

**SMALL FIRMS' INVESTMENT:  
A SEARCH FOR THE  
MOTIVATIONS  
1999-2002**

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## **Introduction ... The 1979-1982 Study**

Some twenty years ago, research was conducted by the author into the investment motivations of a sample of small firms in the south of England. The results were published in the *International Small Business Journal* 1984. This research has been updated between 1999 and 2002. The results were surprising in the sense that little had changed over the period.

The aim of the original 1979-1982 South Wessex Survey was to make a contribution to what was considered at the time to be an under-researched field by examining the motivations and weaknesses behind investment decision making. This involved investigating 52 small firms with up to 200 employees in the South Wessex region of the United Kingdom.

The results showed that, in the main, small firms actually chose to ignore, and even avoid, certain opportunities to reach the highest attainable return on investment, indicating endemic investment weaknesses within the small engineering firm.

For example, the sample firms had concentrated on their main products over the years for various reasons, but tradition as opposed to strategy was a principal explanation. Hardly any firms had considered movement into new fields, and related diversification was not popular being regarded as risky rather than risk spreading. The impression was that diversification could have been at least as beneficial as the activity currently engaged in which was producing sub-optimum results.

Some firms argued that diversification, and even related diversification, was impracticable.

In output determination, flexibility is essential. Yet 46% of the firms fixed output by allocating quotas which would be retained for some time until events dictated otherwise. Only 27% were scheduling output in response to market forces suggesting reasonable degrees of flexibility. But perhaps most striking was another 27% actually employing constant output policies. Current and expected demand, as measured by length of order books were fundamental determinants of output levels, whilst labour availability and excess capacity acted as major influences. As far as output constraints were concerned, inadequate plant capacity predominated with rising costs of production second. The results indicated that very rarely did firms raise or lower output in the shorter term in a conscious attempt to optimise sales, profits or costs.

It emerged that the principal goal of 21% of the firms was satisfactory profit. Subsidiary policies tended to be rather more individual, e.g. safety, but two clear aims repeated themselves: satisfactory profits and survival. Key personnel gave specific reasons for adopting their policies. Several claimed that satisfactory profits and survival were the only real goals for small firms especially during recessionary economic conditions. But policies did seem to be the result of historical or traditional decision making, and once a firm had adopted a goal this would be retained and only amended when events dictated.

Flexibility of strategy was not apparent. From this finding it seemed clear that a flexible policy could well have increased profits, because if profits had not improved then the policy could easily have been changed.

Since firms considered survival either second to satisfactory profits in the hierarchy of objectives, or as one of the foundations for profitability, the signs were that firms were simply aiming to survive. It was possible that survival could have been the critical fundamental objective since many firms regarded this as a barometer of success.

There were other factors that were equally worrying, and these are now considered in parallel with the 1999-2002 follow up study.

But first, a brief outline of the research method employed for both the 1979-1982 and 1999-2002 studies.

### **Research Method ... 1979-1982 and 1999-2002 Surveys**

A sample of 50 small engineering companies in the 1999-2002 survey (52 in 1982) with up to 200 employees was selected subject to eight tests of acceptability, i.e.

- ◆ population size of at least 50
- ◆ a range of sizes of firm up to 200 staff
- ◆ different ages of company
- ◆ mechanical and electrical engineering firms
- ◆ cluster locations in the South Wessex region
- ◆ degrees of production run and speciality work
- ◆ independence
- ◆ incorporation

All data were collected by personal, open, unstructured, face to face interviews with key personnel, with selected follow-up discussions during the three year period.

The choice of sample also provided a cross-section of environments in which small firms operated and which had a variety of mixes of business approaches, e.g. specialist and non-specialist production units.

The summarised findings in this paper can only be regarded, even 20 years on, as an introduction to a subject of considerable scope and complexity and a paving of the way towards further in-depth research.

For the purposes of this work, “optimal investment behaviour and performance” may be defined as that behaviour and performance laid down by the firms themselves as reasonably attainable.

