LEARNING NEW PRODUCTIVITY CRITERIA IN TRANSITION ECONOMIES: EVIDENCE FROM 450 CIS COMPANIES

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Abstract

The empirical data suggests that the ownership structure of the CIS firms studied did not determine productivity improvements during the years 1995-97. This finding indicates that within this time period, ownership structure was not the main determinant in explaining improvement in organisational performance, but rather than this reflected the transition path, i.e. whether the transformation occurred via the reconstruction of the old or through developing a new organisational entity. The main difference between these two transition paths can be summarised as follows: the transition path of privatised companies can be characterised as organisational revolution whereas the transition path of private start-ups can be described as organisational evolution in a revolutionary business environment. Moreover, the empirical data indicates that there was a significant relationship between the younger age of the top manager and productivity improvement in a company. This finding suggests that adapting Soviet management culture into the post-Soviet environment can be a more complex task than merely learning new organisational practices.

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1. Introduction

The shift from central planning towards a market economy has caused a dramatic decrease in economic performance in all transition economies. In the former Soviet republics the decline has been deeper and the recovery slower than in Central and Eastern European countries (CEECs). One possible explanation for more incremental change in the former Soviet Union might be the fact that the economies of the ex-Soviet republics were integrated more intensively with each other than other socialist countries were within the former Comecon co-operative system. Despite the integration of all socialist economies into the SEV system, the CEECs managed to maintain the basis of their national economies unlike the former Soviet republics, which may have given an advantage to the CEECs to develop their economic structures after the disruption of the socialist empire.

A clear indication of the faster economic recovery of the CEEC's is the fact that they have already managed to reach the GDP level of 1989; whereas the former Soviet republics have a long way to go before they can expect the same. In the Baltic States, the recovery is likely to happen sooner as their GDP is already 66 per cent of the 1989 level and these economies are growing steadily. In the Commonwealth of Independent States (CIS), economic development has stumbled, and hence, their GDP is only 55 per cent of what it was a decade earlier (EBRD, 1998).

As the main actors behind the economic recovery are business enterprises, this study aims to study change in productivity of almost 500 companies in three CIS countries.

2. A Literature Review

2.1. Some views linking organisational learning and organisational performance

The theoretical contributions presented in this section deal with organisational learning and performance in market economies not in transition economies. The literature concerning the former Soviet Union is reviewed in Section 2.2. Despite the fact that some scholars question the applicability of Western theories to transition economies (Peng and Heath, 1996), studying the phenomenon through theoretical contributions concerning organisational change was considered a more constructive approach than that of exploring the subject without the guidance of earlier theoretical views. At first sight, it may seem paradoxical to apply organisational change theories dealing with advanced market economies to transition economies since the organisational transformation from a centrally planned economy towards a market economy is indisputably a unique phenomenon in the history of mankind.

Despite the uniqueness of the phenomenon on a economic system level, the author believes that the impact of the economic system change, at the enterprise level, is not necessarily unique, as it resembles organisational change in any extremely turbulent business environment. Therefore, earlier theoretical views on organisational change are assumed to contribute towards the understanding of the phenomenon, even if some transition-specific features should be taken into consideration when Western theories are applied to transition economies.

Although transition economies would not require their own microeconomic theories, it should be stressed that organisational change in transition economies is much more profound and comprehensive than in the West, as almost the entire enterprise population and even the whole society are transforming. Despite the profoundness and the comprehensiveness of the transformation, it can be argued that change at the enterprise level is more transition-specific than unique and therefore allows academics to use Western contributions concerning organisational change in organisational transition in the post-socialist economies.

Organisational performance is a major explanatory variable in most models of organisational learning (Cyert and March, 1963; Levinthal and March, 1981; Lant and Mezias, 1992; Dodgson, 1993). For instance, Dodgson (1993, 378) aptly states that "*learning can be seen to have occurred when organizations perform in changed and better ways*". This view treats organisational performance as an indication of organisational learning.

According to some scholars, the earlier performance of an organisation influences how the organisation acquires new knowledge in the future (Miles and Cameron, 1982; Fiol and Lyles, 1985). Actions associated with positive outcomes are repeated and actions associated with negative outcomes are rejected (Cyert and March, 1963; Levinthal and March, 1981). These views can be summarised by concluding that the organisations have learned to learn in their own special way. This view regards organisational learning as a learned performance pattern.

Miles and Randolph (1980) link learning styles with organisational performance and change. They argue that reactive learning has a negative impact on performance, which successively reflects a strongly perceived need for organisational change. Correspondingly, proactive learning causes a positive impact on performance, which manifests itself as a weakly perceived need for organisational change. This view links learning style, organisational performance and change.

These three views presented above have stressed the role of organisational learning in improving performance i.e. learning positive performance. In addition to learning positive performance, scholars have also underlined the importance of unlearning (e.g.

Hedberg, 1981; McGill and Slocum, 1993). The concept of unlearning contributes to the discussion on the relationship between organisational learning and performance with an idea of unlearning negative performance i.e. forgetting past behaviour which is redundant or unsuccessful.

Top management change may, for instance, force the unlearning of old routines, and hence, increase the probability of organisational change. In other words, the importance of key manager replacement as the engine of change has been explained by arguing that the replacement of a board of directors and top executives provides an important mechanism to overcome inertia (Nystrom and Starbuck, 1984; Tushman and Romanelli, 1985; Harrison et al., 1988; Lant and Mezias, 1992; Wiersema and Banthel, 1993).

In addition to top management change, several academics have studied the impact of the management's age on organisational change. Several studies indicate that organisations with an old and homogeneous top management team are less liable to change than organisations with a young and fairly heterogeneous group of managers (Lant et al., 1992; Wiersema and Banthel, 1992; Keck and Tushman, 1993; Boeker, 1997; Park et al., 1997). Despite these mainstream findings, Hambrick et al. (1993) have come to different conclusions i.e. they argue that executive age was not related to commitment to the *status quo*.

Scholars have studied the relationship between organisational size and change. Haveman (1993) argues that in environments undergoing incremental change, small organisations will modify their activity bases more rapidly than large organisations, because the structural ossification process is more influential than the market-power process. When organisational environments are undergoing rapid restructuring, the advantages of large size may outweigh the inertia, and thus, large organisations may grow faster than their small counterparts in turbulent environments. On the contrary, Kelly and

Amburgey (1991) argue that there is no strong relation between organisational size and the probability of change.

To conclude this brief literature review, it can firstly be summarised that organisational performance can be regarded as an indicator of organisational learning. Secondly, organisational learning can be seen as a learned performance pattern. Thirdly, the way an organisation learns affects performance. Fourthly, the literature also takes into consideration the role of unlearning in improving organisational performance. Fifthly, conclusions drawn on the impact of various organisational and managerial factors on organisational change are not homogenous.

2.2. Some studies relevant to organisational learning and change in the former Soviet Union

Table 1 presents information on some 100 studies relevant to organisational learning and change in the former Soviet Union (FSU) published in the Western forum. The table is by no means a comprehensive presentation of all the important contributions in the research field. These contributions have been named as examples of studies close to this research, and therefore, some significant studies are missing. Only those researches conducted after the Soviet era are presented in the table i.e. studies on Soviet enterprise management have been excluded (e.g. Liuhto, 1999c).

