INVESTMENT APPROACHES IN TURKISH COMPANIES AND MAKING INVESTMENT PROJECT DECISIONS

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ABSTRACT

INVESTMENT APPROACHES IN TURKISH COMPANIES AND MAKING INVESTMENT PROJECT DECISIONS

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Investment evaluation is a very important tool for decision-making process in companies, thus it must be managed and structured correctly. This thesis discusses how you can evaluate an investment opportunity.

The purpose of this study is to gain insights into the strategies of firms with regard to strategic investments in manufacturing plant and equipment. Specifically, this research sets out to examine how business case method is designed and used in an organization to be inline with strategic investment decisions with the firm's strategy. Business case which may name differently in companies is comparing results and analyse. Business case is a new method to evaluate investment which is more transparent and useful for companies

while making decision. It is found that in Turkish companies both local and international companies are willing to continue to invest in 2010 and prefer to invest more in capital which is physical investment rather than cash investment.

Keywords: *investment evaluation, investment appraisal, business case, capital expenditure*

TÜRK ŞİRKETLERİNDE YATIRIM YAKLAŞIMLARI VE YATIRIM PROJELERI KARAR SURECI

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Yatırım değerlendirmesi çok önemli bir karar verme aracı olup doğru ve düzenli bir şekilde yönetilmelidir. Bu çalışmanın önemi, Türk şirketlerinin yatırım fırsatı bulduklarında bunun yatırıma değer olup olmadığının hesaplanması ve incelenmesidir.

Bu çalışmanın amacı firmaların stratejilerine üretim araçları ve alanları ile derinlemesine bir bakış yakalamaktır. Özellikle bu çalışma, olurluk incelemsinin nasıl düzenlendiği ve bir organizasyonda stratejik yatırım kararı verilmesi aşamasında şirketin profiline sadık kalınarak nasıl yapılabileceğini gösteriyor. Olurluk incelemesi, şirketlerde farklı adlandırılabilir, bulguları karşılaştırmak ve daha derin bir analiz yapmak için kullanılır. Olurluk incelemesi yeni bir yatırım değerlendirme metodu olup şirketlerin yatırım

kararı vermesi aşamsında daha faydalı ve şeffaf sonuçlar sağlamaktadır. Buna ilaveten Türk şirketlerinde yatırıma yaklaşımları ve değerlendirme süreçleri sunulacaktır. Sonuçta Türk şirketlerinde ister uluslararasi ister local olsun 2010 senesinde yatırımlarına devam etmek istedikleri ve yatırımlardan nakdi yatırıma değil fiziksel yani demirbaş yatırımlarına eğilimli oldukları gözlenmiştir.

Anahtar Kelimeler: yatırım değerlendirme, yatırım tahminleri, olurluk incelemesi, demirbaş yatırımı

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CHAPTER 1
INTRODUCTION

Investment evaluation is a very important tool for decision-making process in companies, thus it must be managed and structured correctly. Evaluating possible investment decisions require the external environment and the optimal use of assets and the connectivity between them.

The purpose of this study is to gain insights into the strategies of firms with regard to strategic investments in plant and equipment. Specifically, this research sets out to examine how business cases are designed and used in an organization to be inline with strategic investment decisions with the firm's strategy. In this way, the investment evaluating and approaches in Turkish companies will be analysed.

The financial crisis triggered by sub-prime mortgages has clouded the economic environment for the last couple of years. Consumer sentiment indices have been bleak. Investment spending in major economies of the world has plummeted. The Turkish economy escaped the initial financial crisis but gradually succumbed to the global economic slowdown.

Turkish companies are no strangers to economic crisis or stretches of economic slowdown. After the 2001 crisis, which resulted in the adoption of a

floating exchange rate regime, a widely held expectation has been that more sophisticated financial management tools may have become more prominent. It is in this context that this thesis seeks to investigate approaches to making investment decisions today, in a hostile economic environment but with the experience of a severe economic crisis in recent history.

It is found that companies are willing to continue to invest in 2010 and aim to invest physically as machines, buildings, systems etc. Approach to investment in Turkey is getting more long term than before. By capital expenditure investment, depreciation costs are split in the years which are also an advantage for the companies. It is clear to see that Turkish companies are willing to invest in 2010 and their approaches are analysed.

The plan of this study is as follows. The introduction is followed by a literature review of the theory of investment evaluation methods and applications to a variety of different contexts. Chapter three presents the definition and theoretical structure of investment evaluation. Then, with models given, the investment evaluation in a company and the company specific factors affecting this are investigated by using the business case tool.

Chapter four constitutes the heart of this thesis. The first section proposes the theoretical basis for evaluating an investment project and introduces the investment types as cash and capital investment. The tools used for investment evaluation are discussed. The second section presents Business Case which is combining all tools including other parameters for making the right decision for the company. Business Case can be named differently in some other companies.

Chapter five presents the research results based on a survey on 34 companies. The goal is to determine whether the Turkish companies go with cash investment or physical (capital expenditure) investment in case of earning same benefit with same cost. Empirical analysis of the survey shows the investment approaches in the companies. Finally, chapter six concludes. You will be able to find two business case studies in the appendices.

CHAPTER 2
LITERATURE REVIEW

In this chapter I present a review of the literature on investment evaluation practices in different countries and compare and contrast them. There are very few papers and data on this particular topic for Turkish companies so the literature review of other countries experiences aims to set the stage
for the analysis on Turkish companies which will be undertaken in the next chapter.

This literature review will seek some answers to below queries:

1 – Who are the business deciders and what the decision criteria's are

2 – Feedbacks to the methods

3 – Investment Appraisals and Approaches in other countries

Investment decision and evaluating in companies are made by the head of the company or as well as mainly by Finance department. These deciders are named "Business Angels" by Ludvigsen (2009) in "Decision time in Belgium: an experiment as to how business angels evaluate investment opportunities .

Despite their importance, business angels are still not fully understood. The purpose of the Ludvigsen (2009) paper is to increase our understanding of business angels, specifically how business angels in Belgium use decision criteria to evaluate investment opportunities.

Business angels are not a homogenous group. Many studies have attempted to classify business angels (Sullivan and Miller, 1996; Coveney and Moore, 1998; Sorheim and Landström, 2001), two of the most common classifications are by frequency and by size of investments. Serial angels are the business angels that have invested in more than three investments. Virgin angels are non-serial angels which are have not yet invested in a single opportunity (Freear, Sohl and Wetzel (1994)).

Some papers address the question of whether business angels put more emphasis on the entrepreneur/management on the team or product/market when they evaluate investment opportunities. Mason and Harrison (2002) find that the qualities of the entrepreneurial team matter more than the product or market.

In addition, several authors have investigated whether decision criteria leading to rejection differ from decision criteria leading to acceptance. Haines (2003), Feeney and Riding (1999) concluded that business angels consider both the

attributes of the business and the attributes of the entrepreneur as important when they consider whether to reject or invest in a project.

Much of the literature shows that decision processes and criteria vary across cultures, countries and even types of business angels. For example, Stedler and Peters (2003) present data from Germany showing that German deciders are influenced by a greater number of factors than UK, Canadian, and US. In Germany, key decision factors include all the parameters as the entrepreneur/ management team, product/service uniqueness and competitiveness, growth potential, profit margins and being able to move into a profitable position quickly. Exit options, rates of return, and degree of self financing are also important. Haines, Madill and Riding (2003) look at Canada and report that Canadian business angels use a wide range of due diligence approaches. In Canada Business Angels have trust the people involved in potential deals. They use more informal approaches. In Turkey business angels are still mainly the owners of the companies and have neoclassical view while deciding on the project.

The neoclassical theory of investment is based in part on the Modigliani-Miller (1958) theorems in finance. The neoclassical view assumes that as long as the firm has profitable investments with returns above the cost of capital, the firm can obtain sufficient funds to undertake them. Consequently, internal

and external finance are viewed as substitutes; firms could use external finance to smooth investment when internal finance fluctuates. On the other hand, cash flow theories of investment emphasize financing hierarchy faced by the firm and therefore the crucial role of cash flows in determining capital expenditures.

Jones, Danbolt and Hirst (2004) are examining the stock market reaction to 402 company investment announcements during the 1991-1996 period made by UK companies. According to functional categories investment announcements are classified. The market reacts more favorably to investments that 'create' future investment opportunities, than to investments which can be categorized as 'exercising' investment opportunities. The market reaction also changes with firm size, with large companies tending to experience smaller responses to announcements than do smaller firms. Chung (1998) reported that the quality of a company's investment opportunities is the primary determinant of market reactions to capital expenditure decisions.
As a result it is safe to say that the main factor while deciding to undertake the investment or not is the decider who is the owner of the investment and his view.

Traditionally, the financial internal rate of return, payback and the net present of value (NPV) of the projects are calculated. However, these three methods

are not sufficent to show the investment's riskiness. Consider, an investment has large and positive NPV and FIRR but cash flow affect is not considered. Such a project may go bankrupt long before it gets a chance to generate the large positive net cash flows expected in the later years. Therefore the economic values of the market and country both government and private sector must be considered while taking investment decision As a result of the survey some companies mention that they also highly consider excise changes, sales taxes, export taxes in Turkey. Not only a positive net present value indicates that the project will make a positive result, but also the government decisions and actions taken on economics is highly important. On the other hand also the economic analysis of an investment project is an essential complement to its financial appraisal. Financial results are showing the owner of the investment if the project and investment is feasible or not.

An investment project aims to achieve a profitable return that ensures attractive return on the invested capital, and positive and consistent cash flows.

Luban (2004) develops, a system dynamics model which is used to incorporate the techniques of cash flow analysis for a capital investment project with the external factors such as those related to current market conditions and the organization culture and emotions related to previous investments. This model

provides a way to allow for insight into the potential gains by various investments. And this model is focuses on stocks and flows within processes and the relationships between them. The simulation allows the analyst or the owner to decide at each point in time cause the demand and condition of the market at the time of decision is given.

In the figure there are two variables, productive capacity of the company and number of productive facility.

Making investment decisions in the companies is one of the least understood processes in the workings of an economy. At the time this paper is published it was a very common point of view that investment decisions were too complex and not all the parameters were considered. Nowadays lots of tools are in the system to make the right investment decision for the company.

The payback method of investment appraisal has been the subject of considerable comment and criticism in the literature. While many of the surveys have reported an increasing use of the discounted cash flow financial appraisal methods, this has not totally been at the expense of the Payback which continues to be a popular method used in industry.

Payback method has been started to be a primary, traditional, popular, and important method especially in both the UK and USA. Payback has been

shown to be related to capital budget size. And Payback has been used more in strategically important projects than routine replacement projects in moderately sized USA firms. On the other hand it is an important method used in the appraisal of advanced manufacturing technology projects in both the UK and USA.

Payback method of investment appraisal is used in industry, first as a technique, identifying its main disadvantages and then commenting on the discounted payback method. On deciding for the most appropriate investment when capital restrictions exist, investors define their alternatives and analyze each one of them. Traditionally, the definition, appraisal and analysis stages are treated separately.

Firms do not use NPV for all capital budgeting decisions. Differential usage is attributed to the cost of information and the incomplete dissemination of knowledge of evaluation techniques. Analysis of Australian survey data indicates that 34% of informed managers switch to naive techniques for smaller dollar projects - a cost of information effect. 40% of organizations with large capital expenditures do not use NPV, suggesting a lack of knowledge of the NPV technique. Thus, after controlling for cost and mandatory considerations, that many large firms with sophisticated capital budgeting procedures actually accept projects that do not meet threshold

criteria. The explanation appears to lie in the recognition that projects have strategic and growth options.

Herewith some data is given for the investment rates around the world; according to the results of WIFO's Autumn 2008 Investment Survey, investment in manufacturing declined by 4.8 percent in 2008 (at current prices) and is expected to fall by 0.6 percent in 2009. The greatest shrinkage is expected for automotive and consumer goods. In contrast, there will be increases in investment goods and intermediate goods. The manufacturing firms plan to push up their investment in hardware and software by 23 and 18 percent, respectively. Construction companies plan to cut their investments by 7.2 percent.

The results indicate that companies' reasons for investing and required rates of return on investments have changed over time. When it was found that a majority of companies formally evaluated investments, the use of formal appraisal techniques were frequently abandoned.

