

## The Function of Governments and Intergovernmental Organizations in the International Resource Transfer - The Case of the World Bank

By

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### I. Alternative Approaches

The problem of international resource transfer, in particular from the industrialized countries to the less developed countries, can be analyzed from two quite distinct points of view: the social welfare maximizing and the political economy approaches.

#### 1. Social Welfare Maximization Approach

This approach is based on the theory of quantitative economic policy as originated by Tinbergen [1956] and Theil [1964], and used today, for example, in the optimum taxation literature. It has also been used to derive optimal development policies for countries as a whole. The social welfare maximization approach proceeds in three steps:

- (i) A social welfare function containing the issues involved is established. In our case of international resource transfers this function must be defined over the whole world (or at least over the earth) because the interests of the different countries in all continents are at stake. This function is maximized subject to economic constraints, in particular the basic scarcity of resources. The result is the socially optimal state.
- (ii) This optimal state is compared with the existing situation, and the measures necessary to reach the optimum are specified.
- (iii) The decision-makers are informed about these optimal policies. It is open to debate whether the advice should be "pure" in the sense that political feasibility is disregarded, or "practical", taking into account that there are political restrictions.

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The social welfare maximizing approach must be criticized on two levels:

- *Logics.* In general, no social welfare function exists which is based on the preferences of the individual nations<sup>1</sup> and which meets certain obvious and desirable conditions. The impossibility of constructing such a welfare function [Arrow 1963, Sen 1970, and a host of other literature] is insurmountable when distributional aspects and many issue dimensions are involved. The difficulty could be overcome by simply postulating a world social welfare function not explicitly based on the preferences of the individual nations. But then the question arises of where the value judgements involved come from. It is therefore doubtful whether such a postulated world social welfare function has any interest and meaning.
- *Incentives.* Even if it *were* possible to establish a world welfare function, no country (or individual) would have an incentive to pursue world welfare. To assume that there is a world government doing this would mean defining away the central problem. World welfare is certainly not identical or even similar to national welfare.

The critique on the grounds of logical inconsistency and missing incentives is so fundamental that a different approach is needed.

#### 2. Political Economy Approach

The basic characteristic of this approach is that it analyzes the incentive structure which results from the existing institutional conditions. The approach is therefore also called *comparative analysis of institutions*. It may also be called *theory of democratic economic policy* because it explicitly takes into account the preferences and incentives of the decision-makers (usually of the individuals, as in a democracy, here of the sovereign nations). This approach, which has been established mainly by Buchanan [1977; see also Frey, 1983], and by the Public Choice movement in general [see e.g. Mueller, 1979] does not require the construction of a world social welfare function.

The political economy approach proceeds in the following way:

- (i) The existing institutions (involved in the international resource transfer) are analyzed in a positive way<sup>2</sup>. The purpose is to understand their

<sup>1</sup> For the problem here considered, it would make little sense to take the preferences of all individuals living on earth. It is certainly more relevant to take the preferences of the nations as the basis. In the case of dictatorial or authoritarian governments, this simplification raises a lot of difficult ethical problems.

<sup>2</sup> This is the subject of the newly arising field of International Political Economics which has been pioneered by Hirschman [1945] and Kindleberger [1970], and to which Baldwin [e.g. 1976, 1982], Caves [1976], Brock and Magee [1978], Findlay and Wellisz [1983], among others, have made important contributions. See also the survey and discussion in Frey [1984].

behavior by identifying their preferences and constraints, and thus to analyze their incentives. From the start, economic and political aspects are considered.

(ii) On the basis of this knowledge, the possibilities for economic policy are analyzed. In particular, it is studied what institutional changes would find the support of the sovereign nations involved in the international resource transfer.

This paper must restrict itself to a small set of the problems connected with the international resource transfer. It would be a gargantuan task to analyze the interdependent behavior of all national and intergovernmental decision-makers involved. It is preferred to try to study somewhat more deeply the behavior of one particular, but important, institution, the World Bank's credit lending to less developed countries. This also makes it possible to put forward empirical evidence.

Part II of this paper looks at the World Bank as a resource transfer institution. Four interpretations of its behavior and its underlying incentive structure are provided. Part III econometrically estimates the World Bank's lending behavior in the period 1972–1981. The model of "selfish bureaucratic" behavior turns out to fit the data best. Part IV discusses the consequences of the theoretical and empirical analysis for the choice of institutions, and Part V offers some concluding remarks.