## **Investment Strategies ...The 1999-2002 South Wessex Survey**

Firms generally agreed that if returns on investment were to be optimised, then the application of a specific investment strategy would be necessary. Profit optimality demanded a conscious effort on the part of the decision-maker and this would require, among a whole range of techniques, models and goals, a well- defined and implemented investment programme. For example, the emphasis should have been on vertical investment, but 72% (75% in 1982) of capital expenditure had been basically horizontal. Moreover, even piecemeal investment had tended to be precipitated by crises. There was little evidence of positive investment thinking, and very few of the smaller firms admitted to planning ahead beyond six to eight months (12 months 1982). The majority merely invested when the need arose. In short, most investment appeared to be non-strategic, piecemeal, non-anticipatory and geared to survival only.

Whilst there could be little doubt that a recessionary economic situation affected the decision to invest, it was equally clear that other, and perhaps more basic factors were relevant. At best, the relationship between investment and the economic climate must be regarded as tenuous. The impression was that investment by many of the firms would have been sub-optimum irrespective of the economic climate, and in most cases individual investment problems could have been tackled more by resolute management than by arbitrary economic upturns.

One test of investment effectiveness might be the response of capital spending to some important short-term development. Whilst several firms could indicate links between labour, output, asset levels, profit, costs, etc., and investment itself, there was little or no evidence to support these relationships over the short-run despite profit potential. The flexibility normally associated with small firms certainly did not apply to short-term capital expenditure and, indeed, the lost opportunities could have been considerable.

However, a marked affiliation between real profit (t-1) and real investment was observed. This hints, for example, that any government measure which increases post-tax profit directly for the smaller firm will, in turn, stimulate investment. On this basis it would seem that the progressive reduction in taxation for the small firm over the past twenty years has been a step in the right direction.

Having established a relationship between investment and past profit (1982 and 2002) it would perhaps be misleading to assume that capital spending was determined by this factor alone. There were, of course, instances where investment had been undertaken for reasons other than profit availability. But was this investment active or passive? Was it visionary or merely replacement investment? Unfortunately, investment optimality was undoubtedly likely to be impaired as a result of non-visionary capital spending by some 84% (81% in 1982) of the sample firms. It was also interesting to note that the jobbing mechanical engineering firms in the sample were more likely to adopt this approach than the high technology electrical engineering counterparts.

Whilst confident conclusions are difficult to reach, the general impression was that investment optimality was falling well short if only 16% of the firms had been engaged in visionary investment. And, of course, there was no guarantee that even these firms would invest positively over the longer term.

Long term investment planning would always be recommended by the consultant since such planning would be essential for performance optimality. Yet very few firms used future indicators as specific influences on their investment decisions. Some 58% (52% in 1982) of the sample felt that no reliable indicators existed apart from their own historical data. Capital spending would probably proceed if the investment item was actually needed, and that own funds were available, or the cost of borrowing was not prohibitive, in which case the investment could be postponed. This hardly suggested the pursuit of investment optimisation.

The impression was that investment was inspired essentially by the “necessity criterion” which rendered capital expenditure imperative. The cost of borrowing, credit availability (and government investment incentives in 1982) were revealed to be more influences of investment rather than determinants.

As far as influences were concerned, these merely reflected the issues that had affected, or would affect, marginal investment decisions. For example, once capital spending had been agreed, then the decision to invest might have been influenced, but not necessarily determined, by such items as the cost of finance, bank credit, rival investment, industrial trends and length of order books.

### **Investment Finance ... The 1999-2002 South Wessex Survey**

The majority of the firms had used bank facilities for investment purposes only when their own, or private external funds, had been inadequate. From the interview discussions it seemed reasonable to conclude that that a large part of the firms’ long term finances for investment had been provided by owners’ capital, past profits and private loans, with bank support a reluctant last resort along with equity finance. The owner-managers always preferred to use the firms’ own funds for investment and, indeed, some companies had adopted a specific non-borrowing policy. A similar result was found in 1982. There was no shortage of external finance, but it was very soon in evidence that the South Wessex firms did not, in the main, apply for these funds. In fact, the impression was that institutional finance was to be avoided, and an outstanding feature of the findings was that 88% of the sample (94% in 1982) had not been involved in any attempt to obtain finance through facilities beyond the local bank.

