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Michael McManus

The East-West Connection: Development of Scholarly Exchange in Management Science

p. 7

Exchange in the field of academic management or management science between North America and West Europe counterparts has a rich and well developed history. The subject of this paper is the sociology and development of scholarly exchange in management science between Soviets and East Europeans and their counterparts in North America and Europe. This is the least developed area of scientific exchange – the East-West connection in management. It is an important area for the field of management and represents a major frontier.

One purpose of this paper is to confront directly the problems and issues from a Westerner's perspective. This paper does not attempt to convince the undecided or the sceptic that exchange in general and any management program in particular are necessary or without problems. Rather, what is needed is an objective analysis of the experiences to date.

A second purpose of this paper is to reflect upon some of these experiences in exchange developers: What has been done? What is the greater context of scientific exchange in other fields? What have been patterns of exchange behavior? What are the underlying conditions helping and hindering the exchange process? What are the barriers and confounding influences? Where are the resources? What alternative models are viable? And, what is the outlook in the next five years?

Panagiotis Fotilas

European Community and the Greek Industrial Enterprises: Some New Economic and Social Problems

p. 23

This publication highlights the main economic and social problems which arise for the Greek industrial enterprises from the accession of the country into the EC. The paper reviews the rapid development of the industrial sector and deals with problems concerning structural shortcomings, trade balance difficulties, foreign investment activities, the employment situation and the working conditions. It also offers some suggestions on how these problems may be met.

Dhia AlHashim

Internal Performance Evaluation in American Multinational Enterprises

p. 33

One of the major managerial functions is the maintenance of proper control over the operations of a corporation. In fulfilling this function domestic corporations have utilized many different controlling techniques. The key for successful operations of any corporation, however, remains with its accounting system. It is through this system that management controls its day-to-day activities and coordinates its different operations.

As the number of international business transactions increases, the need for coordination and control of the different activities of a multinational enterprise (ME) becomes more urgent. Simultaneously, the management of an ME must adjust its activities to the everchanging foreign environment. In addition, the passage of the U.S. Foreign Corrupt Practices Act of 1977 mandated the maintenance of adequate internal accounting control systems and of adequate record-keeping. In order to adhere to the provisions of this legislation, U.S. based MEs were forced to reexamine their information system.

The objective of this paper is to deal with the effect of the environmental forces surrounding the operations of U.S. based MEs on the selection of the accounting tools used to control and coordinate these operations.

Determinants of Foreign Market Entry: A Multivariate Analysis of Corporate Behavior in the U.S. Based Health Care Industry

p. 40

The study which is reported in the present paper resulted in the following conclusions: First, firms in the U.S. based health care products industry seem to evaluate foreign markets on the basis of the following dimensions (factors): market and marketing opportunity, legal barriers and their economic objectives, cultural unity and physiographic barriers, political stability, and the level of economic development and performance of the country. The identification in this study of those factors pre-specified in the literature as important dimensions of a foreign market supports the contention that the health care industry also views the same environmental factors as relevant when evaluating foreign markets. However, whether they view these factors as equally important with other industries was not investigated and calls for further study. Secondly, there was no statistically significant relationship between the companies' evaluation criteria of a foreign market and the companies's experience in overseas business, number of employees, R & D expenditure, total sales nor total investment. This contrast to expectation may be due to inaccurate reporting of data for sales, investment, and research and development expenditures by the companies, or due to non-representativeness of the responses to the entire industry. Further research is thus suggested, since the present investigation was only exploratory in nature.

Martha Hollis

A Decentralized Foreign Exchange Risk Model

p. 53

Multinational Corporations face profit losses due to unanticipated movements in foreign exchange rates relative to the home currency. This paper formulates the short-term money management problem with goals of matching maturing monetary assets and liabilities for each period in a multi-period horizon subject to policy and operating constraints. Using the financial control archetype of independent foreign-subsubsidiary profit centers, the multiple goals programming model is denominated in units of foreign currency precluding the need for spot exchange rate forecasts. A rolling horizon model permits decision-making for the current period based on strategies for two future periods. An illustration of the model for a West German subsidiary of a U.S. Multinational Corporation is provided.

Henry Lane

Systems, Values, and Action: An Analytic Framework for Intercultural Management Research

p. 61

Numerous examples of business problems created by cultural insensitivity can be found. Many suggested remedies for avoiding such problems focus on improving managers' cultural awareness and interpersonal communication skills. As important as these skills are, however, businesses use specific administrative systems to manage their affairs also. Multinationals may design into these systems a cultural bias without realizing it and not much is known about the impact of culture on these systems. This paper proposes a framework for investigating the impact of culture on the design and performance of multinationals. The concept of culture is defined and integrated into an organization design framework.

