# Capital Structure Decisions and Decision Making:

# Survey Evidence from the UK and Greece

Dr Stuart Archbold

Kingston University, London

and

Professor Ioannis Laziridis

University of Macedonia, Thessaloniki

## 1.    Introduction

In 1984, Stewart Myers, one of the leading corporate finance academics, published a paper in the *Journal of Finance* entitled, 'The Capital Structure Puzzle'. Since then a substantial literature has grown up around attempts to resolve that puzzle. Yet, in 1999, despite a very large number of research papers Barclay and Smith could published a paper in another leading journal *Financial Management*, entitled, 'The Capital Structure Puzzle: the Evidence Revisited'. Whilst we have a number of plausible theories and hypotheses about capital structure the empirical evidence is inconsistent, as the titles of these papers suggest. Perhaps a useful summary of the current position is provided by Beattie *et al*. (2006)

> "Despite theoretical developments in recent years, our understanding of corporate capital structure remains incomplete."

This paper summarises the results of a questionnaire survey on corporate capital structure undertaken during summer 2007 in the UK and in spring 2008 in Greece. The questionnaire was sent to the Finance Directors of a sample of 219 UK firms, drawn largely from the FTSE250 and 300 firms listed on the Athens Stock Exchange. The motivation for this research stems from the lack of consistency in the empirical results on capital structure to be found in the corporate finance literature. There have been only a small number of surveys on the subject in the UK and Europe, unlike the USA where a considerable number of surveys have been undertaken and published, and so another comparative survey seemed opportune. Given the differences, both economic and institutional, a comparison between the UK and Greece might throw up interesting differences. By undertaking our own, original survey, we hope to make a modest contribution to the understanding of the capital structure issues.

The paper is organised as follows. The next section provides a brief introduced to the academic theories and hypotheses associated with debt-equity choices – capital structure. This is presented as a prelude to section 3, which provides a brief review of the empirical evidence on capital structure to be found in the corporate finance literature. Section 4 provides information about the sample, and section 5 reports the results obtained from the survey and relates those results to the extant theories and hypotheses. Section 6 concludes.

## 2      Theoretical Considerations

The theoretical work on capital structure begins with the seminal contributions of Modigliani and Miller (1958, 1963). In the first paper they posit that, in a perfect capital market without corporate taxes, the debt-equity choice is irrelevant in terms of the total value of the firm. As cheaper debt is introduced into a firm's capital structure the weighted average cost of capital would fall were it not for the linear and offsetting increase in the cost of equity – the shareholders' required rate of return. In their theoretical model, other things equal, the weighted average cost of capital (WACC) does not depend on the proportions of debt and equity used to finance the business and therefore capital structure choices cannot affect the total value of the firm. In that sense the debt-equity choice does not matter.

Obviously the assumptions required for a perfect capital market do not hold in the real world and the existence of corporate taxes rendered the Modigliani and Miller model a special case. Following a lengthy correspondence in the pages of the *American Economic Review*, Modigliani and Miller revised their model in 1963 to include corporate taxes. As a result, they acknowledged the tax shield available to firms that use debt. Therefore the debt-equity choice does matter and the financial policy that emerges is that firms should gear up as much as possible in order to take advantage of the tax shield and thereby increase the total value of the firm.

The caveat that applies to this policy prescription is necessary, of course, because as firms increase financial leverage, the probability of financial distress increases in tandem. Therefore the amount of debt that any firm can sustain will depend, *inter alia*, on their line of business and the volatility of the cash flows stream that it generates.

This leads to the so-called *trade-off model* of capital structure whereby the tax benefits of debt are balanced against the probability of financial distress and liquidation. As a result of this trade-off of benefit with disadvantage, an optimum capital structure exists for firms and financial leverage can clearly affect the value of the firm and so capital structure is element of the business that should be actively managed.

An alternative model of capital structure is provided by the so-called *Pecking Order Hypothesis* of Myers (1984). In this model firms are hypothesized to have a preference to utilise internally generated funds

for investment purposes to the extent that this is possible. This preference arises due to the reduced transactions costs associated with internally generated funds and the avoidance of increased external monitoring associated with external sources of finance. If internal funds are exhausted, but the firm still has positive net present value projects available, it will turn to vanilla forms of debt. Once this source is exhausted it will then use hybrid forms of debt and only in the last resort will a firm issue new equity.

Given the nature of this pecking order and the stream of potential investment projects that become available, this hypothesis does not have any policy prescription associated with it. There is no trade-off and therefore no optimum capital structure. In that sense, the trade-off model and the pecking order hypothesis represent opposite ends of the theoretical spectrum.

There have been various amendments to these two models, but in essence they remain as the cornerstones of the academic literature on capital structure and not much is lost by ignoring the refinements that have been posited. However, there two theoretical contributions that do deserve mention: these are *principal-agent theory* (Jensen and Meckling, 1976) and *signalling theory* (Ross, 1977).

Principal-agent theory posits potential conflicts of interests between corporate managers and providers of finance, which, if allowed to materialize, can lead to agency costs. One way of avoiding agency costs and mitigating the potential conflict of interest is to align the interest of corporate insiders and outsiders via the compensation contracts and incentives of the former. Allied to this mechanism, insiders can signal their alignment with the interests of their investors by taking on financial leverage. The disciplines associate with corporate debt, the need to pay interest and repay or re-finance the principal, plus the increased possibility of financial distress, force management to eliminate slack and focus on profitability. In other words the constraints of corporate debt eliminate the potential for managerial adventurism at the expense of investors.

