

This is a repository copy of *The status of planning processes in family-owned businesses: A study of transformational economy and its relationship to the financial performance of family-owned Ukrainian firms..*

White Rose Research Online URL for this paper:
<http://eprints.whiterose.ac.uk/11228/>

Monograph:

Lehkman, O. (2009) *The status of planning processes in family-owned businesses: A study of transformational economy and its relationship to the financial performance of family-owned Ukrainian firms.* Working Paper. Department of Management Studies, University of York

Reuse

Unless indicated otherwise, fulltext items are protected by copyright with all rights reserved. The copyright exception in section 29 of the Copyright, Designs and Patents Act 1988 allows the making of a single copy solely for the purpose of non-commercial research or private study within the limits of fair dealing. The publisher or other rights-holder may allow further reproduction and re-use of this version - refer to the White Rose Research Online record for this item. Where records identify the publisher as the copyright holder, users can verify any specific terms of use on the publisher's website.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.

promoting access to White Rose research papers



Universities of Leeds, Sheffield and York
<http://eprints.whiterose.ac.uk/>



White Rose Research Online URL for this paper:
<http://eprints.whiterose.ac.uk/11228>

Working Paper

Lehkman, O (2009) The status of planning processes in family-owned businesses: A study of transformational economy and its relationship to the financial performance of family-owned Ukrainian firms.
Working paper number 47.

White Rose Research Online
eprints@whiterose.ac.uk

THE UNIVERSITY *of York*

University of York
The York Management School
Working Paper No. 47
ISSN Number: 1743-4041
July 2009

The status of planning processes in family-owned businesses: A study of transformational economy and its relationship to the financial performance of family-owned Ukrainian firms

Olena Lehkman

This paper is circulated for discussion purposes only and its contents should be considered preliminary.

The status of planning processes in family-owned businesses: A study of transformational economy and its relationship to the financial performance of family-owned Ukrainian firms

ABSTRACT

Numerous articles in academic publications have been examining the relationship between planning process and performance. However, the obtained findings are controversial. Even less research has been conducted for family businesses. In contrast to already conducted studies this work will explore the following research questions in a context of transition economy and taking the Ukraine as an example. This research is aiming to explore planning processes that are employed by Ukrainian family-owned firms, and its relationship to profit and growth rate. In addition, such categories as age and size will be tested in order to investigate their relationship with profit growth and employed planning processes. Compared to prior research, more complex methods were applied in order to investigate the above aims along with providing valuable information for the body of knowledge.

CHAPTER 1

Introduction

Areas of Interest

Particular interest in the relationship between planning process and performance and their influence on each other began in the late 1960s. Over the past half of the century, resolution has not been found. On the one hand, planning is considered to be a key to the survival in a turbulent environment. Contemporary organisations are facing rapid changes and therefore have to prepare their strategic choices (Unni 1981; Shrader, Mulford, and Blackburn 1989; Ansoff 1990; Aram and Cowen 1990; Ansoff 1991). On the other hand, some researchers have argued that predetermined actions in an uncertain environment can become a hindrance for growth and development (Quinn 1980; Mintzberg, 1994).

Even less empirical research has been conducted for family businesses, yet these are considered to build a basis for every economy. The importance of the family business has been recognised as numerous researchers showed their unique competitive advantages which help them to compete in the fast changing world of global corporations; however, the majority of small and family businesses do not plan at all and reasons for that are still vague (Jones 1982; Rue and Ibrahim 1996).

A long dispute and various empirical studies provided debatable support regarding the value of planning for firm's performance. The ongoing debate seems to be endless as authors have received contradicting results. There are few empirical academic publications which examined techniques and approaches to planning process and performance that organisations have used. Consequently, the important question as to whether planning strategy actually helps to increase financial performance of the firm remains unresolved. In this research, an attempt will be made to explore the relationship between planning process and performance and indicate the direction of planning process alongside a consideration of the environment.

Ukraine and its Family-owned businesses

The Ukraine inherited its economic structure from the Soviet Union. Most of the socio-political features of its life are the result of mixture of the Soviet Union heritage and new government policies. The severe transition recession in the 1990s turned country to hard times, especially its new-born entrepreneurship class. A lot of work has to be done in order to recover post-crisis Ukraine.

One of the shortcomings of the previously conducted research is that it has location bound. Most of the empirical work on the topic of planning-performance link explores enterprises in the USA and the United Kingdom. However, no investigation was conducted regarding this topic on transition economies like the Ukraine. Family business forms the basis of the middle class in the Ukraine which builds economic stability and improves living standards. It is rapidly becoming a driver of the Ukrainian economy with 57% of total sales in the country achieved by family-owned business, and 61% is employed in it in 2006 (World Bank Group 2007). Statistical data and numerous market analyses indicate that family-owned business sector is still far from realising its full potential (World Bank Group 2007). However, inefficient state regulation of business development, intense control over business, and a complicated political situation makes it hard for businesses “to create controlled change in the environment” (Ackoff 1970 p.1). Research that investigates whether planning improves performance and increases firm’s stability in the turbulent Ukrainian political and economical environment is crucial because it will provide some theoretical basis for process improvements and might help to boost firms’ performance and, consequently, increase general welfare of those who uses its benefits.

Research objectives

The research has focused on the influence of the planning mode and performance among family businesses in the Ukraine with consideration of its uncertain environment and the transitional state of the economy. Thus, the purpose of this research is to improve understanding of the above topic and explore the planning-performance relation by suggesting additional categories such as environment, size, and age as possible leverages that influence the results. In order to provide the answer to the research questions the following objectives are to be achieved:

1. To discover the planning process Ukrainian family run businesses are using along with their general perception of the environment
2. To examine the planning-profit and planning-growth relationship among family-owned business in the Ukraine
3. To investigate the relationship between perceived environment and planning process sophistication
4. Investigate if size and age of the organisation are related to:
 - a) Growth rate
 - b) Planning process

Structure of the dissertation

The dissertation is presented as a research paper with logically connected chapters. The first chapter provides an introduction to the topic, outlines the key areas to be investigated and identifies primary aims and objectives of the research. The second chapter is a review of the literature that analyses and synthesise previously conducted research in relation to the objectives of his study. Different ideas, theories and hypotheses were evaluated which are relevant to the proposed research. Moreover, it provides definitions of the categories that will be used in the research in order to clarify their meaning and apply them later on. The next chapter explains the research methodology that has been designed for the research. It includes a discussion of the applied strategies and compares these some common methods. Chapter four reveals the research findings that have been obtained from the data analysis using SPSS computer software. The discussion chapter then follow where the results are discussed and analysed. This is linked to the main points from literature review and findings of other authors, therefore, providing limitations of the study. Chapter six presents the conclusions and recommendations for future research and evaluate the effectiveness of the research.

CHAPTER 2

Literature Review

To begin, there is a need to organise the literature on planning process-performance.

In order to build structured and comprehensive literature review the presented studies were selected depending on the reliability of their research methodology and the degree to which they were referenced by other authors.

The formal planning process

As with many management topics, planning process is not easy to define. It was observed that explanations of what “planning process” mean changes depending on author and source (Byars 1992). Thus, it is essential to distinguish the concept so the following arguments can be understood.

The concept “planning process” can not be understood without considering corporate strategy of which planning is a small subset. Corporate strategy consists of three core areas – strategic analysis, strategic development and strategy implementation (Lynch 2000). Strategic development, therefore, distinguishes process, content and context. Process refers to the way strategies are brought into life; content includes strategic decisions and ideas

which are then implemented through the process; context is the environment in which the firm operates and develops its strategies. Process is the most difficult part in strategic development that causes the most problems because it is hard to predict possible barriers and yet it is important to strategy development. In this work, the focus will be placed on strategy process where planning plays an important role.

There is deep disagreement between scientists and practitioners regarding strategy development. There are two basic approaches: prescriptive approach and emergent approach. These separate models lead to different ways to organise corporate strategy process.

The prescriptive approach involves a rigorous planning system. Managers identify objectives, organise resources and analyse the environment. Then strategy is implemented according to the plan. Armstrong (1982), for instance, claimed that strategic planning benefits the firm and defines it as “an explicit process for determining the firm’s long-term objectives, procedures for generating and evaluating alternative strategies, and a system for monitoring the results of the plan when implemented” (p.198). Similarly, Ansoff (1990) determines planning as a logical, analytical process which is conducted in order to provide a future position of the organisation with reference to its environment and includes a statement of objectives and specification of the diversified strategy (p.58).

Despite strong arguments, some researchers have argued that strategic or formal planning is too rigid and usually irrelevant – they are proponents of the emergent approach (Quinn 1980; Mintzberg and Waters 1985; Mintzberg 1987). They claim that planning has a high level of focus on maintaining and implementing an already elaborated plan, driving out innovations that are vital for every organisation. Mintzberg (1987), for instance, when critiquing formal planning, is questioning if there any need for systematic planning at all. Furthermore, he claimed that it is even dangerous to “program strategies” in an uncertain environment because “setting oneself on a predetermined course in unknown waters is the perfect way to sail straight into an iceberg” (p.26). From his point of view, planning should be incremental where a manager is capturing the information from all available sources and synthesizing that knowledge into a new course of action, simultaneously adapting to an uncertain environment, with the constraints of bounded rationality and imperfect information. Analogously, Quinn (1980) claimed that formal planning is just another aspect of control and rarely brings radical changes. From his point of view, process is dynamic process where the manager constantly reassesses the future. Effective

strategies emerge from day-to-day interaction with the environment which shapes objectives and vision continuously.

Considering that the object of the dissertation is family business, there is a need to consider another way to plan, different from strategic. Numerous researchers (Jones 1982; Rue and Ibrahim 1996) claim that family business do not plan at all. Therefore, in their operations they are more likely to base the decisions on their past experience. They are mostly focus on the short-term goals and do not consider an environment as a factor that might influence on objectives setting and plan elaboration (Lindblom 1959; Dror 1964).

Generally, the above provides an outline of possible variations in planning process activities. Research for this dissertation overcomes limitations of previous studies as it takes planning having a broader definition, adjusted to family-owned firms.

Levels of planning

Most prior research studies have looked at financial performance between planners and non-planners, or distinguished between formal and informal planners (Wood and LaForge 1979; Jones 1982; Boyd 1991). The presence of the written plan with identified strategy and goals has been highlighted as the most common dimension to make a distinction between these two groups (Thune and House 1970; Herold 1972; Kudla 1980; Robinson and Pearce 1983). Thus, formal planners use prescriptive approach in strategic planning, and informal non-planners are more tend to use emergent approach. These ways to define strategy process have limited focus and fail to recognise a possible range of various planning concepts and techniques, involved in planning activity (Rhyne 1985). It is even more important to recognise wide range of management practices in small and family business in an adequate way (Sexton and Van Auken 1982).

