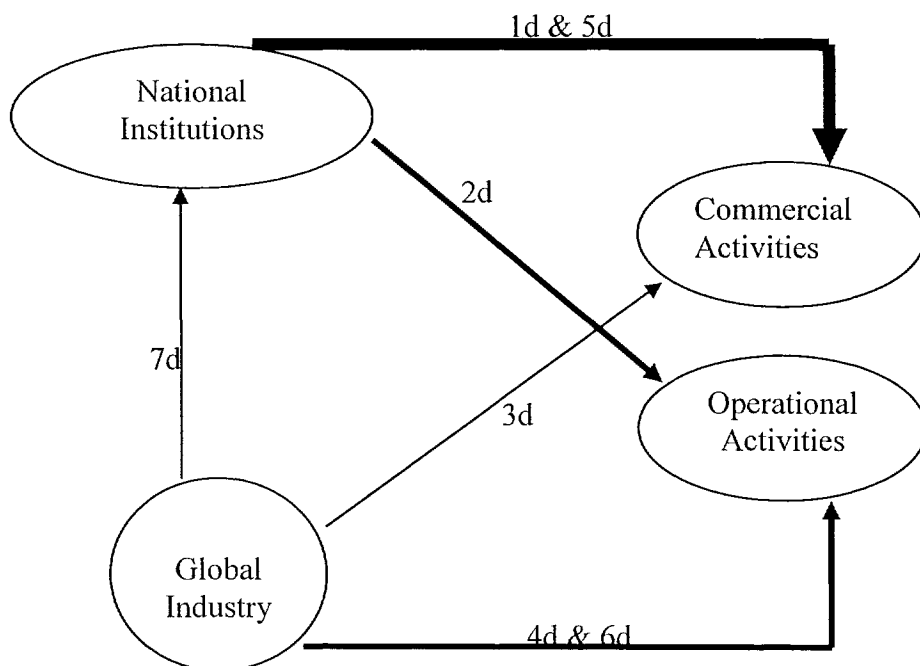
Note: (——) Weak effect , (━━━) Moderate effect, (■━━■) Strong effect; the numbers stand for the Hypotheses

3.5) Hypotheses for the voluntaristic relationships

The reverse impact of organizational activities on the institutional forms and the creation of new institutions go back to Selznick's (1949) value-infusion model in organizational settings. Institutionalization, a social process by which social realities are constructed (Berger & Luckmann, 1967), is a two-edged sword: institutions exert pressure on organizations to institutionalize them (e.g., isomorphism), but strong social realities may develop that change institutional expectations and norms or even create new arrangements. These new institutional forms can be generated within organizations. Corporate cultures and shared values (Frost, et al., 1991) are two obvious examples of these new forms. The creation of new institutions (i.e. Mezias et al., 1994) and institutional practices (i.e. Leblebici, et al., 1991) has been examined in this literature. Institutional change has recently become one of the major issues in the institutional theory literature. AMJ's recent special issue (45/1, 2002) on institutional change clearly describes it. For example, Lee & Pennings (2002) explore how the performance of firms can change their institutionalized forms. Guard et al. (2002) explain how Java technology changes the existing taken-for-granted norms of the software industry. This path of reverse impact that organizations have on institutions or institutions at lower levels have on those at higher levels, I call a bottom-up or voluntaristic relationship.

National institutions of each country impose basic rules, such as safety and security standards, on airlines. Airlines are expected to follow these standards regardless of their size, age, competitiveness, and location. They may try to change some of these global expectations, but it takes time since organizations constitute institutions

diachronically (Barley et al., 1997). A good example is the use of twine-engine (jet) airplanes by airlines in the over-Atlantic routes. This was a dream for airlines because of its significant effects on fuel and maintenance costs. It took airlines many years to convince the global and national authorities to change the regulation that prohibited operating twine-engine airplanes in those routes. Another example of this bottom-up relationship is the process of deregulation initiated by U.S. airlines during the late 1970s. Although, the industry faced fiscal crises and the U.S. government was struggling with these crises, the major U.S. airlines suggested the deregulation of airline industry. They created new institutional norms and expectations for the industry by late1980's. Nowadays airlines all around the world are under the pressure of this deregulation movement. It has changed the expectations of global institutions such as ICAO, IATA and related national institutions of different countries.

In these bottom-up relationships, two levels of institutions and two different functional activities of airlines in a developing context are to be considered in this study. In terms of national institutions, most state agencies in developing countries like those in Iran do not have enough experience and expertise for a fast changing field such as the airline industry. According to the resource dependency theory (Pfeffer & Salanick, 1978), these agencies try to effectively control a major (national) airline in order to obtain quick and easy access to information and experts. This is why the activities of national airlines are one of the major sources of inputs for the norms that are institutionalized in the national institutions of a developing country. Since trust and network ties are essential in Iran, as in most of developing nations (Peng and Luo, 2000), the behavior of an Iranian carrier with strong ties to related state agencies may also have a significant impact on the

norms of Iran's national institutions. Such an impact is not uniform across the different functions of airlines. The operational activities of airlines, which are strongly tied to the global industry norms, may have more power to influence national institutions. Those functions such as commercial activities, which are less standardized by global norms, have almost no power to change the related national institutional norms. Thus, the operational activities (or strategies) of Iranian airlines have a more important role in shaping the norms of related national institutional norms. The related voluntaristic hypotheses will be:

Hypothesis 1v: Commercial activities of Iranian airlines moderately shape the commercial norms of related national institutions.

Hypothesis 2v: Operational activities of Iranian airlines moderately shape the operational norms of the related national institutions.

Hypothesis 5v: The less standardized a functional activity of organizations in a developing country, the less influence it has on the national institutional norms.

Obviously, the operational and commercial behavior of airlines in a developing country like Iran can expect to exert a very weak impact on the industry's norms. The reason can be the size (in terms of the market share) and the great differences between common commercial norms of these airlines and those of the industry in general. There are a few airlines like Emirates Airlines that have successfully reduced their distance

from the industry norms. This is why, despite it is being a small airline located in a developing country, Emirates Airlines has become, to certain extent, an influential member of this industry. The voluntaristic hypotheses concerning the impact of the functional activities of Iranian airlines on industrial norms can be worded as follows:

Hypothesis 3v: Commercial activities of Iranian airlines have no influence on the airline industry norms.

Hypothesis 4v: Operational activities of Iranian airlines have no influence on the airline industry norms.

Hypothesis 6v: The activities of an organization in a developing country have a negligible influence on the industry's norms.

The main driving forces behind most of the global institutional norms are found in developed nations. In fact, the conformity and support of the national institutions of these countries have institutionalized various behaviours at a global level. For example, airlines deregulation was initiated by the national institutions or organizations of developed nations and then became global norms. National institutions of developing nations have historically been followers of the global norms. Thus, the Iranian CAO and the Ministry of Transportation are not exceptional in having almost no impact on the norms of the global airline industry. This means:

Hypothesis 7v: Iranian national institutions have a negligible impact on the airline industry norms.

In differentiating two different activities of airlines, the main model of voluntaristic hypotheses for this study can be shown as Figure 3.5. The following chapter presents a brief overview of both the Iranian national institutional context and the global airline as means of clarifying the logic behind the fourteen hypotheses listed above.

Figure 3.5

Voluntristic relationships among institutions and

between institutions and airlines' functional activities
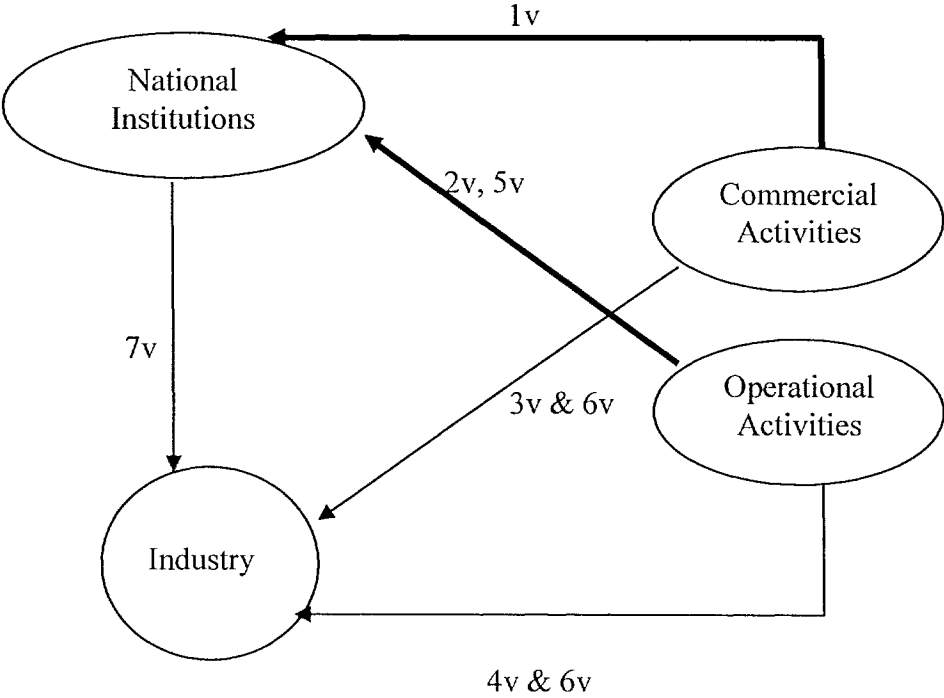
Note: (——): Weak effect, (━━━): Moderate effect; the numbers stand for the Hypotheses

Chapter Four

Data and Methodology

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4.1) Methodology

I am using interviews and survey questionnaires as the main sources of data for this study. The rationales for selecting primary sources of data through interviews and survey questionnaires are taken from the last twenty years of empirical research in the literature. Researchers have tried various data collection methods to explore the relationships between institutions and organizations. One of the traditional methods is content analysis. Most historical institutional studies have analyzed the content of archival data, published documents, and/or newspaper articles (e.g. Arndt et al., 2000; Elsbach, 1994; Lamertz et al., 1998; Mezias, et al., 1994). In agreement with Weber (1985), Lamertz and Baum (1998) argue that content analysis is a well-accepted method for revealing trends in communications that may reflect the cultural patterns of institutions. Over a seven-year period (from January 1, 1988, to December 31, 1994), they collected a sample of 110 articles published by Canadian newspapers concerning the layoff of middle managers by Canadian companies. They analyzed the content of these articles to verify their hypotheses on changes in various "accounts" introduced by sociologists like Berger & Luckman (1966). Deephouse (1996) took the same approach in analyzing the content of newspaper articles to explore the relationship between strategic isomorphism and the legitimacy of commercial banks. Mezias et al. (1994) examined how the decision process of a public policy task force established financial reporting standards which were based on content analysis of published documents. They used an independent survey commissioned by the FASB (Financial Accounting Standards Board) in 1985, the annual publication of the Financial Accounting Foundation, and the minutes of individual meetings of the EITF (Emerging Issues Task Force) obtained through the

NEXUS database as their main sources of data. All the studies using content analysis have taken their samples from the U.S. or Canada. Since having reliable, published documents or articles is a basic assumption in this method, the content analysis method may not be applicable in a developing context; finding reliable documents or articles is very difficult if not impossible in most developing countries.

Another widely used method is case analysis. This method has been used more often than content analysis, especially during 1980s and early 1990s. Researchers have applied this method in analyzing historical data (e.g. Austin, 1998; Brint, Karabel, 1991; Christensen et al., 1995; DiMaggio, 1991; Meyer & Scott, 1983; Tolbert, 1985) as well as interviews and archival data (e.g. Covaleski et al., 1988; Elsbach, Sutton, 1992; Fussel et al., 2000). Here again, researchers rely on reliable historical and archival data that are mostly available in the U.S. and countries such as Canada (Singh, et al., 1991; Wicks, 2001), Norway (Holm, 1995), and Denmark (Christensen et al., 1995). There are exceptional studies (e.g. Cheng, et al., 1998; Orru, et al., 1991) in which the case method is used to analyze historical data or documents and reports of firms in Asian countries. However, it is rare to find a published empirical study in the institutional theory literature that has used the case method to analyze historical data or documents of a sample from a developing country. Even, in the exceptional study by Lawrence et al. (2002) in which the case method is applied in a developing context, the main data collection method is interviewing the manager and employees of a Palestinian organization. Thus, the institutional theory literature does not support the case method for studies in a developing context, one of the obvious reasons being the absence of reliable secondary sources of

data. Thus, case analysis using secondary sources of data cannot be considered as an option for the present study.

There are very few studies, such as Stearns et al. (1996) and D'Aunno et al. (2001), in which event analysis (another qualitative approach) is used to analyze secondary sources of data. More than 90% of the empirical studies using one of these qualitative methods (i.e. content analysis, case analysis, and event analysis) are focused on forms, structures, and the general conformity of organizations. There are exceptional studies (i.e. Cheng, et al., 1998; Lamertz, Baum, 1998) in which issues such as organizational strategy is explored using one of these qualitative methods.

Finally, researchers have tried different statistical methods to analyze all sorts of data such as historical and archival data (i.e. Baum et al., 1991; Dacin, 1997; Edelman, 1992; Haunschild et al.,1997; Henisz et al., 2001; Hoffman, 1999; Mezias, 1991; Palmer et al., 1993) and survey questionnaires (i.e. Davis, et al., 2000; Kirby, et al., 1998; Burns, Wholey, 1993). Using this method to analyze data from two or more sources including interviews and survey questionnaires has become a common practice, particularly in recent years (i.e. Blum, et al., 1994; Boeker et al., 1989; Carroll et al., 1988; Eisenhardt 1988; Galaskiewicz et al , 1989; Godstein, 1994; Gooderham et al.,1999; Homburg et al., 1999; Peng, Luo, 2000; Russo, 2001; Westphal et al., 1997). Statistical analysis and data collection methods such as survey questionnaires and interviews are more often used in studies with samples from developing nations than any other methods. One major reason may be, in these contexts, primary sources of data are more reliable than secondary sources while secondary sources are neither reliable nor available in these nations. In

most developing countries, secondary sources of data are rare, incomplete or in a language foreign to the researcher (Teagarden et al., 1995).

My review of the empirical studies (discussed in chapter two) indicates that interviews and survey questionnaires may be the most accepted methods for collecting data in studies on the relationship between institutions and organizations in developing contexts. However, gaining access in order to interview or to carry out survey questionnaires with individuals and organizations sometimes makes the research mission impossible. In most developing countries, business relationships are based on trust rather than contracts (Teagarden et al., 1995). Thus, with these methods of data collection, developing close social interactions is an essential step in order to build trust.

My working experience with Iran Air as the main carrier of Iran gave me a major advantage in creating a close and trustful relationship with experts and managers of the Iranian airline industry. Aviation and air transportation in general, as in any other highly technological industry, has its own language and culture. My experience in this field made communication and interaction much easier. Knowing the language and the national culture of Iran was another advantage and a great source of help in this research.

In summary, collecting data through primary sources, such as interviews and survey questionnaires, and analyzing them using statistical methods seems to be the most appropriate methodologies for this study. A review of empirical studies published in the institutional theory literature during the past twenty years (chapter two) indicates that these methods have been used more often than any other methods for studies with samples from developing contexts. Second, the overall situation (i.e. cultural, political, economic, and social conditions) in a developing country such as Iran implies that

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secondary sources either do not exist or, even if they do, one cannot rely on them. Since research methodology should be applicable and adjusted to the characteristics of the context(s) of the study, any methodology which is based on secondary sources can be problematic for the present study. One last point: in addition to these two reasons is the fact that my personal experience with the language, national culture, and the airline industry make these methods even more effective. My ability to use multiple methods (i.e. interviews and survey questionnaire) as a means of improving both the validity and reliability of the data will be discussed later in this chapter, but it is worthwhile to mention here that the simultaneous use of these two methods can significantly help me to cross check different aspects of the constructs and their scales as well as the consistency of responses. In the following section the main constructs and their related measures both for interviews and survey questionnaires will be discussed in detail.

4.2) Sampling Procedure and Measures for Interviews

In order to obtain reliable results, this study is focused on a single industry (i.e. the airline industry). Industry or what is called *organizational field* in the institutional theory literature is basically defined as "a community of organizations that partakes of a common meaning system and whose participants interact more frequently and fatefully with one another than with actors outside the field" (Scott, '1995: 56). The major players of the airline industry in Iran are Iranian carriers, the Civil Aviation Organization (CAO) of Iran, the Iranian Airports Company (IAC) and travel agencies. Two of the main constructs of this study are commercial and operational activities of airlines with

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markedly different natures necessitated having two separate samples for survey questionnaires. Different players of the Iranian airline industry are included in each sample according to the nature of those related activity.

The CAO is responsible for controlling civil aviation rules and regulations in Iranian airspace. The Iranian Airports Company is responsible for constructing, operating, and managing all the civil airfields of the country. This company was part of the CAO until a few years ago when the government decided to make it a separate business entity for economic and commercial reasons. Since the CAO and IAC are involved in both operational and commercial activities of the airlines, they are included in both samples. Travel agencies as the most fragmented player of this field are mainly involved in the commercial activities of the airlines. That is why they are included only in the sample of the commercial survey questionnaires.

The most recent statistics provided by the CAO (CAO, 2001) indicate that there are 26 organizations or airlines operating 326 owned or leased civil registered planes in Iran. Only 193 of these planes have airworthiness certification and are operational, of which forty two are leased and the remaining are domestically owned airplanes (details are given in chapter 3, section 3.1.2). There are 85 passenger airplanes operated by different airlines. According to the same report (i.e., CAO, 2001) and the most recent internal report prepared by the Department of Information System and Performance Analysis of Iran Air, there are nine major carriers in Iran. Their market shares in terms of the number of passengers carried on both domestic and international flights are shown in Figure 4.1. Since this industry is highly regulated in Iran, most strategic decisions are made by executives of the CAO, the IAC, and the airlines. This led me to consider these

organizations, their executives, and their experts as the most appropriate and informative sources of information for the purpose of this study.

My personal working experience in this field along with my close connections to various individuals gave me access to at least five main airlines (i.e., Iran Air, Aseman, Iran Air Tour, Mahan, and Faraz Gheshm), the Iranian Air Transport company, the CAO of Iran, Iranian Airports Company, and several travel agencies. The Iranian Air Transport company is one of the subsidiaries of Iranian National Oil company, providing air transportation services to its tens of thousands of employees and their families. For that reason, it is not included in the statistics provided by the CAO. As shown in Figure 4.1, these five airlines hold about 90% of the domestic market and carry 95% of the passengers who travel with Iranian carriers to international destinations. These organizations are essentially owned and managed by the government, except Mahan and Faraz Gheshm that are apparently owned by private shareholders. Iran Air as the flag carrier of the country is forty years old and has more than 12,000 employees (almost three times the total number of employees in the other Iranian airlines). Iran Air's age, size, market share, and long presence in international markets imply that it has more experienced employees than any other organization in the Iranian airline industry. This is why more managers of this airline are included in the sample for the interviews. The CEO (or the president) and at least two top executives (mostly operational and commercial directors) of each organization agreed to participate in this study. This enabled me to interview thirty four executives and managers from the above mentioned airlines and government organizations. Interviewing at least three top managers of each organization was an effective way to check the internal validity of the interviewees' responses. More

than 90% of Iranian civil air transportation activities are under the supervision of these individuals. Many of them are key members of various strategic decision-making committees including the board of directors of each airline. All these facts support my choice of the selected sample for this study.

The format and content of questions designed for the structured interviews were first discussed with three experts in the industry: A middle manager at Air Canada who holds an Aviation MBA degree; an entrepreneur who owns a pilot training company in Toronto, works at Air Canada as a pilot, and holds an Aviation MBA; and finally, one of the middle managers of Iran Air who holds an aeronautical engineering degree and has ten years management experience in the airline industry. I discussed the overall objectives and the format of these in an informal meeting with six students (from four different countries) enrolled in the Aviation MBA program at John Molson School of Business of Concordia University, Montreal. The first draft of the interview questions and their guidelines was prepared after receiving feedback from both the experts and Aviation MBA students. Then, two aviation MBA students (also attending John Molson School of Business) who had more industry experience agreed to be interviewed to test the procedures and the content of the questions. After completing each section, these two interviewees were asked if they understood the questions and if the questions effectively addressed the interviewer's objectives. This helped me adjust the procedure and even the content of questions.

A final test for the structure and the content of the interviews was made in the real world before getting into the actual research setting. After using my personal connections to contact different airlines, managers of Lufthansa participated in the final pilot test. I

interviewed these managers during a three-day trip to Germany. Each of these testing interviews took two to four hours. Interviewees believed that questions were clear and met the purpose of this study. One of the three interviewees, a top executive of Lufthansa, found the interview very interesting and spent more than three hours just to answer and discuss the questions. He provided very positive and helpful feedbacks. Since institutional environments vary from country to country, I collected general information about some of the most influential institutions in Germany before interviewing these managers. I was able to receive this information from Iran Air's station manager in Frankfurt. The pilot test helped me to make the final adjustments and achieve a great level of confidence in performing the interviews.

After these tests, the format and questions of the interviews were ready to be implemented in the actual research setting. A preliminary and certainly vital step was to develop a sense of trust in the interviewees. Via the telephone, I spoke with the interviewees personally in order to develop a friendly, trusting relationship. I explained the purpose of my study and the essential role of their experience and knowledge during these critical phone calls. At the end of each phone call, I was able to fix a date for an interview. After a few days, I made follow up calls to the interviewees' secretaries or their assistants to confirm the schedules. In some cases I had to reschedule interviews or even split them into two sessions to meet the executives' schedules. Despite my close connections and my attempt to establish trustful relationships, a few individuals were suspicious about the whole project. Some of them even asked me if the government or some other authority was behind this research. This simply indicates that even those researchers who know the culture and language and have appropriate access to the

informants of a research setting in a developing country may encounter serious impediments; the level of uncertainty and mistrust can significantly constrain social research. A researcher must spend considerable time building trusting relationships before actually starting the research and must continue to maintain them throughout the research. One should be aware of the networks of informal ties among executives and take advantage of a close and trustful relationship with one interviewee to empower the relationships with others. This was the method that I found most effectively in this research.

Figure 4.1

Distribution of the market share of Iranian airlines (2000-2001)

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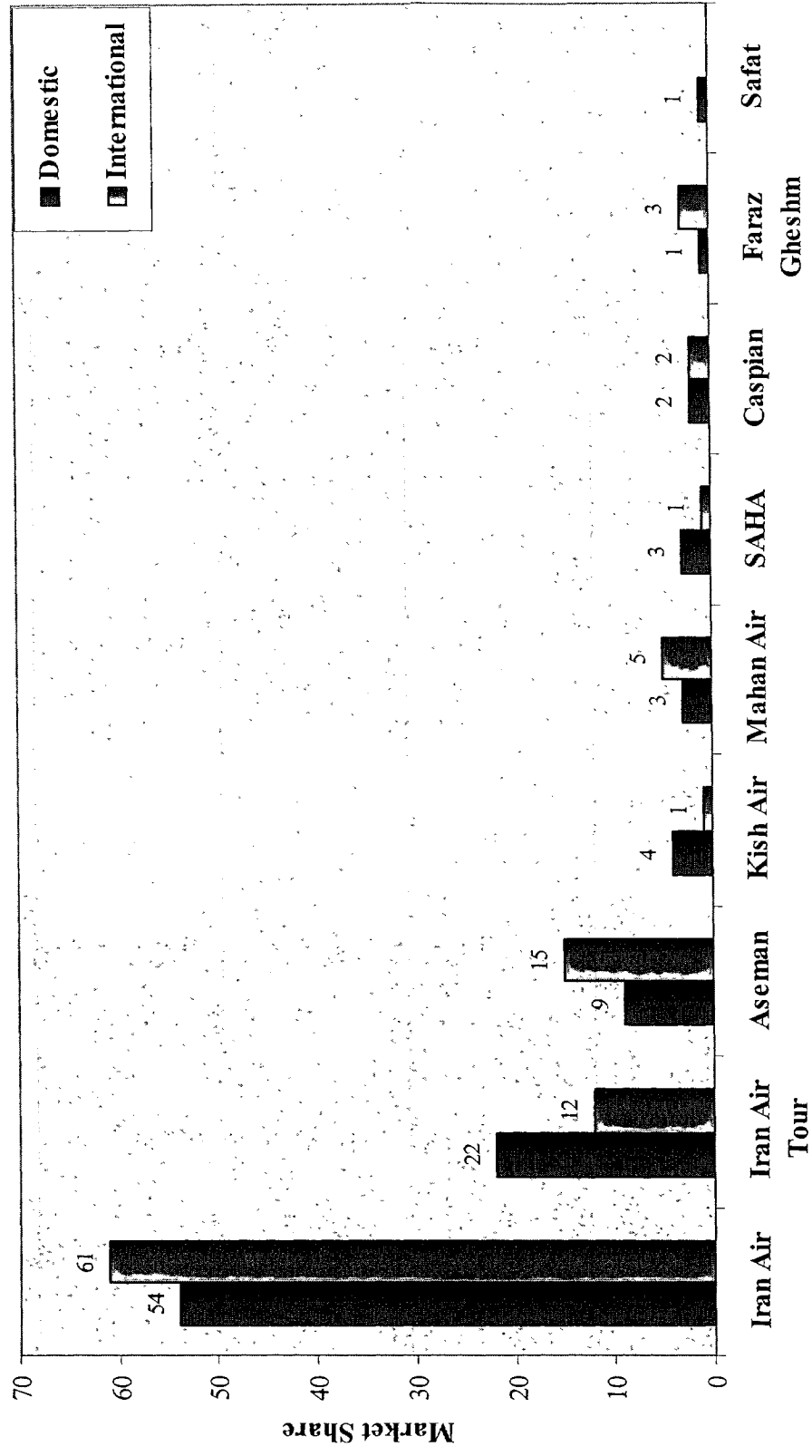
Each one of these structured interviews lasted two to four hours depending upon the interviewee's position and interests. The location and the setting in which each interview took place played a major role in building a trustful relationship (Easterby-Smith et al., 1991). For that reason all interviews took place in the interviewees' offices. This gave the interviewees a feeling of control and confidence and made for a pleasant and trusting environment. In order to establish a friendly rapport, I spent the first 15 to 30 minutes of each interview in informal chats on different topics, mostly not related to the aviation industry. A few of the interviewees preferred to spend even more time in informal conversation by inviting me to a lunch before the actual interview. This gave me another opportunity to reinforce the necessary trust and strengthening our relationships. There were even a few top executives who asked for a short lecture on the theoretical and practical aspects of the whole project. This made some of the interviews as long as four hours. After these preparatory steps, I asked the interviewees to provide some general information about themselves and their working experiences, especially their experience in the airline industry. Figures 4.2 to 4.7 summarize this personal information.

Each interview had two sections with specific objectives. The first section was designed to obtain a general understanding about the nature of commercial and operational activities of Iranian carriers and the sources of institutional pressure on these activities. It begins with an open-ended question about the main elements shaping commercial activities and the strategies of each airline (or about Iranian carriers in general if the interview was with an executive of the CAO of Iran or the IAC). I asked each interviewee to identify the institutional forces among those elements and to name the five most influential institutions dealing with commercial activities and strategies.

This was similarly repeated for operational activities and strategies. I recognize that managers of airlines around the world have a common understanding about commercial and operational activities and their differences; however, I asked the interviewees to give me their own perspectives in order to make sure that there was a common understanding among managers of the Iranian airline industry. Besides providing me with an overall perspective of managers of the Iranian airline industry on airline issues, this section was also an effective means to check the validity of the measures used in the survey questionnaires.

The interviewees were asked to rank a list of eight commercial and six operational functions (as shown in Appendix 1) according to the extent that each one of those functions described their airlines' commercial and operational activities. Then, they were asked to tell what percentages of the commercial and operational activities of their airline are described by the first five commercial and the first four operational activities (based on their rankings) respectively (It should be noted that in the interviews with the executives of the CAO of Iran and the IAC, Iranian carriers as a whole were addressed instead of a specific airline). The functions were carefully selected for these two lists. Both the industrial and traditional definitions of the commercial and operational activities of airlines were considered. For example, the function of ticketing and sales was included in the list of the commercial functions because commercial activities are traditionally known as ticketing and sales among managers and experts. Thus, whenever they talk about commercial activities, they refer to ticketing and sales as a major part of these activities. Inclusion of this function in the list of commercial functions seemed to help the interviewees feel more comfortable when they explored the role of other functions in

their commercial activities and strategies. This is the same for the customer services. Both customer services and ticketing and sales are very subjective and difficult to measure in developing countries such as Iran. However, inclusion of these functions as the backbone of the executives' perception about commercial activities was inevitable. It was viewed as a key to the interviewees' perceptions about other functions. This was the case for the operational functions such as on the job training and handling scheduled and unscheduled flights round the clock.

The second section was designed to obtain managers' perceptions of the norms of both Iranian national institutions and the global airline industry. The purpose of this section is to explore the relationships between institutions at two different levels and between two functional activities or strategies of the airlines and those institutions. First, I asked the interviewees an open-ended question concerning the norms of the global airline industry. Then I asked the interviewees to rank a list of four potential sources that may influence these norms, based on the significance of their influences on both the commercial and operational norms of the global airline industry. Interviewees were also asked to describe the extent to which these industry norms influence commercial and operational activities of Iranian airlines and the norms of related Iranian national institutions. The same method was used for the norms of national institutions that are defined by the Iranian CAO or the Ministry of Transportation. The last part of this section focused mainly on the effects of national institutional norms and global industry norms on the two functional activities of the airlines. A list of seven commercial and operational strategies was presented to each interviewee, and he (all interviewees were male) was asked to describe the influence of national institutional norms on each strategy. The same

procedure was followed for the influences of the global airline industry norms. This section created fourteen items for the influences of national institutional norms and industry norms on the commercial and operational activities of Iranian carriers. The analysis of the results is discussed in the next chapter.

4.3) Survey Questionnaires

4.3.1) Constructs and Measures

The reciprocal relationships among two levels of institutions as well as between institutions and the functional strategies of organizations discussed in chapter three (as shown in Figure 3.3) imply that variables may be dependent or independent according to the direction the influences take. National institutional norms, global industry norms, and two functional strategies of airlines (i.e., operational and commercial) are the main constructs of this study. Deterministic or voluntaristic types of relationships among these constructs will tell us if they should be considered as dependent or independent variables. Institutional norms at the national and organizational field (or industry) levels have been the most common constructs in this literature (e. g. DiMaggio, 1991; DiMaggio & Powell, 1983; Tolbert et al., 1983).

Most of the traditional empirical works (as shown in Table 2.2, chapter 2) are longitudinal case studies focusing on the structure or forms of non-profit organizations such as museums, public services or educational organizations. There are very few studies in which the activities or strategies of organizations (particularly of business firms) are explored using the institutional theory (e. g. Davis et al., 2000; Flegstein, 1985;

Meyer et al., 1983). Davis et al. (2000) consider the mode of the foreign market entry of strategic business units of a corporation as an isomorphic behaviour based on either the host country's institutional environment or internal (i.e., the parent organization) institutional environment. In a longitudinal study, Flegstein (1985) considers a multidivisional form of large American firms as an isomorphic and institutionalized behaviour of these firms in the 1970s. The majority of the empirical studies in this literature are concerned mainly about the influences of institutions on the structure, forms, or strategies of organizations. In other words, deterministic rather than voluntaristic relationships between institutional and organizational constructs have long been tested in this literature. This may be one of the reasons that the Academy of Management Journal has allotted a special research forum on institutional theory and institutional change earlier this year (Dacin et al., 2002). Simultaneous analysis of deterministic and voluntaristic relationships between institutions and the functional strategies of business firms seems to effectively demonstrate the power of the institutional theory. Furthermore, interviews and survey questionnaires appear to be the most appropriate data collection methods for such a study in a developing context.

The study by Carroll et al. (1988) is one of the earliest studies using survey questionnaires and historical data to measure such variables as the vertical relations between organizations (cooperatives) and state agencies, the level of fragmentation in institutional decision-making, and the competition among organizations. Their sample of 231 organizations from 11 countries created a study for measuring variables that have historically been measured using secondary sources. They designed specific measures that had not been examined prior to their study. In this literature, the problem for most

empirical studies using the institutional theory is a lack of common sets of measures for institutional factors (Oliver, 1997; Scott, 1995/2001). Consequently, specifying the measurement tools has become a common practice in most studies that use a survey questionnaire as a data collection method (Peng et al., 2000).

The lack of a common set of measures for this study implies that specific measures must be designed. Norms of national institutions and the global airline industry along with two functional activities or strategies of airlines are the main constructs in this study. A wide range of dimensions for institutional norms at the national or global level can be extremely difficult to measure. For that reason, some of the most widely accepted dimensions of national and industrial norms (among major players of Iranian airline industry) are to be considered in this study. Those dimensions of commercial and operational activities that are more quantitative and less dependant on individual perceptions have been selected for this study. The main measures selected for each one of the constructs are described in the following sections.

4.3.2) Global Airline Industry Norms

Global airline industry norms are broken down to operational and commercial norms that are widely accepted among members of this industry. There are, of course, many commercial and operational norms such as those related to reservation systems, customer services, training, and operational standards. However, industry norms should be carefully selected in order to prevent biased responses. Since the reciprocal relationship between industry norms and organizational strategies is to be measured, respondents may try to prove that they follow industry norms. For example, most

managers like to believe that their airline follows the operational and maintenance standards of the industry. They also try to tell you that their airline has a good customer service. Those who have some difficulties with their reservation system do not simply admit it; instead, they respond in a more complex manner which makes it much more difficult for the researcher to interpret the results. This is why selecting appropriate norms is an essential step in the whole research process of this study.

Commercial norms of the global airline industry are operationalized using three dimensions: the frequency of international airfare adjustments, the variety of airfares in a single flight, and the number of strategic alliances. These are the types of commercial strategies and activities that can be measured using available and reliable secondary sources of data because they are less subjective to the respondents' perceptions. They also cover some of the elements of other commercial norms such as those related to customer services.

The deregulation movement in the airline industry has made frequent airfare adjustments a well-accepted industry norm. Airlines in most competitive environments (such as the U.S.) have institutionalized this commercial norm. In some cases, they have an ongoing airfare adjustment system which works automatically based on various factors. As a result of this, their fares for special routes may change every hour. Although this practice varies in every domestic market, frequent adjustments of airfares for domestic routes in general and international routes in particular have become a well-accepted practice among airlines all around the world.

