

A Multiple-Criteria Model For Assessing Political Risk Exposure in the Foreign Investment Decision

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Abstract: Political risk is an important part of the foreign investment decision for a multinational corporation. The purpose of this paper is to introduce the Analytic Hierarchy Process (AHP) as a method of measuring political risk exposure with ratio scales. In this analysis, ten criteria identifying political risk are applied to a sample of five alternative host countries. These criteria were evaluated by a group of political risk experts. The respondents then performed pairwise comparisons on the sample of host countries with respect to each of these political risk factors. This multiple-criteria analysis via an AHP formulation made the selection of the optimal host country for a foreign investment straight forward.

Keywords: Analytic Hierarchy Process (AHP); political risk exposure

I. INTRODUCTION

There are three crucial differences in applying standard domestic principles of capital budgeting analysis to foreign operations: 1) cash flow estimation is generally more difficult for overseas investments, 2) foreign cash flows may be in foreign currencies, and 3) deliberate governmental acts may truncate or divert cash flows. The latter risk, known as sovereign risk or political risk, is the focus of this study.

This paper proposes to show that the Analytic Hierarchy Process (AHP) developed by Saaty [1] is an effective method for forecasting political risk in foreign investments. Since its creation, this general theory of measurement has been successfully applied to many research fields, both physical and social, [2] and has provided scientists with a new way of looking at old problems. In this study, the old problem is how to account for political risk in international investments and the new suggested methodology is the AHP.

A particular advantage of this approach resides in its capacity to include easily subjective factors. Indeed, in a topic such as the one proposed, subjective judgments of individuals constitute a critical part of the decision process. This is an important consideration since this study requires a substantial amount of judgmental input data relative to political risk.

This paper introduces the AHP as a convenient methodology for processing subjective information. It describes the application of this technique to the decision faced by most U.S. based multinational corporations (MNCs); namely, how to choose the least politically risky country among a sample of host countries. To identify this "optimal host country," one needs a hierarchic or a network structure to represent the problem and pairwise comparisons to establish relations within the structure.

This paper is organized as follows. In Section II the problem is specified; Section III describes the AHP model mechanics; Section IV introduces the mathematics of this decision-aiding method; Section V offers an example of how to use the proposed technique and presents the results; in Section VI concluding remarks are drawn.

II. PROBLEM SPECIFICATION

Political risk is one of the key differences between international and domestic capital budgeting decisions. In most instances, this type of risk refers to the political authority of a nation state to supercede within its own borders reasonable legal expectations. Foreign subsidiaries which are physically located within the jurisdiction of the host country are subject to rules established by local government

authorities, no matter how arbitrary and unfair such regulations may appear. Additionally, factors external to the host government can increase political risk, e.g., Iraqi invasion of Kuwait.

Traditionally, much of the literature on foreign risk exposure [3, pp. 288-326] has concentrated on the extreme cases of expropriation and nationalization. In fact, many other types of political risk exposure exist and can be used by host governments to threaten the profitability of foreign investments. Political risk can occur in many situations, some obvious, some subtle. An obvious situation is when a government is overthrown and the new one becomes hostile to the MNC. A subtle situation is when family members, friends, and supporters of the ruler (e.g. the Philippines during the Marcos years) are given control over the economy of the country and can determine who will be permitted to do transactions with that government and country. These people "sell their agreement" to the highest bidder, and the winning firm will have a very favorable position as long as that "official" continues to favor that corporation and retains his status with the ruler. A change in either situation could result in the ouster of the multinational firm. These are only a few of the potential forms and situations where political risk can present itself. For these reasons it must be considered along with the potential economic benefits for doing business in a particular country before the investment is made.