There is a growing body of literature examining the influence of strategic planning on a variety of financial performance measures for large, small and family firms (Robinson and Pearce 1984). As a result of these studies, researchers provided conflicting conclusions, especially those of small firms that strategic planning helps to improve decision-making, build long-range view and get general benefits from formal planning. In contrast, others researchers concluded that planning does not pay off for small business and are more suited for large companies and there is no effect on financial performance for small business (Lindsay, et. al. 1981; Robinson and Pearce 1983).

The earliest studies examine identified planning practices according to the presence of the written documentation. Thune and House (1970), Herold (1972), Fulmer and Rue

(1974), Leontiades and Tezel (1980) categorised firms as planners and non-planners in order to compare their performance. Further research tried to develop more sophisticated classification of planning by elaborating from two to five categories in order to define it more clearly and realistically (Kudla 1980; Robinson and Pearce 1983; Rhyne 1986; Bracker and Pearson 1986; McKiernan and Morris 1994). The above studies have used different approaches to classify planning, however, the most common indicator of planning process were written long-term plan, which includes specification of goals and organisational objectives, and elaborated method for its evaluation after plan is implemented. Some of the authors argue that family owned businesses are more likely to use operational planning rather than strategic, where they tend to apply short-term goals and objectives without written document (Shrader, Mulford, Blackburn 1989). Others insist that smaller family firms do not differentiate between operational and strategic plans (Nylen 1985).

Most studies have limited view on strategy process development. The formal planning system is only one part of strategy formulation. Furthermore, strategic thinking does not necessarily take place only during formal planning. Wrapp (1967) believes that the successful manager does not spend his time in detailing objectives, he tends to muddle through problems and purpose. In order to understand the planning process in family business, categories have to be adjusted to specific features of the family-owned business. However, in order to distinguish different planning activities from one another, Rhyne's (1986) strategic planning classification will be adopted. In Rhyne's (1986) classification there are three planning categories: short-term forecasting, budgeting, annual planning, and long-range planning. Additionally, intuitive planning will be included in the research. This complementary category refers to pseudo planning which is lacking logic and structural nature of planning, however, it is unlikely that respondents will admit the absence of planning as such, thus, this category provides an opportunity to legitimate pseudo planning process. Table 1 presents strategic planning classification.

Table 1. Strategic planning classification

	Mission/objective	Time horizon
Short-term forecasting	Identify near-term operating results	Less than 1 year
Budgeting	Financial control of operating results	Normally 1 year
Annual planning	Identify problems, opportunities to maximize results on annual basis	One year
Long-range planning	Identify problems, opportunities to maximize results of current or closely related operations over a longer period	From 5 to 15 years
Intuitive planning (Pseudo planning)	Outcome of mental processes that leads to the selection of decision, mostly based on past experience	Less than 1 year

It was decided to include intuitive planning as a category in the research because discussion with some of the respondents indicated that this category is more likely to reflect their planning process (or its absence as such). Bracker, Keats, and Pearson (1988) mention this category in their case study, however, they did not include it because its orientation was not characteristic of the technically oriented industry they were observing. Moss and Atre (2003) claim that intuitive planning is based on intuition and experience and the manager usually refers to the similar activity in the past in order to resolve a new problem. Many managers no longer deny an element of intuitive thinking in their conclusions and decisions and admit its importance in planning (Umiker 1989). However, many academics believe that it can not be categorised as planning due to the uncertainty it brings and the irrational basis (Killick 1976).

Is there a link between planning and financial performance?

The extensive literature on the relationship between planning process and financial performance shows contradictory findings. While there is a strong empirical support for a positive effect of the planning on the performance, several studies showed opposite results. Appendix 1 is adapted from Rhyne (1986) and improved to include more recent studies and research on small and family businesses which was not included by the author. This table summarises the most frequently cited articles.

Numerous studies, conducted by academics as well as practitioners, have recognised the importance of strategic planning for family-owned business. Many others did not go into empirical research, instead have just highlighted that planning is valuable for firm's success (Aram and Cowen 1990; Branch 1991; Brokaw 1992; Knight 1993). However, literature provides extensive amount of research that examines whether planning increases the success rate of small and family businesses.

A positive relation between planning and financial performance was found by Bracker, Keats, and Pearson (1988) in a small electronics firms that were exercising strategic planning. Several other studies confirmed a positive correlation between planning and performance in small firms (Jones 1982; Ackelsberg and Arlow 1985; Sexton and Van Auken 1985; Bracker and Pearson 1986; Miller and Cardinal 1994). Additionally, it increases the success rate (Barton and Hounsell 1994; Frishkoff 1994), and affects the level of performance (Orpen 1985; Schwenk and Shrader 1993). Strategic planners were shown to earn higher profits than non-planners; consequently, the intensity of strategic planning is positively interlinked with profitability (Peel and Bridge 1998). Unni (1981) argued that well elaborated strategy "increases the likelihood of success in business, but the response did not reflect the extent to which they actually make use of planning" (p.56). Similarly, Ansoff et. al. (1970) found that formal planners performed significantly better than the non-planners on all the financial criteria.

A meta-analysis, conducted by Schwenk and Shrader (1993) examined the influence of formal planning on small firms' financial performance revealed that planning does have a positive effect on performance across studies.

Robinson and Pearce (1983) research for a small US banks showed that banks without formal planning performed equally with formal planners. Rhyne (1987) reported that no relationship was found between long-term planning and financial indicators. In his study Rhyne (1987) concluded that the nature of the planning process is more important than the use of the formal system itself. Others have concluded that planners outperformed non-planners, however, there was no reliable relationship between performance and planning (Wood and LaForge 1979).

In spite of all the support, quite a lot of contradictory findings have emerged. Kudla (1980), Leontiades and Tezel (1980) found no differences in performance between planners and non-planners. However, authors suggest that planning reduces the riskiness of the firms' activities. Rue and Fulmer (1973), Grinyer and Norburn (1975), Kallman and

Shapiro (1978) studies showed no evidence to support the hypothesis that planning increases financial performance.

The contradictions in findings and tenuous planning-performance link have been one of the main reasons why formal planning has been rejected as the most important and efficient way to plan (Mintzberg 1994a). One methodological explanation of such results can be crude dichotomous planning classification (formal to non-formal; planners and non-planners). A second explanation could be the influence of the environment on the type of planning employed. Some academics (Miller and Cardinal 1994; Priem et al. 1995) claim that formal strategy is suitable for unstable, dynamic environment, while others (Frederickson and Mitchell 1984; Mintzberg 1973) recommend it for stable environment and incrementalism for unstable ones. Mintzberg (1994) argues the reliability of the results is dubious since most studies used correlation analysis, which does not indicate causation. A positive correlation between planning and performance does not give strong an argument to conclude that planning pays off. Furthermore, all the studies used diverse classifications to measure the formality of planning, samples included firms with different size ranges, and conflicting performance measures. As a result, findings from previous studies were inconsistent and contradictory.

The importance of environment in the research

Environment takes a primary place in all the research because of its influence on the degree of uncertainty on the decision-making process. Uncertainty has been defined as the gap between the amount of needed information and the information available (Galbraith 1973). The environment can behave in two ways – increasing and decreasing available information for managers. Thus, in the case studies that have been examined, environments have been characterised from different dimensions, and the degree of stability/instability was the most commonly identified category that influenced decision-making process (Frederickson and Mitchell 1984; Rhyne 1987; Miller and Cardinal 1994). In the literature organisational environment has been defined as: 1) objects (customers, suppliers, competitors, and regulatory groups); 2) attributes (complexity and turbulence); 3) managerial perceptions (Bourgeois 1980).

Complexity and turbulent environments have been measured by Miller and Cardinal (1994) and Kudla (1980). Managerial perceptions were the most favourable characteristic to measure environment for Jones (1982), Lindsay and Rue (1980). Some academics assert

that it is only through managerial perceptions environment becomes “identified” to the firm (Weick 1969).

However, most of the studies have not included environment as a variable (Armstrong 1982; Robinson and Pearce 1988; Bracker, Keates and Pearson 1988). This has limited its conclusions since the result can be biased by not considering all the possible factors of influence.

Planning in Ukraine and its environment

The controlled economy in the USSR has greatly influenced Ukrainian development. From the time the Ukraine became an independent country, the economic reforms changed the conditions in which firms operate. Managers and owners have had to learn to run their companies in the free market economy where state is withdrawing its control system. The environment is rapidly changing as government and business make an attempt to build a new successful economy. However, a tight permit system hinders the development of the private sector in the Ukraine. The sanitary and epidemiological service, fire safety authorities, and local government bodies impede the functioning of business and put them under a lot of pressure. Furthermore, severe government inspections are creating an environment of constant surveillance and distrust. The research shows that small and medium firms were inspected approximately of 4 times each in 2006 alone (World Bank Group 2007).

No evidence has been found regarding the planning practices in the family business in the Ukraine. However, this research will attempt to discover the topic of planning in the Ukrainian family business. Regarding planning in the medium and large companies, it is more focused on short-run goals like increase in cash flow (Filatotchev et al. 1999).

The economic restructuring in the Ukraine affected the development of the small and medium enterprise sector in Ukraine. However, unstable legislation, corruption, unfair competition, and interference of central authorities remain the main obstacles for business (International Finance Corporation 2004).

Definition of the family business

Worldwide, family businesses employ fifty percent of the world’s workforce and produce half of its GDP (Heck and Stafford 2001; Ibrahim, Angelidis, and Parsa 2008). However, family-owned firms may vary in their size and forms. The private nature of family-owned businesses results in a lack of available information. Additionally, their collective impact

on the economy is hard to measure since there is no agreement about the definition. That is why it is important to distinguish the family business from other organisational forms.

One of the possible definitions states that if one or two members of the family employed in business it is considered to be family-owned (Beehr et al. 1997). Other defines it as a business in which family controls most of the decision-making (Rosenblatt et al.. 1985 in Ibrahim, Angelidis, and Parsa 2008). Rue and Ibrahim (1996) define family-owned businesses as those in which “the controlling interest is held by the family and in which one or more family members (including in-laws) is employed or reasonably expected to be employed in the future” (p.31).

In order to collect information for the research, family-owned business is defined as a business in which family members are directly involved or having the majority of the control. It is the most common operational definition and comparatively easy to apply in the research. However, it is crucial to specify the size of firms. This study will consider only small and medium enterprises where number of employees is not exciding 500 people.

The above chapter provides an outlook on the available literature regarding family-owned business and its relationship to planning process, level of performance and environment. More than two decades of research have not received any consistent findings. The proponents of strategic planning (Ansoff et. al. 1991) still argue with the ones who claim that planning brings too much rigidity and only impedes to cope with the environment (Mintzberg 1990). In addition, planning process – performance link has been tested in prior studies, however, prevalence of descriptive methodology leads to some doubts regarding causality of the link between categories and does not bring a new knowledge to understand the forces that drive family-owned business. For these reasons this study will make the attempt to fill these gaps using more sophisticated methods to test the propositions, for instance, various types of regression instead of simple correlation analysis. Specifically, this research seeks to determine:

Proposition 1: Ukrainian family-owned firms are more likely to have more sophisticated planning processes.