Another outcome of deregulation in the airline industry is the customization of services. Airlines have realized that various needs of passengers can be satisfied through

customizing their services. For example, some passengers don't like to have any limitations on their tickets and are ready to pay for this kind of freedom; others are ready to take all sorts of limitations to get the lowest fares. For that reason, we are becoming used to seeing passengers who have paid different fares sit beside each other in the same flight for the same journey. Thus, having a variety of airfares for each flight is another well-accepted commercial norm among airlines all around the world.

Finally, airlines have been trying to gain access to different markets, establish a more diversified route network, and provide better services to their customers through strategic alliances. Strategic alliances are the vital elements in creating a competitive position in this industry (Clougherty, 2000; Graham, 1997; Park, 1997). Thus, making strategic alliances with other airlines can be viewed as a widely accepted commercial norm.

Historically, there has been a growth trend for all three of these indices in the airline industry. In other words, airlines are expected to adjust their fares more frequently, have a greater variety of airfares in every flight, and make more strategic alliances within the industry. Those that conform to these expectations are perceived to be using legitimate commercial strategies and becoming more competitive.

Operational norms of global airline industry are operationalized using three worldwide dimensions: aircraft availability rates, aircraft utilization rates, and the average fleet age. Aircraft availability indicates the efficiency of operational activities such as the maintenance and flight operation departments for each airline. Aircraft utilization indicates the average number of revenue flight hours per day for each type of aircraft in the airlines' fleet. Aircraft utilization is generally calculated per year to reduce the

seasonal effects. An airline might have a high rate of aircraft availability but not necessarily a high rate of aircraft utilization. This could be due to problems such as route planning, limitations of airport services, the airline's operational problems or the size of each fleet. The average age of airplanes is a good indication of the extent to which airlines are updated with new technologies and operating systems. Airlines want to have a low average fleet age in order to maintain efficient operations. Fifteen years ago, some airlines, such as Lufthansa, set an average fleet age of five years as their strategic objective. Their objective was to create a unique image for their airline and at the same time improve the efficiency of their operation significantly. Increasing aircraft availability, reducing the average fleet age, and increasing aircraft utilizations are three well-accepted operational norms among members of this industry. These operational norms, like the selected commercial norms, are not subjective to the respondents' perceptions since they are traceable in most of the available secondary sources. Therefore, respondents have less chance of providing biased answers to the questions related to these norms.

IATA and ICAO databases are the main secondary sources that were used to cross check the validity of selected commercial and operational norms. Obviously these norms are more salient among competitive airlines all around the world. However, airlines in developing countries like Iran must adopt these norms to be viewed as competitive in the airline industry. Six 5-point Likert scales are designed to measure each of these commercial and operational norms. These items are presented in Appendix 2.

4.3.3) Norms of the related national institutions

National institutions have been defined as the state agencies responsible for planning and allocating resources (Carroll et al., 1988; Dacin, 1997). Researchers have operationalized various national institutional environments or pressures: governments' policies in budgeting and funding (DiMaggio and Powell, 1983); national regulations, norms, and cognitive models (Scott, 1995); political and social institutions (Gooderham, 1999); local markets (Davis, et al., 2000); governments' technological policies (Casper, 2000); and state regulation, ownership and governance norms (D'Aunno et al., 2000). There is a common belief among researchers that regulatory, political, and government institutions are the main sources of national institutional pressures. Consequently, regulatory institutions, such as the Civil Aviation Organization and the Ministry of Transportation, that regulate and control Iranian air transportation activities are the most appropriate sources of national institutional pressures for the Iranian carriers. Rules, regulations, and boundaries that are defined by these institutions represent the main body of national institutional norms and expectations. These regulations and their related procedures are constantly documented by the government institutions; however, they may not be considered as valid and reliable secondary sources of data for the present study for two reasons. First and most importantly, what is written in these documents may be totally different from what is actually practiced. More specifically, there is no uniform understanding and execution of these written rules and regulations. As one of the interviewees put it, "We are living in an environment in which each one of us is treated differently for different political, social, and economic reasons". The second problem is gaining access to these documents. It is almost impossible, even for a researcher who

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comes from Iran and worked in the industry, to gain access to these sources which are known as classified documents. Limitations of the secondary sources of data have made primary sources such as interviews and survey questionnaires much more appropriate for measuring the national institutional norms too.

National institutional norms are also broken down to operational and commercial norms in order to be more consistent with the airlines' respective functional activities and the norms of the global airline industry. The nature of these two kinds of national institutional arrangements varies according to the degree to which they are globally standardized. For example, operational norms of the CAO of Iran are themselves institutionalized by the regulative and normative institutional arrangements of the global airline industry. Thus, the CAO of Iran survives by conforming to these global standards. In contrast, the commercial norms of these national institutions are less globally standardized than their operational norms. They are embedded in the national regulative, normative, and cognitive (Powell & DiMaggio, 1991) institutional environment. National institutions are, in fact, the main driving force behind the commercial strategies of Iranian carriers. Thus, it is very important to distinguish between these two sets of national institutional norms and select the most appropriate scales to measure them properly.

The commercial norms of national institutions such as the Civil Aviation Organization and the Ministry of Transportation are operationalized using their policies for airfares and for routes' traffic rights. There are of course many other dimensions of their commercial norms that could be considered; however, some of these dimensions can be highly subjective to individual economic and political interpretations. I have tried to select those dimensions that are least subjective and historically known among managers

and experts of this industry in Iran. In a highly regulated environment (such as in Iran), government institutions use their regulative power to set specific pricing norms among airlines. It is not the market or competitive forces that set the rules of the game in these environments. Since the 1979 Islamic revolution in Iran, the Ministry of Transportation has been in charge of setting airfares. Adjustment of domestic airfares has always been included in the government annual budgetary bill proposed to the parliament for the last two decades. This process of domestic airfare adjustment has become a well-accepted norm in the country. In other countries, governments have normally followed a policy of not getting involved in the international airfare adjustments. Thus, international airfares have always been adjusted according to international competition and fluctuating exchange rates. The Iranian government's policy has gained even more power with the establishment of new Iranian airlines that operate internationally in recent years. As a result, the CAO and the Ministry of Transportation have developed regulative and normative norms for adjusting the domestic and international airfares of Iranian carriers.

The policy of national institutions (i.e., the CAO of Iran) for traffic rights in domestic and international routes is the second selected dimension for commercial norms of national institutions. Airlines must meet specific standards defined by the Iranian CAO to be able to set up a certain number of flights for each domestic or international route. Since airports are 100% owned by the government (i.e., the CAO and Ministry of Transportation), airlines that meet all the standards still need to arrange their flight schedules with the CAO and the airport authorities. Thus, certain formal and informal institutional arrangements are in place for establishing scheduled flights by Iranian carriers. These arrangements are not necessarily market oriented norms. Market and

competitive forces are not the main driving forces in establishing a new flight schedule in Iran (as is the case in most developed nations). The role of political and informal ties should never be ruled out in this process. The political and religious authorities may have a significant impact on the decisions of the Iranian CAO in approving traffic rights to each airline. Having certain standards along with appropriate connections has become the taken-for-granted commercial norm institutionalized by the national institutions for obtaining scheduled traffic rights.

In summary, the Iranian CAO and the ministry of transportation, as the two most related national institutions, have institutionalized certain regulated and normative commercial norms among Iranian carriers. The two most essential elements of these commercial norms are airfares and traffic rights. Airlines must set their commercial strategies around these norms. Five specific 5-point Likert scales are designed to measure these commercial norms of national institutions for domestic (three items) and international (two items) flights. These items are presented in the section A of Appendix 3.

The operational norms of related national institutions also have a regulative and normative nature. They are institutionalized by global rather than national institutional arrangements. Here again, the dimensions of operational norms that are least subjective to individuals' perceptions and are well-known among managers and experts should be selected. In order to be more consistent with the scales used for operational norms of the global industry, the same three dimensions (i.e. aircraft availability, aircraft utilization, and average fleet age) were used to measure operational norms of the national institutions. In addition to these dimensions, the extent to which national institutions (i.e.

the CAO of Iran) execute international standards is used as another measure for their operational norms. Finally, the mechanisms that national institutions of each country use to control operational activities of airlines will generally become their national operational standards or norms. The civil aviation authorities of most countries normally designate operational experts of airlines to control safety and standards of airlines' operations according to the ICAO and/or FAA regulations. This trustful relationship between aviation authorities and airline experts may change as a result of many political, managerial, and institutional factors within each country. Since this controlling mechanism is less subjective than managers and experts' perceptions, it can be a valid measuring scale for the national institutional norms.

In summary, operational norms of national institutions are to be operationalized using three factors. The first measures the importance of general operational dimensions (i.e. aircraft availability, aircraft utilization, and fleet age) in national institutional norms, using three 5-point Likert scales. The second compares the national institutional norms with international standards, using two 5-point Likert scales. Finally, the third measures the norms of national institutions for controlling operational activities of airlines, using two 5-point Likert scales. These seven items are presented in the section B of Appendix 3.

4.3.4) Two Different Functional Strategies of Airlines

The focus of this study is on the commercial and operational activities of airlines. There are a few major elements in the commercial strategy of every airline around the world. For example, factors such as strategic alliances, travel agencies, code sharing with

other airlines, and international competitive forces play major roles in the commercial activities. Those airlines that have more strategic alliances and code sharing with other airlines, work closely with travel agencies, and carefully and constantly watch the international competitive forces will be more competitive. Their commercial strategies are inevitably crafted by these factors. Thus if respondents believe that having more strategic alliances, more frequent airfare adjustments, and a variety of airfares are industry norms but their airline has a lower number of strategic alliances and code sharing or is not working closely with travel agencies, their airline is not conforming to commercial norms of the global airline industry. These factors of airlines' commercial strategies are operationalized by five 5-point Likert scales. Since domestic airfares and traffic rights are essential elements of national institutional norms, two 5-point Likert scales are designed to measure the strategy of airlines for these two domestic commercial activities. These seven scales for commercial strategies of airlines are presented in the section A of Appendix 4. The operational strategies of airlines are operationalized using the same dimensions discussed for the operational norms of both the global airline industry and the national institutions. The importance of aircraft availability, aircraft utilization, and their average fleet age in the operational strategies of airlines are the main concerns of these dimensions. Each one of these dimensions is measured by two 5-point Likert scales. These six operational items are presented in the section B of Appendix 4.

4.3.5) Sampling procedures

Since commercial and operational activities have completely different natures, two separate questionnaires and samples are inevitable. One cannot expect an expert or manager of the commercial department of an airline to be able to explain operational activities and strategies and their relationship to institutions at national and global levels. This is equally true for the experts and managers of organizations such as the CAO of Iran and the IAC. The only exceptional cases may be the CEOs or presidents of these organizations who normally have a general knowledge about both operational and commercial strategies. For that reason, two groups of individuals from the main players of the Iranian airline industry were included in the samples for the survey questionnaires.

Commercial experts and managers of airlines and airports, the CAO of Iran, the IAC, and managers of travel agencies appear to be the most knowledgeable individuals for the commercial activities and the strategies of Iranian airlines. Operational experts and managers of airlines and airports, the CAO of Iran, and the IAC were taken as the most knowledgeable group of individuals for operational activities and strategies of the airlines. These are the most knowledgeable individuals for more than 90% of commercial and operational activities. Almost all strategies related to these two activities are crafted and implemented under the supervision of these individuals. This means that both commercial and operational samples significantly represent the whole population. On the other hand, having managers and experts from various kinds of organizations in each sample, increases the reliability of responses. Variation of perspectives among managers and experts of airlines and controlling organizations like the civil aviation authorities, is one the most common observations in the airline industry around the world. This is true

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to some extent among airlines and travel agencies. Therefore, including the perspectives of all these organizations in the samples for survey questionnaires may provide the chance of covering most of the variations. Finally, this sampling method provides an opportunity to check the validity of the results both within and between organizations.

Two sets of questionnaires were developed: one for the commercial and another for operational sample, using the scales discussed in the section 4.3.1. One of the major concerns was the length of these questionnaires. Since the respondents were managers and experts who had been struggling with all sorts of uncertainties, they would not be patient with long questionnaires. This is why most questions were straight to the point and the total number of questions was less than 25. These questionnaires were tested in different phases. As the first step, the same three industry experts selected for the interviews were asked to respond to the questionnaires with feedback on the content, wording, and consistency of each item. In addition to these experts, two other individuals were asked to assess the questionnaires and provide feedback. The first was a faculty member in the management department of John Molson School of Business (Concordia University) who used to be the director of the International Aviation MBA program of this school and has consulting experience with firms in the airline industry. The second was the assistant director of International Aviation MBA who has been in this position for more than ten years. After revising the questionnaires based on feedback from these individuals, I selected the 2001 aviation MBA students and some of the faculty members who teach in this program to test the commercial questionnaire. This pilot test was specifically useful for the scales of global airline industry norms because these

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respondents were coming from different countries and organizations and could provide a variety of perspectives on these norms.

As the next stage for testing the questionnaires, I asked one of the training managers of Iran Air to translate both questionnaires to Farsi (the Iranian language) and return them to me to be retranslated into English. The translation and retranslation process proved that more than 90% of the concepts were easily understandable in Farsi, and there was no major problem in translating the questionnaires. One obvious reason may be the fact that English is the well-accepted and dominant language of the airline industry in most countries, including Iran. I asked the same manager to distribute the two sets of questionnaires among both commercial and operational students who were routinely trained at the training centre of Iran Air. This was a very effective pilot test because all students were from the actual research setting and were becoming specialists in the commercial or operational fields. The most interesting result from these two pilot tests (one in Canada and the other in Iran) was the fact that there was a consensus among all these students on the norms of the global airline industry. Another interesting outcome from these pilot tests was that some students found the questions very interesting and gave hand written feedback which was of great help in finalizing the questionnaires. Finally, in pilot testing the interviews in Germany, I asked managers and even some of the German travel agencies to respond to the questionnaires. This helped me recheck the validity of the scales. After these tests and adjustments, each questionnaire had four finalized sections. The first section, which is common among commercial and operational questionnaires, had six scales to measure the norms of the global airline industry. The second section measured the commercial or operational norms of national institutions.

The third section measured the commercial or operational strategies of the airlines. Finally, the last section would gather general information about each respondent. The contents of the scales for each section are presented in Appendices 2 to 5.

A snowball sampling method was used for the final version of survey questionnaires. I asked the interviewees or key individuals of each organization to distribute the questionnaires among their middle managers, supervisors, foremen, or experts. This procedure was effectively used for the five major airlines (i.e., Iran Air, Aseman, Iran Air Tour, Mahan, and Faraz Gheshm). I also asked the commercial and operational executives of the CAO of Iran and the Iranian Airports Company to distribute the questionnaires among their middle managers, supervisors, foremen, or experts. I was able to distribute 110 commercial and 130 operational questionnaires among the airlines and the national institutions. As a follow up mechanism, I called the office of each interviewee or manager who contributed to this distribution process at least twice to track each questionnaire. In most cases, I had to go to the various offices to collect the questionnaires. A few interviewees were kind enough to use their internal mailing systems to distribute and collect the questionnaires. Airport managers generally and the CEO of Iranian Airports Company in particular distributed and collected the questionnaires through their internal mailing systems. The response rates of both the airlines and the national institutions were 62% and 74% for commercial and operational questionnaires, respectively. This is an extremely high response rate for a developing context which could not be achieved using any methods other than making personal connections and relationships. The breakdown of responses is presented in Table 4.1.

In order to distribute the commercial version of the questionnaires among travel agencies, I had to be very cautious because almost all these agencies are private firms. This means that they don't like to be questioned even about general issues, especially when it comes to filling out written documents such as questionnaires. They cannot trust anyone in their environment. For this reason, I had to approach them carefully, first creating an appropriate sense of trust. I found it more practical to first meet two members of the board of directors of the Iranian travel agencies union and explain the details of this research project to them. These two fruitful meetings gave me access to many travel agencies. They introduced some of the most experienced travel agencies in Tehran and other major cities such as Esfahan, Shiraz and Mashhad. They also provided me with a general list of the names, addresses and phones numbers of travel agencies which made it much easier for me to contact the selected agencies. They warned me that the managers of travel agencies would only respond to these questionnaires if they met me and believed they could trust me, or if the questionnaire was recommended to them by someone close to them whom they already trusted. The two directors advised me against mailing the questionnaires to travel agencies. This advice was similar to the advice that the commercial managers of the airlines gave me when I discussed this issue with them. For that reason, I decided not to mail any of the questionnaires and found other ways of contacting travel agencies through trustful links.

I personally called some of the managers of travel agencies in order to meet them and give them one or more copies of the questionnaire. There were instances when I could not set up a meeting; but the managers promised that, as soon as I dropped the questionnaire at their offices, they would complete it. For about 50% of the forty-six

travel agencies that participated in this study, I had to ask experts or managers of airlines who had closer links with the managers of travel agencies to call them and ask them to fill out the questionnaires. Table 4.1 gives the break down of actual useable responses from all organizations, including travel agencies, that were collected through this survey.

Table 4.1: Breakdown of useable collected responses

Constructs	Dimensions	Scales	Airlines	National Institutions	Travel Agencies	Total Responses
National Institutional Norms	Commercial	Domestic airfares (One item) International airfares (Two items) Route Network (Two items)	38	30	53	121
	Operational	Controlling policies (Two items) Aircraft availability (One item) Aircraft utilization (One item) Average Fleet Age (One item) Standards (Two items)	55	41	-	96
Industry Norms	Commercial	airfare adjustment (One item) Variety of airfares (One item) Strategic alliances (One item)	93	71	53	217
	Operational	Aircraft availability (One item) Aircraft utilization (One item) Average Fleet Age (One item)	93	71	53	217
Airlines' Functional Strategies	Commercial	Domestic airfares (Two items) Alliances (Two items) International airfares (One item) travel agencies (Two items)	38	30	53	121
	Operational	Aircraft Availability (Two items) Aircraft Utilization (Two items) Average Fleet Age (Two items)	55	41	-	96
Total			93	71	53	

Figure 4.2: Distribution of the gender of the interviewees and the respondents to survey questionnaires
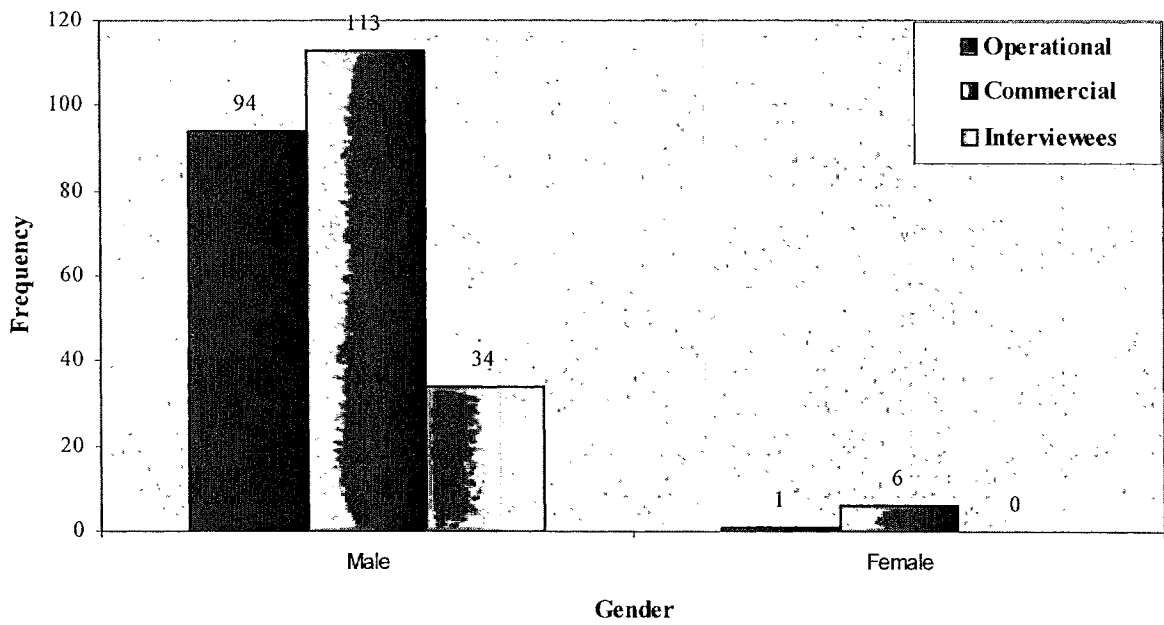
Figure 4.3: Distribution of the age of the interviewees and the respondents to survey questionnaires
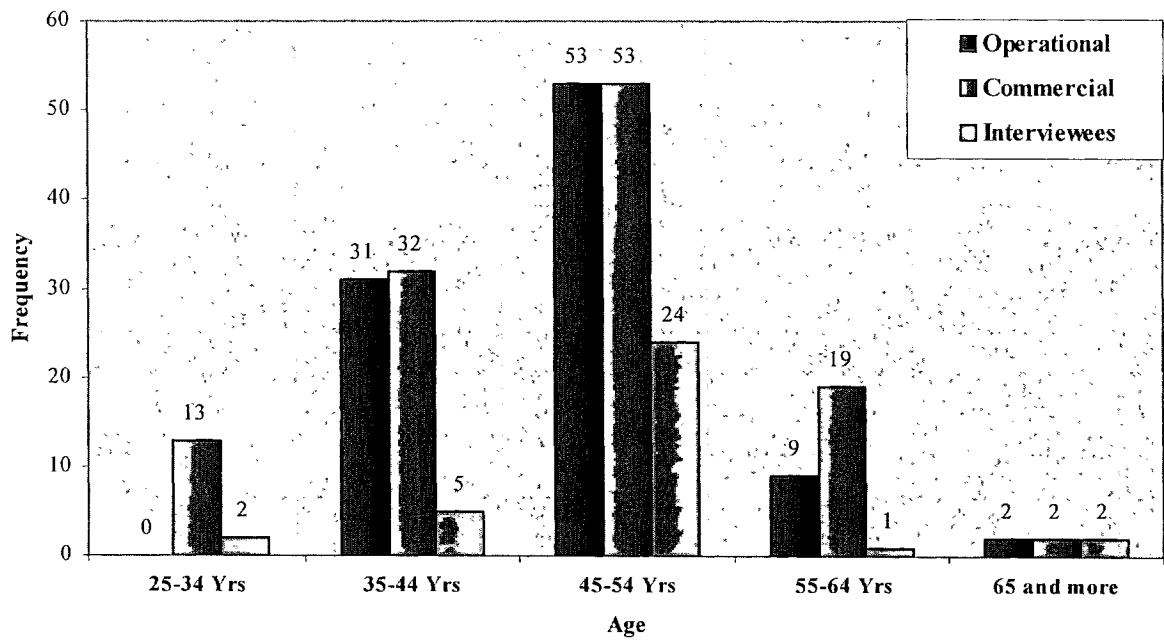
Figure 4.4: Level of education of the interviewees and the respondents to survey questionnaires
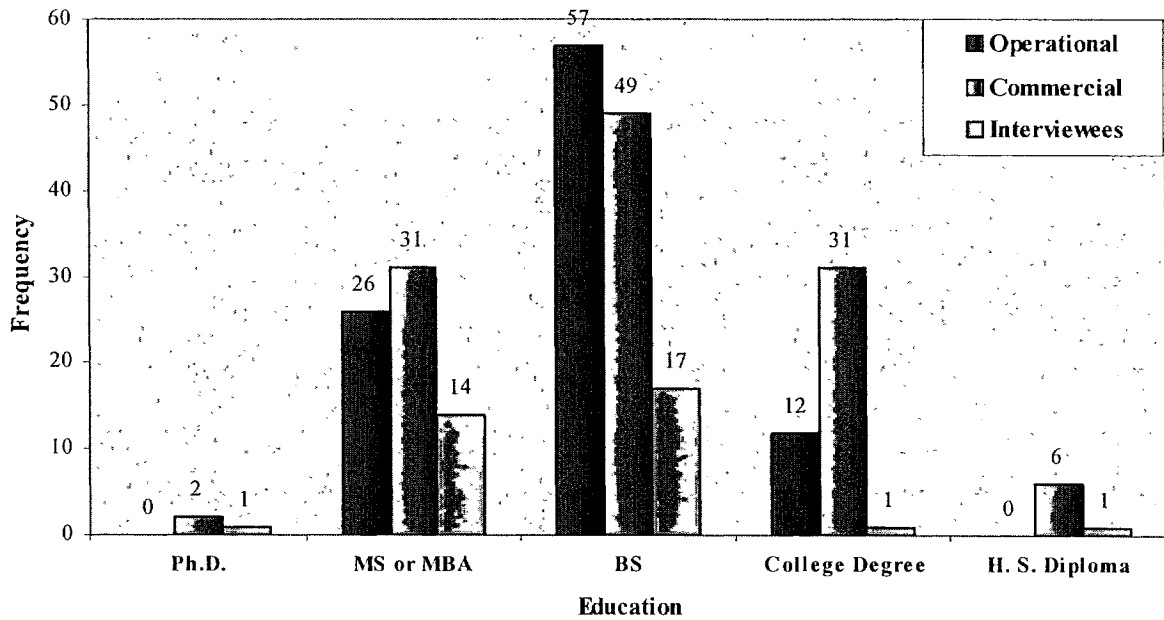
Figure 4.5: Number of years at the Present Position
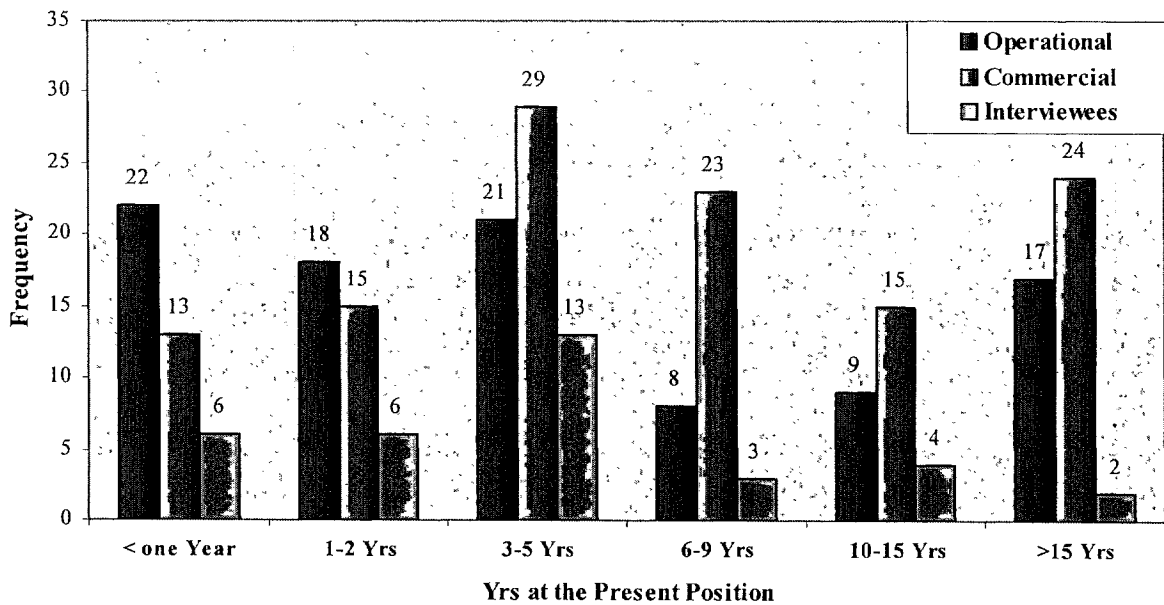
Figure 4.6: Number of years with the Present Employer
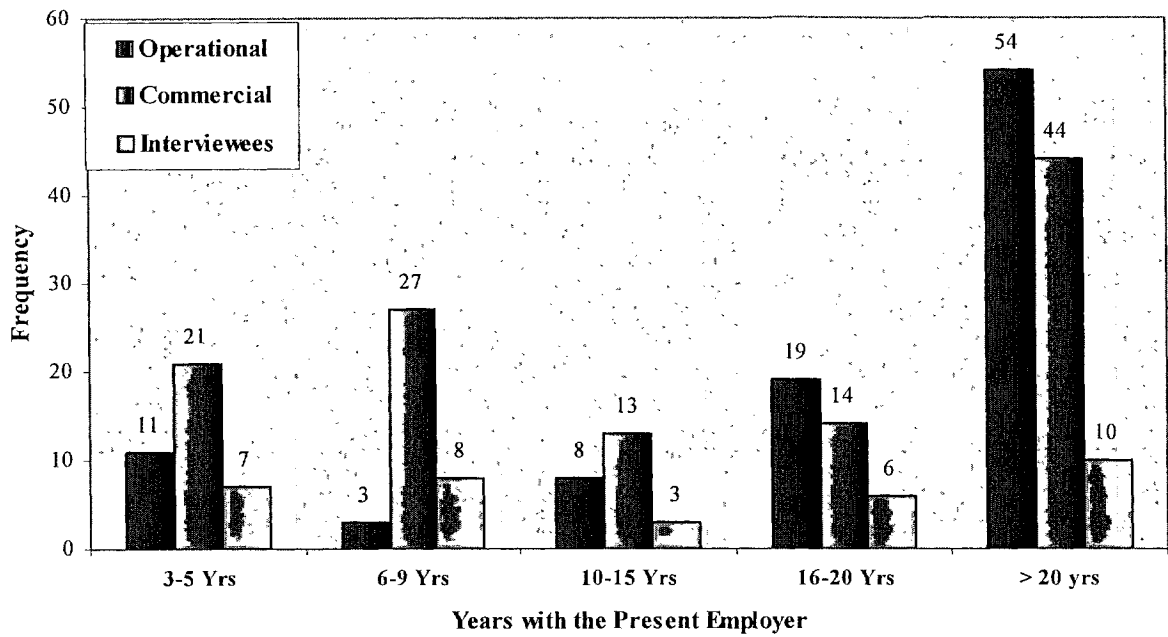
Figure 4.7: Experience in the airline Industry

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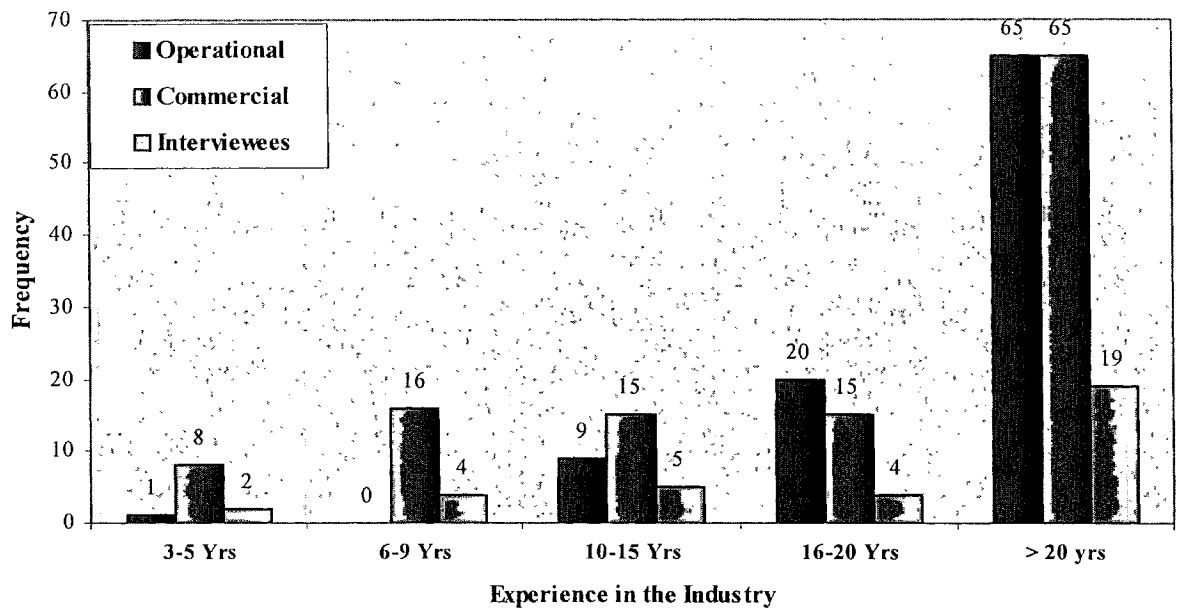
Chapter Five

Analysis of Data and Results

This chapter provides the analysis of the interviews and the survey questionnaires and tests the hypotheses. One of the advantages of using both interviews and survey questionnaires is that they cross-validate the measures and obviously the results of each method. For example, the global airline industry norms that were used in the interviews are the same norms identified by a sample of 217 managers and experts of Iranian air transportation in the survey questionnaires. In this way, the industry norms used in the interviews are strongly validated by the survey data. The same is true for the measures used in the survey questionnaires. The interviewees' definition for the most important commercial and operational activities of Iranian carriers strongly support the type of measures used in the survey questionnaires. These two methods also helped to cross-check types and strengths of relationships between major constructs of this study. However, only the interviews could identify the direction of effects in the relationships between different levels of institutions as well as between institutions and functional behaviours of organizations. For that reason the collected data from interviews are analyzed to test the hypotheses in the first part of the chapter. Then, in the second part, the results of the survey questionnaires are analyzed to check whether participants in the survey and interviewees have similar perceptions about the relationships between the main constructs .

5.1) Part One: Analysis of Interviews

A systematic interpretative procedure was used to understand the contents of these structured interviews. Descriptive statistics of interviewees' responses and their comments to interview questions are used in this procedure. Each set of questions is analyzed both separately and in conjunction with other sets of questions to find out how interviewees' perceive reciprocal relationships between the three main constructs (i.e. norms of national institutions, global airline industry norms, and the commercial and operational strategies and activities of Iranian carriers). The purpose of these analyses is to check if interviewees' responses and comments support the hypotheses of this study. Interviewing at least three executives from each organization provided a good opportunity to check the reliability of their responses. This type of reliability check has been done for different sets of interview questions. The data have been checked for any special tendency among airline managers or among the managers of national institutions. The effects of variables such as the ages of interviewees, their types of experiences (expertise), and the number of years they have worked in the aviation industry have also been examined. Any major discrepancy or significant tendency is mentioned in the corresponding section of each set of questions. The analyses of different sets of interview questions and their relationships with hypotheses (as shown in Table 5.1) are represented in the sections that follow.