The literature review reveals firstly a clear emphasis on Russia among the former Soviet republics. Special interest towards Russia is obvious, as she is the biggest former Soviet republic with 150 million inhabitants and has vast natural resources. These factors, among others, have enticed many foreign companies to Russia. The growing interest of foreign companies in Russia has attracted Western academics, both directly (more extensive research funding) and indirectly (wider circle of readers) to study the transformation in Russia. Secondly, the review shows that many researches deal with ownership changes (mainly privatisation) and restructuring, which are often explicitly or implicitly linked with the analysis of enterprise performance. Thirdly, the review indicates that the research results on the relationship between ownership and performance are not unambiguous.

Some studies propose that private ownership positively influences change in organisational effectiveness in transition economies (EBRD, 1997; Frydman et al., 1998). For example, Frydman et al. (1998, 2) argue that "*private ownership dramatically improves corporate performance, and that its impact is the strongest enhancing a firm's ability to generate revenues*". This view indicates, at least implicitly, the importance of the ownership shift from the state to private owners in accelerating organisational performance.

Despite this rather commonly shared view, scholars have also expressed doubts about the impact of privatisation on the improvement of organisational performance. For example, it has been suggested that the empirical results on the relationship between privatisation and performance improvement are vague (Akimova and Schwödiauer, 1998). Some academics argue that privatisation may not necessarily lead to considerable improvement of performance (Jones and Mygind, 1998). Romanov (1996, 233) takes an even more critical standpoint when stating that "*the Russian government is obviously disappointed that privatisation of enterprises has not brought fast positive shifts in management and in the growth of efficiency. The possession of shares has not brought radical changes in the behaviour of the new owners of industry - the existing managers (actual owners) or the workers (the nominal owners)*". It has also been concluded that the consequences of privatisation of a post-socialist company are not comparable with the experiences of privatisation in a market economy (Zilcken, 1995).

Some studies underline the importance of foreign influence. For example, it has been proposed that there exists a relationship between foreign direct investment inflow and economic performance at the macroeconomic level (EBRD, 1998). Similarly, some academics stress the importance of foreign ownership in organisational improvement at the microeconomic level (Uhlenbruck, 1998; Purju, 1998). For example, Purju (1998) has underlined the significance of foreign ownership as it leads to a better financial position and easier penetration to foreign markets.

On the other hand, research findings also point out how foreign organisational practices are not always effective in the FSU, and hence, foreign managers are forced to adjust their managerial style to local circumstances (Shekshnia and Puffer, 1996; Suutari, 1998). In other words, foreign managers are forced to adopt features that are at least partially influenced by the less advanced methods of the *Management Sovieticus*. As an example, authoritarian management style and the use of written instructions and direct orders may be mentioned (Suutari, 1996).

Haveman (1993) suggests that advantages of large organisational size become emphasised in turbulent environments. Ickes and Ryterman argue that "*the best and most productive enterprises inherited from the socialist period will tend to be the largest*" (Ickes and Ryterman, 1997, 25).

To conclude, conclusions drawn on the organisational transformation in the FSU are not homogenous. Moreover, it seems that academics have conducted more studies concerning organisational learning in Central and Eastern Europe than in the FSU (Rebernik, 1993; Tesar, 1993; Gurkov and Kuzminov, 1995; Kuznetsov, 1995; Child and Czeglédy, 1996; Thomson and McNamara, 1998). The relatively small number of studies focusing explicitly on organisational learning in CIS companies was one main reason to use an organisational learning approach in exploring performance change in this research. Correspondingly, focusing on performance change was motivated by the importance of organisational performance acceleration in the economic recovery of the CIS, i.e. if CIS companies are unable to learn, their change probability will most probably remain low. Correspondingly, if CIS companies are unable to change, their competitiveness and financial performance are not likely to improve sufficiently rapidly, which would inevitably slow down the economic recovery of the CIS economies[1].

3. Methodology

The core objective of the article is to analyse productivity change in CIS companies. The author aims to explore this core objective through the following five working hypotheses based on the literature review presented in the previous section:

(1) *Private and foreign ownership has a positive impact on productivity change.*
(2) *Top management change, the management's younger age and majority ownership are positively reflected in the productivity change.*
(3) *Companies carrying out investments improve their productivity more frequently than other companies.*
(4) *Large organisations change their productivity more often than the rest of the sample.*
(5) *Productivity improvement is less frequent in traditional sectors (in manufacturing) than in infant sectors (in trade & services) which were neglected during the Soviet era, and hence have boomed after the collapse of central planning.*

In the beginning of 1997, the research team gathered to plan a large survey and to design the content of their questionnaire. The main goal of the entire research project was to explore the determinants of enterprise growth and the development of entrepreneurship in three CIS countries, namely Belarus, Russia and Ukraine. Here, it should be stressed that this article concentrates only on one issue - productivity change, and consequently, the contributions of the whole research project is by no means limited to the conclusions made in this article.

This research approaches organisational learning via the improvement of organisational performance i.e. improved organisational performance is regarded as an indicator of organisational learning. It needs to be noted that studying productivity improvement as an indication of organisational learning is not indisputable, as productivity may change independently from organisational learning. To put it differently, change in productivity may be explained not only by organisational learning but also by other internal or external factors. In addition, some scholars argue that organisational learning may also lead to negative performance (DiBella et al., 1996).

Despite the potential limitations of the approach, the author considered it appropriate to follow the thought presented by Dodgson (1993, 378) who suggests that "*learning can be seen to have occurred when organizations perform in changed and better ways*". In a similar manner, the author assumes that improved productivity is one indication of organisational learning, though it is not the only one.

The team consisted of a partner from each CIS country involved and a partner from two EU states[2]. The role of the local partners became emphasised in aiding the design of an applicable questionnaire to these countries and in collecting data. The research team tried to design the content of the questionnaire with the utmost care, since managers in the post-centrally planned economies are not always familiar with the terminology used in market economies (Jankowicz, 1994). In order to avoid a response-bias due to a lack of understanding of the terminology used, the research team simplified the questionnaire items. Moreover, careful design of questions was a necessity since in the less controlled environment of transition economies, managers are extremely reluctant to reveal information regarding enterprise performance to 'outsiders' since they may fear that the information will end up in the hands of taxation authorities, competitors or even organised crime[3].

In order to avoid deliberately distorted answers or massive non-response, it was considered appropriate to turn this sensitive subject into a less sensitive one by not enquiring about the exact productivity figures but by asking the general managers' view about productivity change instead. The top managers were asked to indicate whether their productivity has remained the same or gone up/down in their company (the research focused only on the top managers' views).

Although soliciting the managers' views on productivity change automatically decreases the accuracy of the data, such views on productivity change may increase the reliability of the data, as CIS managers are extremely reluctant to give correct performance figures to outsiders. In the suspicious atmosphere of transition economies, a manager's views on company performance may paradoxically offer a more solid path to usable data than the performance figures given by the company management. To put it differently, a manager's views may offer data which is probably correct but not precise, whereas the exact figures may produce data which can be precisely wrong, even if any performance information is given at all.