The results of a survey large Czech manufacturing companies are presented by Hynek (2005) which shows the current levels of investment in advanced manufacturing technology, the techniques and criteria used to assess advanced manufacturing technology capital projects, and attitudes to the need for further

investment. Comparisons are made with the results of earlier identical surveys in the UK and the USA. The comparisons reveal numerous statistically significant differences. The current levels of advanced manufacturing technology investment in the Czech Republic are relatively low, the techniques used for evaluation relatively unsophisticated, the investment criteria used are more short term, and there is less concern about the need for advanced manufacturing technology.

A research is done to test the hypotheses of an influence of financial institutions and governance structures on types of investment. Data were collected Data were collected on gross fixed investment for 27 manufacturing industries over the period 1970 to 1990 and on R&D expenditure for 15 manufacturing industries over the period 1973 to 1994. The time periods and industries were dictated by data availability from the OECD. In addition, the petrol refinery industry was excluded throughout because of price index number problems. As a result of this research while Spain has the lowest ratio of both, the UK and US have some of the highest R&D but the lowest fixed investment ratios. It shows that industry growth across countries is more closely correlated with R&D than with fixed investment. The result is that the correlation coefficient with R&D is 0.508 as against 0.010 with fixed investment. (Carlin and Mayer, 2002)

Business cases are highly important for the stakeholders of the company. The management of competing stakeholders has emerged as an important topic for formulating business strategies. Lee and Kim's (2001) methodology begins with the understanding of stakeholders' demands. This understanding is particularly useful for businesses with conflicting stakeholders. Their methodology consists of four phases: current business analysis, strategy development, strategy evaluation, and strategy implementation. Business cases are done for the stakeholders who are the customer of the companies and their needs are important in terms of giving he business decisions within the companies. As Heseook and Taehun mentioned in their article, strategy and the evaluation of the strategy must be clarified in the business case in line with the stakeolder.

Beath & Ross (2002) we can clearly see that for IT capital investments decisions have been based on business cases estimating financial returns on individual applications. They suggest companies to make four distinct types of IT investments: transformation, renewal, process improvements, and experiments. firms should be investing in all four types of initiatives in order to address both short-term profitability and longer-term survival and growth and to develop the robust IT environment and business applications that are needed to support their desired business model.

The two key questions which motivate Schaller and Chirinko (1996) do bubbles exist (in the sense that stock market prices do not always correspond to the present value of expected future profitability) and, if bubbles exist, do they have an effect on business fixed investment? The case of Japan is particularly interesting because of the dramatic movements in the Japanese stock market and the wide perception that these were associated with a bubble. They use a variety of techniques to analyze these questions. The data strongly suggest that there was a bubble that had an economically important statistically significant effect on business fixed investment in Japan. Herewith we can clearly see that in Japan, fixed investments are strongly affected by stock market and economy.

There is an estimation that the association of investments in R&D and in physical assets (CAPEX) with subsequent earnings variability. Assumption is done on these relations in different time periods and across industries. It is found that R&D contributes to subsequent earnings variability more than CAPEX only in relative R&D-intensive industries – industries in which R&D is relatively more intensive than physical capital. The findings suggest that with respect to subsequent earnings variability, fundamental differences between investment information about R&D and CAPEX exist. However, they are mainly noticeable in firms that operate in relatively R&D-intensive

industries. The evidence also suggests there was a shift in the relations between R&D and CAPEX over time.

Since there is no research directly related to investment evaluation in Turkish companies, with this thesis I wanted to show the approaches to investment and 2010 investment willingness of companies.

CHAPTER 3

There are two types of investment which are financial and capital expenditure investment. Herewith investment types are briefly mentioned.

3.1. Cash

Cash Investment is one type of investment companies select while decision making. Herewith time value of money, reasons why firms hold cash and ways to manage cash will be given. In Turkey the local and not corporate companies tend to have cash investments and do not make the necessary controls and evaluations. Even some sources are also available in Turkey (as VOB, IMKB etc.) companies still are not willing to use the derivatives as options, hedging, forward etc.

Reason why firms hold cash, ways to manage cash, and time value of money will be explained in this section. The three primary reasons offered by economist John Maynard Keynes to explain why firms hold cash are for the purpose of speculation, for the purpose of precaution, and for the purpose of making transactions. All three of these reasons are from the need for companies to possess liquidity.

Keynes described the reason for holding cash for speculative purposes as creating the ability for a firm to take advantage of opportunities that if acted upon quickly will favour the firm. An example of this would be purchasing extra inventory at a discount that is greater than the carrying costs of holding the inventory.

Holding cash as a precaution is an emergency fund for a company. If expected cash inflows are not received as expected cash held on a precautionary basis could be used to satisfy short-term obligations that the cash inflow may have been bench marked for. Producing or providing services are the responsibility and aim of companies. Providing of services and creating of products results in the need for cash inflows and outflows. Firms hold cash in order to cover the cash inflow and cash outflow needs that they have.

Firms can manage cash all areas of operations that involve the use of cash. The aim is to receive cash as soon as possible while at the same time waiting to pay out cash latest. Some examples are given as below to show how firms are able to do this.

The aim for cash management is to shorten the time before receiving the cash. Firms that make sales on credit are able to decrease the time that their customers wait until they pay the firm by offering discounts.

Credit sales are often made with terms such as 3/10 net 60. The first part of the sales term "5/10" means that if the customer pays for the sale within 10 days they will receive a 5% discount on the sale. The remainder of the sales term, "net 40," means that the payment term is due within 40 days. By offering an inducement, the 5% discount, firms are able to cause their customers to pay off their bills early. This results in the firm receiving the cash earlier.

The aim of keeping inventory is to put off the payment of cash for as long as possible and to manage the cash being held. By using a JIT inventory system, a firm is able to avoid paying for the inventory until it is needed while also avoiding carrying costs on the inventory. JIT is a system where raw materials are purchased and received just in time, as they are needed in the production lines of a firm for instance.

Companies sell goods on credit, which may take some time that company is paid. These unpaid bills are shown in the trial balance as accounts receivables. Credit manager of the company has the main role in this issue.

When a company sells good to a customer, it is not expected to be paid the amount immediately. There are some questions need to be answered as a company. What are the terms of sale? You may have a contract with your

customer for 30 days. But can also add another criteria as before 30 days payment will have 20 discount. So you as company make it surer that you are going to receive your money. The promise to pay is another question company supposed to ask. If a company wants a clear commitment from the customer, there are several ways of guarantee this receivable. You can ask the customer whether to arrange a commercial draft (bills of exchange) or guarantee letter from the customer's bank. Credit analysis, is the way shows if the customer is likely to pay or not. You can whether check if the customer has paid promptly in the past, or check the financial statement of the company.

The aim of the company is to maximize profits not establish sensitive credit limits which the credit decision. The final step in credit management is to collect payment. If the company can not collect the money, interest charge invoice can be issued to the customer. Since this is a sensitive subject, this way is most of the times used more in big firms. Factoring can be another way of solving collection payment issue. The factor and the client agree on credit limits and average collection period. For any sale, the client sends a copy of the invoice to the factor, the customer makes payment directly to the factor, and the factor pays on the agreed collection. Factor employed by number of manufacturers, and therefore it is better to judge the creditworthiness of each customer.

The second important asset is inventory. Inventory means in a production company, raw material, work in process (WIP), or finished goods awaiting sale and shipment. Inventory management can be in different ways like the company can buy goods day by day, as needed. But this is too risky for a production company since the delivery, shipment can have a delay. Or the company can produce only the goods will sell the day after, but this is also too dangerous strategy for the company, since you do not have any bulk stock.

Just in time (JIT) approach reduces the inventory levels. Just-in-time was firstly used by Toyota in Japan. Toyota keeps inventory part by ordering suppliers as they are needed. But on the other hand Toyota was also able to operate successfully ensure the strikes, traffic jams, or other problems. Thirty years ago Ford used to turn over its inventories about 5 times a year, today that figure is over 20 times.

Money held now could be invested in a bank account and is therefore more valuable than money to be received in 12 months. Present value seeks to account for this. It equals the rate by which you have to discount future benefits for you to be indifferent between a benefit received now and a

benefit received at the end of the specified time period. The equation for present value is: benefit / (1+discount rate).

As a summary, present value shows how much you get now, and future value shows how much and what you will get now grow to when compounded at a given rate. When a company aim to make cash investment the company will need to calculate the future value and present value of the money to get a view of full picture of the investment.

3.2. Capital Expenditure in Turkish Companies in line with legal requirements

Capital expenditure is a physical investment type used by companies and mainly named CAPEX in companies. According to Turkish Legal requirement any purchase (asset) which remains in use and that will benefit your business for more than a year) will be considered as a capital expenditure. (Turkish Legal requirement allows amount up to 520 YTL (amount valid for 2006) such as tools, fixtures, equipments to be directly written as expense optionally. If more than one tools are complementary than total value should be below the ceiling amount.

Examples of capital expenditures are; machinery, building, motor vehicles, forklifts, computers, furniture's, fixtures etc. If any add on to the machine increases the value of the machine (e.g. increase economic life), then this should be considered as fixed asset.

The cost of an item of property, plant and equipment that should be considered as capital expenditure comprises its purchase price, including import duties and non-refundable purchase taxes, and any directly attributable costs of bringing the asset to working condition for its intended use; any trade discounts and rebates are deducted in arriving at the purchase price.

Planning of Capital expenditure starts with the budget. Finance will provide templates to all Departments for preparing detail monthly capital expenditure budget in line with Company plan requirements. This will be done for new projects as well as for carry-over projects.

Consolidates the numbers for the whole company and will evaluate the possibility of this capital expenditure from technical point of view. If there are some obstacles to invest this Capital expenditure technically, Engineering/Technical informs relevant department to revise it. Then, Engineering/Technical department sends consolidated Capital expenditure list to finance Department for financial evaluation. Finance will consolidate the numbers for the whole company. Once Company Plan is finalized and approved, Finance will communicate the Final Capital expenditure budget to budget holders.

3.3. Investment Risk, Return and Management Control Systems

Default risk is the risk that an individual creditor will not be able to pay its debts. Cash investments risk is usually lower than Capital Expenditure investment decisions. When giving cash investment decision the concern is more to loss of purchasing power over the long term. This is called as inflation risk. Looking for opportunities to avoid or reduce income taxes one of the main issue in all financial areas. A key part of successful cash management is determining the tax implications of all your financial activities.

The main concern in an investment is losing the money which has been invested, which is named capital risk.

If the assets we invest are held in another currency, the currency may effect the value of the investment, which is called *currency risk*.

Many of the investments may not be saleable easily or may take time to be sold. Assets that are easily sold are termed liquid. These kinds of risks are named *liquidity risk.*

A loss of on the investment value is called *financial risk.* If the price decline in the stock of a company, there is a financial risk.

If there is a high demand for a given stock, or a given bond, the price will rise as purchaser is willing to pay more for security than the last one. When the

sellers want to rid themselves of an issue more than the buyers want to buy it, is the reverse. This is called *market risk.*

A management control system in a company means coordinate the process of making decision and guide the behaviour of the managers and employees in the company self. The aim of management control system is more to gather all the decisions and improve these collective decisions in a feasible way within the company.

Lots of world class companies start to have internal control departments besides audit departments. Management control system should contain both financial and non-financial data. Some companies present both financial and non-financial information in a single report called balanced scorecard.

Management control system refers to both formal and informal control systems. Formal controls are procedures, performance measures, incentive plans. The management accounting system is a formal control system, showing costs, revenues, incomes. Human resource is also a formal control system, recruiting, training, absenteeism and accidents.

The informal control systems are loyalties, organization culture, unwritten norms, behaviour of managers etc.

CHAPTER 4

In this chapter, I describe the two types of investment evaluation criteria that I compare in this thesis. In the first section, capital budgeting methods are introduced and discussed. In the second section I introduce and discuss the business case which provides a more in depth analysis of the investment evaluation in Turkey. Also I am going to consider how managers can systematically incorporate financial and non-financial aspects into their long-run planning decisions.

4.1. Capital Budgeting Methods

Capital budgeting focuses on projects over their entire lives in order to consider all the cash flows or cash savings from investing in a project.

Capital Budgeting is the making of long-run planning decisions for investments in projects and programs. It is a decision-making and control tool that focuses primarily on projects or programs that span multiple years. These planning decisions should be guided by the objectives of the organization and its strategies. Capital Budget is total process of generating, evaluating, selecting and following up on capital expenditures.

In capital budgeting, valuation techniques are used to analyze the impact of real assets instead of financial assets. Remember in capital budgeting what is important is cash flow, not profits. The cash flows at acquisition are called net investment and those every year after are termed net cash flows.

