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A Cooperative Analysis Procedure for Use by Diplomats and Negotiators: With a Proposed Step for Resolving Conflict on the Korean Peninsula

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Walter Isard and Iwan J. Azis

Abstract

This paper is concerned with the development of a cooperative analysis approach for use by Diplomats and Negotiators in resolving certain difficult conflicts. It employs concepts from economics and peace science without any diminution of the urgent need for superb diplomacy and negotiations skills. Its potential use for resolving the major conflict in the Korean peninsula is explored. A policy option is set forth involving a small withdrawal of North Korean troops from North Korea's Eastern DMZ border for economic development in that area of North Korea without any reduction whatsoever of the North Korean military power. For each party involved, benefits significantly greater than costs are found for this policy.

A COOPERATIVE ANALYSIS PROCEDURE FOR USE BY DIPLOMATS AND NEGOTIATORS: With A Proposed Step for Resolving Conflict on the Korean Peninsula

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Abstract: This paper is concerned with the development of a cooperative analysis approach for use by Diplomats and Negotiators in resolving certain difficult conflicts. It employs concepts from economics and peace science without any diminution of the urgent need for superb diplomacy and negotiations skills. Its potential use for resolving the major conflict in the Korean peninsula is explored. A policy option is set forth involving a small withdrawal of North Korean troops from North Korea's Eastern DMZ border for economic development in that area of North Korea without any reduction whatsoever of the North Korean military power. For each party involved, benefits significantly greater than costs are found for this policy.

1. Introduction

Today, there still exist few, if any, scientifically based procedures for use by diplomats and negotiators in managing and resolving conflicts.[1] This paper aims to face this need by developing a quasi-scientific procedure that can effectively be employed by diplomats and negotiators for a number of difficult conflict situations. We demonstrate its use with regard to the current conflict on the Korean peninsula.

[1] This situation obtains despite the great advances in game theory and strategic analysis in the last half century following the publication of the classic book Theory of Games and Economic Behavior (1944) by the brilliant mathematician John von Neumann and the solidly grounded economist Oskar Morgenstern.

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2. A Simplified Presentation of the Procedure to be Followed

Before presenting the analysis, let us illustrate the procedure in the simplest possible manner. To do so, it is desirable for the reader (whether or not he/she is an extremely busy diplomat) to have on hand a simple pocket calculator. He/she then will be able to check quickly any of the computations and results presented.

Start with the preference of a given party for two items. In the pairwise comparison Table 1 below, we record item #1 in both the first row and the first column, and item #2 in both the second row and second column.

Table 1. A Pairwise Comparison of Two Items

	Item #1	Item #2	Relative Wights
Item #1	1	1/3	1/4
Item #2	3	1	3/4

Suppose for some purpose one party states that item #1 is one-third as important (desirable) as item #2. We then enter the fraction 1/3 in the cell in the first row and second column. Next when asked how much more important item #2 is compared to item #1, the party states 4 times as important. We quickly point out an inconsistency in his/her statements. For if item #1 is one-third as important as item #2, then item #2 can only be three times as important as item #1. He(she) is then asked to make a consistent statement. Suppose upon further thought, he(she) does come to state that item #2 is only three times as important as item #1. Accordingly, we enter 3 in the cell of the second row, first column.[2]

[2] The party may have made an alternative statement, namely that item #2 was 3 1/2 times as important as item #1 and to be consistent, that item #1 was only 1/3.5 times as important as item #2. In that case the numbers 1/3.5 and 3.5 would replace 1/3 and 3, respectively, in Table 1.

By definition, when a party compares item #1 (in row 1) with item #1 (in column #1), that is item #1 with itself, the result is: equal importance. So the number 1 is entered in the cell of row 1 and column 1. Likewise, for a comparison of item #2 in row 2 with item #2 in column 2, the number 1 is to be entered into the cell of row #2 and column #2.

The next step is to adjust the numbers in the cells, the relative values for the importance of items #1 and #2, so that they add up to unity.[3] One simple way to do this is first to add the numbers in any column. If we do so for the second column, we proceed to find the common denominator, namely 3; and then convert the numbers in terms of the common denominator, the number 1 in this case being 3/3. Adding, the total is 4/3. Item #1 contributes only one to the total of 4 in the numerator, so that its new relative value becomes 1/4, and item #2 contributes 3 to the total in the numerator so that its new relative value becomes 3/4. Thus, in terms of relative values, item #1 is still only 1/3 as important as item #2, and item #2 is still three times as important as item #1. We enter these new adjusted relative values in the third column of Table 1 and call them relative weights.

The next step is to consider two specific objectives, objective α and objective β. We wish to determine their relative importance for realizing item #1, which we now consider to be some general goal. The first question we pose is how important, relatively speaking, are the two objectives for achieving that goal. To do so we set up another pairwise comparison table, Table 2.

Say the party being interviewed states that objective α is eight times as important as objective β for achieving item #1. If he(she) is consistent, he(she) also states that objective β is only one eighth as important as objective α for achieving item #1.

[3] Technically speaking, the relative values of importance in Table 1 are to be normalized.

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Table 2. Pairwise Comparison of Objectives with Regard to Achievement of Item (general goal) #1

	Objective α	Objective β	Relative Wights
Objective α	1	8	8/9
Objective β	1/8	1	1/9

These numbers are then appropriately entered into Table 2; also 1s are entered along the diagonal for the same reason as noted in the discussion of Table 1. Adding the numbers in column 1, the lowest common denominator being 8, we obtain 9/8. Thus, objective α contributes 8 to the total of 9 in the numerator (since 1 = 8/8), and objective β only 1. Consequently, the relative weights entered in the last column of Table 2 are 8/9 and 1/9.

Next, we introduce two policies, Policy A and Policy B. The relevant question to pose now is: how important, relatively speaking, are the two policies for achieving the specific objective α. To do so, we set up comparison Table 3.