The time frame for analysing productivity improvement is three years (change during 1995 - 1997). Such a narrow time span naturally increases the risk that productivity change may have been caused by temporary factors. Despite the relatively short time frame, it should be stressed that expanding the time frame in order to have a longer time span for analysis would have decreased the validity of the views. In addition, it should be stressed that asking managers to evaluate productivity change since 1995 contains an implicit retrospective assessment of the phenomenon, which is never as accurate a method as a replication of the study. Unfortunately, the replication of the research was not possible within the timetable of the research project.

The questionnaire was translated from English to Belarussian, Russian and Ukrainian. English or any other language, was not used as a unitary language in the questionnaire because the command of foreign languages in the CIS can be rather weak, especially in the peripheral areas of these countries. On the other hand, Russian was not regarded as an appropriate unitary language in the questionnaire though Russian is widely understood in these countries, due to historical reasons. As translation always endangers the content equivalence, the co-ordinator from the University of Cambridge was responsible for controlling the questionnaire so that it remained unchanged in the translation process. Before the actual data collection started, a pilot study was organised to detect possible weaknesses in the questionnaire.

Should the designing of an applicable questionnaire be considered an unenviable task, conducting a scientifically puristic sampling process in the CIS is an even more complex academic exercise. Conducting stratified sampling is difficult since the enterprise statistics in the CIS do not offer the best basis for focusing the survey. On the other hand, random sampling can be doomed because there are so many non-active companies in the FSU. When conducting sampling in the CIS, it should not be forgotten that "*enterprise registers do not always contain information even about the owner or address of an enterprise, which makes it impossible to detect these 'phantom' companies. Secondly, the enterprise registers include a great number of non-active companies. Many of these 'idle' firms have been registered with a speculative intention to start operations, only if opportunity arises. To make the sampling even more complicated, it has been estimated that there are thousands of 'shadow' companies which are very active but have not been registered. In addition, there are many non-profit organisations, which do not officially belong to the category of business organisations but which, nevertheless, conduct extensive business operations. As an example of these 'unofficial' business organisations, an association of Afghanistan veterans in Russia can be mentioned. All in all, the large number of these 'phantom', 'idle', 'shadow' and 'unofficial' enterprises makes it very demanding to precisely define the enterprise population in the transition economies*" (Michailova and Liuhto, 1999, 17).

Due to the deficiencies of the enterprise registers and statistics, the research team considered it more appropriate to focus on active companies than to pursue scientifically puristic sampling. Since the enterprise registers and statistics did not offer sufficient basis for sampling, data bases of various business associations were combined to locate active enterprises[4].

As studying the growth and development of entrepreneurship was the main theme of the overall research project, companies which started their operation after the collapse of the Soviet system (start-ups) were central to this research. Thus, the guideline for the data collection was the fact that start-ups would form half of the sample. These start-ups could operate in any sector, but enterprises which were already operating during the Soviet period should be chosen only from the manufacturing companies. Other sampling restrictions were not applied.

The task of the CIS researchers was to collect empirical evidence within the guidelines given. The local partners selected companies only on the basis of the guidelines given, not on the basis of their personal preferences. The data collection was carried out in the second part of 1997. In practice, the data collection was conducted as follows. A local partner contacted the company management and asked about the possibility of interviewing the company management, and hence, the filling out of the questionnaire occurred in the presence of the CIS researcher.

In Ukraine, 25 per cent of the companies approached participated in the research. In Belarus, enthusiasm to participate was slightly higher but in Russia lower. Although an exact explanation for this low enthusiasm to participate in the research cannot be offered, it can be assumed that the uncontrolled business environment of the CIS has been reflected in their unwillingness to take part in the survey. In other words, in the suspicious atmosphere of the CIS it is natural that CIS managers do not want to reveal information about company activities to outsiders. Moreover, the length of the questionnaire may also have decreased company managers' enthusiasm to take part in the research (see Appendix 1)[5].

Due to the limitations of the sampling procedure, it cannot be guaranteed that the findings offer externally valid evidence. Therefore, the findings of the survey should not be generalised as such, neither concerning these or any other CIS countries. Despite the possible deterioration of the external validity, these empirical findings may give some guidance, at least until surveys which are able to follow the puristic requirements of the sampling are carried out.

The total sample of 446 CIS companies consists of 146 companies in Russia (St. Petersburg), 150 in Ukraine and 150 in Belarus[6]. The research focuses on these CIS countries, as their cultural background is more homogenous than the other 9 CIS republics. Furthermore, the large population size (altogether some 200 million inhabitants) as well as vast natural resources and the geographical proximity of these former Soviet republics to the European Union increase Western interest in the development of these CIS economies.

Some 40 per cent of the companies studied are in manufacturing. Companies involved in trade and services (TS) form a quarter of the sample. An interesting feature in branch distribution is the ‘mixed branch activity’ i.e. a quarter of the companies operate in both manufacturing and TS. One probable motive behind these mixed activities is the fact that many companies take care of manufacturing and TS because the market is not developed enough to allow the companies to focus on the core business alone (see Table 2).

The majority of the companies can be classified as non-state companies. State and municipal companies represent almost one fourth of the sample. There are only 9 companies with foreign majority ownership in the sample. In addition to these 9 companies, some 20 other companies have a foreign owner but in these companies the foreigner does not possess the absolute majority.

The data shows that the personnel size of the firms studied decreased by two-thirds during the years 1990-1996. The decline in the personnel size of the sample follows a similar trend as the drop in real

GDP[7]. On the basis of this rather similar transformation trend it can be assumed that the transformation of the sample does not entirely differ from the transformation of the enterprise population as a whole.

Almost 80 per cent of the sample have made an investment in new production technology since 1989. Over 40 per cent of the companies studied have undergone at least one strategic management change since 1989.

The average age of the responding managers was 43 years. The data indicates that in manufacturing the average age is significantly higher than in other fields of activity. Especially within the service sector, the share of younger managers is considerably larger. Some 50 per cent of the managers were 40 years old or younger in the service sector whereas in manufacturing the share was only 28 per cent. This finding indicates that managerial turnover has not been as radical in manufacturing as in those sectors which remained underdeveloped during the Soviet era. Less radical management turnover in manufacturing may also mean that the personal relations network has changed less in manufacturing than in trade and services.

4. Empirical Results

Almost 50 per cent of the managers expressed the view that the productivity in their company has gone up during 1995-1997. Only a quarter perceived that productivity has remained the same. The remaining quarter considered that their productivity has gone down (see Appendix 2).

Working hypothesis 1: *Private and foreign ownership has a positive impact on productivity change.*

Contrary to the working hypothesis assuming that private and foreign ownership would have a positive impact on productivity change, the survey data indicates that there is no significant relationship between any ownership structure and productivity improvement within the time frame used.

It needs to be stressed that the results of the survey should not be interpreted so that productivity would be the same in companies with different ownership structures but rather in a way that a certain ownership structure does not cause significant productivity changes. For example, productivity may be higher in foreign companies than in local companies but at least the data does not indicate that productivity change is significantly different between the studied companies. In other words, foreign companies may be ahead of local companies, and hence, they may guide organisational transformation, even if there is no significant difference between changes in productivity.

The small number of foreign enterprises does not allow us to draw a solid conclusion regarding the difference between foreign enterprises and other companies. Despite the limitations caused by the insignificant amount of foreign companies, the research data indicates that foreign ownership does not automatically lead to improved performance, and hence, foreign ownership should not necessarily be regarded as the major determinant for successful organisational transformation, though the role of the foreign companies should not be underestimated either.