Proposition 2: The General perception of the environment is that the environment is more likely to be turbulent and unstable.

Proposition 3: There is a great likelihood that the planning-profit and planning-growth relationship among family-owned business in the Ukraine will be positively and strongly correlated.

Proposition 4: The more the environment is perceived as turbulent, the more complicated the planning process is.

Proposition 5: The greater the size and age of the firm, the greater the likelihood for higher growth rate.

Proposition 6: Size and age of the organisation are likely to be strong predictors for more complex planning processes.

CHAPTER 3

Methodology

The planning process - performance model will include planning process sophistication, profit, growth rate, firm size, age, and environment perception variables. It is believed that the above variables can have an impact on the planning strategy preference and performance measures. Graphic presentation of the model is given below.

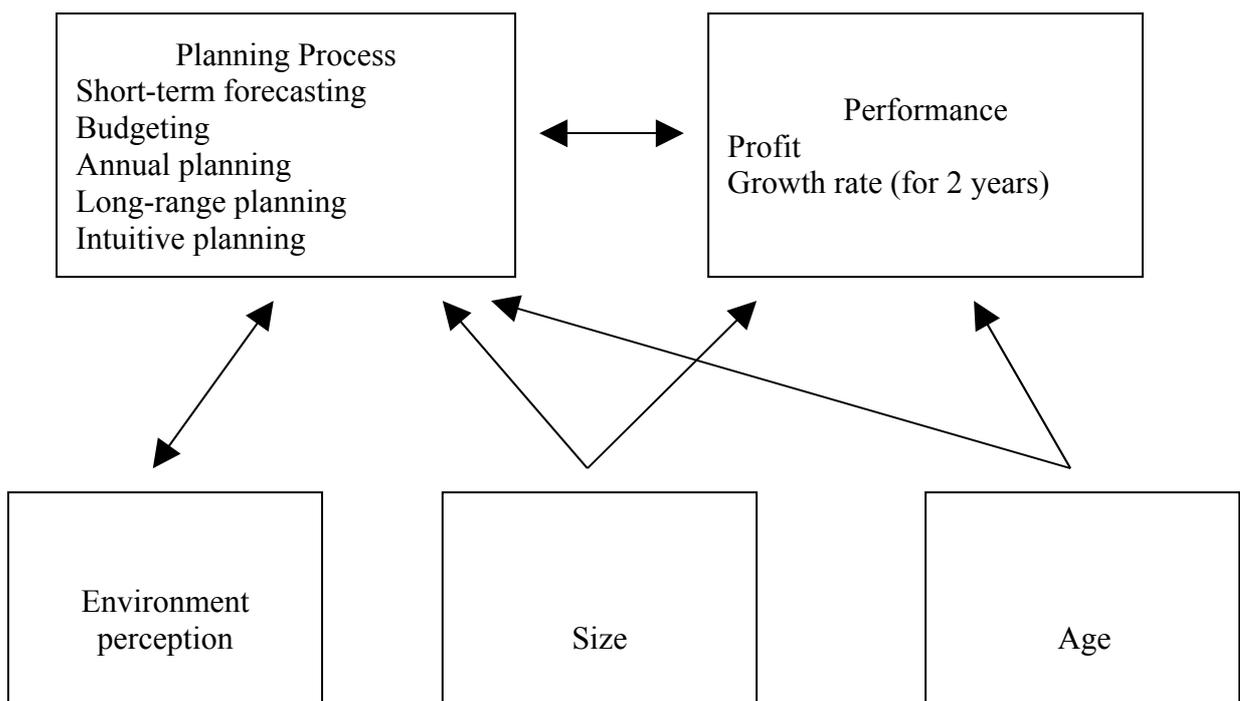


Figure 1. Planning process-performance model*

*Arrows identify direction of influence

Figure 1 presents all dependant and independent variables included in the research with the detailed categories included in the planning process and performance variables. In addition, arrows in the model show the exact directions of the influence between variables.

It was believed that model will help to present the advantages of the research by visually displaying uncommon variables in the research.

Sample

Study is based on survey of 37 small and medium family businesses in the Ukraine. Potential research firms' contact numbers were received from the German-Ukrainian Fund which provides financial investment support for small and medium family business in Ukraine (Appendix 2). Cost and time considerations limited the research in terms of a sample size. However, according to Terpstra's (1981) scale sample size greater than 30 considered to be appropriate in order to test hypotheses. Firms were included in the sample if they were family held and had no more than 500 employees. Around 150 firms were contacted by phone to enquiry about their participation in the survey and thirty-nine, 0.26 percent, were interested in participating. However, only thirty-seven were usable because two organisations did not provide financial information and could not be included in the sample. Mangione (1995) claims that this response rate is low, and is likely to distort the findings. However, Bryman and Bell (2007) argues that many respectable researchers had published their studies with a low response rate. Nevertheless, it is essential to recognise and acknowledge the implications of possible limitations arising from the low response rate and small sample size. Questionnaires (shown in Appendix 3) were sent, followed by a phone call to make sure they have received the document. This method was used to boost response rates because usually organisations in Ukraine are not willing to participate in any sort of surveys as it requires disclosing financial information and takes time to complete questionnaires. Furthermore, they were asked if they understand all the categories in the questionnaire and if they have any questions before completing the form in order to minimize possible missing or incorrect information. The sample group was selected randomly and the distribution of the industries is illustrated in table 2 below.

Table 2. Distribution of sample industries

<i>Industries</i>	<i>Number of firms</i>
Mining, road-metal production	1
Building materials, production and trading	6
Metal products	1
Soaps, cosmetics	1
Transportation, including tourist services and marine shipment	3
Wholesale trade	3
Retail trade	5
Advertising, branding and marketing	1
Hotel	1
Service	1
Alcohol production	1
Agriculture and farming industry	7
Electrical equipment	1
Footwear	1
Picture production	1
Pub and restaurant	1
Bread production	1
Cable trading	1
Total	37

It was decided to test propositions on multi-industry sample in order to explicate general environmental impact on planning process elaboration rather than investigate the possible influence factors on planning process in a single industry. Furthermore, a randomly selected sample decreases possible biases and is more likely to represent the population.

Measures

Respondents have been asked to indicate contingency variables - size and age of the organisation because they can have different influence on the final result. This was followed by various questions regarding planning process and its importance using seven-point Likert scales ranging from “unimportant” to “highly important”, and closed and open questions. It included the adopted type of planning system, assessment of the results, and various sources of information they are using to elaborate the plan. Additionally, questions about environment and its influence on planning process were included. Respondents were asked to identify their perception of environment whether its “stable”, “turbulent or unstable” or they “do not focus on it”. The Likert scales have been used in attempt to make judgements as to the extent respondents believe, agree or disagree with statements. This approach is claimed to be more conventional in attitude surveys (Bryman, Bell 2007). It

helps to process answers, enhance the comparability, clarify meanings for respondents, and is easy to complete. However, there is a possibility of losing some of the information which respondents could have come up with during the interview. That is why telephone conversations were conducted in order to cover missing information.

The firms' financial performance was evaluated by profit figures for the year 2007. Profit growth from the year 2006 to 2007 was also included in order to show more accurately firm performance. Growth rate was determined over the 2-year time frame by taking the initial year profit (2006) and subtracting it from the next year (2007) and dividing this value by the initial year profit (2006) in order to obtain profit growth for the year 2007 and was left as a continuous variable. All figures are measured in the Ukrainian national currency Grivna (GRN). The profit variable was coded in SPSS software as "Low", and "High" performers. At first, it was decided to divide them in three categories, however, the difference between profits among respondents is very big. It caused invalid results and weak strength between variables when the hypotheses were tested in SPSS. Computer software biased the results because it took some numbers as outliers. In order to obtain more valid and significant results were split into two groups.

In the analysis profit and growth measures were taken separately in order to observe whether contingency variables will influence the relationship between planning and profit differently from planning and growth. However, different kinds of tests will be applied for these variables, since profit is a categorical variable and growth rate is continuous. The dependent and independent variables will be identified and changed according to the questions that will be explored.

The average age of the firms was 8.76 years, with a range of 1-17 years. Profit ranged from GRN -285,800 to GRN 4798,000 in 2007. The number of employees ranged from 2 to 492, with an average of 71. These ranges suggest that within the limitations outlined above that respondents constitute a representative sample.

Data analysis

The research questions were tested using SPSS software which allows statistical analysis. The relationship of the performance and planning process variables was tested using non-parametric correlation analysis. In order to answer the question regarding what planning process Ukrainian firms are using, univariate analysis will be used. It helps to analyse one variable at the time, thus, using a diagram the data is displayed according to type of planning process applied amongst the sample. Frequency tables were used to provide data

regarding the number firms belonging to each category for the different questions. For example, it helped to see the overall picture about how frequently they monitor results. The same procedure was applied for analysing the general perception of environment.

Contingency tables were used in order to examine relationship between pairs of variables. Thus, a pattern of association can be shown. Additionally, the chi-square test is applied. It allows the assumption of confidence between the two variables in a population. On its own, the chi-square value means nothing, but obtains its meaning in relation to the level of statistical significance. Cramer's V test is usually reported along with chi-square test and contingency tables and represents the strength of dependency between two categorical variables (Bryman and Bell 2007).

In order to analyse the strength and direction (positive or negative) of the linear relationship between planning process and profit and between planning process and growth nonparametric correlation (2-tailed) analysis was used. Spearman coefficient was applied since this test works with ordinal and ratio variables. The same approach was applied by Rhyne (1986) for investigating the relationship between the performance variables in the planning classification. The reliability of the source allows the same tests to be used for this study in order to understand the connection between variables. In addition, some of the widely respected studies used correlation analysis to test their assumption demonstrated validity, reliability and applicability (Frederickson and Mitchell 1984; Robinson and Pearce 1988; Miller and Cardinal 1994).

To analyse last research question regarding influence of age and size on growth rate and planning process, two different tests were conducted. It was decided to use multiple regression analysis in order to explore relationship between independent variables and growth rate. Growth rate was preferable for the analysis for the reason that it gives more accurate financial information compared to profit figures. Multiple regression is used when one variable is continuous (growth rate) and others are a number of independent predictors (continuous as well). Multiple regression is similar to correlation analysis, however, more informative. This allows investigation of more complex research questions, gives more sophisticated information about the model, along with the relative contribution of each one variable to the model. Prior research has not used this particular method to test their research questions, however, it is believed that this method is more informative and gives an opportunity to explore research questions in more complex way.