As well as the signalling impact associated with principal-agent considerations, Ross (1977) suggests that firms can also signal the capital market via debt issues. One of the elements of signalling theory concerns the willingness of a firm's management to increase financial gearing and thereby signal insider information and optimism about the future prospects of the business. Similarly stock re-purchases can signal positive information about the cash generating prospects of the firm and the willingness of

management to return excess capital to shareholders, rather than waste it on negative NPV projects (Jensen, 1986).

The strength of signals is an important consideration. For example, an increase in financial gearing is a strong signal because it is irreversible (in the short- to medium term) and potentially costly (financial distress and subsequent loss of management reputations). Re-purchasing a specific amount of stock via (say) a tender offer is a much stronger signal than a plan to re-purchase up to a maximum amount over a lengthy period of time. Finally, a decision to re-purchase stock by raising debt would represent a very strong signal of very positive inside information about the future prospects of a firm. To be really effective signalling theory posits that capital structure events or signals must be unequivocal and potentially costly.

## 3     A Brief Review of the Empirical Evidence

There is a very large empirical literature associated with capital structure and it is impossible to summarise all aspects of it in brief here. However, what we intend to do is provide the reader with a sense of the inconsistency of the results generated by academic researchers using a variety of research methods. It is that inconsistency, of course, that has motivated our own study.

There is a considerable amount of US evidence that is consistent with the pecking order hypothesis, starting with the survey by Donaldson (1961) and exemplified by the later surveys of Pinegar and Wilbricht (1989) and Graham and Harvey (2001). However, some surveys have reported more mixed results with some support for the pecking order hypothesis, but also (inconsistent) evidence of firms holding to target gearing ratios, which is more in line with the trade-off model (Scott and Johnson, 1982; Norton, 1989).

The mixed results from US survey evidence are mirrored by the European (UK, France, Germany, and Netherlands) study of Brounen *et al.* (2004). They found some evidence for the pecking order hypothesis, but even more for the static trade-off model. Another European survey across 16 countries, by Bancel and Mittoo (2004), also found substantial evidence for the trade-off model and the idea that firms seemed to work towards an optimum or target capital structure. Still In Europe, a survey of Greek

firms by Daskalakis and Vasiliou (2006) found little evidence for the pecking order, but little also for the trade-off model.

One problem associated with these European surveys is the small sample size, particular the cross-country studies. In contrast, the UK study by Beattie *et al.* (2006) had a much larger sample of 192 firms drawn from the *DataStream* database. The responses that they obtained also found evidence for both the pecking order hypothesis and the trade-off model, which, *prima facie,* suggests that practitioners hold inconsistent views about the determinants of capital structure. However, as Beattie *et al.* point out, as far as respondents are concerned the pecking order hypothesis and the trade-off model are not necessarily mutually exclusive, even if academics tend to view them in that way.

The survey evidence with respect to signalling and principal-agent theory is also mixed. Signalling receives more support than principal-agent theory, but overall the evidence is not completely consistent and convincing for either (Beattie *et al*., 2006; Graham and Harvey, 2001).

Whilst this brief review of the empirical evidence has focused on survey studies, by far the greater number of studies have used large sample statistical data and regression analysis to test the various capital structure theories. This type of research has also generated an inconsistent set of results with competing support found for and against the pecking order hypothesis, the trade-off model, signalling and principal-agent theory. For reasons of brevity this type of research is not reviewed here, but a useful summary of that evidence can be found in Barclay and Smith (1999). As the title of that paper reveals, (*The Capital Structure Puzzle: the Evidence Revisited*), the evidence from regression studies, as with survey studies, is far from conclusive.

## 4      Research Method and Sample

In order to provide the opportunity to compare results with those generated in the US, the questionnaire instrument created and used by Graham and Harvey (2001) was taken as a template. The 100 questions were reduced considerably in number (the Graham and Harvey survey included questions about investment appraisal, cost of capital and dividend policy) and edited to suit the UK and Greek contexts. The questionnaire was then trialled amongst the finance faculty at Kingston University.

A sample of 219 finance directors were then identified by name, with the sample based for the most part on the constituent firms of the current FTSE index. Similarly in Greece the finance directors of 100 firms listed on the Athens Stock Exchange were identified. The questionnaire was then sent to the named finance directors, together with a covering letter that explained the purpose of the survey and also guaranteed respondents complete anonymity. After 3 weeks a follow up letter and another questionnaire were sent to non-respondents. In total 83 usable responses were received in the UK, a response rate of 37.9%. In Greece 24 replies were received, despite strenuous efforts to induce a greater responses: in Greece the final response rate was 24%, although disappointing in terms of actual numbers, but not entirely out of line with recent experience of other researchers in the finance field. The response rates of to similar surveys are as follows: Graham and Harvey, 2001 with 9%; Bancel and Mittoo, 2004 with 12%; and Beattie *et al*., 2006 with 23%.

Details of the respondent samples are provided in Tables 1, 2, and 3.

_____

Tables 1, 2, and 3 about here

_____

## 5.    Empirical Results

### 5.1    Trade-off Theory

Table 4 captures the responses to questions and statements about factors associated with the trade-off theory of capital structure. In some respects UK responses align with trade-off theory. A large proportion of respondents consider the tax shield advantages of debt (Q5a) to be important or very important (68.3%) and the mean response (0.80) is significant at the one per cent level.  This a stronger result than the results from Graham and Harvey (2001) for the US, the UK results reported by Brounen *et al*. (2006), the UK results of Beattie *et al*. (2006). In contrast, the tax shield is not a major consideration for Greek firms, with only 20.9 per cent rating it as important or very important. This is much lower than the Bancel and Mittoo (2004) study that included Greece and similar European countries in terms of economic development.