The data shows that no significant difference exists with regard to productivity change between non-private companies and private enterprises. The relatively poor results from productivity improvement in private enterprises stem mainly from difficulties in privatisation. In fact, the empirical evidence suggests that privatised companies have not managed to improve their performance significantly more than non-private companies, at least within the time frame under consideration. In addition, the empirical evidence shows that productivity improvement seems to be much slower in privatised companies than in private start-ups (test result ***). In fact, the data suggests that companies which have been private since their establishment have improved their productivity more often than the rest of the sample (test result ***). These findings indicate that the transition path – a reconstruction of the old versus. the development of a new organisational entity - is a more important factor in explaining performance change than that of ownership structures at this stage of organisational transition.

The available empirical evidence concerning the relationship between ownership structure and productivity change emphasises the fact that scholars should not be blinded by relatively 'immobile' organisational variables but should focus on the events and actors of the transformation. Or to put it another way, although certain ownership structures might allow, for instance, the implementation of change in a company, the possibility of such a change does not necessarily result in change, if the management is incapable of executing change.

Working hypothesis 2: *Top management change, the management's younger age and majority ownership are positively reflected in productivity change.*

Also contrary to the working hypothesis assuming linkage between top management change and positive change in productivity, the findings indicate that management change is not synonymous with performance improvement (test result **)[8]. Although making the distinction between change and performance improvement may seem self-evident, surprisingly many transition studies still draw strong conclusions about absolute advancement in transition even if they have studied relative change.

An interesting finding is that productivity improvement does not depend on the number of strategic management changes. In other words, the data did not produce a significant result concerning whether only one or several strategic management changes occurred in a company. On the basis of this finding, it cannot be concluded that frequent management shocks would be more linked with productivity improvement than one fundamental shock, or vice versa (see Table 3).

The data also shows that strategic management change is rarer in private start-ups than in other companies (test result ***). This is natural as the majority of the start-ups have existed for less than ten years. Another explanation for the resistance to strategic management change might be the fact that the majority of start-up enterprises are led by owner-managers who are reluctant to execute strategic management change in their company i.e. to replace themselves (test result ***). It might be predicted that the prolonged tenure of these new enterprises would result in change when the owner-manager resigns and leaves the management post to either a professional manager or her/his heir.

There exists a very significant relationship between the managers' age and start-ups, which is consistent with the working hypothesis (test result ***). Managers of 40 years old or younger seem to be more active in establishing their own company than are older managers. What is even more important, these start-ups perform better than companies in general i.e. there is also a linkage between the managers' younger age and productivity improvement (test result ***). It seems that the younger management generation, which probably entered the business world during or after *Perestroika*, has managed to learn faster the managerial skills suitable for the post-Soviet business milieu than the older management generation, which was probably in management posts already, before the organisational transition started. This finding may suggest that adapting the Soviet management culture into the post-Soviet environment is more complex than learning new organisational practices. Unlearning old experiences seems to be more demanding than learning new skills.

The owner-manager position seems to be strongly related to productivity improvement, which was also assumed in the working hypothesis (test result ***). This relationship is very natural as the owner-managers bear financial responsibility for the destiny of their firms, and thus they are more enthusiastic to improve the company's productivity. In addition, owner-managers seem to be eager to further develop the activities of their company. This development orientation can also be noticed in the results, as the owner-managers invest more heavily in new production technology than managers who do not possess the ownership majority - test result ***.

Working hypothesis 3: Companies carrying out investments improve their productivity more frequently than other companies.

As was anticipated in the working hypothesis, the data indicates that investment in new production technology and productivity improvement are closely related (test result ***). The existence of this relationship is so natural that explaining the reasons for it seems rather unnecessary. However, it can be briefly summarised that technological backwardness and financial problems preventing technological modernisation are commonly considered to be the main obstacles of organisational development in the post-Soviet companies. Therefore, the acceleration of organisational transformation in the FSU would require financial aid supporting technological modernisation.

Working hypothesis 4: Large organisations change their productivity more often than the rest of the sample.

On the contrary, the data does not support the working hypothesis, assuming a correlation between large enterprises and positive productivity change. The empirical evidence indicates that there is not a constant relationship between personnel size and change in organisational performance. Only SMEs in the CIS seem to improve their performance slightly more frequently than the rest of the sample (test result *). However, the test result is only moderately significant, and hence, it does not allow us to argue that a strong linkage would exist between organisational size and change in organisational performance.

In this context, it needs to be stressed that the data of this survey does not suggest that a relationship between size and productivity does not exist, but that it suggests that a relationship between size and change in productivity does not exist. Analysing the correlation between size and performance is not possible, as the questionnaire measured change in performance rather than the state of performance.

Despite this data limitation, the empirical findings do not indicate that large companies have increased their productivity significantly more frequently than small enterprises, or vice versa. In this context, it should be noted that the relationship between size and performance is a much more complex phenomenon than has previously been proposed by some scholars.

For example, even if the most successful organisational giants may be more productive than companies in general, there are many Soviet dinosaurs, which have experienced the loss of their clientele and disintegration of their business network, eroding their performance tremendously. Therefore, it would not be accurate to conclude that the largest companies would be indisputably the most productive. Correspondingly, even if SMEs are more flexible than the large companies, their weaker resource-base often prevents their implementation of the necessary changes. Therefore, it also seems understandable why the SMEs do not improve their performance more frequently than the rest of the sample.

The empirical data also suggests that a constant size determinism within the CIS countries studied does not exist. Even though the micro enterprises (employing less than 10 persons) have managed to significantly improve their performance more frequently that the rest of the sample in Russia (test result **), Russia seems rather to be an exception than a rule when compared with Belarus and Ukraine. Although the Russian data is positive, one should not be too happy with the result since the positive performance of the micro companies is mainly due to postponed transformation at the microscopic level.

In other words, the development of smaller companies was extremely slow in Russia until the mid-1990s so it is natural that they are improving their productivity faster than the rest of the sample in the second half of the decade. Although the development of smaller companies is a positive sign of organisational transformation, this development should continue for several years before it can be argued that the SME sector in the CIS has reached the level of advanced market economies.

Working hypothesis 5: Productivity improvement is less frequent in traditional sectors (in manufacturing) than in infant sectors (in trade & services) which were neglected during the Soviet era, and hence, have boomed after the collapse of central planning.

It is rather commonly assumed that the organisational transformation in manufacturing is significantly different from transition in the trade and services sectors since the centrally planned economies concentrated on developing industrial production, and simultaneously neglected the development of trade and services. However, the data indicates that this is not the case and a significant relationship between sectors and change in productivity does not exist i.e. the empirical results are not consistent with the working hypothesis.

When interpreting these results, it should firstly be noted that the vacuums of these untouched and therefore, profitable sectors have filled rapidly, and consequently, competition in these infant fields has been tougher than in traditional sectors. Due to fiercer competition it is understandable that organisational performance development in these infant sectors is not considerably different from traditional ones despite the fact that these infant sectors were virginal at the first steps of the transition. Moreover, it should be stressed that these surveys did not analyse change in organisational performance directly after the collapse of the centrally planned economy, when the performance development of these infant sectors obviously was at its peak.

