Management Accounting Research, 1991, **2**, 171–188

Selling of capital investments to top management

O. P. Lumijärvi*

The purpose of this field study was to investigate, within one large company, how subordinates attempt to influence decision-makers so that they achieve the desired capital investment funds. It was discovered that subordinates try to convince superiors of the excellence of projects by selling investments, i.e., by employing economic, strategic, non-economic, and production technology arguments on formal and informal occasions. The findings are consistent with previous investigations which argue that subordinates attempt to induce decision-makers to become committed to a project through meetings and informal communications in order to avoid rejection, a capital investment calculation is not a major determinant in decision-making, and a submitted proposal will most likely be approved.

Key words: capital budgeting; capital investment decision-making; field study.

1. Introduction

The importance of capital investments and capital budgeting cannot be overemphasized. Investments affect operations and cash flows of firms for long periods of time, making investment success extremely important. However, an investment *per se* does not improve results but the success of companies depends upon how efficiently and effectively capital resources are utilized. Companies frequently spend large sums of money for capital investments which may give returns only after a long period of time. Moreover, a corporation's capital resources are typically limited. Consequently, the resource allocation decision is often critical to firm success.

Capital investment processes of companies have been under study in the accounting literature for a long time [1–14]. However, a large number of empirical studies in capital budgeting have been surveys and most of them have concentrated on the techniques used in evaluation. In fact, the popularity of different capital investment techniques in large U.K. and U.S. companies has been extensively investigated [15–26]. These studies have revealed, for example, that capital budgeting techniques have become more and more popular during the past decades and that the DCF methods—net present value (NPV) and internal rate of return (IRR)—and the payback period are the most popular techniques. Surveys have also discovered that the capital investment process is normally a bottom-up procedure and investment ideas are screened before the proposals are prepared [27–29].

* Turku School of Economics and Business Administration and KPMG Management Consulting, Kalevankatu 3 A 45, SF-00100 Helsinki, Finland.

Received July 1991; accepted 19 August 1991.

10455–5005/91/030171 + 18 $03.00/0

Although surveys have contributed to the capital budgeting literature, they can be criticized in many ways. For example, surveys are fairly superficial. Normally only the results of the questionnaires are presented and the findings are seldom interpreted. Further, surveys may also give too favorable and rational a picture of the company's capital budgeting practices. For instance, although DCF techniques are applied, it does not mean that decision-makers use them, and the role of profitability calculations in the decision-making process is not known. In fact, it is not even obvious who makes the capital investment decisions and what is the role of top management in a capital budgeting process [30, 31, 23]. Casual observations indicate that because typically units compete with each other for the limited amount of funds to be used for capital investments and lower-level operating managers propose capital investments and senior managers approve or reject these investments, the lower-level managers are seeking means for ensuring that the decision-maker—the person who has formal power to make the investment decision—will approve their proposals. Nevertheless, surveys have not uncovered how lower-level managers attempt to have their projects approved. Consequently, the surveys have not completely revealed how companies' capital resource allocation processes work [29, 32]. The purpose of this paper is to describe and report a field study, which was conducted within one large organization, of how a subordinate attempts to influence decision-makers so that he or she receives the desired funds for fixed capital investments.

The remainder of the paper is organized as follows. The next section presents findings of earlier studies in the field and states the propositions. Then the research methods are presented. The third section describes the target company, and is followed by the findings section. Finally, the study is summarized and the conclusions are offered.

2. Literature review

During the past few decades several scholars have studied capital budgeting from a social process viewpoint. The purpose of this approach, which can be regarded as an opposite perspective to the traditional normative and wealth-maximizing approach of the finance theory, has been to observe and explain the actual behaviour of people in capital budgeting processes [33]. A major study in this social process approach was by Bower [34] who showed that projects passed through different hierarchical phases and capital investment decisions were made by managers at various levels, not only by the top management of the organization. With the concept of impetus he also demonstrated the importance of the superiors' commitment in the acceptance of capital investments. Impetus refers to the willingness of a (division) manager to commit himself to sponsor a project before his superiors. In practice this means that when an investment is approved at the division and the division managers are committed to the project, it will also be accepted at the higher level of the organization. In fact, Clancy *et al.* [35] noted that once a project is set into motion, it becomes increasingly more difficult to stop:

> . . . after a project has received approval (or should one say, blessing) at several lower levels, upper-level decision makers are usually loathe to reject it . . . . it will usually be approved since by this time numerous lower-level managers and analysts have indicated their personal approval and commitment to the project . . . . upper-level managers will usually reject a project only if there are overwhelming reasons for doing so (p. 30).

Consequently, from a subordinate's point of view, it is crucial that a superior commits him or herself to a project as early as possible. However, on the basis of the Bower study, it is not totally clear how this commitment can be achieved and whether there exist distinctions between different kind of investments.

Studies have discovered that a superior supports those projects which are in his or her interest to support. For example, Ackerman [36] studied four companies in a field setting and found that in one of the companies some projects were funded while others had to wait for years. The explanation, according to Ackerman, is the force of backing: such as the supporter's organizational power and how strongly he or she feels about the project [37, 38]. Therefore Ackerman concludes that the capital budgeting process is influenced less by financial than other factors. In effect, there is some evidence in the literature that companies do not always use discounted methods for capital investment decisions [39, 16, 40].

It has been suggested that the capital budgeting process may be a mere ritual [41–43, 35]. This means that lower-level managers submit only such projects which will very likely be approved. If a project is rejected, a subordinate faces embarrassment and loss of face. A similar interpretation can be made on the basis on the findings of Mills and Herbert [44] who discovered that informal communications between subordinates and superiors are used in order to prevent rejection of investment proposals [17, 45]. Carter [46] also notes in his empirical study that investment decisions are the result of sequential bargaining at different organizational levels. More precisely, between the initiation and final approval of an investment, different people and groups—for example, first a profit centre manager and a division manager and later the division manager and the president—bargain. During bargaining, people commit themselves to the projects, making it increasingly more difficult to cancel or reject the proposals [41, 47, 48].