Arnold Picot

The Management of Investment Externalities within the Private Investment Decision Process

p. 71

The problem of investment externalities is presented as a special field of uncertainty within the investment decision process. Conditions for the relevance of such effects to decision makers are identified (knowledge, actuality of affected needs, time horizon, organizational power) and the resulting difficulties of prediction are discussed. Having explored some motives of management to deal with externalities a set of strategies (information, Elimination, participation) suitable to fight relevant investment externalities is developed and subjected to a short comparative examination. It is recommended to pay already during the investment decision process more attention to possible non-market consequences of private investment.

Eugen Jaffe

Are Domestic and International Marketing Dissimilar? An Assessment

p. 83

Robert Bartels has proposed an "environmentalist" approach to the study of comparative marketing systems. The approach has not been subjected to any systematic evaluation, even though it differs from the mainstream of thought in the field, as demonstrated by the literature and state of the art. This article suggests how Bartels' model might be used in comparative studies of marketing systems by an extension of its basic premise.

Carel de Beer / Toon van de Ven

**The Efficiency of Production Systems in Developing Countries:
A Case Study in Peruvian Metalworking Industry**

p. 87

This paper presents part of the results of a research into the effectiveness of Peruvian metal-industry. More specifically the efficiency of production has been analysed in 23 firms. It appears that significant differences exist between two types of production systems: the product oriented system on the one hand and the process oriented system on the other hand. Not only the physical lay-outs of these systems differ, but also differences in efficiency and related organisational effects have been found. It seems that occurrence of these types is only weakly related to characteristics of the product-mix.

Gideon Chitayat

The Effectiveness of Boards of Directors in Israeli State-Owned Companies

p. 94

The purpose of this paper is to focus on what roles the chairmen and the boards of Israeli state-owned companies actually play. According to the views of many chairmen, boards have an adequate number of members, but there is a problem with enforcing attendance. Some directors who are government officials do not have the business skills and experience needed to direct the managing director. Board meeting time is not well-utilized due to either the lack of written background reports or the lack of advance preparation by directors. Directors and part-time chairmen are not receiving compensation for their time. In most cases, boards approve the annual budget without question and in some companies, boards evaluate the overall performance of the company. Individual ministers have considerable power over the companies under their control. Some chairmen view their role as that of a "watchdog" to control the activities of the chief executive officer and to provide the government with essential information. Full-time chairmen in some companies perform various tasks of the chief executive officer. Part-time chairmen serve more as advisors to the chief executive officer.

Shlomo Globerson / Nessim Malki

Estimating the Expenses Resulting from Labor Turnover

p. 111

The literature on the subject indicates that labor turnover has already reached a very high level, and so has the cost which is associated with it, therefore, the phenomenon should alert the attention of management. This article discusses the topic and describes a study presenting data of labor turnover costs for different types of jobs. Five major components of turnover are defined, and the costs associated with each of them are presented and discussed. Results indicate that, among the five turnover components, the component "training of a new employee" has the highest cost. In addition, the engineering jobs had the highest turnover cost among the costs of the different types of jobs.

Shaker Zabara

Egyptian Management at the Crossroads

p. 118

This paper identifies major ideological, economic, social, and cultural forces which define the role and nature of Egyptian management. It also identifies most salient features of that management as bureaucratic, ill-trained, disoriented, and negligent in human resource development. The latter section contends that the future of management and Egypt is inseparable. Therefore, without resolving inherited ideological paradoxes, development of a concept of man, and fostering professionalism, Egypt will continue to suffer.

The Management of Investment Externalities Within the Private Investment Decision Process

Externalities as Non-Market Consequences of Investment Decisions

Investment decisions set long-lasting premises for the future production possibilities of a firm. Usually the evaluation of an investment alternative depends on the expected profits induced by the pecuniary flows which accompany the investment process. As long as the market mechanism can demand adequate compensations for all costs caused by the investment from the investor, and, at the same time, return to him equivalents for all goods which his investment produces for other subjects, the above mentioned valuation method is sufficient. This holds true for the objectives of the investor as well as for those of all others who are affected by the investment.

This picture, however, is unrealistic: Nearly every investment decision produces consequences which cannot be compensated by the market mechanism or by other institutions and which at the same time either injure or further the goals and needs of those members of society who are not involved in the decision process. Economic theory has called such consequences "externalities", i. e. the production functions or the utility functions of economic subjects show some arguments throughout which cannot be controlled by the subjects alone but by other decision makers¹.