In contrast, similar proportions of respondents in both countries rate potential financial distress as a moderately important consideration (UK = 47.6%; Greece = 41.7%), but the mean response in both cases is not statistically significant. The importance of financial distress in this survey of UK and Greek firms is much stronger than other survey results (Graham and Harvey, 2001; Bancel and Mittoo, 2004; Brounen *et al*., 2006; Beattie *et al*., 2006). However, there is a slight question mark over the UK result for this question when compared with the distribution of responses to Q5c, where only 25.7 per cent consider the volatility of earnings (mean = -0.36) to be an important consideration in the choice of debt level. This also contrasts with the consistent set of responses in the Greek sample.

_____

Table 4 about here

_____

The importance of the weighted average cost of capital (WACC) as a consideration in debt choices (Q6i) is important in the UK (57.3% and significant at the one per cent level), but only moderately so for Greek firms (45.8%, but not significant). Surprisingly, perhaps, other recent survey referred to above do not appear to have asked a direct question about capital structure choices and the WACC.

The cheaper cost of issuing debt (Q5d, Q6f) could be considered to be an element of the trade-off in the debt-equity choice and is of consistently high importance in the UK (78% for both questions). However, the responses from Greek firms are inconsistent (45.8% and 20.8% respectively). The importance of issue costs for the UK reported here is a much stronger result than Graham and Harvey (2001) for the US, Brounen *et al*. (2006) for the UK and Bancel and Mittoo (2004) for Europe.

On the basis of evidence provided in Table 4, there is support for trade-off theory in the UK sample, but not in the Greek sample. However, the picture changes somewhat when we consider the responses to questions about the setting of targets for capital structure, Table 5.

In the case of the UK firms 59.3 per cent confirm that they have a target for financial leverage, but for the most part the target is flexible and might change from time to time. This provides additional support

for the trade-off theory in the UK. According to the Greek data, 81.8 per cent of firms employ a target for capital structure, although, again, the target is flexible and subject to change. This result is somewhat puzzling, given the responses to the questions set out in Table 4 above.

_____

Table 5 about here

_____

On balance we conclude that the UK results in respect of trade-off theory are broadly in line with evidence from the US provided by Graham and Harvey (2001), from the UK results reported by Brounen *et al*. (2006) and Beattie *et al*. (2006) and also the result reported by Bancel and Mittoo (2004) for Europe. In the case of Greece, we conclude that overall our results do not support the trade-off theory; although we recognize that the responses in respect of financial leverage targeting are anomalous.

*5.2    Pecking Order Hypothesis*

Despite the support for the trade-off theory in the UK provided by the data in Tables 4 and 5, the data presented in Table 6 provides clear support for the competing pecking order hypothesis. In the case of Greece, we find no support for the pecking order hypothesis.

_____

Table 6 about here

_____

In the UK there is very strong support for the statement that debt is preferable to issuing equity (Q6c), with 80.5 per cent of respondents registering agreement or strong agreement with that statement (mean = 1.11, significant at one percent level). When profits are insufficient for investment needs (Q6a), debt is clearly preferred to equity, although support is less clear cut (45.1% agree/strongly agree, mean = 0.32, significant at the 5 per cent level). However, when asked to support a statement suggesting the equity issuance would be avoided whenever possible (Q6e), only 39.0 per cent agree and the mean

response (0.06) is not different from the neutral choice. There is very strong support (81.7% agree/strongly agree) for a preference of straight debt over convertible debt.

In the case of Greece the responses to the same questions produces much lower levels of agreement or strong agreement. Only 33.3 per cent agree that when profits are insufficient debt is preferable to equity (Q6a) and only 25 per cent register agreement that, other things equal, debt is preferable to equity (Q6c) and 20.9 per cent agree that they would avoid equity issues whenever possible.

The results for the UK are similar to those reported by earlier surveys. However, our results provide stronger support for the pecking order hypothesis than that reported by Beattie *et* al. (2006) and by Brounen *et* al. (2006) for the UK. They are also stronger than those reported by Graham and Harvey (2001) for the US and Bancel and Mittoo (2004) for 1 European countries. In contrast the lack of evidence in favour of the pecking order hypothesis in Greece stands out as an anomaly, particularly in the light of the lack of support for the competing trade-off theory reported in the previous section.

*5.3    Principal-Agent Theory and Capital Structure*

The agency issues associated with capital structure were addressed with four direct questions in the survey, although others have indirect implications. The results are reported in Table 7.

_____

Table 7 about here

_____

Three questions, Q5l, Q6k, and Q6m, address the purported impact that debt has on management discipline and incentives to work hard, effectively and efficiently in shareholder interests (Jensen, 1986). The results for both the UK and Greece are negative and very similar – statistical tests for differences in means were not significant. The negative signs and low (in some cases very low) level of agreement or strong agreement with this group of questions demonstrates a complete rejection of the idea that relatively high levels of debt are required to ensure that management works in the best interests of shareholders. As Beattie *et al.* (2006) point out; this is, perhaps, unsurprising: asking corporate

managers if they need the discipline or constraint of debt in order to maximize shareholder interests is unlikely to elicit a positive response.

The one substantial difference between the UK and Greek responses is the level of agreement associated with question Q6j, which asked respondents if they would consider raising debt in order to engage in a share re-purchase. There was modest support for this proposition from the UK respondents, where 46.3 per cent agreed or strongly agreed, whereas this proposition was roundly rejected by the Greek respondents, where only 4.2 per cent agreed. This difference was statistically significant at the one per cent level according to the parametric *t*-test, but not significant according to the non-parametric Mann-Whitney test and given the nature of the data we tend to rely on the latter test.