## II. The World Bank as a Resource Transfer Institution

The behavior of the World Bank (International Bank for Reconstruction and Development, IBRD, and the International Development Association, IDA) and its credit lending activities have been described in a great many publications and need therefore not be repeated here [see e.g. MacBean, Snowden, 1981]. Instead, the observed behavior is interpreted in terms of the underlying incentives.

### 1. Four Types of Behavior

The distribution of World Bank credits to the LDCs is "unequal", even if per capita credits are considered: some countries get significantly more than others. The determinants which induce the World Bank officials are of varying nature, extending beyond economic to political and historical factors. In the following two pages, four (idealized) types (or models) of World Bank credit behavior are distinguished.

#### a. Ethical

According to this interpretation, the World Bank grants credits especially to those LDCs which are in greatest need of economic support, and which

find it most difficult to get credits on commercial terms from private lenders. Those LDCs with the worst economic conditions (low per capita national income, high rate of inflation) receive the most credit (per capita). Another important determinant is the financial condition of the LDCs: those with high budget and balance of payments deficits, and with a high accumulated (official) foreign debt deserve more credits than those in a better financial condition.

#### b. Performance

This interpretation of World Bank behavior suggests that those countries that have proved in the past to have performed well deserve more credits than the other countries. The idea is that those LDCs should be supported that are able to put the resources transferred to the most effective use, and are least likely to waste them.

The most important indicator of performance available is past history: those LDCs that had highest growth rates in the past are also considered to have good prospects for the future. (The *level* of per capita GNP is, on the other hand, irrelevant as a performance indicator). Another indicator of a country's capacity and willingness to push forward its economic development is the extent of financial responsibility: countries with low inflation, (high) budget and balance of payments surpluses, and low accumulated foreign debt show that they are able to make a profitable use of the resources. Support by the World Bank may also be wasted if economic development is hampered by the political side: those LDCs that experience a high political stability have a better chance for development, and will therefore receive more credits per capita population (all *ceteris paribus*).

#### c. Weberian

According to the great German sociologist Max Weber, a bureaucracy is composed of well-meaning and competent bureaucrats who follow the rules. In the case of the World Bank this means that the official goals as set down in the Charter are followed. Article I of the Agreement of IDA, effective since September 24, 1960, states the following purposes [see e.g. Mason, Asher, 1973, p. 788]: "The purposes of the Association are to promote economic development, increase productivity and thus raise standards of living in the less-developed areas . . . , in particular by providing finance to meet their important developmental requirements on terms which are more flexible and bear less heavily on the balance of payments than those of conventional loans, thereby furthering the developmental objectives of the International Bank for Reconstruction and Development and supplementing its activities".

These purposes can be operationalized in the following way. A country receives more credits from the World Bank

- the more underdeveloped it is (the lower its per capita income);
- the lower its past growth experience is, since this indicates that a special development effort is required to overcome the problems, which should be brought about, or at least be supported by the World Bank; and
- the more pressing the financial constraints are, i.e. the higher the deficit in the balance of payments and the larger the accumulated debt.

#### d. Selfish

The behavior of the World Bank can finally be regarded to be the result of (top) bureaucrats' endeavor to maximize their own utility, subject to various constraints. In order to achieve their goal they must first of all maintain, and if possible, increase their room for discretionary actions. The top bureaucrats know that the member countries have little incentive (because the Bank's activities have mainly the characteristics of a public good) and possibility (due to the information advantage of the bureaucracy) to interfere with their *general business*<sup>1</sup> as long as they do not commit any grave errors or produce any large-scale scandals. The World Bank officials reduce the danger of such outside intervention, and can maintain or enlarge their room for discretionary actions, by only lending to countries that are "credit-worthy". Countries which have large balance of payments deficits and a high accumulated debt, and which have had low growth rates in the past, and are politically unstable, are less likely to receive credits than more successful and financially sounder countries. Another means to secure or to even increase their room for discretionary measures is for the top World Bank bureaucrats to pursue a policy which pleases the main donor countries. This can be achieved by granting higher per capita credits to LDCs which have a close relationship to the main donor countries. In particular, the former colonies and dominions of France, the United Kingdom and the United States will be privileged.