In the case that these arguments are influenced by the consequences of an investment decision, externalities arise: The affected subjects cannot get compensation for deterioration caused by non-market interdependencies of their preference functions or production functions. They do not have to pay for an amelioration of their situation. A legal or other power basis for compensation does not exist in either case. In the first case, the investor avoids expenses for reductions of values caused by his investment. In the second case, he loses possible returns induced by his investment.

Consequently, participation in a decision and concern about non-market decision consequences differ. Those who participate in an investment decision are only in part identical with the group which is affected by the decision consequences, and not all affected persons participate in the decision or can be put in status quo ante with the help of the market or other legal remedies².

It is plausible to suppose that investors try to internalize the positive externalities of their decisions as far as possible in order to maximize returns. On the other hand, problems of business strategy as well as social conflicts may arise from the appearance of negative externalities. This is due to the competition for gratuitous utilization of external resources among possible users (e. g. natural environment as a resource for waste deposition as well as for raw materials or recreation). Therefore, the problems discussed in the following will be mainly those dealing with negative externalities of investment decisions.

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Conditions for the Emergence of Relevant Investment Externalities

As the concept of externalities refers to all possible non-market consequences of investment decisions, its extension is extremely wide³. However, only a small set of the large number of externalities is relevant to an investor as well as to public policy. It isn't the existence of externalities as such which is problematic, but only their valuation by the social and economic environment. The environment, however, changes continuously. Because of the limited reversibility of investment decisions, it is desirable to find out the possible externalities and to investigate their relevance before the decision is made. This task poses remarkable problems:

Firstly, the differentiation between relevant and less important externalities must be vague. The interested views of the parties involved make this clear. Externalities of an investment decision are called *relevant for the business policy* as far as the economic and political consequences caused in the business environment can possibly injure the investment success or the goal achievement and the existence of the firm as a whole. Externalities are *relevant for public policy* as far as they may lead to a deterioration of the overall allocation and to a reduction of the support of the actual political representatives by important groups or even to an act of retreat from the social order. Both these views of relevance – the business and the public view – are interdependent and overlap each other. Secondly, both the naming of the concrete conditions on which externalities become relevant and the forecasting of the future formation of these conditions raise great difficulties. Literature, as far as concerned with the problems of externalities, hardly notices this aspect, though it is very important in dealing with externalities in practice. Consequently, some important conditions for the emergence of relevant externalities of investment decisions will be characterized.

The Knowledge of Possible Externalities of an Investment Alternative

The knowledge of future external injuries caused by investments is the necessary basis for consideration of the relevance of external side effects.

First, there are great problems in determining the secondary effects of an investment in advance. This determination depends on the questions posed in order to structure future consequences. Naturally, these questions are always *selective*, and are based on the present value system and experiences of the decision makers. In this way, the future value orientation and needs are extrapolated from the present situation. Methods like Technology Assessment or Environmental Impact Analysis can supply a certain systematic help during this process⁴.

Furthermore, it is a question of *information costs* and conventions as to when such an investigation can be considered as finished and on what degree of uncertain knowledge about future events planning for externalities should be based.

Finally, the quantity of knowledge about future externalities depends considerably on the regulation of the *burden of proof*⁵: If the (possibly) affected persons have to prove the harmfulness, what still seems to be the usual case, then a great part of the relevant knowledge will only emerge when the externalities as a consequence of the investment have already (partly) happened. It must further be mentioned that the possibly affected persons often do not dispose of the means for investigating in such questions.

If, however, the investor is to prove the harmlessness of his alternative, the fundamental examination and the forecasting of externalities might be more extensive, but the readiness for investment with high externality risks would, on the other hand, decrease.

The analysis of a single investment is, in most cases, not an appropriate basis for the valuation of its harmfulness. Rather, in many cases, – especially for the estimation of possible impacts on natural and social environment – it is necessary to have information about the quantity and regional distribution of similar investments, as well as about their *melting together with other producers of externalities*. At the same time, the imputation of externalities on individual firms becomes more difficult, if not impossible. The knowledge for making such imputations is hardly available in the individual process of investment decisions. To avoid this problem we would need a central ex ante coordination of all competing investment projects – a procedure which, as we know, is neither very practical nor efficient with respect to economic adaptation to change.

As well as the question of whether the knowledge about possible future externalities is principally available, that of *whether this knowledge is actually available for the affected persons* also plays role. It is quite possible that investment consequences are not perceived as injuries and therefore do not become relevant because the affected persons are not informed about the character of these consequences.