Neither the UK nor the Greek responses from this survey provide support for the agency hypotheses associated with capital structure. This evidence is broadly consistent with the findings from other recent surveys (Graham and Harvey, 2001; Bancel and Mittoo, 2004; Beattie *et al*., 2006, Brounen *et al*., 2006).

*5.4    Signalling Hypothesis*

As far as the signalling possibilities of capital structure choices are concerned, for the most part there is little difference between the responses obtained from both sets of respondents in Greece and the UK. As the data in Table 8 show, the questions or statements posed in relation to signalling elicit disagreement or lack of importance (as the negative signs show). The proportions of respondents who considering signalling considerations important or very important, (or agreement or strong agreement) are typically low or very low and the mean values demonstrating lack of importance or disagreement are statistically significant in ten cases.

_____

Table 8 about here

_____

The exceptions are in the case of the statements about credit rating and the issuance of debt as a signal that equity is under-valued. In the former case there is modest support for the idea that credit rating is

an important consideration in debt-equity choices, though the mean values for both Greece and the UK are not significant.

In the case of debt and undervaluation there is little support for the proposition and the level of disagreement results in a negative mean which is significant at the one per cent level in the UK. In Greece the level of support is also very low, but the mean value is just positive. This is the only question or statement that registers a statistically significant difference between the two countries.

These results from our survey are broadly in line with the other recent surveys referred to above (Graham and Harvey, 2001; Bancel and Mittoo, 2004; Beattie *et al*., 2006, Brounen *et al*., 2006). The influence of credit rating is tested in three of the other studies and two out of three (GH and BM) clear support, whereas BJK does not. Only BGT poses a similar question to Q6g and Q6h about information disclosure (in their case about the limited disclosure of placements). Unlike our questions they find strong support, but this might be due to the implicit assumption that they were asking about equity placements rather than the difference between information disclosure due to debt versus equity issues in one statement and bank relationships in the other.

*5.5    Strategic Financial Management and Market Timing Issues*

The results for what might be considered strategic financial management concerns and market timing issues are presented in Table 9.

Two questions were posed about the use of debt to discourage potential bids from other corporate management teams and from private equity funds. In both Greece and the UK there was a very low level of support for the strategic use of debt in this way. Furthermore, the mean values for these questions were negative and significant at the one per cent level in both Greece and the UK. Nevertheless, the mean differences between the two countries were also statistically significant because the rejection of these strategic propositions were more emphatic in the UK. These results were consistent with the four recent survey studies referred to above (Graham and Harvey, 2001; Bancel and Mittoo, 2004; Beattie *et al*., 2006, Brounen *et al*., 2006).

Three other questions, Q5f, Q5g, and Q5k were related to strategic issues: whether financial gearing was set in order to match the nature of the business; setting a limit on debt to reassure customers; and taking on debt to signal strategic intent to rival firms (the last two are, of course, at odds and mutually exclusive). There was solid support for the relationship between gearing and the line of business in the UK with 58.0 per cent rating this as important or very important. There was some support for this proposition in Greece, but the difference between the two countries is significant at the one per cent level. The other surveys (GH, BM, BJK, and BGT) did not present the proposition in terms of lines of business, only whether the leverage levels of other firms influenced the debt-equity choices and there was little support for that influence (reviewed above in Table 4).

_____

Table 9 about here

_____

In terms of customer and supplier reassurance and signalling strategic intent to rivals, there was very little support for these propositions in either Greece or the UK, although there was a statistically significant difference between the mean responses in the two countries, due to a stronger rebuttal in the UK. These results are broadly in line with the other surveys, although both BJK and BGT find a little more support for the reassurance proposition in the UK.

Four propositions were tested in relation to timing the market: Q5i about the influence of the business cycle; Q7b about issuing debt when interest rates were low; issuing short-term debt when there were expectations of a fall in interest rates; and finally issuing long term debt in order to avoid re-financing during difficult economic conditions. There was little support for the business cycle influence in the UK, but modest support in Greece and the difference in means between the two countries is significant at the 5 per cent level. This was not tested by the other surveys.

The two questions associated with the timing of interest rates received differential support levels in the UK and Greece. There was modest support for the issuance of debt when interest rates were low in the UK, but much stronger support in Greece and the difference in means was significant at the 5 per cent

level. GH and BM find modest support for this proposition respectively in their US and European surveys.

Issuing short term debt in anticipation of falls in interest rates is rejected resoundingly in the UK, but receives a 50 per cent support level in Greece. The difference in mean responses is significant at the one per cent level. The same question was posed in three of the previous surveys. GH and BM find modest support for this idea in the US and Europe, but BJK report very low support in their results for the UK.

The issuance of long term debt to avoid re-financing difficulties received strong support in both Greece and the UK, with mean values for responses significant at the one per cent level, with no significant difference in means. Strong support was also reported by BM for Europe, but BJK report very low levels of support for the UK, and GH report only modest support for the US.  The matching of debt maturities with the expected life of fixed assets received solid support in the UK, but surprisingly very little in Greece and the difference in means is significant at the one per cent level. This is even more surprising when we observe that all the previous surveys report strong support for this proposition.

Finally we asked if a strategy of borrowing short term would be likely to reduce risk taking in terms of investment projects. This was roundly rejected in both Greece and the UK, although the difference in means was significant, because of the very much lower level of support in the UK. Very low levels of support for this proposition were also reported by the four previous studies.

Overall the support for the strategic use of capital structure in a broader context receives very little support.