Payback, Discounted Payback, Net Present Value (NPV), Profitability Index, IRR and MIRR are capital budgeting decision methods. Below we discuss these methods in the order mentioned above.

4.1.1. Payback Methods

Payback calculation method is the most used method in Turkish companies to calculate and evaluate the investment. There is a project which is considering approving has the following cash flow. In year zero 15,000 Euro will be spent on the project. Then in 5 years we will get money back as starting year (0), cash flow is -15.000, first year +7.000, second +6.000, third +3.000, fourth +2.000 and last year is +1.000.

Payback is actually when the project breaks even, when we get our money back. This is exactly what payback shows us. Payback does not show whether the investors decide on the project or not. It only gives the investors the period of getting the money back.

Table 1 Payback Calculation

Year	**Cash flow**	**Running Total**	
0	-15,000	-15,000	
1	+7,000	-8,000	(so after the 1st year, the project has not yet broken even)
2	+6,000	-2,000	(so after the 2nd year, the project has not yet broken even)
3	+3,000	+1,000	(so the project breaks even sometime in the 3rd year)

In table 1 we can determine when the project breaks even. And in table 2 it is shown how to find the exact even point.

Table 2 Net Break Even Time Calculation

Negative Balance / Cash flow from the Break Even Year	=	When in the final year we break even
-2,000 / 3,000	=	.666

We see that we break even two slash three of the way through the 3rd year. So the total time required to payback the money we borrowed was 2.66 years. Projects with a payback less than a specified cut-off period are accepted, whereas those with a payback beyond this figure are rejected. And the riskier the project is, the shorter the required payback will be. Payback has two major weaknesses; ignoring the time value of money and cash flows beyond the payback period.

4.1.2. Discounted Payback is very similar to payback method. First we discount the cash flows. This money will be received in the future, and will be less valuable than money we have today. For this example, let's say the cost of capital is 10%. Discounted payback calculates from the discounted net cash flows. Table 3 presents an example.

Table 3 Discounted Cash Flow Effect

Year	**Cash flow**	**Discounted Cash flow**	**Running Total**
0	-15,000	-15,000	-15,000
1	7,000	6,363	-8,637
2	6,000	4,959	-3,678
3	3,000	2,254	-1,424
4	2,000	1,366	-58
5	1,000	621	**563**

Break even is in a point in the 5th year. Exact calculation is given in table 4 below. The Discounted Payback Method breaks even after 4.093 years.

Table 4 Discounted Payback Methods Break Even

Negative Balance / Cash flow from the Break Even Year	=	When in the final year we break even
-58 / 621	=	.093

4.1.3. Net Present Value (NPV) – Net Present value supports to give better investment decisions than all other criteria. In the example above the NPV is 563. Basically NPV and Discounted Payback are having the same idea, only with little different results. Discounted Payback is showing the time, and Net Present Value is the final amount you get by adding all the discounted cash flows affects. Net Present Value is a method helping us making the best investment evaluating and giving the investment decisions. *If the NPV is positive, then approve the project.* As a result you are making more money on the investment than spending on your cost of capital. If the NPV result is negative, then do not approve the project because you are paying more in interest on the borrowed money than you are making from the project.

NPV is calculated by summing the present value of the net benefits for each year over of a specified time and adding the initial costs of the project. A positive NPV generates a profit, while a negative NPV generates a loss in the project. The most important thing about NPV is that it shows the managers about the value of the savings.

Shareholders aim in a company is wealth maximization. So an investment project must focus on cash, no risk and the time value of the money. As wealth a positive NPV add to shareholder NPV reduce shareholders wealth. This makes NPV a very important tool for an investment decision. If we have two projects with positive NPV, of course accept the one with higher net present value.

Table 5 Profitability Index

Profitability Index	**equals**	**NPV**	**divided by**	**Total Investment**	**plus**	**1**
PI	=	563	/	15,000	+	1

Profitability index calculation in the example, the PI = 1.0375. For the cash borrowed and invested we get back 1.0375. This profit is above and beyond our cost of capital. The profitability index is the ratio of the present value of the expected future net cash flows. The benefits of this method are the same

as those for the net present value. Either of these present-value methods will give the same accept-reject decisions to a Project.

4.1.4. Internal Rate of Return (IRR) and Modified Internal Rate of Return (MIRR)

The internal rate of return (IRR) is a capital budgeting method used by companies to decide is the company should make long-term investments or not. The internal rate of return is the amount of profit you get by investing in a certain project. It is a rate. 10% IRR means you make 10% profit annual on the money invested in the project.

MIRR Is similar to IRR, except it assumption that the cash flows (revenue) from the project are reinvested back into the company, and are compounded by the company's cost of capital, but are not directly invested back into the project from which they came.

4.2. Business Case

Herewith I would like to introduce and discuss the benefits of business case which may name differently in companies. Business case is a form mainly prepared by finance but owned by the project owner. It is giving all the results as payback period, net present value, risks and advantages of the projects in one picture. It is more transparent and useful for deciding the investment.

A business case is a structured proposal for business change that is justified in terms of costs and benefits. It is a typical prerequisite for the initiation of a large project and is explicitly required by many project management methodologies.

The Business Case addresses, at a high level, the business need that the project seeks to resolve. It includes the reasons for the project, the expected business benefits, the options considered (with reasons for rejecting or carrying forward each option), the expected costs of the project, a gap analysis and the expected risks.

In almost all cases the option of doing nothing should be included with the costs and risks of inactivity along with the differences (costs, risks, outcomes etc) between doing nothing and the proposed project.
It is from this that the justification for the project is derived.

The case will be reviewed at the initiation of the project (before the go/no-go decision is made) and periodically during the running of the project (e.g. at stage or sub-project boundaries) to ensure that:

1. The business case is still valid, i.e. the business need still exists.
2. The project is still on track to deliver the solution to the business need.

As a result of this review the project may be terminated or future parts amended. The business case may also be subject to amendment if the review concludes that the business need has abated or changed, this will have a knock on effect on the project.

Business cases must be justified, evaluated and prioritized to ensure that Investment has value, project will be properly managed, firm has the capability to deliver the benefits, the firm's dedicated resources are working on the highest value opportunities and projects with inter-dependencies are undertaken in the optimum sequence.

The Business Case Process should ensure that required issues have been thoroughly considered - this is essential in order to facilitate completion of the documentation, proposals are presented in a standard and consistent format, relevant information is available and considered, sufficient information to facilitate fair comparative evaluations of a number of different proposals is available, both the value and risks inherent in the proposed project are clear,

project is sponsored by, and has the commitment of, an executive member who has the capability and authority to deliver most—if not all—of the benefits, the IT department agrees that the project is technically viable, the delivery of the outcomes and benefits can be traced and measured.

The Business Case Process should be designed to be adaptable - tailored to the size and risk of the proposal, consistent - the same basic business issues are addressed by every project, business oriented - concerned with the business capabilities and impact, rather than having a technical focus, comprehensive - includes all factors relevant to a complete evaluation, understandable - the contents are clearly relevant, logical and, although demanding, are simple to complete and evaluate, measurable - all key aspects can be quantified so their achievement can be tracked and measured, transparent - key elements can be justified directly, accountable - accountabilities and commitments for the delivery of benefits and management of costs are clear

The principal purposes of the Business Case Process are to introduce a way of thinking that causes people with the authority to recommend projects to firstly consider their value, risk and relative priority as a fundamental element of submitting the project proposal, require those proposing a project to justify its value to the firm and to self-cull any proposals that are not of demonstrable value, enable management to determine if the project proposed is of value to the business and achievable compared to the relative merits of alternative

proposals, enable management to objectively measure the subsequent achievement of the business case's benefits.

Generation of the Business Case should not be mechanical. Indeed, the case must demonstrate that: the issues have been thought through; the full benefits will be realized on time, any technical aspects have been thoroughly evaluated and cost, and track and measure their achievement. (For any IT project it is unlikely that any significant proposal would be submitted to the Executive Management Team for approval without both the business sponsor head of IT agreeing on the merit of the proposal.)

A business case should contain some or all of the following information types (depending on the size, timing, scale and availability of information), Reference - Project name/reference, Origins/background/current state, Context - Business objectives/opportunities, Business strategic alignment (priority), Value Proposition - Desired business outcomes, Outcomes roadmap, Business benefits (by outcome), Quantified benefits value, Costs/ROI Financial scenarios, Risks/costs of not proceeding, Project risks (to project, benefits and business), Focus - Problem/solution scope, Assumptions/constraints, Options identified/evaluated, Size, scale and complexity assessment, Deliverables - Outcomes, deliverables and benefits planned, Organizational areas impacted (internally and externally), Key stakeholders, Dependencies, Workload -

Approach, Phase/stage definitions (Project (change) activities, Technical delivery activities, Workload estimate/breakdown, Project plan and schedule, Critical path), Required resources - Project leadership team, Project governance team, Team resources, Funding, Commitments (required) - Project controls, Reporting processes, Deliverables schedule, financial budget/schedule

Business case preparation is under responsibility of the project proposer, Finance is responsible in coordinating and performing investment appraisal necessary to be used in the Business Case. In order to be able to schedule the proper work timely, needed information required in order to prepare the analysis should be given to at least two weeks before the planned Capital expenditure order. All cost items associated with this project should be included in the business case preparation.

For planned projects for low expenses (depend on the company policy) a simple Business Case should be prepared and attached under Capital expenditure approval forms. This BC at least should include the reason, investment appraisal, payback of the investment and alternatives.

For any Capital expenditure with a high amount detailed Business Case which has been prepared in the Budget process should be reviewed and updated according to the recent production volume and economic assumptions.

All Capital expenditure investments should be ensured by the budget holder that utility capacity for all equipment is sufficient to make this investment and it can be invested technically. That's why Capital expenditure owner must apply to Engineering/Technical Manager to get confirmation with the Capital expenditure approval form.

All Capital expenditure investments should be ensured by the budget holder that all equipment meets applicable health and environment standards. Applicable CE standard detail and health and environment approval should be fulfilled in the Capital expenditure approval Form by the budget holder.

Business cases provide the executive committee with the necessary financial projections, financial metrics, and assessment of contingencies and risks, to support a decision either to accept or not accept the proposal.

Business objectives complete the business case subject statement, "what the case is about." Good subject statements are built around objectives—business objectives, financial objectives, functional objectives, or operational objectives.

Time, When does the analysis period begin, and when does it end, Is the analysis synchronized with calendar or fiscal years? Project or program plans?

Geography/Location, Does the analysis refer to a specific site; does it cover specific areas only? (E.g., a manufacturing floor, computer room, loading dock, executive offices)

Organization or Function, does the analysis cover a specific division, department or group, company or organization, -does the analysis apply only to certain functions? (Manufacturing, marketing, sales, etc.), does the analysis apply to certain personnel but not others? (E.g., hourly-paid labour, management, IT/IS staff but not computer users)

Technology, does the analysis cover computer hardware but not software, vehicle engine and drive train maintenance, but not body work, Electrical but not mechanical devices?

4.2.1. Business Case for a Capital Expenditure Project

As previously stated, today, the most important factors preventing the decision while investing in companies in Turkey are lack of knowledge and experience, as well as insufficient controlling systems, and knowledge level of investments. Hereby, I criticise two different business cases within one Production Company, named KANZ AG. with the same amount of money, USD6, 500,000.00.

In Business Case 1, KANZ AG Company is planning to have a new production line in the company, which is liquid additives production. KANZ AG. is seeking capabilities to meet the expected growth in sales of its local brands and export opportunities in liquid additives production Therefore, KANZ AG need to purchase new machineries.

In the second business case, I assume that the company invest the initial cost, USD6, 500,000 as a cash (financial) investment and make the necessary calculations.

4.2.1.1 Business Case Capex Assessment Form

There is a company named Kanz AG. planning to invest physically to increase the production volume. Therefore the company is evaluating the investment by using business case which is covering all capital budgeting methods in a business case.

In table 5 KANZ AG. is seeking capabilities to meet the expected growth in sales of its local brands and export opportunities in liquid additives production. In order to benefit from local and export opportunities it needs to be provided a Liquid Additives Complex into First Production Group (FPG).

Table 5 Company Kanz Business Case

Proposer Name: Can Sever **Steve Hump – Region Director** **Stephen Kanz– Technical Director** **Sema Karanfil – Finance Manager**	**Company: KANZ AG.**
Date: Dec 6, 2009	

1. Introduction

Give a brief description of the proposal including the key objectives.

