

# A Comparative Survey Of Capital Investment Decision Practices In The United States And The United Kingdom

Thomas Klammer, (Email: Klammer@unt.edu), University of North Texas  
Neil Wilner, (Email: Wilner@unt.edu), University of North Texas  
Jan Smolarski (Email: jan.smolarski@finansium.fi), Finansium Ltd, Finland

## **Abstract**

*Capital expenditures can be crucial to firms' long-term success, especially in a complex global environment. As companies increasingly compete in the global market place, it is important to study project evaluation processes from an international perspective. Capital investments involve substantial monetary commitments and risks that affect long-term firm profitability and influence capital allocation decisions in the future. Survey research in the area of capital expenditure analysis has been extensively done in both the United States [US] and the United Kingdom [UK]. This research is the first comparative survey of practices in both countries that we are aware of. A direct comparison of the use of project evaluation, management science, and risk management techniques in the two countries is made. The survey instrument used is an adaptation of the Klammer [1970] instrument that has been used repeatedly in surveys of American firms. This is the first time that it has been applied to British firms. The use of a common instrument allows for more meaningful comparisons. The samples consisted of 127 American and 59 British firms with sales of at least \$100 million and capital expenditures of at least \$10 million. Preliminary results indicate a continued extensive use of discounted cash flow techniques by US firms. Techniques such as payback or urgency continue to be used, but to a lesser degree than discounting. Firms in the UK also make extensive use of discounting but do so to a lesser degree than their American counterparts. Payback is widely used in the UK. Risk management techniques are widely used in both countries, with sensitivity analysis being the most popular technique in both countries. Extensive use of technical and administrative procedures, such as detailed budgets, standardized forms and post-audits, are evidenced in both countries. The paper offers reasons that have to do with organizational structure and form, as well as market differences, to explain our results.*

## **Introduction**

Capital expenditures can be crucial to firms' long-term success, especially in a complex global environment. Capital investments involve substantial monetary commitments and risk which affect long-term firm profitability and influence capital allocation decisions in the future.

Survey research in the area of capital expenditure analysis has been extensively done in both the United States [US] and the United Kingdom [UK]. Studies have also been conducted for other industrialized countries such as Canada and New Zealand. Comparative surveys of practices in more than one country have been done on only a limited basis.

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*Readers with comments or questions are encouraged to contact the authors via email.*

This study is a direct comparison of the use of project evaluation, management science, and risk management techniques in two countries. Technical procedures and administrative practices are also briefly considered. As companies increasingly compete in the global market place, it is important to study processes from an international perspective. This study promotes a better understanding of the capital investment processes used in industrial organizations in both the US and UK. The survey updates the existing literature within the US and UK, and provides between country comparisons of capital investment practices.

Surveys are a useful tool for getting a basic understanding of the capital expenditure evaluation process companies are using. [see Klammer and Walker, 1984, Klammer, Koch, and Wilner [1991] and Wilner, Klammer and Smolarski [2001] ] Because surveys of practices have seemed to confirm prior surveys, some researchers now advocate doing in-depth studies of “why” companies follow certain practices. [see Pike 1996] There have, however, not been surveys of practice in multiple countries using the same instrument. Thus, the comparative approach of this study has the potential to contribute to our knowledge of both the “what” and the “why” issue. It obviously addresses the question of “what” companies in two highly industrialized countries are doing. If the practices are found to be similar in both countries, then studies of “why” certain practices are being followed may have explanatory power across both countries. If the practices are not found to be similar, we would not be able to generalize the findings of in-depth studies. Instead, we would be left with two “why” issues. “Why” there are differences across countries and “why” are certain practices followed within countries. We would want to know if the differences are caused by historical, cultural, technical or other factors acting alone or in combination.