Table (5.1): Interview questions and hypotheses corresponding to them

Interview Questions	Related Hypotheses
Questions 1 to 4	5d and 6d
Questions 5 to 8	None directly*
Questions 9 to 14	3v, 4v, 6v, 7v
Questions 15 to 18	1v, 2v, 5v, 7d
Questions 19 and 20	1d, 2d, 3d, 4d

* They are basically used to cross validate major measures used in the survey questionnaires for commercial and operational activities.

5.1.1) Main sources of Institutional pressure for functional strategies/ activities of Iranian carriers (analysis of interviewees' responses to questions 1-4)

The interviewed managers believed that both operational and commercial activities of Iranian airlines (including their own airlines if they were managers of airlines) are under several kinds of institutional pressures. They talked about various institutions that may influence the commercial and operational activities of Iranian carriers. They identified twenty-five sources of institutional pressure for these two kinds of activities as listed in Table 5.2. There is a common belief among interviewees that the operational activities of Iranian carriers are influenced by fewer institutions than are commercial activities. Nine and five of the identified sources of institutional pressure, respectively, for commercial and operational activities were mentioned by at least 15 interviewees. These managers consider the Iranian CAO, ICAO (International Civil

Aviation Organization), and IATA (International Air Transportation Association) the most influential institutions for both commercial and operational activities (as shown in Figure 5.1). Interestingly, four out of the five most influential institutions for operational activities (i.e., the CAO of Iran, ICAO & IATA, manufacturers, and politics) try to rationalize or standardize these activities according to well-accepted worldwide norms while only two out of the nine most influential institutions (i.e., CAO, IATA, ICAO, the ministry of transportation, politics, government institutions, budgetary and financial institutions, regional and international markets, and the parliament and MPs) try to rationalize or standardize the commercial activities of Iranian carriers according to industry norms. These two institutions are ICAO and IATA. Thus, technical and/or global institutions have surrounded operational activities essentially to standardize them according to the industry norms. In contrast, social, economic, and political institutions have surrounded commercial activities to institutionalize them according to the national or community norms. This suggests that the institutionalization process varies according to the nature of functional activities. The nature of an activity may define the kind and the number of institutions that exert pressure on it. It seems that, in a developing country, less standardized or market oriented types of activities, such as the commercial activities of airlines that have a greater scope of social interaction, are influenced more by national institutions than by global institutions. These results, as summarized in Table 5.3, strongly support hypotheses 5d[1] and 6d[2]. Furthermore, the interviewees' comments on

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[1] **Hypothesis 5d:** The less standardized a functional activity of organizations in a developing country, the more institutionalized it is by the national institutions.

[2] **Hypothesis 6d:** The more standardized a functional activity of organizations in a developing country, the more institutionalized it is by global industry norms

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other sources of institutional pressure as discussed in the following sections also support these two hypotheses.

Table (5.2): Sources of institutional pressures for two functional activities of Iranian carriers (Taken from 34 interviews)

	Institutions	Commercial Activities	Operational Activities
1.	C.A.O.	28	31
2.	IATA	27	28
3.	ICAO	25	33
4.	Ministry of Transportation	24	9
5.	Politics	23	16
6.	Government Institutions	21	10
7.	Regional markets	16	1
8.	Budgetary & Financial inst.	16	4
9.	Parliament (MPs)	14	4
10.	Airlines	11	5
11.	Social groups	10	4
12.	Ministry of Foreign Affairs	9	1
13.	Industry	6	7
14.	Local authorities	5	0
15.	Culture	5	2
16.	Traditional Management sys.	5	3
17.	Regional agreements	4	0
18.	Tourism Organizations	3	2
19.	Environmental Organizations	2	4
20.	Other means of Transportation	2	0
21.	Manufacturers	1	25
22.	Governors-General	1	0
23.	Travel Agencies	1	0
24.	Unions	1	2
25.	Competition on hiring experts	0	4

Table (5.3): Summary of results from interview question 1-4

	Commercial Activities	Operational Activities
1. Level of social interactions	High	Low
2. Level of standardization	Low	High
3. Number of influential institutions	Many	Few
4. Institutionalized mainly by	National institutions	Global institutions
4.1. Influences of national political institutions	High	Low
4.2. Influences of international political institutions	Low	High
4.3. Influences of manufacturers as global institutions	Low	High
4.4. The influences of government and other national institutions	High	Low

5.1.1.1) Political institutional pressure on two functional activities

More than fifty percent of the interviewed managers identified the political environment as the only non-technical source of institutional pressure for operational activities of Iranian carriers. By *politics* they meant the political relationships between Iran and other countries. For example, the interviewees stated that the U.S. economic sanctions have had a significant, direct impact on the operations of the Iranian aviation industry. These economic sanctions have created major constraints for relationships between Iran and Western European countries, especially those who provide the know-how and technology for passenger aircraft operating in Iran. Most managers believe that gradual changes in the operational standards of the Iranian aviation industry, particularly its shift toward Russian aviation technology, should be viewed as a result of the U.S. sanctions against Iran in the last two decades. They claim that, when obtaining access to the updated technology is extremely constrained by political forces, there remains no other way

except re-engineering the standards or establishing new sets of standards. One of the executives of Iran Air made the following statements when explaining these political pressures:

"The U.S. economic sanction and the political issues have made major constraints for our activities. For example:

1. Iran Air was one of the top ten in terms of its operational standards about 25 years ago, but because of these sanctions and political factors we have not been able to get access to better equipment. This has brought us to a very low ranking from the operational point of view.

2. The airline industry is moving toward lowering the average fleet age and renovating or updating airline information technology, but we have not been able to move toward these directions because of the two obstacles mentioned."

One of the managers argued that this restructuring process has not downgraded the safety standards, but it certainly has introduced operational norms different from those of western countries. In explaining how controlling mechanisms have changed, one of the executives of the Iranian CAO made the following statement:

"Sometimes we have to impose more extensive constraints and controls on Iranian carriers in order to make sure that these reengineered or new standards perform at least at the same level as the old ones."

The maintenance manger of one of the airlines provided a good example for these newly institutionalized operational norms. He explained the difficulties that they experienced in performing a major repair on one of the components of a western aircraft type. They

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could not get the special kit required for this major repair because of the U.S. sanctions. They had to convince the CAO's technical representatives to extend the deadline for this repair for a few months until they found an alternate source for the kit. Finally, they were able to find a domestic source to design and manufacture this kit and perform the repair with the homemade kit. The CAO authorities approved their repair conditionally and issued a special inspection procedure in which the airline was obliged to check the component at intervals twice as frequently as if they had used the original kit. There were many such stories recounted especially by the maintenance managers. As another maintenance manager put it:

> "After more than twenty years of struggling with political constraints, it is inevitable to have a new set of well-accepted operational norms and institutionalized operational activities among Iranian carriers."

Politics (with the above mentioned definition) was ranked as the sixth source of institutional pressure for commercial activities. Interviewees considered that national political factors influence commercial activities more than external factors (e.g. the U.S. sanctions) do. The U.S. economic sanctions and political relationships between the government of Iran and some of the Western European countries have constrained such commercial activities as the reservation systems and the route networks of Iranian carriers. However, the interviewed managers did not consider them as major sources of institutional pressure on the commercial strategies of Iranian airlines. They expressed the belief that national political pressures from powerful individuals or groups at different levels have significantly greater influence on these activities. These individuals or groups

have the power to impose non-economic flights or to keep non-economic routes in the airlines' networks. As one of the executives described it:

> "Iranian carriers are forced to set schedule flights to countries such as Africa and even Beirut for political reasons which normally have no commercial and/or economic feasibility."

There are individuals who can even change pricing policies because they are either governmental or legislative authorities or because they have strong connections with these authorities. Airlines behave according to the expectations of these individuals or groups in order to survive and grow in this market. In fact, satisfying these kinds of political expectations has become a crucial element in the commercial strategies of Iranian carriers. The following statements, made by one of the airlines' CEO, clearly explains this point:

> "Four major national sources exert pressure on our activities, the CAO of Iran, the government, the regional carriers and/or regional market, and finally individuals with specific authority or power.
>
> Individuals play major roles in our system, even the type of circulars that are issued by the CAO are because of individuals, not a systematic procedure. It is an individual's will instead of a system that is operating in our airline industry.
>
> Because of all these sources of pressures, we cannot provide the type of service that our passengers expect from us on international flights. This is one of the major reasons that we have decided to reduce our prices in this

market to be able to attract the lower portion of the market. I would call

this an institutionalized behaviour."

The strong impact of national political institutions on commercial activities can also be observed in the interviewees' selection of the parliament as one of the most influential institutions for commercial activities. As these executives put it:

"Members of the parliament have significant influence on establishing

new flights and/or change in our route network."

"The Internal Ministry along with the governor-general and MPs of each

province create significant pressure for establishing scheduled flights to

major cities of each province. Sometimes airlines operate specific flights

with no economic feasibility, just for political reasons."

According to the perceptions of these 34 interviewees, the impact of national (domestic) political forces is much stronger on the commercial activities and strategies of Iranian carriers than on their operational activities (Item 4.1 in Table 5.3). International political pressures (such as the U.S. sanctions) are viewed as the main political source of pressure for operational activities and strategies (Item 4.2 in Table 5.3). This is an indication of the variation of institutionalization processes and institutional impacts on different activities of business firms in a developing country. Both the sources of institutional pressures and their institutionalization processes vary among different activities of organizations indicating that organizations' functional activities and strategies are institutionalized but in different ways and by different levels of institutions.

5.1.1.2) Manufacturers and their institutional pressure on two different functions

Aircraft manufacturers are unique type of organizations, capable of integrating various types of procedures, services, and products offered by several component manufacturers, business entities and organizations to make a complex system called aircraft. Every airline should follow the manufacturers' manuals and procedures when operating these complex systems. These procedures vary among manufacturers. For example, airlines operating Boeing aircraft follow specific types of procedures for their maintenance, ground handling, and even flight operations that are different from those operating Airbus aircraft. This means that if an airline operates both types of aircraft (i.e., Boeing and Airbus), it must have different operating systems for each fleet. This is because each manufacturer has institutionalized its own specific type of language, culture and disciplines through procedures and manuals that have become norms among operators. These taken-for-granted norms may be observed in the job descriptions, the organizational structures, and even the functional strategies of airlines. Most of the interviewed executives considered manufacturers as one of the major sources of institutional pressure for operational activities of Iranian carriers. One of the interviewees explained the role of Russian manufacturers by arguing that: "Russian manufacturers are acting as another source of institutional pressure for operational activities of especially newly established airlines in Iran." In contrast, the interviewees said that manufacturers do not really institutionalize the commercial activities of Iranian carriers (item 4.3 in Table 5.3). This may be viewed as more evidence for the variation of institutional pressures on different activities. It also indicates that manufacturers, as another external (non-national) source of institutional pressure, exert a significant impact on highly

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standardized activities but exert very limited impact on less standardized or market driven activities, at least in a developing country i.e. hypotheses 5d and 6d).

5.1.1.3) The pressures from government, social, and regional institutions on two different activities

The government of Iran owns the major Iranian carriers, such as Iran Air, Aseman, and Iran Air Tour. These airlines hold more than 85% of both domestic and international markets. The Ministry of Road and Transportation is responsible for building roads, railways, airports and ports around the country. It is in charge of implementing and controlling the rules and regulations in every sector of transportation including air transportation. The Minister of Road and Transportation, as the chair of the general assembly for all the government owned airlines, appoints the head of the Civil Aviation Organization (CAO). The CAO controls Iranian airspace, airfields, and the operation of Iranian carriers in accordance with both Iranian and international rules and regulations. Interviewees identified the CAO of Iran as one of the major influential institutions for both operational and commercial activities of Iranian carriers. They expressed the belief that the Ministry of Road and Transportation, the financial and budgetary authorities (such as the Management and Planning Organization and the Central Bank of Iran), and the government in general, have been institutionalizing and shaping the commercial activities and strategies of the airlines. Interviewees described this point in different ways; the following is one example:

"Iran Air likes to have a more economic and competitive network, but institutions such as the CAO, the Ministry of Transportation, the Central

Bank of Iran, the Ministry of Foreign Affairs, and the Islamic Parliament are in fact making these decisions for us. Bureaucracy and governmental controls on airline activities have made commercial activities of Iran Air more passive."

In identifying the influential sources of institutional pressures for the commercial activities of Iranian airlines, interviewees' opinions varied; they included the government in general (21 interviewees), budgetary and financial institutions (16 interviewees), and regional markets (16 interviewees). It is interesting to note that the interviewees thought that the commercial activities and strategies of Iranian carriers, especially those for the domestic market, are not shaped by market forces. The domestic market is highly regulated by local and national institutions, one of the main differences between commercial activities of business firms in developing countries compared to those in developed countries (item 4.4 in Table 5.3). One last institution that more than 16 interviewees identified as an influential institution for commercial activities was regional markets. Managers of most of the smaller carriers with only limited regional international networks claimed that regional markets have institutionalized their commercial strategies. This still indicates that commercial activities are influenced more by local and regional institutional environments than by global ones.

Major international carriers may have significant roles in shaping the norms of the airline industry. For example, strategic alliances initiated by major airlines such as American Airlines, United, Lufthansa, and British Airways have become a commercial norm among airlines all around the world. Two main strategic alliances are "Oneworld" (American Airlines, Aer Lingus, British Airways, Cathay Pacific Airways, Finnair,

Iberia, LanChile, Qantas Airways) and "Star Alliance" (Air Canada, Air New Zealand, ANA, Ansett Australia, Austrian Airlines, bmi, Lauda, Lufthansa, Mexicana, Scandinavian Airlines, Singapore Airlines, Thai, tyrolean, UNITED, VARIG). Thus, major players of the airline industry, as in other industries, can make a significant impact on the behaviour of industry members. Interestingly, interviewed managers do not perceive other major airlines and the industry in general as influential institutions for the commercial and operational activities of Iranian carriers. As one of the interviewees put it:

"The airline industry is moving toward merging, regional and international alliances and cooperation, but we have moved on the opposite side."

5.1.1.4) Summary of the results from questions 1 to 4 of interviews

In the first part of interviews, the major results of interviewees' responses to questions 1 to 4 can be summarized as follows:

1. The influences of each source of institutional pressure on the different functional activities of an organization vary.

2. The institutionalization process varies according to the nature of the functional activities of an organization.

3. In a developing country, the globally standardized functional activities of organizations are less institutionalized by national level institutions than are its less standardized activities.

4. Market and industry forces are not perceived as major sources of institutional pressure for functional activities of organizations in a developing country.

These results support hypotheses $5d^3$ and $6d^4$. Interviewees strongly believe that their commercial activities (which are less standardized compared to operational ones) are significantly institutionalized by national institutions (Hypothesis 5d), while operational activities are more institutionalized by global institutions (Hypothesis 6d). However, these two hypotheses will be discussed in more details in section 5.1.6 (last section of this part).

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[3] **Hypothesis 5d:** The less standardized a functional activity of organizations in a developing country, the more institutionalized it is by the national institutions.

[4] **Hypothesis 6d:** The more standardized a functional activity of organizations in a developing country, the more institutionalized it is by global industry norms

Figure (5.1): Main Influential Institutions Identified by Interviewees
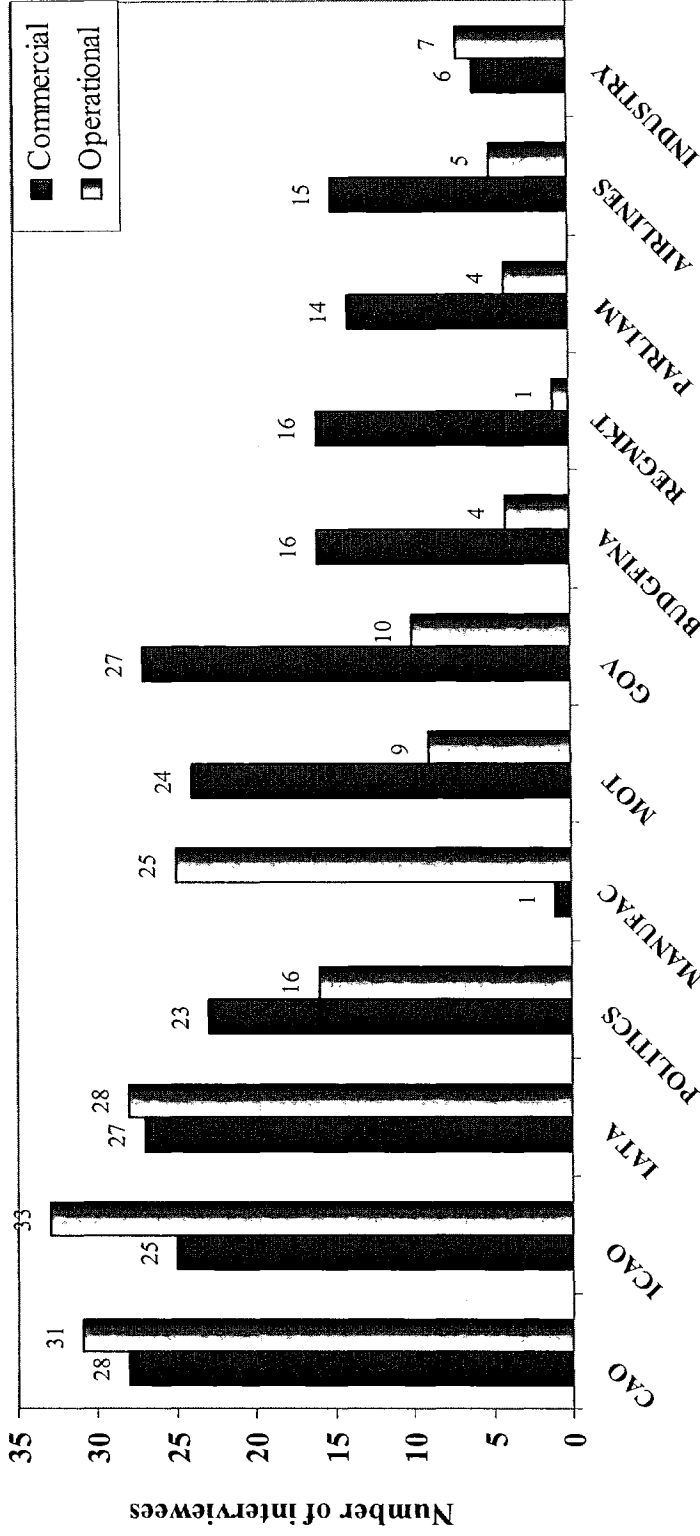
MANUFAC : Manufacturers, **MOT**: Ministry of Transportation, **GOV**: Government, **BUDGFINA**: Budgetary and Financial institutions, **REGMKT**: Regional Markets, **PARLIAM**: Parliament

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5.1.2) Major commercial and operational activities of Iranian carriers

(analysis of the interviewees' responses to questions 5-8)

Questions 5 to 8 were designed to understand how these executives describe operational and commercial activities of Iranian carriers. They also were used to cross validate the selected measures for operational and commercial activities of Iranian carriers in the survey questionnaires. A list of eight commercial and six operational functions was provided to the interviewees to be ranked by them according to the extent that those functions describe their airlines' commercial and operational activities, respectively. Then, the executives were asked to tell what percentages of their commercial and operational activities may be described by the first five commercial and the first four operational activities (based on their rankings). It should be noted that when executives of the CAO of Iran and the IAC were interviewed, Iranian carriers generally were addressed instead of a specific airline. Means and standard deviations of the rankings suggested by interviewees are summarized in Tables 5.4 and 5.5. The number (in percentage) of interviewees who ranked each of the commercial functions as the first five for commercial activities, and each of the operational functions as the first four for operational activities are also presented in these two tables. The following is the analysis of the interviewees' responses to these four questions and some of the main related results:

1. As shown in Appendices 6 and 7, most of the rankings of these functions have a skewed normal distribution. This shows that despite reasonable variations that exist in the rankings, there is some consensus among the interviewees in ranking these

activities. In other words, interviewees' found the selected functions of both lists appropriate for describing the commercial and operational activities of Iranian carriers.

2. Variations in these rankings have two major sources. First, the rankings of executives with limited knowledge about either commercial or operational activities varied more than the rankings of the more experienced executives. Second, executives of younger airlines, such as Mahan, who try to develop new ways of doing business produced rankings very different from executives of older airlines.

3. The means and standard deviations of these rankings (as given in Tables 5.4 and 5.5) show that the interviewees attained a stronger consensus in ranking operational activities than in ranking the commercial ones. This can also be observed from the percentage of commercial or operational activities of Iranian carriers that can be described by these functions (as given in Tables 5.4 and 5.5). Since operational activities are essentially rationalized (and/or standardized) by international norms, they are perceived to be understood more easily and to have more obvious well-accepted boundaries than the commercial activities.

4. At lease three of the top five functions selected by interviewees to describe the commercial activities of Iranian carriers (based on the interviewees' rankings) are similar to the measures used in the commercial survey questionnaire.

5. As expected, the majority of interviewees indicated that the function related to ticketing and sales plays the most significant role in the commercial activities of airlines in Iran. This function is, in fact, the main reason for having commercial

departments in every airline. It is a very subjective dimension for a commercial survey questionnaire, particularly because of its multidimensional nature.

6. The second most important function that describes the commercial activities of Iranian carriers (from the interviewees' point of view) is their relationships with travel agencies. This indicates that Iranian airlines, like airlines around the world, follow the same pattern of considering travel agencies as their main distribution channels.

7. Managing reservation systems has become one of the major commercial issues among airlines, especially among younger and smaller ones who try to be more competitive by offering similar services as those offered by larger and older airlines.

8. Although the interviewed managers have ranked "strategic alliances" and "airfare adjustments" very closely, it seems that adjusting domestic and international airfares has been more common than strategic alliances among Iranian carriers. The limited role of strategic alliances in commercial activities may be viewed as strong evidence (measure) of the differences between the commercial norms of the global airline industry and the commercial activities of Iranian carriers.

9. Advertising is seen as the second least important commercial activity, which shows the nature of the Iranian domestic market and its highly regulated approach to international markets.

10. As expected for a highly regulated environment such as Iran, advertising and managing a variety of airfares do not play major roles in the commercial activities of airlines. Eighty one percent of interviewees ranked "managing variety of airfares" lowest in their commercial activities (Table 5.4 and Appendix 6). Thus, despite their

belief that having a variety of airfares was a well-accepted commercial norm of the airline industry, they didn't follow this norm in their own commercial activities. In other words, Iranian carriers do not conform to the commercial norm of the industry since there is just no need to do so or because this is a commercial activity that is institutionalized by other, stronger sources. Thus, this function is an excellent way to measure the differences between the commercial norms of the global airline industry and commercial activities of Iranian carriers.

11. Interviewees selected aircraft availability and aircraft utilization as the two most important functions of the operational activities of Iranian carriers. These two functions are, in fact, two of the three major dimensions used in the operational survey questionnaire.

12. Interviewees indicated that trying to keep the average fleet age as low as possible has the least role in the operational activities of Iranian carriers although reducing the average fleet age is a well-accepted norm of the global airline industry. Thus, these airlines are not conforming to this operational norm of the airline industry. Most of the interviewees claimed that they wish to reduce their average fleet age but they cannot because of both political and economic reasons. Therefore, some other source of pressure prevents them from conforming to this operational norm of the industry. For that reason, bringing down the average fleet age seems to be one of the most appropriate means to measure the differences between operational norms of the global airline industry and the operational activities and strategies of Iranian carriers.

In conclusion, it can be argued that the selected measures for commercial and operational activities and strategies for both interviews and survey questionnaires are

perceived appropriate by the majority of the top Iranian aviation executives. They also affirm that Iranian carriers do not conform to some of the well-accepted norms of the global airline industry, such as having a variety of airfares in a single flight or reducing the average fleet age since other sources of institutional pressures prevent them from doing so. As one of the interviewees put it:

"Our market and the national forces have made it unnecessary to have a variety of airfares for the same seats in every flight."

Or:

"We individually like to reduce the average age of our fleet, but after all these years of political pressures we have realized that our efforts should be focused on maintaining our aged planes if we want to survive."

while an executive of a younger airline argued that:

"When the market is used to older generation planes which can be operated with very reasonable prices, why should we think about brand new airplanes which are not economically feasible in our market and, more importantly, are not easily available to Iranian carriers."

Table (5.4): Ranking of major elements of Iranian carriers' commercial activities

Based on questions 5 and 6 of interviews (N=34)

Commercial activities	Ranking of different activities		% of airlines' commercial activities described by the first five items		% of the Interviewees who ranked the item as the first five
	Mean of Ranking	Std. Dev.	Mean	Std. Dev.	
4: Activities related to ticketing and sales	2.7	1.9			91
7: Relationships with travel agencies	3.2	1.6			88
6: Managing the reservation system	3.3	1.7	77.8	10.3	91
8: Customer services	3.9	2.1			73
3: Adjusting domestic & international airfares	4.7	2.0			60
5: Strategic alliances with other airlines	4.8	2.3			56
2: Advertising through all sorts of media	6.2	1.3			36
1: Managing variety of airfares in every single flight	6.5	2.0			19

Table (5.5): Ranking of major elements of Iranian carriers' operational activities

Based on questions 7 and 8 of interviews (N=34)

Operational Activities	Ranking of different activities		% of airlines' operational activities described by the first five items		% of the Interviewees who ranked the item as the first four
	Mean of Rankings	Std. Dev.	Mean	Std. Dev.	
1: Increasing the availability of airplanes	2.1	1.2			94
3: Increasing the aircraft utilization	2.6	1.4	82.9	8.9	83
5: Handling scheduled and unscheduled flights round the clock	3.2	1.5			73
2: On the job training	3.6	1.3			71
4: Increasing crew utilization	3.8	1.3			71
6: Keep the average fleet age as low as possible	5.1	1.7			21

5.1.3) Institutional pressures for global airline industry norms (analysis of

the interviewees' responses to questions 9 & 10)

The purpose of these two questions is to find out about the institutional sources
that shape commercial and operational norms of the global airline industry. In order to
narrow the interviewees' perceptions and reduce the subjectivity of the results, a list of
four major potential sources were presented to the interviewees to be ranked by them
based on the extent to which each source influences the norms of the global airline
industry. This ranking let me check if the commercial and operational norms of this
industry are institutionalized differently. It also let me see if they are institutionalized by
the same sources of institutional pressure. Means and standard deviations of the
interviewees' responses to these two questions are given in Table 5.6 and the
distributions of their rankings are presented in Appendices 8 and 9.

**Table (5.6): Major sources of institutional pressure for airline industry norms
(Questions #9 and #10)**

| Institutions | Rankings based on the significance of their influence on the industry: | | | |
| | Commercial Norms | | Operational Norms | |
	Mean	S.D.	Mean	S.D.
1. Civil Aviation Department and/or the Ministry of Transportation of different nations	2.42	1.03	2.03	1.05
2. Activities of airlines all around the world	1.85	1.03	2.82	0.81
3. The major North American and European carriers	3.00	1.12	3.33	1.02
4. Global institutions such as IATA and ICAO	2.61	1.00	1.79	0.86

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Interviewees believed that the most influential source of institutional pressure for the commercial norms of the industry could be found in the activities of airlines around the world. Approximately 50% of the executives ranked global airline activities as the first and approximately 20% of them ranked it as the second most influential source of pressure for these norms. They viewed North American and European carriers, which together hold 75% of the airline industry market, as the least influential source for these norms. This ranking could be a result of living in a highly regulated environment in which market and competitive forces are almost non-existent. As one of the interviewees put it, "Government institutions of powerful countries such as the U.S. can easily change the commercial norms of this industry as they did in 1978 by deregulating the U.S. airline industry."

The interviewees' general belief is that regulating institutions at national or global levels have the most significant role in shaping the global industry norms. This is why they selected national institutions such as the Ministry of Transportations and Civil Aviation organizations of different nations and the two main global organizations (i.e., ICAO and IATA) as, respectively, the second and third most influential institutions in establishing the commercial norms of the airline industry.

These managers believe that global institutions like ICAO and IATA dominantly influence and shape the operational norms of this industry. Here again, the second major source of pressure that shapes the operational norms of the global airline industry is perceived to be national institutions such as the civil aviation departments or the Ministries of Transportation of different nations. The interviewees indicated that national institutions, especially those of powerful countries such as the U.S., might significantly

influence operational norms of the airline industry through international organizations or through manufacturers. The activities of airlines around the world, is clearly perceived as the third source of pressure (as shown in Appendix 9) for the operational norms of the airline industry. As one of the interviewees suggested, "There may be different operational practices among airlines in different countries, but these practices will not become industry norms until regulative institutions approve them." Even safety practices (widely accepted norms among airlines) have been established by regulative institutions such as ICAO and FAA. Hence, international and national regulative institutions are viewed as the most influential sources in institutionalizing the operational norms of the industry. In contrast, the commercial practices of this industry do not necessarily need to be approved by the regulative institutions to become industry norms. This is why the commercial practices of airlines have a greater potential of becoming industry norms. To summarize the analyses of the interviewees' responses to questions #9 and #10, we can say that:

1. Both global and national institutions such as ICAO and the CAO of each country influence Norms of the airline industry respectively.

2. The nature of industry (global) norms will tell us about the kind and the level of the institutions that influence them. For example, if the norms are well-accepted standards like the operational norms of the airline industry, regulative institutions at both international and national levels may be able to change them.

5.1.4 The impact of Iranian national aviation institutions on the norms of the global airline industry (analysis of the interviewees' responses to questions 11-14)

Since the national institutions of each country were ranked as the second source of institutional pressure for both the commercial and operational norms of the airline industry, it was necessary to know the extent to which Iranian national institutions influence these norms. This is in fact the main purpose of the next two questions (i.e. #11 and #12). The majority of interviewees indicated that Iranian national institutions have an insignificant role in changing the airline industry's norms. Almost 80% of them believe that Iranian national institutions have a somewhat insignificant or an insignificant impact on these norms (Table 5.7). As shown in the same table, the idea that Iranian national institutions can have even limited influence on industry norms is strongly rejected. Most of the interviewees argue that: "This is out of the question; our national institutions are just followers and have no influence whatsoever on industry norms".

Question #12 was designed to see where Iranian national institutions stand, in relation to other countries, in terms of their influences on the industry's norms. A list of six countries (carefully selected) was given to the interviewees to be ranked, based on the degree to which national institutions of these countries have been able to influence airline industry norms. The list included Iran and developing nations that have almost the same size airlines as Iran has and their airlines facing much the same sort of difficulties. The descriptive statistics of the interviewees' rankings (as shown in Table 5.8) indicate that

Iran is the country whose national institutions have the least impact on these norms. It is interesting to note that the top executives of the Iranian air transportation industry indicated that the influence of Iranian national institutions on the norms of the airline industry is even less than those of Pakistan or Mexico. All interviewees ranked the national institutions of the U.S. as the most influential driving force for the industry norms. The results of these two questions imply that the impact of Iranian national institutions on industry (global) norms is negligible and support hypothesis 7v[5].

Table (5.7): Significance of the influences of the Iranian national institutions and airlines on the global airline industry norms

	Means	S. D.	t (Sig. 2-tailed)**	% of interviewees who selected 4 or 5*
How significant do national institutions such as the CAO of Iran and/or the Ministry of Transportation influence norms of the global airline industry? (Q #11)	4.12	1.15	5.7 (.000)	80
How significant do commercial activities of Iranian carriers influence the norms of the global airline industry? (Q #13)	4.38	0.60	13.3 (.000)	94
How significant do operational activities of Iranian carriers influence the norms of the global airline industry? (Q #14)	4.24	0.89	8.1 (.000)	88

* on the scale of 1 = very significant, ...4 = somewhat insignificant, 5 = insignificant
** The null hypotheses that Mean = 3.0 for these questions is strongly rejected with 95% confidence interval

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[5] **Hypothesis 7v:** Iranian national institutions have a negligible impact on the airline industry norms.

Table (5.8): Ranking countries based on the influences of their national institutions on airline industry norms
(Question #12)

Countries	Mean	Std. Dev.
US	1.00	0.00
Germany	2.38	0.55
Canada	2.39	0.61
Pakistan	4.34	0.87
Mexico	4.48	0.95
Iran	4.81	1.00

According to questions #9 and #10 one of the main sources that shapes airline industry norms is the strategy and actions of airlines around the world. From the interviewees' point of view, this was the most influential source of pressure for the commercial norms of the airline industry. It is important to know how significant is the role of Iranian carriers in this regard. The interviewees' responses to questions #13 and #14 answer this question. Interviewees don't see even a chance for Iranian carriers to think about influencing industry norms. The descriptive statistics of these two questions and the strong rejection of the hypotheses that commercial or operational activities of Iranian airlines have some influence on industry norms is clearly indicated in Table 5.7. These results support hypotheses 3v[6] and 4v[7]. Some of the interviewees believe that this may be the reason for Iranian carriers to be more interactive with national institutions than international ones. Some of the top executives who do have interaction with the regional aviation executives of other developing countries explained that this is the same for airlines in those countries. The only exceptional airline and at least 6 executives

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[6] **Hypothesis 4v:** Commercial activities of Iranian airlines have no influence on the airline industry norms.
[7] **Hypothesis 4v:** Operational activities of Iranian airlines have no influence on the airline industry norms.

mentioned it specifically, is the Emirate Airline. They suggested that it might be the only

airline from a developing country that has been able to change the existing norms and

even establish new commercial norms for the global airline industry. Generally speaking,

though, the executives did not see a chance for airlines of developing nations to influence

the norms of the global airline industry. These arguments support hypothesis 6v[8].

5.1.5) The main sources of institutional pressure for Iranian aviation national institutions (analysis of the interviewees' responses to questions 15-18)

The purpose of this section is to see how the norms of Iranian national institutions

are shaped. First, each interviewee described his (all the interviewees were male) own

perception about this type of norms. I intentionally asked for their perceptions to establish

whether there was a common understanding about this construct. The majority of

interviewees talked about well-established rules and regulations such as those for

controlling the commercial and operational activities of airlines, those for issuing various

kinds of permits, and also some of the well institutionalized formal and informal political

arrangements. Then a list of four specific settings (institutions), that may significantly

influence these rules, regulations, and national arrangements were presented to the

interviewees to be ranked, based on the intensity of their influences (Question #15). The

descriptive statistics of their rankings (as shown in Table 5.9) and their distributions (as

given in Appendix 10) indicate that global regulative institutions such as ICAO and

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[8] **Hypothesis 6v:** The activities of an organization in a developing country have negligible influence on the industry's norms.