By incorporating Liquid Additives unit into FPG, we may a some consequences such as below;

- Transportation costs will be eliminated,
- Quality of the product will be under control and will be in-house, continuously,
- Cost Analysis must be done regularly,
- Control environment will be held on,
- Prevent possible customer complaints.

2. Strategies

Identify aspects of the Organizational Plan and/or Information Strategy that are addressed.

- This project will help to get more benefit of our Company.
- This project will improve our Financial reporting targets due to cost saving.

3. Benefits

What are the opportunities and benefits for the Organization and User(s)?

- Usage of in-house produced liquid additives will reduce our production costs.
- Quality problems will be eliminated
- Due to available capacity export of the product will be possible.

4. Implications of not undertaking Proposal

What problems will arise if the proposal does not go ahead?

- KANZ Turkey will loose some sales volumes of the area of Middle East and Eastern Europe.

5. Alternatives

What are the alternatives to undertaking the proposed development?

- Import liquid additives for domestic sales only.

6. Organizational Areas Affected

What staff, processes and systems will be affected by the proposed development?

- There will be additional staffing to operate machine, 5 additional technicians per shift.
- There will also be an impact on spare parts inventories.
- There will be an impact on operating cost.

7. Risks

What risks are involved in implementing the proposal and how will they be managed?

- Implementation of the new production line may take more than 5 months, and it may take few months (approximately 4 additional months) to start production after all technicians are trained. And after all these periods if there will be major breakdown on machines, we will be out of stock. There for, inline with this project, import department should make a plan for just in time import.

8. Investment Costs

What is the summary of capital investment costs for the proposed development?

a) Staff

Yes, total 5 technicians per shift.

b) Training

Yes, included in machine price No additional expense will be charged.

c) Equipment, etc

- The total cost of the equipment is USD 6,500,000.00 which includes;

1 additive machine (capable of producing liquid additive) +1 additive feeder + training cost for the technicians

d) Other

- N/A

TOTAL **6,500,000 USD**

9. Running Costs

What are the costs to run this proposal as a service?

a) Ongoing Annual Training (to cover staff turnover, manuals, refresher training etc)

N/A

b) Licence renewal, etc

N/A

c) Maintenance

15,000 USD/year maintenance

60,000 USD/year spare part expenses

TOTAL

75,000 USD/year

10. Payback

How and on what timescales will the projected costs be recouped as savings or benefits?

11. Timescales/Phasing

What are the timescales and deadlines for the proposed development?

- The receipt of the equipments could be expected in 8 or 10 months. Installation and setup will take approximately 6 weeks and the equipment is expected to be operational in 12 months.

12. Decision *Has the proposal been approved, rejected, deferred etc. and do any conditions apply?*
Approved

Authorised by: **Sema Karanfil**	**Finance Director**	**Date**
Authorised by: Steve Hump	**Region Director**	**Date**
Name of Assigned Project Sponsor		**Date**
Stephen KANZ – Technical Director KANZ Turkey		

Table 7 Calculation of the net changes of the revenue

Project Name		Liquid Additives				
Asset Type		Machinery				
Total Cost						
Installed Cost		$6,500,000				
Useful Life		15				
Capitalization Date		8-Jan				
Change in Net Working Capital						
Initial Investment		$6,500,000.00				
		2008	**2009**	**2010**	**2011**	**2012**
Change in revenue		**$4,250,000.00**	**$4,300,000.00**	**$4,300,000.00**	**$4,300,000.00**	**$4,300,000.00**
	Net turn over	$4,250,000.00	$4,300,000.00	$4,300,000.00	$4,300,000.00	$4,300,000.00
	Production Volume for additional	$0.00	$0.00	$0.00	$0.00	$0.00
Change in expenses (excl. depreciation)		**$105,000.00**	**$105,000.00**	**$105,000.00**	**$105,000.00**	**$105,000.00**
All Dept.	**Training Expenses-external**	$0.00	$0.00	$0.00	$0.00	$0.00
Technical	**Electricity Expenses**	$10,000.00	$10,000.00	$10,000.00	$10,000.00	$10,000.00
Technical	**Warehouse Rentals**	$0.00	$0.00	$0.00	$0.00	$0.00
Quality	**Analysis Exp**	$5,000.00	$5,000.00	$5,000.00	$5,000.00	$5,000.00
Technical	**LPG Expenses**	$0.00	$0.00	$0.00	$0.00	$0.00
Production	**Machinery, Plant and FA Maint**	$75,000.00	$75,000.00	$75,000.00	$75,000.00	$75,000.00
Production	**Oil Expenses**	$0.00	$0.00	$0.00	$0.00	$0.00
Production	**Other Consumable Expenses**	$0.00	$0.00	$0.00	$0.00	$0.00
Production	**Spare Parts Expenses**	$0.00	$0.00	$0.00	$0.00	$0.00
Production	S&W	$15,000.00	$15,000.00	$15,000.00	$15,000.00	$15,000.00
Net changes in Revenue		**$4,145,000.00**	**$4,195,000.00**	**$4,195,000.00**	**$4,195,000.00**	**$4,195,000.00**

All the inputs of the project are given in this table to show and to record the decision and the special information about the project. To see full details deciders will need to see the calculations which are shown in table 6.

In this figure the numbers and full costs are given to make the necessary calculations for the project. The initial investment is $6500K and fixed costs are $105K/annual. Fixed costs for this project are electricity, analysis, machinery, maintenance, and spare part costs. Change in revenue for the first year is $4.250K and will be $4.300K. for the following years. Net changes in revenue will be $4.145K for 2008 and $4.195K for the following years. Data per year with the calculation is given below;

In this assessment the production company decides to have a capital expenditure investment, which is a new production line and which is the core business of the company. The investment amount is USD6, 500,000 and the total expense fixed cost of the investment will be USD105, 000 for each year. Net turn over will be for the following first year, USD4, 250,000 and for the rest USD4, 300,000. The payback period will be 1, 56 year which is acceptable. Since this investment is capital expenditure investment, depreciation and net profit after tax is important in the calculation. Future payments and income based on a discount rate shows us the net present value of the investment.

Depreciation must be added in fixed asset investment.

Table 8 Depreciation Influence

	END of YEAR	
	2008	**2009**
Change in Net Turnover	$4,250,000	$4,300,000
Change in F&SV (excl. change in depreciation exp.)	$105,000	$105,000
Change in depreciation exp.	$433,333	$433,333
Change in net prof. Bef. Tax	$3,711,667	$3,761,667
Change in taxes	$734,910	$744,810
Change in net prof. After tax	$2,976,757	$3,016,857
Change in depreciation	$433,333	$433,333
Incremental operating cash inflow	**$3,410,090**	**$3,450,190**
Subject to tax	y	y

Depreciation Expense	**New Asset**	$433,333	$433,333
	Old Asset		$0
Accumulated Depreciation	**New Asset**	$433,333	$866,667
	Old Asset		$0

2010	**2011**	**2012**	**2013**	**2014**
$4,300,000	$4,300,000	$4,300,000	$4,300,000	$4,300,000
$105,000	$105,000	$105,000	$105,000	$105,000
$433,333	$433,333	$433,333	$433,333	$433,333
$3,761,667	$3,761,667	$3,761,667	$3,761,667	$3,761,667
$1,128,500	$1,128,500	$1,128,500	$1,128,500	$1,128,500
$2,633,167	$2,633,167	$2,633,167	$2,633,167	$2,633,167
$433,333	$433,333	$433,333	$433,333	$433,333
$3,066,500	**$3,066,500**	**$3,066,500**	**$3,066,500**	**$3,066,500**
y	y	y	y	y
$433,333	$433,333	$433,333	$433,333	$433,333
$0	$0	$0	$0	$0
$1,300,000	$1,733,333	$2,166,667	$2,600,000	$3,033,333
$0	$0	$0	$0	$0

NPV, present value, IRR, discounted payback and cost of capital is given as below.

Table 9 Capital Budgeting Decision Criteria

Liquid Additives					
	Cash Flow		Initial Investment	$6,500,000	
Initial Investment	-$6,500,000		Cost of Capital	13.7%	
2008	$3,450,190	3,034,467.90	IRR	49.0%	1
2009	$3,066,500	2,372,040.17			2
2010	$3,066,500	2,086,227.06			3
2011	$3,066,500	1,834,852.30			4
2012	$3,066,500	1,613,766.31			5
2013	$3,066,500	1,419,319.54			6
2014	$3,066,500	1,248,302.14			7
2015	$3,066,500	1,097,891.07			8
2016	$3,066,500	965,603.40			9
2017	$3,066,500	849,255.41			10
2018	$3,066,500	746,926.48			11
2019	$3,066,500	656,927.42			12
2020	$3,066,500	577,772.58			13
2021	$3,066,500	508,155.30			14
2022	$3,066,500	446,926.39			15
Present Value of Cash Flows	$19,458,433	19,458,433.49			
NPV	$12,958,433				
Status	ACCEPTED				

Discounted Payback 2.52

4.2. 2. Business Case for a Financial Project and Assessment

Kanz AG is now seeking the advantages and benefits of a cash investment with the same value of investment. Therefore the financials are given and calculated.

Before making an investment decision, it is highly important that in the assessment cost-benefit analysis is done. This business case offers that it suggests a methodology for determining whether or not make cash investment in a company.

Treasurers today are deeply involved in the financial supply chain and have more compliance requirements to meet. In fact, treasury has taken on a more strategically important role in the organisation with front-line responsibilities for managing risk, working capital, controls and corporate governance. As a result, treasurers are looking for ways to make an investment decision with the safest way.

Any decision taken must be based on a careful analysis of the existing treasury organisation. Developing the business case will also offer a sound basis for discussion of the proposition with senior management and more importantly with the operating units that will be impacted by the change

While developing the business case the primary step is to complete a through review of all treasury related activities within the company. The review will include an evaluation of the existing processes, controls, volume and frequency associated with each of the activities performed by treasury:

Table 10 Identify strategic and non-strategic activities in these areas

Front Office Activities	Back office administration
Intercompany funding	Corporate Netting Centre
FX Management	Pool Management
Accounting and Reporting	Business unit support
Reporting requirements	Third party payments
Liquidity/Investment Management	

During an investment process it will be important to differentiate between strategic or core and non-core activities. In our case, a strategic activity involves the identification and development of a strategy to mitigate a foreign exchange exposure. Intercompany funding has a very important, core role in this investment too, since KANZ AG is an intercompany. So we must say that in this case, KANZ AG will follow the impact of the FX Management and Intercompany funding as strategic- core activities.

Techniques to measure the financial attractiveness of any large financial investment are calculated and presented as below for this case.

- Present Value
- Return on Investment (ROI)
- Net Present Value (NPV)
- Payback Period
- Internal Rate of Return (IRR)

Each of these financial measurement options, outlines the mathematical calculation behind each metric, and uses an example to explain the implications of the measurement's findings are discussed.

Present Value; The equation for present value for this case is: benefit / (1+discount rate). Company is planning a cash investment cost $6,500,000.

If the current discount rate is 10% and your benefit at the end of year 1 is $3,000,000, the present value of that benefit right now is equal to $3,000,000/(1+.1)= $2,727,273. $2,727,273 received now is the same to you as $3,000,000 received in 1 year if the discount rate is 10%, since if you invest that $2,730,000 and take inflation into account, it will be the equivalent of $3,000,000 in 1 year. Since this investment often provides a benefit over a number of years and interest is compounded, present value calculations can often be complex. For example, if your annual net benefit is $3,000,000 for three years, the present value would equal:

$3,000,000 / (1.1) + $3,000,000/ (1.1)^2 + $3,000,000/ (1.1)^3 = $7,460,556

It would not equal $3,000,000 +$3,000,000 +$3,000,000 = $9,000,000. The basic principle of present value or the time value of money is central to several of the different ways of measuring the financial attractiveness of one investment over another.

Return on Investment (ROI) The equation for a 3-year ROI is: (net benefit year 1 / (1+discount rate) + net benefit year 2 / (1+discount rate) + net benefit year 3 / (1+discount rate)) / initial cost.
So if the initial cost for the company cash investment was $6,500,000, the annual benefits minus annual costs are constant at $3,000,000 for the next three years, and the discount rate is 10%, your 3-year ROI would be: ($3,000,000 / (1.1) + $3,000,000/ (1.1)^2 + $3,000,000/ (1.1)^3 /6,500,000= 115%. While ROI tells you what percentage return you will get over a specified period of time, it does not tell you anything about the magnitude of the project. So while a 115% return may seem initially attractive would you rather have a 115% returns on a $6,500,000. That is why you will often want to know the Net Present Value.