It is reasonable to assume that performance excellence as well as prestige among the World Bankers' main reference group, the international financial community, are the most important arguments in the (top) bureaucrats' utility function. Performance excellence is achieved by granting credits to those who are supposed to receive the most support according to the World Bank's official tasks. This means that the poorest countries (those with the lowest per capita income) will get the highest credits. Prestige among the international financial community is gained by following its ideological orientation, fiscal conservatism and a friendly attitude towards (direct) foreign investment. LDCs with low rates of inflation, a small budget deficit, and a capitalist climate are (*ceteris paribus*) treated more favorably.

<sup>1</sup> Member countries have, however, an incentive to interfere with *specific* matters when their national interests are concerned. They fight e.g., for a "just" share of country nationals among the Bank's employees in the various echelons.

## 2. The Underlying Incentives

A possible view of the incentive structure which is connected with the four types of World Bank behavior just discussed would simply be that (a) the ethical, (b) the performance, and (c) the Weberian models of behavior disregard incentives of decision-makers. Instead, a behavior is postulated which is either considered desirable or realistic, without enquiring into the motives and constraints of the decision-makers which bring about such behavior. In comparison, model (d) follows the economists' classical assumption of selfish behavior. The incentives are explicitly explained as a result of a utility maximizing calculus of the World Bank officials in charge.

According to this view, an empirical analysis which leads to the result that the selfish model (d) fits reality best, would support the proposition that incentives matter in the international resource transfer. If, on the other hand, empirical research indicated that the ethical, or the performance, or the Weberian types of behavior are compatible with observed World Bank lending policy, while the selfish behavior is not, this would suggest that the process of international resource transfer can satisfactorily be explained without recourse to the incentive structure.

A more sophisticated view of the four types of World Bank behavior is to start from the premise that *all* behavior is the result of a particular set of incentives, even if hidden<sup>1</sup>. It is indeed possible to identify the incentives which are capable of producing the behavior under (a), (b), and (c). It is useful to distinguish recipient orientation and bureaucratic orientation.

*Recipient orientation.* The ethical and the performance models are formulated in terms of attributes of the credit receiving countries. The ethical models posit that the need, while the performance model assumes that the performance, of an LDC is decisive. As the credits are granted by the World Bank officials (and of course not by the recipient countries) it must be explained how the attributes of the recipient countries may motivate the World Bank decision-makers to behave in the way stipulated. One may think of two processes which are able to establish the required link:

- (i) *Economic process.* The industrial donor countries have an interest in being able to export goods to LDCs. The more credit a particular LDC receives, the more it is able to import. The donor countries may therefore lobby for increased credits to their LDC trade partners. The World Bank decision-makers are likely to respond to these pressures which come from both donors and recipients. It is likely that this process benefits to a larger extent the relatively more successful LDCs (because they offer the best trade prospects) so that the associated credit lending behavior is of the "performance" type (b).

<sup>1</sup> The ethical, performance, and Weberian types of behavior are, as a rule, *not* formulated in terms of incentives in the corresponding literature.

(ii) *Political process.* The LDCs have (to some extent) direct influence over World Bank decision-making. Some of them may also be supported by donor countries in exchange for the LDC's international political support, for instance in "lending" their vote in the United Nations assembly. This process benefits mainly LDCs in a pivotal position<sup>1</sup> with respect to the issues at stake, in particular those countries that belong neither to the West nor to the East but are ready to support that side which is ready to provide the most economic help (directly or through the World Bank). It may (*ceteris paribus*) be expected that poor countries are most eager to use the political power they have in order to get more economic help. This means that the World Bank credit giving behavior can be associated with the ethical type (a), though the incentives behind this behavior are based on self-interest, and not on ethical considerations.

*Bureaucratic orientation.* The incentive which may bring about a Weberian type of behavior is performance excellence. The World Bank officials pride themselves on properly fulfilling the official tasks assigned to them in the Charter of the organization. This incentive is hardly sufficient to guarantee that the rules are closely followed, because it assumes that the World Bank officials have no other selfish motives.