Secondly, this rather puzzling finding can perhaps be explained by analysing the transformations in the enterprise populations of these sectors. In analysing sectoral development, it should be remembered that there were several large manufacturing companies in the Soviet Union, but the number of trade and service enterprises were relatively small, especially prior to the *Perestroika* era. Economic transformation has caused rapid expansion of the enterprise population. The enterprise population increased by 15 times, for instance, in Russia during the first seven years after the disintegration of the Soviet Union. In this context, it should be stressed that it is probably of no more significance if the enterprise population in any sector expanded 'only' 10 instead of 20 times[9]. The enterprise boom has been so comprehensive that the enterprise population dating from the Soviet period is in a minor position in all sectors where the state has given the possibility for the free entry of enterprises.

The rapid expansion of the enterprise population in all sectors is probably one important reason why the data does not show a significant relationship in sectoral transformation. The absence of significant differences in productivity change between sectors does not naturally mean that organisational reality in the sectors studied is similar. Here, it should be stressed that the method used in analysing productivity does not allow us to conclude what the state of productivity ('absolute advancement state') is in various sectors but whether there is a significant difference between productivity change ('relative advancement speed') between the sectors, and so, further study is necessary.

5. Conclusion

5.1. Academic discussion

If productivity improvement is regarded as an indication of organisational learning, it can be concluded that learning has occurred in almost half of the CIS companies studied. The empirical findings also suggest that the ownership structure did not determine productivity improvements during 1995-1997.

For example, private companies did not improve their productivity more than the rest of the sample. Surprisingly poor results from productivity improvement in private enterprises are mainly caused by difficulties involved in privatisation. If the private start-ups are compared with privatised companies, the data clearly indicates that the private start-ups did improve their productivity more frequently than the privatised companies, though the majority of their capital stock would have moved into private hands.

This finding indicates that the ownership structure is not the main determinant in explaining organisational performance change but the transition path is. The privatised companies need to go through organisational reconstruction whereas the private start-ups may develop their business activities without the same burden of a centrally planned economy. Therefore, it can be argued that the transition path is a more important factor in explaining organisational performance change than ownership structure at this stage of the organisational transformation.

Even if the empirical data did not produce a significant correlation between private ownership and productivity improvement, this research does not argue that private ownership would not lead to better organisational performance in the long run, despite the fact the data suggests that private ownership is not synonymous with performance improvement at this phase of transition. In the long-term, it is more than likely that privatised companies will improve their productivity significantly or they will disappear. Both these phenomena would increase the performance of the private enterprise population.

In addition, it should be remembered that the share of the privatised enterprises is much lower than the share of private start-ups in the private enterprise population, and hence the sample may offer a slightly more negative picture than the full reality within the private enterprise sector. All in all, it can be suggested that little by little the negative impact of the privatised companies on the performance of the private enterprise population will diminish, and thereafter, private companies will be performing better than the rest of the enterprise population. However, it is too early to estimate the time period necessary after which the privatised companies will have reached the average level of the private enterprise population.

The empirical data suggests that foreign ownership has not led to any significantly stronger improvements in productivity that were observable in local companies. This unanticipated result may stem from the fact that foreign-owned companies first need to adjust their managerial practices into those of the CIS before they are able to 'import' Western management practices into the CIS. Even if productivity change is no faster in foreign companies than in local companies, foreign companies are, in many respects, ahead of local companies, and hence the guiding role of foreign enterprises should not be overlooked.

On the other hand, the rather similar improvement pace between foreign and local companies would suggest that foreign companies are not gaining ground from the local companies, or vice versa, the local companies are not catching up with foreign companies significantly, at least within the time frame used. All in all, as the share of the foreign-owned companies is relatively small in the enterprise sector of the CIS, foreign companies should be treated more as a lubricant than as the engine of organisational transformation.

Another rather surprising result is that strategic management change did not automatically lead to improved productivity. This may stem from the fact that change does not necessarily cause improvement although it may create the optimal chance for it to occur. Therefore, it should be underlined that change *per se* is not the primary issue in the transformation but rather the outcome of change. In addition, it should be stressed that there is most likely to be a rather long time delay between top management change and productivity improvement, even if change would start positive organisational change.

The data indicates that that there is a significant relationship between the younger age of the manager and productivity improvement. The data suggests that the generation which probably entered working life during or after the *Perestroika* era manages companies which are improving productivity more often than the companies which are led by their senior colleagues. This finding suggests that unlearning old Soviet organisational behaviour is more demanding than learning new organisational practices suitable for the post-Soviet economic system.

Despite this finding underlining the superiority of younger age, the advantage of the older management generation is in their personal relation network, which is still extremely important in the business environment of the FSU, where free competition is a less frequently used concept in business than that of personal connections. The central role of personal relations in the post-Soviet business culture is one reason why the political and economic *élite* of the Soviet era has managed so well to maintain their positions, even after the collapse of the centrally planned economy. This maintenance of old positions is notable in manufacturing where the management turnover is significantly less frequent than in trade and services.

The data shows that investment in new production technology and productivity improvement are closely related, or vice versa, the absence of investment activity and poor performance are correlated. This finding is anything but surprising since technological backwardness and financial problems preventing technological modernisation are commonly considered to be the main obstacles of organisational development in post-Soviet companies.

The empirical data also suggests that there is no determinism between organisational size and change in performance. The absence of this correlation should not be interpreted as implying that the organisational dinosaurs of the Soviet era have managed to survive in the post-Soviet business environment without restructuring. It needs to be stressed here that organisational size is not the most appropriate factor in explaining whether restructuring has happened or not. The key factor in improving performance is that of successful adaptation to the changed business environment, not the size of the company.

The data do not allow us to conclude that smaller countries, such as Belarus, are associated with smaller companies, and similarly, large countries, such as Russia, need only large companies. On the contrary, it seems that very small companies are improving their productivity faster than larger ones in Russia. This organisational *miniaturism* in a giant country is a sign of increased regionalism in business activities. For example, the Russian market is no longer a homogeneous market place but is divided into 89 administrative units and even more business cultural entities, where the logic of business does not necessary follow the commands issued by the federal centre.

Moreover, the empirical evidence indicates that no significant relationship exists between a sector and change in productivity. The rapid expansion of the enterprise populations in all the sectors is most probably one important reason why the data does not show a significant correlation between the field of operation and a change in productivity. To put it differently, even if manufacturing (the traditional sector) was overemphasised during the Soviet period, whereas trade and services (the infant sector) were underemphasised, the enterprise population has changed almost completely in both sectors and due to the comprehensive regeneration of the enterprise population, the productivity transformation is not significantly different comparing these fields.

To conclude, some of the empirical test results might have been anticipated but some of them are rather surprising, at least at first sight. Since there still are many puzzling questions concerning organisational transformation, research efforts into organisational and managerial transition should be intensified.

However, forthcoming research should not concentrate too much on passive organisational characteristics but more on organisational events and managerial actions, as it seems that these events and actions more determine the organisational characteristics than vice versa. The organisational characteristics could be referred to as the genes of the human being. Although these genes determine the external appearance and some of the capabilities of a human being, they do not determine how this human being acts in various situations.

Moreover, forthcoming studies should not focus too much on comparisons between transition economies since excessive penetration into transition economies may prevent scholars from seeing the reality surrounding the transition economies. Therefore, forthcoming research should increasingly compare companies operating in developing countries and those in advanced market economies with their counterparts in transition economies. Such comprehensive comparative studies would aid the placing of transition companies in 'the global organisation and management map'.