IATA are the most powerful driving force behind the norms of Iranian aviation national institutions.

Table (5.9): Ranking of the influential settings based on the intensity of their impacts on the Iranian national institutions (Question #15)

	Means	Std. Dev.
The activities of Iranian carriers	3.18	1.09
The norms of global airline industry	2.85	0.82
The major Iranian carrier(s)	2.59	0.74
Global institutions such as IATA and ICAO	1.29	0.80

The activities of major Iranian carriers are seen as the second main source of influence for these norms. Some of the interviewees believe that the flag carrier of Iran (Iran Air) is the main reason behind all the existing institutionalized procedures of the Iranian aviation industry. For example, one of the airline executives (not from Iran Air) said:

"For more than 45 years, Iran Air has been the backbone of the airline industry in Iran. During these years, all rules and regulations have been established to protect Iran Air as a flag carrier with a highly traditional and regulated view for operating an airline. This has shaped the culture of the airline industry in this country. This Iran Air culture has shaped the expectations of Iranians. The government and the parliamentary system have tried to satisfy these expectations all the time."

There is a dominant belief among these executives that Iranian carriers as a whole have the least influence on the accepted national aviation norms compared to the other three

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sources. This confirms the power of major carriers, such as Iran Air, in shaping the aviation norms of the country. Despite the fact that interviewees strongly believe that Iranian national institutions have an insignificant impact on the global airline industry's norms (based on questions 11 & 12), they do see a strong reflection of these norms in the norms of their national institutions. They perceived the airline industry as the third most important institution that shapes rules and regulations of the aviation industry. Although, sixty two percent of these executives suggested that the impact of the global airline industry on their national aviation norms is somewhat significant, the overall view significantly supports the idea that it is a moderate impact (as shown in Table 5.10 and Appendix 11). Therefore, the relationship between the global airline industry norms and the norms of Iranian national aviation institutions seems to be a one-way influence with the airline industry norms moderately influencing the Iranian national institutions. This outcome from the interviewees' perceptions supports hypothesis 7d[9].

The relationship between national aviation institutions (such as the CAO of Iran) and Iranian carriers is one of the most controversial relationships. Some of the interviewees said that Iran Air (the flag carrier of Iran) has been the main driving force behind the aviation norms of this country (as discussed above). Others said that this could not be true because, for at least the last 15 years, most of the CAO's strategies have been in conflict with Iran Air's policies. For example, the CAO executives believe that the open sky is the solution for the Iranian airline industry. They prepared a bill on open sky and sent it to the Islamic

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[9] **Hypothesis 7d:** The airline industry norms have a limited impact on the norms of Iranian national institutions.

parliament to obtain MPs' approval after first obtaining the Cabinet approval. On this issue, these executives expressed the opinion that:

"We have no other way except opening our sky to others to be able to have more competitive airlines in Iran;"

or

"Having an open sky is a major step that should be taken by the Iranian authorities in order to provide better opportunities to Iranian carriers for handling global and regional institutional pressures."

But Iran Air executives are totally against this strategy and argued that:

"One point about the airline industry in Iran is that those that have no knowledge about this industry have taken a bill to the parliament for opening the Iranian sky to every carrier. Special freedom was provided to the German carriers for flying to and from new airport of Tehran in the budget bill that has been approved by the parliament."

or

"I believe that with all the limitations that we have in our nation, issues such as open sky and free trade do not make sense in this country."

The CAO's strategy in approving the establishment of new airlines is another controversial issue for its relationship with Iranian carriers, especially with Iran Air. Interviewees explored this issue as follows:

"Iranian CAO approved the establishment of such airlines as SAHA in order to create jobs for air force and navy pilots after the war between Iran

and Iraq ended. It was after this event that other small carriers were established with military pilots and experts.

The CAO of Iran is, in fact, behind the establishment of each of the new smaller airlines; this organization is imposing these small carriers on the airline industry of this country."

"Mahan Air has been established by the authorities to promote the economy and tourism industry of cities such as Mahan and Bam in Kerman province. Or Kish Air has been established because Iran Air flights to this island did not end up being economical and government authorities liked to promote tourism and economy of this island in the Persian Gulf. This indicates that there are no private investments in these airlines, and there is no market justification for the establishment of these airlines."

Table (5.10): Significance of the influences of the global airline industry and Iranian carriers on the Iranian national aviation institutional norms (Questions 16, 17, 18)

	Means	S. D.	t (Sig. 2-tailed)*	% of interviewees who said the influence is somewhat significant
The impact of the global airline industry norms	2.68	1.25	-1.5 (.140)	62
The impacts of the commercial activities of Iranian carriers	2.82	1.11	-0.93 (.362)	56
The impacts of the operational activities of Iranian carriers	2.91	1.00	-0.52 (.609)	47

Scales are: 1 = very significant, 2 = somewhat significant.......................5 = insignificant
* The null hypotheses stating that each one of these sources has at least limited influence on national institutional norms (i.e Mean = 3) cannot be rejected with 95% confidence interval.

Therefore, the relationship between Iranian carriers and their national aviation institutions, especially the bottom up relationship (i.e., the impact of their activities on the

norms of national institutions), is tied to complex political factors. This can be seen from the results of questions 17 and 18, too. These two questions are about the influences of the airlines' commercial and operational activities on national institutional norms. The means of interviewees' responses to the significance of these impacts (as shown in Table 5.10) indicate that they are not exactly sure how significant are these influences; however, about fifty percent of them indicated that they have a somewhat significant impact on these norms. As indicated in Table 5.10, The interviewees strongly rejected the idea that commercial or operational activities have either a significant or insignificant influence on the norms of Iranian national institutions however, their limited influence cannot be rejected. These findings support hypotheses $1v$[10] and $2v$[11]. It should be noted that those who suggested that commercial activities have some influence on these norms selected a somewhat significant influence for operational activities, too. In general, though, commercial activities seem to be perceived by the interviewees as a more important source of influence and change for national institutional norms. This is in conflict with hypothesis $5v$[12] because commercial activities are less standardized activities but are perceived to have more influence on national institutional norms.

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[10] **Hypothesis 1v:** Commercial activities of Iranian airlines moderately shape the commercial norms of related national institutions.

[11] **Hypothesis 2v:** Operational activities of Iranian airlines moderately shape the operational norms of the related national institutions.

[12] **Hypothesis 5v:** The less standardized a functional activity of organizations in a developing country, the less influence it has on the national institutional norms.

5.1.6) The impacts of the norms of the global airline industry and national institutions on the activities of Iranian carriers (analysis of the interviewees' responses to questions 19 and 20)

The extent to which some of the major commercial or operational activities of airlines are institutionalized by airline industry norms and/or national institutional norms was discussed with the managers in the latter part of the interviews. The interviewees all said that both of these sources of institutional pressures have shaped the operational and commercial strategies of their airlines. They suggested that the most common national factor to influence their strategies is the level of uncertainty. One of the interviewees explained it clearly:

"Regulatory uncertainty is the vital characteristic of our institutional environment. This is why the government and its institutions, as the most powerful force, control every aspect of management activities including individuals' ideas."

One of the outcomes of this high degree of uncertainty and these systems of tight control is the growth of informal organizations. Some of the interviewees told me that:

"About 25% of decisions are made by informal religious or political organizations in our management system. This is why informal organizations are major institutions that affect both commercial and operational activities."

Others went even further by arguing that:

"Informal organizations influence every aspect of this industry, including the recruitment process at each airline."

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These arguments make it easier to accept the following statement, which was made by one of the interviewees:

"Official and unofficial ties and connections are institutionalized in our

environment which makes the process of decision making very difficult

and sometimes impossible."

Despite the existence of powerful informal organizations, interviewees believe that certain institutions have obvious impacts on the commercial and operational strategies of Iranian carriers. One of the airline executives explored the institutions that exert pressure on the commercial strategies of Iranian carriers as follows:

"It should be understood that five major sources of institutions exert

pressure on the commercial activities of Iran Air:

1. Economic sanction imposed by US

2. Domestic rules and regulations

3. Policies related to domestic airfares

4. Rising fuel price by 20% without any change in domestic airfares

5. Insufficient knowledge of our professional (national) institutions about

the nature of air transportation activities"

As can be seen, most of the sources of institutional pressures in his list are at the national level. The interviewees mostly talked about the significance of the role of national institutions in the airlines' strategies, but with more emphasis on commercial strategies. This indicates that the commercial strategies of Iranian carriers are more institutionalized by national institutions than are their operational strategies. Following are some of their related arguments:

"National institutions like the Ministry of Transportation and the Management and Planning Organization and political institutions like the Ministry of Foreign Affairs can significantly change the behaviour of airlines, especially in terms of their commercial activities."

"There are specific routes in our network that are directly imposed by the government and its related institutions."

"National institutions significantly influence the commercial activities of Iran Air while international institutions significantly influence its operational activities."

In order to have a more objective interpretation of the interviewees' various perceptions, I asked them to consider the extent to which each one of a carefully selected list of activities might be influenced by the norms of the global airline industry (question #19) or by the norms of Iranian national aviation institutions (question #20). It is worthwhile to note that these activities are similar to the ones that the interviewees selected for describing more than 75% of their commercial or operational activities (as shown in Tables 5.4 and 5.5). The means, standard deviations, percentages of the frequencies of the five-point Likert scale of each activity and the paired samples significant t-test results are given in Table 5.11. Distributions of the interviewees' responses to these two questions are shown in Appendices 12 and 13. Some of the most important results from these descriptive statistics are as follows:

1. Adjusting the domestic airfares and reducing the overall average age of airplanes are the two strategies of Iranian carriers that were perceived by 83% and 53% of the interviewees, respectively, as not being institutionalized by the norms of the global

airline industry. At the same time, more than sixty percent of the interviewees said that, in all the other activities on the list, the strategies of the Iranian carriers are institutionalized (at least to some extent) by the industry norms.

2. More than 90% of interviewees claimed that the airlines' strategies for adjusting their domestic airfares were definitely institutionalized by national institutional norms. At the same time, 76% of them said that their strategy for automating sales and ticketing was not, in fact, under the institutional pressure of the national norms. More than 64% of the interviewees suggested that the airlines' strategies for the rest of the activities might be institutionalized (to some extent at most) by national institutions.

3. The means of interviewees' responses (shown in Table 5.11) and the skewness of their corresponding normal distributions (shown in Appendices 12 & 13) indicate that interviewees responses to the impact of the global airline industry's norms on the commercial strategies are around the middle point or skewed to the right, while those concerning the operational activities are skewed to the left. This suggests that the norms of the global airline industry have some or little influence on the commercial strategies of Iranian carriers but more influence on their operational strategies. These results are obviously in conflict with hypothesis 3d[13] but support hypothesis 4d.

4. The results shown in Table 5.11 indicate that the operational strategies of Iranian carriers are institutionalized (at least to some extent) by industry norms, a finding that supports hypothesis 4d[14]. As Table 5.11 clearly shows, two out of three operational

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[13] **Hypothesis 3d:** The airline industry has insignificant impact on the commercial activities of Iranian airlines.

[14] **Hypothesis 4d:** The airline industry has a moderate impact on the operational activities of Iranian airlines.

strategies of these airlines are insignificantly institutionalized by the Iranian national aviation institutions. But, if other national institutions are taken into account, then one may conclude that the national institutions have a moderate impact on these strategies (i.e. hypothesis 2d[15]). For that reason, the interviews' results (as shown in Table 5.12a) do not appear to have strong support for hypothesis 2d .

5. The interviewees obviously consider that the operational strategies of Iranian airlines are institutionalized by the global airline industry norms more significantly than are their commercial strategies (paired samples t-test results). This is in line with the main arguments made in section 5.1.1, especially with the concluding remarks at the end of that section. The interviewees all support hypothesis 6d[16]. However, the responses to questions 19 and 20 indicate that there is no clear support for hypothesis 5d[17]. It seems that some of the less standardized commercial activities such as

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[15] **Hypothesis 2d:** Iranian National institutions have a moderate impact on the operational activities of Iranian airlines.

[16] **Hypothesis 6d:** The more standardized a functional activity of organizations in a developing country, the more institutionalized it is by global industry's norms

[17] **Hypothesis 5d:** The less standardized a functional activity of organizations in a developing country, the more institutionalized it is by the national institutions.

Table (5.11): The extent to which global airline industry and Iranian aviation institutions affect seven specific strategies and activities of Iranian carriers (Questions 19 & 20 of interviews)

	Norms of the global airline industry							Norms of the Iranian aviation national institutions							Paired samples T-Test
	Means	S.D.	Frequencies* (in %)					Means	S.D.	Frequencies* (in %)					t (2-tailed Sig.)**
			1	2	3	4	5			1	2	3	4	5	
a. Adjusting domestic airfares	4.35	1.15	6	3	9	15	68	1.33	0.69	73	18	6	3	0	10.1 (.000) **
b. Adjusting international airfares	2.26	0.96	24	38	27	12	0	3.30	1.16	6	23	15	44	12	3.66 (.001) **
c. Strategic alliances with other airlines	3.03	1.26	9	27	36	6	21	3.36	1.37	12	18	15	29	26	1.42 (.166)
d. Automating sales and ticketing	2.76	1.25	15	36	15	24	9	4.09	1.10	3	9	12	32	44	4.44 (.000) **
e. Increasing utilization of airplanes	2.65	1.04	12	38	27	21	3	3.67	1.02	3	15	26	32	24	3.58 (.001) **
f. Increasing availability of airplanes	2.50	0.93	9	53	18	21	0	3.27	1.31	12	23	18	26	21	3.13 (.004) **
g. Reducing the overall average age of airplanes	3.47	1.19	3	24	21	29	24	3.45	1.03	0	23	24	38	15	.135 (.893)

* 1: to a very great extent, 2: to a great extent, 3: to some extent, 4: to little extent, 5: to very little extent
** With 95% confidence interval and df = 33

strategic alliances are not more institutionalized by the national institutions. It is true that the majority of the Iranian carriers operate mostly on domestic routes which make the domestic airfare adjustment very important. However, only 60% of the interviewees (as shown in Table 5.4) selected adjusting domestic airfares as one of the five most important elements of their commercial activities that are highly institutionalized by national institutional norms. Instead, 88% (Table 5.4) of the interviewees selected managing their reservation systems as one of the five most important elements of their commercial activities, which are highly institutionalized by the airline industry norms. Therefore, according to the responses to questions 19 and 20, hypothesis 5d seems to have little support. Comparing these results with those from section 5.1.1, which strongly support hypothesis 5d, one may conclude that the inclusion of the government institutions in general and political institutions in particular will bring more support for this hypothesis. For that reason it is argued that hypothesis 5d is not strongly supported by the interviews (as shown in Table 5.12). The same line of reasoning indicates that, based on the results from question 20, hypothesis 1d[18] cannot be supported. However if other national institutions, including political institutions (as extensively explained in section 5.1.1), are taken into account, then one may conclude that national institutions have, in fact, institutionalized the commercial strategies of Iranian carriers. Here again there is no strong support for hypothesis 1d as Table 5.12 shows.

6. Interviewees' responses to the question concerning the strategy of the Iranian airlines to reduce the overall average age of their airplanes indicate that neither of these two

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[18] **Hypothesis 1d:** Iranian National institutions have a significant impact on the commercial activities of Iranian airlines.

levels (global and national) of institutions has really institutionalized this strategy of

the Iranian carriers. This is in line with the interviewees' comments about the role of

political elements (which have no connection to either the airline industry norms or

the Iranian national aviation institutional norms) in getting access to the updated

technology. As one of the interviewees put it:

"Iran Air managers cannot make any type of fleet planning nor select the type

of aircraft which is appropriate for their fleet, a primary decision that is made

by managers of airlines all around the world...

"Our operational activities are significantly influenced by political issues.

This, in fact, is one of the reasons for the lack of expansion among our

airlines."

This comment suggests that there is a need to look at a variety of institutions at different

levels in order to explore strategies of organizations in a developing country like Iran.

In conclusion, the interviewees' responses to these two questions describe how

the impact of various levels of institutions on functional strategies varies based on the

nature of functional activities (look at the paired sample t-test results). Those activities

such as maintenance and flight operations that should follow well-defined standards seem

to be more influenced by the global institutions. Those that are less standardized and

more open to social interactions, such as commercial activities, are more likely to be

subjected to national institutional pressures. However, global norms may act as

moderators and reduce the impact of national institutions. This is why some of the

executives of the Iranian air transportation industry suggest that they should concentrate

more on international operations in order to internationalize their commercial activities

according to global market norms and protect themselves from national institutional pressures. However, since most of the Iranian carriers are owned by the government, their commercial strategies are highly controlled and institutionalized by national forces. Finally, the results of the twenty questions in these 34 interviews provide strong support for 9 of the 14 hypotheses but do not support one of them. Of course, 4 of the hypotheses are supported but are not classified as strong because of the differences between the results of the two sections of interviews. These results are summarized in Table 5.12a. In the next part of this chapter, the significance of all these relationships is tested using the results from the survey questionnaire data. It seems to me that the support of a more quantitative method (i.e., the survey questionnaires) can significantly strengthen the power of the arguments made from the results of the interviews.

Table (5.12a): Summary of interview results for all the Hypotheses

Hypotheses	Strongly supported	Supported	Not supported
Hypothesis 1d		√	
Hypothesis 2d		√	
Hypothesis 3d		√	
Hypothesis 4d	√		
Hypothesis 5d		√	
Hypothesis 6d	√		
Hypothesis 7d	√		
Hypothesis 1v	√		
Hypothesis 2v	√		
Hypothesis 3v	√		
Hypothesis 4v	√		
Hypothesis 5v			√
Hypothesis 6v	√		
Hypothesis 7v	√		

5.2) Part Two: Survey Questionnaires

Two sets of data will be analyzed in the second part of this chapter. One is based on the 121 usable responses to the commercial survey questionnaires that came from commercial managers and experts of the Iranian airlines, the CAO of Iran, the Iranian Airports Company, and also the managers of travel agencies. Another one is based on the 96 usable responses to the operational survey questionnaires that came from operational managers and experts of organizations similar to those involved in the commercial survey with the exception of the travel agencies. For the details of sampling, scales, and methodology, refer to chapter four. These two sets of data will be analyzed using descriptive statistics, a t-test, factor analysis and correlation matrices. The main purpose of this analysis is to find out more about the intensity of relationships between three main constructs (i.e., norms of national institutions, global airline industry norms, and the commercial and operational strategies/activities of Iranian carriers) rather than their cause and effect relationships. Therefore, the results of the survey questionnaires should not be taken as another independent method for testing the hypotheses of this study. These analyses will, in fact, cross-validate and strengthen the interview results for the relationships between the main constructs of this study. I considered factor analysis and correlation analysis as the most appropriate statistical methods to achieve this objective. Since the questions relating to the norms of the global airline industry are the only commonality between these two sets of survey questionnaires, I will first present an analysis of the scales used for the global industry norms. Then, in the following two

sections each data set will be analyzed both separately and in conjunction with results from other sections.

5.2.1) Norms of global airline industry (Questions 1-6 of both data sets)

Descriptive statistics of the responses to the six measures of industry norms for both samples and the groups within each sample are shown in Tables 5.13, 5.14, and 5.15. It should be noted that the first three items of these tables are for commercial norms and the last three are for operational norms of the global airline industry. Therefore, respondents in the commercial sample may have less knowledge about the last three items and the opposite may be true for the operational sample. For that reason, mean differences between groups within each sample are mainly related to items about which respondents have less knowledge. The results from a one-way ANOVA presented in these three tables show the validity of the scales used to measure global industry norms. The most obvious point is that there is a common belief among both commercial and operational experts and managers that these six items are clear indicators of global industry norms. The differences between operational and commercial groups (shown in Table 5.15) strongly support having two separate questionnaires for these two different groups of experts and managers. This is simply because, as soon as the level of questions changes from global understandings (industry norms) to those at national (i.e. national institutional norms) and/or organizational (i.e. commercial or operational functions) levels, the respondents' lack of knowledge becomes a major obstacle for the reliability of

their responses. This was the reason for having common measures only for the section, which is measuring the global kind of norms.

Adjusting international airfares more than once a year, having a variety of airfares for similar seats in each flight, and having more strategic alliances are well accepted commercial norms of the global airline industry in both samples. This is true for reducing the average age of airplanes, increasing aircraft utilization, and aircraft availability as the operational norms of the airline industry. Thus, respondents strongly believe that these measures represent commercial and operational norms of the airline industry. In the next two sections each one of these sets of norms of the airline industry will be analyzed in relation with the corresponding national institutional norms and the airlines' functional strategies.

Table (5.13): Means, Standard Deviations and within group Tukey's Honestly Significant Test results for industry norms from the Commercial Sample

Scales	Group 1 Airlines (N=38)		Group2 National Ins. (N=30)		Group 3 Travel Ags. (N=53)		Total (N=121)		One way ANOVA for mean differences between groups (Tukey's H S Test)		
	M	SD	M	SD	M	SD	M	SD	Groups 1 & 2 (Sig.)	Groups 1 & 3 (Sig.)	Groups 2 & 3 (Sig.)
1. Industry norm for adjusting international airfares[1]	1.8	0.8	1.2	0.6	1.8	0.7	1.7	0.8	0.00*	0.99	0.00*
2. Industry norm for having variety of fares[2]	1.6	0.5	1.4	0.8	1.5	0.5	1.5	0.6	0.69	0.71	0.99
3. Industry norm for strategic alliances	1.5	0.8	1.4	1.1	1.3	0.7	1.4	0.9	0.96	0.21	0.40
4. Reduction of A/C Ave. age as an industry norm	1.8	0.5	1.7	0.6	1.5	0.5	1.6	0.5	0.84	0.38	0.80
5. Increasing A/C utilization as an industry norm	1.4	0.6	1.9	1.0	2.0	1.1	1.8	1.0	0.05*	0.00*	0.88
6. Increasing A/C availability as an industry norm	1.4	0.6	1.3	0.5	1.3	0.5	1.3	0.6	0.74	0.76	0.99

* The mean difference is significant at .05 level

1: the scales for this item are: 1 = Year, 2 = Six months, 3 = Three months, 4 = A month, 5 = Week or more

2: The scales for all other items are: 1 = Strongly Agree, 2 = Agree, 3 = Undecided, 4 = Disagree, 5 = Strongly Disagree

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Table (5.14): Means, Standard Deviations and within group Significant Test results
for industry norms from the Operational Sample

Scales	Group 1 Airlines (N=55)		Group 2 National Ins. (N=41)		Total (N = 96)		One way ANOVA for mean differences between groups
	M	SD	M	SD	M	SD	Groups 1 & 2 (Sig.)
1. Industry norm for adjusting international airfares[1]	1.4	0.6	1.1	0.5	1.3	0.6	0.02*
2. Industry norm for having variety of fares[2]	1.9	0.9	2.6	1.5	2.2	1.3	0.00*
3. Industry norm for strategic alliances	1.4	0.6	1.5	0.6	1.4	0.6	0.85
4. Reduction of A/C Ave. age as an industry norm	1.4	0.5	1.4	0.5	1.4	0.5	0.42
5. Increasing A/C utilization as an industry norm	1.3	0.4	1.6	0.6	1.4	0.6	0.01*
6. Increasing A/C availability as an industry norm	1.2	0.4	1.3	0.5	1.2	0.5	0.27

* The mean difference is significant at .05 level
1: the scales for this item are: 1 = Year, 2 = Six months, 3 = Three months, 4 = A month, 5 = Week or more
2: The scales for all other items are: 1 = Strongly Agree, 2 = Agree, 3 = Undecided, 4 = Disagree, 5 = Strongly Disagree

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Table (5.15): Means, Standard Deviations and Significant Test results for mean differences between samples for industry norms

Scales (Sig. of mean differences between samples)	Sample	Means	S. D.	95% Confidence Interval for Mean	
				Lower Bound	Upper Bound
1. Industry norm for adjusting international airfares (0.00*)	Operational[1]	1.2708	0.5521	1.159	1.3827
	Commercial[2]	1.6529	0.7715	1.514	1.7918
	Total[3]	1.4839	0.7077	1.3892	1.5786
2. Industry norm for having variety of fares (0.00*)	Operational	2.2083	1.2559	1.9539	2.4628
	Commercial	1.4793	0.593	1.3726	1.5861
	Total	1.8018	1.0103	1.6667	1.937
3. Industry norm for strategic alliances (0.03*)	Operational	1.4063	0.5908	1.2865	1.526
	Commercial	1.6364	0.8851	1.4771	1.7957
	Total	1.5346	0.7758	1.4308	1.6384
4. Reduction of A/C Ave. age as an industry norm (0.59)	Operational	1.4271	0.518	1.3221	1.532
	Commercial	1.3884	0.5381	1.2916	1.4853
	Total	1.4055	0.5284	1.3348	1.4762
5. Increasing A/C utilization as an industry norm (0.00*)	Operational	1.3854	0.55	1.274	1.4969
	Commercial	1.8099	0.9688	1.6355	1.9843
	Total	1.6221	0.8361	1.5102	1.734
6. Increasing A/C availability as an industry norm (0.17)	Operational	1.2083	0.4569	1.1158	1.3009
	Commercial	1.3058	0.5604	1.2049	1.4067
	Total	1.2627	0.5183	1.1933	1.332

* The mean difference is significant at .05 level
1. N =96
2. N = 121
3. N = 217

5.2.2) Analysis of collected data from operational questionnaires

There are 19 items in the first three sections of the operational questionnaire. Descriptive statistics of all these items for two groups of the operational sample are presented in the Table (5.16). It should be noted that the first three items are commercial norms of the industry and will not be used in the analyses on operational activities. As expected and discussed in the first section of this chapter, managers and experts of airlines and national institutions have different perspectives, especially about the operational activities of airlines. For example, managers and experts of national institutions claimed that they are concerned about the availability and utilization of airplanes as can be seen from the results of items 7 & 10. However, results from the responses of airlines' group indicate that they don't believe that national institutions are really concerned about these issues in practice. Aircraft availability and aircraft utilization are two other elements of airlines' operational activities for which the responses of these two groups are different. One main reason can be the fact that individuals from national institutions provide a hands-off type of perception, while the perceptions of airlines' managers and experts are reflections of their close involvement in those activities. Another obvious reason can be the size of these two groups within the operational sample. The most important point is that these differences in the means of their perceptions will not change the final results because, taken either separately or as a whole, the final results that will be discussed in this section will be the same.

Factor analysis with varimax rotation was used to explore the sixteen operational items and reduce them to a more reasonable number of components. It should be noted

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that three items related to the commercial norms of the global airline industry are not included in this factor analysis. The outcome was four factors (as shown in Table 5.19), each of which has at least two items. The first factor brought together all the items for operational activities and strategies of airlines with high degree of reliability for its measures ($\alpha = .79$). The second component is a combination of all measures for national institutional norms except the two controlling norms that made the third factor. The reliabilities of the measures for these two factors (factor 2 & 4) are 0.83 and 0.74, respectively. Finally, the three measures of operational norms of the global airline industry made the third factor with an acceptable reliability for its measures (i.e. $\alpha = .62$).

Table (5.17) shows the correlation matrix for all the operational items. As can be seen, the items for each one of the main constructs are significantly correlated. This indicates that our factor analysis has appropriately grouped these items into four components. The correlation matrix for the four above mentioned factors (as shown in table 5.18) helps us to examine the relationships between the main constructs of this study. According to these results, there is a significant (with 95% confidence interval) relationship between the operational norms of the global airline industry and the operational strategies of Iranian carriers. Since the same kind of intervals are used in the scales of these two constructs, their significant correlation indicates that airlines' activities and strategies for aircraft availability, aircraft utilization and the average age of their fleet are corresponded with the airline industry norms for these operational dimensions. These results cannot tell us anything about their cause and effect relationships. To find out about the type of relationship between them, we need to go back to the interview results. Interviewees suggested that it is essentially the global

industry norms that may influence airlines' activities (refer to the interview analyses section 5.1.3 question #10, and section 5.1.6 question #19), therefore, the type of relationship between them is top down or deterministic. Thus, a combination of their significance deterministic relationships from survey questionnaires with the type of relationship between them from interviews supports hypotheses 4d[19]. As a result of this, it will not be possible to reject hypotheses 4v[20] and 6v[21] which are about the negligibility of the influences that operational activities of airlines or that activities of organizations in general may have on the norms of the airline industry.

As indicated in Table 5.18, there is also a significant (with 99% confidence interval) relationship between operational norms of national institutions and operational strategies of Iranian carriers. It indicates that variations of these two constructs are significantly related, which is the basic requirement for hypotheses 2d[22] and 2v[23]. It also supports the arguments made in sections 5.1.5 (questions #15 and #18) and 5.1.6 (question #20) concerning the interview analyses summarized in Tables 5.10 and 5.11, respectively. Therefore, a combination of the significant relationship between these two constructs from operational survey questionnaires and the results from interviews implies that there is a significant reciprocal relationship between operational norms of Iranian national aviation institutions and the operational strategies of their airlines. This reasonably supports hypotheses 2d and 2v.

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[19] **Hypothesis 4d:** The airline industry has a moderate impact on the operational activities of Iranian airlines.

[20] **Hypothesis 4v:** Operational activities of Iranian airlines have no influence on the airline industry norms.

[21] **Hypothesis 6v:** The activities of an organization in a developing country have a negligible influence on the industry's norms.

[22] **Hypothesis 2d:** Iranian National institutions have a moderate impact on the operational activities of Iranian airlines.

[23] **Hypothesis 2v:** Operational activities of Iranian airlines moderately shape the operational norms of the related national institutions.

Finally, it is interesting to note that, according to the correlation matrix shown in Table 5.18, there is no significant correlation (with 95% confidence interval) between the industry norms and the operational norms of Iranian national aviation institutions. In other words these two constructs do not influence each other directly. This is a special case where the results from operational survey questionnaires strongly support hypotheses 7d[24] and 7v[25]. An insignificant relationship between these two constructs also supports the interview results in sections 5.1.4 (questions #11 & #12) and 5.1.5 (questions #15 & #16) summarized in tables 5.7, 5.8, 5.9 and 5.10. In other words, the results of the operational survey questionnaires and interviews support hypotheses 7v and 7d. Supported hypotheses from a combination of results of operational survey and interviews are summarized in Table 12 b.

Table (5.12b): Summary of a combination of results from operational survey questionnaires and interviews for Hypotheses

Hypotheses	Strongly supported	Supported
Hypothesis 2d		√
Hypothesis 4d	√	
Hypothesis 7d	√	
Hypothesis 2v	√	
Hypothesis 4v	√	
Hypothesis 6v	√	
Hypothesis 7v	√	

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[24] **Hypothesis 7d:** The airline industry norms have a limited impact on the norms of Iranian national institutions.

[25] **Hypothesis 7v:** Iranian national institutions have a negligible impact on the airline industry norms.