6.      **Concluding Remarks**

The UK evidence for trade-off theory from the current survey is much stronger than that reported by the previous studies. There are consistently high levels of support associated with the benefits of tax shields, cheaper issue cost of debt and moderately high levels of support for the offsetting costs of financial distress. Reducing the WACC via capital structure choices is also considered important and substantial number of respondents employ a financial leverage target, albeit a flexible target in most cases. In contrast the results for Greece are rather more mixed, particularly in terms of low levels of support for

the benefits of tax shields. Nevertheless,  the support for a financial leverage target is very strong and other aspects of the trade-off model receive modest support.  These results for the UK provide much stronger support for the trade-off model than all the recent surveys (GH, BM, BJK, and BGT) whereas the results for Greece are broadly in line with prior evidence.

Somewhat paradoxically perhaps, the UK evidence in relation to the pecking order hypothesis is also much stronger than prior UK results (BJK and BGT). As BGT point out, respondents to their survey do not regard the trade-off model and the pecking order hypothesis as mutually exclusive and so it appears that practitioners utilize both models as decision frameworks when considering capital structure choices. In the case of Greece, we find little evidence of support for the pecking order hypothesis. This is, of course, in line with what one might have expected having reported moderate support for the trade-off theory.

The evidence about the principal-agent perspective as applied to capital structure (which could be incorporated in a trade-off framework) is almost wholly negative, with respondents rejecting the notion that debt is used as a necessary discipline for corporate management teams to work in the best interests of their shareholders. As mentioned above, BGT suggest that the way in which questions about principal-agent applications addressed to corporate managers have to be framed with great care and it could be that our questions were framed in such a way as to increase the likelihood of rejection of this perspective. Our findings are broadly in line with recent survey evidence (GH, BM, BJK, and BGT).

Similar to the evidence in respect of agency perspectives, the responses  in respect of signaling questions and statements are largely negative, with very low levels of support for the idea that debt-equity choices convey meaningful (i.e. value) information to the market. These results are also broadly in line with recent studies (GH, BM, BJK, and BGT).

Turning now to the strategic dimensions of capital structure management, there is very little evidence to suggest that debt-equity choices are affected by or are used to affect the perceptions of rivals, customers, or suppliers. Nor was there support for the idea that high levels of financial leverage could be used as an effective defense mechanism in the market for corporate control. The results for Greece and the UK were similar, but there were statistically significant differences between the two sets of

responses, but only because the rejection of these ideas was much more pronounced in the UK. Again, our evidence is broadly in line with previous survey research (GH, BM, BJK, and BGT).

The evidence in respect of market timing issues is rather mixed in terms of different levels of support in the two countries, but in broad terms, there is clear evidence that timing is an important issue for UK firms in relation to their choices over debt issuance, the maturity of debt instruments and the matching of maturities to the lives of fixed assets. For Greek firms there is some support for the timing proposition, but it is less clear cut than the UK evidence.

Overall it appears that both the trade-off model and the packing order hypothesis are used by firms to guide their decisions over capital structure issues. This contradicts the standard or orthodox academic view that they are mutually exclusive perspectives or models. This received wisdom is based on the idea that the two models provide for very different predictions about what we should expect to observe empirically about financial leverage. It could be that the employment of fairly flexible targets for financial gearing accounts for this discrepancy between theory and practice. We also conclude that the more sophisticated the theoretical perspectives on capital structure, less purchase it is likely to have on reality or practice. Agency perspectives, signaling and strategic motivations are all roundly rejected by the respondents in our survey, as they have been to a greater or lesser extent in the other recent questionnaire survey referred to above. Perhaps it is time for theorists to focus on more simple perspectives, rather than continue to pursue more and more complicated and sophisticated explanations that seem increasingly at odds with the evidence evinced by practitioners.

## References

Adedeji, A (1998) 'Does the Pecking Order Hypothesis Explain the Dividend Payout Ratio of Firms in the UK?' *Journal of Business Finance and Accounting* Vol. 25 Nos. 9/10 (pp 1127-55)

Allen D (1991) 'The Determinants of the Capital Structure of Listed Australian Companies: The Financial Manager's Perspective', *Australian Journal of Management, Vol 16, No* 2, December 1991, 103-127

Altman, E (1984) 'A Further Investigation of the Bankruptcy Cost Question', *Journal of Finance,* Vol. 39, No. 4 (pp 1067)

Bancel F. and Mittoo U. (2004) 'Cross-Country Determinants of Capital Structure Choice: A Survey of European Firms', *Financial Management 33,* No.4, Winter 2004, 71-101.

Barclay, M and Smith, C (1999) 'The Capital Structure Puzzle: The Evidence Revisited', *Journal of Applied Corporate Finance*, Volume 12, Issue 1, 8-20.

Beattie V, Goodacre A and Thomson, S.J (2006) 'corporate Financing Decisions: UK Survey evidence', *Journal of Business Finance & Accounting*, Vol. 33, 9 & 10, 1402-1434.

Brealy, R., Myers, S. and Allen, F. (2008) *Corporate Finance, 9*[th] Edition, McGraw Hill International Edition, New York.