Table 3. Pairwise Comparison with Regard to Achievement of Objective α

	Policy A	Policy B	Relative Wights
Policy A	1	2/3	2/5
Policy B	3/2	1	3/5

Suppose the party being surveyed states Policy A is two-thirds as important as Policy B for achieving the specific objective α. Then we can enter 2/3 in the cell of row 1, column 2; and 3/2 in the cell of row 2, column 1, with 1's being put in the diagonal cells. Obtaining the common denominator for column 2, and adding the numbers in the cells of column 2 when converted in terms of the common denominator, we obtain 5/3. Policy A accounts for 2 of the total of 5 in the numerator, so its relative weight is 2/5, as recorded in the last

column of Table 3; and Policy B accounts for 3 of the total of 5, and so its relative weight is, as recorded, 3/5.

The succeeding step is to calculate the relative importance of Policy A and Policy B to overall welfare benefits by their contribution to the achievement of objective α and only objective α. The relative weights (importances) to achieving that objective are 2/5 and 3/5, as noted in Table 3. But by Table 2 the specific objective α has a relative weight of only 8/9 in achieving the general goal (item #1). So both the 2/5 and 3/5 figures must be discounted accordingly. Both must be multiplied by 8/9 to give (2/5)(8/9) and (3/5)(8/9), respectively, in order to point up the importance of each Policy, A and B, that flows through objective α to reach (achieve) the general goal (item #1). However, by Table 1, the general goal (item) #1 has a relative weight (importance) of only 1/4 in achieving overall welfare benefits, so another discounting must take place. That is, the products (2/5)(8/9) and (3/5)(8/9) must each be multiplied by (1/4) to yield (2/5)(8/9)(1/4) and (3/5)(8/9)(1/4), whose values in decimals are 0.089 and 0.133. These values point up the importance of each policy, A and B, as it flows through (contributes to) objective α and only α, and then flows through (contributes to) the general goal (item) #1 and only this goal to determine finally via one (and only one) path a contribution to the total pool of overall welfare benefits.

But then each of the two policies A and B may also contribute to overall benefits via their contributions to the achievement of objective β, which contributions are to be determined by the same pairwise comparison procedure that was employed in determining their contributions via achievement of objective α. And, this will need to be done for each other specific objective the party specifies as relevant, as will now be demonstrated in the following section.

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3. The Basic Analysis for an Actual Conflict Problem: The Case of the North Korea/South Korea Conflict Situation

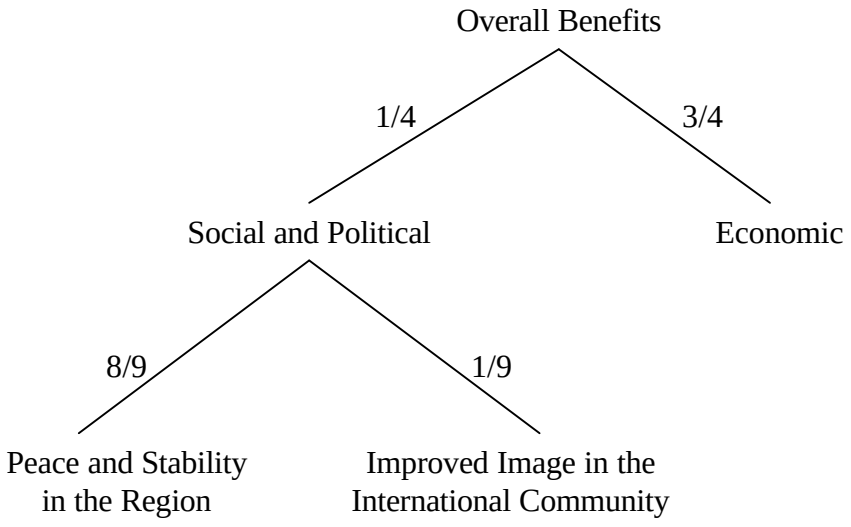
Before undertaking the analysis designed to identify an acceptable policy for cooperation between parties of a conflict, it is necessary to locate members of each party who are well informed about the conflict, where each member can be considered to represent well the interest of his/her party with regard to cooperation. For the case study of the North Korea/South Korea conflict, we were able to find South Korean graduate students who could fulfill this role for South Korea. However, there was a problem in finding corresponding North Korean graduate students. None were present in the Ithaca region. Moreover, we judged that even if we were able to seek information from North Korean graduate students or from other North Koreans who might be well informed, we could not expect from them statements which would not be influenced by a reluctance to suggest or fear of suggesting relative values at variance with those of the political authorities of North Korea. Hence, we chose a mature Chinese graduate student who was studying at a Chinese university at the time of Nixon's path-breaking visit to China and who was well informed of the Chinese political and economic situation prior to that visit. We asked him to provide relative value statements on the assumption that the current political and economic situation of North Korea is of the same general order as was that of "pre-Nixon-visit" China. Hence, from here on we shall consider that individual as representing an imaginary set of members of a North Korean party.

The next step is to engage in a friendly, non-suggestive talk with each party's members as a group, in isolation from members of the other party. In this kind of 'light' conversation, a skillful diplomat or negotiator may be able to induce members to talk freely about the various factors (favorable and unfavorable) which they perceive to be critical for achieving cooperation, and to present other aspects of the situation they feel important. Generally speaking, it may be useful to point up to these members that there may be costs

as well as benefits to cooperation, and if so that we would want them to make pairwise comparisons (in relative terms) of both costs and benefits of critical elements that would be involved in any joint action or policy that might be proposed. (In the case of the Korean conflict we did ask the members of each party to consider both the benefits and costs of each policy (joint action) that might be considered.)

After adequate (perhaps extensive) discussion the members of each party can then be asked to set down tentatively, on paper or a writing pad, the various factors that they consider to be critical in managing or resolving the given conflict. They may wish to do so first in terms of a general classification of factors and then later in more specific fashion. This was done in the Korean study. In considering benefits from cooperation, the South Koreans focussed on two general categories of benefit goals or factors: (I) Social and Political and (II) Economic. (See Figure 1 which presents part of the Benefits umbrella.) The first of these categories was considered by the South Koreans to be only 1/3 as important as the second, leading, as in Table 1, to their relative weights of 1/4 and 3/4, respectively. These weights are noted along the slanted lines stemming from overall benefits to these two categories.