The Time Horizon of Decision and the Range of Externalities

Furthermore, the distribution of external investment consequences over time must be investigated and then be compared with the service life of the investment. If the non-market consequences happen within the service life, then the probability increases that they become relevant for the policy of the firm because the affected persons could possibly react. If the external decision consequences are expected only in a period later than the present or subsequent to the service life of the investment, the firm must not necessarily reckon with reactions influencing the investment success. Spillovers on other future investment projects are not very probable though they cannot be completely excluded.

The tendency to a higher valuation of present problems compared with future problems reduces the engagement of contemporaries for the possible burdens of their descendants. Normally the periods for which decision makers (businessmen or politicians) have to prove the success of their actions are relatively short. This fact favours the disregard or non-perception of long-term decision consequences and thereby the transfer of negative long-term consequences of present investments to later generations⁶.

The Actual Need-Level of the Affected Persons

The above mentioned conditions are necessary for the rise of relevant externalities of investment decisions, but not sufficient. External decision consequences will only lead to considerations or actions by the affected persons when they meet a corresponding disposition, i. e. *information about the emergence of effects must touch actual needs and central attitudes*⁷. According to the degree to which the perceived investment consequences influence the perceived satisfaction of actual needs and meet dominant attitudes, externalities may be classified as relevant.

Only in this case might the valuation of the perceived injuries by the affected persons be higher than the supposed costs of effective resistance against the disturbing side effects. Consequently, a concrete reaction by those affected is probable.

Attitudes and actual needs are differently defined and weighted according to individual experience and information level, individual self-perception and situational factors. Because of the influence of the special socio-economic situation on the valuation of decision consequences by external groups, it is especially difficult to predetermine possible relevant externalities of long-term investments, even if, for example, the ecological knowledge about unavoidable impact on the environment of an investment were at our disposal.

Interdependencies between satisfaction of needs by market processes and the perceived relevance of externalities caused by market processes show this more clearly the public discussion on negative side effects of the corresponding investments by the extensive market satisfaction of the desire for individual transport. The better satisfaction of transportation needs as well as the simultaneous cumulation of transport investments is increased allow the emergence of considerable externalities, and, at the same time, allow their valuation as "relevant". The actual debate on energy supply is another example.

Investment decisions, therefore, raise the question whether the urgency of the needs which will primarily be satisfied by them will exceed the importance of the needs which are injured by the accompanying secondary consequences.

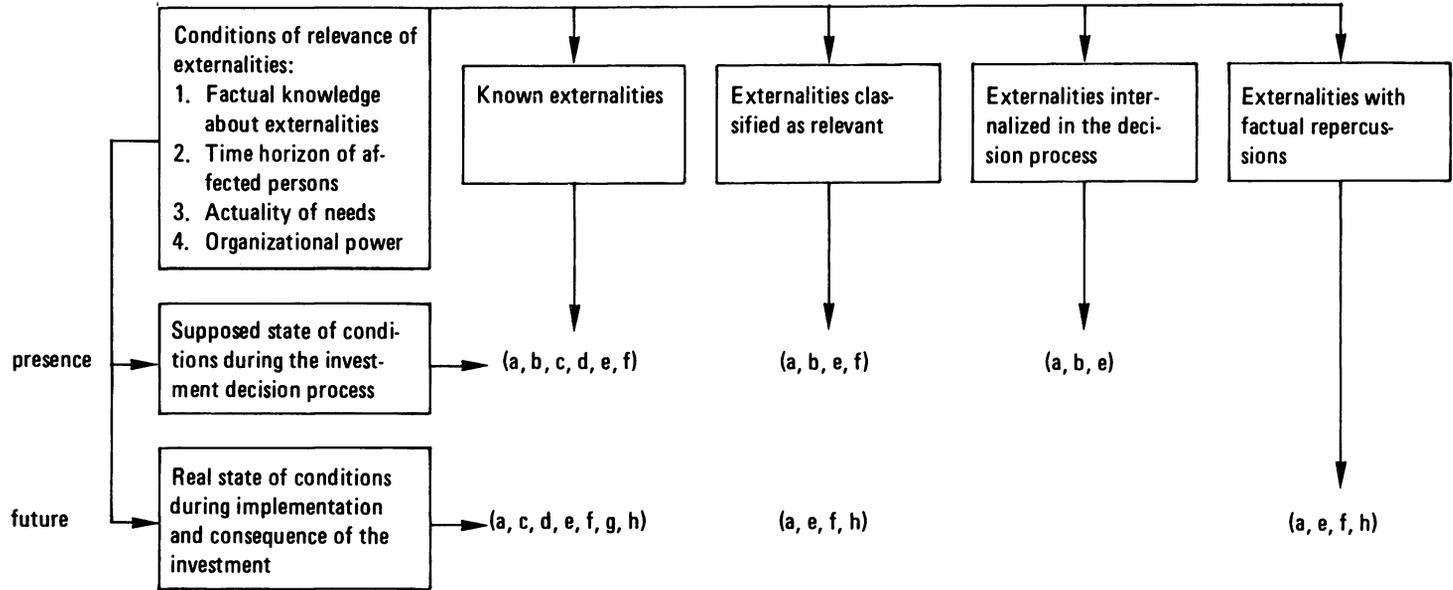
The Organizational Power of the Affected Persons