An official-task-oriented behavior may also be induced by appropriate *constraints* on World Bankers. One such constraint which normally brings about most effective incentives in this direction, namely competition, is scarcely applicable to the World Bank (nor to many other intergovernmental organizations) because it is established as a monopoly for specific lending purposes. Potential competition would arise when the donor and recipient countries were dissatisfied with the performance of the World Bank and an alternative international institution were created. This threat is, however, rather small and is unlikely to force World Bank officials to closely follow the Charter.

Another constraint in the case of a monopoly are regulations. In order to be effective they must be monitored by the member countries of the World Bank. These, however, have little incentive and possibility to closely monitor the World Bank officials, as has already been pointed out. The main reason is that the activity of the World Bank has largely the character of a public good from the point of view of a single country. An increase in efficiency (relative to the official tasks assigned) affects all member countries, and an average member therefore has little incentive to take the trouble of pushing for a more goal-oriented behavior<sup>2</sup>.

<sup>1</sup> The corresponding "power" can be measured with the help of the Shapley/Shubik or Banzhaf index [see e.g. Brams, 1975]. The latter has indeed been used to calculate the change in a priori power as a result of a change in the voting shares in the International Monetary Fund [Dreyer, Schotter, 1980].

<sup>2</sup> A very large and dominating member, such as the United States, may have a greater incentive to do so, but such action would also increase the incentive of other members to remain free-riders.

### III. Empirical Analysis

The stage is now set to empirically test which of the four types of behavior and associated incentive structures corresponds best to reality.

#### 1. Econometric Estimates<sup>1</sup>

The four models of World Bank behavior constructed in the previous section are econometrically tested with data for the period 1972–1981 for 60 (48) developing countries receiving credits from the World Bank. The variable to be explained is the per capita credit commitment (in US-\$), which has been averaged over the period indicated in order to eliminate the bumps brought about by discontinuous credit lending. It is assumed that the "true" model is the one which embodies all the economic and political variables discussed as a determinant in at least one of the types of behavior. This "complete" model includes at the same time all the variables which are hypothesized to influence the World Bank according to the selfish type of behavior.

The explanatory variables (determinants) and the estimated parameters are shown in Table 1. The estimated equations are statistically satisfactory. They account for 64 percent and 54 percent of the variance which is quite good for a cross-section analysis. The F-test indicates that the set of explanatory variables has a significant influence on World Bank credits (at the 99 percent security level).

The estimates show that most of the variables hypothesized to influence World Bank behavior do have a statistically significant influence. This applies in particular to the *economic* variables that mirror the state of the economy: World Bank per capita credits are found to be the higher the lower the per capita income of a recipient nation, the better the growth performance in the past, and the lower the rate of inflation. The financial state seems to play a somewhat smaller role: The government budget surplus has no statistically significant effect at the 95 percent level, and the balance of payments surplus has some explanatory power only in the case of the IBRD. The estimates show, however, that the higher the accumulated external debt, the more credits are received (*ceteris paribus*).

Among the *political* variables, the degree of political instability does not seem to have any strong and significant effect on World Bankers' behavior (it would do so only at a 90 percent security level for IBRD loans). A "capitalist climate" helps to receive more credits in the case of the IBRD, but not of the IDA.

The relationship between the main donor countries and their ex-colonies and ex-dominions seems to have a systematic influence, except for the United

<sup>1</sup> This section is based on Frey and Schneider [1983], where the exact definition of the variables and the sources of the data are given.

Kingdom. France in particular seems to be eager to push the World Bankers to grant more credits to the countries with which they are still associated in some way. There is also evidence that the United States behaves in the same way.

Table 1 – World Bank Lending Behavior

Explanatory Variable	IBRD-Loans (N = 60)	IDA-Credits (N = 48)
Constant .....	5.04 (1.31)	5.98 (1.59)
<i>Economic Determinants</i>		
State of the Economy		
Per Capita Income .....	- 0.57** (- 2.87)	- 0.39** (- 3.12)
Growth of GNP (Lagged) .....	0.64** (3.47)	1.16** (2.83)
Inflation Rate .....	- 0.22* (- 2.48)	- 0.11* (- 2.04)
Financial State		
Government Budget Surplus .....	0.12 (1.72)	0.01 (0.94)
Balance of Payments Surplus .....	0.23* (2.62)	0.04 (0.69)
Accumulated External Debt .....	0.15** (2.93)	0.05* (2.17)
<i>Political Determinants</i>		
Political Instability .....	- 0.21 (- 1.79)	- 0.46 (- 1.61)
Capitalist Climate .....	3.54* (2.16)	1.85 (0.89)
Relationship of Donors to Recipients		
Ex-Colonies { U.K. ....	1.84 (1.89)	1.06 (1.27)
{ France .....	4.99* (2.61)	3.86** (2.89)
(Ex-)Dominions USA .....	1.94* (2.12)	1.46* (2.13)
<i>Test Statistics</i>		
$\bar{R}^2$ .....	0.64	0.54
F .....	7.1	6.5
d.f. ....	47	35