To help the MNC with the forecasting of political risk, a number of mathematical models have been introduced. [3] Some of these models manipulate hundreds of factors by multivariate analysis methods and are understood only by those with a strong background in quantitative analysis. Some others rely on group discussions where one person could become dominant in his or her discussion, thereby causing a consensus around that particular view. This paper suggests a method (AHP) that can be more easily comprehended by the decision makers, thereby allowing them a higher level of participation in the political risk evaluation. In addition to the ease of its use, there are three other features to note with this model. First, the list of variables that identify political risk is not exhaustive. It would be possible to add or delete criteria depending on the views and experiences of the user. The second feature is the flexibility of the AHP to combine unlike factors, such as internal turmoil and foreign relations, in the decision making process. Finally, it is less subject to a dominant view since it is based on opinion surveys filled out individually. There is less of a chance for a person or group to be influenced by one dominant view.

III. THE AHP MODEL MECHANICS

The AHP is a decision analysis appropriate for situations in which the decision maker desires to consider multiple criteria in arriving at the overall best decision. The model works on the three basic principles of logical analysis: construct hierarchies, establish priorities, and maintain logical consistency. Structuring the hierarchies is to break down the problem into its separate elements and levels. Priorities are based on pairwise comparisons which create a rank of the elements in order of importance. A mathematical test is used to ensure consistency of grouping and ranking.

Structuring the Hierarchy

The approach to structuring the hierarchy depends on the kind of decision to be made. The direction of this paper applies to a forward planning decision. The hierarchy pyramid can be structured by enumerating the relevant details or elements that should enter into the decision outcome. The elements are then grouped in levels. The highest level includes the overall objective. The lowest level includes final actions or alternative plans. The intermediate level(s) contains factors for evaluations against the overall objective, other level elements, and the outcomes. The intermediate level elements are then grouped by importance and put into homogeneous levels. The number of levels and number of elements may differ with each case.

Setting Priorities

Priorities are set on the basis of the relative impact of each element on the next higher level. The

exercise is repeated until all combinations of elements have been exhausted. The next highest level element in the pairwise comparison is the "property". The level comparisons result in a "priority vector" or relative importance of the elements with respect to each property or criteria. The final step is to evaluate each vector by the priority of each property. The element on the lowest level with the highest weight is the action or alternative to be chosen.

IV. APPLICATION OF THE AHP MODEL

Structure

The hierarchy contains three levels (see Exhibit 1). The first level of the hierarchy identifies the objective: the optimal political risk exposure for a foreign investment. The second level identifies the characteristics of political risk exposure. In this particular case it is composed of the ten political risk factors defined in Exhibit 2. These are the criteria by which the optimal recipient country of an international investment will be determined. The third and final level of the hierarchy is composed of the five countries which have been selected as potential hosts for a foreign investment. Since risk of expropriation of United States' assets in developed nations is small, five developing countries—in Latin America (Brazil and Mexico), in Africa (Algeria) and in the Far East (Taiwan and China)—were chosen. Each prospective host country in the final level of the hierarchy can be pairwise compared with the other host countries with respect to each of the political risk factors of level two.

The Model

The basis of the AHP is the completion of an "n x n" matrix where $A = a_{ij}$ at each level of the decision hierarchy. A sample structure of this matrix used for a pairwise comparison is outlined below:

$$A = \begin{matrix} & \begin{matrix} a_1 & a_2 & \dots & a_n \end{matrix} \\ \begin{matrix} a_1 \\ a_2 \\ \dots \\ a_n \end{matrix} & \begin{pmatrix} 1 & a_{12} & \dots & a_{1n} \\ a_{21} & 1 & \dots & a_{2n} \\ \dots & \dots & \dots & \dots \\ a_{n1} & a_{n2} & \dots & 1 \end{pmatrix} \end{matrix} \quad (1)$$