Figure 1. South Korea: Benefit Calculations



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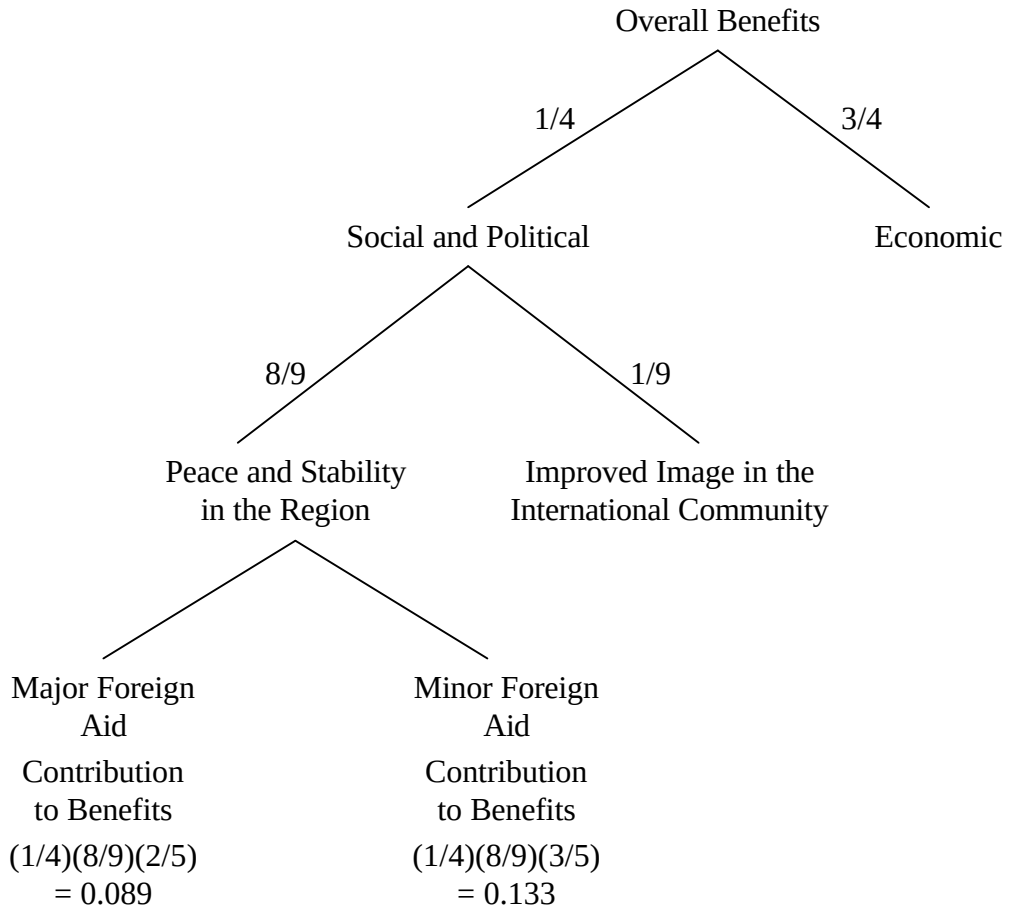
Further, the social and political goals were broken down by the South Koreans into two objectives: (1) peace and stability in the region and (2) improved image in the international community. (These two objectives can be said to correspond to objective α and objective β in the preceding section). The first of these two objectives was considered by the South Koreans to be eight times as important as the second for achieving the Social and Political goals, leading as in Table 2 to their weights of 8/9 and 1/9, respectively. These weights are noted on the slanted lines stemming from Social and Political to these two objectives.

Figure 2. South Korea: A Partial Benefit Calculation of Each Policy



Once the specific benefits of each party are identified in an effort at cooperation, possible policies need to be examined, policies which desirably should be suggested by the

parties. In the case of the Korean conflict, two policies were proposed by the South Korean party as relevant: (1) Major Foreign Aid to North Korea and (2) Minor Foreign Aid to North Korea. (These two policies can be said to correspond to Policy A and Policy B in the preceding section). The South Koreans then judged that for realizing the specific objective peace and stability in the region, the policy Minor Foreign Aid was 1.5 (=3/2) times more important than Major Foreign Aid since the South Koreans feared that Major Foreign Aid would result in unanticipated difficulties as were encountered in the unification of West and East Germany. As a consequence, the relative weights of the policies, Major Foreign Aid and Minor Foreign Aid, were perceived as 2/5 and 3/5, respectively, as developed in Table 3. These weights are also recorded along the relevant slanted lines of Figure 2 running down from peace and stability in the region. (Figure 2 presents extensions of Figure 1.)

As already noted, the next task in a cooperative effort is to calculate for each party the potential benefits of each proposed policy via its contribution to each specific benefit factor. In the case of South Korea, and as indicated in Figure 2, the Major Foreign Aid policy potentially contributes (1/4)(8/9)(2/5) or 0.089 via the extent of its contribution to the realization of the specific benefit factor "peace and stability in the region" using the method of computation presented in the previous section. This is seen by going down the path at the extreme left from Overall Benefits to Major Foreign Policy.

In a similar manner, the contribution (influence) of Minor Foreign Aid to the realization of overall Benefits via the path from Minor Foreign Aid up through peace and stability of the region and through social and political goals had to be calculated. It was derived as (1/4)(8/9)(3/5) = 0.133, again following the method of computation presented in the previous section.

In like manner, the contribution of each of the two policies to overall benefits flowing from their contributions to the objective improved image in the international community (which corresponds to objective β in the previous section) were computed.