Brennan. M and Kraus, A (1987) 'Efficient Financing under Asymmetric Information' *The Journal of Finance,* Vol. 42, No 5 (pp 1225-1243)

Brounen D, De Jong A and Koedijk K (2006) 'Capital Structure Policies in Europe: Survey Evidence' *Journal of Banking & Finance*, Vol. 30, 1409-1442

Daskalakis, N and Vasiliou, D (2006) *The Practice of Capital Structure in a Small Market and Cross-National Comparison* available at http://ssrn.com/abstract=889381:

Degeorge, F and Maug, E (2006) 'Corporate Finance in Europe: A Survey', *Working Paper 121/2006* available at http://ssrn.com/abstract=896518:

Fama, E F and French, K R (1998) 'Taxes, Financing Decisions and Firm Value' *Journal of Finance,* Vol 53, No 3 (pp 819-83)

Fama, E F and French, K R (2002) 'Testing Tradeoff and Pecking Order Predictions abut Dividends and Debt' *Review of Financial Studies,* Vol. 60 No. 3 (pp 187-243)

Graham J. and Harvey C. (2001) 'The Theory and Practice of Corporate Finance: Evidence From the Field' *Journal of Financial Economics* 60, p 187-243

Graham J. and Harvey C. (2002) 'How do CFO's make Capital Budgeting and Capital Structure Decisions? ' *The Journal of Applied Corporate Finance,* Volume 15, No 1, p 8-23

Harris. M. and Raviv, A (1991) 'The Theory of Capital Structure', *Journal of Finance* Vol. 46 No. 1 (p 297-355)

Hovakimian. A, Opler. T and Titman. S (2001) 'The Debt-Equity Choice', *Journal of Financial and Quantitative Analysts,* Vol 36, No 1 (pp 1-24)

Miller. M (1977) 'Debt and Taxes' *Journal of Finance,* Vol 32, No 2 (pp 261-275)

Myers, S (1984) 'The Capital Structure Puzzle' *Journal of Finance,* Vol 39, No 3 (pp 575-592)

Myers, S (2001) 'Capital Structure' *Journal of Economic Perspectives,* Vol 15, No 2 (pp 81-102)

Norton. E (1991) 'Factors Affecting Capital Structure Decisions' *The Financial Review,* Vol 26, No. 3 (pp 431-446)

Pinegar. J and Wilbricht. L (1989) 'What Managers Think of Capital Structure: A Survey', *Financial Management,* Vol 18, No. 4 (pp 82-91)

Rajan, R.G and Zingales, L (1995) 'What Do We Know About Capital Structure? Some Evidence from International Data' *Journal of Finance,* Vol 50, No 5 (pp 1421-60)

Scott. D and Johnson. D (1982) 'Financing Policies and Practices in Large Corporations', *Financial Management,* Vol 11, No. 2 (pp 51-59)

Shyam-Sundar, L and Myers, S (1999) 'Testing Static Tradeoff Against Pecking Order Models of Capital Structure', *Journal of Financial Economics,* Vol 51, No. 2 (pp 219-244)

Titman, S and Wessels, R (1988) 'The Determinants of Capital Structure Choice' *Journal of Finance,* Vol 43, No 1 (pp 1-19)

Warner, J. (1977) 'Bankruptcy Costs: Some Evidence' *Journal of Finance,* Vol. 32, No. 2 (pp 337)

Table 1
Distribution of respondents by sector and by country

| Sector | GREECE | | UK | |
|---|---|---|---|---|
| | No. | % Responses | No. | % Responses |
| Retail and Services | 4 | 17.4% | 15 | 18.5% |
| Manufacturing | 14 | 60.9% | 12 | 14.8% |
| Communications and Media | 1 | 4.3% | 7 | 8.6% |
| Construction | 3 | 13.0% | 4 | 4.9% |
| Technology | - | | 5 | 6.2% |
| Transportation | - | | 4 | 4.9% |
| Financial Services | 1 | 4.3% | 22 | 27.2% |
| Other | - | | 22 | 27.2% |

Table 2
Status of Respondents

| | GREECE | | UK | |
|---|---|---|---|---|
| | No. | % Responses | No. | % Responses |
| Finance Director (CFO) | 11 | 45.8% | 52 | 64.2% |
| Financial Manager (Treasurer, etc.) | 8 | 33.3% | 11 | 13.6% |
| Other senior manager | 5 | 20.8% | 16 | 19.8% |

Table 3
Capital structure history of firms in the survey

|  | GREECE | | UK | |
|---|---|---|---|---|
|  | No. | % Responses | No. | % Responses |

*During the past 5 years the firm has:*

| | | | | |
|---|---|---|---|---|
| Issued any combination of equity, short and long term debt, convertibles | 8 | 33.3 | 43 | 53.1 |
| Only issued equity | 2 | 8.3 | 8 | 9.9 |
| Only issued long term debt | 5 | 20.8 | 21 | 25.9 |
| Only issued short term debt | 3 | 12.5 | 11 | 13.6 |
| Only issued convertible debt | 2 | 8.3 | 1 | 1.3 |
| Did not issue any securities | 4 | 16.7 | 9 | 11.1 |

*Most likely use of funds raised via equity would be:*

| | | | | |
|---|---|---|---|---|
| Retain as cash | 2 | 8.3 | 3 | 3.7 |
| Invest more | 18 | 75.0 | 10 | 12.7 |
| Merger or acquisition | 9 | 37.5 | 40 | 49.4 |
| Repay debt | 10 | 41.7 | 8 | 9.9 |
| Other | | | | |

*Most likely use of funds raised via equity would be:*

| | | | | |
|---|---|---|---|---|
| Retain as cash | 6 | 25.0 | 4 | 4.9 |
| Invest more | 20 | 83.3 | 38 | 46.9 |
| Merger or acquisition | 5 | 20.8 | 48 | 59.3 |
| Repay debt | 1 | 4.2 | 20 | 24.7 |
| Other | - | - | 13 | 16.0 |