The survey instrument employed is a modification of the instrument used by Klammer, Koch and Wilner [1991] This instrument has been used, with modifications, by Klammer [1973] and Klammer and Walker [1984] for US firms.<sup>1</sup> The US results can be viewed as an extension of prior research. The surveys done in the UK have not used a common instrument and have been criticized for making comparisons difficult [Pike 1996]. The comparative UK results reported here can be viewed as a benchmark for future studies in the UK.

The instrument used contains questions relating to the use of project evaluation techniques for six different type of capital projects: replacement, expansion of existing operations, expansion into new operations, foreign investments, high-technology investments, and downsizing decisions. It also contains questions relating to risk management and management science techniques, as well as questions that pertain to administrative techniques and technical procedures.

The primary method of analyzing the data is the Chi-square test of independence. Non-response bias was tested for and does not appear to be a problem. This paper is organized as follows. The next section is a brief literature review. This is followed by a discussion of the research methodology and the main results.

## **Literature Review**

Wilner, Klammer, and Smolarski [2001], Graham and Harvey [2001] and Chen [1995] are the most recent studies of the capital expenditure evaluation process in the US. Wilner et al report results similar to those reported in prior surveys. Discounted cash flow methods are found to be very popular but nondiscounting methods such as payback are still widely used. Approximately 95 percent of their sample used risk management techniques. Sensitivity analysis is the most popular method. The percentage of firms using these techniques has gone up over time. The authors attribute this to intensified competition and the availability of computer packages. Competition makes the incorporation of risk in the analysis more important and the computer makes the analysis easier and less expensive than before.

Graham and Harvey [2001] looked at capital budgeting, cost of capital issues and capital structure in a comprehensive study of the practice of corporate finance. Their focus is on how firm characteristics, CEO

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<sup>1</sup>The authors are most willing to share the questionnaire to increase comparability of future studies.

characteristics, information asymmetries, and management incentives affect the practice of finance. Their main finding that relates to this study is that larger firms tend to use discounting more than smaller firms. Smaller firms use payback as frequently as they use discounting. We discuss this finding in a later section.

Chen [1995] supports the results of the prior surveys in finding increasing popularity of discounting methods. Chen does extend the prior research in two ways. First, he investigates the use of non-financial techniques in project evaluation. Consistent with discussions in the literature, he finds widespread usage of such techniques. Second, he extends Klammer, Koch, and Wilner's [1991] attempt at explaining why methods are used. Chen focuses on the project evaluation methods themselves and relates them to agency variables, contingency variables, and firm financial characteristics. The agency variables are found to be related to the methods chosen. Results for the other variables are mixed. Similar to Wilner et al, he calls for more in-depth studies of the process itself.

The UK literature is well summarized by Pike [1996]. He finds the use of discounting in UK firms to be increasing from 1980, to 1986 and to 1992. Discounting methods are almost never used alone. Most firms use combinations involving discounting [IRR and NPV] and nondiscounting [payback and average accounting rate of return] methods.

UK firms also make extensive use of risk management techniques. The most popular methods are best case/worst case analysis and sensitivity analysis. Similar to the findings for US firms, the usage of these techniques has increased over time. Pike attributes this increase to strategic factors and to the availability of computers.

Drury and Tayles [1996] investigate the impact of company size on the use of appraisal techniques. This is part of a broader study that also examines the treatment of inflation, the appraisal of advanced manufacturing techniques and whether excessive discount rates are used. These authors do find that company [or division] size does impact the choice of appraisal techniques. We discuss this finding in a later section.

## **Methodology**

This research used the following guidelines to obtain a sample similar to those cited in the extant literature. First, companies must have sales above \$100 million. Second, companies must also have capital expenditures equal to or greater than \$10 million. For UK firms the sales and capital expenditures were measured in pounds. The pound conversion had to be above \$100 million for sales and greater than \$10 million for capital expenditures. Third, only those firms classified as industrial firms were included. Excluding utilities, financial service firms, and other service firms including retailers makes the sample consistent with the previously mentioned studies.