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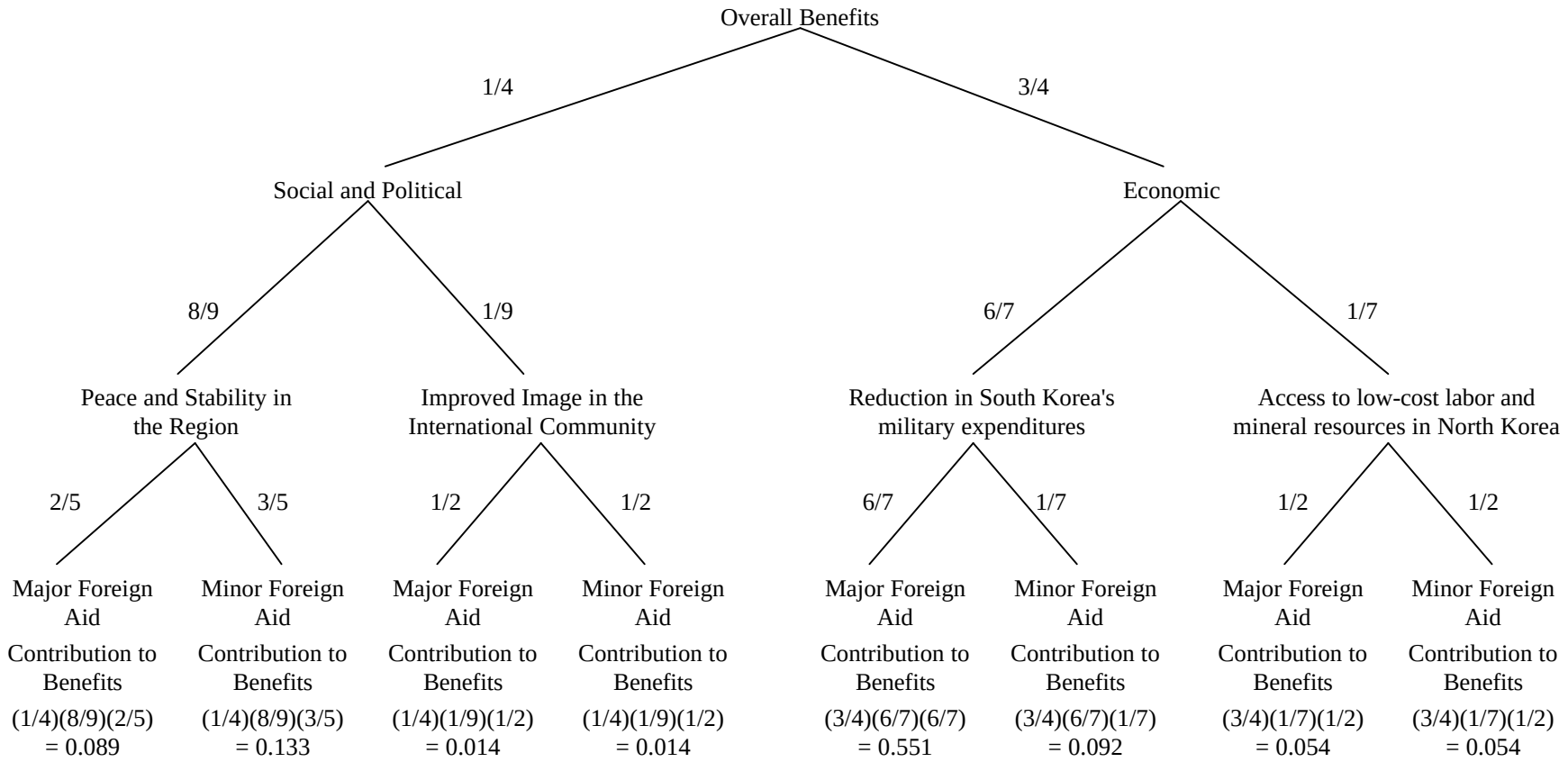
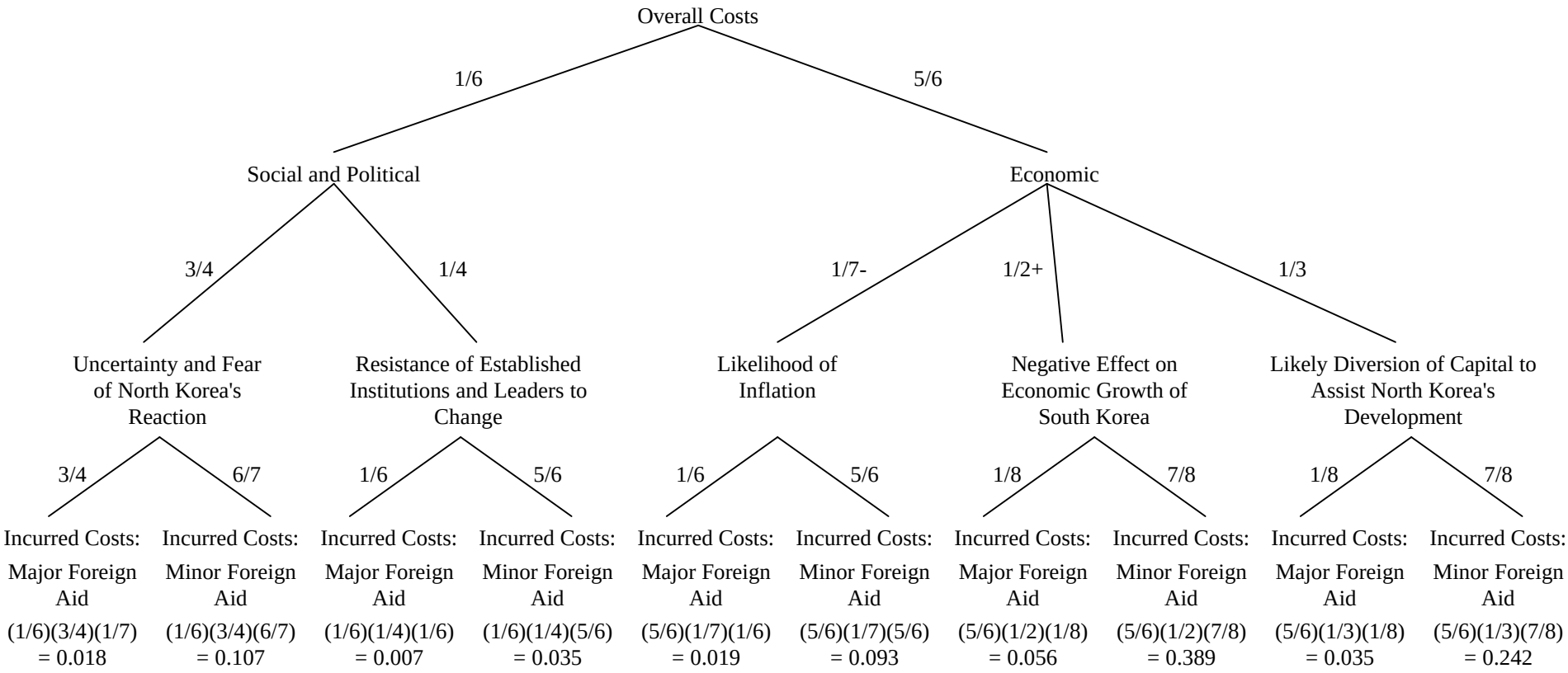
Figure 3. South Korea: Calculation of Total Benefits of Each Policy