The Net Present Value (NPV) gives you an amount (dollar-euro-tl) value of your expected return and therefore indicates the magnitude of your project. It is calculated by summing the present value of the net benefits for each year

over a specified period of time and then subtracting the initial costs of the project. A positive NPV means that the project generates a profit, while a negative NPV means that the project generates a loss. The equation for a three year NPV is: (net benefit year 1 / (1+discount rate) + net benefit year 2 / (1+discount rate)^2 + net benefit year 3 / (1+discount rate)^3) - initial costs. If we take manufacturing companies new financial (cash) investment example; the NPV would equal: $3,000,000 / (1 + .1) + $3,000,000 / (1 + .1)^2 + $3,000,000 / (1 + .1)^3 - $6,500,000 = $960,556

Payback period is used to find out how long it will take for an investment to show a profit which is 2, 17 years for this case.

$6,500,000/$3,000,000 = 2, 17 years which is in the third year.

Payback is very easy to calculate but it doesn't tell you about the magnitude of your savings or even how your investment performs after your benefits equal the initial costs.

Internal Rate of Return (IRR) The expression for IRR (in this case, a three year IRR) is: initial costs = net benefit year 1 / (1+IRR) + net benefit year 2 / (1+IRR)^2 + net benefit year 3 / (1+IRR)^3.

IRR is calculated through a trial and error process or data table since solving the above equation is very time-consuming. If we use the same example as before, the IRR would equal 23%. This gives an NPV of ($4,000,000 / 1.23 +

$4,000,000 / 1.23^2 + $4,000,000 / 1.23^3) - $6,500,000 = $1,545,487 which follows the relationship between NPV and IRR. Financial case calculation;

Table 11 Financial Case Results

Current Discount rate	10%
Income 1-2-3 years	$3,000,000.00
Cash Investment	$6,500,000.00

Payback		**Discounted Payback**	**Present Value**			
Year	-6,500,000	100			6,500,000	
1.00	3,000,000	0.9091	**2,727,273**		3,772,727	
2.00	3,000,000	0.8264	2,479,339		1,293,388	
3.00	3,000,000	0.7513	2,253,944	-	**960,556**	NPV
	9,000,000		7,460,556			
		Return on Investment	-115%			

Current Discount rate	23%
Income 1-2-3 years	$4,000,000.00
Cash Investment	$6,500,000.00

Payback		**Discounted Payback**	**Present Value**			
Year	-6,500,000	100			6,500,000	
1.00	4,000,000	0.8130	**3,252,033**		3,247,967	
2.00	4,000,000	0.6610	2,643,929		604,039	
3.00	4,000,000	0.5374	2,149,536	-	**1,545,497**	NPV
	12,000,000		8,045,497			
		Return on Investment	-124%			

The cash investment amount is USD 6,500,000. Discount rate is set as 10% for the first case, 23% for the second. Income for each year is USD 3,000,000 for the first example, USD 4,000,000 for the second case shown above.

Net present values for both cases are returning minus amounts within the third year, which is the payback period. Returns on investments are different due to discount rate and income. 124% ROI seems more attractive to have the investment. That is why second case should be selected.

This chapter has two sections where we see the capital budgeting decision methods and a decision making tool, business case. Capital budgeting decision methods are very common and used in companies while making decisions especially in multinational companies. Payback calculation is the most common method calculated by the Turkish companies. Business case is a new tool and can be named differently in some companies. Mainly a business case contain all the information, calculations, other costs which are not mention before as training or equipment costs. Business case is very useful for companies to see from a larger view and make the right decision with all criteria.

CHAPTER 5
RESULTS AND FINDINGS

Investment appraisal techniques in Turkish companies are examined and my goal is to perform an in-depth analysis on the current practice of capital budgeting and investment evaluating systems in selected companies in Turkey. In particular, I am interested as to how these companies perform investment appraisal and measurement of project success or failure.

The thesis focuses on thirty four companies, which are selected mainly from six industries: FMCG, Logistics, Chemicals, Catering Services, Warehousing and Utilities; and from Turkey. Seven of the companies are international companies which headquarters are in other countries, twenty seven of them are local but corporate companies.

By this grouping I can analyse the practice both within and across international, local companies and to review country experiences.

For the purpose of investigation, the analysis is done on firm-by-firm basis; however, reports are produced by intercompany and local company groupings. All companies prefer to be anonymous.

Data is collected from two sources: a survey and a face-to-face interview. From the structured outline, interview questionnaires are developed on the following three main themes: company profile, investment appraisal process in the company, and on the prospects of other methods, such as, Business Case, Payback etc., as investment appraisal tool.

A survey is sent to participant companies, appendix 2, asking gender, occupation and age of the owner or head of the company, future investment willingness for 2010, number and amount of investment. To summarize and to focus two companies are selected to have a face to face interview took around two hours with a possible extension of the discussion. In addition, relevant company documents are also collected where available.

As a result of one of the interview in most situations, even appraising of investment may not be needed, as such projects should be done in order to keep up to the current market situation or government regulations.

The companies believe that good investment evaluating process should provide more risk analysis, be more result oriented as business cases and be simple and transparent. This thesis confirms that the NPV, Payback and IRR continue to be used as major investment appraisal techniques. Business Case method is done in different methods and forms but aiming the same result in

different companies and getting more and more popular especially in international companies. Survey is done fourth quarter of the year 2009, asking for the 2010 results. Herewith the results are given in more detail with numbers.

Hypothesis 1: Decision criteria relating to the investments in companies are more structured and formalized in international companies.

In Turkish companies investment evaluating system is newly structured. It is managed and performed in international companies and managed by related departments. Especially the tools are only performed and used in international or corporate Turkish companies. As a result of the survey it is clearly seen that tools are developed more in international companies. Rate for usage of tools within international companies is 85.71% and in local companies 18.52%.
Tools such as payback calculation, MIRR, IRR or Business Cases are commonly used in multinational companies and are too complex for local companies to use.

Survey is done for 34 local and international companies in Turkey. Survey is done both for owner of companies who are mainly owner of the companies and employed as management of the companies. For these 34 companies' results for occupation, 50% are employed as manager in the company and

50% are the owner of the companies. 44% are under 40 years old and 56% are above 40 years old.

Figure 1 Tool usage in international and local companies

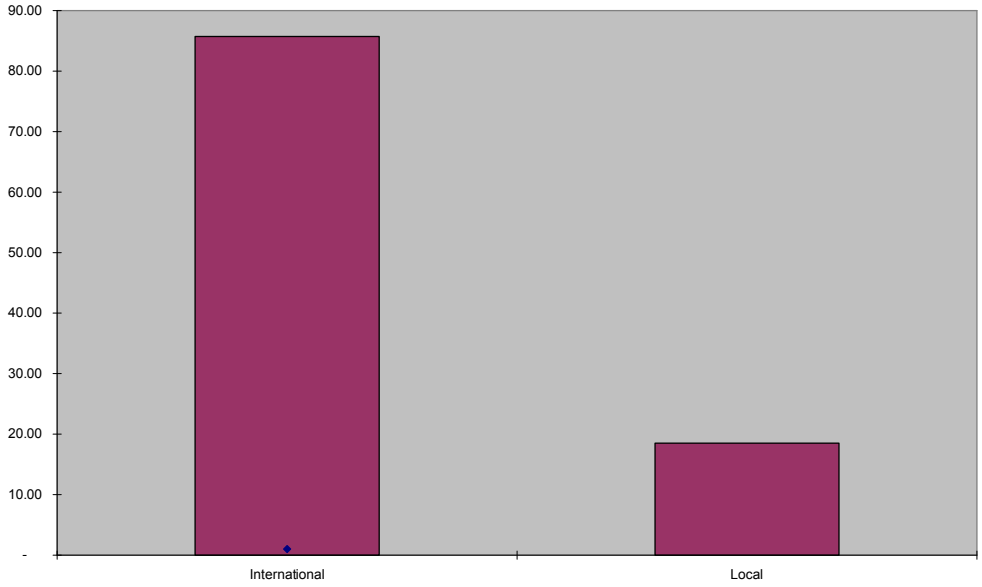
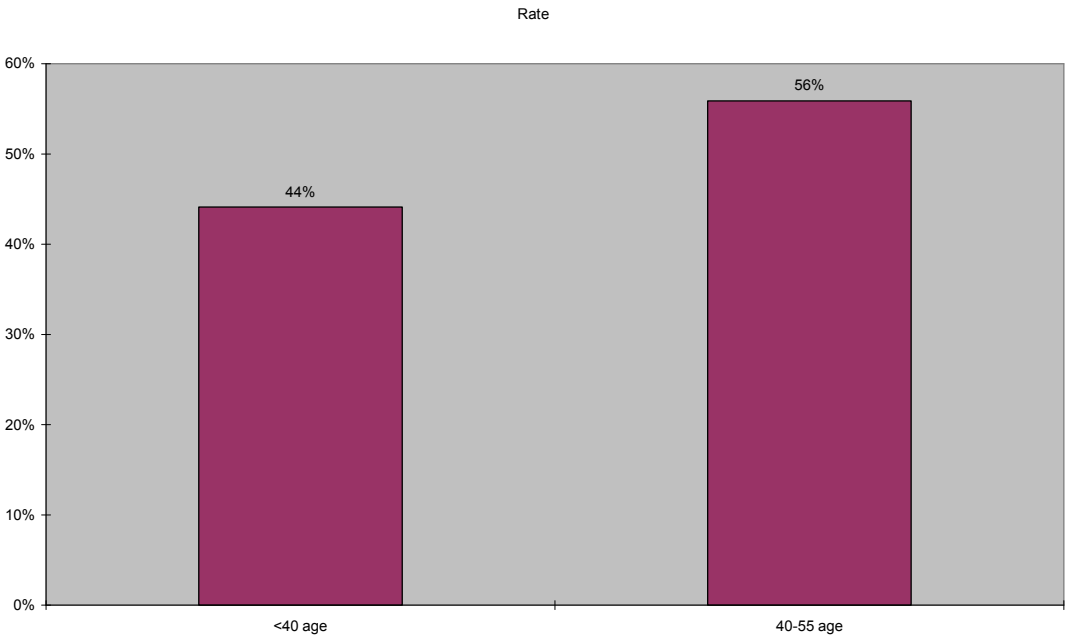


Figure 2 Age Allocation

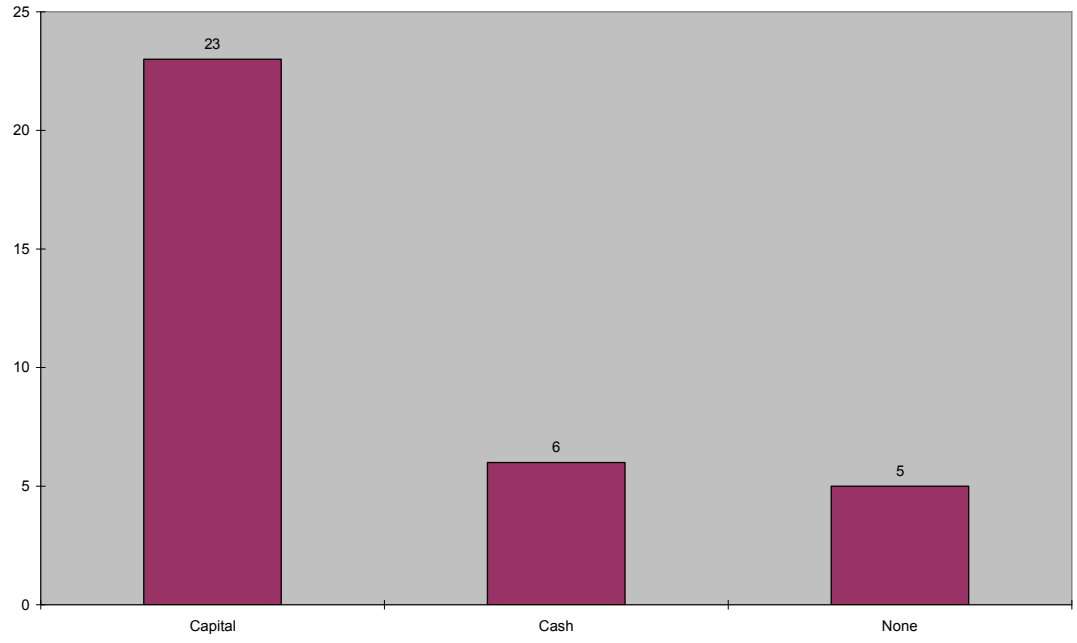


Hypothesis 2: Turkish companies are willing to invest more in capital and physical capacity rather than cash investment even if they know they will gain the same benefit with same cost at payback period.