Several companies actually outlined opportunities for expansion and improvement, but still preferred not to proceed. Some visionary investment via the institutions could well have taken advantage of the very opportunities identified by the firms themselves. There is little doubt that the institutions ensure that a venture is profitable before funds are made available, and thus one might infer that profits were being lost by the firms’ refusal to resort to these funds. In other words, the firms appeared to be content with an investment finance situation that could conceivably have contributed to the prevailing sub-optimum investment levels and sub-optimum investment returns.

Some 40% of the sample (nearly one third in 1982) was convinced that lack of government intervention, e.g. the inability to control recessionary conditions, was the reason for low investment. Taxation figured prominently as an influence on investment decisions in that likely funds were being taxed away. This view was held despite the periodic reductions in small business taxation down to 19% as at 2002.

An interesting aspect of the findings was that 28% (23% in 1982) of the sample believed that governments practised anti-small firm policies because very few incentives were available. In 2002 owner-managers were simply not aware of most of the well over 500 measures introduced by governments to help small business over the years. In 1982 the number of measures was probably nearer 100.

But what exactly did small firms expect from governments? An ambivalent attitude could be discerned in that on the one hand firms had repeatedly valued their independent decision making, whilst on the other they clearly expected some assistance from the authorities.

Significantly, 14% (10% in 1982) reinforced the need for confidence in the markets by the continued control of inflation over the longer term. 8% (6% in 1982) required even lower borrowing rates. 14% (15% in 1982) wanted reduced taxation. And 16% (10% in 1982) suggested more government contracts for small firms.

Thus, we may observe that small companies' investment was more likely to respond to government action that impacted directly on profitability rather than to policy which produced indirect, delayed or unidentifiable financial assistance.

The period 1970-1982 was an interesting one in research terms for it contained wide degrees of government credit control. The South Wessex firms had experienced for the first time both control and market freedom, not to mention uncertainty, during this period under review at that time. The banks were inevitably involved, but 90% of the firms were dissatisfied, in some way, if not totally, with the services offered by the banks. The 1999-2002 study found that 96% were equally unimpressed by bank support.

But essentially the 1999-2002 study showed that credit availability had had little or no effect on 76% (73% in 1982) of the sample, and where some influence was discernible this had occurred only under special conditions. If finance were made available then this in itself would be no determinant of investment, and thus the picture indicated that if governments wished to stimulate investment in small firms then the introduction of various credit policies and schemes should be awarded relatively low priority. Firms had simply invested as required following the "necessity criterion" principle.

Would a persistently low base rate increase investment by small firms? The responses (1982 and 2002) indicated that a rising base rate would reduce investment more than a falling base rate would increase it. However, it was possible to observe isolated instances where investment might be responsive to changes in base rate.

These comprised the following:

- ◆ a capital project might have yields which stretched far into the future,
- ◆ a firm might already be working to tight margins and there was not the scope for increasing prices through market imperfections,
- ◆ a shortage of internal funds might necessitate reliance on external borrowing,
- ◆ interest charges on stocks might represent a higher percentage of total cost in certain firms.

Alternatively:

- ◆ investment would remain constant if the rate of change was marginal only, if the project was vital and if future yields were not too unpredictable,
- ◆ investment would fall if the base rate rose significantly from any level, if the project was not vital and if the outlay was large,
- ◆ investment would rise if the base rate fell significantly, if the lower rate persisted longer term, if future yields were predictable and if the project was re-defined as vital.

But certainly the investment behaviour of the South Wessex firms with regard to the cost of borrowing appeared to be somewhat involved and unpredictable. One could only assume that Bank of England policy 2002 involving nominal changes in base rate to influence investment was unlikely to enjoy notable measures of success. This position was virtually identical in 1982.

Moreover, during 1979-1982 investment incentives were available and had been improved continually. In 1982 only 2% of the sample firms could claim that these incentives had had any major influence on their investment decisions. And although 50% of the firms said that their investment plans might be encouraged by incentives, they nevertheless, regarded this influence as marginal. The investment decisions of 48% of the 1979-1982 sample had clearly not been affected in any way by government investment aids, The majority of the companies were only interested in incentives when they actually coincided with their own plans for investment. If firms were investment optimising, then presumably they would be aid optimising also, but this was certainly not the case. As a consequence it was hardly likely that the firms under review were optimising their investment returns as far as incentives were concerned. Indeed, the vast majority of the 1979-1982 sample was unaware of the many incentives on offer. It was perhaps not too surprising that the main incentives via the tax system were withdrawn in the early 1990s in favour of a reduced corporation tax approach. But the lack of awareness and enthusiasm for incentives still prevailed in 2002.