Table (5.16): Means, Standard Deviations and within group Tukey's Honestly Significant Test results for scales used in Commercial Questionnaires

Scales	Means (SD)			One Way ANOVA for mean differences between groups
	Group 1 Airlines (N = 55)	Group 2 National Ins. (N = 41)	Total (N = 96)	Groups 1 & 2 (Sig.)
1. Adjusting international airfares	1.38 (.56)	1.12 (.51)	1.27 (.55)	0.02*
2. Having variety of airfares in a single flight	1.89 (.90)	2.63 (1.53)	2.21 (1.26)	0.00*
3. Having more strategic alliances	1.36 (.59)	1.46 (.60)	1.43 (.52)	0.85
4. Reducing the average age of airplanes	1.42 (.53)	1.44 (.50)	1.41 (.59)	0.42
5. Increasing A/C utilization	1.25 (.44)	1.56 (.63)	1.39 (.55)	0.01*
6. Increasing A/C availability	1.16 (.37)	1.27 (.55)	1.21 (.46)	0.27
7. NI's concerns about A/C utilization	3.27 (.91)	2.32 (.93)	2.86 (1.03)	0.00*
8. NI's flight standards	3.71 (1.08)	3.41 (.97)	3.58 (1.04)	0.17
9. NI's technical standards	3.69 (1.10)	3.29 (1.05)	3.52 (1.10)	0.08
10. NI's concerns about A/C availability	3.29 (.98)	2.41 (1.02)	2.92 (1.08)	0.00*
11. NI's controlling norms for flight operation	3.02 (.99)	2.85 (1.06)	2.95 (1.02)	0.44
12. NI's controlling norms for technical activities	3.02 (1.11)	2.93 (.96)	2.98 (1.05)	0.67
13. NI's concerns about average age of airplanes	3.38 (1.01)	2.85 (1.17)	3.16 (1.11)	0.02*
14. A/C availability as a performance measure	1.80 (.76)	2.34 (.69)	2.03 (.77)	0.00*
15. A/C utilization as a performance measure	1.95 (.78)	2.41 1.00)	2.15 (.91)	0.01*
16. Reduction of average fleet age as an operational objective	2.16 (.86)	2.80 (1.12)	2.44 (1.02)	0.00*
17. A/C availability as an operational objective	1.56 (.69)	2.20 (.87)	1.83 (.83)	0.00*
18. A/C utilization as an operational objective	1.87 (.82)	2.15 (1.06)	1.99 (.93)	0.16
19. Airlines success in reducing average age of their fleet	3.09 (1.35)	3.73 (1.18)	3.36 (1.31)	0.02*

* The mean difference is significant at .05 level

Note1: Scales for items 7-13 are: 1 = To a very great extent, 2 = To a great extent, 3 = To some extent, 4 = To little extent, 5 = To very little extent

Note2: Scales for items 2-6 and 14-19 are: 1 = Strongly Agree, 2 = Agree, 3 = Undecided, 4 = Disagree, 5 = Strongly Disagree

Note3: Scales for item 1 is: 1 = Year, 2 = Six months, 3 = Three months, 4 = A month, 5 = Week or more

Table (5.17): Means, Standard Deviations, and Bivariate Correlations for operational items

Items (Variables)	Means	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Reducing the average age of airplanes (industry norm)	1.41	0.59	1.00															
2. Increasing A/C utilization (industry norm)	1.39	0.55	0.29**	1.00														
3. Increasing A/C availability (industry norm)	1.21	0.46	0.39**	0.43**	1.00													
4. NI's concerns about A/C utilization	2.86	1.03	0.09	-0.06	0.15	1.00												
5. NI's flight standards	3.58	1.04	0.00	0.03	0.05	0.43**	1.00											
6. NI's technical standards	3.52	1.1	-0.02	-0.07	0.05	0.37**	0.63**	1.00										
7. NI's concerns about A/C availability	2.92	1.08	0.09	0.07	0.12	0.75**	0.47**	0.50**	1.00									
8. NI's controlling norms for flight operation	2.95	1.02	0.05	0.11	0.20*	0.38**	0.35**	0.27**	0.33**	1.00								
9. NI's controlling norms for technical activities	2.98	1.05	0.05	0.07	0.21*	0.32**	0.24*	0.21*	0.28**	0.59**	1.00							
10. NI's concerns about Ave. age of A/C	3.16	1.11	0.00	0.11	0.10	0.47**	0.40**	0.36**	0.61**	0.20*	-0.01	1.00						
11. A/C availability as a performance measure	2.03	0.77	0.02	0.32**	0.22*	0.16	0.09	0.08	0.19	0.12	0.16	0.15	1.00					
12. A/C utilization as a performance measure	2.15	0.91	0.01	0.20*	0.21*	0.27**	0.03	0.12	0.25*	0.10	0.14	0.29**	0.67**	1.00				
13. Reduction of ave. fleet age as an operational objective	2.44	1.02	0.12	0.28**	0.21**	0.16	0.17	0.27**	0.25*	0.07	0.24*	0.27**	0.43**	0.53**	1.00			
14. A/C availability as an operational objective	1.83	0.83	0.12	0.17	0.31**	0.24*	0.20	0.22*	0.28*	0.15	0.18	0.20	0.68**	0.52**	0.58**	1.00		
15. A/C utilization as an operational objective	1.99	0.93	0.03	0.05	-0.14	0.09	0.03	0.15	0.12	0.03	-0.08	0.23*	0.18	0.39**	0.31**	0.34**	1.00	
16. Airlines success in reduction of Ave. age of their fleet	3.36	1.31	0.06	0.07	0.06	0.19	0.26*	0.29**	0.18	0.12	0.13	0.18	0.34**	0.36**	0.44**	0.35**	0.19	1.00

N = 96, NI's: National Institutions', ** $\rho < 0.01$ (two-tailed), * $\rho < 0.05$ (two-tailed)

Table (5.18): Means, Standard Deviations, and Bivariate Correlations for the Operational Factors

	Mean	S.D.	1	2	3	4
1. Operational norms of global airline industry	1.33	0.41	1.00			
2. Operational norms of national institutions	3.21	0.83	0.07	1.00		
3. Controlling norms of national institutions	2.96	0.92	0.16	0.37**	1.00	
4. Airlines' Operational strategies	2.3	0.69	0.22*	0.35**	0.18	1.00

N=96 ** $\rho < 0.01$ (two-tailed), * $\rho < 0.05$ (two-tailed)

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Table (5.19): Factor Analysis of Operational Items

Components	Items	Rotated Component Matrix*			
		Coefficients			
		1	2	3	4
Operational activities of Airlines (α = .79)**	12. A/C utilization as a performance measure	**0.817**			
	11. A/C availability as a performance measure	**0.797**			
	14. A/C availability as an operational objective	**0.781**			
	13. Reduction of Ave. fleet age as an operational objective	**0.735**			
	16. Airlines success in reduction of Ave. age of their fleet	**0.558**	0.204		-0.33
	15. A/C utilization as an operational objective	**0.522**			
Operational norms of National Institutions (α = .83)	7. NI's concerns about A/C availability		**0.84**		
	10. NI's concerns about Ave. age of A/C		**0.75**		-0.23
	4. NI's concerns about A/C utilization		**0.748**		0.227
	5. NI's flight standards		**0.718**		0.237
	6. NI's technical standards		**0.701**		
Operational norms of global airline industry (α = .62)	3. Increasing A/C availability (industry norm)			**0.775**	0.242
	1. Reducing the average age of airplanes (industry norm)			**0.728**	
	2. Increasing A/C utilization (industry norm)	0.229		**0.713**	
Controlling norms of National Institutions (α = .74)	9. NI's controlling norms for technical activities				**0.864**
	8. NI's controlling norms for flight operation		0.338		**0.732**

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
* Rotation converged in 6 iterations.
** Reliability of the measures

5.2.3) Analysis of collected data from commercial questionnaires

There are 18 items in the first three sections of commercial questionnaires. Descriptive statistics of these items for three groups of the commercial sample are presented in Table (5.20). By comparing the means and standard deviations of responses from the three groups, it can be concluded that there is a general agreement between the groups on most of the items. The significant differences that national institutions' responses have with the responses from the other two groups does not really change the results, because the whole idea was to see if they perceive more than six month intervals for international airfare adjustments. Their differences on item 5 are because participants of the commercial sample have less knowledge about operational norms. The reason for significant differences between the means of the responses from the travel agencies and those from the other two groups in items 8 and 9 is because travel agencies are not directly involved with the frequency of flights or flight schedules in general. There is a reasonable difference between the travel agencies' responses and those of the airlines on item 15. Managers of travel agencies believe that domestic airfare adjustment is driven by market needs, while commercial experts and managers of Iranian carriers have a tendency to disagree with this idea. Obviously the latter respondents have a history of struggle and disputes with the authorities around this issue; therefore, their actual experience tells them that domestic airfare adjustment is highly regulated. On the other hand, those few managers of travel agencies whom I had the opportunity to meet (especially the two members of the board of Iranian travel agencies' union) argued that the nature of the Iranian market makes it reasonable to have regulated domestic airfare adjustment.

Therefore, both the airlines and travel agencies have a common perspective on this issue, but with different reasoning. Thus, the differences between these groups on question #15 should not be considered as a source of confusion on this issue. More importantly, the respondents from the national institutions are not sure about this item; that is why the difference will not change the overall results significantly. The significant difference that travel agencies have with the other two groups on item 17 indicates that travel agencies that have daily experience with international airfares through various airlines strategies perceive that the international airfare adjustment strategy of Iranian carriers is driven more strongly by international market forces. Here again the difference does not change the overall results significantly. Finally, I expected to see a significant difference between travel agencies and airlines concerning the role of travel agencies in the commercial strategy of airlines. With all these discussions, it can be concluded that the between group results within the commercial sample strongly support the validity of measures used in this questionnaire.

Factor analysis with varimax rotation was used to explore and reduce the 15 commercial items. Items 4, 5, and 6 were not considered in this factor analysis because they are designed for operational norms of the global airline industry. The 15 items were grouped into five components, each of which had at least two items (as shown in Table 5.23). These components are in line with the three main constructs of this study. There is one factor for the commercial norms of the global airline industry, two for national institutional norms, and two for the airlines' commercial activities and strategies. Items 13, 14, 16, 17, and 18 (of Table 5.20), which explain the airlines' commercial strategies with regard to their relationships with others (such as code sharing, strategic alliances,

relationship with travel agencies and international markets), were grouped together as the first factor called external relationship of airlines. The reliability of these measures for the first factor is considered reasonable ($\alpha = 0.68$). As was expected, all three items for the global airline industry norms made the second component ($\alpha = 0.60$). Three items that are mainly about the norms of the Iranian national institutions for domestic commercial activities made the third commercial factor with an acceptable reliability ($\alpha = 0.62$). The fourth component brought together the two items on the commercial strategy of airlines for domestic flights ($\alpha = 0.62$). Finally, the last component grouped the remaining two measures for the norms of national institutions for international airfares ($\alpha = 0.62$). Comparing the reliabilities of the commercial measures with those of the operational measures, it can be seen that the latter are generally higher than the former. One main reason for having a higher reliability for operational measures is the standardized nature of operational functions. Although knowledgeable individuals were included in both samples, the subjective nature of commercial functions kept the reliability of their measures at an acceptable level. This means individuals' perceptions play a more important role in the responses to the commercial questionnaires than in the operational ones.

The correlation matrix for all the commercial measures is presented in Table 5.21. As can be seen, those items that are grouped together in the factor analysis are significantly correlated with each other ($\rho < .01$). It is interesting to note that the two measures for the commercial strategy of airlines in their domestic activities correlated negatively with measures such as code sharing, strategic alliances, the role of travel agencies in their sales and, of course, their international airfare adjustment. This indicates

that their domestic commercial strategies have nothing to do with code sharing and strategic alliances. More importantly, the role of travel agencies is not significant for their domestic flights. This might be the result of the highly regulated norms of the domestic activities of Iranian carriers. In order to elaborate the relationships between the major constructs of this study, SPSS was used to make the bivariate correlation matrix of the above-mentioned five components (as shown in Table 5.22). The most obvious result from this matrix is that there is no significant correlation between commercial norms of the global airline industry and the norms of Iranian national institutions or the commercial strategies of Iranian carriers. Industry norms correlated negatively, but not significantly, with airline strategies in domestic activities. This lack of correlation between industry norms and any of the other components supports the following arguments:

a. It supports interviewees' belief that commercial activities of Iranian carriers cannot influence industry norms as discussed in section 5.1.5 (questions 15-17 of the interviews), which means hypothesis $3v^{26}$ is supported by the results of the survey questionnaires, too.

b. Combining the above mentioned argument with those concerning the relationships between operational strategies of airlines and industry norms made in sections 5.2.2 (operational survey questionnaires) and 5.1.5 (interviews), it can be concluded that activities of organizations in a developing country such as Iran

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[26] **Hypothesis 3v:** Commercial activities of Iranian airlines have no influence on the airline industry norms.

have an insignificant impact on the global industry norms. This in fact, supports hypothesis 6v[27].

c. In contrast to the results from the interviews (section 5.1.6), the correlation matrices shown in Tables 5.21 and 5.22 indicate that there is an insignificant relationship between the global airline industry norms and the commercial strategies of Iranian carriers. This is a special case in which both hypotheses 3d[28] and 3v are directly supported by the results of the survey questionnaires. The correlation coefficients in Table 5.21 show that there is a significant positive correlation (0.23) between the role of travel agencies in the commercial strategies of Iranian carriers and one of the norms of the global airline industry. Two of the commercial strategies have a significantly negative correlation (-0.18) with industry norms. Thus, one needs to pay more attention to these details and to the results from interviews to make any type of conclusion about these results. Combining the results of both methods provides a more reasonable argument for hypothesis 3d. On the one hand, the results from the interviews show that global norms have some or little influence on the commercial strategies of the airlines, particularly on their strategy in international markets. On the other hand, the results from the survey questionnaires show an insignificant influence for most of the commercial activities except the three above-mentioned special cases. Thus, the strategies for domestic markets are insignificantly influenced by global airline industry norms, while their strategies for international markets are to some extent

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[27] **Hypothesis 6v:** The activities of an organization in a developing country has a negligible influence on the industry's norms.

[28] **Hypothesis 3d:** The airline industry has insignificant impact on the commercial activities of Iranian airlines.

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influenced by global norms. Now, considering the fact that the majority of Iranian carriers' commercial activities relate to their domestic market, one may conclude that global industry norms have an insignificant impact on Iranian airlines' commercial strategies. In other words, there is some support for the hypothesis 3d (as shown in table 5.12c).

d. As indicated in Table 5.21 there is no significant correlation between the norms of Iranian national institutions and airline industry norms. This of course does not mean they don't have a limited impact on each other; however, this lack of correlation indirectly supports hypothesis 7v[29]. According to section 5.1.4 (questions 11-14 of interviews) the norms of Iranian national institutions have no impact on airline industry norms an inference that is supported by the results of the commercial survey questionnaires. Thus, hypothesis 7v is strongly supported by the combination of the results from the survey questionnaire and the interviews. Interviewees also believed that industry norms have a limited impact on national institutional norms, an inference which is not directly supported here. However, since the correlation matrix only indicates that their relationship is insignificant but cannot tell if there is a limited impact, interviewees' arguments are taken as a support for hypothesis 7d[30].

The correlation coefficients of the two components for the national institutional norms suggest that there is no significant relationship between the commercial norms of national institutions for the domestic and commercial activities of the airlines. However, norms of national institutions for international airfares have a positive significant

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[29] **Hypothesis 7v:** Iranian national institutions have a negligible impact on the airline industry norms.
[30] **Hypothesis 7d:** The airline industry norms have a limited impact on the norms of Iranian national institutions.

correlation with the commercial activities of Iranian carriers. More specifically, commercial activities of Iranian airlines are only correlated with the norms of national institutions for international airfares. This is while the domestic commercial activities of the airlines have a significant negative correlation with both the norms of national institutions for international airfares and the airlines' strategies for their external relationship with others. Combining this result with the interviewees' belief that the commercial activities of airlines have a limited impact on the commercial norms of national institutions (refer to section 5.1.5 and Table 5.10), it can be concluded that hypothesis 1v[31] may be supported. In other words, it seems that the strategic alliances, code sharing, airlines' relationships with travel agencies, and their strategies in adjusting their international airfares (as the measures for the first factor in table 5.23) do have some influence on the norms of national institutions for international airfares. However, there is no clear evidence from either the survey results or the interviews supporting hypothesis 1d[32]. The negative significant correlation coefficient between the domestic activities of airlines and the CAO norms also supports the idea that domestic airline activities follow an entirely different path and have nothing to do with the norms of the civil aviation organization. These results also support hypothesis 1v but not hypothesis 1d.

Since there are significant correlations (with at least a 95% confidence interval) between one of the dimensions of the commercial norms of national institutions and the commercial activities of airlines but no correlation between the commercial activities of airlines and the global industry norms, it may be concluded that commercial activities (as

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[31] **Hypothesis 1v:** Commercial activities of Iranian airlines moderately shape the commercial norms of related national institutions.

[32] **Hypothesis 1d:** Iranian National institutions have a significant impact on the commercial activities of Iranian airlines.

less standardized activities) are more related to national institutional norms than global norms. This argument supports hypothesis 5d[33] indirectly. By combining these results with the interview results (refer to section 5.1.1) hypothesis 5d which states "less standardized activities of organizations in a developing country are more institutionalized by their national institutions", is strongly supported. Finally, the negative significant correlation coefficient between domestic airline activities and their relationship with others indicates that strategic alliances, code sharing and other measures of these components have no room in their domestic activities because they are trapped in a highly regulated environment for their domestic activities. The supported hypotheses from a combination of results of commercial survey and the interviews are presented in Table 5.12c.

Table (5.12c): Summary of a combination of results from commercial survey questionnaires and interviews for Hypotheses

Hypotheses	Strongly supported	Supported	Not supported
Hypothesis 1d			√
Hypothesis 3d		√	
Hypothesis 5d	√		
Hypothesis 6d	√		
Hypothesis 7d	√		
Hypothesis 1v	√		
Hypothesis 3v	√		
Hypothesis 6v	√		
Hypothesis 7v	√		

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[33] **Hypothesis 5d:** The less standardized a functional activity of an organization in a developing country, the more institutionalized it is by the national institutions.

Correlation matrices of tables 5.18 and 5.22 indicate that operational activities of airlines (as more standardized activities) compared to commercial activities (as less standardized activities) are significantly related to global industry norms. This, in fact, is an indirect support for hypothesis 6d[35]. However, combining it with the results from interviews (refer to section 5.1.1) it strongly supports this hypothesis. The last point that should be mentioned here is based on the combination of results from all three of these analyses (i.e., the interviews and the commercial and operational survey questionnaires). According to the interviewees' responses, global airline industry norms do have a significant impact on the commercial and the operational activities of airlines (section 5.1.6). According to the results from the operational survey questionnaires (section 5.2.2), the operational activities of Iranian carriers and the operational norms of the global airline industry are correlated significantly. Finally, the commercial survey indicates that there is an insignificant relationship between the commercial activities of Iranian carriers and the commercial norms of the global airline industry. Although these results are somewhat confusing as far as they concern the commercial activities of airlines, as mentioned in the interview analysis, the impact of the global airline industry norms on operational activities is stronger than on commercial ones. Therefore, a combination of the results from these three sources appears to support hypothesis 6d.

The overall results summarized in Tables 5.12a, 5.12b, and 5.12c along with the above mentioned discussions are concluded and presented in Table 5.24 and Figures 5.2 and 5.3 for the fourteen hypotheses of this study. Hypothesis 5v, which states that "less

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[35] **Hypothesis 6d:** The more standardized a functional activity of organizations in a developing country, the more institutionalized it is by global industrial norms.

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standardized functional activities of organizations in developing countries may have less influence on the norms of their national institutions, was not directly supported in this study. One major reason may be found in the nature of the commercial activities of airline industry in a developing country like Iran. However, commercial activities of airlines especially their international activities are the only sources of inputs that may shape the commercial norms of regulative institutions in developing countries. But, there is a clear need for comparing the influence of highly standardized and less standardized activities of organizations on national institutional norms.

Table (5.20): Means, Standard Deviations and within group Tukey's Honestly Significant Test results for scales used in Commercial Questionnaires

Scales	Means (SD)				One Way ANOVA for mean differences between groups (Tukey's HS Test)		
	Group 1 Airlines (N = 38)	Group 2 National Ins. (N = 30)	Group 3 Travel Ags. (N = 53)	Total (N = 121)	Groups 1 & 2 (Sig.)	Groups 1 & 3 (Sig.)	Groups 2 & 3 (Sig.)
1. Industry norm for adjusting international airfares	1.82 (.83)	1.20 (.55)	1.79 (.74)	1.65 (.77)	0.00*	0.99	0.00*
2. Industry norm for having variety of fares	1.55(.50)	1.43(.77)	1.45 (.54)	1.48 (.59)	0.69	0.71	0.99
3. Industry norm for strategic alliances	1.47 (.51)	1.40 (.62)	1.32 (.51)	1.39 (.54)	0.84	0.38	0.80
4. Reduction of A/C ave. age as an industry norm	1.79 (.84)	1.73 (1.14)	1.47 (.72)	1.64 (.89)	0.96	0.21	0.40
5. Increasing A/C utilization as an industry norm	1.39 (.59)	1.93 (.98)	2.04 (1.09)	1.81 (.97)	0.05*	0.00*	0.88
6. Increasing A/C availability as an industry norm	1.37 (.63)	1.27 (.52)	1.28 (.53)	1.31 (.56)	0.74	0.76	0.99
7. NI's norm for uniform domestic airfares	2.29 (1.18)	2.07 (1.14)	2.09 (1.21)	2.15 (1.18)	0.72	0.72	0.99
8. NI's norm for changing frequency of flights in domestic routs.	2.39 (1.26)	2.10 (1.24)	1.77 (.89)	2.05 (1.13)	0.52	0.03*	0.40*
9. NI's norm for airlines' establishment of flights in domestic routes	2.55 (1.16)	2.47 (1.17)	3.13 (1.23)	2.79 (1.22)	0.95	0.06	0.04*
10. NI's norm for adjusting international airfares	2.58 (1.11)	1.97 (.72)	2.15 (1.12)	2.24 (1.05)	0.04*	0.13	0.71
11. NI's norm for the role of international competition in international airfares	2.47 (1.03)	2.43 (.97)	2.04 (.98)	2.27 (1.01)	0.99	0.10	0.20
12. Having variety of domestic airfares is a usual practice among airlines	2.68 (1.40)	2.97 (1.22)	3.08 (1.33)	2.93 (1.32)	0.66	0.35	0.93
13. The extent to which strategic alliances are practiced by the airlines	3.34 (1.12)	3.77 (1.01)	2.94 (1.08)	3.27 (1.12)	0.24	0.19	0.003*
14. The extent to which sales are made through travel agencies	2.05 (.98)	2.10 (.71)	1.70 (.67)	1.91 (.81)	0.97	0.09	0.07
15. The extent to which airlines' domestic airfare adjustment is market driven	2.39 (1.17)	3.07 (1.14)	3.60 (1.10)	3.09 (1.24)	0.04*	0.00*	0.10
16. The role of code sharing in airlines' commercial activities	2.53 (1.33)	2.33 (1.24)	1.92 (1.30)	2.21 (1.31)	0.82	0.08	0.35
17. The extent to which airlines' international airfare adjustment is market driven	2.63 (1.20)	2.67 (.96)	2.04 (.78)	2.38 (1.01)	0.99	0.01*	0.02*
18. The role of travel agencies in airlines commercial strategies	3.13 (1.04)	3.10 (1.42)	2.34 (1.60)	2.78 (1.45)	1.00	0.03*	0.05

* The mean difference is significant at .05 level

Note 1: Scales for items 2-12, 15, and 17 are: 1 = Strongly Agree, 2 = Agree, 3 = Undecided, 4 = Disagree, 5 = Strongly Disagree except for Items 9, 12, and 15 that are inversely coded, therefore, 1 for these two items means strongly disagree, and 5 means strongly agree.

Note 2: Scales for items 13, 14 and 18 are: 1 = To a very great extent, 2 = To a great extent, 3 = To some extent, 4 = To little extent, 5 = To very little extent

Note 3: Scales for item 1 is: 1 = Year, 2 = Six months, 3 = Three months, 4 = A month, 5 = Week or more

Note 4: Scales for item 16 is: 1 = Very important, 2 = Somewhat important, 3 = Undecided, 4 = Somewhat unimportant, 5 = Unimportant

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Table (5.21): Means, Standard Deviations, and Bivariate Correlations for Commercial Items

Items (variables)	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Adjusting international airfares (industry norm)	1.65	0.77	1.00														
2. Industry norm for having variety of fares	1.48	0.59	0.35**	1.00													
3. Industry norm for strategic alliances	1.39	0.54	0.23**	0.51**	1.00												
4. NI's norm for uniform domestic airfares	2.15	1.18	-0.13	-0.08	0.01	1.00											
5. NI's norm for changing frequency of flights in domestic routes.	2.05	1.13	0.00	0.09	0.16	0.44**	1.00										
6. NI's norm for airlines' establishment of flights in domestic routes	2.79	1.22	0.12	0.19*	0.14	0.31**	0.30**	1.00									
7. NI's norm for adjusting international airfares	2.24	1.05	-0.05	0.23*	0.16	0.19*	0.03	-0.07	1.00								
8. NI's norm for the role of international competition in international airfares	2.27	1.01	-0.04	0.07	-0.01	-0.08	-0.07	-0.13	0.45**	1.00							
9. Having variety of domestic airfares is a usual practice among airlines	2.93	1.32	-0.01	-0.07	-0.01	0.01	0.06	-0.08	-0.15	-0.23*	1.00						
10. The extent to which strategic alliances are practiced by the airlines	3.27	1.12	-0.18*	0.07	0.06	0.16	0.17	-0.07	0.22*	0.14	-0.19	1.00					
11. The extent to which sales are made through travel agencies	1.91	0.81	-0.06	0.00	0.04	0.05	-0.02	-0.20*	0.13	0.09	-0.07	0.37**	1.00				
12. The extent to which airlines' domestic airfare adjustment is market driven	3.09	1.24	-0.18*	-0.06	-0.09	0.06	0.03	0.11	-0.06	-0.23*	0.45**	-0.16	-0.22*	1.00			
13. The role of code sharing in airlines' commercial activities	2.21	1.31	-0.01	-0.04	0.18	0.14	0.23**	-0.09	0.25**	0.09	-0.08	0.36**	0.35**	-0.28**	1.00		
14. The extent to which airlines' international airfare adjustment is market driven	2.38	1.01	0.01	0.03	0.02	-0.01	0.05	-0.16	0.23*	0.22*	-0.22*	0.37**	0.40**	-0.37**	0.21*	1.00	
15. The role of travel agencies in airlines commercial strategies	2.78	1.45	0.15	0.02	0.23*	0.20*	0.15	-0.02	0.18	0.17	-0.09	0.35**	0.31**	-0.16	0.25**	0.25**	1.00

N = 121, NI's: National Institutions', ** $p < 0.01$ (two-tailed), * $p < 0.05$ (two-tailed)

Table: (5.22): Means, Standard Deviations, and Bivariate Correlations for Commercial Factors

Components	Mean	S.D.	1	2	3	4	5
1. Commercial norms of the industry	1.51	0.48	1.00				
2. Commercial norms of national institutions for domestic activities	2.33	0.89	0.09	1.00			
3. Norms of national institutions for international airfares	2.26	0.88	0.08	-0.03	1.00		
4. Airlines' domestic commercial behaviour	3.01	1.09	-0.11	0.05	-0.23*	1.00	
5. Airlines' commercial activities	2.51	0.77	0.07	0.10	0.31**	-0.31**	1.00

N=**121**, ** ρ < 0.01 (two-tailed), * ρ < 0.05 (two-tailed)

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Table (5.23): Factor Analysis of Commercial Items

Rotated Component Matrix*

Components	Items	Coefficients				
		1	2	3	4	5
External relationships of airlines (α = 0.68)**	11. The extent to which sales are made through travel agencies	0.748				
	13. The role of code sharing in airlines' commercial activities	0.664				
	10. The extent to which strategic alliances are practiced by the airlines	0.661				0.201
	15. The role of travel agencies in airlines commercial strategies	0.598				
	14. The extent to which airlines' international airfare adjustment is market driven	0.564			-0.372	
Commercial norms of the Airline Industry (α = 0.60)	2. Industry norm for having variety of fares		0.801			0.239
	3. Industry norm for strategic alliances		0.762			
	1. Adjusting international airfares (industry norm)		0.681		-0.217	-0.256
Commercial norms of NIs for domestic flights (α = 0.62)	4. NI's norm for uniform domestic airfares			0.780		
	5. NI's norm for changing frequency of flights in domestic routs.	0.209		0.738		
	6. NI's norm for airlines' establishment of flights in domestic routes	-0.300	0.226	0.695		
Commercial activities of airlines for domestic flights (α = 0.62)	9. Having variety of domestic airfares is a usual practice among airlines				0.820	-0.203
	12. The extent to which airlines' domestic airfare adjustment is market driven	-0.310			0.767	
Commercial norms of NIs for international flights (α = 0.62)	7. NI's norm for adjusting international airfares	0.211				0.839
	8. NI's norm for the role of international competition in international airfares				-0.268	0.754

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

* Rotation converged in 6 iterations.

** Reliability of the measures

Table (5.24): Concluding the results for all the Hypotheses

Hypotheses	Strongly supported	Supported	Not supported
Hypothesis 1d		√	
Hypothesis 2d		√	
Hypothesis 3d		√	
Hypothesis 4d	√		
Hypothesis 5d	√		
Hypothesis 6d	√		
Hypothesis 7d	√		
Hypothesis 1v	√		
Hypothesis 2v	√		
Hypothesis 3v	√		
Hypothesis 4v	√		
Hypothesis 5v			√
Hypothesis 6v	√		
Hypothesis 7v	√		

Figure 5.2

Results for the deterministic hypotheses (all the hypotheses are strongly supported except hypotheses 1d and 2d with moderate support)
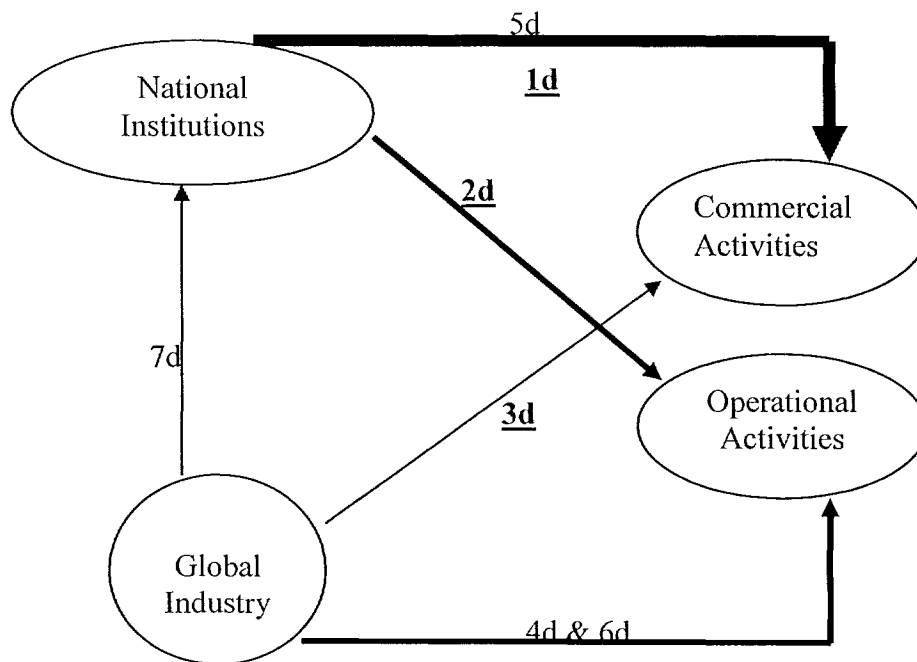
Note: (———) Weak influence, (▬▬▬) Moderate influence, (▬▬▬) Strong influence

Figure 5.3

Results for the voluntristic hypotheses

(all hypotheses are supported except hypothesis 5v)
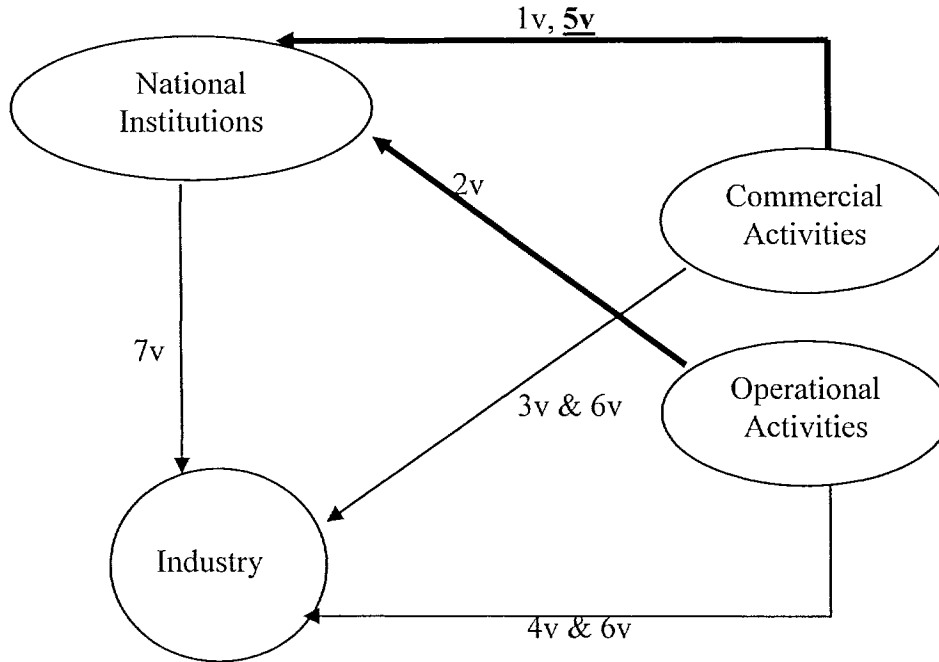
Note: (——): Weak influences, (▬▬): Moderate influences

Chapter Six

Conclusions, Implications and Future Studies

6.1) Conclusion and implications

The journey of this study began with an historical question about the applicability of western theories for understanding organizations and their management systems in developing countries. I proposed that the origin of western theories does not really constrain their applicability to non-western contexts. It is rather the misfit between the nature of a theory and the political, cultural, and economic situations of a context that may limit the applicability of the theory. I used a four-cell matrix based on Scott's (1992) rational/natural and open/closed system approach to shed light on various perspectives and classify them based on their nature. I then compared characteristics of the situation in developing countries with the main assumptions of each group of perspectives to find out which one(s) had the best fit. I concluded that the natural/open system perspectives at the ecological level of analysis would best fit with the situation in most of the developing countries. In other words, theories such as population ecology and institutional theory, regardless of their origin, can cross cultural borders and explain organizations and their management activities in a developing nation. Despite the fact that these theories deal mainly with environmental forces, they are still applicable in developing countries, something that was rarely observed during the 1970s and 1980s (e.g., Kiggundu et al., 1983). The rational/open system perspectives such as the transaction cost theory, are also applicable in these contexts when applied to those aspects of organizations (e.g., the technical core) that fit the nature (or major assumptions) of this theory.

The recent trend in globalization has given more power to theories with a broader scope (i.e., those at the ecological level of analysis). This global trend has created closer

and more frequent interactions between economic, social and political systems around the world. As a result of this, more natural open system perspectives at the ecological level of analysis, such as population ecology, structuration, and new institutional theories, have been developed in the last two decades. Applicability of natural open system perspectives at the ecological level of analysis in developing contexts and the recent increasing trend in researchers' attention to these perspectives lead me to select the new institutional theory as the main theoretical framework for the present study. The new institutional theory is one of the vibrant theories of this group that has gained more power in the last two decades (Dacin et al., 2002) and proved to be effective in exploring different dimensions of organizations and their management systems. However, a very limited number of studies have examined this theory in developing contexts. This is in fact one of the major promising areas that I found in a systematic review of empirical studies undertaken over the last twenty years in which the institutional theory is one of their main theoretical frameworks.

My other interesting observation from this review is the fact that certain dimensions of the institutional theory have been institutionalized in the last two decades. It is important to notice that institutionalization is a cognitive process through which norms, values, and ideas are developed. This means researchers, their communities or associations, and, more specifically, academic journals play a significant role in shaping the existing taken-for-granted norms and lines of thinking in each field. Whether we like it or not, they have institutionalized certain approaches or certain dimensions of each theoretical framework (such as institutional theory). These forces have been dominantly leading related research activities. Researchers have even shown this fact empirically. For

example, in their study, Mizruchi et al. (1999) clearly explain how the mimetic type of isomorphism (DiMaggio and Powell, 1983) has received a disproportionate amount of attention in this literature. They argue that the mimetic type of isomorphism is socially constructed among researchers and has become institutionalized as the most dominant dimension of isomorphism in this field. We occasionally need to review our research activities on each theoretical framework, map the overall view of the existing socially constructed approaches, and explain their effectiveness. It will help to find out if we need to change some of these norms or fill in possible gaps in the literature.