Direct logistic regression was performed to assess the impact of a number of predictors on the preference of planning process. It allows testing models with categorical

dependent variables on two or more labels. Forced Entry method was used in order to test all variables in one block and assess their predictive ability altogether. In this method the dependent variable has to be dichotomous, that is why five categories were coded in two. They were distinguished on the basis of planning process sophistication, taking short-term forecasting, budgeting and intuitive planning as short-term planning; annual planning and long-range planning as long-term planning. This model was chosen in a reason of strong predictive ability that helped to obtain more informative and straightforward results.

This study combines multiple research methods in order to provide higher validity of the findings. The elaborated methods include sophisticated test which were not commonly used in prior studies. The primary data source for this research was taken directly from the respondents and believed to reflect true actions of the firms. Multi-industry sample was used in order to avoid single industry implications which can distort findings. Measures were combining a number of variables such as perceived environment, age and size that were believed to be possible predictors of planning process and performance. This improved methodology has been elaborated in order to fulfil the purposes of the research and overcome previous studies. This allowed to be confident in the research findings.

CHAPTER 4

Findings

Key findings indicate that sophistication of the planning process does appear to influence the differentiation of the level of financial performance. Conducted tests indicated significant correlation between planning process and profit and growth rate. There was no impact found in contribution of the age and size on profit growth rate. However, the next model indicated significant influence of the size of the firm on the planning process. A more detailed discussion of the findings is shown below.

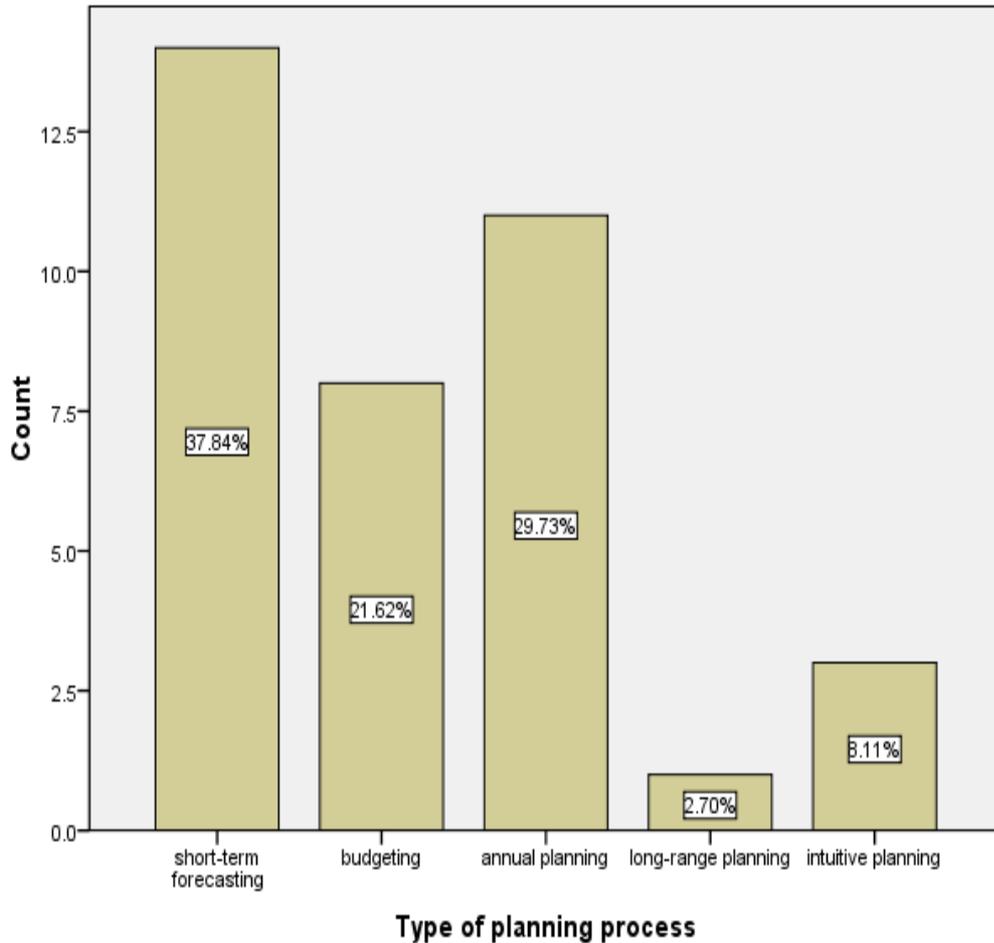


Figure 1. Distribution of planning process between Ukrainian family-owned firms

Proposition 1: Ukrainian family-owned firms are more likely to have more sophisticated planning processes.

Figure 1 displays the distribution of planning processes between sample representatives. It indicates that more than one third (37.84%) of the family-owned firms are using short-term forecasting as a planning strategy. The second most preferable planning process is annual planning (29.73%) which reveals unexpected results regarding popularity of more sophisticated planning techniques in the Ukrainian family-owned firms in this sample. Budgeting is adopted by slightly more than one fifth (21.62%) of the representatives which indicates their emphasis on financial planning rather than elaboration of the planning strategy. Long-range planning (2.7%) and Intuitive planning (8.11%) are the least employed planning processes. The above results demonstrate that Ukrainian family-owned firms do not often apply complicated process of long-range planning,

however, neither do they follow intuitive planning which is too confusing for such complicated environment they are operating (support for Proposition 1). With a different range of distribution, respondents do elaborate planning process from less (short-term forecasting) to more (annual planning) complex systems.

Proposition 3: There is a great likelihood that the planning-profit and planning-growth relationship among family-owned business in the Ukraine will be positively and strongly correlated.

As was indicated in data analysis, contingency tables (Appendix 4) were used to explore the relationship between planning process and profit in Ukrainian firms.

The level of significance was $p < 0.004$. This means that there are only four chances in 10,000 of rejecting the proposition that there is no relationship between planning process and profit rates which gives 95% of the confidence level. Appendix 4 shows that 37.8% of the respondents identified short-term forecasting as their prior planning process; 29.7% of the sample are using annual planning; budgeting, though, is practiced by 21.6% of the respondents; long-range planning (2.7%) and intuitive planning (8.1%) are the least common in practice between the representative sample. According to the high significance level and figures given above we can conclude that Ukrainian family-owned firms are more prone to use short-term planning and budgeting than to focus on long-term planning period.

The relationship between type of planning process (as measured by the type of planning process applied “short-term forecasting”, “budgeting”, “annual planning”, “long-range planning”, and “intuitive planning”) and profit (as measured by the Profit scale “low”, and “high” performance) was investigated using Spearman’s nonparametric correlation coefficient.

Table 3. Planning process-profit correlations

Correlations				
			Planning process	Profit
Spearman's rho	Planning process	Correlation Coefficient	1.000	.332*
		Sig. (2-tailed)	.	.045
		N	37	37
	Profit	Correlation Coefficient	.332*	1.000
		Sig. (2-tailed)	.045	.
		N	37	37
*. Correlation is significant at the 0.05 level (2-tailed).				

Table 3 shows that there was a medium, positive correlation between the two variables, $\rho = +.332$, $n = 37$, $p < .045$, where more sophisticated planning process associated with higher profit rates (strong support for Proposition 3). The significance level indicates 95% of the confidence level in the results that have been obtained, in spite of relatively small sample size.

Planning process and growth rate relationship (as measured by the growth scale) was measured using the same correlation coefficient. The results showed medium, positive correlation between two variables, $\rho = +.302$, $n = 37$, $p < .069$, where higher level of planning process sophistication was related to higher level of growth rate (as shown in Table 4). The level of statistical significance indicates less confidence in the results than previous. However, Pallant (2007) significance strongly influenced by sample size and moderate correlations may not reach significance at the traditional level. That is why he claims that it is more important to focus on the strength of the relationships between variables rather than on significance level.

Table 4. Planning process-growth rate correlation

Correlations				
			Planning process	Growth rate
Spearman's rho	Planning process	Correlation Coefficient	1.000	.302
		Sig. (2-tailed)	.	.069
		N	37	37
	Growth rate	Correlation Coefficient	.302	1.000
		Sig. (2-tailed)	.069	.
		N	37	37

Correlation is significant at the 0.05 level (2-tailed).

Contingency table analysis was not applicable for planning process – growth test, because growth rate is a continuous variable. However, correlation analysis gives sufficient information to explore the relationship between two variables.

Difference in significance levels between profit and growth rate can be explained by differences in measurement that have been applied for every variable. Profit was grouped in categories, though, growth rate was set as continuous variable.

Proposition 2: The General perception of the environment is that the environment is more likely to be turbulent and unstable and Proposition 4: The more the environment is perceived as turbulent, the more complicated the planning process is.

The relationship between perceived environment and planning process sophistication an investigation about general perception should be made. Proposition 2 suggests that general perception of the environment is more likely to be turbulent and unstable. In addition, Proposition 4 will be tested which states that more perceived environment is turbulent for the respondents, the more complicated their planning process is. Table 5 below shows obtained results.

Table 5. Distribution of the environment perception

The perception of the environment				
	Frequency	Percent	Valid Percent	Cumulative Percent
Mostly stable	7	18.9	18.9	18.9
Mostly unstable	19	51.4	51.4	70.3
Do not focus on it	11	29.7	29.7	100.0
Total	37	100.0	100.0	

More than a half of the respondents (51.4%) believe that they operate in the unstable and turbulent environment. In the conversations after they have filled questionnaires some of the representatives designated political and economical instability in the country which influences, sometimes even restrains, on their work. However, 18.9% identified their surrounding environment as stable. Almost 30% of the respondents have chosen ignorant position towards environment without any specific concerns about it. They do not take into account its influence on their operations.

In order to be more specific, cross tabulations were applied to investigate the relationship between planning process and environment perception. It gives an opportunity to look at the summary information.

Table 6. Planning process-environment perception cross tabulation

Planning process and environment perception				
Planning process applied	Environment perception			
	Mostly stable	Mostly unstable	Do not focus on it	Total
Short-term forecasting	6	3	5	14
	85.7%	15.8%	45.5%	37.8%
Budgeting	1	5	2	8
	14.3%	26.3%	18.2%	21.6%
Annual planning	0	10	1	11
	.0%	52.6%	9.1%	29.7%
Long-range planning	0	1	0	1
	.0%	5.3%	.0%	2.7%
Intuitive planning	0	0	3	3
	.0%	.0%	27.3%	8.1%
Total	7	19	11	37
	100.0	100.0	100.0	100.0%
	%	%	%	

$X = 22.326, p < .05$

In order to prove significance and examine confidence level of the results Chi-square and Cramer's tests were conducted. A Chi-square test for independence shows significant association between environment perception and planning process applied. Cramer's V indicates the strength of the relationship between two variables. In the result above Cramer's V is 0.549. This suggests that there is strong dependency between the perception of the environment and planning process.