In Turkish companies the prevalent view regarding investment is to invest more in physical capacity than in cash. Cash investment is selected more by local and little companies. Cash investment is not preferred since there is no trust and static in the market in Turkey. (Interview result with one of the 500 top companies in Turkey, 2008)

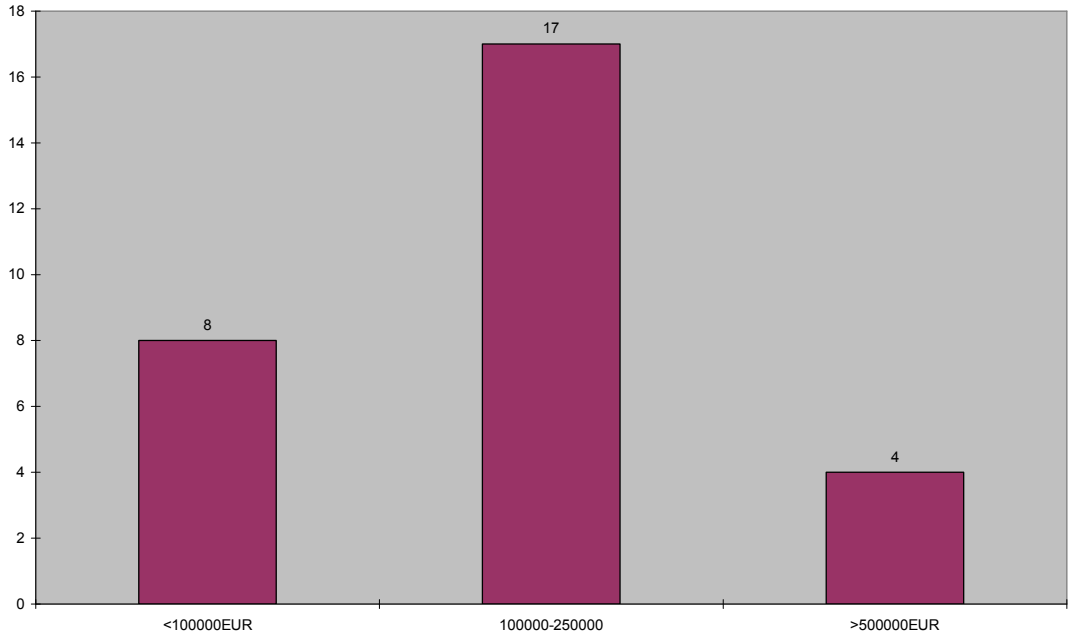
68% of the Turkish companies are willing to invest in Capital. %18 prefers cash and %15 are not willing to invest in 2010.

Figure 3 Investment approaches



Investment amount in Turkish companies for 2010 is 50% between EUR100.000 and EUR250.000 and 24% are budgeting to invest under EUR100.000. Only 12% of the companies are planning to invest more than EUR500.000 in 2010.

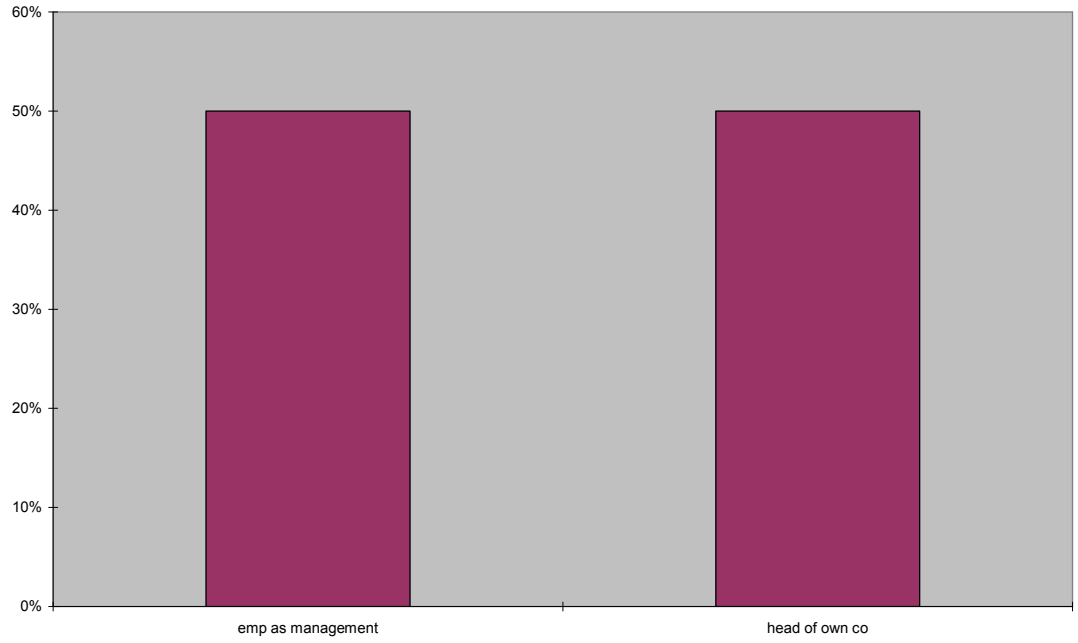
Figure 4 Investment opportunities for 2010



Up 34 companies, all local companies are managed by the owner of the company and 11 of the local companies are willing to invest in capital.

17 of the companies are managed by professional managers who are trained and educated accordingly and employed by the company. They are also aiming to invest physically in 2010.

Figure 5 Management Structures of the companies



CHAPTER 6
CONCLUSION

In Turkish companies investment evaluation system skills are gaining more importance in recent years. I want to show you in this thesis how to evaluate an investment,, how to make a correct project decision within a company and what are the Turkish companies' approaches to cash and capital expenditure investments. It is hypothesized that Turkish firms are willing to invest in Capital Expenditure (Physical) areas instead of cash even if the benefit is same. These analyses will capture the decision makers' actual decision policies in Turkey and to compare these results with their stated decision policies.

In the last few years, when you specially look at the international companies, they have a new department and a manager for investment, projects, evaluating systems, risk management etc. In these departments, project decisions are taken very properly. The systems they use are more about physical investment, as I have called Capital Expenditure in the thesis. Companies aim more profit and want to declare this in their profit and loss sheet. So right investment decision, with minimum cost, maximum benefit will be an issue for a company would like to see.

Moreover, most Turkish companies have controlling problems while investing. So management control system takes a big role, and must be applied in the company. Therefore, internal control departments have been settled in the firms besides internal audit departments.

The policy recommendations for the development of investing in intercompany companies can be summarized as below;

Related department, most of the times finance, will prepare a business case assessment form, including the reason, benefits, alternatives, risks, costs, and the calculations as payback, net present value, internal rate of return of the investment. Each of these financial measures has its strengths and weaknesses. Different companies will place varying amounts of emphasis on each of the different metrics. To get a clear and complete picture of a prospective investment, you will benefit from having access to all of these measures.

Shortly, if an effective investment evaluating system can be set in a company, the earnings, benefits, and employee work satisfaction will be maximized.

I suggest that decision makers and companies in Turkey are having a tendency to invest more in fixed asset (physical) rather than cash even when the payback, savings and costs are equal.

REFERENCES

AKALU M.M. (2001). 'Project Appraisal and Control: Developing a focus on Wealth Creation', International Journal of Project Management, 19(7), 375-383.

AMIR E. (2007). 'The Association of R&D and Capital Expenditures with Subsequent Earnings and Variability', Journal of Business Finance and Accounting, 34(1-2), 222-246.

BEATH, C. and J. ROSS (2002). 'Beyond the Business Case: Strategic IT Investment', Risk and Operations Management Research Paper, (10-10), 4-17.

BREALEY, R., MYERS, S.C. and F. ALLEN, (2005). Corporate Finance, Eight Edition, The McGraw – Hill Companies International Edition, New York.

BURTON B.M. (2003). 'The Stock Market Reaction to Investment Announcements: The Case of Individual Capital Expenditure Projects', Journal of Business Finance and Accounting, 26(5), 681-708.

CARLIN W. and C. MAYER (2002). 'Finance, Investment, and growth', Journal of Financial Economics, 3(2) , 191-226.

CHUNG, K.H., WRIGHT, P. and CHAROENWONG, C., (1998). 'Investment opportunities and market reaction to capital expenditure decisions', Journal of Banking and Finance, 22, 41-60.

COVENEY, P. and K. MOORE (1998). 'Business Angels: Securing Start-Up Finance, Small Business Economics', Springer Netherlands, Southampton, UK.

DAYANANDA D. (2002). 'Capital budgeting: Financial appraisal of investment projects', Published by the Press Syndicate of the University of Cambridge, UK.

ERIKSON, T., R. SORHEIM, and B. REITAN (2003). 'Family angels vs. other informal investors', Family Business Review, 16(3), 163-171.

FEENEY L., HAINES G. H. and A.L RIDING (1999), 'Venture Capital: An International Journal of Entrepreneurial Finance, 1(2), 121-145.

FREEAR, J., J. SOHL, and W. WETZEL, Jr., (1994). 'Angels and non-angels: Are there differences', Journal of Business Venturing, 9, 109-123.

FREEMAN M. (1991). 'Costly Information, Informed Investors and the Use of Sophisticated Capital Budgeting Techniques, working paper, School of Finance and Economics, University of Technology.

HAINES, JR., G., J. MADILL, and A. RIDING (2003). 'Informal investment in Canada: Financing small business growth', Journal of Small Business and Entrepreneurship. 16(3-4), 13-40.

HARRISON, R., M. DIBBEN, and C. MASON (1997). 'The role of trust in the informal investor's investment decision: an exploratory analysis', Entrepreneurship Theory and Practice, 21(4), 63-81.

HENDRIKSE G.W.J (2001). 'Marketing Cooperatives and Financial Structure: a Transaction Costs Economics Analysis', Rotterdam, The Netherlands.

LEE H. and T. KIM (2001), 'Formulating Business Strategies From A Stakeholder' s Perspective: Korean Healthcare It Business Cases', International Journal of Information, 28(4), 831-841.

HONGREN, FOSTER and DATAR (2005). 'Cost Accounting, Tenth Edition, a Managerial Emphasis', The university of Queensland, Australia.

HYNEK J. (2005). 'Justification of Investment into Advanced Manufacturing Technology', University of Kumamoto, Japan.

JENKINS G.P. (1994). 'The Appraisal of Investment Projects: A teaching Approach', Harvard Institute for International Development, Journal of International Development: 6(1), 115-122.

JENSENT N.C, (2006). 'Risk, The pricing capital assets, and the evaluation of investment portfolios', The Journal of Business, 42, 167-247 .

JONES E., DANBOLT J. and HIRST I. (2004). 'Company investment announcements and the market value of the firm', European Journal of Finance, Taylor and Francis Journals, 10(5), 437-452.

LEFLEY F. (1999). 'The payback method of investment appraisal: A review and synthesis', International Journal of Production Economics, 44, 207-224.

LI X. (2009). 'Zhenyu Wu Corporate Risk Management and investment decisions', Emerald Group Publishing Limited, London, UK.

LUBAN F. (2004). 'Using Stimulation to evaluate investment projects', The Bucharest Academy of Economic Studies, Romania.

LUDVIGSEN J. (2009). 'Decision time in Belgium: an experiment as to how business angels evaluate investment opportunities', Journal of Business Angels 9(2), 7-34.

MACMILLAN, I., ZEMAN, L. and SUBBA NARASIMHA, P. (1987). 'Criteria distinguishing unsuccessful ventures in the venture screening process', Journal of Business Venturing 2(2), 123-137.

MAGNI C.A (2007). 'Investment decisions, equivalent risk and bounded rationality', University of Modena and Reggio Emilia, Modena, Italy.

MASON, C.M. and R.T. HARRISON (2002). 'Is it worth it? The rates of return from informal venture capital investments', Journal of Business Venturing, 17, 211-236.

MIHAELA I., and D. CSIMINGA (2003). 'Investment project evaluation – NPV and IRR criteria', Management Information Systems Quarterly, 7(2), 89-96.

MODIGLIANI, F. and M. MILLER. (1958). 'The cost of capital, corporate finance, and the theory of investment', American Economic Review 48, 261–297.