Marsh *et al.* [49] argue that the capital budgeting process cannot be regarded purely as a political process. Rather, they stress the importance of formal control systems. Marsh *et al.* discovered that decision-makers commit themselves to a project via various meetings during the project's acceptance process. In addition, they noticed that typically only one capital investment option is presented to top management. Therefore, top managers can make only yes or no decisions and, according to the findings of Marsh *et al.*, the top management at the corporate level approves the presented projects much more often than it rejects them.

The preceding discussion can be summarized with the following propositions:

P1. Subordinates attempt to induce decision-makers to become committed to a project because otherwise the investment is not accepted.
P2. Subordinates try to gain decision-makers' commitment through meetings and informal communications.
P3. Capital investment calculation is not the most important determinant in decision-making.
P4. When a subordinate submits a proposal it will very likely be approved.

The present study was designed to gather empirical evidence on these propositions.

3. Research methods

A field study methodology was chosen for this research in order to provide an in-depth understanding of the subject matter. In fact, it has been argued that the field study is a fruitful method to investigate issues associated with management control and the information related behaviour of managers [50–54]. Moreover, it was assumed that more accurate and relevant data could be gathered using field research methods such as interviews and observations than through surveys or experimental studies.

The search for a potential research site started in winter 1988. From the beginning it was clear that the study would concentrate on one large company with a vast number of subunits. Two factors were important in this choice. First, numerous organizational levels exist in a large company, and in such a corporation capital investment are typically done on a regular basis. Second, a detailed study of company wide competition for the funds could not be possible in a reasonable period of time if several companies were studied.

By investigating business magazines, annual reports, and newspapers the researcher made a ranking of candidate firms. The most desirable company was approached in April 1988 when a research proposal and a covering letter was sent to the senior executive vice president of Scandinavia Corp (the name of the company is disguised). A phone call was made to this manager in May, during which he gave a preliminary approval for Scandinavia Corp to serve as the target firm.

The field research was carried out at three of Scandinavia Corp's five divisions in 1988–1989. The sources of information were: (1) interviews at several organizational levels; (2) informal discussions with the interview participants during coffee breaks, lunches, and tours of the unit facilities; and (3) historical as well as up-to-date materials obtained from the company (e.g. investment proposals and ex post audit reports of implemented investments). The primary source of information was interviews, and the objective was to interview people who played an important role in the company's or units' capital budgeting processes—the people who generate, co-ordinate, review, approve and reject proposals. The managers were normally interviewed once each. The duration of the interviews varied between 1 and 3.5 hours, and a typical meeting was 1.5 hours in length. Between September 1988 and June 1989 a total of 71 interviews with 69 different people, totalling 110 meeting hours, were conducted.

All of the meetings were semistructured interviews following 'questionnaires' developed in advance [55, 56]. For each interview, the questionnaire was tailored separately because individual characteristics and the setting had to be taken into consideration. The interviews were documented in writing and the notes were transcribed immediately after the meeting to create a permanent record. At times follow-up contacts were made in order to check the accuracy of the data or supplement the facts and figures. Follow-up calls were also made in order to track some of the investment projects as they progressed during the research project. All in all, the use of various forms of information and interviews with several people within same units as well as at different organizational levels allowed verification of the accuracy of the researcher's observations and helped overcome gameplaying by interviewees [57].

4. The target firm

Scandinavia Corp is a publicly traded Fortune International 500 company and one of the largest enterprises in Finland. By means of its subsidiaries, sales offices, and representatives, Scandinavia Corp operates throughout the world. The company has always been a diversified industrial firm with a variety businesses and today, Scandinavia Corp's organization includes five divisions which are decentralized into business units and further into profit centres.

The profitability of the divisions and business units varies to a great extent, and the profitability of the whole company has fluctuated between poor and satisfactory during the 1980s, although the company has shown a profit every year. However, the company's profit increased remarkably in 1988 and 1989. Scandinavia Corp is fairly capital intensive and uses a lot of funds for investments. The amount of annual capital investments, excluding company acquisitions, has been lately nearly FIM 1000 million (approximately £143 million).

The study concentrated on three divisions, hereafter Pulp and Paper Division, Metal Division, and Packing and Service Division. The units studied normally account for 90 per cent of Scandinavia Corps' capital investments and 70 per cent of its net sales. The investigated units offer variation in many ways, for example, capital intensive vs labour intensive production processes, advanced vs standard manufacturing technology, large vs small units, rapidly growing vs stable units, and profitable vs unprofitable units. As a result, the sample provides a good cross-section of sizes and types of investments as well as activities within Scandinavia Corp. A summary of the divisions studied is given in Table 1.

During the strategic planning phase the business units announce their preliminary capital investments needs. The investment potential is allocated to the units on the bases of the company's strategy, result projections of the business units, and their investment needs.[1] The investment potential for each unit is determined before the annual budgeting process starts. Although a unit's investment framework is approved during the budgeting phase, each investment proposal has to be accepted separately.

Table 1
Summary of the divisions studied

	Pulp and paper division	Metal division	Packing and service division
1. Net sales (FIM million)	2500	3000	1400
2. Number of employees	1900	6100	4200
3. Number of business units	4	6	4
4. Profitability of the units	Excellent: 1 unit good: 2 units Satisfactory: 1 unit	Excellent: 1 unit good: 2 units satisfactory: 1 unit poor: 2 units	Excellent: 1 unit good: 1 unit satisfactory: 1 unit poor: 1 unit
5. Amount of annual capital investments (approximately FIM million)	500	200	150

[1] Investment potential is based on the projects' expected contribution to the company's asset to equity ratio (AER). Capital investments are made within the limits within which the desired AER can be reached.