The question asked at this stage is "Which country is more advantageous for the MNC with respect to, say, political stability?" The entry of matrix A is the answer to this pairwise comparison question. The comparison scale shown in Exhibit 3 provides the entry. If the entry 9 (taken from Exhibit 3) is shown at the a_{12} position, this means that country a_1 is "far more favored" than country a_2 with respect to "political stability". One result of a pairwise comparison of elements within the matrix structure is that a diagonal which runs from the upper left corner of the matrix A to the lower right corner is composed entirely of cells with the value 1. This results from the fact that the diagonal elements of (1) depict the comparison between an element and itself. Once the upper triangular portion values above the "one diagonal" are known, the lower triangular portion values can be determined since the transpose values are reciprocals: $a_{ij} = 1/a_{ji}, \forall_{ij}$. Subsequently, 1/9 is entered at the symmetric position a_{21} . Once all the entries of the matrix A are available, one solves for the priority vector from the following eigenvector problem:

$$Aw = \lambda_{\max} w \quad (2)$$

where $w = (w_i)$ are the weights on the priority vector and λ_{\max} is the Perron root or principal eigenvalue of A.

An important consideration in terms of the quality of the ultimate decision (the optimal host country) relates to the consistency of judgments that the decision maker demonstrated during the series of pairwise comparisons. Consistency is checked by making certain that

$$a_{ij} = a_{ik} a_{kj}, \forall_{i,j,k} \quad (3)$$

A positive reciprocal matrix is called consistent if there is a positive vector w such that $a_{ij} = w_i w_j + e_{ij}$, \forall_{ij} . E_{ij} is some error that represents inconsistencies in judgments and then $a_{ij} \neq a_{ik} a_{kj}$. It can be shown that the principal eigenvalue of the matrix A , λ_{max} , satisfies $\lambda_{max} \geq n$. Theorem 7-15 of Ref. [1] states that $\lambda_{max} = n$ holds only for a perfectly consistent case. A consistency index is now defined as

$$C.I. = (\lambda_{max} - n) / (n - 1) \quad (4)$$

C.I. = 0 in the perfectly consistent case. The final consistency test is defined as the consistency ratio (C.R.). This ratio is defined as

$$C.R. = C.I. / R.I. \quad (5)$$

C.R. is required to be < 0.10 for acceptable results [1]. The random consistency index (R.I.) is the average C.I. resulting from a number of randomly generated judgment matrices. The commonly used table for R.I. [1, p.21] resulted from matrices generated by randomly selecting, with a uniform distribution, an integer from the response scale of one to nine. That number was randomly placed in a judgment matrix, and its reciprocal was appropriately placed to preserve the reciprocal symmetric nature of a judgment matrix [1, p.21]. Repeating this experiment yields the following value for R.I.

Matrix size (n)	1	2	3	4	5	6	7	8	9	10
Random Consistency Index (R.I.)	0	0	0.58	0.90	1.12	1.24	1.32	1.41	1.45	1.49

V. DATA COLLECTION AND FINDINGS

Data Collection

Cross country political risk data were obtained from an eleven-page questionnaire mailed to a substantial number of foreign risk experts*. The respondents were randomly selected from the *Directory of American Firms Operating in Foreign Countries*, published by Uniworld Business Publications. First, the AHP model and the logic of its procedure were explained to the respondents, then a couple of simple examples were illustrated. In the first part of the questionnaire, they were asked to judge, from their perspective as foreign risk experts and regardless of any particular country, the relative importance of the ten factors related to political risk as they are defined in Exhibit 2. This was accomplished through a pairwise comparison of each political risk factor to every other factor. The subsequent AHP matrix of level two of the hierarchy was calculated.

In the second part of the questionnaire, respondents were asked to perform pairwise comparisons of the host countries (the People's Republic of China, Algeria, Mexico, Brazil, and Taiwan) with respect to each of the ten political risk factors from level two of the hierarchy. Responses to the second part of the survey were used to construct level three of the hierarchy.

As suggested by Saaty, geometric means for all these respondents were tabulated and rounded to the nearest integer due to the fact that the AHP model requires only a discrete scale from one through nine. The pairwise comparisons and consistency ratios were then performed on the matrices.