Table 6 above shows that 52.6% of the representatives from the sample, who consider their environment as unstable, adopting annual planning. Covering 26.3% of the total feedback, budgeting was second ranked as a planning process in the unstable environment, and this was followed by 15.8% practising short-term forecasting. Representatives with stable perception about the environment are more prone to implement short-term forecasting (85.7%) as a planning strategy. Furthermore, short-term forecasting (45.5%) and intuitive planning (27.3%) were more favourable among managers who do not consider environmental influence in their planning process strategy. The impact of environment perception on the planning process suggests that unstable environment does concerns sample representatives and it is more likely to influence on their planning process strategy (Proposition 4 is correct). However, the above tests show association between two variables but not the direct causality.

Propositions 5 and 6 investigate relationship between age and size as independent variables, and 1) profit growth rate and 2) planning process as dependant ones respectively.

Proposition 5: The greater the size and age of the firm, the greater the likelihood for higher growth rate.

In order to test Proposition 5 standard multiple regression model was used to assess the influence of two control measures (age, and size) on the growth rate among the Ukrainian firms. This model can be expressed as:

$$Y_i = a + b_1X_1 + b_2X_2 + E_i,$$

where

- Y_i is the dependant variable (profit growth)
- X_1 is the first independent variable (age)
- X_2 is the second independent variable (size)
- E_i is the error of prediction

Collinearity diagnostics included testing two values: Tolerance and VIF. Tolerance explains the independence between two variables. The other value is the inverse of the Tolerance value. In this research, the tolerance value for each one independent variable is .957 (which is significant level), therefore, the multi-collinearity assumption was not violated. This is also supported by VIF value, which is 1.044 and well below critical level of 10. These results are not unexpected, given that correlation analysis between independent variables was only .365, which has to be less than .7 for all variables to be retained. Furthermore, outliers were checked using the Mahalanobis distances that are produced along with multiple regression program. Linearity plot is given in Appendix 5. In order to identify which cases are outliers, chi-square value has to be determined. The maximum value in the data file is 13.729 which is less than the critical value (13.82). It suggests the normal distribution, however, the output was examined for unusual cases. In normal distribution it is expected for 1% of the cases to fall out.

Table 7. Illustration of the model outliers

Casewise Diagnostics ^a				
Case Number	Std. Residual	Growth rate	Predicted Value	Residual
24	-4.545	-22.33	-1.1580	-21.17033
a. Dependent Variable: growth rate				

As it shown in the table 7, case number 24 recorded a growth rate of -22.33%, but model predicted only -1.1580%. Evidently, model did not predict this firm's growth rate very well – it is much less than we expected. In order to check if this particular case is having any excessive influence on the results of the total model Cook's Distance test has to be verified. It scored .422 (less than 1), suggesting no major problems. Next step is evaluation of the model. This tells how much percent in the dependent variable (growth model) is explained by the model (which includes the variables of age and size).

Table 8. Evaluation of the model

Model Summary ^b				
Model 1	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.283 ^a	.260	.263	4.65829
a. Predictors: (Constant), size, age				
b. Dependent Variable: growth rate				

As table 8 demonstrates, in the model summary box R Square represents this value which is .263. Expressed as a percentage (multiply by 100) this means that model explains only 26.3% of the variance in growth rate. This is quite a small result that can suggest that this model (independent variables in particular) can not predict growth rate (Proposition 5 is not supported).

The final step in the model evaluation is to examine the contribution of each independent variable included in the model. To do so, the Beta value has to be compared. It is larger for age variable than for size (-.286 and .107, respectively), however, significance level is greater than .05 which means that variables are not making significant contribution to predict dependent variable (shown in Appendix 4). The result above indicate validity and reliability of the model, however, independent variables (age and size) can not predict growth rate for Ukrainian firms.

Proposition 6: Size and age of the organisation are likely to be strong predictors for more complex planning processes.

Direct logistic regression applied to explore the relationship in the model contained two independent variables (age and size) and one dependant – planning process. This model can be expressed as:

$$Z_{ik} = b_{k0} + b_{k1}X_{i1} + b_{k2}X_{i2},$$

Where

- Z_{ik} is the dependant variable (planning process)
- X_i is the predictor for the i case (X₁ is age; X₂ is size)
- B_k is the regression coefficient for the kth observed variable

The full model (including all independent variables) was statistically significant, χ^2 (2, N=37) = 9.86, $p < .008$, indicating that the model performed well and separated

respondent who chose short-term planning from those who chose long-term planning. The model in total explained between 23% (Cox and Snell R square) and 32.2% (Nagelkerke R square) of the variance in planning process, and correctly classified 75.7% of cases.

Table 9. The contribution of each of predictor variables

Variables in the Equation									
		B	S.E.	Wald	df	Sig.	Odds Ratio	95.0% C.I. for Odds Ratio	
								Lower	Upper
Step 1	age	-.178	.100	3.173	1	.075	.837	.688	1.018
	size	.011	.005	5.475	1	.019	1.011	1.002	1.020
	Constant	-.059	.811	.005	1	.942	.943		

As shown in Table 9, only one independent variable made a unique statistically significant contribution to the model – it is size (proposition 6 is partially supported). The predictor of preference in planning process was size of the company, recording an odds ratio of 1.011. This indicated that respondents with larger number of employees engaged in a company were over 10 times more likely to report long-term planning involved in their planning process over those who had smaller number of employees. Age does not impact on the planning process in the Ukrainian family firms. Its significance level is small in the model.

CHAPTER 5

Discussion

The six propositions were investigated in this study:

Proposition	Results
<i>Proposition 1: Ukrainian family-owned firms are more likely to have more sophisticated planning processes.</i>	Supported
<i>Proposition 2: The General perception of the environment is that the environment is more likely to be turbulent and unstable.</i>	Supported
<i>Proposition 3: There is a great likelihood that the planning-profit and planning-growth relationship among family-owned business in the Ukraine will be positively and strongly correlated.</i>	Supported
<i>Proposition 4: The more the environment is perceived as turbulent, the more complicated the planning process is.</i>	Supported
<i>Proposition 5: The greater the size and age of the firm, the greater the likelihood for higher growth rate.</i>	Not supported
<i>Proposition 6: Size and age of the organisation are likely to be strong predictors for more complex planning processes.</i>	Partial support

They were directed to discover planning process which the Ukrainian family-owned firms are using, along with the perception of the environment. The relationship between planning process and financial performance and perceived environment were tested. Furthermore, tests were conducted in order to explore the links between age and size from one side and performance and planning process on the other. The results of the analysis will be presented below.

Planning process. The research indicated that short-term forecasting (37.84%) is the most common planning process applied by the firms. Annual planning (29.73%) is employed by relatively high number of firms as well, along with budgeting (21.62%) which was slightly less popular. It was reported that the least frequent planning processes were long-range planning and intuitive planning (2.7% and 8.11%, respectively). The results demonstrate that Ukrainian family-owned firms do not often apply complicated

process of long-range planning, however, neither do they follow intuitive planning which is too confusing for the complicated environment in which they are operating (support for Proposition 1). With a different range of distribution, respondents do elaborate planning process from less (short-term forecasting) to more (annual planning) complex systems. These findings show that the planning process of family firms is more complex than generally perceived and they have moved from day-to-day management to more strategic planning (Rue and Ibrahim, 1996). The prior research suggests similar findings among family-owned businesses, indicating the employment of the complex planning processes (Unni, 1981; Jones, 1982).

General perception of the environment. More than a half (51.4%) of the respondents perceive their surrounding environment as mostly unstable. However, 18.9% believe that they operate in mostly stable environment. These seven sample representatives are engaged in generally stable, government protected industries or too small to feel major influence of the environment changes. For example, there is a bread producer among them which is a vital industry and artificially maintained to be stable. The rest are micro businesses. Furthermore, the remaining respondents (29.7%) claim they do not focus on the environment in their planning process. Still, before looking for possible explanations the fact that all sample respondents are representatives of diverse industries that can vary in governmental control and reorganisation (which is still part of the policy and economy elaboration in the Ukraine) to a different extend should be considered. However, the use of the analysis of perceptions measures in research shows a high degree of internal consistency in respondents' engagements with a research instruments. Therefore, perceptual measures are deemed to have a reasonable degree of reliability.

Planning process-profit. Results showed that planning process was positively and significantly related to profit. Planning process was defined in four categories (short-term forecasting, budgeting, annual planning, long-range planning, and intuitive planning) in order to extend the research and overcome limitations of prior studies where planning process sophistication was measured using presence of written documentation as a proxy and firms were divided on two groups – planners and non-planners (Kudla 1980; Jones 1982; Robinson and Pearce 1983; Boyd 1991). The contingency table 6 indicated that annual planning (44.4%) and budgeting (38.9%) were the most common between strategy process techniques adopted by high performing family-owned businesses, thus, short-term forecasting (63.2%), annual planning (15.8%) and intuitive planning (10.5%) were applied by low performers. Significance level indicated by statistical tests gave a 95% confidence

level. Consequently, there is high reliability of the received results. Correlation analysis revealed strong positive relationship between variables ($\rho = +.332$, $n = 37$, $p < .045$), where more sophisticated planning process are associated with higher profit rates.

Results are consistent with prior studies which showed that firms employing higher levels of planning outperformed all other categories in terms of profitability (Rhyne 1986; Bracker and Pearson 1986; Bracker, Keats and Pearson 1988; Miller and Cardinal 1994). Findings suggest that planning sophistication may be one of the most crucial aspects in planning activity. This assumption was investigated by Orpen (1985) where results proved that quality of planning process is the most significant determinant of the level of financial performance. However, it is risky to conclude that more sophisticated planning process is the only one cause of the superior performance of the firms. There is a high possibility that these companies are engaged in more advanced management practices and might be more analytically oriented. Therefore, it is most likely that higher levels of planning process are characteristic of better managed firms.

Planning process-growth. Planning process was found to be moderately and positively related to growth. Planning was defined identically with the above test, however, growth is the measure obtained from 2-year profit figure. This test was performed in order to provide more accurate analysis of the relationship between planning process and profitability. The correlation coefficients ($\rho = +.302$, $n = 37$, $p < .069$) indicated that higher levels of planning process sophistication was related to higher levels of growth rate. The level of statistical significance was lower than traditionally accepted, however, some authors claim that significance level is influenced by sample size and in this situation it is more important to focus on strength of the relationships (Pallant 2007). In addition, there are big differences between sample representatives in terms of growth rate that can bias findings and reveal less strong relationships. Unlike the profit category, which was grouped, growth was left as a continuous variable that explains differences in obtained results. A number of outliers in growth data could have caused a noise in the data. However, in spite of this obstruction, the results indicated positive relationship between categories. Miller and Cardinal (1994) found that uncontrolled industry effect reduces the empirically observed planning-growth relationship and that is why strength and significance level is lower than usually expected. Planning process-growth relationship was supported by a number of prior studies which are consistent with received findings (Thune and House 1970; Bracker, Keats and Pearson 1988).