*Note:* The figures in parentheses are t-values. Statistically significant coefficients at the 95 (99) percent level are indicated by one (two) asterisk(s); two-tailed test. The relationship of donors to recipients is captured by appropriate dummy variables.

Source: Frey, Schneider [1983].

On the whole, the estimation equation for IBRD loans shows considerably more statistically significant influences than the equation for IDA loans.

## 2. Interpretation

The empirical estimates presented are now compared with the theoretical hypotheses associated with (a) the ethical, (b) the performance, (c) the Weberian, and (d) the selfish type of behavior. In order to facilitate the comparison, Table 2 lists the theoretically expected as well as the econometrically estimated signs of the coefficients.

Table 2 – Determinants of World Bank Lending – Theoretical Hypotheses and Empirical Estimates

	Theoretically Expected Sign				Empirically Estimated Sign
	(a) Ethical	(b) Perfor- mance	(c) We- berian	(d) Selfish	(Combination IBRD and IDA)
<i>Economic Determinants</i>					
State of the Economy					
Per Capita Income .....	-	0	-	-	-
Growth of GNP (Lagged) ...	0	+	-	+	+
Inflation Rate .....	+	-	0	-	-
Financial State					
Government Budget Surplus ..	-	+	0	+	n.s.
Balance of Payments Surplus	-	+	-	+	+
Accumulated External Debt ..	+	-	+	-	+
<i>Political Determinants</i>					
Political Instability .....	0	-	0	-	n.s.
Capitalist Climate .....	0	0	+	+	+
Relationship of Donors to Recipients					
Ex-Colonies { U.K. ....	0	0	0	+	n.s.
{ France .....	0	0	0	+	+
(Ex-)Dominions USA .....	0	0	0	+	+

*Note:* An empirically estimated positive or negative sign is attributed if at least one of the two estimation equations given in Table 1 has a statistically significant coefficient at the 95 percent level and the sign of the coefficient of the other equation has the same sign. - n.s. indicates that the estimated parameter sign is not statistically significant.

For deciding how well the types of behavior correspond to the actual World Bank behavior, as econometrically estimated, the following criteria could be used:

- (i) *Most hits*, i.e. the number of theoretically expected coefficients that have the same sign (including zero) as the empirical estimate. This criterion emphasizes the number of “correct” predictions made. The result is shown in Table 3. The selfish model (d) has 7 hits, followed by the Weberian model (c) with 5 hits.
- (ii) *Least clear misses*, i.e. the number of parameters whose sign is opposite to the estimated one (the zero signs and insignificant parameters are disregarded here). This criterion determines which model is the least misleading one. The winners are the performance (b) and the selfish (d) types of behavior.

Table 3 – *Criteria and Results for Evaluating the Four Types of Behavior*

Criterion	Type of Behavior			
	(a) Ethical	(b) Performance	(c) Weberian	(d) Selfish
Most Hits . . . . .	4	4	5	7
Least Clear Misses . . . . .	2	1	2	1
Borda Count (Sum of Ranks) . . . . .	5	4	4	2

The two criteria can be jointly taken into account by, for example, taking the sum of ranks of each type of behavior according to each criterion (Borda count). The result (shown again in Table 3) reveals the selfish type of behavior (d) to be the winner, followed by the performance (b) and the Weberian (c) types of behavior. The ethical type of behavior (a) accords least well with the econometric estimates.

In the *simple* interpretation of the incentive structure discussed above, the empirical analysis suggests that *incentives matter*. The types of behavior (a), (b), (c) which disregard the role of incentives in World Bank behavior are less consistent with what has been found to be “realistic”.