For investments of under 1 million marks, the business unit's internal board—which operates as a unit's Board of Directors—releases reserves to the disposal of the general manager two or more times during a year based on current operating results. Before approval of investments over 1 million marks, a detailed investment proposal is required. If an investment falls below FIM 5 million, the proposal can be approved by the internal board of a unit. On the other hand, investments which exceed FIM 5 million are accepted by the company's Executive Committee and projects over FIM 20 million by Scandinavia Corp's Board of Directors.[2]

An investment project's profitability is calculated using the internal rate of return (IRR) and payback criteria. There are no strict IRR or payback targets in the company. Nevertheless, interviews suggest that some informal return targets do exist. For instance, a project that is over FIM 5 million must have an IRR of at least 15–20%.

5. Results

Observations in Scandinavia Corp indicated that subordinates attempt to 'sell' their investments to a decision-maker in order to have their projects approved. Selling was related to every major capital investment of Scandinavia Corp in one form or another. On the average nine interviewees out of ten said that investments have to be sold. Selling refers to an activity by which a proposer attempts to obtain the decision-maker's commitment to the investment [58–62, 37, 38]. When a person to whom an investment is sold has committed him or herself to the investment, he or she is ready to support the project, to promote it, and to contribute to the investment's approval.[3] More precisely, it was observed in Scandinavia Corp that an investment of over FIM 5 million, no matter how promising, is not accepted purely on the basis of an official proposal or calculations. For example, a member of the Executive Committee said:

> People should consider from the very beginning how an investment will be sold. The truth is that one or two ideas out of a hundred are carried out. This is because everybody doesn't see that an investment has to be packaged properly. You can call it a kind of lobbying but it belongs to the process. . . . Investments are considered for a long time . . . but they [proposers] have to know how to sell so that they'll [investments] be implemented.

Selling can also be understood as a form of persuasion—the proposer of a capital investment attempts to induce the desired person to support the investment [67, 43].

Depending on the size of a project there can be numerous sellers and decision-makers. However, in the projects of over FIM 1 million the initial seller is usually a general manager of a business unit. In these cases critical to an investment's approval is the commitment of the head of the division (see Figure 1). It appeared in several interviews that if the division manager does not approve the project, it has no possibility of being accepted [34]. One of the subordinates emphasized the importance of selling to the head of division by saying:

> If you want to ensure that a proposal is going to be accepted you have to know the supervisor [the head of the division] and sell the idea first to him.

[2] The 'divisional' level of management is exercised at the internal boards. In all of the other cases except in one, a head of the division is the chairman of a business unit's internal board. The other members of an internal board are typically top managers of a division as well as central management.

[3] According to Brunsson [63], 'Commitment links the actor to the action in advance, it is a kind of promise of personal support to an action (p. 48).' cf. [64–66].

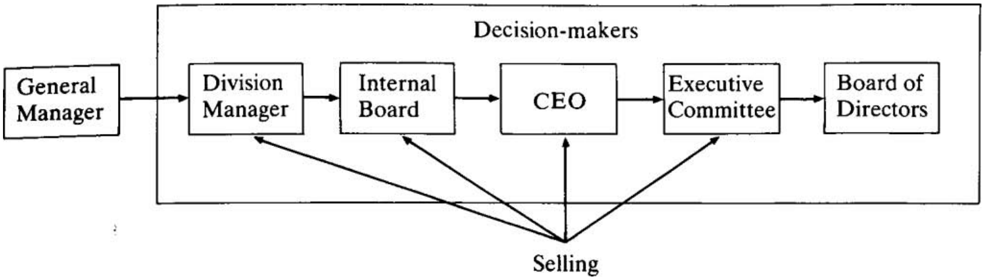

Figure 1. The progress of a capital investment and the targets of selling in Scandinavia Corp.

Several other interviewees revealed that the division head's cooperation is an essential pre-requisite for investment approval [68, 38].

The study discovered that proposers then try to sell the investment to the members of the internal board (see Figure 1). If the investment advances to the Executive Committee, attempts are then made to obtain the support of the CEO.[4] It was observed that if the CEO does not approve the project it will not get through the Executive Committee. If, on the other hand, the CEO does not reject the investment attempts are also made to sell the investment to the other members of the Executive Committee.

Typically, efforts to sell the project to the CEO and to the other members of the Executive Committe have been made before an official investment proposal is submitted. In effect, so much has been discussed about proposals in advance that the acceptance of the investment is insured before the project is even considered by the Executive Committee [41, 42]. Therefore investments are hardly ever rejected by the Executive Committee. The CEO gave the following description:

> The Executive Committee has discussed the project at some point before the proposal comes there. When the proposal comes up for consideration, the decision has already been made. The decision was made at a very early stage when the head of the division informed [the members of the committee] about the investment in advance. But the decision can be delayed at the Executive Committee, so that the investment is studied carefully. If the final decision was made at an early stage, the investment would not be examined properly and planning could be started only after the decision. The Executive Committee's decision at a meeting is just a formality; it's just dotting the i.

Many interviewees made similar points. For example, one of the general managers said:

> Usually an investment has already been discussed in advance and the proposal is just a formality. The investment is simply blessed at the Executive Committee's meeting. It has been accepted earlier.

It was observed that to the Board of Directors investments are not usually sold (see Figure 1). The Executive Committee is the most important forum of the decision-making which also applies to large investments. Further, it was noticed that the Board of the Directors of Scandinavia Corp does not, in general, reject investment proposals. Up to the present all of the projects which the Executive Committee has accepted have been approved by the Board (in which the CEO is a member).

[4] The Executive Committee consists of the CEO, the senior executive vice president, and six vice presidents of whom five are division managers.

Selling arguments
Birnberg *et al.* [54] presented a framework that can be used to study selling of capital investments. Using their terminology, selling investments incorporates the focusing and filtering of information. For example, a proposer of an investment can enhance or focus the significance of the technology. Or the proposer may not reveal the drawbacks of the investment, i.e., information is filtered. It is worth noting that the line between filtering and focusing is not clear because some aspects of an investment may be focused while, at the same time, some other aspects are filtered. In this study the emphasizing of information includes both focusing and filtering.