Findings

As an illustration, it was stated in the beginning of the questionnaire that a theoretical MNC has decided to build a plant in one of five alternative developing countries. It was also stated in the questionnaire that the comparative advantages of the direct investment have already been analyzed and only the political risk variable needs to be evaluated and incorporated in the decision-making matrices. The calculated matrix for level two of the hierarchy [Exhibit 4] shows the results of pairwise comparisons of the ten political risk factors and the importance accorded to each one of them by the respondents. Table 1 (excerpted from Exhibit 4) shows the political risk factors and their respective priority weights.

* In a few instances, followup letters had to be sent to people who had not responded to the questionnaire within a specified period of time.

Table 1: Contribution of the Political Risk Criteria to Overall Objective (Optimal Host Country)

	Political Stability	Internal Turmoil	Int'l Rel'n	Exprop /Natztn	Breach Contract	Gov't Interf	Trade Restr	Cost of Bus	Tax Struct	Repat Profit
Priority Weights	0.179	0.042	0.057	0.129	0.118	0.113	0.072	0.074	0.072	0.144

These results established the relative importance given to political stability. A better political climate is deemed the most important feature in the selection of a host country. A democratically elected government is considered to be less prone to such drastic actions as breach of contract or expropriation than a dictatorial one. Also of prime importance is repatriation of profit. Expropriation and nationalization, breach of contract, and government interference, while not as important as political stability, are still more important than the remaining political risk factors. These other factors have very low priorities in comparison with political stability and repatriation of profit. The values in this vector of relative weights can be interpreted either as the importance of one factor over another, e.g. political stability is approximately four times (0.179/0.042) as important as internal turmoil, or as the relative attention that should be paid a particular factor (political stability = 17.9%) in selecting the country that should host the investment.

Continuing with the AHP analysis of the host country selection, the pairwise comparison procedure determines the priorities of the five alternative countries in terms of the ten political risk factors. Exhibit 5 shows the calculated matrices and the resulting country priority weights vis-à-vis the selected political risk criteria. In the priority weights summarized in Table 2, we see the preference that Taiwan was given in six aspects of political risk: internal turmoil, expropriation and nationalization, governmental interference, trade restrictions, tax structure, and repatriation of profit. As to political stability and breach of contract, Taiwan and Mexico are equally favored. One should also note the relative importance given Mexico in the areas of international relations and cost of doing business. Brazil, while not as favored as Taiwan and Mexico, is still judged, by far, politically more hospitable for an investment than Algeria or China.

Table 2: Country Weights with Respect to Each Political Risk Factor *

	Taiwan	Mexico	Brazil	Algeria	China
Political Stability	.307	.307	.239	.041	.106
Internal Turmoil	.341	.259	.180	.108	.112
Internal Relations	.253	.293	.253	.125	.076
Exprop/Nationaliztn	.337	.324	.207	.077	.055
Breach of Contract	.278	.278	.278	.101	.065
Govt Interference	.385	.193	.164	.177	.082
Trade Restrictions	.340	.296	.221	.074	.068
Cost of Doing Bus	.274	.426	.128	.111	.061
Tax Structure	.300	.266	.266	.084	.084
Repatriatn of Profit	.376	.320	.168	.080	.056

* Shaded numbers indicate country lead vis-à-vis one political risk factor.

In addition to the pairwise comparisons for the decision alternatives (level three of the hierarchy), one must use the same pairwise comparison procedure to determine the optimal host country. This synthetization process can be best understood if we think of the priority for each political criterion as a weight that reflects its importance. The overall priority for each decision alternative concerning country selection is obtained by summing the product of the criterion priority times the priority of the decision

alternative with respect to that criterion. This synthetization process—illustrated in Exhibit 6—can be used to convert the pairwise comparison information into the priorities for the overall goal, as shown in Table 3.