Furthermore, it is important for the future relevance of the externalities to which degree those affected are able to make themselves heard in the surroundings of the firm or in public. This, finally, is a question of power, i. e. of the possibility of influence by an individual or a group of individuals on the future behavior of the investor. Organized and institutionalized interests will be able to articulate themselves and succeed earlier than non-organized dispersed interests of the individuals and informal groups. However, organized representatives are, mostly, characterized by a better information basis and by a stronger long-term orientation to the future⁸. In consequence, the question arises if actual needs, which are affected by externalities of investment decisions, dispose (or will dispose) of an effective organizational representation in the public.

The Dynamics of the Relevance of Investment Externalities

Figure 1 summarizes the conditions described above. It emphasizes the dynamic side of the problem. The letter-symbols put in brackets represent different subsets of externalities according to the change of the conditions over time (vertical direction) and to the perspective of the decision maker (horizontal direction). The figure shows that both the amount of the known as well as of the relevant externalities change in the course of time. This is due to changes in factual knowledge, time horizon, actuality of needs and/or organizational power. In spite of internalization of single externalities during the process of the investment decision (a, b, c,) relevant externalities, which differ from those anticipated earlier and which can injure the success of investment and business (a, f, h), still

Figure 1: Problems of Forecasting the Relevance of Investment-Externalities



appear in the future. For example the changes of conditions are interdependent. New unforeseen knowledge about external decision consequences causes new attitudes and new resistance, for example. Because of such dynamics, it is impossible to completely forecast the arising of turbulent fields in the socio-economic environment of business⁹. The application of heuristic and inexact methods could possibly ease the problem. All in all this is a relatively rarely noticed field of investment planning under uncertainty.

Possibilities for Inclusion of Externalities into the Investment Decision Process

Motives for the Analysis of Externalities by Private Investors

Quantifying technological and social aspects of investments has cartinally been a difficult part of the investment planning. With regard to the theory of externalities, the private investment decision process, in contrast to the investment planning process of the public sector, has hardly been analysed up to this point. Without referring to the very doubtful concept of the "social responsibility of the firm"¹⁰, two motives may be seen which also may lead private enterprise to a voluntary (i. e. not formally imposed) analysis and to a partly ex ante diminution of possible externalities of investment alternatives:

(1) Nearly every alternative demands an analysis of its compatibility with the given institutional framework of the society. Within this analysis consequences of an investment appear which are officially regulated or prohibited (pollution and safety-standards, restrictions for location etc.). This analysis gives rise to the consideration whether it must be reckoned with future extension or intensification of the present public impositions and with claims of the interest groups, and whether this should be anticipated within the present decision process. Is it realistic to expect that some of the remaining externalities will be changing into internalities by potential demands of the groups or by public measures? Should, therefore, technological or organizational measures be discussed which would not produce these externalities? Such a behavior, indeed, could shortly lead to higher internal costs, but in the long run to advantages in technology, prestige, and also costs/returns.

(2) Theoretical considerations¹¹ and empirical investigations¹² can support the following proposition: The firm which engages in social responsibility activities as well as average enterprise will optimize its profit gial. Neither pure altruism nor extensive orientation to immediate market figures, but an engagement adapted to the average attention for social problems guarantees the best economic chances for surviving in a changing environment. If one accepts this hypothesis, positive and negative side effects of investment decisions should be exposed or eliminated to the same extent as they are regarded by other firms and by the public on the average. Furthermore, such a policy could also result in a better identification of external investors with the company's policy¹³. Therefore, externalities, which have the potential to indirectly influence the internal decision consequences, have to be predicted and to be taken into account for the firm's investment policy and for its public presentation.