The UK sample was selected from two sources. The London Times UK Top 1000 Firms, a compilation of selected financial data from the 1,000 largest firms in the UK was the first source. The lower limit of The Times UK Top 1000 list was sales of approximately \$141.6 million, which is significantly higher than the \$100 million lower limit imposed in this study. The sample size was increased by selecting additional firms with sales between \$100.0 and \$141.5 million from a second source, The Financial Times Shareholder Reporting Service. To obtain a sample of publicly traded British industrial firms we subsequently traced the firms to The Financial Times to help ascertain that they were listed on the International [London] Stock Exchange and that they were classified as industrial firms. These procedures resulted in a sample of 236 firms consistent with the prior project evaluation literature. Of the initial 236 firms in the sample, 6 firms were excluded, mainly due to merger and bankruptcies

US firms meeting the minimum criteria were selected from one source: COMPUSTAT. In order to ascertain that the firms were classified as industrial firms, we traced the sample to The Fortune 500 Industrial Firms and The Business Week's 1,000 American's Most Valuable Companies. Eliminating foreign, private and non-industrial companies resulted in an initial sample of 400 industrial firms. Of the initial 400 firms in the sample, 14 firms were excluded, mainly due to merger and bankruptcies.

The US mailing consisted of 386 questionnaires. The initial mailing resulted in 74 usable responses, representing a 19.2 percent response rate. A second mailing resulted in 53 usable responses. The second mailing resulted in a 13.7 percent response rate based on the number of firms in the initial mailing. Both mailings resulted in a total response rate of 32.9 percent. This compares favorably with previous studies, which mostly achieved a 20 percent or lower response rate.

The initial UK sample consisted of 230 industrial firms. In the first mailing, 45 UK firms responded, representing a 19.6 percent response rate. The second mailing resulted in an additional 14 responses, representing a 6.1 percent response rate. Both mailings resulted in a total response rate of 25.7 percent. Table 1 shows financial data about sample and responding firms, respectively.

A review of Table 1 shows that the responding US firms are approximately 2.5 times as large as the responding UK firms measured by both sales and assets. This is reflective of the size differences in the sample. The difference in size of the responding firms is largely a result of 14 US firms with sales above \$10 billion. Only one UK firm with sales above \$10 billion responded. Although there are size differentials, the samples are representative of the largest US and UK firms.

We cannot make a precise size comparison of the results of this study with existing US and UK project evaluation literature because sample selection criteria are not uniform. However, it appears that all of the prior studies are large firm studies, which is consistent with this research. Thus, the difference in choice of sample selection criteria should not affect comparison of this study with existing research.

To test for non-response bias between the first and second mailing in both samples, chi-square tests were conducted. Two tests based on expansion of existing operations and expansion into new operations for US and UK firms did not produce significant results.

The survey instrument includes six questions that deal with project evaluation techniques used for various types of capital expenditures. Capital expenditure categories include replacement, expansion of existing operations, expansion into new operations, foreign operations, high-technology investments and downsizing. For each type of capital expenditure, there are eight alternative evaluation methods: urgency, payback, simple rate of return, internal rate of return, net present value, multiple decision attribute model and other. There is also a "not analyzed" alternative. The questionnaire asked the respondents to provide the information only for the current period, 1996.<sup>2</sup> There are also questions dealing with if and how firms use risk management and management science techniques. The final issues addressed relate to the use of technical procedures and administrative techniques.

Klammer, Koch and Wilner [1991] found that firms used multiple capital investment evaluation techniques extensively. To discriminate between primary and secondary evaluation techniques, the respondents indicated primary capital project evaluation methods with a circled check mark in the survey instrument. The results of this study will now be discussed.

### **Results Relating to Project Evaluation Techniques**

Table 2 shows project evaluation techniques used by US and UK firms. Table 3 shows the results of chi-square tests employed to determine if the differences are significant. The results are significant for all investment categories, except for replacement decisions. US firms use discounted cash-flow techniques to a greater extent than UK firms.