5.2. Some policy recommendations derived from the empirical research results

On the basis of the empirical results, at least two urgent policy measures should be mentioned to improve organisational performance, and thus accelerate the transformation speed in the CIS. These are the provision of a technological investment fund for private start-ups, and a financial and commercial assistance centre for young entrepreneurs.

The technological investment fund for start-ups should not be implemented only through increasing financial aid and loans for private start-ups planning to make an investment in production technology. In addition to these rather conventional measures, the CIS governments should consider the possibility of creating regional funds, which would invest in the most promising new enterprises. These funds would act not only as development banks but also as investors who would become temporary owners of the most promising start-ups. After repayment of the funding, the manager of the start-up would be entitled to redeem the shares transferred to the fund. In this manner, the entrepreneur would receive the desperately needed risk funding, and correspondingly, the fund would receive interest, depending on the profitability of the enterprise. Furthermore, the CIS governments could expect productivity improvement at the microeconomic level and thus acceleration of growth at the macroeconomic level.

The second urgent policy measure needed to speed up productivity improvement would be the creation of financial and commercial assistance centres for young entrepreneurs in the CIS. In addition to state supported loans, these centres for young entrepreneurs could support young entrepreneurs by up-grading their business skills, by financing the development of innovations and original business ideas and by aiding young entrepreneurs to launch products in the CIS and Western markets. Such promotion of export activities should not cover the expenses of market research and feasibility studies completely, since earlier experience has shown that complete aid is not as efficient an aid measure as a policy which requires entrepreneurs to cover at least 50 per cent of the total expenditure. This support policy would divide the risks between the entrepreneur and the fund and moreover, leave the fund with more financial resources to aid more young entrepreneurs.

The execution of the policy measures mentioned above does not demand a giant financial allocation from the CIS governments. Furthermore, the support measures mentioned could be organised in a manner which does not necessarily require a continuous financial contribution from either CIS governments or regional budgets as the funds can operate on the basis of self-sufficiency. In other words, the funds could invest in the most efficient and fastest growing enterprises and thus receive a good return on their investment, which then could be re-invested in other new companies. These funds could also be a feasible way to channel foreign support to the CIS and to improve the effectiveness of the aid given.

The measures recommended above are new ideas. The main reason for pinpointing the importance of these measures is the fact that the empirical evidence from this survey points towards the significance of these measures in increasing productivity at the microeconomic level and most likely, the acceleration of economic growth on the macroeconomic level.

To conclude, although the data suggests that SMEs are not improving their productivity constantly more frequently than larger companies, I personally believe that the CIS governments should support the development of SMEs since they create an important dynamic impact on any economy. In order to support dynamism, it is important that the governments of the transition economies put more effort into the building up of the optimal conditions for free competition and take care of the free regeneration of the enterprise population.

The CIS governments do not necessarily have to establish special SME funds but an even more important policy measure, supporting dynamism, would be the creation of a free and consistent business environment. This does not require financial support for the entrepreneurs *per se* but 'investment' in the development of the regulatory framework and the executors of the business regulations.

To put it differently, it would be necessary to abolish bureaucratic regulations, which reduce the enthusiasm needed to start one's own enterprise. Moreover, it is necessary to fill in the gaps and eliminate overlaps in the laws. This legislative development is necessary since legislative gaps and overlaps increase uncertainty among the entrepreneurs and also the risk that the authorities would influence business in a manner which is unnecessary according to legal principles though it would not be explicitly against the letter of the law. Therefore, the administrative system should invest in itself to increase its capability to support organisational transformation.

Even if the CIS governments have already implemented several important measures to control the business environment more efficiently, unfortunately, some of these new control mechanisms have increased bureaucracy rather than consistency in the business environment. The fundamental weakness in some of these measures is the fact that they do not concentrate on the creation of the framework within which the business activities should be carried out but introduce unnecessary regulations within these boundaries.

The slow development of a free and consistent business environment is one reason why free competition is a less frequently used byword in business communication in the CIS rather than the use of personal business connections. Before the overemphasised importance of the personal relation network is erased from the post-Soviet business culture, enterprises are not capable of reaching their maximal performance and hence, economic recovery will remain slower than resources would allow.

Correspondingly, reduced recovery speed means that it is rather a question of decades than years before all the CIS countries have recovered from the economic disorder; causing a decrease of 45 per cent in the real GDP and much longer before they have reached the EU average[10]. Hopefully, the population of the CIS is patient enough to follow the transformation path, which is narrow but at least solid, rather than turning to the tempting but hazardous paths offered by populistic sirens.

APPENDICES

APPENDIX 1. SUMMARY OF QUESTIONNAIRE [11]

1. In which branch does your company operate?

1. Manufacturing
2. Trade
1. Services
9. Other (specify)…………………..

6. Who owns the company? (*What is the ownership distribution at present and before?*)

	Previous	Present
1. the state	…………… %	…………… %
2. the person who answers the question	…………… %	…………… %
3. other private partners inside the country	…………… %	…………… %
4. private investors outside the country	…………… %	…………… %
5. employees	…………… %	…………… %
6. municipality	…………… %	…………… %
7. other: ………………………………………	…………… %	…………… %
Total	100 percent	100 percent

8. What is the ownership history of this enterprise? (multiple answers are possible)

1. private since establishment
2. previously it was a part of a state enterprise
3. previously it was a whole state enterprise
4. the majority of assets will remain state owned in the recent future
5. the majority of assets will be privatised in the recent future

9. other (specify) ……………………………

11. Did the company make an investment in new production equipment and machines since 1989 or start-up?

0. no
1. yes: when? (*Please circle the year*)
   1989 1990 1991 1992 1993 1994 1995 1996 1997

20. Did the productivity in your company since 1995

1. go down
2. remain the same
3. go up

41. Did the company experience an important change in the key management staff since 1989 or since start-up (*Note: key managers are defined as persons that have an important impact on the firm's strategy*)

0. no

1. yes
   ➔ please indicate in which year(s) (*circle the appropriate years*):
   1989 1990 1991 1992 1993 1994 1995 1996 1997

53. How many employees work in your company in ?

1990………………………………
1991………………………………
1992………………………………
1993………………………………
1994………………………………
1995………………………………
1996………………………………

76. Position of the person who answers the questions:

1. owner and manager
2. manager (*but not majority owner*)
3. majority owner without being in daily management
9. other: specify ……………….