	Total
Major Foreign Aid	0.089 + 0.014 + 0.551 + 0.054 = 0.708
Minor Foreign Aid	0.133 + 0.014 + 0.092 + 0.054 = 0.293

Figure 4. South Korea: Calculation of Total Costs of Each Policy



	Total
Major Foreign Aid	0.018 + 0.007 + 0.019 + 0.056 + 0.035 = 0.135
Minor Foreign Aid	0.107 + 0.035 + 0.093 + 0.389 + 0.242 = 0.866

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The relevant weights are recorded in Figure 3 along the relevant paths, which lead to contributions of (1/4)(8/9)(1/2) = 0.014 for each of the two paths since the two policies were judged to be of equal importance for the achievement of this objective.

Similarly, the contribution was computed for each of the two policies to overall benefits flowing from achieving the two other South Korean objectives: (1) reduction in South Korea's military expenditures and (2) access to low-cost labor and mineral resources in North Korea, which the South Koreans considered relevant for achieving South Korea's second goal, namely the economic goal. See Figure 3 which extends Figure 2 to include contributions through realization of all specific benefit factors judged critical by the South Koreans. It depicts the complete benefits umbrella.

Additionally, below Figure 3 we have constructed a table where each row records the contributions that a given policy makes through each of the four specific benefit factors. The total is indicated at the extreme right, being 0.708 for Major Foreign Aid and 0.293 for Minor Foreign Aid. These totals are recorded in column 1 of Table 4, whose significance will be explained later.

As already noted, both the South Koreans and North Koreans thought it meaningful in this approach to cooperative activity to consider both benefits and costs, general and specific. Accordingly, from statements of the South Koreans we constructed Figure 4 wherein the two general cost categories: (I) Social and Political and (II) Economic and five specific cost factors are noted.[4] As with Figure 3 on benefits, appropriate pairwise comparisons were made by the members of the South Korean group. These then were processed to yield the relative weights along the slanted lines of Figure 4 and to the potentially incurred costs of each policy in the realization of each of the five cost factors.

[4] As in Figure 4, they are: (1) Uncertainty and Fear of North Korea's Reaction; (2) Resistance of Established Institutions and Leaders to Change; (3) Likelihood of Inflation; (4) Negative Effect on Economic Growth of South Korea; and (5) Likely Diversion of Capital to Assist North Korea's Development.

At the bottom of Figure 4, these incurred costs are listed in a table for the Major Foreign Aid policy and totaled, and also for the Minor Foreign Aid policy. The two totals were then entered in the second column of Table 4; and Benefit/Cost ratios were calculated and recorded in the third column of that table. Clearly, the Benefit/Cost ratio is significantly greater for the Major Foreign Aid policy, and was preferred by the South Koreans.

It should be noted that the use of Benefit/Cost ratios is only one way to evaluate alternative policies. There are other ways, which may be employed by diplomats and negotiators, into whose discussion we cannot enter here.

One question that arises in searching for a cooperative action is whether or not the same policies (joint actions) should be considered by both parties. Often, the parties may be able to propose different sets. This was the case in the Korean peninsula conflict. Once the preference of South Koreans for Major Foreign Aid became clearcut, it was judged desirable to communicate this preference to the North Koreans. It was felt that a more flexible and deeper consideration by the North Koreans of diverse benefit and cost factors (and perhaps their interrelations) would be possible. Such flexibility and deeper thinking can often characterize the use of the Cooperative Action Procedure (CAP) in a conflict situation when participants can differ regarding policies (joint actions) to be considered initially as options.

Given the above flexibility, the North Koreans chose to consider Open Door, and Status Quo as policy options in addition to Major Foreign Aid to North Korea. With their acceptance of the Benefit/Cost approach, the North Koreans were asked to identify general categories of benefits and cost factors as well as relevant specific benefit and cost factors. Their choices are recorded in Figures 5 and 6. Note that the North Koreans set three categories of general goals: (I) Social; (II) Economic; and (III) Political. Furthermore, they identified as relevant seven specific objectives yielding benefits (see Figure 5) and five specific costs that needed to be considered (see Figure 6).