In the more *sophisticated* analysis of the incentives implied by the four types of World Bank behavior, the result of the empirical analysis suggests that direct *selfish* incentives of the supplier are dominant. The standard economic model of human behavior which argues that the best way to analyze economic activity is to assume that the decision-makers pursue directly their own interests is thus supported.

The types of behavior which fare second-best, the performance (b) and the Weberian (c) models, do not capture incentives as well as model (d). In the performance type of behavior, the (selfish) incentives enter only indirectly through the donors’ interests in the economic prosperity of the LDCs

receiving credits. In the Weberian model, performance excellence must be taken to be the only argument in the (selfish) utility function of World Bank officials, a somewhat demanding assumption. As has been hypothesized, the economic constraints imposed on World Bank decision-makers are not sufficient to induce them to keep closely to the Charter. Finally, the political constraints on World Bank officials seem to be even weaker (as hypothesized), so that the ethical type of behavior accords least well with the empirical observations.

#### IV. Consequences for the Choice of Institutions

The empirical analysis undertaken suggests that the distribution of credits by the World Bank is the result of the self-interestedness of World Bank officials under the given institutional conditions. It follows that in the *current politico-economic process*<sup>1</sup> economic policy advisers have only a small chance to influence such behavior: The actors are well aware of how to pursue their own interests within the given framework, and they have no reason to accept any advice which would decrease their utility. To simply advise the World Bankers to change their policy in a direction which an economic adviser considers “world welfare” increasing would either be completely disregarded or rejected. Much policy advice overlooks the incentive structure of the actors involved, which explains why it so often has little or no effect.

Within the current politico-economic process that kind of advice will be followed which enables the decision-makers to increase their *own* utility. Economic advice<sup>2</sup> thus serves to increase the information of how to best serve the actors’ self-interest. In the case of World Bank credit policy this means in particular that the advisers provide suggestions of how the (top) officials can gain more prestige within the international financial community and how they can improve (even more) on their quest for “performance excellence”. Economic advisers may also provide information to donor and recipient countries of how they can further their own interests by influencing the economic and political constraints which the World Bank faces. Under favorable conditions, in particular if it is not a distributional conflict of a constant-sum nature but an issue where Pareto-superior reallocations are possible, all actors concerned may agree on a policy change [see Vaubel, 1984]. However, such agreement does not necessarily come about because

<sup>1</sup> This (conceptual) level of politico-economic activity is characterized by the fact that the institutional conditions (or the “rules of the game”) are given, and that the actors know their interests. The decision-makers are, however, not fully informed. See Buchanan and Tullock [1962], Buchanan [1975; 1977] or Frey [1983].

<sup>2</sup> Economic advice is not offered by “benevolent” advisers in the interest of mankind. It is necessary to study the *incentives* which motivate the advisers. This aspect is not explicitly dealt with here for reasons of space.

one or more parties may engage in strategic maneuvers. It becomes clear that, in general, the scope for successful policy advice in the current politico-economic process is rather limited, because the decision-makers have sufficient incentives to find out the best way to further their own ends.

The behavior of decision-makers, and with it the outcome of the whole process of World Bank credit granting, can be affected much more effectively by *changing the institutional framework* within which the World Bankers are acting. In a world of self-interested decision-makers institutions can only be changed if this step is in the interest of all the parties concerned. The independent actors involved in this "game" would not participate if they knew that the changed institutional conditions would work systematically to their disadvantage. In the case of the World Bank, the independent actors are the sovereign nations that have decided to establish this international organization to achieve a public good which one nation alone is not able (or at least not well able) to provide. If, for instance, the World Bank institution is changed to the systematic disadvantage of the industrial donor countries, they are likely to either retreat from the contract, or to participate (i.e. contribute) less. Such donor countries will try to achieve their goals by setting up a new international organization which conforms better to their wishes, or if they fail, they will endeavor to intensify the direct deals with the LDCs they are interested in. If, on the other hand, an institutional change systematically puts the receiving countries at a disadvantage, they will try to get credits from other sources, for instance, from individual countries, private banks, or other international lending institutions. In both cases, the institutional change envisaged would lead to a breakdown (or at least to a reduced operation) of the World Bank. It follows that an institutional change is feasible only if the actors (countries) involved agree on it.