OSNABRUGGE, V. (2000). 'A comparison of business angel and venture capitalist investment procedures: an agency theory-based analysis', Venture Capital: An International Journal of Entrepreneurial Finance, 2(2), 91-109.

POULSEN T. (2008). 'Investment decisions with benefits of control', Finance Research Group Working Papers.

PRICEWATERHOUSECOOPERS, (2006). 'Thomson Venture Economics and the National Venture Capital Association', Money Tree Report, Q4 2006/Full-year 2006.,2(2), 5-41.

SAMUEL C. (1996). 'Internal Finance and Investment, Operations Policy Department', International Finance Centre Management Co., Ltd., Boston.

SCHALLER H. and CHIRINKO B, (1996). 'Business Fixed Investment and Bubbles : The Japanese Case', Carleton Economic Papers, American Economic Association, New York.

SHEEHAN M. (1994). 'The Investment Decision-making Process and Investment Determinants in the Northern Ireland Manufacturing Sector', Regional Studies, 21(5), 458-470.

SORHEIM, R. and H. LANDSTRÖM (2001). 'Informal investors – a categorization with policy implications, Entrepreneurship and Regional Development, 13(4), 351-370.

STEDLER, H. and H. PETERS (2003). 'Business angels in Germany: an empirical study', Venture Capital, 5(3), 269-276.

SUDEK, R. (2007). 'Angel Investment Criteria', Journal of Small Business Strategy, 17(2), 89-103.

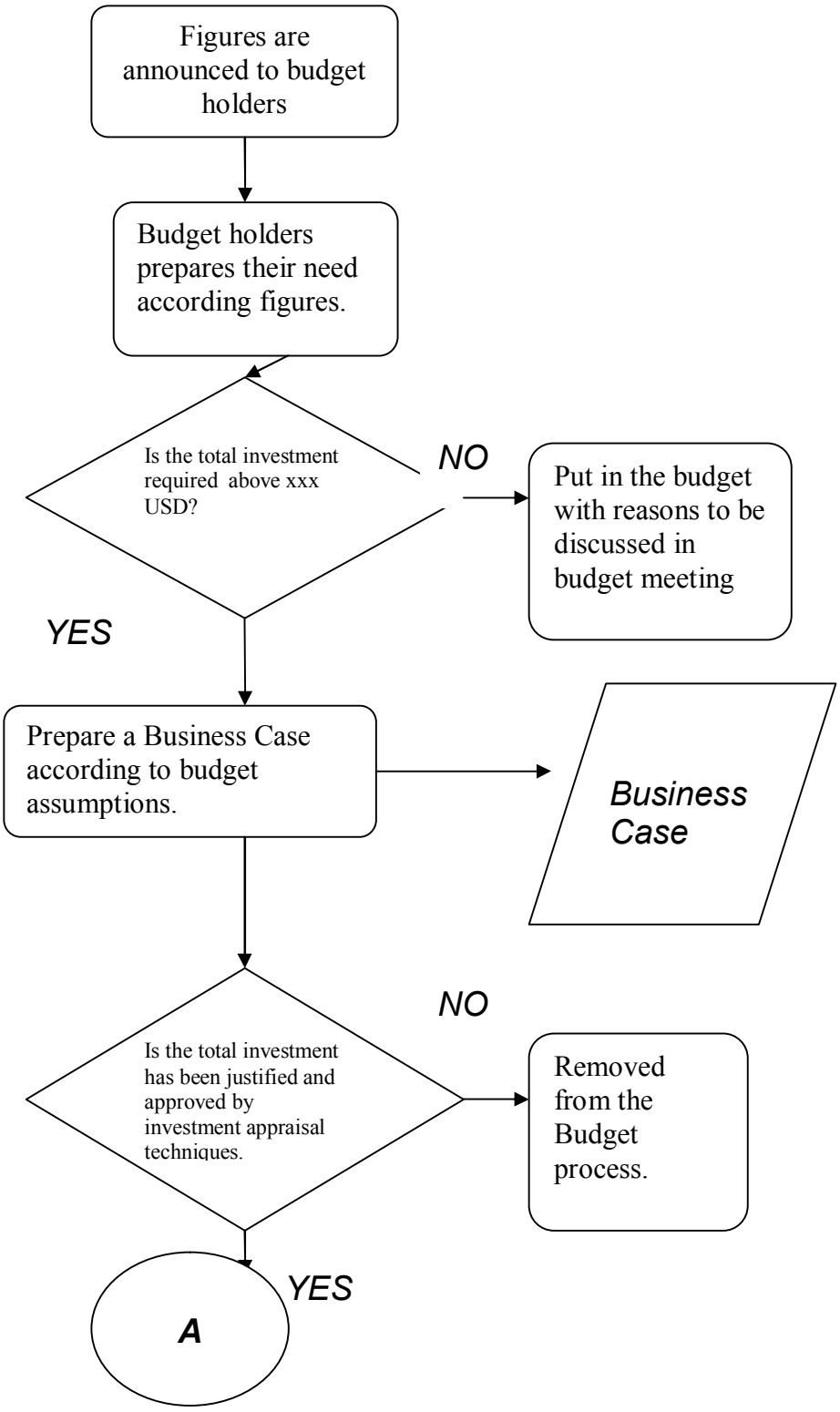
SULLIVAN, M.K. and A. MILLER (1996). 'Segmenting the informal venture capital market: economic, hedonistic and altruistic investors', Journal of Business Research, 36, 25-35.

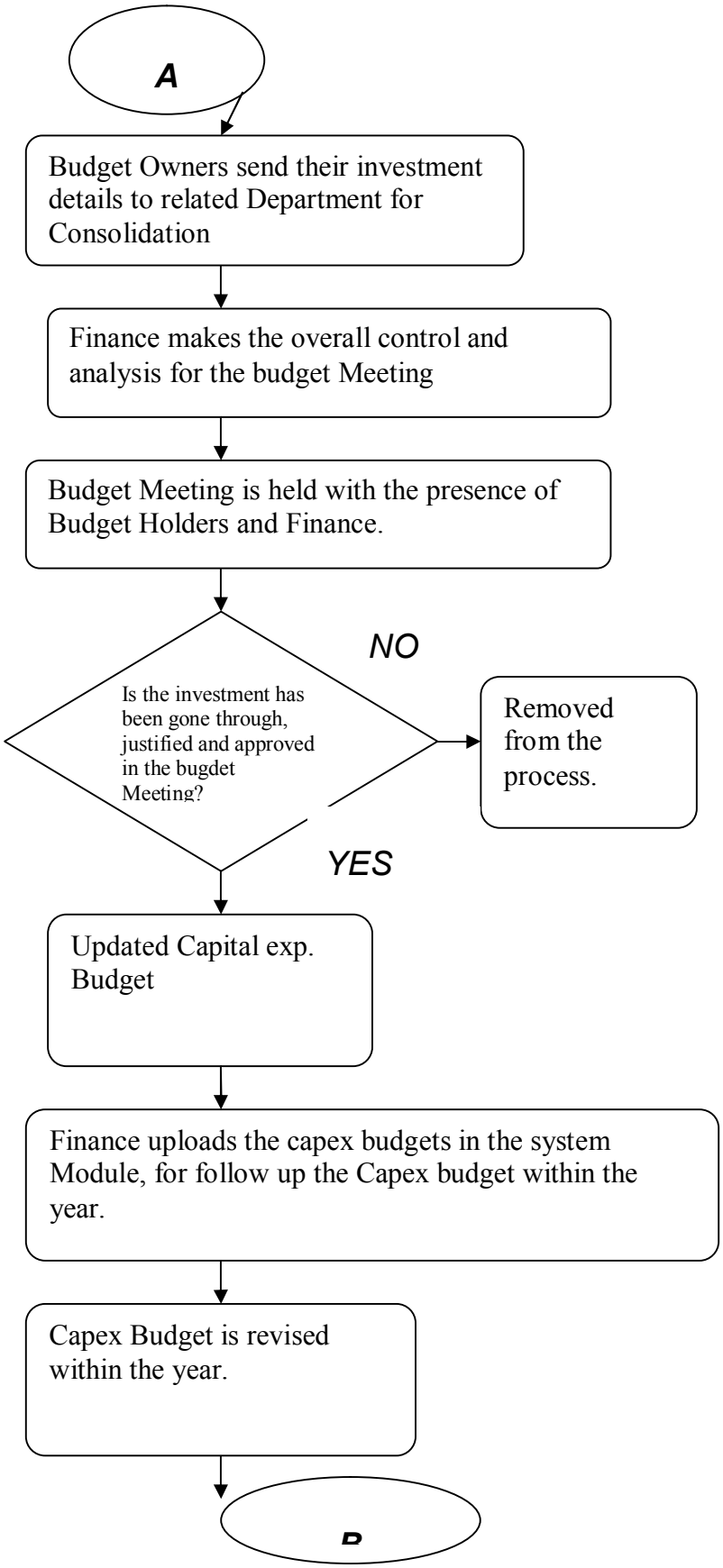
V. A. BESSONOV and I. B. VOSKOBOYNIKOV (2008). 'Fixed Capital and Investment Trends in the Russian Economy in Transition', Problems of Economic Transition, 51(4), 6-48.

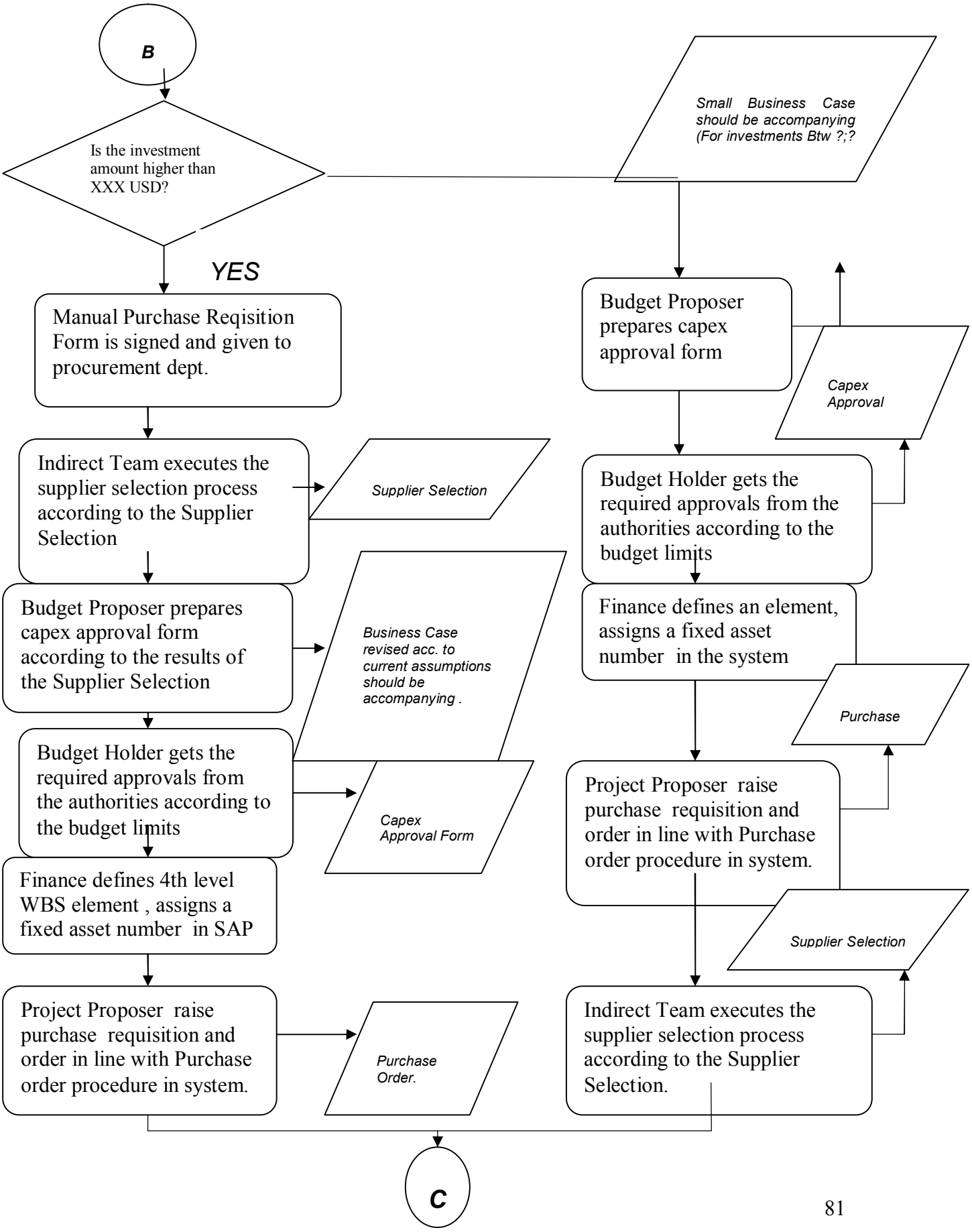
WYNN-WILLIAMS K. (2008). 'Formulating Business Strategies From A Stakeholder's Perspective: Korean Healthcare It Business Cases', International Journal of Information Technology and Decision Making, 04(04).