In view of the mentioned motives, investment alternatives which least injure future public policy and, at the same time, produce only those externalities caused on an average by the firm's competitors will – *ceteris paribus* – be preferred. Under certain conditions,

this behavior will lead to a steady increase of the average consideration of externalities by private investors.

In this context it must be stressed that within our discussion only such externalities are observed which can mediately affect the dominant goal of the investor. Other, in this sense indifferent externalities (which absolutely can be relevant for the society) are not regarded.

Strategies for Relevance Reduction of Negative Investment Externalities

Given a number of relevant externalities of an alternative, the question is how the investor is able to reduce the relevance of these effects with respect to the affected persons in order to ensure the later success of the investment. Assuming that the possibilities of research and development for an integrated technological melioration of the alternative can be considered as exhausted, then three strategies (see figure 2) for diminution of the relevance of these effects are still at the disposal of the investor. Only if the costs of setting up these strategies exceed the additional success of this alternative compared with the second best, will the investor give up the investment alternative in question.

Figure 2: Strategies for Relevance Reduction of Investment Externalities

1. Information	2. Elimination	3. Participation
a) before decision after decision	a) real monetary	a) real symbolic
b) restriction expansion	b) individual collective	b) direct indirect
c) institutionalized occasional	c) single cooperative	c) institutionalized informal

1. Information

The strategy of information aims at the prevention, weakening or removal of the attitudes which strengthen the relevance of negative externalities. By influence on the information level, the decision makers try to remove the cognitive basis of the injury perceived by the affected persons. This strategy can already be applied *before* the final decision. Often it is applied *after* the decision during the phase of implementation. Under certain circumstances the rise of negative attitudes towards the investment may be prevented by *restriction* of the passing of relevant inside informations; by actively *increasing* the information basis of the affected persons and possibly by clarification and explanation activities, the volume of suspected or perceived injuring externalities may be limited. An *institutionalization* of such information activities, e. g., a periodic social account, is as possible as *occasional* problem orientated public relations.

2. *Elimination*

The strategy of elimination aims at an avoidance or at a reparation of the caused relevant externalities. Thereby, to a greater extent, the investors, i. e. the participants of the decision, will turn into those affected by their decision consequences. This strategy can provide for a *real* avoidance of the arising effects or for a *monetary* compensation of the affected persons. It may address *individually* to the benefit of single affected persons or *collectively* to a group of affected persons. Finally, the investor is able to act *on his own* or conjoint with others, e. g., in a *cooperative* association.

3. *Participation*

The strategy of participation aims at an integration of the affected persons into the investment decision process. The supposed future affected persons will turn into a participating party in the decision and, therewith, be able to bring in their interests and needs immediately and early. A participation strategy is to diminish the rise of relevant negative externalities from the outset and to guarantee the later loyalty to the decision consequences. Fundamental problems of application of this type of strategy, which today is frequently favoured in public discussions, are that the group of those who are to participate may vary depending on the type of investment and the kind of externalities under discussion, that this group may also differ from the circle of future affected persons, and that the number of the affected persons is frequently very high.

The decision participation may happen in *real* terms, i. e. the affected persons are actually integrated into the internal decision process with the possibility of negotiation and information. Then they are explicitly responsible for the treated decision as far as they are consenting. In some cases such a real participation may lead to a (vertical) integration of the investor with one or many affected parties.

The participation may also be *symbolic*, namely then, when a great number of the affected persons without a complete information basis are asked for their agreement in a formal act¹⁴. Such a procedure especially serves the later loyalty to the alternative in question and is normally not suitable for altering the chosen alternative.

Direct participation means that those affected personally take part in the decision process or in parts of the decision process. *Indirect* participation means that affected groups send representatives or experts into the decision group (e. g. board of directors)¹⁵.

Finally the participation of the possible affected persons in the investment decision process may be *institutionalized* (e. g. by special legal rights); furthermore, with respect to special investments periodical supplementary decisions and revisions may be institutionalized in which those affected could again participate. In many cases, however, participation will happen *informally* and sporadically by inclusion of, e. g., environment experts into parts of the investment decision process.