How is such a consensus on institutional change to be achieved? As long as each nation involved is perfectly informed, such a consensus is unlikely to be achieved, except if there is an obvious Pareto-optimal improvement of the institutional set-up available. Even then strategic moves of the countries involved may block its achievement. If the institutional changes correspond to a movement along a Pareto-optimal frontier, there will be clear losers, no consensus is possible, and the institutional change will not come about (at least not among the same participants of the international lending institution).

However, institutional changes have long-run consequences. This fact facilitates an agreement among the countries involved because they are uncertain about the future. They do not know (exactly) in what position they will find themselves in the future, i.e., they have to act behind what Rawls [1971] called a "veil of ignorance". A nation which is at present among the credit recipients may find itself in the position of a donor in the future (for instance, because natural resources have been found which makes the country a capital exporter). On the other hand, a country which is now among the

donors may find itself in the position of a credit recipient (for instance, because the ecological movement – the "greens" – blocks investment and industrial change reducing – conventionally measured – national income and exports). While this uncertainty is surely only partial, it still forces countries acting in their own interests to take a more "objective" view about institutions and their change. They will take a different view than in the case of a specific policy change where they are much more certain how they will be affected.

The sovereign countries engaged in the world economy may thus be assumed to be interested in an effective institutional arrangement of credit lending through the World Bank, which takes into account both the interests of the donors and of the recipients. Which particular institutional design may be chosen is difficult or even impossible to predict because it depends on the specific economic, technical and political characteristics of the countries, on the extent to which they are behind the veil of ignorance, as well as on the bargaining capacities. It is, however, possible to discuss the general instrumental approach which such an institutional change might take. The (selfish) behavior of the World Bankers may be influenced in the desired direction by changing the constraints under which the (top) officials pursue their own interests. The institutional changes must make these constraints more effective and goal-oriented. On the basis of what has been discussed above about the determinants of World Bank behavior, there are two possibilities to affect these constraints:

- (i) Establishment of (more) *competition* between international lending institutions. Competition will, however, only lead to a desired change in behavior if the rewards of the World Bank officials are linked to an appropriate success indicator. It is very difficult to think of an institutional arrangement which would meet this requirement. There are great problems involved, both with respect to how the rewards and the indicator of "success" are to be operationalized. It would, for instance, make little sense to simply transfer the incentive structure of private entrepreneurs acting in a competitive economy to the case of the World Bank. It is doubtful whether the top officials' behavior can be strongly influenced by salaries linked to the success indicator, because at that level of decision-making, monetary income is probably of a marginal significance only, compared to other elements in the utility function, such as prestige and performance excellence<sup>1</sup>. It is even more difficult to find and operationalize an appropriate success indicator. One of the main reasons is that in general the World Bank officials are in control of the

<sup>1</sup> If one doesn't agree, one would also have to believe that the major political decisions of country leaders have been motivated by reasons of private income. This is unreasonable, because such people have in general other and better sources to acquire personal income (e.g. by joining the boards of large companies or organizations, writing memoirs and giving highly paid lectures after resignation).

indicator and will have little trouble to set it at any level which suits their own utility, without much resemblance to what the indicator is supposed to really measure.

- (ii) The second approach by which the constraints under which the World Bankers operate can be strengthened is to establish *organizations* which effectively *monitor* their behavior. As has already been pointed out, the individual countries have little incentive to do so due to the public good nature of a significant part of World Bank activity. It would be necessary to establish a special monitoring office for that purpose, similar to, for instance, the "Rechnungshof" in the Federal Republic of Germany. It is, however, well known that such organizations have little incentive and lack the information to effectively fulfill their monitoring task. As a rule, they are not able to really affect the behavior of the organization they are supposed to control. Instead, they are restricted to pointing out a few instances of waste of money and (if they are lucky) some minor scandals.

The (sad) conclusion of our discussion is that too little is known about how to design institutions which produce the incentive structure required to reach a specified goal. This conclusion is, however, not all too unexpected: economics has been defined for a long time as the "science of the market", disregarding all other institutions than the price system<sup>1</sup>. Further development of the comparative analysis of institutions and thus of a (testable) theory of incentive design is urgent. There is little doubt that much can be learned from cross-national comparisons of institutional arrangements, an endeavor which so far has received too little attention.