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<sup>2</sup>We have done an exhaustive search of the literature to see if there are studies conducted during the time period of our data or subsequent to 1996. We reported the studies that we did find: Graham and Harvey [2001], Drury and Tayles [1996] and Chen [1995]. All of these studies complement our study but are not meant to be as extensive with respect to the issues we report on. We welcome the identification of studies that we may have missed and we feel that our study contributes to the literature in at least two ways. First, it updates both the most recent comprehensive surveys in the US and UK that use data from 1991 and 1992, respectively. Second, it offers data, not yet in the literature, that can be used for comparative purposes for surveys conducted post 1996.

Several trends emerge from examining Table 2. First, US firms tend to use discounted cash-flow analysis techniques in analyzing many investments. Both the secondary techniques reported and anecdotal evidence suggest that nondiscounting techniques are also heavily used. US firms use “Other” [including EPS effect, ROI, ROA, and strategic issues] methods extensively in analyzing foreign investments, high-tech investments, and downsizing decisions. US firms also use payback and urgency to a great extent in analyzing hi-technology investments and downsizing decisions

UK firms tend to use discounted cash-flow and “other” techniques to a lesser extent than US firms. Interestingly, UK firms use urgency as an evaluation tool to a lesser extent than US firms. UK firms make substantially greater use of payback as an analytical tool. Two UK firms indicated that this approach avoided relying on the sales forecast beyond the point of payback.

### **Possible Reasons for Differences in Use of Project Evaluation Techniques**

There are several plausible for differences. First, there may be cultural differences, discussion of which is well beyond the scope of this paper. Second, British firms were relatively late in adopting a multi-divisional firm structure. This was mainly due to the “family” and holding company structures of ownership and control, which remained popular in the United Kingdom until the 1960's [Chandler, 1990]<sup>3</sup> There are still a few “family” firms and a greater number of holding companies. Chandler [1990] also argued that the goal of the family firm was not to maximize long-term profits. Rather, the firms paid a high level of dividends to ensure a comfortable life for the owner-manager. With a high pay-out ratio, fewer internally generated funds were available for expansion and improvements.

Evidence suggests that UK firms lagged US firms in organizational development for most of the twentieth century. Chandler [1990] noted that by the 1960's, British firms had caught up with US firms in terms of organizational structure although US firms, on average, adopted the multi-divisional structure three times as fast as UK firms. An interesting question arises. Why are there differences in the use of techniques if British firms have caught up?

Teece [1990] presents arguments that support a finding of differences. Teece developed and tested an empirical model of diffusion of administrative innovations. He found that diffusion of administrative innovation is indeed slow, up to 41 years in some cases. His study theorizes that there are three reasons for a slow multi-divisional diffusion. First, firms may under-invest in administrative innovations due to the lack of immediate observable benefits. Second, administrative innovations involve set-up costs and organizational disruption. Third, most companies may attempt to use an incremental approach in implementing administrative innovations. Using an incremental approach will slow the diffusion of administrative changes.

Innovation in the project evaluation process is one form of administrative innovation which according to previous arguments should be more prevalent in a multi-divisional firm. Although Chandler [1990] maintains that most British firms have adopted the multi-divisional form, Teece's [1990] study suggests that there may still be a difference between US and UK firms in their use of project evaluation techniques. Specifically, Teece [1990] argues that administrative changes diffuse very slowly which implies that the adoption of discounted cash flow techniques may not be complete in UK firms.

Finally, the responding US firms tend to be larger than the UK firms. Both Graham and Harvey [2001] and Drury and Tayles [1996] both reported that larger firms tend to use discounting techniques to a greater extent than smaller firms. Klammer [1993] provides a theoretical justification for this finding. He presents an Investment Management Matrix to aid in matching the complexity of a capital budgeting decision to evaluation tools. The more

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<sup>3</sup>Armour and Teece [1978] found that the adoption of a multi-divisional organizational structure enhanced the return on owner's equity by two percent during the period of diffusion. This indicates that economic reasons may have existed for British firms to adopt the multi-divisional organizational form.

complex the decision or the organization the more sophisticated the process. If we accept the premise that larger organizations tend to be more complex than smaller ones and/or they tend to face more complex decisions then it makes sense to find a difference in the use of discounting for our sample.