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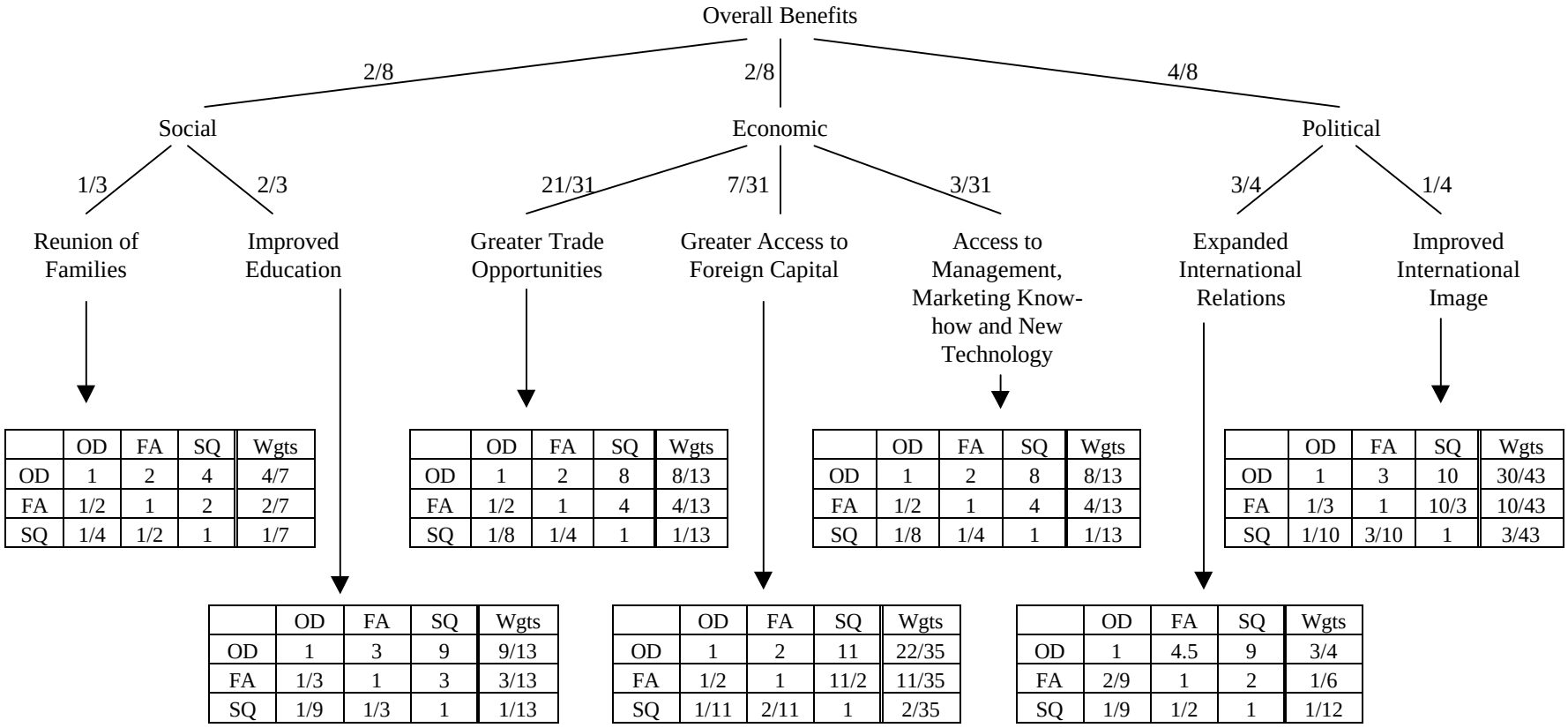
Figure 5. North Korea: Calculation of Total Benefits of Each Policy



	OD	FA	SQ	Wgts
OD	1	2	4	4/7
FA	1/2	1	2	2/7
SQ	1/4	1/2	1	1/7

	OD	FA	SQ	Wgts
OD	1	2	8	8/13
FA	1/2	1	4	4/13
SQ	1/8	1/4	1	1/13

	OD	FA	SQ	Wgts
OD	1	2	8	8/13
FA	1/2	1	4	4/13
SQ	1/8	1/4	1	1/13

	OD	FA	SQ	Wgts
OD	1	3	10	30/43
FA	1/3	1	10/3	10/43
SQ	1/10	3/10	1	3/43

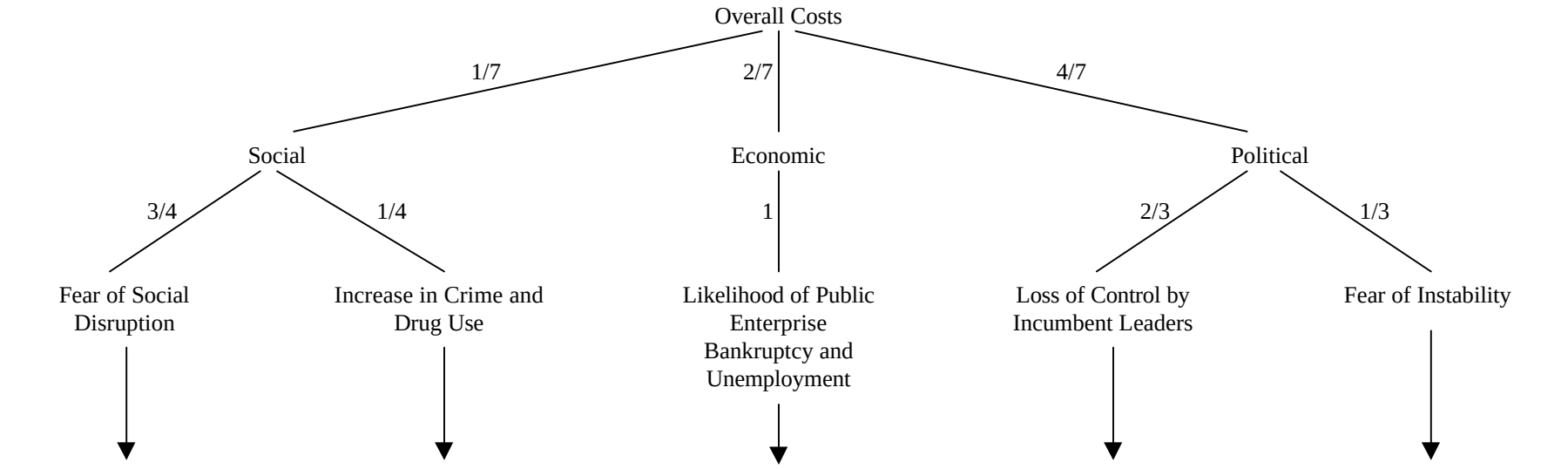
	OD	FA	SQ	Wgts
OD	1	3	9	9/13
FA	1/3	1	3	3/13
SQ	1/9	1/3	1	1/13