The last twenty years of empirical research in the institutional theory literature similarly indicates that certain approaches and concerns have been institutionalized among researchers in this field. As my review of the literature showed, the taken-for-granted norms for doing research in this field include: considering primarily one level of institutional pressure, studying top down relationships between institutions and organizations, and focusing on overall form or strategy (behavior) of organizations. In other words, these approaches have been institutionalized within the institutional theory literature. As a result of this, other aspects and dimensions of the institutional theory have received less attention. My review identified several promising areas of study, including the need to consider institutions at different levels, their interactions, the reciprocal relationship between institutions, the reciprocal relationship between institutions and organizations, and the variations of an institutional pressure on different functions of organizations. Moreover, there is room to consider all these issues within the context of developing countries. Although issues such as the different levels of institutions or the reciprocal relationships between institutions and organizations have already been raised

by researchers in this field (i.e., Scott, 2001), one can rarely find systematic empirical research like the review study presented in chapter two that supports these arguments. These findings can shed light on some of the gaps and missing parts of the puzzle that, if completed, would clearly empower the effectiveness of the institutional theory in analyzing organizations and their activities at both the macro and micro levels.

In conclusion, I made two major contributions up to this stage of my research journey. The first one was the idea that western theories don't necessarily need to be concerned about the technical core of organizations (as argued by Kiggundu et al., 1983) to be perceived as applicable in a developing context. However, the natural/open system perspectives at the ecological level of analysis are proposed the most appropriate group of theories in understanding organizations and their management activities in developing countries. The new institutional theory as a western theory was considered an excellent candidate for this proposition. The second contribution was identifying four major promising areas of study in the institutional theory literature based on a systematic review of the last twenty years of empirical research in this literature. The importance of multilevel institutions particularly global institutions, the reciprocal relationship between institutions and various parts of organizations, variation of institutionalization processes within organizations, and the effectiveness of institutional theory in a developing context are these promising areas.

The research model of this study was developed based on the above-mentioned four promising areas. I could have easily followed the most common and institutionalized approach in the institutional theory literature by taking one institutional level and the overall behavior of organizations in a developing country and explored the effectiveness

of the institutional theory in those contexts. I could have described the impact of Iranian national institutions on the general forms or behaviors of Iranian airlines. However, one cannot assume that national institutional norms are the only driving forces behind the behaviors of these airlines. National institutions do not exert their pressure in a vacuum. They are embedded in a multilevel institutional environment in which institutions at different levels may significantly change their impact on organizations. This is why I included another level of institutional pressure that has considerable impact on both Iranian national institutions and Iranian airlines. Basing my research model on less institutionalized approaches of the institutional theory literature, allowed me to prove the effectiveness of this theory in understanding organizations of a developing country and to explore some new dimensions of this theory.

In the next stage of this journey, the model of this study was used to examine how the functional activities and strategies of airlines, as business organizations, are institutionalized in a developing context. It was used to explore how the norms of institutions at a specific level may be changed as a result of pressures from either institutions at another level or the strategy of organizations for each of their particular functional activities. It was also used to show that the institutionalization process varies across different functional activities and strategies of organizations. The effectiveness of the institutional theory in explaining the functional activities and strategies of airlines in Iran as a developing country was a prominent part of this study. This study provided clear evidence of the effects that global institutions have on both the national institutions (such as the Iranian aviation institutions) and business organizations (i.e., airlines). It also explained how the relationships between two levels of institutions and between

institutions and organizations are reciprocal. These issues can be seen as new independent variables for institutionalization, deinstitutionalization, and institutional changes. They help us to tap new dimensions of the institutional theory. These findings support the idea that the institutional theory is not limited in explaining the persistence and the homogeneity of phenomena (Dacin et al., 2002); it can explain various parts of the behaviors of phenomena such as changes in the functional strategies of organizations. These results along with some of the main concluding remarks are summarized in the sections below.

6.1.1) Variation of institutionalization process within an organization

The effect of institutions on organizations' forms and behaviors has historically been the main concern in the institutional theory literature (DiMaggio and Powell, 1983; Oliver, 1991; Scott, 1995 and 2001). One of the main assumptions in most of the studies in this literature is the uniformity of institutional influences on different parts of organizations. For that reason, they are basically concerned about the effect of institutional pressures on specific dimensions of organizations such as organizational form (e.g., Arndt et al., 2000; Austin, 1998; Brint et al., 1991; Kikulis, et al., 1995; Palmer et al., 1993; Thornton, 2002), performance (Carroll, et al., 1988; Kraatz et al., 1996; Peng, Luo, 2000; Townley, 2002), strategy (Blum, et al., 1994; Davis et al., 1994; Henisz et al., 2001; Judge et al., 1992; Lamertz, Baum, 1998), and founding (Dacin, 1997; Russo, 2001). Even those studies that have talked about the effect of institutions on specific function of organizations such as their staffing (i.e., Lounsbury, 2001) or

budgetary practices (i.e., Covaleski et al., 1988), have considered these functions as another overall characteristics of organizations without considering the variation of institutional effects within organizations. I have questioned this approach and asked if all parts of an organization behave and act similarly when confronted an institutional pressure? More specifically, does institutionalization process vary within an organization? What does make this variation? How important is this variation in the overall behavior of organizations? These are the type of questions that have rarely been addressed in this literature. I tried to answer these questions and empirically show that various parts of organizations react differently and as a result of this they are institutionalized differently. This finding lead me to argue that institutional theory can take us one step further inside organizations and explore the effect of institutional pressures on different parts of organizations. The supported deterministic hypotheses of this study indicate that the influence of each institution varies across different parts, more specifically, across different functions of organizations. They clearly show that the nature of each function determines which institution can exert more pressure on that specific function.

The nature of a functional activity was defined in terms of the degree by which it is standardized according to the global standards. I concluded that functions such as the operational activities of airlines that are highly standardized by global norms are less influenced by institutions at other levels (in this case national institutions). This finding can have many implications. The first, and perhaps the most general one, is that institutionalization should not be viewed as a macro process that only affects an organization as a whole. It is a process that has various kinds of influences on different

parts of an organization. For example, the way that the executives of Iranian air transportation perceive strategic alliances is highly institutionalized by their national institutions. The same thing is true for the airfare adjustment strategy of Iranian carriers. In other words, variation in the strategy of organizations when confronted with an institutional pressure (as described by Oilver, 1991) does not stop at the firm level; it can go down to different parts of organizations. Each function of an organization reacts and responds to an institutional pressure differently. That is why the process of institutionalization also varies across functional activities of each organization. It is, in fact, the combination of responses from different parts of an organization that formulate the overall strategy of an organization that faces an institutional pressure. This means the institutional theory effectively help us in explaining the functional strategies of organizations and their relationship to the overall strategy of organizations. Thus, knowing how various parts of an organization respond to an institutional pressure allows us to find out more about the main driving force(s) behind the overall strategy of an organization. As a result of this, the type of institutions and the intensity of their pressure on each specific part of organizations can be viewed as effective antecedents for the overall strategy of organizations.

The second implication is that a function that is fully institutionalized (Tolbert & Zucker, 1996) by stable and widely established institutions, might be less influenced by other institutions. For example, the 1979 Islamic revolution in Iran, which changed the whole historical institutional arrangements of the country, could not change the institutionalized operational activities of the Iranian airlines. It was only after the economic sanctions and the serious conflicts and interactions between Iranian national

institutions and the main supplier of the global operational standards (i.e., the U.S.A), that the wall was cracked and other institutions could have some effect on operational activities of these airlines. Therefore, standardization, particularly the global standardization, as an example of global institutionalization, can be a very strong protective shield for different parts of an organization. As global arrangements and norms cover a broader scope of organizations and their activities, there will be less chance for national, regional, and local institutional pressures to influence them. In other words, one will be able to shape the overall strategy of an organization through an incremental institutionalization process in which bits and parts of the organization are institutionalized according to certain norms.

The variation of institutionalization process among functional activities of organizations due to the nature of these functions implies that institutional theory can effectively explain sub-elements of the overall behavior of an organization. This in fact is one of the main contributions of this study to the institutional theory literature. It clearly helps us to shed more light on the complex relationship between institutions and organizations, and find out more about the main driving forces for this relationship. Furthermore, it implies that a western theory such as institutional theory can effectively explore functional strategy of business firms in a developing country.

6.1.2) Multilevel nature of institutional pressures and the importance of global institutions

Another major outcome from the first group of hypotheses (i.e., deterministic hypotheses) was that institutions at various levels exert pressure on each functional activity of organizations simultaneously. The main argument is that organizations are embedded and operate in a multilevel institutional environment. Thus, making any type of conclusion about the forms, structures, or strategies of organizations as a result of an analysis of one specific level of institutions oversimplifies a multidimensional phenomenon. For example, D'Aunno et al. (2000) identified state regulation, ownership and norms of governance, and mimicry of models of divergent change as the institutional forces for divergent change in the core activities among all the U.S. rural hospitals from 1984 to 1991. One may ask how the effects of these institutional forces differ. Is it possible that these institutional forces have institutionalized each other in some way (their mediating effects)? Or, are there other institutional forces that may have shaped these divergent changes? Comparing various levels of institutional forces can help us answer these and related questions. A few empirical studies have explored the effects of institutions at more than one level on organizational forms or structures (i.e. Palmer et al., 1993; Kikulis, et al., 1995; D'Aunno et al., 2000; Arndt et al., 2000) and on a specific strategy or function of an organization (i.e. Davis, et al., 2000; Arndt et al., 2000; Homburg et al., 1999; Holm, 1995; Kostova & Roth, 2002). Even these studies have not explicitly compared the effects of institutions at different levels. Studies by Davis et al. (2000) and Kostova & Roth (2002) are among the exceptional ones; in their studies, the

effects of institutional forces, at both the national and corporate levels, on an organizational practice are explored explicitly. Their findings show that both external and internal institutions can exert pressure on organizations. However, these exceptional studies have paid little attention to the fact that organizations, particularly MNCs, are significantly influenced by the global institutions.

The majority of the empirical studies in this literature have focused on national or regional institutions as the dominant driving forces behind organizational forms and behaviors in the last century. Markets, industries, organizations, and official institutions at national, regional, and local levels have mostly attracted researchers' attention. This reflects the fact that these kinds of institutions have been perceived as the dominant external sources of pressure for organizations and their activities during most of the last century. However, this may not be the case in the twenty-first century since global institutions and global norms have gained more power and are becoming the main driving force even behind the norms of national and regional institutions. This is particularly true for today's business environment in which global arrangements are being established around the world. There are several formal sources of global institutional pressures such as the UN, WTO, and IMF. However, many organizational fields have also become global and their norms are no longer limited to national borders. Major players of certain global organizational fields, such as the airline industry, are subjected to specific global taken-for-granted norms. They have to conform to these norms to be accepted as operators both nationally and internationally. Globalization has provided a great opportunity for organizational fields to expand their boundaries beyond certain national borders. It has created an increasing trend toward the establishment of global

organizational fields as one of the major sources of global institutional pressure for organizations. As presented in chapter three, it is rare to find an article among the 85 reviewed empirical articles in which global institutional forces, one of the main sources of institutionalization for organizations, are addressed directly. Thus, the clear distinction that the deterministic hypotheses of the present study have made between the impact of national and global institutional pressures on various functional activities of organizations is viewed as a new window for the institutional analysis of firms in the global phase of today's business environment.

Findings of this study show that global institutional norms (i.e., the norms of the global airline industry) may have a direct influence on the functional activities and strategies of organizations in a developing country such as Iran (Hypotheses 4d and 7d). According to Oliver's (1991) theoretical framework, the Iranian airlines may have decided to respond to some of the global institutional norms symbolically (not actually conform to them), because of the nature of their context, or because these airlines do not perceive themselves to be dependent on the global airline industry for their critical resources. In other words, as a result of lower resource dependency, they resist the expectations of the constituents of the global airline industry (DiMaggio & Powell, 1983; Oliver, 1991; Pfeffer & Salancik, 1978). In contrast, these organizations conform more to their national institutional norms (Hypotheses 1d and 2d) because of factors such as constituents, control, cause, and context (as defined by Oliver, 1991). National institutional constituents control the allocation and availability of organizations' critical resources in developing countries; consequently, it is very difficult for organizations to resist the expectations of those constituents (i.e., constituents factor). These institutions

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have a powerful legal control on organizations (i.e., control factor), which makes conformity the best choice for organizations.

Organizations in a developing country conform to national level institutional pressures to enhance their legitimacy (i.e., cause factor) and reduce uncertainty (i.e., context factor). The latter is a clear demonstration of the fact that the nature of a context and its institutions can significantly reduce the impact of global institutional pressures on the forms and behaviors of organizations operating in such a context. Thus, in a context where obvious boundaries exist between national institutions and global institutional environment, as is the case in most of the developing countries, the functional activities of organizations, are less institutionalized by global institutional norms. This means that the strategy of organizations confronted with certain levels of institutional pressures (in this case, at the global level) may be affected or even institutionalized by institutions at another level (in this case, the national level). One might end up with the same results by repeating this study in a country such as China with the essential role of business networks in the Chinese context. A multilevel institutional analysis can help us explore those sources of variation in the strategies of organizations less observable using only one level of institutions. For example, in a country such as Taiwan, family firms (*Jiazugiye*) and their business group (*Jituanguiye*) have created a kind of national institutional arrangement that not only shapes the nation's business norms but also mediates the effects of global institutional pressures on local firms.

Although this mediating effect of Iranian national institutions was not directly measured, the interviewees' elaborations on the factors that have constrained Iranian air carriers in following the commercial norms of the global airline industry clearly describe

the constraining role that Iranian national institutions have played in the relationship between global institutional pressures and the commercial activities of Iranian airlines. This is another aspect of the institutionalization process that was rarely addressed in the reviewed empirical studies. Those very few studies that have considered more than one institutional level usually explore the effects that institutional forces at each level have on organizations separately.

The results of this study also show that global institutions do have some influence on the norms of Iranian national institutions. The influence of institutions on each other is a matter of both resource dependency and the strength of boundaries between them. The fact that global institutional norms have less impact on the national institutions of a developing country such as Iran (hypothesis 7d), clearly explains the strength of boundaries between these two levels of institutions in a developing context. However, the strength of these boundaries may not be uniform across all aspects of these institutions. It varies with the nature of institutional norms. For example, Iranian aviation institutions have no other choice except conforming to most of the global operational norms. This is the case for most countries, including developing countries. Therefore, the operational norms of the national civil aviation institutions of almost every country are strongly institutionalized by global institutions. Global standards have diminished the boundaries between operational norms of institutions at global and national levels. In contrast, the commercial norms of these national institutions may follow different paths in each country. As it was empirically explored, there is a clear line between global commercial norms of the airline industry and those of Iranian national institutions. This tells us that the effect of institutions on each other also varies according to the nature of institutional

norms. When there is a faded boundary between the norms of two levels of institutions (such as the operational norms of Iranian national institutions and those of global airline industry), there is a good chance of experiencing inter-level institutionalization among those institutions. The most salient point is that institutions do have an effect on the norms of each other; they may reinforce or constrain each other's institutional pressures.

Therefore, institutions at one level may decrease or increase the pressures that institutions at another level have on organizations' forms or behaviors. For example, national institutional forces of each of the ten countries in the study by Kostova & Roth (2002) may have limited the effects of corporate level institutional forces on the implementation of quality management as the specific organizational practice among subsidiaries of their focal MNC. Similarly, in the study by Davis et al. (2000), corporate level institutional pressures may have reinforced the effect of national level institutional pressures on the entry-mode strategy of the subsidiaries of MNCs. These inter-institutional influences can be the result of a combination of interactions of institutions at organizational, local, regional, national and global levels. The deterministic hypotheses of the present study support the idea that national institutional norms of a developing nation (i.e., Iranian regulative institutions) have significantly limited the effects of the norms of a global organizational field (i.e., global airline industry norms) on certain activities of organizations in that nation.

6.1.3) Multilevel sources of institutionalization and deinstitutionalization

Oliver (1992) has identified functional, political and social sources of pressure for deinstitutionalization and institutional change (Oliver, 1992). Researchers have explored each one of these sources of pressure at national or organizational field levels separately (i.e. Lee et al., 2002; Townley, 2002; and Zilber, 2002). One can rarely find a study in which these sources of pressure are explored at two or more levels simultaneously. Furthermore, the interactions and/or conflicts among sources of pressure at different levels have received less attention in this literature. Researchers have basically considered various sources of institutional change separately (i.e. Elsbach, 1994; Galaskiewicz, 1991; Guard et al., 2002; Hargadon et al., 2001; Kraatz & Moore, 2002; Leblebici, et al., 1991). This study explains how various sources of pressure and their interactions cause deinstitutionalization and institutional change. It is claimed that the interaction between two sources of pressure at two different levels can be more powerful than an extremely strong source of pressure at one specific level. The unique historical situation of the Iranian institutional environment and the Iranian air transportation field has made the present study exceptional in terms of revealing new aspects of the process of institutional change. First, as was discussed in chapter three, Iran has been experiencing a tremendous accelerating rate of institutional change in the last century of its history, particularly after the 1979 Islamic revolution. Since the revolution had religious roots, it brought new ways of defining morals for every social activity. Almost all political arrangements lost their power to religious leaders and groups. Powerful religious leaders became the most influential source of pressure to enforce various

changes in moral and legitimate systems. As a result of this, new ways of managing organizations, mostly in conflict with taken-for-granted norms, were developed in each organization. In fact, the revolution and all its components including its leaders made both old and new norms and values along with new religious values more visible in the society. In other words, as informal institutions were made more visible, they became more formal and ready for change. When these conflicting values and norms (i.e., the old in conflict with the new) became more visible among individuals and organizations, institutional change became inevitable. This is how organizational, political, and social forces deinstitutionalized older norms and institutionalized new arrangements in Iran. A new moral system and new social expectations hindered the continuation of the old practices in each organization.

Although the 1979 revolution should be considered the main reason for the diffusion of the most radical institutional change in the history of Iran, as explained in chapter three, it could not change all institutional arrangements. The significant political and social power of the revolution could not really change the way airlines were organized, managed, and operated. Since the institutional arrangements of the Iranian aviation field had very strong ties to global institutional arrangements, national sources of pressure even in the form of a revolution could not break them. Pressures from sources at other levels were required to create a change in the institutional arrangement of the aviation field of the country. For that reason, there was no significant change in the way that airlines and other players in this field were managing or operating after the revolution. It was only after the development of a kind of confrontation between institutions at global and Iranian national levels, fuelled by the U.S. economic sanctions

against Iran, that a kind of deinstitutionalization process began in most of the high-tech industries, particularly, those with a close relationship with American technologies such as the airline industry.

Deinstitutionalizing specific norms, in a social context, will automatically create a great opportunity for institutionalizing new norms and replacing the older ones. As Scott (2001) explains, "The weakening and disappearance of one set of beliefs and practices is likely to be associated with the arrival of new beliefs and practices"(2001: 184). Western aircraft and their related standards were dominantly institutionalized in the Iranian aviation industry for more than fifty years. Every aspect of the Iranian airlines, particularly their operational activities (including their structures, strategies, decision making processes, their communication, and even the behavior of their employees), was institutionalized according to western, and more specifically American, norms. Blocking the support of these norms through economic sanctions and political constraints after the 1979 revolution helped reveal most of the informal taken-for-granted norms. As a result of this, the conflict between the new and older norms became more visible, which again made institutional change inevitable. Major players in the field traded off some of the well-established western norms in order to survive. The adherence to western standards, which used to be known as the most legitimate behavior among organizations in this field, was questioned after western governments, particularly the U.S. government, imposed certain political and economic constraints on the practice of those standards. Thus, it was the power and interests of certain governments of developed nations and their interactions with the Iranian national government that fuelled a deinstitutionalization process in the Iranian aviation field.

First, a new set of nationally mediated standards was developed to keep the existing western equipment operational. This can be viewed as the pre-institutionalization stage (Tolbert and Zucker, 1996) of the new norms in the Iranian air transportation industry. Then, the need for new aircraft, as the most vital element in keeping the airlines alive, and the American sanction on western aircraft resulted in the introduction of Russian equipment and norms into the Iranian airline industry. The Russians made this vital resource cheap and available for Iranians. This clearly shows that resource dependency was also one of the driving forces behind the airlines' move toward new technology and systems. Operating aged western airplanes and Russian airplanes with their particular standards became a legitimate practice among Iranian operators after the American economic sanctions were implemented against Iran. As one of the executives in his interview described it, "Russian airplanes became the foundation for the establishment of new airlines in this country." This replacement of norms brought extensive changes in the forms and strategies of major players in this field. Therefore, a local organizational field (i.e., the Iranian aviation industry) that was formerly in compliance with global western norms was pushed to deinstitutionalize some of those norms and replace them with new nationally mediated ones. In summary, political forces at global and national levels and their interaction changed the norms of Iranian national aviation institutions as well as the behavior of organizations in this field.

This is a contemporary example of incremental institutional change in a fast changing institutional environment. It shows how sources of power at different levels (i.e., global and national levels) and the resource dependency of organizations can change institutional arrangements that a revolution was not able to do so. It clearly describes the

role of political forces as a major antecedent of the deinstitutionalization process (Oliver, 1992). However, this study differs from most of the existing studies, such as Greenwood et al. (2002) and Townley (2002). Previous studies have mainly considered internal political factors of a country in describing national institutional changes. It is believed that institutional norms and values are developed and embedded in a multilevel institutional environment; therefore, an institutional change should be viewed as a multidimensional phenomenon. This study describes how certain practices that have "become taken for granted by members of a social group as efficacious and necessary" (Tolbert & Zucker, 1996: 179) may be replaced through interaction between different levels of institutions. It also shows the importance of moving from informal to formal institutions or from less visible to more visible norms in the process of institutional change. Therefore, some of the theoretical implications from this stage of my journey are the followings: institutionalization and deinstitutionalization are multilevel processes driven by various sources of pressures at different levels; interaction between the sources of pressure for change may become the primary reason for institutional change; and finally, there is a relationship between the degree of visibility of institutional norms and institutional change.

6.1.4 Institutional continuity in the reciprocal relationship between institutions and organizations

One of the main objectives of this study was to examine the reciprocal relationship between institutions and organizations. For that reason, both top-down (institutions affecting organizations) and bottom-up (organizations affecting institutions) relationships are considered in this study. On one hand, based on supported deterministic hypotheses, it was shown that institutions at various levels (as discussed in the previous sections 6.1.1 and 6.1.2) could have direct influence on organizations. On the other hand, based on supported voluntaristic hypotheses, it was shown that organizations and their functional activities might only have a moderate influence on the norms of national institutions (hypotheses 1v and 2v). They have no influence on the norms of global institutions (hypotheses 3v, 4v, and 6v). A combination of these results shows that a reciprocal relationship can basically experienced between national or local institutions and organizations. The relationship between global institutions and organizations is a top-down kind of relationship in a developing context. Thus, institutional norms at various levels affect organizations and their activities, but organizations might only affect the norms of closest level of institutions to their activities.

This argument that functional activities of organizations can shape the norms of closest level of institutions explains the history of institutional development. Institutions have normally been established after certain practices are experienced by a group of people or firms at the national or global level. For example, after a few years of experiencing air transportation services in the U.S. and European countries, ICAO and

IATA (two formal global institutions) were established by the governments of various nations. the implementation of global norms through these institutions was viewed necessary in the air transportation industry. In the same way, the Iranian air transportation service established national institutions such as Iranian Civil Aviation Organization. In other words, it is the actions or practices of individuals, groups, organizations, or even institutions that shape the norms of institutions. As soon as an institution is established, it will have its own identity, and every newly established organization in that field must follow the taken-for-granted norms defined by its institutional environment. However, those created an institution remain as one of the main sources of pressure for any change in its norms. In other words there is a kind of continuity in the reciprocal relationship between institutions and organizations.

The history of air transportation in Iran indicates that Iran Air, as the national flag carrier of the country, has been the main national driving force behind most of the norms of the Iranian air transportation industry for more than four decades. This was claimed both by the interviewees and the participants in the survey questionnaires (discussed in chapter five). Another major force that has been shaping the behavior of Iranian carriers is the power of individuals or political groups, which has also been in place for more than four decades. The 1979 Islamic revolution not only failed to reduce the power of this latter force but also reinforced it in different ways. A major reason for this is that the number of politicians, political groups, and religious individuals and groups exerting pressure on different industries, including the airline industry, increased dramatically after the revolution. Therefore, there has been a kind of institutional continuity in the norms of the Iranian air transportation industry for almost half a century. This ongoing

institutionalization process- based on the practices of the national flag carrier, personalized sources of power, the power of political groups and widely accepted standards- has been experienced in the aviation industry of many developing countries besides Iran. The aviation industry of most countries in the Middle East, Latin America, Asia and Africa has been experiencing this institutional continuity since they were born.

This finding, that functional activities of major players both within and outside an industry influence the norms of national institutions in developing countries, has major theoretical and practical implications. Theoretically, it supports one of the main ideas explored in the special research forum of the Academy of Management Journal on the institutional theory and the role of agents in institutional change (Dacin et al., 2002:47). It indicates there is a continuous role of agency in the institutionalization processes and the institutional theory does not focus mainly on homogeneity and persistence (DiMaggio, 1988). In other words, the institutional theory is not a theory of just isomorphism; it effectively explores the changes and sources of change in organizations and institutions. This study is further support for acknowledging the role of actors and their perception along with the importance of change and variation (Goodstein, 1994; Oliver, 1992) in the institutional theory. A prominent, practical implication is that functional activities of the major players of an industry in a developing country can change the norms of related national or local institutions. In other words, one of the most effective ways of changing the national institutional norms of a developing country is through the functional activities of the major players in that country. For example, the globalization process in a developing country will be protected from various institutional pressures if the microelements (functional activities) of organizations, particularly those of major players,

receive more attention and become more globally standardized. This may be one of the reasons that the quality and procedure for each functional activity of organizations have received special attention from the European ISO, which is gradually creating global norms for industries around the world.

6.2 Limitations and future research

My intellectual journey was not different from other such journeys; it ended up with many new questions and more work for others. Despite the very interesting findings and discussions on various new dimensions of the institutional theory, my study has certain limitations and room for improvement. First, all the arguments have been tested in a single developing context. One can always question the generalizability of some of the argument made, especially for developing contexts. Although some of the main results, such as the multilevel nature of the institutional pressures and the sources of institutionalization and deinstitutionalization, are not specific for developing contexts, one can always question the power of the institutional theory in other developing contexts. Second, the most important limitation of this study is the issue of causality. The main purpose of this study was to explore relationships rather than causality; but in exploring the relationship between institutions and organizations, one can hardly ignore the cause/effect relationships. The data from the interviews were used to find out more about the direction of effects in these relationships, but there is still room to improve this issue of causality through different research design and methodology. A third limitation is that moderating and mediating effects of institutions at each level and the interactive

effects are mainly discussed and explored based on the interview data. It would have been more helpful if these effects could be explored more specifically through further quantitative models. Finally, it is very difficult to replicate this study just like any other studies with samples from developing countries. This is a kind of usual limitation that is basically related to the idiosyncratic characteristics of doing research in these contexts. Researchers should pay special attention to issues such as culture, language, trust and social relationships in order to be able to replicate studies such as this present study in a developing country. This can be one of the reasons for not having replicated studies with samples from developing contexts in management fields.

This study highlighted some of the issues about the power of western theories in developing nations that need to be explored in future studies. For example, I briefly discussed the idea that power, resource dependency, and institutional pressures can change institutional norms, especially management norms at the functional level of organizations. This issue of combining institutional theory with other theories, such as resource dependency theories, has been discussed in the literature (i.e. Oliver, 1997). However, future research is needed to consider more than one institutional level and, instead of taking organizations as a whole, to use these theories to explore the functional strategy of organizations. Another issue that was raised in this study through some of the historical evidence in a developing country is that there is a relationship between the formality of institutions (i.e. becoming more visible) and their change. It is important to understand that most institutional norms and values are taken for granted and are practiced by individuals and organizations without their noticing the existence of these norms. This is why institutions are generally identified as informal in nature regardless of

whether they are regulative, normative, or cognitive. As soon as norms and values become more visible (i.e. formal), the possibility of institutional change increases. This is the type of hypothesis that can be examined in the future studies.

One of the major issues that should receive special attention in future studies is the importance that global institutional norms, along with other institutional norms, have on the forms and strategies of organizations. This is primarily due to the rapid pace in the development of widely accepted norms at the global level. Another promising area for further research relates to the reciprocal relationship between different levels of institutions and individuals or organizations. Organizations may use institutional norms at one level (e.g., global level) to either protect themselves from the pressures of institutions at other levels or even shape the norms of institutions at other levels (e.g., national institutions). Future studies need to address the mediating role of organizations between two levels of institutions. The process of the institutionalization of institutions also needs to be addressed in future empirical studies. Finally, further studies are needed to compare the effectiveness of applying the institutional theory across developing countries to support the appropriateness of natural/open system perspectives at the ecological level of analysis in order to understand organizations and their management systems in developing nations.

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Appendix 1

The Guidelines and Questions for Interviewing

Executives and Managers of Iranian Airline Industry

Notes for interviewee: After having relationship oriented type of talks with the interviewees and getting some personal information about them, a very brief summary of this research and its objectives should be provided to each interviewee. Then, the following questions should be asked from them. It is important to make sure that there is a common understanding among interviewees on issues such as institutional pressure, commercial and operational activities and strategies.

a. **What are the main factors that shape the commercial activities and strategies of your airline?**

1. **Are there any institutions or organizations (national and/or global) that exert pressure or define some type of boundary for the commercial activities of your airline?**

   1 ○ Yes   0 ○ No

2. **Would you please name five of the most important ones?**

b. **What are the main factors that shape the Operational activities and strategies of your airline?**

3. **Are there any institutions or organizations (national and/or global) that exert pressure or define some type of boundary for the operational activities of your airline?**

   1 ○ Yes   0 ○ No

4. **Would you please name five of the most important ones?**

*If the airline industry is not in the interviewee's response to questions #2 and #4, then some kind of probe should be used to sharpen up the interviewee's response. This can be done by asking some general questions, for example, about the effects of airports' noise limitations or manufacturers' policies on their commercial and operational activities.

Then, the following two lists of commercial and operational strategies and activities should provided to the interviewee and give enough time to him/her to go over them to be able to answer the questions 5 to 8.

First List
Commercial Strategies & Activities

- Managing variety of airfares in every single flight
- Advertising through all sorts of media
- Adjusting domestic & international airfares
- Activities related to ticketing and sales
- Strategic alliances with other airlines
- Managing the reservation system
- Relationships with travel agencies
- Customer services

Second List

Operational Strategies & Activities

(maintenance and flight operation)

- Increasing the availability of airplanes
- On the job training
- Increasing the aircraft utilization
- Increasing crew utilization
- Handling scheduled and unscheduled flights round the clock
- Keep the average fleet age as low as possible

5. Please, rank the first list by the extent to which they describe the commercial activities of your airline (which one most describes the commercial activities of your airline).

* Help the interviewee by providing him/her with the list and letting him/her know that he/she can put two activities in the same ranking. While the list is in front of the interviewee, the next questions related to commercial activities will be asked as follows:

6. **What percentage of the commercial activities of your airline is described by the first five activities based on your ranking?**

       100   90   80   70   60   50   40   30   20   10   0

7. **Please, rank the second list by the extent to which they describe the operational activities of your airline (which one most describes the operational activities of your airline).**

8. **What percentage of operational activities of your airline is described by the first four activities based on your ranking?**

       100   90   80   70   60   50   40   30   20   10   0

Notes: With this general understanding about the nature of commercial and operational activities of the airlines and the sources of institutional pressure on these activities, interviewees will be asked to talk about two major levels of institutional pressures in more details. These two levels are global airline industry and national institutions. Since norms of these two levels of institutions will be repeatedly discussed in the remaining questions, it is important to make sure that interviewees have common understandings about this concept. For that reason, a few simple probes should be used at this stage. Interviewees can be asked about the commercial or operational activities that are widely accepted and practiced by airlines around the world. The same type of questions can be asked for common practices among Iranian carriers. These questions will sharpen the focus of interviewee to the concept of industry norms and national institutional norms. Then the relationships between these two levels of institutions and between each level of institution and different activities of airlines are discussed in the remaining 12 questions. First, a list of four sources of pressure that may shape the commercial and operational norms of global airline industry provided to the interviewees to be ranked as worded in the questions 9 and 10. But, how these institutional pressures are developed, or how the airline industry norms and the rules and regulations of the CAO are shaped, are the type of questions that will be considered in the same section of the interview later on.

* The following questions are for the effects of airlines activities on the norms of the airline industry and the national institutions.

    c. **Please explain some about the commercial and operational norms of the global airline industry?**

9. Please, rank the followings based on the significance of their influence on the commercial norms of the global airline industry:

◯   a. Civil Aviation Department and/or the Ministry of Transportation of different nations
◯   b. Activities of airlines all around the world
◯   c. The major carriers that are based in North America and Europe
◯   d. Global institutions such as IATA and ICAO

10. Please, rank the followings based on the significance of their influence on the operational norms of the global airline industry:

◯   a. Civil Aviation Department and/or the Ministry of Transportation of different nations
◯   b. The activities of all airlines around the world
◯   c. The major carriers that are based in North America and Europe
◯   d. Global institutions such as IATA and ICAO

11. How significant are the influences of the national institutions such as the CAO of Iran and/or the ministry of transportation on the global airline industry norms?

Very significant	Somewhat significant		Somewhat insignificant	insignificant
◯	◯	◯	◯	◯

12. Please, rank the following countries based on the degree to which their national institutions have been able to influence the airline industry norms.

Germany   Iran   United States   Mexico   Canada   Pakistan

13. Do commercial activities of Iranian carriers influence the norms of the global airline industry? If they do, how significant is it?

Very significant	Somewhat significant		Somewhat insignificant	insignificant
◯	◯	◯	◯	◯

14. Do operational activities of Iranian carriers influence the norms of the global airline industry? If they do, how significant is it?

Very significant	Somewhat significant		Somewhat insignificant	insignificant
◯	◯	◯	◯	◯

d. Please explain the commercial and operational norms of national institutions such as those of Iranian CAO.