### **Results Related to Risk Management, Management Science, Technical Procedures and Administrative Techniques**

To provide additional information about related issues involved in project evaluation, a comparison of risk management/management science, technical procedures, and administrative issues follows below. This information also provides insights into administrative innovations. The information provided in this section was not amenable to statistical analysis. A pattern that emerges, and is supported by Teece's work, is that US firms do appear to use the tools surveyed to a slightly greater extent than their UK counterparts.

Table 4 results show that most firms use some type of risk management tool. When using risk management tools, most firms use several different techniques. Firms in both countries use risk management tools extensively. At least 94.5 percent of US firms and 94.9 percent of UK firms use some type of risk management tools. US firms tend to use three or more techniques whereas UK firms appear to use two or three techniques. The most popular methods and their frequency of use are reported in Table 5.

Sensitivity analysis is the most commonly used risk management technique in both countries. The second, third and fourth most popular methods in US firms are [2] raising the required rate of return, [3] adjusting cash flow estimates, and [4] shortening the payback period. The results are similar for UK firms with one exception. Shortening the payback period was the third most popular method for UK firms and the fourth most popular method was adjusting cash flow estimates.

Table 5 also shows that firms in both countries make very limited use of management science techniques. US firms tend to use these tools slightly more often. This is consistent with Pike's and Teece's studies.

Both US and UK firms make extensive use of technical procedures and administrative techniques. Table 6 shows technical procedures used by US and UK firms. Technical procedures included in this study are exemption from normal project evaluation procedures, the use of project evaluation systems to analyze lease decisions, and control of the amount of funds available for capital expenditures.

The greatest difference among firms in the two countries relate to leasing decisions. US firms appear to analyze leases using the existing project evaluation system to a greater extent than UK firms. UK firms do not appear to control the amount available for capital expenditures in a given span of time to the same extent as US firms. Table 7 shows the use of administrative techniques in both countries and lists the administrative techniques included in this study.

Table 7 reveals that firms in both countries make extensive use of long-term and detailed short-term capital budgets. Firms in both countries also make extensive use of standard forms and post-audits. US firms have full-time capital budgeting staff to a substantially greater extent than UK firms. Sub-units of UK firms use the same project evaluation procedures [e.g., the same manual, forms, and exemption rules], but are not required to use the same project evaluation decision techniques [e.g., NPV, IRR, Payback] to the same extent as US firms. US firms monitor the construction/installation phase more and require projects to meet certain minimum pre-screening criterion to a greater extent than UK firms.

### **Summary and Conclusions**

There are two primary findings in this study. First, the trend in both the US and UK literature of continued use of discounting techniques is supported. The continued use of non-discounting methods in both countries is also consistent with prior literature.

Second, US firms tend to use administrative innovations to a slightly greater degree than their UK counterparts. Three justifications were given for this finding. First, cultural differences may be the reason. Second, Teece's [1990] findings that it takes time for administrative innovations to be diffused through multi-divisional organizations coupled with Chandler's [1990] finding that UK firms were slower to adopt a multi-divisional structure supports this finding. Finally, Klammer [1993] presents evidence that complexity may account for the differences. The differences do not imply that companies in one country are doing a better job than companies in the other country. It simply means that companies in both countries are looking for evaluation techniques that fit the complexity of their company and/or decision.

Several areas of future research are suggested. Additional country specific surveys can update work done in both countries. Comparative surveys can ascertain whether the differences in the use of administrative techniques lessens over time as the literature suggests. Finally, in-depth studies or case studies may be employed to further our understanding of the capital decision process.