Table 4

Responses to Questions Associated with Trade-off Theory. Mean responses based on Likert Scale Responses from -2 to +2 and % of responses rated very important or important. Differences in means of UK and Greek samples tested with standard *t*-test and Mann-Whitney non-parametric test

| | UK Mean | % important | Greece Mean | % important | Mean Difference | *t*-test *p*-value | MWU | MWU *p*-value |
|---|---|---|---|---|---|---|---|---|
| *How important is factor X in debt-equity choices? or To what extent do you agree-disagree with statement?* | | | | | | | | |
| Q5a  Tax shield provided by debt | 0.80*** | 68.3% | -0.26 | 20.9% | 1.063 | 0.000 | -4.306 | 0.000 |
| Q5b  Potential costs of financial distress | 0.12 | 47.6% | 0.39 | 41.7% | -0.268 | 0.302 | -0.583 | 0.560 |
| Q5c  Volatility of earnings | -0.36*** | 25.7% | 0.27 | 41.7% | -0.631 | 0.022 | -2.245 | 0.025 |
| Q5d  Cheaper cost of issuing debt compared to equity | 1.01*** | 78.0% | 0.26 | 45.8% | 0.751 | 0.007 | -2.968 | 0.003 |
| Q6f  Debt preferred to equity because of lower issue costs | 0.86*** | 78.0% | -0.13 | 20.8% | 0.995 | 0.000 | -4.407 | 0.002 |
| Q6i  Debt level chosen to minimise WACC | 0.54*** | 57.3% | 0.35 | 45.8% | 0.195 | 0.399 | -0.901 | 0.000 |

*, **, *** denote statistical significance at the 10, 5, and one per cent levels. UK and Greek means tested via *t*-test and Kolmogorov-Smirnov non-parametric test under assumption of normal and uniform distributions. Both parametric and non-parametric tests produce the same levels of statistical significance for each question. MWU= Mann-Whitney U test statistic.

Table 5
Responses to Questions and Statements about Target Setting

| Sector | GREECE | | UK | |
|---|---|---|---|---|
| | No. | % Responses | No. | % Responses |
| Does you have a leverage target? | 18 | 81.8% | 48 | 59.3% |
| Strict Target with narrow range | 5 | 26.3% | 8 | 9.9% |
| Strict target with broad range | 2 | 10.5% | 13 | 16.0% |
| Flexible target with substantial | 5 | 26.3% | 12 | 14.8% |
| Very loose target | 2 | 10.5% | 7 | 8.6% |
| Target but changes from time to time | 4 | 21.1% | 14 | 17.3% |

Table 6

Responses to Questions Associated with Pecking Order Hypothesis. Mean responses based on Likert Scale Responses from -2 to +2 and % of responses rated very important or important. Differences in means of UK and Greek samples tested with standard *t*-test and Mann-Whitney non-parametric test

| | UK Mean | % important | Greece Mean | % important | Mean Difference | *t*-test *p*-value | MWU | MWU *p*-value |
|---|---|---|---|---|---|---|---|---|
| *How important is factor X in debt-equity choices? or To what extent do you agree-disagree with statement?* | | | | | | | | |
| Q6a When profits insufficient for investment debt is preferable to equity issue | 0.32** | 45.1% | 0.04 | 33.3% | 0.278 | 0.270 | -1.365 | 0.000 |
| Q6b Other things equal, straight debt is preferable to convertible | 1.19*** | 81.7% | 0.39* | 50.0% | 0.794 | 0.001 | -3.577 | 0.000 |
| Q6c Other things equal raising debt is preferable to raising equity | 1.11*** | 80.5% | -0.48** | 25.0% | 1.589 | 0.000 | -5.715 | 0.003 |
| Q6d Preference for debt due to close relationship with bank(s) | -0.95*** | 8.5% | -0.22 | 25.0% | -0.733 | 0.003 | -3.000 | 0.504 |
| Q6e Would want to avoid issuing equity whenever possible | 0.06 | 39.0% | -0.13 | 20.9% | 0.192 | 0.426 | -0.668 | 0.000 |
| Q6n When profits are insufficient for investment, better to delay than issue new securities | -0.57*** | 20.8% | -0.39 | 20.9% | -0.177 | 0.521 | -0.749 | 0.066 |

*, **, *** denote statistical significance at the 10, 5, and one per cent levels. UK and Greek means tested via *t*-test and Kolmogorov-Smirnov non-parametric test under assumption of normal and uniform distributions. Both parametric and non-parametric tests produce the same levels of statistical significance for each question. MWU= Mann-Whitney U test statistic.

Table 7

Responses to Questions Associated with Principal-Agent Theory. Mean responses based on Likert Scale Responses from -2 to +2 and % of responses rated very important or important. Differences in means of UK and Greek samples tested with standard *t*-test and Mann-Whitney non-parametric test

| | UK Mean | % important | Greece Mean | % important | Mean Difference | *t*-test *p*-value | MWU | MWU *p*-value |
|---|---|---|---|---|---|---|---|---|

*How important is factor X in debt-equity choices? or To what extent do you agree-disagree with statement?*

| | | UK Mean | % important | Greece Mean | % important | Mean Difference | *t*-test *p*-value | MWU | MWU *p*-value |
|---|---|---|---|---|---|---|---|---|---|
| Q5l | High level of debt as an incentive to senior management to work hard to be efficient and effective | -1.22*** | 6.1% | -0.87*** | 0.0% | -0.353 | 0.104 | -1.952 | 0.051 |
| Q6j | Willing to raise debt to finance share re-purchase | 0.25* | 46.3% | -1.30*** | 4.2% | 1.551 | 0.000 | -5.148 | 0.236 |
| Q6k | High debt level is a good discipline to ensure that senior management maximises shareholder value | -0.22* | 29.3% | -0.48* | 16.7% | 0.256 | 0.328 | -1.186 | 0.449 |
| Q6m | High debt level is a necessary discipline to ensure senior management maximises shareholder value | -0.72 | 13.4% | -0.82*** | 4.2% | 0.102 | 0.619 | -0.344 | 0.454 |

*, **, *** denote statistical significance at the 10, 5, and one per cent levels. UK and Greek means tested via *t*-test and Kolmogorov-Smirnov non-parametric test under assumption of normal and uniform distributions. Both parametric and non-parametric tests produce the same levels of statistical significance for each question. MWU= Mann-Whitney U test statistic.