Perceived environment-planning process. Analysis of the general perception of the environment showed that 51.4% of the respondents believe they run their firms in mostly unstable and turbulent environments. On the other hand, 18.9% think their business environment is mostly stable and does not disturb or hinder their actions. The remaining 29.7% of the sample does not take into account such factors as environmental determinants and are not concerned about the impact of environment on performance. These findings raise the question as to why these perceptions are so different. In this research the companies were members of eighteen industries, not one particular industry where it is possible to control industry effect. That is why political or governmental factors may have different impacts on firms' actions and, thus, the environment. In addition, some companies might be highly dependant on international policies and law for a reason of exporting goods like, for instance, agricultural enterprises which are usually selling a part of their goods abroad.

Cross tabulation analysis indicated that more than a half of the representatives (52.6%) are concerned with the instability of their environment and employ annual planning. The remaining categories, budgeting (26.3%) and short-term forecasting (15.8%) were less popular. Owners with stable environment perception are more likely to employ short-term forecasting (85.7%) and budgeting (14.3%) as a form of planning strategy. These findings concerning environment are particularly interesting in light of the ongoing debate over whether stable or unstable environment requires more sophisticated planning process in order to increase competitiveness (Mintzberg 1990; Ansoff 1991). Results showed that Ukrainian family-owned firms are more tend to use more sophisticated planning process in turbulent environment than firms in stable ones. Moreover, short-term forecasting (45.5%), intuitive planning (27.3%) and budgeting (18.2%) were employed by owners who do not focus on the environmental impact on their management. Significance tests (Cramer's $V = 0.549$; Chi-square = 22.326, $p < .05$) showed strong dependency between the perception of the environment and planning process. However, the above tests show association between two variables but not the direct causality.

Differences in planning processes employed by firms from industry to industry might also be influenced by the degree of competitiveness in the market place (Thune and House 1970). Most of representatives with a perception of a stable environment operate in industries with a lower rate of new product introduction and technological innovation. That is why it appears to be a reasonable explanation that more sophisticated planning process are primarily exercised in more rapidly changing environments.

Age, size-profit growth. Application of the standard multiple regression model ($Y_i = a + b_1X_1 + b_2X_2 + E_i$) revealed no relationship between age and size of the firm and profit growth (in this case performance). Beta value indicated significant results for independent variables (age=-.286 and size=.107), though, it does not make significant contribution to predict profit growth because significance level was greater than traditionally accepted ($p < 0.005$). All model assumptions were not violated which supports the reliability of the results. However, performed tests showed that the model explains only 26.3% of the variance in the growth rate which means that age and size are not high predictors of growth rate. Findings indicate validity and reliability of the model, however, independent variables (age and size) can not predict growth rate for the Ukrainian firms.

A continuation of this research will require more examination and exploration of the possible variables that can predict profit growth rate in order to build a more advanced model. One of the primary limitations of this test is the comparatively small sample size. A bigger population of firm might provide more significant results in order to assess this model more accurately. In addition, big overlaps between representatives in terms of age and size might have decreased significance of the independent variables.

This research brought important results for the reason that variables such as size and age were not examined directly in terms of their relationship with profit growth in prior studies. Furthermore, a multiple regression model of analysis has not been performed in previous studies where correlation test was the most common way to explore relationships between variables (Frederickson and Mitchell 1984; Rhyne 1986; Robinson and Pearce 1988; Miller and Cardinal 1994). The advantages of this test compared to simple correlation are as follows: First, unlike regression analysis, correlation does not show a best-fit line. It simply indicates how much one variable changes when the other one changes as well. Second, regression shows cause and effect as it determines the best way to predict variables, which is different from correlation that only shows the degree of relatedness between them. The last, but not least advantage is that with correlation it is not important how variables are set, however, with regression it matters a lot because it is not the same if X predicts Y or otherwise. Therefore, a conclusion can be made that current research overcomes prior ones in terms of applied methodology for exploring relationships between variables and brings more in-depth knowledge about the subject.

Age, size-planning process. Application of the direct logistic regression model ($Z_{ik} = B_k0 + B_k1X_{i1} + B_k2X_{i2}$) showed that only one characteristic in the model made a significant contribution to predict planning process sophistication, namely the size.

According to the results, size is the variable that impacts upon the level of planning process. The model indicated that firms with a larger number of employees engaged in a company tend to employ a higher level of planning process and were over 10 times more likely to report long-term planning processes over those who had smaller number of employees. The model in general was statistically significant ($\chi^2 (2, N=37) = 9.86, p < .008$) with a high level of performance. As for the age it was found that it does not impact on the planning process in Ukrainian family firms. Its significance level is small in the model.

The direct logistic regression model was chosen because of its strong predictive ability that helped to obtain more informative and straightforward results. In this research different tests were applied for different questions in order to provide more accurate results because the validity of the finding depends greatly upon what test is used. The five categories of planning process were grouped into two (short-term planning and long-term planning) in order to avoid ambiguity in the findings and obtain more significant result. On the one hand, it limited the research by grouping planning process in too narrow categorisation. On the other hand, however, the obtained results are more informative and significant. In addition, no case study was found with similar findings because most of them are focused on exploring relationship between financial performance and size and/or age, rather than planning process (Bracker, Keats, and Pearson 1988; Miller and Cardinal 1994).

Several respected authors (Mintzberg 1973; Lorange and Vancil 1976) claimed that the size of the organization can influence strategic decision process, however, no one focused on planning process in particular. Furthermore, in their studies they have used simple correlation analysis and restricted their research to a controlled industry effect. Therefore, current findings enrich knowledge about impact of age and size on planning process, however, more research should be done.

Limitations

The current study focused on limited set of planning process categories, and in no way exhausted the potential number of performance characteristics. Partially, the sample size had an impact on the research in general. Though, the relatively small number of planning process characteristics associated with performance has received limited research in the first place. Additionally, financial results were a base to measure the performance in the current study, and while being important indicator, they not necessarily reflect the full

bunch of strategic performance. Further research must explore more accurately specific characteristics and value of planning process and its relationship to performance measures.

In the research it is clearly shown that more complex planning processes are related to higher profit rates, however, correlation analysis displays the direction and strength of the relationships, but not the causation effect. The other possible limitation to the research is comparatively small time frame to reflect accurate year-to-year firm performance. However, considering time and resources available to conduct the research it was challenging even to obtain information for 2-year profit figures. Nevertheless, financial information was given under the conditions of promised anonymity which suggests the reflection of true performance statistics.

Although low response rate may have had some impact on findings, acceptance of the low response rate in published studies suggests that obtained results are valid.

CHAPTER 6

Conclusions and Future research

The dissertation started as a very ambitious work. It has reached its initial objectives, but more research needs to be done for better understanding of the reasons for the family firms that underpin the choice of planning process. The presentation of the main accomplishments will follow below, along with direction for future research.

This dissertation considered the problem of the status of planning process in Family-owned businesses in the Ukraine and its relationship to the financial performance, environment perception, firm size and age. The emphasis of this research was on exploring the most common planning processes that firms are using, investigating their general perception of the environment and its relationship and impact on the employed planning process, additionally examining planning process-profit and planning process-growth relationship. While these findings constitute important contributions to the body of knowledge, they lack “scientificity” aura that is usually the characteristic of analysis on a large number of cases. However, the number of cases upon which research questions were tested is enough to prove common patterns and present reasonably valid results.

The purpose of this research was to provide more information about planning processes and its relation of Ukrainian family-owned firms, an area that has not been properly explored in previous research. Growing importance of the family-owned businesses in a weak Ukrainian economy should not be deliberately minimised and needs particular attention. That is why understanding the significance of planning efforts and its

impact on the performance is a worthwhile research topic. In addition to straightforward planning process-performance research that prevails in the literature, additional factors were tested (perceived environment, age and size) in order to understand what other contingencies influence on the planning process and performance. Family-owned businesses have been largely ignored in the past research and examination of their planning practices was meant to fill the gaps in the literature. This complicated assignment has not been fulfilled to my complete satisfaction, however, with more resources and time it can be accomplished.

The results that have been discovered are important for a number of reasons. They indicate that the planning processes of family-owned businesses are more complex than generally perceived. Nearly one third (29.73%) of the respondents reported that they employ annual planning which indicates that they employ more sophisticated planning practices.

Regarding environment perception of the representatives, findings revealed that 51.4% of the respondents believe they run their firms in mostly unstable and turbulent environment. Further research demonstrated that Ukrainian family-owned firms are more likely to tend to use more complex planning process in turbulent environments than firms in stable ones. These findings concerning environment are particularly interesting in light of the ongoing debate between supporters of the Classical perception of strategy and planning (Chandler 1962; Ansoff 1991) and supporters of the Processual perspective (Pettigrew 1992; Mintzberg 1990) over whether stable or unstable environment requires more sophisticated planning process in order to increase competitiveness and performance. This particular topic was highlighted in the literature review. Our findings present straightforward results supporting the perspective that family-owned firms are employing more complex planning processes in turbulent environments.

Consistent with expectations, results showed that planning process positively affect performance. Researchers (Lindsay et. al. 1981; Robinson and Pearce 1983) who have concluded that more sophisticated planning process does not generally benefit firm performance appear to have been mistaken. A large amount of studies reported similar findings, therefore, implications for strategic management theory are not essentially new, however, have they been ignored by the researchers presenting a case for a particular economy such as, for instance, Ukrainian transformation economy. Researchers who are involved in planning process empirical investigation have focused on representatives of the

developed countries, mostly avoiding the status of planning process in newly established countries where its finding might have crucial impact on the economy development.

Unexpected results were received regarding the impact of the age and size on the planning process and performance. They indicated that profit growth was not influenced by size or age. We believed that these two categories will be determinants of firms' performance or at least will show some correlation in the relationship. However, findings revealed negative results. Further suggestions will be to test these relationships on bigger sample in order to reassess current findings. Notwithstanding, direct logistic regression (proposition 6) model showed that size is a predictor of the planning process sophistication. These findings revealed important knowledge that has not been tested in prior research and brings valuable contribution to the body of knowledge.

From a practical viewpoint, the study of planning process in family business would benefit from improved research methods. In this research, probability samples were used. It is interesting what results will be if control groups will be tested instead. In previous research only Van de Ven (1980) did this, however, he was investigating program planning process, with no relationship to firms' performance. Therefore, control groups are quite new area for research regarding planning process. However, this type of research will give an opportunity to look more closely at unique ways to run a business such as family ones, possibly revealing inimitable characteristics of family-owned firms that can indirectly influence business performance. By assumption, among them can be next-generation leadership, resistance to change, sibling conflicts, incompatible family goals, and so on. Usually these problems are not getting enough attention. However, they have to be considered while researching family business.

Improved family firm research will offer more advanced theoretical base for the future research to be conducted. It has come far but still has a long way to go.