Table 3: Priorities for the Overall Goal

Country	Taiwan	Mexico	Brazil	Algeria	China	Total
Priority	.323	.297	.212	.092	.076	1.000

These results provide a basis for the MNC to make a decision regarding country selection. The priority vector (Table 3) derived through the use of the AHP indicates that out of the five countries studied, Taiwan (.323) is the one perceived as the optimal host country for a foreign investment as far as political risk is concerned. It is approximately four times preferred to Algeria (.323/.092) and China (.323/.076). Brazil (.212) and especially Mexico (.297) rank immediately below Taiwan.

VI. CONCLUSION

In this paper, we presented another practical use to multiple- criteria decision making known as the Analytic Hierarchy Process. [4] It was successfully applied to the problem of selecting an optimal host country for a foreign investment when political risk is a concern.

A multinational firm that intends to use the AHP to forecast political risk might deal with two possible issues. First, who shall participate in deciding which criteria shall be considered to manage political risk? Second, who shall decide the relative importance of the criteria included? Since it is probable that most MNCs intend to maintain secrecy regarding their future foreign ventures, it is unlikely that they will send opinion surveys to senior international managers of other multinational firms. A more likely answer is the use of a panel of their own in-house political risk analysts. First, their experts will determine a checklist of variables that are thought to influence political risk, as was done in this study. Next, an AHP model is developed to derive priorities for levels of performance, or “ratings,” with respect to each of these criteria (e.g. internal turmoil, international relations, or trade restrictions). Then each alternative host country is assigned a rating relative to each criterion. The AHP-derived priorities for the ratings are used to determine the alternative’s priority weight. The priority weight of any alternative host country can be compared relative to any other alternative, and the ranking and prioritization identifying the optimal host country are straightforward. Finally, software associated with the AHP exists [6] and should be able to accommodate a large number of political risk criteria and matrix size.

References

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Exhibit I: Hierarchy of Optimal Host Country Political Risk Exposure