Table 8

Responses to Questions Associated with the Signalling Hypothesis. Mean responses based on Likert Scale Responses from -2 to +2 and % of responses rated very important or important. Differences in means of UK and Greek samples tested with standard $t$-test and Mann-Whitney non-parametric test

| | UK Mean MWU $p$-value | % important | Greece Mean | % important | Mean Difference | $t$-test $p$-value | MWU |
|---|---|---|---|---|---|---|---|
| *How important is factor X in debt-equity choices? or To what extent do you agree-disagree with statement?* | | | | | | | |
| Q5h Debt-equity of other firms in our industry | -0.25** | 24.4% | -0.30 | 29.2% | 0.054 | 0.835 | -0.185 | 0.853 |
| Q5n Debt issue signals confidence about future earnings growth | -0.78*** | 11.0% | -0.78*** | 12.5% | -0.005 | 0.984 | -0.192 | 0.848 |
| Q5o Credit rating | 0.22 | 47.6% | 0.14 | 41.7% | 0.086 | 0.797 | -0.358 | 0.720 |
| Q6g Debt preferred to equity due to lower information disclosure | -1.06*** | 3.7% | -0.36* | 16.7% | -0.698 | 0.001 | -3.084 | 0.035 |
| Q6h Bank debt preferred to bond issue due to lower information disclosure | -0.88*** | 12.2% | -0.43** | 16.7% | -0.442 | 0.060 | -2.114 | 0.368 |
| Q6l Other things equal, a debt issue signals insider belief that the firm is undervalued | -0.67*** | 11.0% | -0.87*** | 4.2% | 0.203 | 0.380 | -0.758 | 0.731 |
| Q7a We use debt if we consider that the firm is undervalued | -0.41*** | 15.8% | 0.05 | 20.9% | -0.455 | 0.035 | -1.836 | 0.066 |

*, **, *** denote statistical significance at the 10, 5, and one per cent levels. UK and Greek means tested via $t$-test and Kolmogorov-Smirnov non-parametric test under assumption of normal and uniform distributions. Both parametric and non-parametric tests produce the same levels of statistical significance for each question. MWU= Mann-Whitney U test statistic.

Table 9

Responses to Questions Associated with Strategic Financial Management and Market Timing Issues. Mean responses based on Likert Scale Responses from -2 to +2 and % of responses rated very important or important. Differences in means of UK and Greek samples tested with standard *t*-test and Mann-Whitney non-parametric test

| | UK MWU Mean *p*-value | % important | Greece Mean | % important | Mean Difference | *t*-test *p*-value | MWU |
|---|---|---|---|---|---|---|---|

*How important is factor X in debt-equity choices? or To what extent do you agree-disagree with statement?*

| | | UK MWU Mean *p*-value | % important | Greece Mean | % important | Mean Difference | *t*-test *p*-value | MWU |
|---|---|---|---|---|---|---|---|---|
| Q5e | Debt levels to discourage potential bidders | -1.21*** | 6.1% | -0.68*** | 12.5% | -0.528 | 0.021 | -2.234 | 0.025 |
| Q5f | The nature of the lines of business | 0.74*** | 58.0% | 0.08 | 29.2% | 0.657 | 0.008 | -2.694 | 0.007 |
| Q5g | Limitation of debt to show financial strength to suppliers and customers | -0.74*** | 12.2% | -0.26 | 25.0% | -0.480 | 0.064 | -1.835 | 0.066 |
| Q5i | The stage of the business cycle | -0.06 | 28.1% | 0.36* | 41.6% | -0.425 | 0.069 | -1.858 | 0.063 |
| Q5k | Debt issues signal to rivals an unwillingness to reduce capacity | -1.38*** | 3.7% | -0.61** | 20.8% | -0.774 | 0.006 | -3.042 | 0.002 |
| Q5m | Debt level to discourage interest of private equity firms | -1.28*** | 4.9% | -1.14*** | 4.2% | -0.148 | 0.484 | -0.809 | 0.419 |
| Q7b | Issue debt when interest rates are low | 0.14 | 37.8% | 0.65*** | 58.3% | -0.516 | 0.030 | -2.171 | 0.030 |
| Q7c | Issue short term debt if we think interest rates will fall | -0.52*** | 13.5% | 0.52** | 50.0% | -1.040 | 0.000 | -4.112 | 0.000 |
| Q7d | Match debt maturity to the life of fixed assets | 0.27** | 47.5% | -0.43** | 16.7% | 0.706 | 0.002 | -2.775 | 0.006 |
| Q7e | Borrowing short term reduces risk of investment projects | -0.96*** | 4.9% | -0.39** | 12.5% | -0.572 | 0.007 | -2.684 | 0.007 |
| Q7f | Issue long term debt to minimise risk of refinancing in difficult economic conditions | 0.63*** | 59.7% | 0.65*** | 62.5% | -0.023 | 0.914 | -0.163 | 0.870 |

*, **, *** denote statistical significance at the 10, 5, and one per cent levels. UK and Greek means tested via *t*-test and Kolmogorov-Smirnov non-parametric test under assumption of normal and uniform distributions. Both parametric and non-parametric tests produce the same levels of statistical significance for each question. MWU= Mann-Whitney U test statistic.