	OD	FA	SQ	Wgts
OD	1	2	11	22/35
FA	1/2	1	11/2	11/35
SQ	1/11	2/11	1	2/35

	OD	FA	SQ	Wgts
OD	1	4.5	9	3/4
FA	2/9	1	2	1/6
SQ	1/9	1/2	1	1/12

	Total
Open Door (OD)	0.047 + 0.116 + 0.260 + 0.089 + 0.038 + 0.070 + 0.022 = 0.642
Foreign Aid (FA)	0.024 + 0.038 + 0.130 + 0.044 + 0.019 + 0.016 + 0.002 = 0.273
Status Quo (SQ)	0.012 + 0.013 + 0.033 + 0.008 + 0.004 + 0.008 + 0.007 = 0.085

Figure 6. North Korea: Calculation of Total Costs of Each Policy



	OD	FA	SQ	Wgts
OD	1	5	9	45/59
FA	1/5	1	9/5	9/59
SQ	1/9	5/9	1	5/59

	OD	FA	SQ	Wgts
OD	1	3	9	9/13
FA	1/3	1	3	3/13
SQ	1/9	1/3	1	1/13

	OD	FA	SQ	Wgts
OD	1	9	5	45/59
FA	1/9	1	5/9	5/59
SQ	1/5	9/5	1	9/59

	OD	FA	SQ	Wgts
OD	1	4	2	4/7
FA	1/4	1	1/2	1/7
SQ	1/2	2	1	2/7

	OD	FA	SQ	Wgts
OD	1	2	1/4	2/11
FA	1/2	1	1/8	1/11
SQ	4	8	1	8/11

	Total
Open Door (OD)	0.082 + 0.025 + 0.218 + 0.218 + 0.035 = 0.578
Foreign Aid (FA)	0.016 + 0.008 + 0.024 + 0.054 + 0.017 = 0.119
Status Quo (SQ)	0.009 + 0.003 + 0.044 + 0.109 + 0.139 = 0.303

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Table 4. South Korea's Benefit/Cost Ratios

	Relative Benefits	Relative Costs	Relative Benefit/Cost Ratio
Major Foreign Aid	0.708	0.135	5.244
Minor Foreign Aid	0.293	0.866	0.338

Accordingly, Figures 5 and 6 were organized to take into account the greater number of general goals, specific benefits and specific costs. And for each specific benefit and cost item, the pairwise comparisons were obtained to determine the relative importances and thus weights of the three relevant policies. For example, for achieving the specific benefit item, reunion of families at the extreme left of Figure 5, the open door policy is considered twice as important as major foreign aid and four times as important as status quo, yielding relative weights of 4/7, 2/7 and 1/7, respectively. Thus, when one goes up the path from open door policy to overall benefits through the objective of reunion of families, (2/8)(1/3)(4/7) is multiplied out to yield the figure 0.047 as noted in the cell of the first row and first column in the table below Figure 5. This measures what would be the particular contribution to overall benefits of an open door policy via achieving the particular objective, and only that objective, of reunion of families. When one goes up the paths from the policies Foreign Aid and then Status Quo to overall benefits through the objective of reunion of families, (2/8)(1/3)(2/7) and (2/8)(1/3)(1/7) are multiplied out to obtain, respectively, 0.024 and 0.012 which are respectively recorded in the cells of the second and third rows of column one in the table below Figure 5. These magnitudes measure what would be the particular contributions to the overall benefits of North Korea from foreign aid and status quo policies with regard to the achievement of the objective and only the objective of reunion of families.

In a similar manner as above, we obtain the measures of what would be the contributions to the overall benefits of each of the three policies with regard to the

achievement of each of the other six objectives, one at a time. These contributions are noted in the three rows of columns 2 to 7 of the table below Figure 5. The totals of the rows respectively measure what is perceived to be the overall benefits of each of the three policies. These totals are then recorded in column (1) of Table 5.

In exactly the same manner, the data of Figure 6 are derived and yield, in the table below the Figure, the respective costs incurred by each of the three policies with respect to each of the five specific cost items noted in Figure 6. The total costs of each of the three policies are obtained and then entered in column 2 of Table 5. Finally, the relative Benefit/Cost ratios for the three options of North Korea were calculated and recorded in column 3 of Table 5.

From Table 5, it thus appears in the minds of the North Koreans that there is a clear preference for a Major Aid policy, the significant benefits of an Open Door policy being largely offset by the high cost of such a policy.

Table 5. North Korea's Benefit/Cost Ratios

	Relative Benefits	Relative Costs	Relative Benefit/Cost Ratio
Open Door	0.642	0.578	1.111
Major Foreign Aid	0.273	0.119	2.294
Status Quo	0.085	0.303	0.281

At this point in the examination of a number of conflict situations, third parties might be involved. They may help administer and provide other support activities for maintaining an agreement that is reached through the use of a cooperative action procedure. The very reaching of an agreement where no administration and support activity is required of a third party, or even when such is required by a third, may in certain situations be

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sufficient to justify their involvement in the mind(s) of the third party(ies). In other situations, incentives must accompany such involvement.