The strategy of participation touches fundamental questions of the constitutional rights of the firm. If the real participation in the investment decision process is extended to external groups, then this fact, for example, could influence the independence, the velocity and the competitiveness of the investment decision. Therefore, it must be questioned how many additional voting members may be taken up into the decision committee in the case of a real participation of affected persons. On one hand, the finding of a consensus should not become too difficult and expensive. But on the other hand, the un-

desired relevant externalities should be reduced to an efficiency increasing extent. If no relevant externality is desired at all, then all individuals externally affected in a relevant way should be included into the investment decision group and should be equipped with a right of veto. Beyond that group only unimportant externalities are to appear as well as such decision consequences for which the market exclusion principle or other institutional rights are valid. Such a method seems very unrealistic and unpractical, indeed, and it causes high costs. However, by sporadic or symbolic participation, as well as by determination of the necessary consenting votes, the decision procedure can be changed in such a way that disadvantages of further extending the decision group and advantages of additionally avoiding undesired externalities equalize themselves from the investor's view¹⁶.

Aspects of Strategy Selection

If the diminution of relevant externalities becomes part of investment planning process, then an evaluation of the possible strategies will be necessary.

Externalities can be interpreted as that vast field of decision interdependencies which so far is neither coordinated by the market nor by legal norms. It would be wrong to suppose that the undesired externalities of investment decision could be removed by the application of several volunteer strategies or legal instruments without again causing some externalities by these measures. As social values change depending on several of the above mentioned conditions, it is, possible in principle, that the internalization produces relevant side effects which are able to partly compensate the importance of the perceived internalized effects (for example new, possibly more negatively valued environmental burdens by technical environmental progress; increased resistance those who are excluded of the participation). Such indirect effects of strategy selection are only rarely discussed, especially because they are also hard to grasp. Compared with that, the immediate costs and benefits of the strategy application are more intensively regarded when selecting strategies, provided that the investor has a chance of choosing at all.

While all three mentioned types of strategy costs of the strategy application may be estimated in vague terms, the valuation of the benefit, induced by one of the strategies, causes the greatest difficulties. Because of this, firms would probably choose the type of strategy with the least expenses. Frequently, that is the strategy of information policy. The strategy of elimination, for the purpose of anticipative diminution of externalities which in many cases is very expensive, will be chosen less often. This strategy seems to be more an element of a supplementary investment policy which in this way meets external pressure exerted during the phase of investment implementation. Only when the supposed reactions of the business environment seem to become more costly than an anticipative elimination, would such a strategy probably a part of investment planning. Producers of environmental protection technology might recommend and promote the strategy of real anticipative elimination within their marketing of investment goods. Elimination and information are often strictly connected strategies because an elimination of an externality may be a welcome opportunity for public relation activities of the firm.

Because of the high uncertainty of the benefit-cost-analysis of the participation strategy the utility of this kind of action is difficult to be reliably estimated in advance. Especially, the risks of business policy which can be connected with a participation of the

affected persons are frequently estimated higher than the future advantages which are thereby possibly reachable. This is perhaps an additional explanation for the fact that, voluntarily, firms only seldom take advantage of a real institutionalized participation of the affected persons in an investment decision and in place of that restrict themselves to a sporadic interrogation of experts and of single affected persons. However, it might be questionable whether this behavior can in all cases be regarded as rational¹⁷.

If the risk preference of the decision makers towards possible repercussions of externalities is high, all strategic alternatives are considered as too expensive compared with their expected benefit. In this case, the firm acts more defensively. It gives up its own ex ante initiatives in this field and adapts to the actual official demands. In times in which the question of whether firms effect any investment at all is more important than the question what consequences investment will have such a behavior is particularly probable. On the other hand, risk averters as well as periods of booming investment behavior will favour adoption of the strategies.

As mentioned above and as the investor considers only those externalities which are probably relevant for his goal achievement, there remain many cases in which externalities appear relevant only to public institutions. Then, the internalization of these effects is accomplished or furthered by public measures: instruments of tax policy, orders and prohibitions of certain individual and collective actions, interferences into the legal framework of business, all methods variously treated in literature.

Concluding Remarks

Business environment has become more and more complex and dynamic. Social, political, legal, technological and world-wide economic changes are shaking the basis of business strategy, i. e. especially the investment strategy. Investment behavior which some years ago seemed to be widely accepted, suddenly faces resistance, and vice versa. Under these circumstances, management has to direct its sensitivity not only to market forces but also to non-market interdependencies coming from its business activities. Economic theory teaches a clear cut frontier between internal and external effects of economic activity, but in practice the strict separation can no longer be assumed in the face of the real dynamics of the socio-economic environment. The perception, interpretation, and policing of "weak signals" should therefore be extended to this area¹⁸. In this sense, sensible anticipative considerations of alleged investment externalities, of their possible relevance for internal success and of internalization strategies seem to be unavoidable for a well founded business policy. The framework developed in this paper could support the management of the sketched investment uncertainty. The innovative reduction of relevant externalities can be conceived as a challenge to Schumpeterian entrepreneurs, especially in times of discontinuities.