**Table 1**  
**Summary Financial Data - Sample US and UK Firms**

	<u>Sales</u>	<u>Assets</u>	<u>Profits</u>	<u>Number of Employees</u>	<u>Capital Expenditures</u>
US Firms	\$5,385,534	\$6,003,729	\$133,736	28,812	\$393,003
UK Firms	\$3,204,482	\$3,027,617	\$142,806	17,998	\$336,406

**Summary Financial Data - Responding US and UK Firms**

	<u>Sales</u>	<u>Assets</u>	<u>Profits</u>	<u>Number of Employees</u>	<u>Capital Expenditures</u>
US Firms	\$5,912,752	\$5,960,549	\$165,310	30,765	\$425,627
UK Firms	\$2,363,401	\$2,300,841	\$158,046	16,466	\$227,787

**Table 2**  
**Project Evaluation Techniques Used By US and UK Firms**

	<u>Number</u>	<u>US Firms Primary %</u>	<u>Secondary %</u>	<u>Number</u>	<u>UK Firms Primary %</u>	<u>Secondary %</u>
<b>Replacement Projects:</b>						
Urgency	25	19.7%	5%	9	15.3%	8%
Payback	14	11.0%	9%	13	22.0%	27%
Discounted Cash Flow Methods	74	58.3%	20%	30	50.8%	14%
Other	<u>14</u>	<u>11.0%</u>		<u>7</u>	<u>11.9%</u>	
Total	<u>127</u>	<u>100.0%</u>		<u>59</u>	<u>100.0%</u>	
<b>Expansion of Existing Operations:</b>						
Urgency	3	2.4%	0.5%	0	0.0%	0.0%
Payback	10	7.9%	16.1%	18	30.5%	32.2%
Discounted Cash Flow Methods	103	81.1%	13.8%	38	64.4%	9.4%
Other	<u>11</u>	<u>8.7%</u>		<u>3</u>	<u>5.1%</u>	
Total	<u>127</u>	<u>100.0%</u>		<u>59</u>	<u>100.0%</u>	
<b>Expansion Into New Operations:</b>						
Urgency	1	0.8%	0.0%	0	0.0%	0.0%
Payback	6	4.7%	22.1%	15	25.4%	31.4%
Discounted Cash Flow Methods	104	81.9%	12.6%	38	64.4%	9.2%
Other	<u>16</u>	<u>12.6%</u>		<u>6</u>	<u>10.2%</u>	
Total	<u>127</u>	<u>100.0%</u>		<u>59</u>	<u>100.0%</u>	
<b>Foreign Investments:</b>						
Urgency	1	0.8%	0.0%	0	0.0%	0.0%
Payback	6	4.7%	10.4%	13	22.0%	27.5%
Discounted Cash Flow Methods	95	74.8%	8.2%	37	62.7%	9.6%
Other	<u>25</u>	<u>19.7%</u>		<u>9</u>	<u>15.3%</u>	
Total	<u>127</u>	<u>100.0%</u>		<u>59</u>	<u>100.0%</u>	
<b>Hi-tech Investments:</b>						
Urgency	13	10.2%	5.1%	4	6.8%	2.3%
Payback	12	9.4%	15.4%	18	30.5%	32.3%
Discounted Cash Flow Methods	77	60.6%	7.4%	26	44.1%	4.2%
Other	<u>25</u>	<u>19.7%</u>		<u>11</u>	<u>18.6%</u>	
Total	<u>127</u>	<u>100.0%</u>		<u>59</u>	<u>100.0%</u>	
<b>Downsizing Decisions:</b>						
Urgency	16	12.6%	4.2%	3	5.1%	2.1%
Payback	19	15.0%	16.3%	27	45.8%	21.4%
Discounted Cash Flow Methods	63	49.6%	11.2%	19	32.2%	18.2%
Other	29	22.8%		10	16.9%	
Total	<u>127</u>	<u>100.0%</u>		<u>59</u>	<u>100.0%</u>	