### **Investment Appraisal ... The 1999-2002 South Wessex Survey**

The data indicated that the payback and rate of return methods were by far the most popular used. Some 42% (44% in 1982) employed these traditional approaches, 10% used discounted cash flow (8% in 1982) and 48% used trial and error methods (48% in 1982) or none at all. Of the 50 firms in the population no firm was total familiar with the pitfalls of DCF (also 0% in 1982).

Firms that did actually use a method of investment appraisal were not always clear how or why the technique had been selected or adopted in the first instance, and 42% (46% in 1982) simply claimed their method to be of traditional origin. Practically no firm had been influenced by the literature on the subject (also virtually 0% in 1982).

Competent forecasting of cash flows was not in evidence and 28% (31% in 1982) used no method whatsoever. Only 16% (13% in 1982) made attempts to assess future cash flows on a calculated basis.

Nearly three quarters of the sample (77% in 1982) using traditional methods of appraisal or not method admitted to no major amendments in system or policy. In general terms the firms in question did not present an encouraging picture in respect of the selection, employment, flexibility of approach and potential improvement of the investment appraisal method.

The owner-manager-directors' attitudes tended to fall into two camps. Firms using the traditional methods believed that the quality of the investment appraisal decision was not influenced by the quality of the investment appraisal method. On the other hand, firms employing the more modern techniques conceded, with reservation, that the quality of the method could possibly enhance the quality of the decision and the return on net assets. A similar position prevailed in 1982.

On balance, considering the available evidence in 1982 and 2002, it was almost certain that levels of investment and rates of return, even if acceptable to the firms themselves, were inconsistent with any goal of optimality as a result of most firms being unfamiliar with the real techniques and pitfalls of investment appraisal

The respondents in 1982 and 2002 were asked to indicate the most important management techniques employed, including investment appraisal, in the day to day running of the firm. Budgeting in its widest sense appeared to be the most popular, but 40% (44% in 1982) of the firms could not indicate a major operations research or management technique method at all. Only 4 firms (only 1 firm in 1982) recorded discounted cash flow as a routine management aid.

However, two problems were apparent in the research method approach. Firstly, it was not easy to categorise specifically the firms that were employing some management techniques, and those that were clearly using none. Every firm could show to varying degrees that certain "systems" were in operation. And secondly, in some instances the introduction of sophisticated operations research techniques would be fairly difficult, if not impossible. Even so, this could not excuse the absence of basic technique application. Many techniques are usable by smaller firms and, indeed, some firms do employ such techniques.

The firms employing the traditional methods of investment appraisal generally presented incomplete and inadequate appraisals. On the other hand, the companies using discounted cash flow produced much better evaluations, but even so, were not immune from criticism. Overall, the investment appraisals and investment strategies practised were, again, at odds with any goal of optimisation. For example, the most well used combination of factors taken into account was taxation and inflation (and similarly in 1982). Even so only 22% of the sample fully implemented these (24% in



1982), with depreciation hardly acknowledged at all (again as in 1982). Only 6% (8% in 1982) felt the need to make adjustments for inflation. Inflation during 1999-2002 was much lower and under better control than 1979-1982, yet this had not induced very much more appreciation of the benefits of making allowances for inflation in investment calculations.

A point of some interest was that no firm felt that such items as risk, uncertainty, obsolescence and opportunity cost could be mathematically catered for. Undoubtedly, the approach to the method and the variables to be included (2002 and 1982) inclined far more towards the trial and error than the mathematical. Whether or not some factors were self-correcting, self-cancelling or simply non-measurable remained arguable, but in any event, would be no substitute for rigour. Similarly, although certain types of investment could indeed overshadow the calculations, and final accounts could automatically reflect net returns long term, this tended simply to confirm the rule of thumb attitude in 1982 and 2002 rather than defend it.