The purpose is to make sure if the interviewees have common understandings on norms at national level for this industry.

15. Please, rank the followings based on the significance of their effects on the norms of the national institutions such as those of the CAO of Iran:

◯ a. The activities of Iranian carriers
◯ b. The norms of global airline industry
◯ c. The major Iranian carrier(s)
◯ d. Global institutions such as IATA and ICAO

16. Do global airline industry norms have influence on the rules and regulations of national institutions (such as CAO of Iran)? If they do, how significant is it?

Very significant	Somewhat significant		Somewhat insignificant	insignificant
◯	◯	◯	◯	◯

17. Do commercial activities of Iranian carriers have any influence on the rules and regulations of the national institutions (such as the CAO of Iran)? If they do how significant is it?

Very significant	Somewhat significant		Somewhat insignificant	insignificant
◯	◯	◯	◯	◯

18. Do operational activities of Iranian carriers have any influence on the rules and regulations of the national institutions (such as the CAO of Iran)? If they do how significant is it?

Very significant	Somewhat significant		Somewhat insignificant	insignificant
◯	◯	◯	◯	◯

e. **Please explore the impact of global airline industry norms on each one of the following activities and/or strategies.**

While the interviewee is talking about each one of these activities, the following question should be asked to get his/her response.

19. To what extent is each one of the following strategies and activities of your airline affected by the norms of global airline industry?

To a very great extent	To a great extent	To some extent	To little extent	To very little extent
1	2	3	4	5

- ○ a. Adjusting domestic airfares
- ○ b. Adjusting international airfares
- ○ c. Strategic alliances with other airlines
- ○ d. Automating sales and ticketing
- ○ e. Increasing utilization of airplanes
- ○ f. Increasing availability of airplanes
- ○ g. Reducing the overall average age of airplanes

f. **Please explore the impact of national institutional norms on each one of the following activities and/or strategies.**

While the interviewee is talking about each one of these activities, the following question should be asked to get his/her response.

20. To what extent is each one of the following strategies and activities of your airline affected by the norms of the national institutions such the CAO of Iran and/or the ministry of transportation?

To a very great extent	To a great extent	To some extent	To little extent	To very little extent
1	2	3	4	5

- ○ a. Adjusting domestic airfares
- ○ b. Adjusting international airfares
- ○ c. Strategic alliances with other airlines
- ○ d. Automating sales and ticketing
- ○ e. Increasing utilization of airplanes
- ○ f. Increasing availability of airplanes
- ○ h. Reducing the overall average age of airplanes

Appendix 2

Section One The Survey Questionnaires

Norms of the airline industry

The first part of this questionnaire is about some of the taken-for-granted norms of the **worldwide** airline industry.

Commercial Norms are defined as widely accepted pricing, sales, and marketing activities for domestic and/or international passenger and cargo flights.

Operational Norms are defined as widely accepted activities related to aircraft maintenance and flight operation.

1. It is a well-accepted industry norm to adjust international airfares at least every:

Year	Six months	Three months	Month	Week or more
○	○	○	○	○
1	2	3	4	5

2. Having a variety of airfares for a single flight is a well-accepted commercial norm.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
○	○	○	○	○
1	2	3	4	5

3. Reducing the average age of airplanes is a well-accepted operational norm.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
○	○	○	○	○
1	2	3	4	5

4. Having more strategic alliances with other airlines is a well-accepted commercial norm.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
○	○	○	○	○
1	2	3	4	5

5. Increasing aircraft utilization is a well-accepted operational norm.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
○	○	○	○	○
1	2	3	4	5

6. Increasing availability of airplanes is a well-accepted operational norm.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
○	○	○	○	○
1	2	3	4	5

Appendix 3

Section Two of the Survey Questionnaires

Norms of the Ministry of Transportation and Civil Aviation Organization of Iran

A) Commercial Norms

1. The Ministry of Transportation expects Iranian carriers to have uniform (the same) airfares for their domestic flights.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
◯	◯	◯	◯	◯
1	2	3	4	5

2. Iranian carriers may change the frequency of their flights on domestic routes only after they get permission from the Civil Aviation Organization of Iran.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
◯	◯	◯	◯	◯
1	2	3	4	5

3. Iranian carriers that meet the required standards defined by Civil Aviation Organization can establish flights on any domestic routes of their choice.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
◯	◯	◯	◯	◯
5	4	3	2	1

4. The Ministry of Transportation expects Iranian carriers to adjust their international airfares as often as required in the international market.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
◯	◯	◯	◯	◯
1	2	3	4	5

5. The Ministry of Transportation considers international competition as the determinant factor for international airfares of Iranian carriers.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
◯	◯	◯	◯	◯
1	2	3	4	5

B) Operational Norms

1. To what extent does Civil Aviation Organization concern about the aircraft utilization of Iranian carriers?

To a very great extent	To a great extent	To some extent	To little extent	To very little extent
○	○	○	○	○
1	2	3	4	5

2. To what extent does Civil Aviation Organization execute flight operation standards that are beyond the international standards?

To a very great extent	To a great extent	To some extent	To little extent	To very little extent
○	○	○	○	○
1	2	3	4	5

3. To what extent does Civil Aviation Organization execute technical standards that are beyond the international standards?

To a very great extent	To a great extent	To some extent	To little extent	To very little extent
○	○	○	○	○
1	2	3	4	5

4. To what extent does Civil Aviation Organization concern about the aircraft availability of Iranian carriers?

To a very great extent	To a great extent	To some extent	To little extent	To very little extent
○	○	○	○	○
1	2	3	4	5

5. To what extent does Civil Aviation Organization designate airlines' flight operational staff to control and inspect (on their behalf) the flight operations of airlines?

To a very great extent	To a great extent	To some extent	To little extent	To very little extent
○	○	○	○	○
1	2	3	4	5

6. To what extent does Civil Aviation Organization designate airlines' technical staff to control and inspect (on their behalf) the technical operations of airlines?

To a very great extent	To a great extent	To some extent	To little extent	To very little extent
○	○	○	○	○
1	2	3	4	5

7. To what extent does Civil Aviation Organization concern about the average fleet age of Iranian carriers?

To a very great extent	To a great extent	To some extent	To little extent	To very little extent
○	○	○	○	○
1	2	3	4	5

Appendix 4

Section Three of the Survey Questionnaires

A) Airlines' Commercial Strategies

1. Having different fares for the same class of seats on a domestic flight is a very usual commercial practice among Iranian carriers.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
◯	◯	◯	◯	◯
5	4	3	2	1

2. To what extent do Iranian carriers use strategic alliances for their commercial relationship with other airlines?

To a very great extent	To a great extent	To some extent	To little extent	To very little extent
◯	◯	◯	◯	◯
1	2	3	4	5

3. To what extent do Iranian carriers make their sales through travel agencies?

To a very great extent	To a great extent	To some extent	To little extent	To very little extent
◯	◯	◯	◯	◯
1	2	3	4	5

4. Adjusting domestic airfares according to the market needs is a major ongoing commercial task of Iranian carriers.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
◯	◯	◯	◯	◯
5	4	3	2	1

5. How important is the role of code sharing in the commercial activities of Iranian carriers?

Very important	Somewhat important	Undecided	Somewhat unimportant	unimportant
◯	◯	◯	◯	◯
1	2	3	4	5

6. Adjusting international airfares as often as needed in the international market is a usual commercial policy of Iranian carriers.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
◯	◯	◯	◯	◯
1	2	3	4	5

7. To what extent are travel agencies involved in the commercial strategies of Iranian carriers?

To a very great extent	To a great extent	To some extent	To little extent	To very little extent
◯	◯	◯	◯	◯
1	2	3	4	5

289

B) Airlines' Operational Strategies

1. Aircraft availability is practically used as a major performance index in our airline.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
○	○	○	○	○
1	2	3	4	5

2. Operational managers of our airline consider aircraft utilization as an essential efficiency measure for their activities.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
○	○	○	○	○
1	2	3	4	5

3. Reducing the average age of airplanes has high practical priority in the operational strategies of our airline.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
○	○	○	○	○
1	2	3	4	5

4. Increasing aircraft availability is considered as one of the main operational objectives of our airline.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
○	○	○	○	○
1	2	3	4	5

5. Increasing aircraft utilization is a practical objective in operational strategies of our airline.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
○	○	○	○	○
1	2	3	4	5

6. How successful has been your airline in reducing the average age of its fleet?

Very successful	Somewhat successful	Undecided	Somewhat unsuccessful	Unsuccessful
○	○	○	○	○
1	2	3	4	5

Appendix 5

Section Four of the Survey Questionnaire

General information

This questionnaire will be completed by some general information. Please provide the followings:

Your name:

Your gender: O Male   O Female

                          1   2

Your current age: O 25-34   O 35-44   O 45-54   O 55-65   O 65 or older

                          1   2   3   4   5

Your education and licences:

PhD   MS or MBA   BS   Technician/ two year after HSD   HSD   Lower than HSD
O   O   O   O   O   O
1   2   3   4   5   6

Your employer name:

Your position:

Number of years in this position:

Less than a year   1-2 years   3-5 years   6-9 years   10-15 years   More than 15 years
O   O   O   O   O   O
1   2   3   4   5   6

Number of years working for your present employer:

3-5 years   6-9 years   10-15 years   15-20 years   More than 20 years
O   O   O   O   O
1   2   3   4   5

Number of years in aviation industry:

3-5 years   6-9 years   10-15 years   15-20 years   More than 20 years
O   O   O   O   O
1   2   3   4   5

Please provide your e-mail, fax. Number, or mail address if you would like to have a brief summary of the results of this study.

E-Mail:

Fax. Number:

Mailing Address:

Appendix 6

Distribution of the Interviewees' Rankings for the Eight Commercial Functions
(Question #5 of interviews)

1. Activities related to ticketing and sales
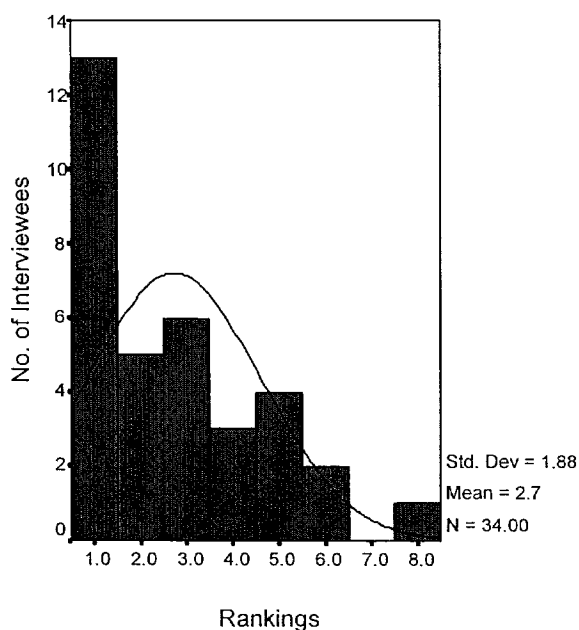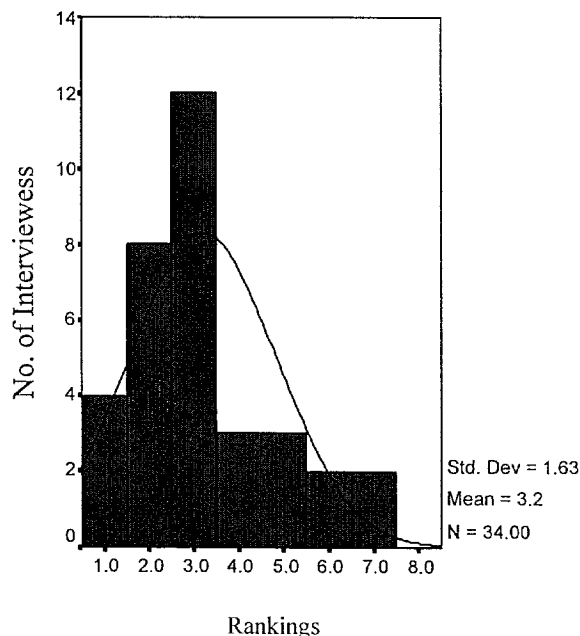
Std. Dev = 1.88
Mean = 2.7
N = 34.00

Rankings

2. Relationships with travel agencies

Std. Dev = 1.63
Mean = 3.2
N = 34.00

Rankings

3. Managing the reservation system

Std. Dev = 1.73
Mean = 3.3
N = 34.00

Rankings

4. Customer services

Std. Dev = 2.14
Mean = 3.9
N = 34.00

Rankings

5. Adjusting domestic & international airfares

Std. Dev = 2.01
Mean = 4.7
N = 33.00

Rankings

6. Strategic alliances with other airlines

Std. Dev = 2.27
Mean = 4.8
N = 32.00

Rankings

7. Advertising through all sorts of media

Std. Dev = 1.32
Mean = 6.2
N = 33.00

Rankings

8. Managing variety of airfares in every single flight

Std. Dev = 2.02
Mean = 6.5
N = 32.00

Rankings

293
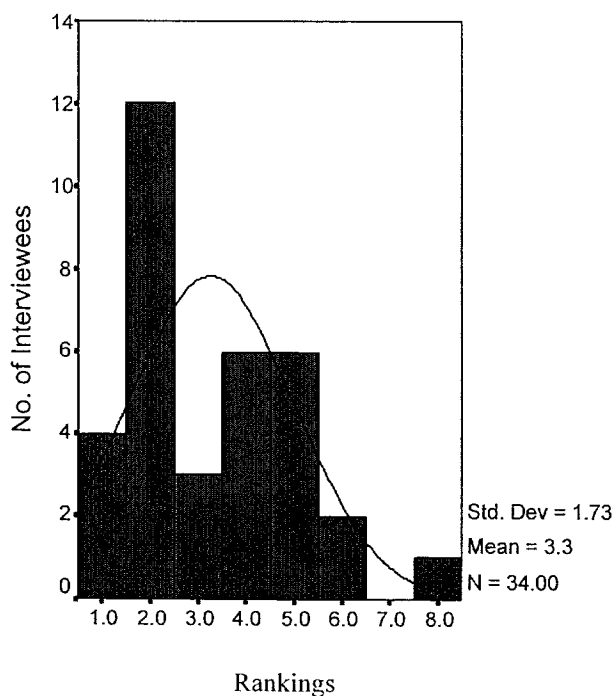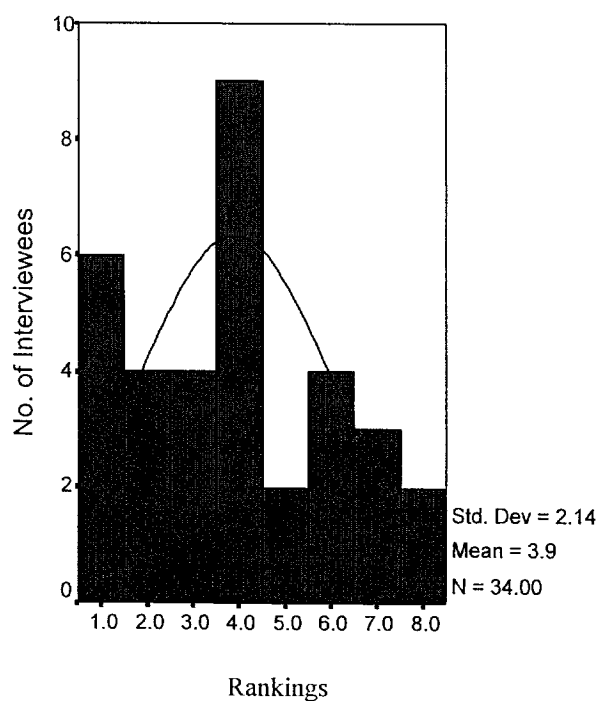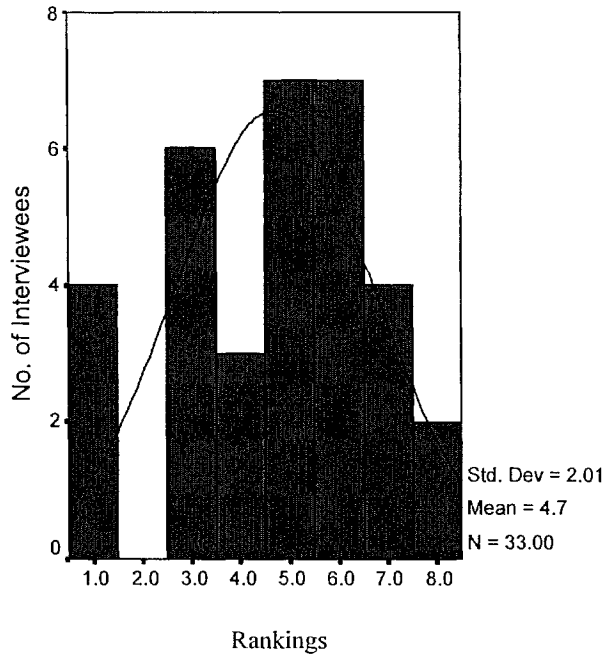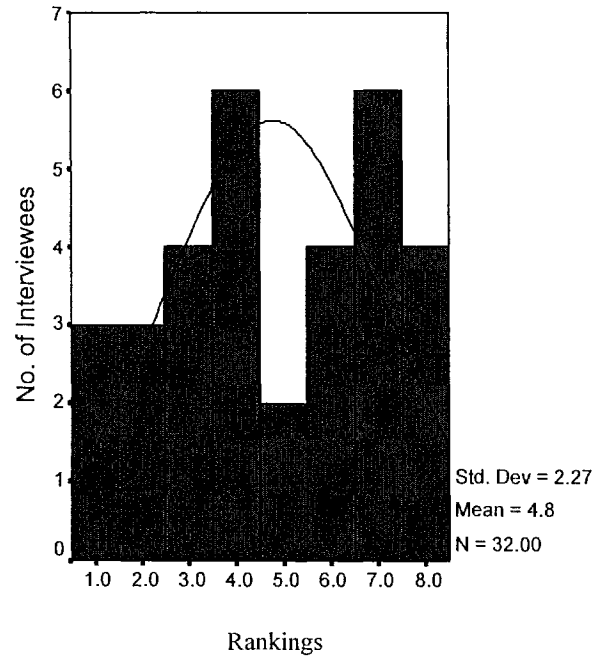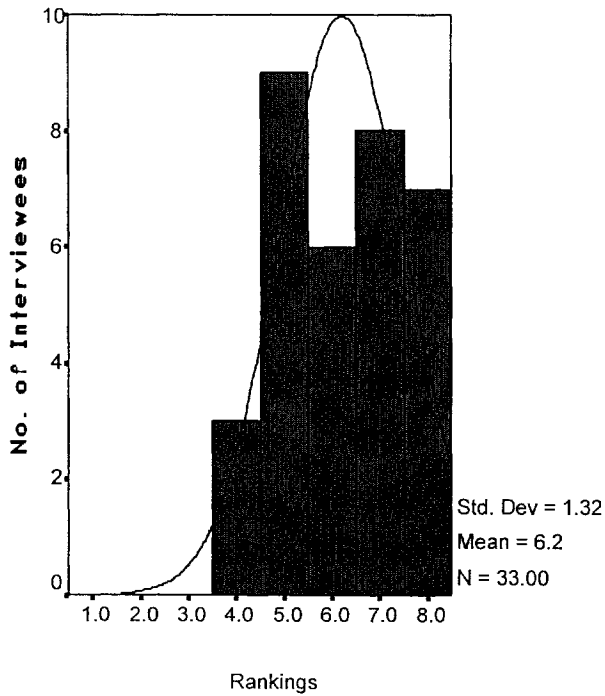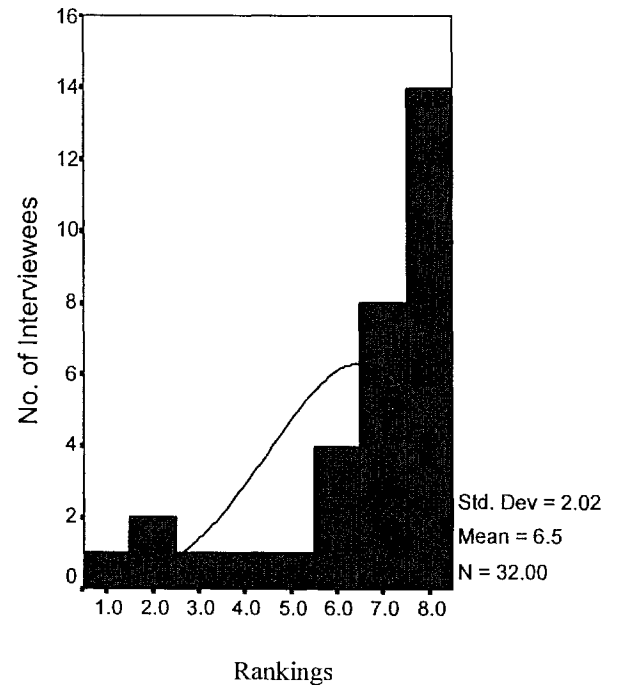
Appendix 7

Distribution of the Interviewees' Rankings for the Six Operational Functions
(Question #7 of interviews)

1. Increasing the availability of airplanes
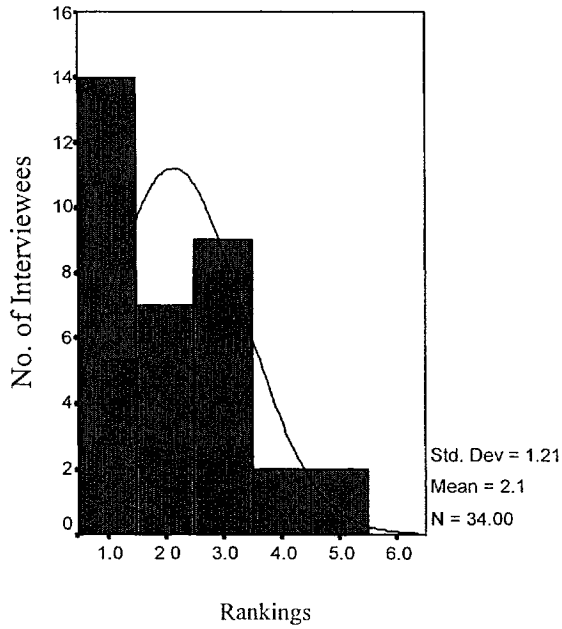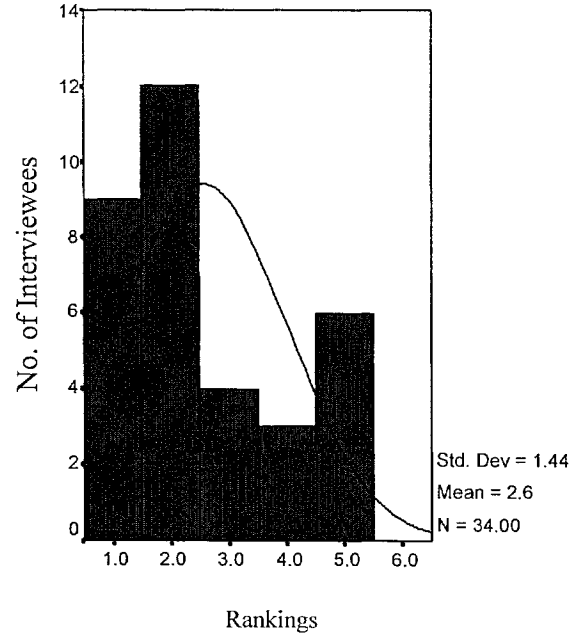
Std. Dev = 1.21
Mean = 2.1
N = 34.00

Rankings

2. Increasing aircraft utilization

Std. Dev = 1.44
Mean = 2.6
N = 34.00

Rankings

3. Handling scheduled and unscheduled Flights round the clock

Std. Dev = 1.50
Mean = 3.2
N = 34.00

Rankings

4. On the job training

Std. Dev = 1 28
Mean = 3.6
N = 34.00

Rankings

5. Increasing crew utilization

Std. Dev = 1.34
Mean = 3.8
N = 34.00

Rankings

6. Keep the average fleet age as low as possible

Std. Dev = 1.73
Mean = 5.1
N = 34.00

Rankings

295
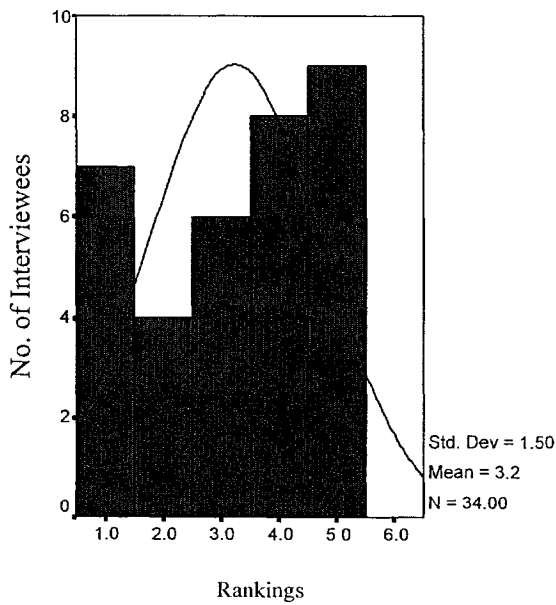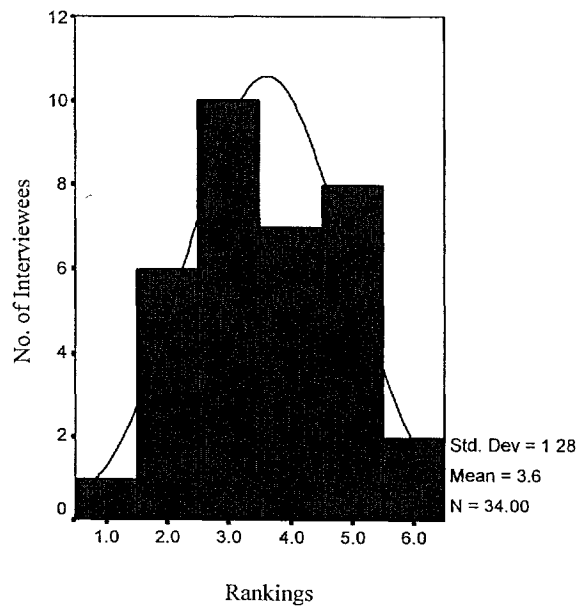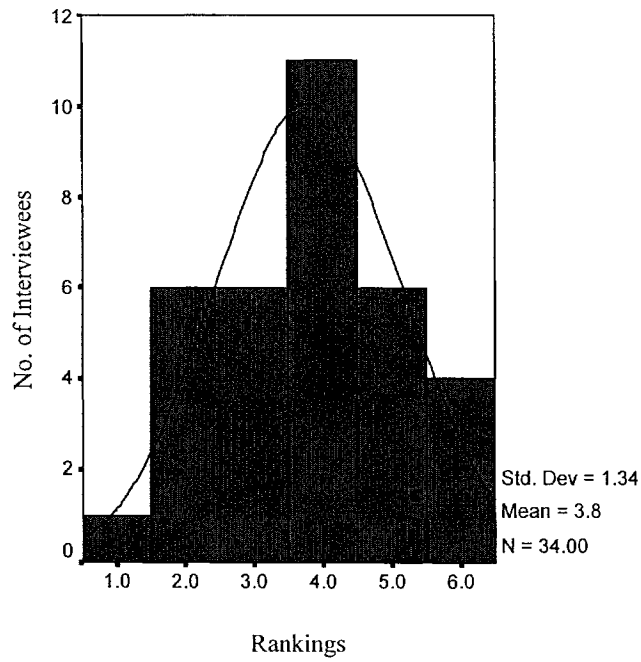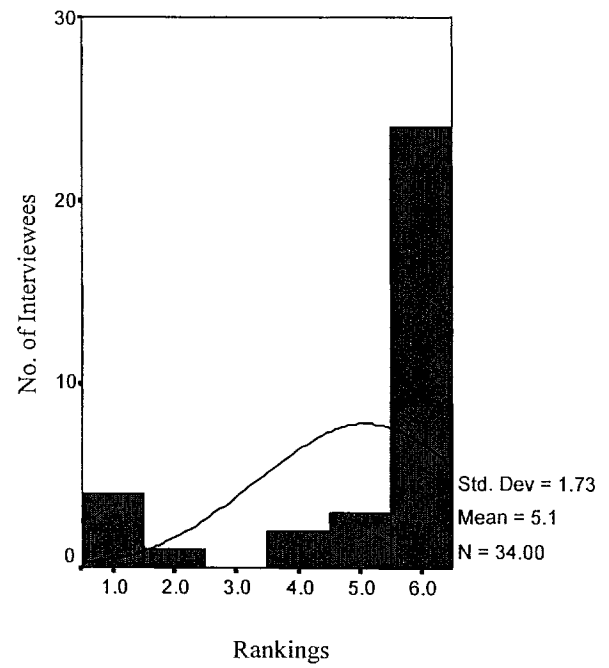
Appendix 8

Distribution of the interviewees' rankings for the main four sources that influence the
commercial norms of global airline industry
(Question #9 of interviews)

**9a. Civil aviation department or the Ministry
of transportation of different nations**
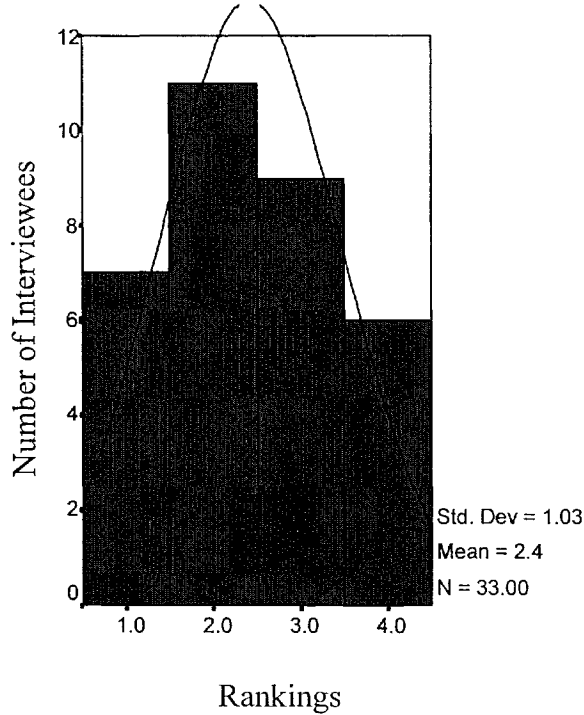
Std. Dev = 1.03
Mean = 2.4
N = 33.00

Rankings

9b. The activities of all airlines around the world

Std. Dev = 1.03
Mean = 1.8
N = 33.00

Rankings

**9c. The major carriers that are based in
North America and Europe**

Std. Dev = 1.12
Mean = 3.0
N = 33.00

Rankings

9d. Global institutions such as IATA and ICAO

Std. Dev = 1.00
Mean = 2.6
N = 33.00
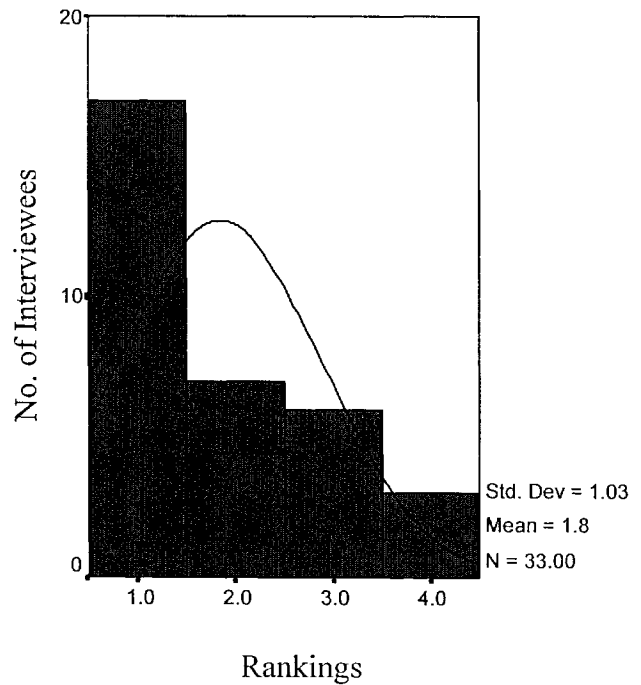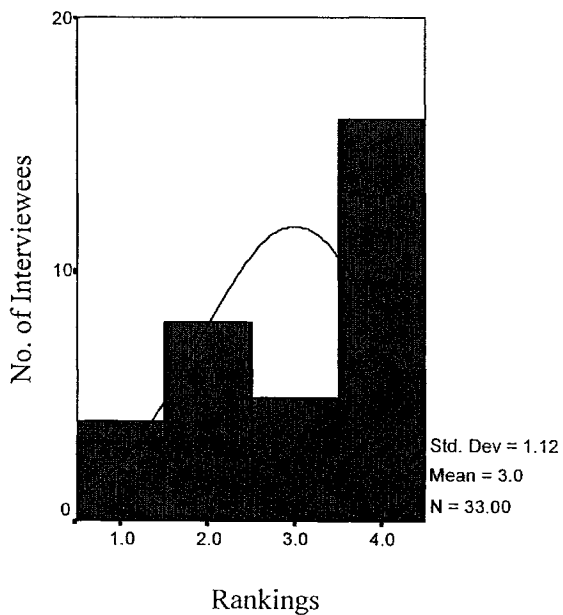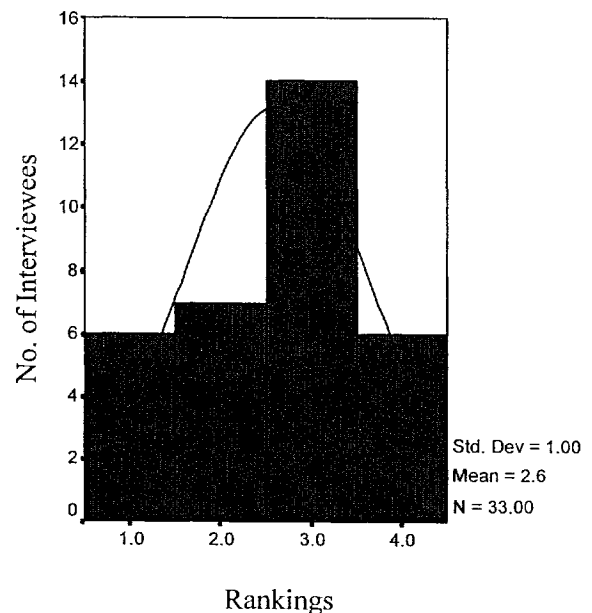
Rankings