The observations gave evidence that the different arguments which are used to sell investments to decision-makers, i.e., in attempting to influence decision-makers in order to obtain the desired funds, can be classified as follows:

1. Economic arguments, e.g, profitability of an investment.
2. Strategic arguments, e.g, an investment's strategic applicability.
3. Non-economic arguments, e.g, social factors pertaining to an investment.
4. Production technology arguments, e.g., new manufacturing system.

Next, each of these categories is studied closer.

The basic argument in selling investments is to maintain that the investment is profitable. It was observed that in almost every investment case profitability of the project was emphasized. Especially, if the unit's profitability was poor it stressed the project's return. In fact, the study did not find any proposal where IRR was under 15%. Scandinavia Corp's manager of financial control confirmed this by saying:

> I've never seen an investment proposal where the return is under 20%. And the payback period is normally 2–3 years.

However, it was observed that the effectiveness of economic arguments were low. Most of the decision-makers saw little value in figures. For example, a member of the Executive Committee disclosed:

> I don't pay attention to calculations but to the description of the investment and what we are going to get out of it. What's written in the investment's description and what's between the lines matter.

A member of an internal board has a similar view:

> They [general managers] are selling investments with percentages. Well, maybe they think that we can't say anything when the return is 20% and payback period 2–3 years. Too may people try to sell like this.

Several decision-makers emphasized that it is demanding to analyse and criticize the proposed calculations and figures. Therefore they do not pay much attention to numbers. In fact, it was observed that if a lower-level manager presents calculations convincingly superiors are unable to criticize the figures. One of the general managers gave his opinion:

> If the IRR is, for example, 30% it's difficult for the head of the division to object. He can ask questions, but, to a great extent, he has to rely on what is proposed to him.

As a result, the presented return figures have finally a minor role in the final decision-making. Nevertheless, it was observed that the return of an investment has to be sufficient, IRR of at least 15%, because otherwise the investment would not even be considered. In fact, the study discovered that investments which returns are insufficient are either presented as profitable or they are not submitted from the units. The CEO confirmed these arguments by saying:

> An investment's estimated return is important for a proposal to even be taken into consideration. . . . The return is about on the same level for all the investments which come to the Executive Committee.

Within Scandinavia Corp, it is essential that an investment fits into a unit's strategy. Consequently, most proposals now state that the investment is part of a strategy or that the investment will allow the planned strategy to be implemented. For example, a controller of a division said that the most typical cliché nowadays is that 'the strategy requires the investment'. Although the efficiency of the strategy argument varied, it appeared in the interviews that for most of the decision-makers it was essential. For example, one of the division managers conceded:

> Large investments, especially, are based on the fact that a good strategy exists. That is the most important criterion.

A member of an internal board explained why it is good to justify and buy an investment with a strategy argument:

> You can frame a strategy and you can understand it.

In addition, it was discovered that all kinds of non-economic reasons are employed to sell investments although it appeared they are rarely used in Scandinavia Corp. An example of a non-economic argument is employment. It was observed that in the investment cases where social factors were emphasized forcefully, the arguments had a significant effect and those investments were finally accepted. For example, in one of the cases social factors were the real reasons for carrying out a large investments of over FIM 130 million. An alternative was the shutdown of the factory. The CEO commented this project.

> There are several things that matter, [for example] employment of the unit. . . . If there weren't any social factors the factory would have already been cemented closed!

Finally, it turned out that capital investments can also be sold by using production engineering arguments. On the basis of the observations, these arguments are not employed as often as economic and strategic arguments, but more often than non-economic arguments. This is because the production technology arguments are typically applied when the project represents new technology in the company, such as FMS (Flexible Manufacturing Systems). Observations also indicate that the effect of these arguments is good, i.e., an investment can gain acceptance by emphasizing technological details of the project.

These distinct types of arguments are each related to particular information because the persons selling an investment state their arguments using focusing and filtering. The preceding discussion is summarized in Table 2.[5] It was observed in Scandinavia Corp that economic arguments were emphasized extremely frequently although they did not seem to have much influence on the decision-makers. Strategic arguments were also employed very often and they had more effect on the superiors than economic arguments. Non-economic arguments were applied rarely, but when employed they

[5] Subordinates and superiors were asked to reveal the way of selling investments as well as employed arguments and their effectiveness.

Table 2
Frequency and effectiveness of different arguments

	Economic arguments	Strategic arguments	Non-economic arguments	Production technology arguments
1. Frequency of selling arguments[a]	Very frequently	Very frequently	Rarely	Frequently
2. Effectiveness of selling arguments[b]	Ineffective	Effective	Effective	Very effective

[a] Scale: rarely, frequently, very frequently.
[b] Scale: ineffective, effective, very effective.

were effective. Finally, proposers emphasized production technology arguments frequently and the decision-makers seemed to value them very high.

It was observed in Scandinavia Corp that some characteristics of the project as well as of the unit submitting the investment were prevalent when certain selling arguments were employed. One of them is that units with poor profitability emphasize economic arguments when they attempt to promote their projects. More precisely, they stress to the decision-makers that an investment is exceptionally profitable. On the contrary, the business units with a good profitability do not seem to emphasize the economic arguments, rather they use strategic and production technology arguments. For example, a well performing unit in Pulp and Paper Division made an investment of over FIM 300 million. All of the interviewees said that the acceptance of this investment did not depend on the costs. Strategy proved to be more important than the initial outlay. One of the business unit managers said:

> In this case there was a vision that we have to produce [certain] product or otherwise we are going to be out of the market, and this was the major issue.

The decision-makers agreed and one of them stated:

> The investment was sold [with the argument] that new products would result, and this argument was very easy to buy.