Footnotes

- 1 See e. g. the collection of important contributions to the theory of externalities edited by Staaf, R., Tannian, F., *Externalities: Theoretical Dimensions of Political Economy*, New York and

London 1974. A short overview of the problem is given by Picot, A. Kosten, volkswirtschaftliche, in: Handwörterbuch des Rechnungswesens, 2. Aufl., ed. by E. Kosiol, K. Chmielewicz, M. Schweitzer, Stuttgart 1980 (in print).

- 2 It should be noted, however, that affected individuals can change their behavior and thereby try to get a "compensation". Increased turnover rates or rates of absenteeism as consequences of investment induced changes of labor conditions are often quoted examples. Such indirect consequences raise the interest of business management in the analysis of externalities. See e. g. Picot, A., Betriebswirtschaftlicher Nutzen contra volkswirtschaftliche Kosten? in: Humanisierung des Arbeitslebens – Vergessene Verpflichtung?, ed. by L. V. Rosenstiel und M. Weinkamm, Stuttgart 1980 (in print) and Macy, B. A., Mirvis, P. H., A Methodology for Assessment of Quality of Working Life and Organizational Effectiveness in Behavioral-Economic Terms, in: Administrative Science Quarterly, Vol. 21, 1976, p. 216.
- 3 See Kapp's the critics on the concept of externalities: K. W., Environmental Disruption and Social Costs: A Challenge to Economics, in: Political Economy of Environment, Problems of Method, Paris, The Hague, 1972, p. 97.
- 4 e. g. Hinterhuber, H. H., Kritzler, Th., Technologieanalyse, in: Handwörterbuch der Produktionswirtschaft, ed. by W. Kern, Stuttgart 1979, p. 1930; Environmental Quality 1972, The Third Annual Report of the Council of Environmental Quality, Washington 1972, p. 230.
- 5 See e. g. Littmann, K., Umweltbelastung – Sozialökonomische Gegenkonzepte, Göttingen 1974, p. 52.
- 6 The problems of time preference and of a social discount rate cannot be discussed here in more detail; see e. g. Frey, B. S., Schwödiauer, G., Über die zeitliche Nutzung der Natur, in: Schmollers Jahrbuch Vol. 91, 1971, p. 691; Solow, R. M., The Economics of Resources or the Resources of Economics, in: American Economic Review, Papers and Proceedings, Vol 64, 1974, p. 1.
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- 11 Johnson, H. L., Socially Responsible Firms: An Empty Box or a Universal Set? in: Journal of Business, Vol. 39, 1966, p. 394, Baumol, W. J., Enlightened Self-Interest and Corporate Philanthropy, in: A New Rationale for Corporate Social Policy, Committee for Economic Development, Supplementary Paper No. 31, New York 1970, p. 15, Shocker, A. D., Sethi, S. P., An Approach to Incorporate Social Preferences in Developing Corporate Action Strategies, in: The Unstable Ground: Corporate Social Policy in a Dynamic Society, ed. by S. P. Sethi, Los Angeles 1974, 67, Picot, A., supra note 10, p. 32.
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- 14 For a more detailed discussion of symbolic participation see Luhmann, N., Legitimation durch Verfahren, Neuwied, Berlin, 1969, p. 219, Kirsch, G., Die Betroffenen und die Beteiligten, München 1974, p. 270, Picot, A., supra note 10, p. 152.
- 15 The problems of representative participation are discussed in more detail by Scharpf, F. W., supra note 8, p. 7, Kirsch, G., supra note 14, p. 70, Picot, A., supra note 10, p. 149.
- 16 A more detailed analysis of the resulting questions can be found in Buchanan, J. M., Tullock, G., The Calculus of Consent, Logical Foundations of Constitutional Democracy, Ann Arbor, Mich. 1962, Picot, A., Freiwillige Beteiligung externer Gruppen als Konsensbildungsinstrument bei Unternehmensentscheidungen, in: Die Unternehmung, Vol. 30, 1976, p. 245 ff., Kirsch, W., Esser, W., Gabele, E., Das Management des geplanten Wandels von Organisation, Stuttgart 1979.
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- 18 See Ansoff, H. I., *Strategic Management*, London 1979, Picot, A., *Der Einfluß des sozialen Umfeldes auf die Unternehmensführung*, in: *RKW-Handbuch Führungstechnik und Organisation*, ed. by E. Potthoff, Berlin, Bielefeld 1978.