Appendix 9

Distribution of the interviewees' rankings for the main four sources that shape
operational norms of the global airline industry
(Question #10 of interviews)

10a. Civil aviation department or the Ministry of transportation of different nations

Std. Dev = 1.00
Mean = 2.6
N = 33.00
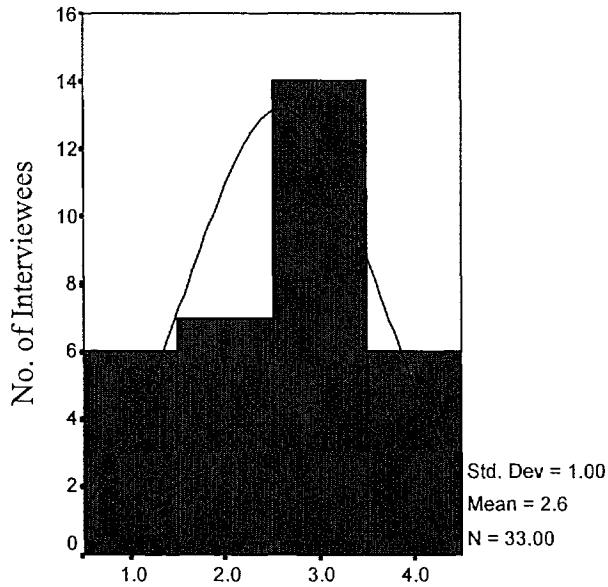
Rankings

10b. The activities of all airlines around the world

Std. Dev = .81
Mean = 2.8
N = 33.00
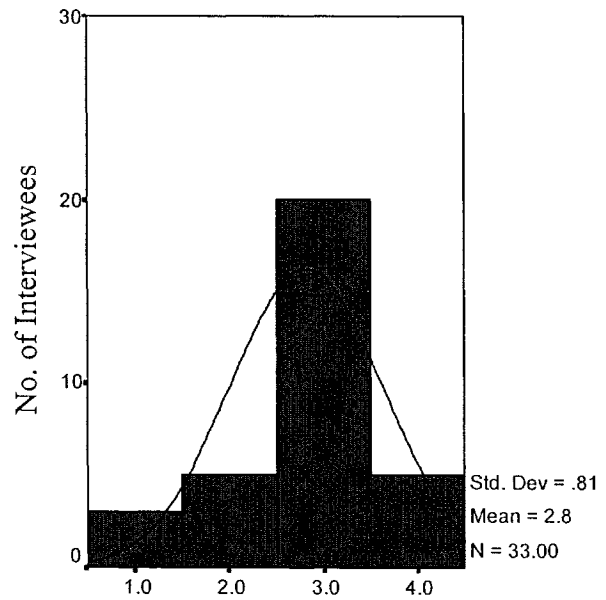
Rankings

10c. The major carriers that are based in North America and Europe

Std. Dev = 1.02
Mean = 3.3
N = 33.00
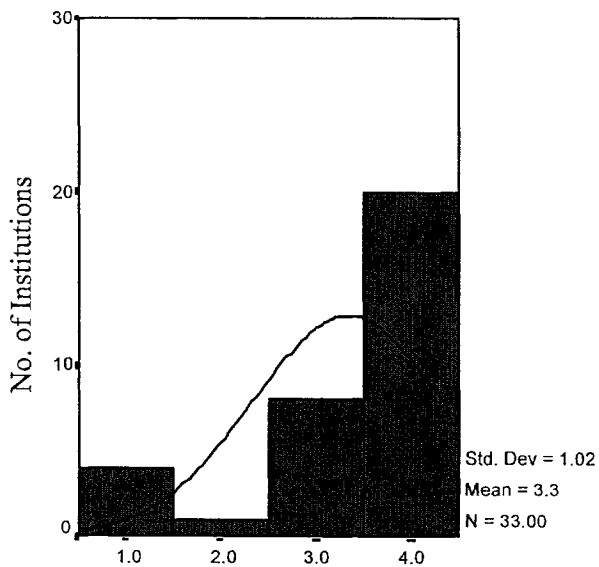
Rankings

10d. Global institutions such as IATA and ICAO

Std. Dev = .86
Mean = 1.8
N = 33 00

Rankings

297
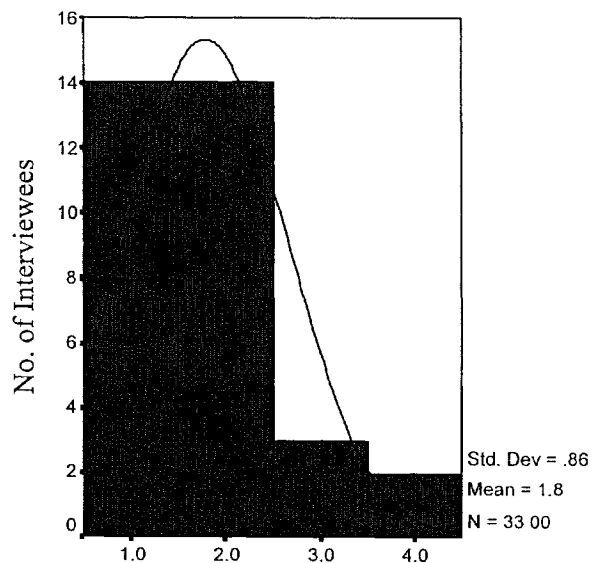
Appendix 10

Distribution of the interviewees' rankings for the main four sources that shape the norms of Iranian national aviation institutions
(Question #15 of interviews)

a. The activities of Iranian carriers
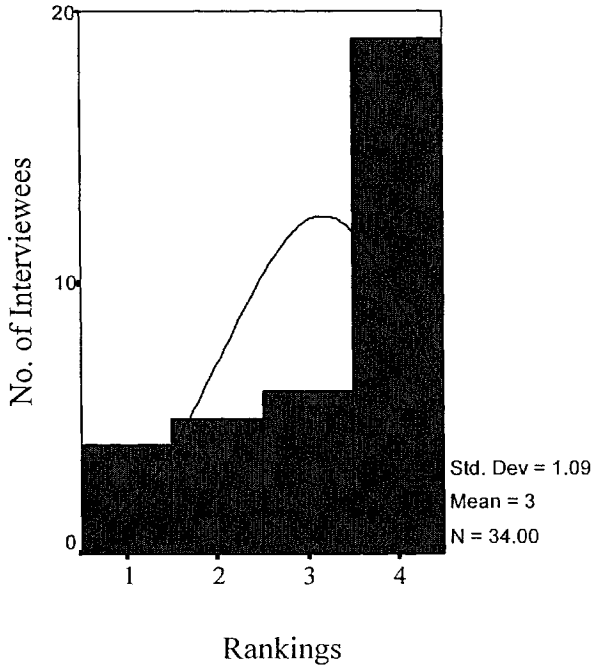
Std. Dev = 1.09
Mean = 3
N = 34.00

Rankings

b. The norms of global airline industry

Std. Dev = .82
Mean = 3
N = 34.00

Rankings

c. The major Iranian carrier(s)

Std. Dev = .74
Mean = 3
N = 34.00

Rankings

d. Global institutions such as IATA and ICAO

Std. Dev = .80
Mean = 1
N = 34.00

Rankings
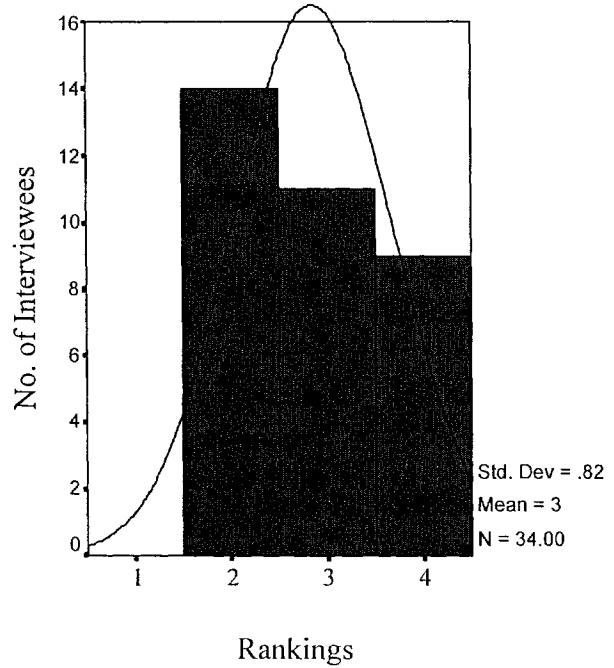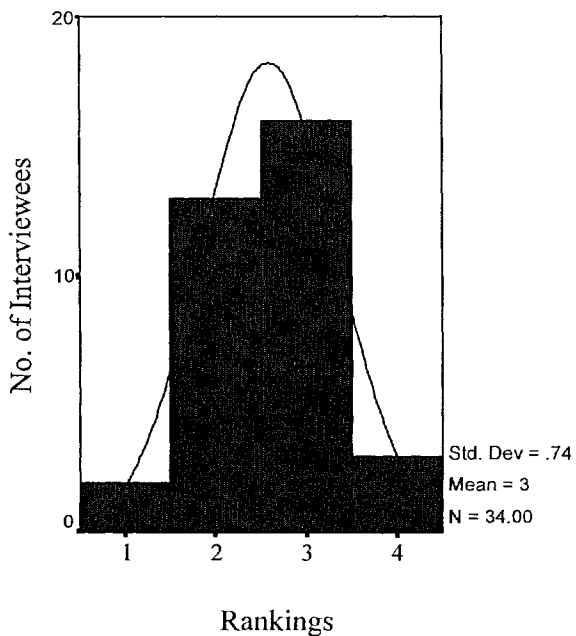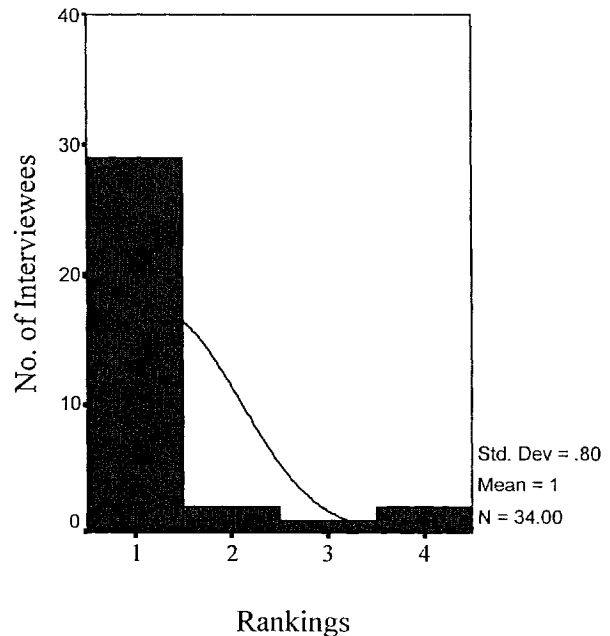
Appendix 11

Distribution of the interviewees' responses to the questions about the impact of the norms of airline industry and the activities of Iranian carriers on the Iranian aviation norms. (Questions 16, 17, and 18 of interviews)
{ Scale is : 1 = very significant...................5 = insignificant }

16. The impacts of the global airline industry norms
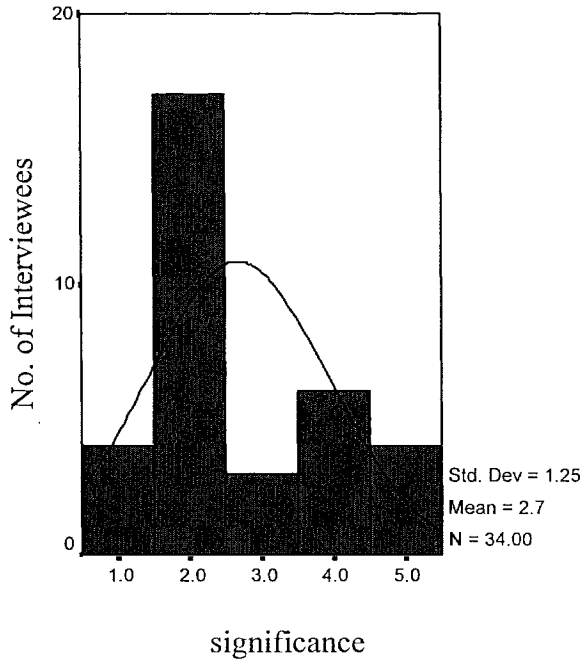
Std. Dev = 1.25
Mean = 2.7
N = 34.00

significance

17. The impacts of the commercial activities of Iranian carriers

Std. Dev = 1.11
Mean = 2.8
N = 34.00

significance

18. The impacts of the operational activities of Iranian carriers

Std. Dev = 1.00
Mean = 2.9
N = 34.00

Significance

299
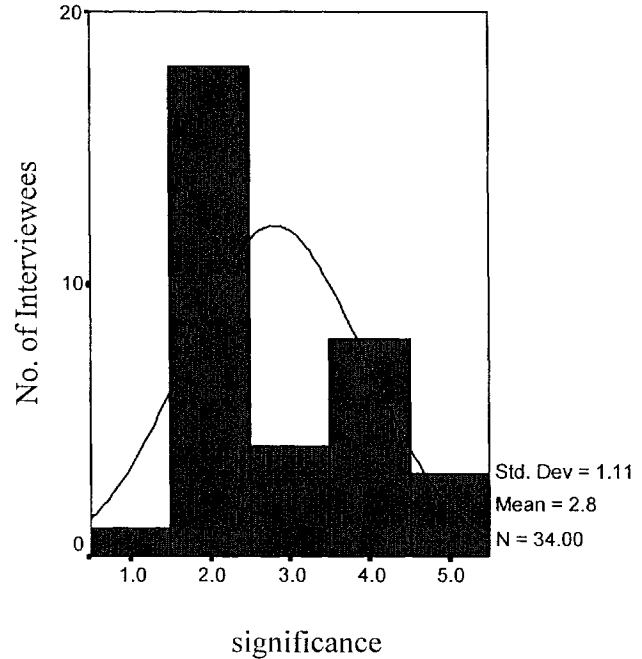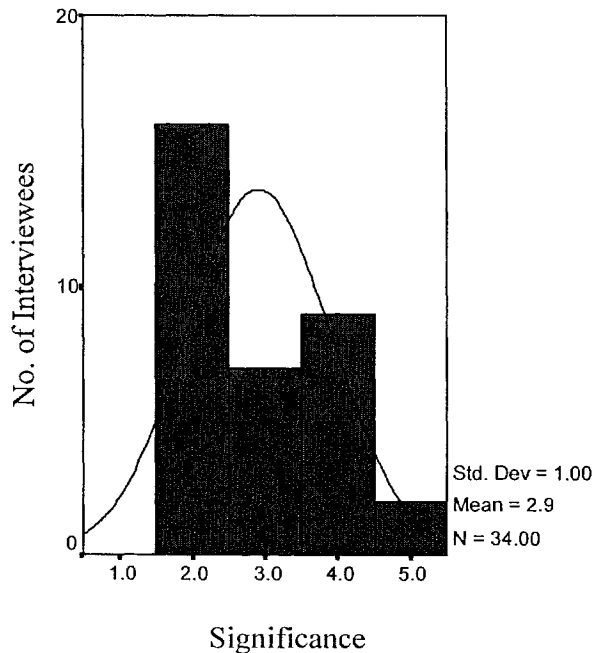
Appendix 12

Distribution of the interviewees' responses to the extent to which seven specific commercial and operational strategies and activities of Iranian carriers are influenced by the norms of global airline industry (Question 19 of interviews)

{ 1: to a very great extent, 2: to a great extent, 3: to some extent, 4: to little extent, 5: to very little extent }
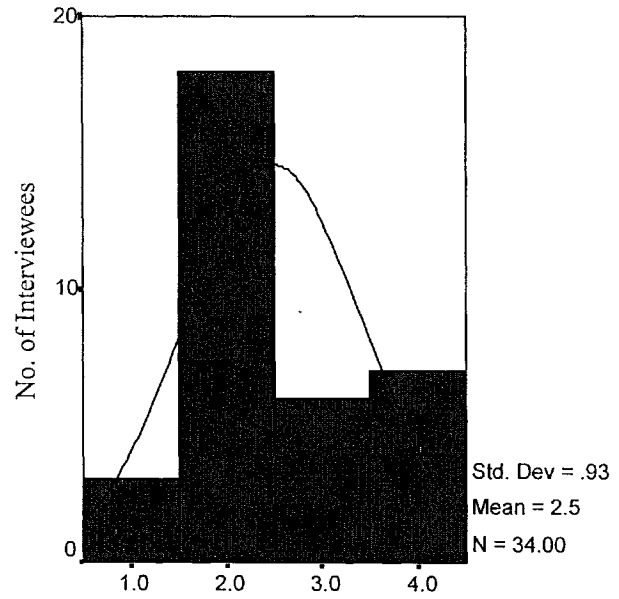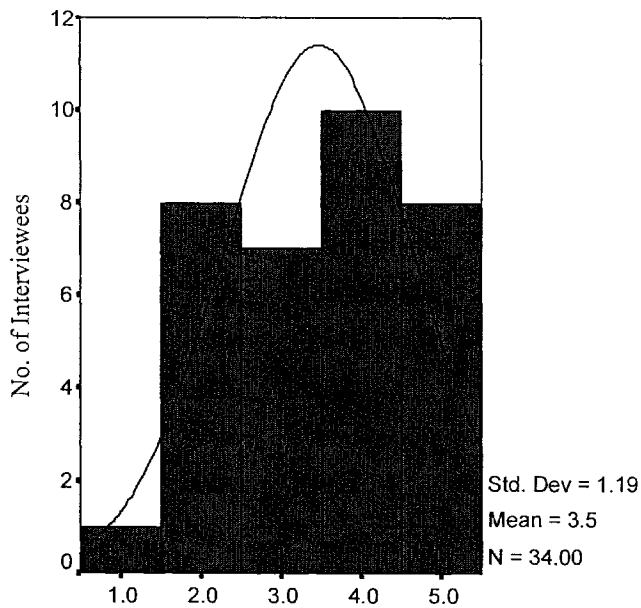
19a. Adjusting domestic airfares

Std. Dev = 1.15
Mean = 4.4
N = 34.00

The extent to which it is affected

19b. Adjusting international airfares

Std. Dev = .96
Mean = 2.3
N = 34.00

The extent to which it is affected

19c. Strategic alliances with other airlines

Std. Dev = 1.26
Mean = 3.0
N = 33.00

The extent to which it is affected

19d. Automating sales and ticketing

Std. Dev = 1.25
Mean = 2.8
N = 33.00

The extent to which it is affected

300
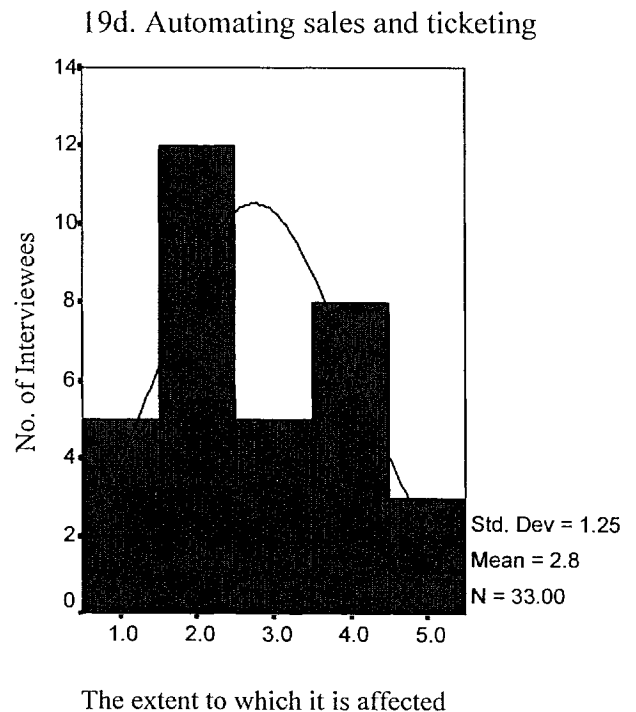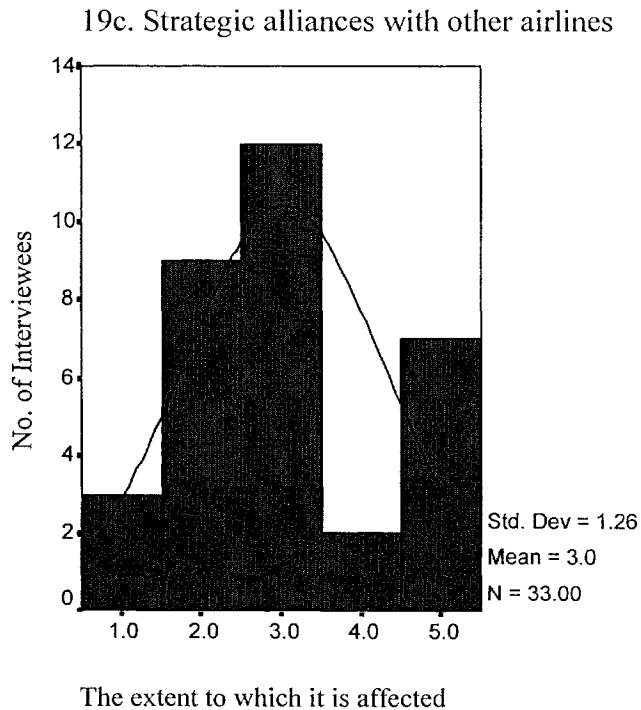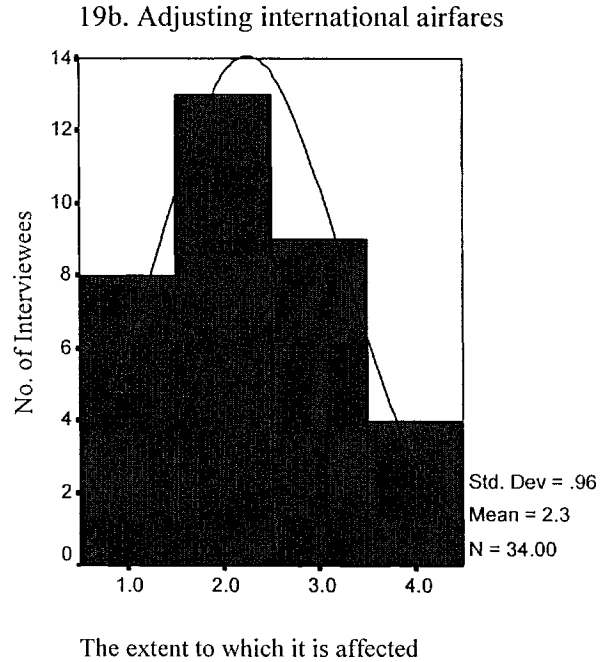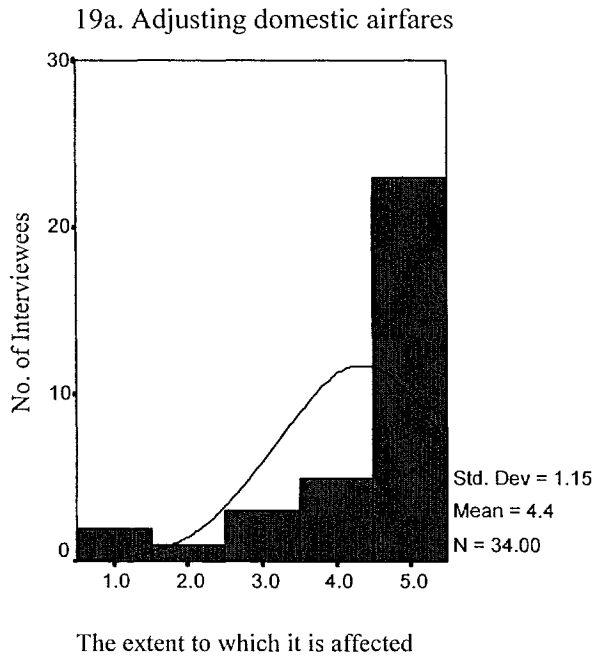
19e. Increasing utilization of airplanes

Std. Dev = 1.04
Mean = 2.6
N = 34.00
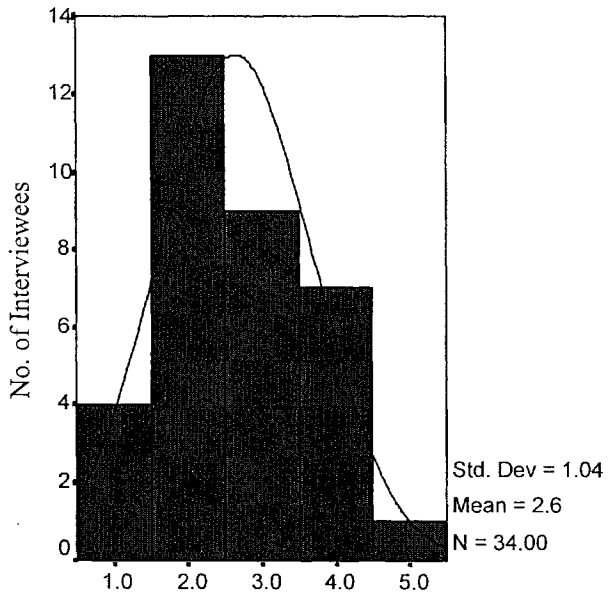
The extent to which it is affected

19f. Increasing availability of airplanes

Std. Dev = .93
Mean = 2.5
N = 34.00

The extent to which it is affected

19g. Reducing the overall average age of airplanes

Std. Dev = 1.19
Mean = 3.5
N = 34.00

The extent to which it is affected

301

Appendix 13

Distribution of the interviewees' responses to the extent by which seven specific
commercial and operational strategies and activities of Iranian carriers are influenced by
the norms of Iranian national aviation institutions (Question 20 of interviews)

{ 1: to a very great extent, 2: to a great extent, 3: to some extent, 4: to little extent, 5: to very little extent }
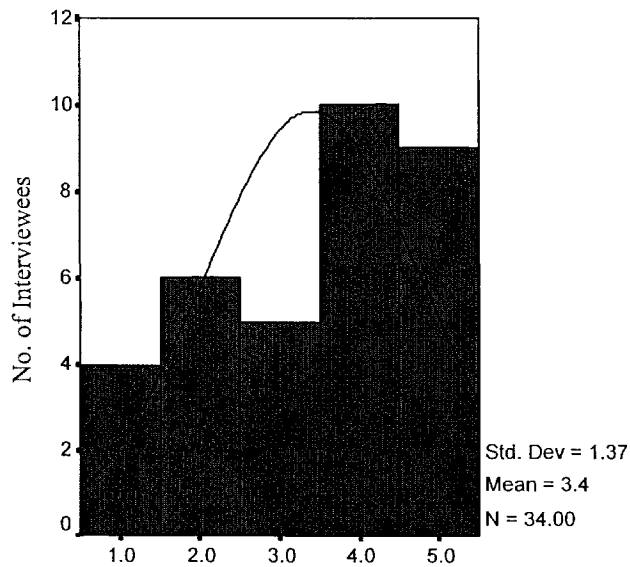
20a. Adjusting domestic airfares

Std. Dev = .74
Mean = 1.4
N = 34.00
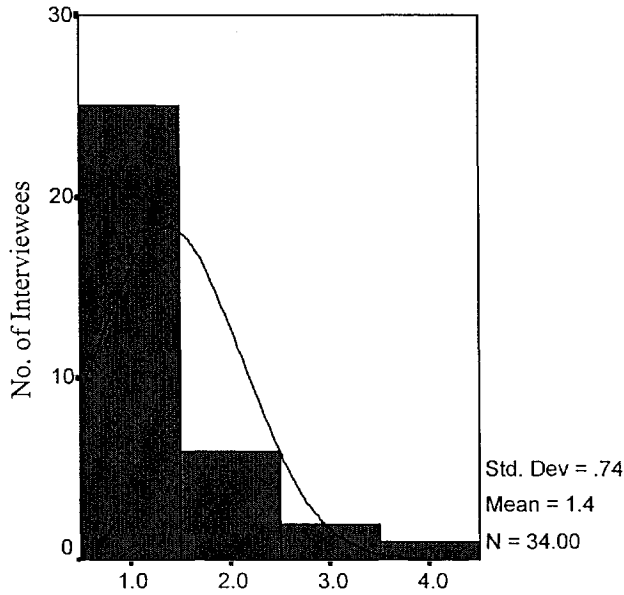
The extent to which it is affected

20b. Adjusting international airfares

Std. Dev = 1.15
Mean = 3.3
N = 34.00
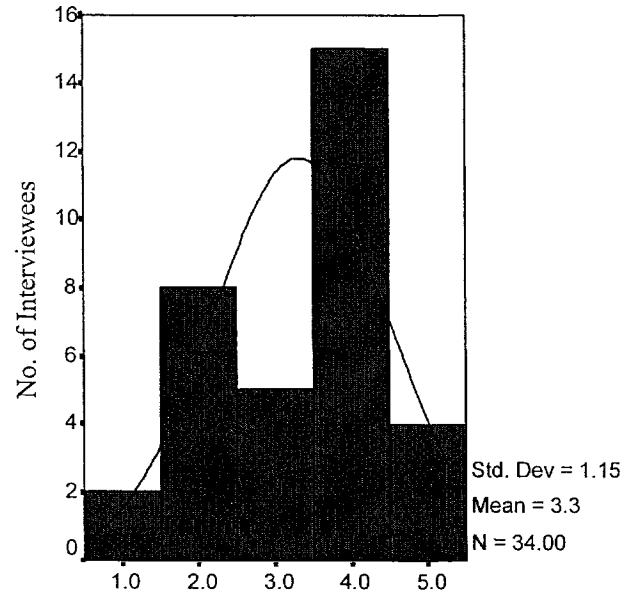
The extent to which it is affected

20c. Strategic alliances with other airlines

Std. Dev = 1.37
Mean = 3.4
N = 34.00

The extent to which it is affected

20d. Automating sales and ticketing

Std. Dev = 1.10
Mean = 4.1
N = 34.00
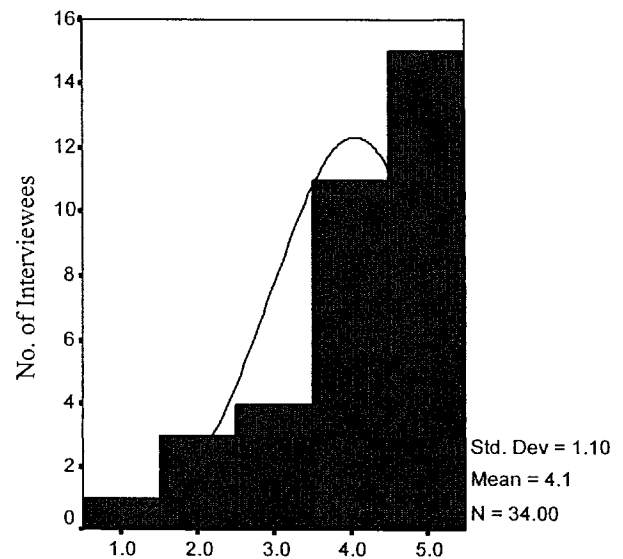
The extent to which it is affected

20e. Increasing utilization of airplanes

Std. Dev = 1.10
Mean = 3.6
N = 34.00
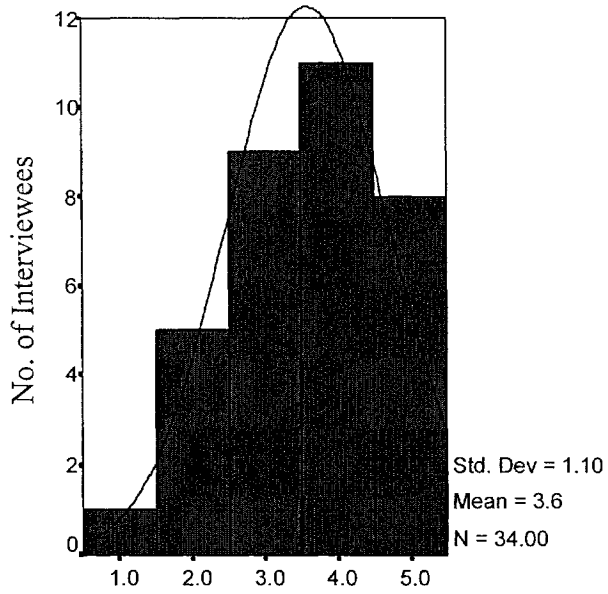
The extent to which it is affected

20f. Increasing availability of airplanes

Std. Dev = 1.34
Mean = 3.2
N = 34.00
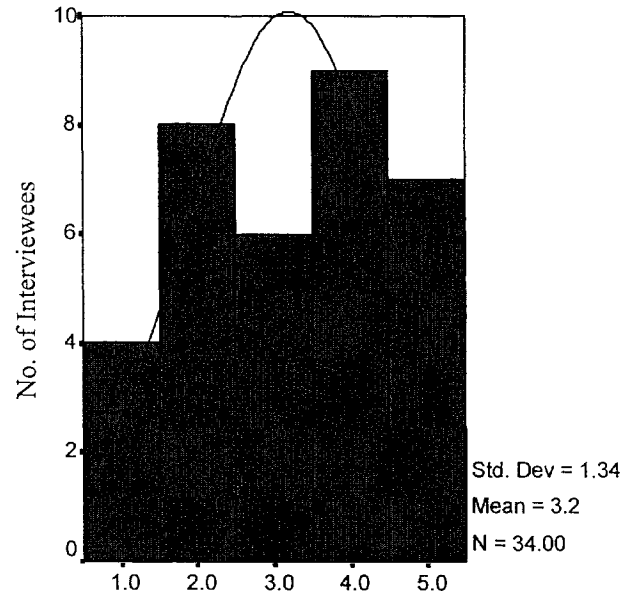
The extent to which it is affected

20g. Reducing the overall average age of airplanes

Std. Dev = 1.02
Mean = 3.4
N = 34.00

The extent to which it is affected

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