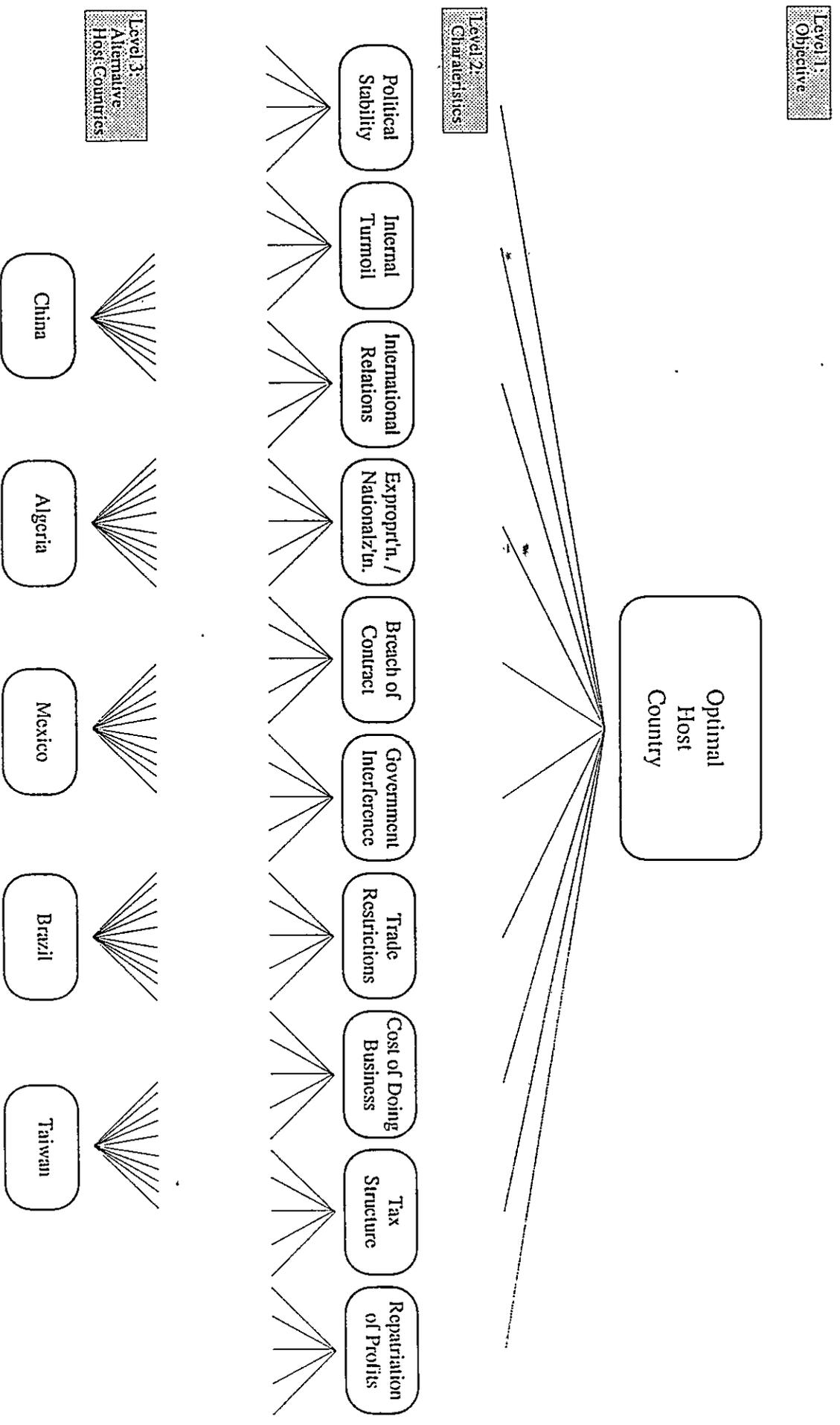


Exhibit 2: Definition of Political Risk Factors

Case: A large U.S. multinational corporation has selected several developing countries (China; Taiwan; Brazil; Mexico; and Algeria) as potential sites to build a plant. The plant will manufacture intermediate goods which will be purchased by the parent company in the U.S. for assembly of a final product marketed throughout its domestic and international network.

The political risk factors to be ranked are as follows:

1. **Political Stability:** This reflects the effectiveness of a government to stay on top of its political opposition and implement policies. It also reflects the efficiency of the legal judiciary system.
2. **Internal Social Turmoil:** This deals with the unified country idea, but includes the welfare of the people leading away from strikes, terrorism directed toward the MNC's interests in the host country, boycotts, or civil wars.
3. **International Relations:** This refers to diplomatic stress between host and home countries and host country's relationship with neighboring nations.
4. **Expropriation or Nationalization:** This means the host government taking the control of running the company away from the MNC.
5. **Breach of Contract:** This is the host government's potential for backing out of written agreements with foreign companies or insisting on renegotiations.
6. **Continual Host Government Interference in Foreign Ventures:** This occurs when host government agencies directly interfere with the performance of the contract by imposing new rules, conditions, or fees that affect the profitability of the venture after contracts are signed.
7. **Trade Restrictions:** This is making importing and exporting difficult for the foreign companies and creating an inhospitable investment scene.
8. **Extraordinary Cost of Doing Business:** This means that there is a widespread belief among officials and others that a foreign company is fair game for any costs and no matter how many costs it is loaded down with it will nevertheless be able to earn a profit and retain its enthusiasm for the host country.
9. **Tax Structure and Administration:** This means that foreign companies are faced by a complex web of tax legislation, regulations, and rulings that appear to be lacking consistency in their interpretation and implementation. As a result, foreign companies are prevented from evaluating the profitability of a proposed project.
10. **Inability of Investors to Repatriate Profits:** This means that foreign companies will have trouble converting earnings into foreign exchange for the repatriation of profits because of the host country's rigid exchange rules.