An example of production technology arguments is a well performed unit in Metal Division which was planning a FMS investment of over FIM 55 million. Calculations indicated that the project would be extremely profitable. But the real selling arguments were FMS and its benefits. In fact, the approval of the investment was influenced more by the general appreciation of FMS than by the project's profitability.

This FMS investment also indicated that when an investment represents new technology in the company production technology arguments are emphasized. A similar case emerged in another unit of Metal Division where a FMS investment of FIM 15 million was considered. Also in this case the FMS was emphasized and the fact that the investment included new technology advanced the project in the company.

In addition, it was discovered that in extremely large investments, those of several hundred million marks, strategic arguments are emphasized much more than any others. For example, one unit in Pulp and Paper Division was considering a machine investment of over FIM 900 million. The general manager of the business unit emphasized that strategy is much more important in such a large investment than profitability:

> The most important issue isn't, or, in my opinion it shouldn't be, the return. There should be a vision of the desired market. This means that where we are going is more important than the return. . . . The most important thing is what's the faith in this business. This kind of a large business shouldn't be justified only by a calculation.

Similar comments were also received from other managers who had large investments under consideration or implementation. In fact, the company's top decision-makers agreed and, among others, the senior executive vice president of Scandinavia Corp said:

> In large investments several other things are considered, not just profitability and other calculations. A decision regarding this kind of investment is more a decision of strategy than of calculation or profitability.

These two cases give partial evidence for the observation that if an investment represents standard technology, such that already exits in the company, proposers may emphasize strategic arguments. In addition, it turned out that if the investment is small, typically under FIM 5 million, the proposers emphasize economic arguments. All in all, it was observed that if a project is small and represents standard technology, proposers stress more economic and strategic arguments than any others. The final and a natural observation was that if an investment is not based on economic factors but, for example, on the guarantee of employment, proposers emphasize non-economic arguments.

Table 3 summarizes the preceding discussion. The figure presents factors which were observed to link a business unit and a capital investment when proposers employed different arguments.

Table 3
Characteristics that were dominantly prevalent with different selling arguments

	Economic arguments	Strategic arguments	Non-economic arguments	Production technology arguments
Unit:				
Unit's poor profitability	x			
Unit's good profitability		x		x
Investment:				
Investment represents new technology in the company				x
Investment is extremely large (comparing to average projects)		x		
Investment represents standard technology in the company	x	x		
Investment is small	x			
Investment's real reasons are not economic factors			x	

Selling occasions

When selling investments was investigated further it appeared that selling takes place in different situations in Scandinavia Corp. More precisely, the interviews and observations indicated that selling occasions can be categorized as follows:

1. Formal selling occasions, e.g., meetings and negotiations where strategic plans, budgets, and capital investments are considered.
2. Informal selling occasions, e.g., arranged trips, audiences with decision-makers, accidential appointments, and phone calls.

Examples of both of these selling occasions are provided below.

In some respects, an investment is first sold when a business unit's strategic plan is considered. To illustrate this point, a member of the Executive Committee said:

> During the strategy phase a lot of discussions are held. At that stage people try to sell their ideas to others. They try to convince others that it is worthwhile to put money in this [investment].

After this phase, investments are reconsidered at several later meetings. In fact, it appeared that one of the basic means for selling is that an investment is discussed at numerous meetings over a long period of time [49]. This was exemplified in all large investments, those of several million marks or more. When a project is reviewed several times over a long period of time, decision-makers gradually commit themselves to the investment. Each time the project is considered decision-makers give their approval to promote the project. Finally, when an official proposal is submitted, a commitment has already been made to the project and it is accepted. One of the general managers revealed:

> Decision-making on an investment is a long process and requires several discussions. But it is important that the idea for the investment is generated by a decision-maker so that he notices that this investment should be done and that there is something in it. . . . You can't just bring an investment to a decision-maker and say 'Here it is.' The decision-makers have to be committed to the investment before the decision is made.

If an investment is put before an internal board, the Executive Committee, or the Board of Directors, a general manager or head of the division gives a presentation on the project. This presentation can include the strategy of emphasizing arguments. In fact, according to the interviewees, the presentation is an effective means of selling an investment and of obtaining the decision-makers' commitment to the project. One of the decision-makers regarded the presentation as essential to the acceptance of an investment:

> If poor investment papers [proposal] exist and a person can't present his issue properly, you get the feeling that everything is not in order, even though the idea may be good. Nevertheless, the investment will not be accepted. On the other hand, if the idea is lousy but the person has good papers and can present his stuff clearly and sell it, it's absolutely sure that the project will be accepted.

When the role of a presentation was raised during the interview where a general manager and the unit's vice manager were present at the same time, the following dialogue ensued:

> The vice manager: One important factor when you go to present a proposal is that you are prepared for questions. Many times managers test the idea by anticipating questions, and if you have prepared yourself for this and you can give reasoned answers, everything is going to be ok.

The general manager: A good, logical presentation is very important because it can have a great influence.

The vice manager: It's very important that at the end of the presentation you get somebody to say how good this idea is as soon as possible because the Executive Committee members actually know very little about the issue and are watching other members to see what they think about it. When one person says that this is a good idea then, normally, the others follow. But if you get a tough opponent, then it's more difficult because now the others may follow his opinion.

The interviews indicated that selling occurs frequently in informal selling occasions. More precisely, investments are sold, for example, when proposers unexpectedly meet a decision-maker. To illustrate this point, one of the operating managers said:

> There exist so many decision-makers in this large company that you have to sell your own [investment] to the decision-makers every time you meet one of them.

Another manager had a similar opinion:

> If you [unexpectedly] run into a decision-maker then of course you start to sell your investments and you make it clear that we really have to get the funds.

In addition, the interviews revealed that informal selling occasion often take place during phone calls [69–71].