**Table 3**  
**Differences in the Use of Discounted and Non-Discounted Cash Flow Techniques Between US and UK Firms**

<u>Question</u>	<u>Calculated Value</u>	<u>p Value</u>	<u>Significant</u>
Replacement Projects:	.8998	>.25	No
Expansion of Existing Operations:	6.1227	.025	Yes
Expansion Into New Operations:	6.8180	.01	Yes
Foreign Investments:	2.8586	.10	Yes
High-tech Investments:	4.4718	.05	Yes
Downsizing Decisions:	4.9495	.05	Yes

**Table 4**  
**The Number of Risk Management Techniques Used by US and UK Firms**

	<u>US Firms</u>		<u>UK Firms</u>	
	<u>Number Of Firms</u>	<u>% of Firms</u>	<u>Number Of Firms</u>	<u>% of Firms</u>
None	7	5.5%	3	5.1%
One	16	12.6%	3	5.1%
Two	15	11.8%	17	28.8%
Three	34	26.8%	14	23.8%
Four	29	22.8%	11	18.6%
More than four	26	20.5%	11	18.6%
Total Number of Firms	127	100.0%	59	100.0%

**Table 5**  
**The Use of Risk Management and Management Science Techniques in US and UK**

	<u>US Firms</u>		<u>UK Firms</u>	
	<u>Number of Firms Using Specific Risk Management Techniques</u>	<u>Percent of Firms Using Specific Risk Management Techniques</u>	<u>Number of Firms Using Specific Risk Management Techniques</u>	<u>Percent of Firms Using Specific Risk Management Techniques</u>
<u>Risk Management Tools:</u>				
Calculation of a Bail Out Factor	17	13.4%	5	8.5%
Adjusting Cash Flow Estimates	73	57.5%	30	50.9%
Raising the Required Rate of Return	81	63.8%	34	57.6%
Shortening the Payback Period	52	40.9%	31	52.5%
Determining the Probability of Distributions	27	21.3%	9	15.3%
Measuring the Covariance of Project Risk	5	3.9%	3	5.1%
Sensitivity Analysis	88	69.3%	50	84.8%
Beta Analysis (CAPM)	25	19.7%	15	25.4%
<u>Management Science Tools:</u>				
Game Theory	3	2.4%	0	0.0%
Linear Programming	6	4.7%	1	1.7%
Nonlinear Programming	0	0.0%	0	0.0%
Computer Simulation	13	10.2%	4	11.9%
Probability Theory	17	13.4%	1	1.7%
Pert/Critical Path	11	8.7%	3	5.1%
Utility Theory	0	0.0%	0	0.0%

**Table 6**  
**Technical Procedures Used in US and UK Firms**

Procedures	US Firms	UK Firms
Exemption From Evaluation Project Evaluation Techniques		
Size of Project	74.8%	74.6%
Type of Project	59.1%	52.5%
Leases Analyzed Under Present Project Evaluation System	81.1%	61.0%
Predetermined Amount Available for Capital Projects	69.3%	59.3%

**Table 7**  
**Administrative Techniques Used in US and UK Firms**

<u>Techniques</u>	<u>US Firms</u>	<u>UK Firms</u>
Detailed Short-Range Capital Budget	94.5%	96.6%
Long-Range Capital Budget	70.9%	66.1%
Standard Forms	90.6%	86.4%
Full-Time Capital Budgeting Staff	35.4%	11.9%
Monitoring of Construction/Installation/Buying of New Capital Projects	90.6%	79.7%
Post-Audits of Major Capital Projects	74.8%	79.7%
Sub-Units Use the Same Project Evaluation Decision Techniques	90.5%	83.0%
Sub-Units Use the Same Project Evaluation Procedures	82.7%	86.4%
Company Wide Review of Major Capital Expenditures	63.0%	67.8%
Projects Required to Meet Certain Pre-Screening Criterion	68.5%	52.5%

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