Exhibit 3: The Pairwise Comparison Scale

Intensity of Importance	Definition	Explanation
1	Equal importance	Two elements contribute equally to the objective
3	Moderate importance of one over another	Experience and judgment slightly favor one element over another
5	Essential or strong importance	Experience and judgment strongly favor one element over another
7	Very strong importance	An element is strongly favored and its dominance demonstrated in practice
9	Extreme importance	The evidence favoring one activity over another is of the highest possible order of affirmation
2,4,6,8	Intermediate values between adjacent judgments	When compromise is needed between two judgments
Reciprocals	If activity i has one of the above numbers assigned to it when compared with activity j, then j has the reciprocal value when compared with i	
Rationals	Ratios arising from the scale	If consistency were to be forced by obtaining n numerical values to span the matrix

Exhibit 4: Second Level of the Hierarchy -- Comparison Matrix of the Political Risk Factors

	Political Stability	Internal Turmoil	Int'l Rel'n	Exprop. /Natztn	Breach Contract	Gov't Interf.	Trade Restr.	Cost of Bus.	Tax Struct.	Repat. Profit
Political Stability	1	4	2	2	2	2	3	2	2	1
Internal Turmoil	1/4	1	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/3
Intl Relatn	1/2	2	1	1/2	1/2	1/2	1/2	1/2	1/2	1/3
Exprop/ Natztn	1/2	2	2	1	1	2	2	2	2	1
Breach Contrt	1/2	2	2	1	1	1	2	2	2	1
Govt Interf	1/2	2	2	1/2	1	1	2	2	2	1
Trade Rest	1/3	2	2	1/2	1/2	1/2	1	1	1	1/2
Cost of Dng Bus	1/2	2	2	1/2	1/2	1/2	1	1	1	1/2
Tax Struc	1/2	2	2	1/2	1/2	1/2	1	1	1	1/3
Repat Profit	1	3	3	1	1	1	2	2	3	1
Priority Weights	0.179	0.042	0.057	0.129	0.118	0.113	0.072	0.074	0.072	0.144

$\lambda_{max} = 10.303$ C.I. = 0.034 C.R. = 0.023

Exhibit 5: Third Level of the Hierarchy -- Pairwise Comparison Matrices with Respect to Each Political Risk Factor

Matrix 1					
Political Stability	1	2	3	4	5
1. China	1	4	1/4	1/2	1/4
2. Algeria	1/4	1	1/8	1/4	1/8
3. Mexico	4	8	1	1	1
4. Brazil	2	4	1	1	1
5. Taiwan	4	8	1	1	1
Priorities:	.106	.041	.307	.239	.307
$\lambda_{max} = 5.141$	C.I. = 0.035		C.R. = 0.031		

Matrix 2					
Internal Social Turmoil	1	2	3	4	5
1. China	1	1	1/3	1/2	1/2
2. Algeria	1	1	1/2	1/2	1/3
3. Mexico	3	2	1	2	1/2
4. Brazil	2	2	1/2	1	1/2
5. Taiwan	2	3	2	2	1
Priorities:	.112	.108	.259	.108	.341
$\lambda_{max} = 5.137$	C.I. = 0.035		C.R. = 0.031		

Matrix 3					
International Relations	1	2	3	4	5
1. China	1	1/2	1/4	1/3	1/3
2. Algeria	2	1	1/3	1/2	1/2
3. Mexico	4	3	1	1	1
4. Brazil	3	2	1	1	1
5. Taiwan	3	2	1	1	1
Priorities:	.076	.125	.293	.253	.253
$\lambda_{max} = 5.034$	C.I. = 0.008		C.R. = 0.007		

Matrix 4					
Expropriation/Nationalization	1	2	3	4	5
1. China	1	1/2	1/5	1/4	1/5
2. Algeria	2	1	1/4	1/4	1/5
3. Mexico	5	4	1	2	1
4. Brazil	4	4	1/2	1	1/2
5. Taiwan	5	5	1	2	1
Priorities:	.055	.077	.324	.207	.337
$\lambda_{max} = 5.099$	C.I. = 0.025		C.R. = 0.022		