The interviews also revealed that investments are frequently presented to the decision-makers during personal visits [38]. Especially, if an investment is large, proposers pay visits to decision-makers. One of the operating managers said:

> One good method [to sell] is visiting one of so called experts [i.e. top managers] and asking his opinion on the idea. This is important because this expert may [otherwise] feel that he was passed by when the idea then officially appears.

A member of the Executive Committee confirmed that often people try to sell investments to him by visiting and asking his advice. He continued:

> People come to discuss. They want to know what is lacking in the proposal and what else should be done. . . . On the other hand, I'm also trying to push this by saying, for example, that you still have to think about this and that. It's a consulting discussion about what is needed so that the proposal can move to the next stage. And in this way the investment comes known in the company, and it just doesn't appear on an agenda.

In addition, one way of selling an investment is to have decision-makers visit a site where a machine similar to the proposed one exists. It was observed that this occurs in Scandinavia Corp especially when a project includes new technology.

Table 4
Frequency and effectiveness of different selling occasions

	Formal selling occasions	Informal selling occasions
1. Frequency of selling occasions[a]	Very frequently	Frequently
2. Effectiveness of selling occasions[b]	Effective	Very effective

[a] Scale: rarely, frequently, very frequently.
[b] Scale: ineffective, effective, very effective.

Table 4 summarizes the above discussion. It was discovered that selling occurs more frequently in formal than in informal occasions. However, on the basis of the observations, it can be said that an informal selling occasion is more effective than formal occasions. Especially observations indicated that such an informal occasion where a personal visit is made to a decision-maker has a great influence.

5. Discussion and conclusions

The preceding arguments are summarized in Figure 2 where selling capital investment to a decision-maker is illustrated. As the figure demonstrates, the purpose of selling is to induce a desired decision-maker to become committed to a capital investment. There can be several selling occasions before the commitment is received but when the selling succeeds the decision-maker supports the project, puts it forward with the proposer, and contributes to the investment's approval.[6]

The findings support the first and second propositions which argued that subordinates attempt to induce decision-makers to become committed to a project because otherwise the investment is not accepted, and that subordinates try to gain decision-makers' commitment through meetings and informal communications. It was observed in Scandinavia Corp that in every capital investments of over FIM 1 million lower-level operating managers sold their projects to superiors and this way they tried to receive superiors' commitment and to get investments accepted. In fact, a capital investment, no matter how promising is not approved purely on the basis of its official proposal or calculations but proposers have to obtain decision-makers' commitment to projects. People carry out selling capital investments by emphasizing (i.e. focusing and filtering) economic, strategic, non-economic and production technology arguments. This means that by using such grounds a proposer attempts to convince his or her superior that the project is sound and worth implementing. In addition, selling occurs in different situations; not only in formal meetings but also in informal occasions such as personal visits and phone calls. Although the study discovered that selling takes place more often in formal than informal occasions, it emerged that an informal selling occasion is the most effective. Especially, a decision-maker's commitment to a project is more easily obtained if a proposer visits him or her.

The results also supported the third proposition; a capital investment calculation is not the most important determinant in the final decision-making. The study discovered that decision-makers regard economic arguments almost as useless proposers on the other hand, stress profitability figures very often in selling. However, a project's

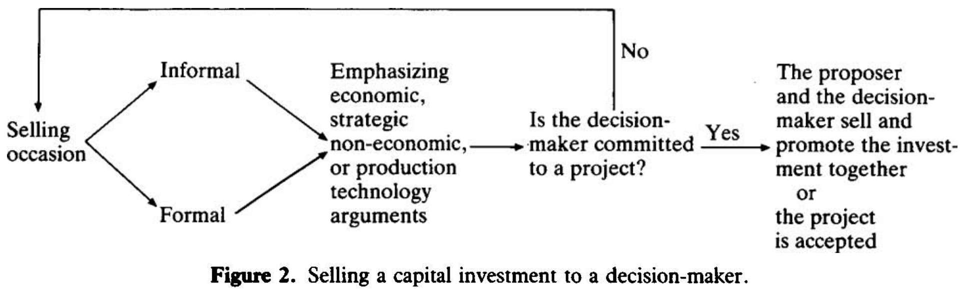

Figure 2. Selling a capital investment to a decision-maker.

[6] It is also possible that the capital investment is rejected.

profitability has to be sufficient so that the investment is taken into consideration. Moreover, observations indicate that the most effective arguments are those associated with production technology. In general, decision-makers consider issues linked to strategy and production engineering relevant and important, but proposers use economic and strategic arguments more frequently in selling than non-economic and production technology arguments.

Observations gave evidence that in general proposers use economic arguments when their units' profitability is poor, an investment is small, or the project represents standard technology in the company. Strategic arguments are prevalent in situations characterized by a unit's good profitability, a large investment project, or an investment in standard technology. On the other hand, non-economic arguments are used when the project is not based on economic factors. Finally, production technology arguments are dominant when a unit's profitability is good and a project represent new technology in the company.

The findings also support the fourth proposition which argued that when a subordinate submits a proposal it will very likely be approved. The study discovered that after an idea has been sold to the division manager, efforts are made to sell the project to the members of the internal board, and in large investment cases also to the CEO and the members of the Executive Committee. If the decision-makers give their commitments to the investment, or at least do not reject it, an official investment proposal is submitted. Expressed differently, efforts to sell the project to the decision-makers have been made before an official investment proposal is submitted. Moreover, the official proposal is presented after it is known that the investment will likely be accepted. In effect, so much has been discussed about the project in advance that the acceptance of the investment is insured before the project is even considered, for example, by the Executive Committee [41, 42]. Therefore investments are hardly ever rejected although it is possible. No rejected investment case emerged in the interviews [49].

This research, of which results apply only to the target firm, has offered a perspective for understanding how lower-level managers attempt to have their capital investment approved in a large company. Nevertheless, there are still several questions to be answered. Does selling occur in other companies? If it does, how is it carried out? How different capital budgeting systems affect selling? Finally, it could be studied whether selling is associated with other investments such as company acquisitions.