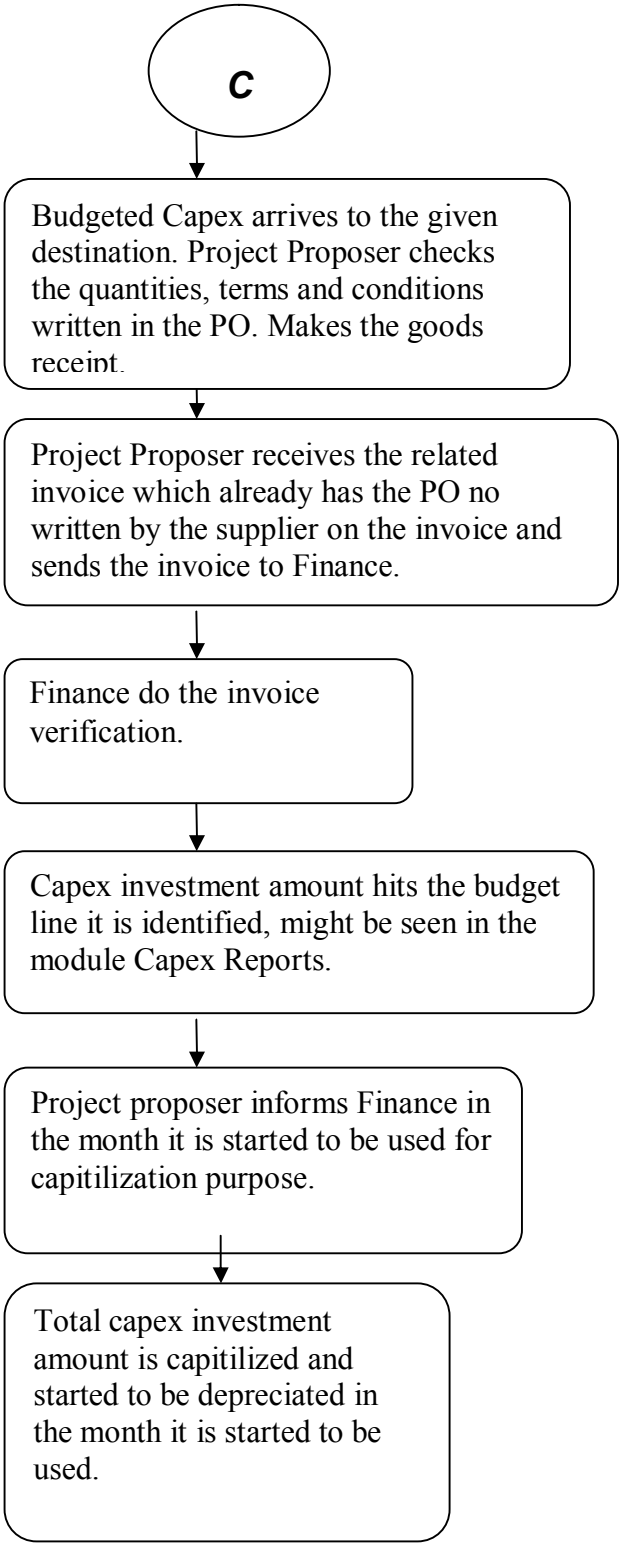
APPENDIX A:

Business Flow




A
Budget Owners send their investment details to related Department for Consolidation
Finance makes the overall control and analysis for the budget Meeting
Budget Meeting is held with the presence of Budget Holders and Finance.
Is the investment has been gone through, justified and approved in the bugdet Meeting?
NO
Removed from the process.
YES
Updated Capital exp. Budget
Finance uploads the capex budgets in the system Module, for follow up the Capex budget within the year.
Capex Budget is revised within the year.
B


B
Is the investment amount higher than XXX USD?
YES
Small Business Case should be accompanying (For investments Btw ?;?
Manual Purchase Reqisition Form is signed and given to procurement dept.
Budget Proposer prepares capex approval form
Capex Approval
Indirect Team executes the supplier selection process according to the Supplier Selection
Supplier Selection
Budget Holder gets the required approvals from the authorities according to the budget limits
Budget Proposer prepares capex approval form according to the results of the Supplier Selection
Business Case revised acc. to current assumptions should be accompanying .
Finance defines an element, assigns a fixed asset number in the system
Purchase
Budget Holder gets the required approvals from the authorities according to the budget limits
Capex Approval Form
Project Proposer raise purchase requisition and order in line with Purchase order procedure in system.
Finance defines 4th level WBS element , assigns a fixed asset number in SAP
Supplier Selection
Project Proposer raise purchase requisition and order in line with Purchase order procedure in system.
Purchase Order.
Indirect Team executes the supplier selection process according to the Supplier Selection.
C



Reference: Emrah Kaptanoglu (Finance Manager)

APPENDIX B

Business Case Form for Capital Expenditure

Project Name of project and who is requesting approval (sponsor)

	Financial Summary A brief commentary of the financial analysis			
Beside headings enter respective figures	Investment	NPV	IRR	Disc. Payback

Business Context What is the current environment? How and why must the business respond strategically? What are the key opportunities?

Proposal What is being proposed (outline proposal, scope, key objectives)?

	Strategic Fit How does the proposal support the Business Strategy? Please keep commentary brief.							
Strategic Fit –tick box		Future growth			Protect profit			Other – Please specify
Project Fit – tick box		Increase revenue		Cost reduction		Cost avoidance		Other - Please specify

Value proposition What benefits are being sought? What costs are being saved? What is the impact on business?	Tangible benefits (*Quantified in the Financial Case – see Appendix 1a)* Intangible Benefits

Supporting Evidence	What evidence exists to support the benefits that will materialize in the time frame forecast? Example; Benefits from previous projects etc.

Alternatives	What alternatives were considered and what were the reasons for rejection?

Dependencies	What is this proposal dependent upon?

	Major Risk	**Probability**	**How Managed**
Major Downsides What are the major risks, their impacts and how can they is mitigated?			

Plan	Plan is the investment and benefits included in your last company plan? If so, please highlight any material differences.

Timing and Resourcing	What are the key project milestones and phases? What levels of internal resources are required and do we have the necessary skills?

Monitoring	What procedures will be in place to monitor the project and what is the timing of a Purchase Info Record?

Reviewed by	Who has reviewed and supports this proposal?

Authorized By	**Signature**	**Date**
Name Job Title		
Name Job Title		

Mandatory (all cases):

Financial Case (Mandatory)

Financial Case	What is the financial justification for the proposal?
Suggested source of project finance	Internal/ external resources?
Exchange rate exposure	Please specify how any exchange rate exposure will be managed? (If applicable).

			Year 0	Year 1	Year 2	Year 3	Year 4	Year 5-9	Perp etuit	Tota l
Benefits		**Description**								
		Total (a)								

Costs

(ii) -	Capex								
	Total Capex (b)								

(iii) –	**Revenue**								
(iv)	**If Add.**								
	Total Revenue (c)								

	Sub-total costs (b)+(c)								

Tax	**Total Tax Effect (d)**								

Net cash flow (a+b+c+d)								

NPV		**IRR**		**WACC**		***Discount-payback***	
% NPV in perpetuity	Where applicable						

WACC Breakdown of adjustments to Group WACC with reasons. Remember to use adjustments in formula to arrive at overall DCF. Formula can be found on Accompanying Notes – section WACC and useful notes on its calculation (page 5).	Discount rate used: Group WACC Adj: Inflationary Risk Country risk Inherent investment risk Overall Discount Rate for DCF including adjustments above (use formula)	 **____ %** **____ %** **____ %** **____ %** **____ %**	**Reason:**

Key assumptions	What are the key assumptions made and the logic behind these assumptions?

Sensitivities	What are the main sensitivities to the financial figures for small deviations in the key assumptions for the proposal?

Impact on key figures

Impact on Key Figures* (mandatory where investment requires standing committee or main board approval)

£ mns	Year -2 Year -1 Year 0 Year 1 Year 2
A. Unit Results Before Project ** - Volumes (mns) - Local Profit before Tax - Profit after Tax - Trading Margin (%) - Asset Turnover (times) - Manageable Cash Flow	
B. Unit Results After Project - Volumes (mns) - Local Profit before Tax - Profit after Tax - Trading Margin (%) - Asset Turnover (times) - Manageable Cash Flow	
C. Project Impact (B – A) - Volumes (mns) - Local Profit before Tax - Profit after Tax - Trading Margin (%) - Asset Turnover (times) - Manageable Cash Flow	

Impact on Cash Flows

Figures in £mn's	Year -2 Year -1 Year 0 Year 1 Year 2
A. Cash Flows Before Project - Dividend Remittances - Royalty Remittances - Interest Remittances - Total P&L Remittances - Loans and other Capital payments	
B. Cash Flows After Project - Dividend Remittances - Royalty Remittances - T&A Fee Remittances - Interest Remittances - Total P&L Remittances - Loans and other Capital payments - Total Cash Flows	
C. Project Impact (B – A) - Dividend Remittances - Royalty Remittances - T&A Fee Remittances - Interest Remittances - Total P&L Remittances - Loans and other Capital payments - Total Cash Flows	

Mandatory (for operations investments only):

1- Detailed breakdown of capital
2- Analysis of installed capacity Expenditure

Madde II. A Appendix 2	**Madde III. Breakdown of Proposed Capital Expenditure (mandatory for Operations proposals)**				
Classification	***Bölüm 3.01 Item***	**(a) Cost**			
		Local CCY amount	**Translated amount (2) £**	**Value Purchased within (3)**	**Value Purchased outside (3)**
Infrastructure costs	**1 2 …. X**				
	Sub-total				
Machinery and Equipment	**1 2 …. X**				
	Sub-total				
Installation Costs	**1. 2. …. …. X.**				
	Sub-total				

Contingencies	**Infrastructure Costs** **Machinery and Equipment** **Installation Costs**				
	Contingencies sub-total				
Expenditure – sub-total					
Overall Total					
Major exchange rates used					

Notes :

(1) The above structure is suggested, but the breakdown should provide appropriate detail on the proposed capital expenditure. Where the cost of internal resources can be capitalized, such as engineers, these should be included in this breakdown. The classifications should include the following items: -

Infrastructure costs Land purchase costs, construction expenditure, consultancy, site modifications and related fees.

Machinery & Equipment Major items of expenditure, showing FOB prices, freight & insurance and any import duties. The cost of spare parts should be shown separately.

Installation Costs Commissioning, consultancy and training costs.

(2) The expenditure should be translated into £ for all investments requiring standing committee or management board approval.

(3) The total expenditure should be split between the amount payable to external suppliers and the amount paid to other Group Companies. The figures should be shown in £ if the investment requires standing committee or management board approval.

APPENDIX C:

Survey Form

Dear Sir and Madams,
Related to my thesis may I kindly request that you provide some basic demographic information. This information will only be disclosed in aggregate form and will not contain personally identifiable information.
Best Regards
Sema ARIG

Gender		MALE FEMALE
Age		< 40 40 – 55 > 55
Current Occupation		Head of own Company Employed as head of company Employed in Management
Experience by sector		Service industries Telecommunications IT Manufacturing Trade Other
Experience by Role		General management / CEO Sales and Marketing Finance HR / Law Consulting
Proportion of own capital invested		<10 % 10% - 20 % >20%
Investment Volumes (Annual)		< EUR 100,000 EUR 100.000 to EUR 250.000 EUR 250.000 to EUR 500.000 > EUR 500.000
Number of current Investments		0 1 2 3 or more
Future willingness 2010		will acquire more

		investments will not acquire more investments
In case of having same benefit and cost which investment types do you prefer and why in one sentence please.		Cash Investment Capital Expenditure Investment
Which tools are you using for investment evaluation (can be more than one)		Payback Net present value Business Case/Other