BIBLIOGRAPHY

- Ackelsberg, R. and Arlow, P. (1985) 'Small businesses do plan and it pays off' *Long Range Planning*, 18 (5), pp.61-67
- Ackoff, R.L., (1970) *A concept of corporate planning*, New York: Wiley
- Ansoff, I., (1970) *Toward a strategic theory of the firm*, in I. Ansoff (ed.), *Business Strategy*. Baltimore: Penguin
- Ansoff, I. (1991) Critique of Henry Mintzberg's 'The Design School: Reconsidering the basis premises of strategic management', *Strategic Management Journal*, 12, pp.449-61
- Ansoff, I., and McDonnell, E. (1990) *Implanting strategic management*, Prentice Hall, 2nd
- Ansoff, I., Avner, J., Brandenburg, R.G., Porter, F.E., and Radosevich, R. (1970) 'Does planning pay? The effect of planning on success of acquisitions in American firms', *Long Range Planning*, 3 (2), pp.2-7
- Aram, J., and Cowen, S. (1990) 'Strategic planning for increased profit in the small business', *Long Range Planning*, 23 (6), pp.63-70
- Armstrong, J.S. (1982) 'The value of formal planning for strategic decisions: Review of empirical research', *Strategic Management Journal*, 3 (3), pp.197-211
- Barry, B. (1975) 'The development of organization structure in the family firm', *Journal of General Management*, Autumn, pp.42-60
- Barton, F.C., and Hounsell, D. (1994) 'Accountants find success in business succession planning', *Practical Accounting*, 27, pp.18-22
- Beehr, T.A., Drexler, J.A., and Faulkner, S. (1997) 'Working in small family businesses: Empirical comparisons to non-family businesses', *Journal of Organisational Behaviour*, 18 (3), pp.297-312
- Bourgeois, L.J. III (1980) 'Strategy and environment: A conceptual integration', *Academy of Management Review*, 5 (1), pp.25-39
- Bracker, J.S. Keats, B.W., and Pearson, J.N. (1988) 'Planning and financial performance among small firms in a growth industry', *Strategic Management Journal*, 9 (6), pp.591-603
- Bracker, S.J., and Pearson, J.N. (1986) 'Planning and Financial Performance of Small, Mature Firms', *Strategic Management Journal*, 7 (6), pp.503-22
- Branch, S. (1991) 'A good plan is a key to business success', *Black Enterprise*, 22, pp.68-70
- Brews, P.J., and Hunt, M.R. (1999) 'Learning to plan and planning to learn: Resolving the planning school/learning school debate', *Strategic Management Journal*, 20, pp.889-913

- Brokaw, L. (1992) *The secret of great planning*. Inc., 14, pp.151-57
- Byars, L.L. (1992) *Concepts of strategic management*, Harper Collins, NY
- Carlock, R., and Ward, J. (2001) *Strategic planning for the family business: Parallel Planning to unite the family and business*, Palgrave Macmillan, 1st ed.
- Chandler, A. (1962) *Strategy and structure*, Cambridge, MA
- Dror, Y. (1964) 'Muddling Through – "Science" or Inertia?', *Public Administrator Review*, pp.153-57
- Filatotchev, I., Wright, M., Buck, T., and Zhukov, V. (1999) 'Corporate entrepreneurs and privatized firms in Russia, Ukraine, and Belarus', *Journal of Business Venturing*, 14 (5-6), pp.475-92
- Frederickson, J.W., and Mitchell, T.R. (1984) 'Strategic decision process: Comprehensiveness and performance in an industry with an unstable environment', *Academy of Management Journal*, 27, pp.299-343
- Galbraith, J. (1973) *Designing Complex Organizations*, Reading, MA: Addison-Wesley Publishing Co.
- Greenley, G.E. (1989) *Strategic management*, Prentice Hall
- Grinyer, P.H., and Norburn, D. (1975) 'Planning for existing markets: Perceptions of executives and financial performance', *Journal of the Royal Statistical Society*, 138 (1), pp.70-97
- Harris, D., Martinez, J.L., & Ward, J.L. (1994) 'Is strategy different for the Family owned businesses?', *Family Business Review*, 7(2), pp.159-76
- Heck, R., Stafford, K. (2001) 'The vital institution of family business: Economic benefits hidden in plain sight', in G.K. McCann and N. Upton (eds.), *Destroying myths and creating value in family businesses* (pp.9-17). Deland, FL: Stetson University
- Herold, D.M. (1972) 'Long-range planning and organisational performance: A cross-valuation study', *Academy of Management Journal*, pp.91-102
- Hillidge, J. (1990) 'Planning for growth in a small company', *Long Range Planning*, 23, pp.76-81
- International Finance Corporation (2004) *Business environment in Ukraine: Ukraine SME survey and policy development project with the financial support of the Ministry of Foreign Affairs of Norway*, International Finance Corporation. Available [www.ifc.org/ifcext/eca.nsf/AttachmentsByTitle/UkraineSMESurvey_2004_Eng/\\$FILE/UkrSMESurvey_2004_Eng.pdf](http://www.ifc.org/ifcext/eca.nsf/AttachmentsByTitle/UkraineSMESurvey_2004_Eng/$FILE/UkrSMESurvey_2004_Eng.pdf). Accessed on 17 Jun 2008

International Finance Corporation. *Small and Medium Enterprises as a Driver of Sustainable Growth and a Strengthened National Economy*, World Bank Group. Available at:

[www.siteresources.worldbank.org/UKRAINEEXTN/Resources/BusinessEnvironmentSurvey Report_2007_Eng.pdf](http://www.siteresources.worldbank.org/UKRAINEEXTN/Resources/BusinessEnvironmentSurveyReport_2007_Eng.pdf). [Accessed on 01 Jun 2008]

Ibrahim, N., Angelidis, J., and Parsa, F. (2008) 'Strategic management of family businesses: Current findings and directions for future research', *International Journal of Management*, 25 (1), pp.95-110

Jones, W.D. (1982) 'Characteristics of planning in small firms', *Journal of Small Business Management*, 20 (3), pp.15-19

Kallman, D.W., and Shapiro, H.J. (1978) 'The motor freight industry – A case against planning', *Long Range Planning*, 11 (1), pp.81-86

Killick, T. (1976) 'The possibilities of development planning', *Oxford Economic Papers*, 28 (2), pp.161-84

Knight, R.A. (1993) 'Planning: The key to family owned business survival', *Management Accounting*, 74, pp.33-34

Kudla, R.J. (1980) 'The effects of strategic planning on common stock returns', *The Academy of Management Journal*, 23 (1), pp.5-20

Leontiades, M., and Tezel, A. (1980) 'Planning perceptions and planning results', *Strategic Management Journal*, 1, pp.65-75

Lindblom, C. (1959) 'The science of muddling through', *Public Administrative Review*, Sept., pp.79-88

Lindsay, W.M., and Rue, L.W. (1980) 'Impact of the organisation environment on the long-range planning process: A contingency view', *Academy of Management Journal*, 23, pp.385-404

Lorange, P., and Vancil, R.A. (1976) 'How to design a strategic planning system', *Harvard Business Review*, 54 (5), pp.75-81

McKiernan, P., and Morris, C. (1994) 'Strategic planning and financial performance in UK SMEs: Does formality matter?', *British Journal of Management*, 5 (s1), p.s31-s41

Miller, C.C., and Cardinal, L.B. (1994) 'Strategic Planning and Firm Performance: A Synthesis of More than Two Decades of Research', *The Academy of Management Journal*, 37 (6), pp.1649-665

Mintzberg, H. (1973) 'Strategy-Making in Three Modes', *California Management Review*, 16 (2), pp.44-53

Mintzberg, H. (1987) 'The Strategy Concept II: Another look at why organisations need strategies', *California Management Review*, 30 (1), pp.25-32

- Mintzberg, H. (1994) *The Rise and Fall of Strategic Planning*, Prentice Hall International
- Mintzberg, H. (1994a) 'Rethinking strategic planning. Part II: New roles for planners', *Long Range Planning*, 27 (3), pp.22-30
- Mintzberg, H., and Waters, J. (1985) 'Of strategies deliberate and emergent', *Strategic Management Journal*, 6, pp.257-72
- Moss, L.T., Atre, S. (2003) *Business intelligence roadmap: The complete project lifecycle for decision-support applications*, Addison-Wesley
- Nylen, D.W. (1985) 'Making your business plan an action plan', *Business*, 35, pp.12-16
- Orpen, C. (1985) 'The effects of long-range planning on small business performance: A further examination', *Journal of Small Business Management*, 23 (1), pp.16-32
- Pallant, J. (2007) *SPSS – survival manual: A step by step guide to data analysis using SPSS for Windows*, Open University press, 3rd ed.
- Peel, M.J., and Bridge, J., (1998) 'How planning and capital budgeting improve SME performance', *Long Range Planning*, 31 (6), pp.848-56
- Pettigrew, A.M. (1992) 'The character and significance of strategy process research', *Strategic Management Journal*, 13 (special issue), pp.5-16
- Priem, R.L., Rasheed, A.A., and Kotulic, A.G. (1995) 'Rationality in strategic decision process, environmental dynamism and firm performance', *Journal of Management*, 21 (5), pp.913-29
- Quinn, J. (1980). *Strategies for Change. Logical Incrementalism*, Homewood, Ill: Irwin, p.222
- Rhyne, L.C. (1985) 'The relationship of informative usage, characteristics to planning system sophistication: An empirical examination', *Strategic Management Journal*, 6, pp.319-37
- Rhyne, L.C. (1986) 'The Relationship of Strategic Planning to Financial Performance', *Strategic Management Journal*, 7 (5), pp.423-36
- Rhyne, L.C. (1987) 'Contrasting planning systems in a high, medium and low performance companies', *Journal of Management Studies*, 24 (4), pp.363-85
- Robinson, R.B., and Pearce, J.A. (1983) 'The Impact of Formalized Strategic Planning on Financial Performance in Small Organizations', *Strategic Management Journal*, 4 (3), pp.197-207
- Robinson, R.B., and Pearce, J.A. (1984) 'Research thrusts in small firm strategic planning', *Academy of Management Review*, 9 (1), pp.128-37