Acknowledgements: The author would like to thank David Cooper, Lars Hassel, Trevor Hopper, Kari Lukka, Kenneth Merchant, Peter Miller, and Robert Scapens for helpful comments on earlier drafts of this paper.

References

1. Dean, J. *Capital Budgeting: Top-Management Policy on Plant, Equipment, and Product Development*, New York, Columbia University Press, 1951.
2. Bierman, H. Jr. and Smidt, S. *The Capital Budgeting Decision: Economic Analysis of Investment Projects*, 7th ed., New York, Macmillan, 1988.
3. Porterfield, J. T. S. *Investment Decisions and Capital Costs*, Englewood Cliffs, NJ, Prentice-Hall, 1965.
4. Quirin, G. D. *The Capital Expenditure Decision*, Homewood, IL, Irwin, 1969.
5. Mao, J. C. T. Survey of capital budgeting: theory and practice, *Journal of Finance*, May, 349–360, 1970.

6. Merret, A. J. and Sykes, A. *The Finance and Analysis of Capital Projects*, 2nd ed., London, Longman, 1973.
7. Honko, J. and Virtanen, K. *The Investment Process in Finnish Industrial Enterprises: A Study of the Capital Investment Planning and Control Process in the Fifty Largest Finnish Industrial Enterprises*, Helsinki, The Helsinki School of Economics, 1975.
8. Bromwich, M. *The Economics of Capital Budgeting*, London, Pitman, 1979.
9. Canada, J. R. and White, J. A. *Capital Investment Decision Analysis for Management and Engineering*, Englewood Cliffs, NJ, Prentice-Hall, 1980.
10. Lister, R. J. Capital budgeting: a survey. In Scapens, R. W., Otley, D. T. and Lister, R. J. (eds), *Management Accounting, Organizational Theory and Capital Budgeting*, London, Macmillan, 1984.
11. Pike, R. and Dobbins, R. *Investment Decisions and Financial Strategy*, Oxford, Philip Allan, 1986.
12. Brealey, R. and Myers, S. *Principles of Corporate Finance*, 3rd ed., New York, McGraw-Hill, 1988.
13. Myers, S. C. Finance theory and financial strategy, *Interfaces*, January–February, 126–137, 1984.
14. Copeland, T. E. and Weston, J. F. *Financial Theory and Corporate Policy*, 3rd ed., Reading, MA, Addison-Wesley, 1988.
15. Gitman, L. J. and Forrester, J. R. Jr. A survey of capital budgeting techniques used by major U.S. firms, *Financial Management*, Fall, 66–71, 1977.
16. Petty, J. W. and Scott, D. F. Jr. Capital budgeting practices in large U.S. firms: a retrospective analysis and update. In Derkinderen, F. G. J. and Crum, R. L. (eds.), *Readings in Strategy for Corporate Investment*, Boston, MA, Pitman, 1981.
17. Scapens, R. W., Sale, T. J. and Tikkas, P. A. *Financial Control of Divisional Capital Investment*, London, ICMA, 1982.
18. Scapens, R. W. and Sale, T. J. An international study of accounting practices in divisionalized companies and their associations with organizational variables, *The Accounting Review*, April, 231–247, 1985.
19. Pike, R. H. An empirical study of the adoption of sophisticated capital budgeting practices and decision-making effectiveness, *Accounting and Business Research*, Autumn, 341–351. 1988.
20. Pike, R. and Sharp, J. Trends in the use of management science techniques in capital budgeting, *Managerial and Decision Economics*, *10*, 135–140, 1989.
21. Rosenblatt, M. J. and Jucker, J. V. Capital expenditure decision/making: some tools and trends, *Interfaces*, February, 63–69, 1979.
22. Klammer, T. P. and Walker, M. C. The continuing increase in the use of sophisticated capital budgeting techniques, *California Management Review*, Fall, 137–148, 1984.
23. Canada, J. R. and Miller, N. P. Review of surveys on use of capital investment evaluation techniques, *The Engineering Economist*, Winter, 193–200, 1985.
24. Mills, R. W. Capital budgeting techniques used in.the UK and USA. *Management Accounting*, January, 26–27, 1988.
25. Mills, R. W. Measuring the use of capital budgeting techniques with the postal questionnaire: a UK perspective, *Interfaces*, September–October, 81–87, 1988.
26. Carsberg, B. and Hope, A. *Business Investment Decisions under Inflation: Theory and Practice*, London, ICAEW, 1976.
27. Petty, J. W. and Scott, D. F. Jr. and Bird, M. M. The capital expenditure decision-making process of large corporations, *The Engineering Economist*, Spring, 159–172, 1975.
28. Scapens, R. W. and Sale, T. J. Performance measurement and formal capital expenditures controls in divisionalised companies, *Journal of Business Finance and Accounting*, Autumn, 389–419, 1981.
29. Mukherjee, T. K. Capital-budgeting surveys: the past and the future, *Review of Business and Economic Research*, Spring, 37–56, 1987.
30. Rappaport, A. A critique of capital budgeting questionnaires, *Interfaces*, May, 100–102, 1979.
31. Aggarwal, R. Corporate use of sophisticated capital budgeting techniques: a strategic perspective and a critique of survey results, *Interfaces*, April, 31–34, 1980.