This need for third party incentives arose in the case of the Korean peninsula conflict. Specifically, the question arose, after agreement on the "Major Foreign Aid to North Korea" policy: what incentives would be necessary to induce United States and other potential donors to provide North Korea with the required aid. No incentives seemed to be required of South Korea. However, at the time when the conflict situation was studied, incentives for receiving aid from potential donors seemed clearly to be required of North Korea. Would North Korea be willing to allow a UN team (if not a U.S./UN or other team) to inspect North Korea's nuclear facilities to assure the world community that North Korea is desisting from the development of nuclear weaponry? Or would North Korea agree to a reduction in its military expenditures, activity or capability? Or would North Korea be willing to undertake a significant civil rights program? To these, and other incentives that have been presented and discussed in political circles, the reply of the North Koreans was a flat negative. They did not wish to have outsiders involved in their internal affairs and domestic policy. Thus, we reached a stalemate in finding an option for a beginning at economic cooperative action between the Koreas.

As we disbanded our discussions with North Korea and were about to leave the meeting, the North Koreans unexpectedly came up with another suggestion. Why not go along with North Korea's insistence on maintaining its military capability, freedom from inspection and non-interference in domestic policy? At the same time, however, why not explore the possibility of a North Korean pullback of its military forces (without any diminution of them) from a small area, say about five square kilometers, bordering the DMZ (Demilitarized Zone). Let this area be along the Eastern coast, away from the sensitive Pyongyang district. Set this area up as a Special Economic (Trade) Zone of North Korea where North Korean, South Korean and foreign investment can take place and where U.S.

and other countries might remove restrictions on their nationals with regard to investment in this area.

With this new option to be considered, a new set of pairwise comparisons and benefit/cost computations were undertaken. However, since a major foreign aid policy seemed to be in order, it was judged desirable to have both South Korea and North Korea evaluate for comparative purposes (as a check) the relative desirability of the development of the Rajin-Sunbong Free Trade Zone in the Northeast district of North Korea in connection with the Tumen River development program of the United Nations. Moreover, another option that the North Korean party wished to have on the table at this stage was simply Informal Discussions.

Pairwise comparisons were then sought. However, since the question of incentives was brought up, it was considered desirable to consider the subjective preferences of the party(ies) who would be providing the foreign aid. For this purpose we obtained responses from a Canadian graduate student well informed about the views of United States (a major potential donor) and North America in general. Hence, the resulting weights by three parties, North Korea, South Korea and North America, were derived. They are presented in Table 6. Clearly the North American and South Korean parties each had a clear preference for the DMZ option. North Korea's preference was not as clear cut. [5]

[5] At this point, it was recognized that a still deeper probe might be desirable, namely an examination of the possible teams of nations and organizations that might be involved to provide oversight regarding any agreement that might be reached. From initial discussion of this issue it was clear that South Korea should be represented in the team even though it would not be providing financial aid; it would be providing management skills and technological know how, and the key goal was after all economic cooperation between the Koreas. As a major potential donor, the United States would need to be on the team. So also would China and the United Nations and/or other International Organizations, upon the insistence of the North Korean party, to insure fair and sympathetic oversight and interpretation of the agreement. Japan was considered to be another nation that might be involved, especially if the Tumen River development were to be chosen, since for that option Japan could be, along with United States, a major donor. Thus these were two reasonable compositions for an oversight group. One would include Japan along with South Korea, China, United States, International Organization(s), and one would not. Since the DMZ option was the most preferred by all three parties (see Table 7), and since Japan's involvement would be required only if the Tumen River development were pursued, we chose not to take this next step of selecting a relevant team of nations and international organizations to oversee an agreement. We took for granted that South

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Table 6. Relative Weights on Policy Options

	For North Korea	For South Korea	For North America
Informal	0.335	0.266	0.090
DMZ	0.361	0.526	0.631
Tumen	0.304	0.208	0.279

The experience of this North Korea/South Korean conflict management study makes crystal clear one of advantages of the proposed cooperative action procedure. The operation of this procedure, involving (1) the identification of specific factors, in many cases classifiable by benefit contributions and cost incurrences and (2) the requirement that pairwise comparisons be made makes possible for each member of each team clearer thinking about new, possible alternative options to be explored if a stalemate results. This is so because pairwise comparisons with regard to specific factors, presumably well defined, can lead to a finer appreciation of not only more factors, but a finer perception of the importance of each factor. The pairwise comparisons that the mind of any one individual makes are consistent and comparable for that individual (although interpersonal comparisons among different individuals may not be possible) and can lead to the examination and/or suggestion of new creative options, as illustrated by the injection of the DMZ policy in the Korean conflict.

Another question also arises. If third party involvement seems to be necessary from the very start, why not explicitly bring in the third party at the beginning of the study? There certainly can be reasons for doing so. However, in the case of the Korean conflict examined, the involvement of a third party (as a United States/Canada team) would have made the situation more complex for each of the two major participants (the North Korean

Korea, China, United States, United Nations and perhaps another international organization for funding purposes would serve as an oversight group.

team and the South Korean team). It would probably have been at the expense of deeper examination of issues confronting each of the two major participants and precluded the resulting creative new option that emerged.

4. Concluding Remarks

The cooperative action procedure (CAP) can be extremely fruitful in many conflict situations, at least in taking a first step for building up trust among participants. It can facilitate and lead to more communication and identification of more specific relevant factors and their interplay among participants, and in general deeper analysis. It can do so because it can do more in the way of quantitatively specifying preferences than non-quantitative verbal statements. It may be also useful in non-conflict situations in determining priorities and most likely outcomes (Isard and Smith, 1982). Further, when this procedure is combined with other methods and approaches to break stalemates, further progress in conflict management and dispute resolution should be achievable. (These matters will be the subject of further papers.) At the same time CAP requires participants to be able to carry through only pairwise comparisons of their preferences with scales they consider relevant, and to be willing to attribute some significance to the normalized weights involved. No training in economics or other social science is required. Of a mediating team or other third party all that is necessary is patience and clear preliminary explanations and instructions.

In the particular conflict situation between the Koreas, this method allowed us to look more deeply into that conflict and to come up with an option, namely the DMZ, which was in no way anticipated; it emerged from the very process of engaging in dispute settlement required by this method.

The authors strongly urge that the DMZ option be fully explored by diplomats of concerned nations.

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