### **Investment Performance ... The 1999-2002 South Wessex Survey**

The target rate of return on net assets and the mark-up on costs are mathematically related by:

$$\text{Mark-up} = \text{Target rate of return} \times \frac{\text{Net assets}}{\text{Sales}}$$

But the 2002 South Wessex firms (and similarly in 1982) who, in the main, failed to reach their targets could hardly have done otherwise with the mark-ups employed. Even allowing for adverse market conditions when losses were perhaps inevitable, it remained true that the majority were simply not co-ordinating the mark-up with the required target rate of return. In short, for many of the 2002 and 1982 firms the above relationship was presumably unknown, and the evidence suggested that the problem lay more within the mark-up on cost based pricing rather than with the setting up of the target rate of return in the first instance.

The severe difficulties in actually measuring a company's performance or effectiveness were acknowledged at the outset, but since the majority of the owner-manager-directors expressed their profitability in terms of a rate of return on net assets this particular criterion was adopted.

It was soon evident in 2002 (and in 1982) that policies of rigid targeting, which exemplified a behavioural pattern closely allied to survival, were generally employed by the firms. Moreover, the minimum acceptable rate of return tended to be determined by specific circumstance or events, and any apparent flexibility was directed more towards horizontal rather than vertical investment. Whilst several firms exceeded their rate of return expectations, many had not reached their targets, others had failed to achieve even the minimum and some had sustained losses. Too many of the firms actually failed to reach the targets set by themselves. This situation also prevailed in 1982.

Reasons for this failure rate were not too difficult to identify, and several have already been outlined in this paper. But the major reason given by owner-manager-directors to reach target returns on investment (and also in 1982) was “uncontrollable external factors”. Only 16% (13% in 1982) considered that their own inadequate investment strategies, expertise and appraisals might have caused financial performance to be below par. Only a minority felt that a more positive investment approach was required and many believed that no action could be taken to raise performance owing to these outside constraints. No firm in 1982 and 2002 could guarantee that any suggestion by the researcher-consultant to improve investment returns for the firm would, in fact, be implemented.

Since targeting is basically a ratio approach, i.e. profit as a percentage of net assets and since the firms in question (1982 and 2002) appeared to get this ratio wrong more often than not, could this lack of management technique be partly responsible for sub-standard performances?

One crucial factor in the failure of small businesses is the lack of adequate investment. In the two surveys (1982 and 2002) no firm gave this as a possible reason for failing to reach targets set by the firms themselves. A highly significant 84% (79% in 1982) had neither employed, nor had considered employing, outside expertise, believing consultants to be unnecessary, overrated, expensive, inventors of problems, disruptive and representative of external interference.

But in the early 1970s, a UK Department of Industry initiative in which firms were encouraged to use consultants, e.g. by financial subsidies, showed that of the firms in their sample, 95% were satisfied or partially satisfied with the consultants employed. Moreover, 93% claimed that they had already used, or would use, the consultants again. Interestingly, the net benefits were estimated by the firms themselves to be about 200% on the consultants’ fees in the first year alone. (Jones 1974).

It seemed reasonable to conclude that the firms’ strong reservations about consultants over 20 years were very much over-stated, and outside expertise, e.g. tax consultants, could well have aided the pursuit of investment optimality.

With regard to the Mechanical Engineering and Electrical Engineering industries in 1982 and 2002, the former had, in the main, responded less to the need to pursue vertical investment beyond the level of repairs and maintenance. The firms were more concerned about survival than the Electrical Engineering units. They relied on the necessity criterion more, they had not taken advantage of the investment incentives available, they used fewer management techniques and they were less ready to admit their deficiencies. Although difficult to generalise this aspect of the research, it seemed that the Electrical Engineering industry appeared to stand up to the tests of investment strategy, finance management, appraisal and performance better than the Mechanical Engineers. This industry had obviously been encouraged to invest in new technology (1982 and 2002) by the continuing changing nature of a demanding market.

## **Finalities ... The 1999-2002 South Wessex Survey**

The findings of the 1999-2002 Survey have indicated endemic investment weaknesses within the small engineering firm, findings previously revealed in 1982. Despite any limitations of the sample, data collection, analysis and interpretation both in 1982 and 2002, the overall picture cannot be disregarded. The total evidence of the two surveys strongly and continually suggested that the firms' overall investment behaviour was generally inconsistent with any goal of optimisation. Irrespective of the efforts of consultants, academics, governments and accountants over 20 years, the worrying message is that very little progress seems to have been made.

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