78. Age: ………. years

APPENDIX 2. SOME EMPIRICAL RESULTS

	PRODUCTIVITY CHANGE			N.A.	PEARSON'S TEST
	Gone down	**Remained the same**	**Gone up**		
DISTRIBUTION	24%	24%	48%	4%	
OWNERSHIP STRUCTURE					
State and municipal	33%	24%	43%	33	*Non-significant test result*
The rest of the sample	24%	25%	51%		
Local private (excl. foreign and employee-ownership)	22%	23%	55%	33	*Non-significant test result*
The rest of the sample	30%	26%	44%		
Foreign	11%	44%	44%	33	*Non-significant test result*
The rest of the sample	27%	25%	49%		
Employee-ownership	30%	24%	46%	33	*Non-significant test result*
The rest of the sample	26%	25%	49%		
Private and employee-ownership	25%	23%	52%	33	*Non-significant test result*
The rest of the sample	30%	28%	43%		
ORGANISATIONAL HISTORY					
Private start-ups	18%	22%	60%	155	***
Privatised companies (majority)	37%	24%	39%		
State and municipal	33%	24%	43%	258	*Non-significant test result*
Privatised companies (majority)	37%	24%	39%		
FIELD OF OPERATION					
Manufacturing	30%	25%	45%	162	*Non-significant test result*
Trade & services	22%	24%	54%		

	PRODUCTIVITY CHANGE (valid row percentages)			N.A.	PEARSON'S TEST
	Gone down	**Remained the same**	**Gone up**		
PERSONNEL SIZE [12]					
Micro (under 10 empl.)	24%	19%	57%	68	*Non-significant test result*
The rest of the sample	28%	26%	46%		
Small (10-49 empl.)	19%	26%	55%	68	*Non-significant test result*
The rest of the sample	30%	24%	46%		
Medium (50-249 empl.)	28%	28%	45%	68	*Non-significant test result*
The rest of the sample	27%	24%	49%		
SMEs (under 250 empl.)	23%	25%	52%	68	*
Large (250 and over)	35%	25%	40%		
Giants (1000 and over)	32%	21%	47%	68	*Non-significant test result*
The rest of the sample	27%	25%	48%		
Personnel size in 1995 (Belarus)					
Micro (under 10 empl.)	31%	19%	50%	22	*Non-significant test result*
The rest of the sample	19%	19%	63%		
Small (10-49 empl.)	20%	20%	60%	22	*Non-significant test result*
The rest of the sample	21%	18%	60%		
Medium (50-249 empl.)	7%	22%	70%	22	*Non-significant test result*
The rest of the sample	25%	18%	57%		
SMEs (under 250 empl.)	19%	21%	60%	22	*Non-significant test result*
Large (250 and over)	24%	16%	60%		
Personnel size in 1995 (Russia)					
Micro (under 10 empl.)	4%	8%	88%	33	**
The rest of the sample	15%	38%	47%		
Small (10-49 empl.)	9%	31%	59%	33	*Non-significant test result*
The rest of the sample	14%	32%	54%		
Medium (50-249 empl.)	7%	50%	43%	33 ¤	*Non-significant test result*
The rest of the sample	13%	29%	58%		
SMEs (under 250 empl.)	7%	27%	66%	33	*
Large (250 and over)	21%	40%	40%		
Personnel size in 1995 (Ukraine)					
Micro (under 10 empl.)	40%	30%	30%	13	*Non-significant test result*

The rest of the sample	46%	23%	31%		
Small (10-49 empl.)	26%	26%	47%	13	*
The rest of the sample	53%	23%	24%		
Medium (50-249 empl.)	48%	24%	29%	13	*Non-significant test result*
The rest of the sample	44%	24%	32%		
SMEs (under 250 empl.)	38%	26%	36%	13	*
Large (250 and over)	65%	19%	16%		

Notes

1. The level of real GDP in the Commonwealth of Independent States (the CIS) was in 1998 only 55 per cent of the 1989 level: in Belarus 75, in Russia 55, and in Ukraine 37 per cent. In fact, the average level of real GDP in these three CIS countries is the same as the level of the entire CIS, and therefore, it can be assumed that the transformation in these three CIS countries does not provide a completely distorted picture of the entire CIS, though the findings should not be generalised as such to the rest of the CIS (EBRD, 1998).

2. In addition to the research co-ordinator Valetijn Bilsen and the author, the following scholars from the CIS took part in the project: Edouard Simtchenko from Belarus, Vadim Kapustkin from Russia, Elena Mitina and Valetina Zaikina from Ukraine.

3. Many earlier studies have reported that organisational performance is a very delicate research subject in transition economies (e.g. Malkov, 1992; Birch and Pooley, 1995; Liuhto, 1999b; Michailova and Liuhto, 1999).

4. Analysing enterprise statistics across the CIS countries can be very frustrating, as published statistics are often incomparable. The research team did not deem it appropriate to acquire 'tailor-made' statistics or enterprise registers directly from authorities, since they can be extremely expensive without any guarantee of their reliability.

5. Exact records of the companies which refused to participate in the survey were not kept. The usefulness of such a record is rather questionable as it gives only a partial view on the non-response.

6. 300 companies participated in the survey in Ukraine. However, in order to maintain the balance between the countries studied

only 150 Ukrainian companies were included when the data was analysed. As St. Petersburg is only one of 89 administrative units in a geographically vast and culturally heterogeneous Russia, the results concerning Russia have a strong regional flavour. Due to the regionally-bounded results, the author considered that national comparisons would have most probably caused distorted findings, and hence, national comparisons were not conducted.

7. The average decline in the real GDP of these countries was 47 per cent during 1989-1996 (EBRD, 1997), whereas personnel numbers decreased by 66 per cent during 1990-1996.

8. The survey data does not allow us to draw a conclusion that organisations with a certain ownership structure are considerably more sensitive towards strategic management change. Despite the absence of a significant relationship between the ownership structure and strategic management change, the research findings strongly indicate that privatisation is very significantly related to strategic management change (test result ***). However, it needs to be stressed that strategic management change has not led to a considerable performance improvement in privatised companies.

9. According to Blasi et al. (1997, 25), "*at the beginning of 1991 the Russian Federation had approximately 23,766 mid-sized and large industrial enterprises and 170,000 smaller ones, mostly retail shops*". By the beginning of 1999, more than 2.9 million enterprises had been registered in Russia (Liuhto, 1997b, 1998a; RSC, 1999).

10. It should not be forgotten that with a 3 per cent annual growth it will take approximately 20 years to only reach the GDP level of 1989, and a few decades more before the CIS countries reach the EU average. Moreover, it should be stressed that it is unlikely that all the CIS countries will be able to maintain such a

growth rate for such a long period. Therefore, it is obvious that the economic catching up requires decades, even if the CIS countries are able to follow a positive development path.

11. This appendix contains a summary of a 19-page-questionnaire with 79 questions. As it would not have been possible to present the whole questionnaire in this article, only the questions which were analysed are shown.

12. The companies have been divided into these enterprise size categories on the basis of the EU classification. The category ‘giants’ does not belong in the EU classification, but it has been included here in order to study whether very large enterprise size is related with productivity change. The symbol’¤’ signifies that over 20 per cent cells have expected count less than 5.