32. Barwise, P., Marsh, P., Thomas, K. and Wensley, R. Research on strategic investment decisions. In McGee, J. and Thomas, H. (eds), *Strategic Management Research: A European Perspective*, New York, Wiley, 1986.
33. Berry, A. J. The control of capital investment, *Journal of Management Studies, 21*, 61–81, 1984.
34. Bower, J. L. *Managing the Resource Allocation Process: A Study of Corporate Planning and Investment*, Boston, MA, Harvard Business School Press, 1970.
35. Clancy, D. K., Collins, F. and Chatfield, R. Capital budgeting: the behavioural factors, *Cost and Management*, September–October, 28–32, 1982.
36. Ackerman, R. W. Influence of integration and diversity on the investment process, *Administrative Science Quarterly*, September, 341–351, 1970.
37. Wildavsky, A. *Budgeting: A Comparative Theory of Budgeting Processes*, Boston, MA, Little, Brown and Company, 1975.
38. Wildavsky, A. *The Politics of the Budgetary Process*, 3rd ed., Toronto, Little, Brown and Company, 1979.
39. Istvan, D. F. *Capital-Expenditure Decisions: How They are Made in Large Corporations*, Indiana, Bureau of Business Research, Indiana University, 1961.
40. Berry, A. J., Capps, T., Cooper, D., Ferguson, P., Hopper, T. and Lowe, E. A. Management control in an area of the NCB: rationales of accounting practices in a public enterprise, *Accounting, Organizations and Society*, 10, 3–28, 1985.
41. Hopwood, A. *Accounting and Human Behaviour*, London, Haymarket Publishing Limited, 1974.
42. Clancy, D. K., Collins, F. and Chatfield, R. The behavioral factors of capital budgeting. In Siegel, G. and Ramanauskas-Marconi H. (eds.), *Behavioral Accounting*, Cincinnati, South-Western Publishing Co, 1989.
43. Clancy, D. K. and Finn, D. W. Capital project life cycles: a reorientation of project selection, *Cost and Management*, July–August, 6–10, 1985.
44. Mills, R. W. and Herbert, P. J. A. *Corporate and Divisional Influence in Capital Budgeting. A Study of Corporate and Divisional Capital Budgeting Practice in Large UK Companies*, London, CIMA, 1987.
45. Pondy, L. R. and Birnberg, J. G. An experimental study of the allocation of financial resources within small, hierarchial task groups, *Administrative Science Quarterly, 14*, 192–201, 1969.
46. Carter, E. E. The behavioral theory of the firm and top-level corporate decisions, *Administrative Science Quarterly*, December, 413–428, 1971.
47. King, P. Is the emphasis on capital budgeting theory misplaced? *Journal of Business Finance and Accounting, 2*, 69–82, 1975.
48. Mintzberg, H., Raisinghani, D. and Théorêt, A. The structure of 'unstructured' decision process, *Administrative Science Quarterly*, June, 246–275, 1976.
49. Marsh, P., Barwise, P., Thomas, K. and Wensley, R. Managing strategic investment decisions. In Pettigrew, A. M. (ed.), *Competitiveness and the Management Process*, Oxford, Basil Blackwell, 1988.
50. Hopper T, and Powell, A. Making sense of research into the organizational and social aspects of management accounting: a review of its underlying assumptions, *Journal of Management Studies, 22*, 429–465, 1985.
51. Kaplan, R. S. The role for empirical research in management accounting, *Accounting, Organizations and Society, 11*, 429–452, 1986.
52. Merchant, K. A. and Simons, R. Research and control in complex organizations: an overview, *Journal of Accounting Literature, 5*, 183–203, 1986.
53. Bruns, W. J. Jr. and Kaplan, R. S. Field studies in management accounting. In Bruns, W. J. Jr. and Kaplan, R. S. (eds.), *Accounting & Management: Field Study Perspectives*, Boston, MA, Harvard Business School Press, 1987.
54. Birnberg, J. G., Turopolec, L. and Young, S. M. The organizational context of accounting, *Accounting, Organizations and Society, 8*, 111–129, 1983.
55. Yin, R. K. *Case Study Research: Design and Methods*, Beverly Hills, CA, Sage Publications, 1984.
56. Hirsjärvi, S. and Hurme, H. *Teemahaastattelu* [Theme interviews], Helsinki, Gaudeamus, 1982.

57. Jick, T. D. Mixing qualitative and quantitative methods: triangulation in action, *Administrative Science Quarterly*, December, 602–611, 1979.
58. Bagozzi, R. P. Marketing as an organized behavioral system of exchange, *Journal of Marketing*, October, 77–81, 1974.
59. Bagozzi, R. P. Marketing as exchange, *Journal of Marketing*, October, 32–39, 1975.
60. Stokes, C. R. and Lawrimore, K. W. Selling a new cost accounting system, *Journal of Cost Management*, Fall, 29–34, 1989.
61. Staw, B. M. The escalation of commitment to a course of action, *Academy of Management Review*, October, 577–587, 1981.
62. Preston, A., Cooper, D. and Coombs, R. Fabricating budgets: a study of the production of management budgeting in the National Health Service, working paper, 1990.
63. Brunsson, N. Deciding for responsibility and legitimation: alternative interpretations of organizational decision-making, *Accounting, Organizations and Society, 15*, 47–59, 1990.
64. Salancik, G. Commitment is too easy. *Organizational Dynamics*, *6*, 62–80, 1977.
65. Schwenk, C. R. Information, cognitive biases, and commitment to a course of action, *Academy of Management Review, 11*, 298–310, 1986.
66. March, J. G. Ambiguity and accounting: the elusive link between information and decision making, *Accounting, Organizations and Society*, *12*, 153–168, 1987.
67. Hopwood, A. The organisational and behavioral aspects of budgeting and control. In Arnold, J., Carsberg, B. and Scapens, R. (eds.), *Topics in Management Accounting*, Southampton, Allan, 1980.
68. Zanibbi, L. R. and Pike, R. H. The capital investment decison-making behavior of managers and the control of capital investment, paper presented at the *International Conference on Research in Management Control Systems*, London, 1989.
69. Mintzberg, H. *The Nature of Managerial Work*, New York, Harper & Row, 1973.
70. Mintzberg, H. The manager's job: folklore and fact, *Harvard Business Review*, July–August, 49–61, 1975.
71. Preston, A. Interactions and arrangements in the process of informing, *Accounting, Organizations and Society, 11*, 521–540, 1986.