## V. Concluding Remarks

The paper has started by distinguishing two approaches to deal with the function of governments and intergovernmental organizations in the international resource transfer. The "world social welfare" maximizing approach is rejected on logical and incentive grounds. The political economy approach is used by providing a positive analysis of the behavior of a particular international institution active in international resource transfer, the World Bank. Four types of behavior involving distinct incentive structures are theoretically derived, and empirically tested for the period 1972–1981 and for sixty credit receiving countries. It turns out that the model assuming selfish behavior of the World Bank (top) officials fares best. On the basis of this knowledge it is argued that there is little possibility to influence the behavior of the World Bankers in the current politico-economic process, with institutional conditions (constraints) given. Changing the institutional set-up within which the

<sup>1</sup> This is most clearly so in the most prestigious field within economics, general competitive equilibrium [see Schotter, 1981].

World Bankers act is a more effective way to affect the behavior, but it is difficult to see how this can be done in practice. Both the introduction of (more) competition among international lending institutions, and a stronger monitoring of the World Bank by a specialized controlling office are faced with the problem of how the appropriate incentives can be produced by the design of institutions which meet with agreement among the sovereign international actors.

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Zusammenfassung: Die Rolle von Regierungen und zwischenstaatlichen Organisationen beim internationalen Ressourcentransfer – Der Fall der Weltbank. – In dieser Arbeit wird die Tätigkeit der Weltbank beim internationalen Ressourcentransfer untersucht, und zwar unter ausdrücklicher Berücksichtigung von Präferenzen und Motiven der Entscheidungsträger und nicht einer Wohlfahrtsfunktion für die gesamte Welt. Vier Verhaltensweisen, die bestimmte Anreizstrukturen implizieren, werden theoretisch abgeleitet und ökonomisch getestet. Das Eigeninteresse der leitenden Weltbankbeamten als einer der vier Erklärungsansätze schneidet am besten ab. Es besteht nur eine geringe Aussicht, das Verhalten der Beamten der Weltbank im laufenden politisch-ökonomischen Prozeß zu beeinflussen. Wirkungsvoller wäre es zwar, die institutionellen Strukturen z. B. durch eine verstärkte Konkurrenz zwischen den Kreditgebern oder durch einen größeren Einfluß der Kontrollinstanzen zu verändern, aber das dazu notwendige Übereinkommen der souveränen Staaten ist schwer zu erreichen.

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Résumé: La fonction des gouvernements et des organisations intergouvernementales dans le transfert international des ressources – Le cas de la Banque Mondiale. – L'auteur rejette l'approche du «bien-être social mondial», et il applique l'approche de l'économie politique en analysant l'activité du transfert international des ressources de la Banque Mondiale. Théoriquement il dérive quatre types de comportement qui impliquent des structures d'incitation très différentes et qui sont testées par des méthodes économétriques. Les meilleurs résultats s'ensuivent du comportement intéressé des fonctionnaires supérieurs de la Banque Mondiale. Il y a peu de possibilité d'influencer ces fonctionnaires si le processus politique-économique est déjà mis en train. Le changement des structures institutionnelles, par exemple, par une concurrence plus forte entre les prêteurs ou une surveillance plus forte par des offices de contrôle est plus efficace mais il est difficile d'arriver à un accord international qui doit être conclu entre les nations souveraines.

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Resumen: La función de los gobiernos y organizaciones inter-gubernamentales en la transferencia internacional de recursos – El caso del Banco Mundial. – Se rechaza el enfoque de «bienestar social mundial» y se adopta el enfoque de política económica para analizar la actividad de transferencia internacional de recursos del Banco Mundial. Se derivan teórica-

mente cuatro tipos de comportamiento que implican distintas estructuras de incentivos y se someten a prueba econométrica. El comportamiento egoísta de los funcionarios máximos del Banco Mundial da los mejores resultados. Hay escasa posibilidad de influenciar el comportamiento de los Banqueros Mundiales en el proceso político-económico normal. Cambiando la estructura institucional, por ejemplo, aumentando la competencia entre los prestadores o exhortación estricta controlando las oficinas es más efectivo pero es difícil lograr el acuerdo necesario entre los actores internacionales soberanos.