- Rue, L., and Ibrahim, N. (1996) 'The status of planning in smaller family-owned business', *Family Business Review*, 9 (1), pp.29-43
- Rue, L.W., and Fulmer, R.M. (1973) 'Is long range planning profitable?', *Proceedings of the Academy of Management*, Boston, Mass., pp.66-73
- Schwenk, C., and Shrader, C. (1993) 'Effects of formal strategic planning on financial performance in small firms: A meta-analysis', *Entrepreneurship Theory and Practice*, 17 (3), pp.53-64
- Sexton, D.L., and Van Auken, P.M. (1982) 'Prevalence of strategic planning in the small business', *Journal of Small Business Management*, 20 (3), pp.20-26
- Shrader, C., Mulford, C., and Blackburn, V. (1989) 'Strategic and operational planning, uncertainty, and performance in small firms', *Journal of Small Business Management*, p.27
- Shrader, C.B., Mulford, C.L., and Blackburn, V.L. (1989) 'Strategic and Operational Planning, Uncertainty and Performance in Small Firms', *Journal of Small Business Management*, 27, pp.45-50
- Singer, J., & Donoho, C. (1992) 'Strategic management planning for the successful family business', *Journal of Business and Entrepreneurship*, 4 (3), pp.39-51
- Terpstra, D.E. (1981) 'Relationship between methodological rigor and reported outcomes in organisation development evaluation research', *Journal of applied psychology*, 60, pp.541-43
- Terterov, M. (2005) *Doing Business with Ukraine*, GMB Publishing Ltd, 3rd ed. Available at: www.books.google.co.uk/books?id=UUMfaUXiXywC&pg=PP23&lpg=PP23&dq=small+business+in+ukraine&source=web&ots=P01icFnVa&sig=y6bS7ycuvf86tt0US_je9NsJ69E&hl=en#PPP1,M1. [Accessed on 28 may 2008]
- Thune, S.S., and House, R.J. (1970) 'Where long-range planning pays off: Findings of a survey of formal, informal planners', *Business Horizons*, 13, pp.81-87
- Umiker, W. (1989) 'Intuitive decision making and problem solving', *Medical Laboratory Observer*, 1 April
- Unni, V.K. (1981) 'The role of Strategic Planning in Small Business', *Long Range Planning*, 14 (2), pp.54-58
- Van de Van, A.H. (1980) 'Problem solving, planning and innovation, Part 1. test of the program planning model', *Human Relations*, 33, pp.711-40
- Ward, J.L. (1987) *Keeping the family business healthy: How to plan for continuing growth, profitability, and family leadership*, San Francisco: Jossey Bass
- Ward, J.L. (1988) 'The special role of strategic planning for family businesses', *Family Business Review*, 1 (2), pp.105-17

Weick, K. (1969) *The social psychology of organising*, Mass.: Addison-Wesley

Wood, D.R., and LaForge, R.L. (1979) 'The impact of comprehensive planning on financial performance', *Academy of Management Journal*, 22, pp.516-26

Wrapp, H.E. (1967) 'Good managers don't make policy decisions', *Harvard Business Review*, 45 (Sept.-Oct.), pp.91-99

APPENDICES

Appendix 1. Prior studies on relationship between planning process and performance

Study	Sample (number)	Categorization of planning	Performance measures	Industry effect	Findings
Thune and House, 1970	Industrial firms (36)	Strategy, goals, action programs for 3 years	Sales, stock prices, EPS ROE, ROA	Yes	Formal planners' performance superior
Ansoff, et al., 1970	U.S. manufacturing firms (62)	Systematic establishment and implementation of plans	Twenty-one financial measure	No	Planners outperformed non-planners. Planners performed more consistently
Herold, 1972	Industrial firms (10)	Strategy, goals, action programs for 3 years	Pretax profit, R&D expenditures	Yes	Formal planners outperformed informal planners
Fulmer and Rue, 1974	U.S. firms in durable, non-durable and service industries (386)	Three-year written document with objectives and strategy	Sales growth, net margin, ROA	Yes	No across-the-board relationship found
Karger and Malik, 1975	Industrial firms (38)	Five-year written plan for firm, divisions and plants plus detailed 1-2-year plan	Thirteen financial measures	Yes	Planners outperformed non-planners on almost all measures
Wood and LaForge, 1979	U.S. banks (41)	Non-planners, partial planners, comprehensive planners	Net income, ROE	Yes	Comprehensive planners outperformed non-planners. No relationship between comprehensive and partial planners
Kudla, 1980	Manufacturing firms plus others (129)	Non-planners, Incomplete planners, and complete planners	Monthly stock returns adjusted for market effects and risk	No	Planning had a negligible impact on returns and transitory impact on reduction of risk
Leontiades and Tezel,	Fortune 1000 firms (61)	CEO's and CPO's perception of	ROE, ROA, price earnings	No	No relationship

1980		importance and contribution of planning	ratio, sales and EPS growth		
Robinson, Vozikis, and Pearce, 1981	Small firms (51)	Not explicitly defined	Sales growth, Profitability, sales per employee, employment growth	No	Planning found to enhance effectiveness
Lindsay, et al., 1981	U.S. firms in durable, non-durable and service industries (144)	Impoverished, programmed, and progressive planners	Sales and earnings growth, net margin, ROA	Yes	No consistent relationship between planning and performance
Unni, 1981	Small businesses (120)	Strategic planning	Profit and sales	No	Judgement, experience, and intuition seem to play important role than any well structured technique of strategic planning. Good strategy greatly increases the likelihood of success
Jones, 1982	Small firms (69)	Planners vs. non-planners	Return on assets	No	Planning firms are more successful
Robinson and Pearce, 1983	Small banks (85)	Formal vs. non-formal planners	Profit margin, loan growth, ROA, ROE	Yes	No relationship
Welch, 1984	N.Y. stock exchange firms (49)	Strategic vs. non-strategic planners	Average price/earnings multiple	Yes	Strategic planner's P/E multiple higher
Fredrickson and Mitchell, 1984	Forest product firms (27)	Level of comprehensiveness	Average return on assets, sales growth	Yes	Negative relationship between comprehensiveness and performance
Fredrickson, 1984	Paint and coating manufacturers (38)	Level of comprehensiveness	Average return on assets, sales growth	Yes	Positive relationship between comprehensiveness and ROA. No relationship with sales growth

Rhyne, 1986	Fortune 1000 (210)	Short-term forecasting, budgeting, annual planning, long-range planning, strategic planning	Stock price, yield to stockholders	No	Planning systems that combined an external focus with a long-range perspective were found to be associated with superior 10-year total return to stockholders
Rhyne, 1987	Public manufacturing companies from Fortune 1000 (89)	Short-term forecasting, budgeting, annual planning, long-range planning, strategic planning	Total return to investors	Yes	High performers reported a less complex planning process
Bracker, Keats, and Pearson, 1988	Small firms in a growth industry (217)	Structured strategic planning, structured operational planning and unstructured planning	Growth in revenue, net income growth, present value, CEO cash compensation growth	No	Opportunistic entrepreneurs who employ structured strategic planning may be better prepared to cope with change
Robinson and Pearce, 1988	Manufacturing firms (97)	Description of strategic planning activities	Sales growth, return on total assets, return on total sales, overall firm performance	No	Level of planning sophistication was found to significantly moderate performance
Boyd, 1991	2496 organisations	Formal planners vs. informal planners	Meta-analysis, 13 indicators	No	Weak correlation between planning and nine performance measures
Phillips, 1996	UK hotel sector (63)	Planning thoroughness, planning formality and planning sophistication indicators	Return on investment, profit margin, growth in sales per room	Yes	Business performance is positively related to the quality of core planning processes

Source: adapted from Rhyne (1987)

Appendix 2. The sample representatives

<i>N</i>	<i>Size</i>	<i>Age</i>	<i>Industries</i>
1	5	5	Retail trade
2	2	5	Retail trade
3	26	8	Farming industry
4	104	5	Agriculture and farming industry
5	74	4	Building materials (bricks manufacturer)
6	173	3	Agriculture and farming industry
7	2	5	Retail trade
8	10	7	Retail trade
9	12	7	Retail trade
10	9	8	Hotel
11	44	12	Transportation, logistics
12	11	13	Agriculture and farming industry
13	49	2	Building materials, trading
14	12	11	Building materials (cement manufacturer)
15	68	8	Agriculture
16	34	6	Agriculture and farming industry
17	340	4	Building materials (bricks manufacturer)
18	5	1	Mining, road-metal production
19	32	1	Agriculture
20	3	1	Building materials, production and trading
21	492	14	Building materials, production and trading
22	357	16	Building materials, production and trading
23	89	17	Soaps, cosmetics
24	11	12	Wholesale trade
25	17	12	Transportation, including tourist services
26	163	11	Bread production
27	267	13	Service
28	14	13	Pub and restaurant
29	6	14	Metal products
30	29	14	Cable trading
31	19	12	Advertising, branding and marketing
32	54	8	Farming industry
33	47	7	Alcohol production (wine)
34	7	11	Transportation, marine shipment
35	15	9	Electrical equipment
36	2	11	Picture production
37	28	14	Footwear

Appendix 3. Example of the questionnaire

Please, indicate age and size of your organisation

1. Rate the importance of planning? Please choose the one answer that best represents your views

1 2 3 4 5

Unimportant

Very important

2. Choose the planning system below which is inherited by your firm
 - A. Short-term forecasting (Less than 1 year)
 - B. Budgeting (Approximately 1 year – Financial control of the results)
 - C. Annual planning (1 year)
 - D. Long-range planning (5-15 years)
 - E. None of above. Please, specify yours

3. If you do not have formal planning (written plan) how do you usually forecast future?

4. How frequently do you monitor the results of your planning?

- A. Never
- B. Once a year
- C. Twice a year
- D. More than twice a year

5. What is your own perception of the environment?

- A. Mostly stable
- B. Mostly unstable, turbulent
- C. Do not focus on this

6. Rate the importance of such factor as environment in a strategy planning process for your company. Please choose the one answer that best represents your views

1 2 3 4 5 6 7

Low importance

High importance

7. What sources of information do you use in order to elaborate firm's plan? (Adopted from Armstrong (1982)

- A. Environment changes
- B. Changes in the organisation itself

- C. Organisation's actions
- D. Competitors actions

8. Please specify how additional sources of information influence your strategy formulation (Contact with superiors, subordinates, outsiders, outside publications). Please choose the one answer that best represents your views

1 2 3 4 5 6 7

Low influence

High influence

9. What is your profit? (Please, specify year 2006 and 2007)

Appendix 4. Contingency table showing the relationship between planning process and profit in Ukrainian firms

Planning process - profit					
			Profit		
			Low performers	High performers	Total
Planning process	1 short-term forecasting	Count	12	2	14
		% within profit	63.2%	11.1%	37.8%
	2 budgeting	Count	1	7	8
		% within profit	5.3%	38.9%	21.6%
	3 annual planning	Count	3	8	11
		% within profit	15.8%	44.4%	29.7%
	4 long-range planning	Count	1	0	1
		% within profit	5.3%	.0%	2.7%
	5 intuitive planning	Count	2	1	3
		% within profit	10.5%	5.6%	8.1%
Total	Count	19	18	37	
	% within profit	100.0%	100.0%	100.0%	

Note: $\chi^2 = 15.233$ $p < 0.004$

Appendix 5. Coefficient table from multiple regression analysis. Beta variable and significance level for model evaluation

Coefficients^a													
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	2.393	1.705		1.404	.169	-1.072	5.858					
	age	-.300	.177	-.286	-1.699	.099	-.659	.059	-.263	-.280	-.279	.957	1.044
	size	.004	.007	.107	.636	.529	-.010	.019	.048	.108	.105	.957	1.044
a. Dependent Variable: growth rate													

Appendix 6. Outliers and linearity analysis for growth rate variable in multiple regression

Normal P-P Plot of Regression Standardized Residual