Matrix 5					
Breach of Contract	1	2	3	4	5
1. China	1	1/2	1/4	1/4	1/4
2. Algeria	2	1	1/3	1/3	1/3
3. Mexico	4	3	1	1	1
4. Brazil	4	3	1	1	1
5. Taiwan	4	3	1	1	1
Priorities:	.065	.101	.278	.278	.278
$\lambda_{max} = 5.028$	C.I. = 0.007		C.R. = 0.006		

Matrix 6					
Host Gov't Interference	1	2	3	4	5
1. China	1	1/2	1/3	1/2	1/4
2. Algeria	2	1	1	1	1/2
3. Mexico	3	1	1	1	1/2
4. Brazil	2	1	1	1	1/3
5. Taiwan	4	2	2	3	1
Priorities:	.082	.177	.193	.164	.385
$\lambda_{max} = 5.040$	C.I. = 0.010		C.R. = 0.009		

Matrix 7					
Trade Restrictions	1	2	3	4	5
1. China	1	1	1/5	1/3	1/5
2. Algeria	1	1	1/4	1/3	1/4
3. Mexico	5	4	1	1	1
4. Brazil	3	3	1	1	1/2
5. Taiwan	5	4	1	2	1
Priorities:	.068	.074	.296	.221	.340
$\lambda_{max} = 5.045$	C.I. = 0.011		C.R. = 0.010		

Matrix 8					
Cost of Doing Bus	1	2	3	4	5
1. China	1	1/2	1/6	1/2	1/5
2. Algeria	2	1	1/4	1	1/3
3. Mexico	6	4	1	3	2
4. Brazil	2	1	1/3	1	1/2
5. Taiwan	5	3	1/2	2	1
Priorities:	.061	.111	.426	.128	.274
$\lambda_{max} = 5.037$	C.I. = 0.009		C.R. = 0.008		

Matrix 9					
Tax Structure & Adminisrtn	1	2	3	4	5
1. China	1	1	1/3	1/3	1/4
2. Algeria	1	1	1/3	1/3	1/4
3. Mexico	3	3	1	1	1
4. Brazil	3	3	1	1	1
5. Taiwan	4	4	1	1	1
Priorities:	.084	.084	.266	.266	.300
$\lambda_{max} = 5.017$	C.I. = 0.004		C.R. = 0.004		

Matrix 10					
Repatriation of Profit	1	2	3	4	5
1. China	1	1/2	1/5	1/3	1/6
2. Algeria	2	1	1/4	1/3	1/5
3. Mexico	5	4	1	2	1
4. Brazil	3	3	1/2	1	1/3
5. Taiwan	6	5	1	3	1
Priorities:	.056	.080	.320	.168	.376
$\lambda_{max} = 5.078$	C.I. = 0.020		C.R. = 0.018		

Exhibit 6: The Decision Matrix

	Political Stability	Internal Turmoil	Int'l Rel'n	Exprop. /Natz'n	Breach Contract	Gov't Interf.	Trade Restr.	Cost of Bus.	Tax Struct.	Repat. Profit	Overall Priority
Priority Weights	.179	.042	.057	.129	.118	.113	.072	.074	.072	.144	1.000
China*	.106	.112	.076	.055	.065	.082	.068	.061	.084	.056	.076
Algeria	.041	.108	.125	.077	.101	.177	.074	.111	.084	.080	.092
Mexico	.307	.259	.293	.324	.278	.193	.296	.426	.266	.320	.297
Brazil	.239	.180	.253	.207	.278	.164	.221	.128	.266	.168	.212
Taiwan	.307	.341	.253	.337	.278	.384	.341	.274	.300	.376	.323
	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

* Priority Weight

for China = .179(.106) + .042(.112) + .057(.076) + .129(.055) + .118(.065)
 + .113(.082) + .072(.068) + .074(.061) + .072(.084) + .144(.056) = .076

Repeating this calculation for Algeria, Mexico, Brazil, and Taiwan yields their overall priorities.