Table 1. Some Studies Relevant to Organisational Learning and Change in the former Soviet Union

Main Theme	Author/s (publication year) ***Country Focused On***
Organisational Learning	Gurkov & Kuzminov (1995); Kuznetsov (1995) ***Russia***
Enterprise Performance	Mygind (1997); Liuhto (1999b) ***the Baltic States*** Purju (1998); Jones & Mygind (1998) ***Estonia*** Kuztnetsov & Kuznetsova (1996); Richter & Schaffer (1996) ***Russia***
Ownership Transformation, Restructuring and Other Organisational Arrangements	von Hirschhausen & Hui (1995) ***the Baltic States*** Frydman et al. (1993) ***the Baltic States, Russia &Ukraine*** Djankov (1998*)* ***the CIS*** Nellis (1996) ***Estonia*** Filatotchev et al. (1992/1996); Hendley (1992); Ash & Hare (1994); Brown et al. (1994); Clarke et al. (1994); Rutland (1994); Vacroux (1994); Boycko et al. (1995); Buck et al. (1995/1996); Freinkman (1995); Radygin (1995); Zilcken (1995); Barberis et al. (1996); Boycko (1996); Earle & Estrin (1996/1997); Earle & Rose (1996); Schleifer & Vasiliev (1996); Shekshnia & Puffer (1996); Brown (1997); Ickes & Ryterman (1997); Duflo & Senik-Leygenie (1997); Kalmi (1997); Healey & Lekslin (1998) ***Russia*** Akimova & Schwödiauer (1998) ***Ukraine***
Business Environment and Organisational Adjustments and Reorientations	Üksvarav & Nurmi (1993); Gustavsson & Ljung (1998); Liuhto (1998b/1999a) ***Estonia*** Dent (1994); Kabalina et al. (1996); Varshavskaya & Donova (1996); Hendley (1998); Liuhto (1998a); Mills & Polonsky (1998) ***Russia***
Investment Behaviour	Zilcken (1997) ***Latvia***
Corporate Governance, Management and Leadership	Kustin (1998) ***Belarus*** Liuhto (1996) ***Estonia*** Suutari (1996) ***Estonia & Russia*** Puffer & McCarthy (1993); Kozminski (1993); Shama (1993/1994); Welsh et al. (1993); Kuznetsov (1994); Longenecker & Popovski (1994); Puffer (1994); Shekshnia (1994); Frydman et al. (1995); Pistor (1995); Melin (1996); Romanov (1996); Blasi (1997); Gurkov (1998); Matthews & Yeghiazarian (1998) ***Russia***
Management Education Training and Development	Greer (1995); Radosevic (1997) ***the Baltic States*** Zhuplev & Kozhakhmetov (1997) ***Kazakhstan*** Puffer (1993); Wiley (1994) ***Russia***
Organisation Cultural Aspects	Jerschina & Gorniak (1997) ***the Baltic States, Belarus, Russia & Ukraine*** Liuhto (1997a); Vadi & Buono (1997) ***Estonia*** Urnov et al. (1993); Migliore et al. (1996); Ralston et al. (1997) ***Russia***
Personal Relationships and Networks in Business	Salmi (1995/1996); Lehtinen (1996); Bäckman (1997); Rizoupolous (1997); Lehmbruch (1999) *Russia*
Business Ethics	Kharkhordin (1994); Kharkhordin & Gerber (1994); Puffer & McCarthy (1995); Hisrich & Gratchev (1999) ***Russia***
Market Entry, Strategies and Operations of Foreign Companies	Hirvensalo (1996) ***the Baltic States* & *Russia*** Borsos (1994); Nieminen & Törnroos (1995); Törnroos (1996) ***Estonia*** Suutari (1998) ***Estonia & Russia*** Franko (1996) ***Lithuania, Russia & Ukraine*** Cattaneo (1992); Jermakowicz & Jermakowicz (1993); Thornton & Mikheeva (1996); Hamill & Versun (1996); Anderson et al. (1997) ***Russia*** Bridgewater et al. (1995) ***Ukraine***

Table 2. The Sample Characteristics

Basic characteristics

Country	Russia	Ukraine	Belarus	Total	N.A.
	146	150	150	446	0

Branch	Manufacturing	Trade	Services	Mixed	Other	N.A.
	176	54	65	117	28	6

Ownership[1] (majority)	State & municipal	Private	Foreign	Employees	Other	N.A.
	101	175	9	99	47	15

Personnel size	1990	1993	1996
Belarus	1204 (N.A. = 87)	770 (N.A. = 53)	470 (N.A. = 5)
Russia	1606 (N.A. = 84)	858 (N.A. = 55)	591 (N.A. = 12)
Ukraine	1237 (N.A. = 83)	708 (N.A. = 48)	313 (N.A. = 1)
Mean	1345 (N.A. = 254)	776 (N.A. = 156)	453 (N.A. = 18)

Organisational characteristics

Organisation History	Private since establishment[2] (= private start-up)	Others	N.A.
	47%	48%	6%

Investment in new production equipment & machines since 1989 or start-up	Yes	No	N.A.
	78%	19%	4%

Important change in key management staff since 1989 or start-up	Yes	No	N.A.
	42%	57%	1%

Characteristics of respondent

Age	Mean	Younger generation (40 years or less)	Older generation (Over 40 years)	N.A.
	43 years	43%	57%	1%

Position[3]	Owner-manager	Manager	Other	N.A.
	35%	56%	8%	1%

[1] The category 'private' is comprised of local private companies, where ownership is not divided between employees. The group 'other' includes companies, which do not belong to any other ownership category mentioned or where the ownership is divided between these ownership groups in a manner where none of these ownership groups holds an absolute majority (over 50% of the capital stock).

[2] The category 'private since establishment' includes local private enterprises, foreign companies and employee-owned firms, which have been in private hands since the beginning of their operations.

[3] In this research, the term 'owner-manager' signifies a manager who holds the majority ownership in the company. The category 'manager' stands for a manager who does not possess a majority in the company.

Table 3. Some Significant Test Results

	PRODUCTIVITY				
	Gone down	**Remained the same**	**Gone up**	**N.A.**	**Pearson's test** [4]
Investment in new production technology since 1989 / Development of productivity since 1995					
Investment	79 (24%)	72 (21%)	185 (55%)	28	***
No investment	24 (29%)	33 (40%)	25 (31%)		
Private start-up / Development of productivity since 1995					
Private start-ups	36 (18%)	43 (22%)	120 (60%)	40	***
Other companies	72 (35%)	54 (26%)	81 (39%)		
Management post / Development of productivity since 1995					
Owner-managers	21 (14%)	35 (24%)	92 (62%)	58	***
Managers	78 (33%)	58 (24%)	104 (43%)		
Manager's age / Development of productivity since 1995					
40 years or less	41 (23%)	29 (16%)	111 (61%)	23	***
Over 40 years	68 (28%)	74 (31%)	100 (41%)		
Important change in key management staff since 1989 / Development of productivity since 1995					
Change(s)	58 (32%)	34 (19%)	88 (49%)	23	**
No change	50 (21%)	71 (29%)	122 (50%)		

	STRATEGIC MANAGEMENT CHANGE			
	Change	**No change**	**N.A.**	**Pearson's test**
Privatisation / Important change in key management staff since 1989				
Privatised companies	65 (55%)	53 (45%)	82	***
Other companies	91 (37%)	155 (63%)		
Private start-ups / Important change in key management staff since 1989				
Private start-ups	62 (30%)	145 (70%)	28	***
Other companies	113 (54%)	98 (46%)		
Management post / Important change in key management staff since 1989				
Owner-managers	44 (29%)	109 (71%)	46	***
Managers	121 (49%)	126 (51%)		
	ORGANISATION HISTORY			
	Private start-ups	**Others**	**N.A.**	**Pearson's test**
Manager's age / Organisational history				
40 years or less	132 (72%)	51 (28%)	28	***
Over 40 years	74 (32%)	161 (69%)		

[4] The asterisks are used in the following manner: *** test result at 0.001 level (very significant test result), ** test result at 0.01 level (significant test result), and * test result at 0.05 level (moderately significant test result).

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