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**“The First Phase of the Internationalisation Process : Export
Determinants in Firms of the Former Soviet Union”**

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**THE FIRST PHASE OF THE INTERNATIONALISATION
PROCESS:
EXPORT DETERMINANTS IN FIRMS OF THE FORMER
SOVIET UNION**

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1.EXPORT PATTERNS

Foreign economic relations after the disintegration of the former Soviet Union

Following the dissolution of the FSU in late 1991 and the subsequent collapse of the bloc autarky under the CMEA it was anticipated that these countries would abandon their past trading behaviour and reorientate trade to the West.

If Russia foreign trade was to be liberalised as it was hoped then, “*external aspects of reform (bring) access to know how accumulated by the market economies (which) promises huge gains in productivity,*”¹

In order to achieve these benefits the following actions were taken:

- the state monopoly on foreign trade was abolished
- the exchange rate was unified
- unrestricted foreign exchange for current account transactions was made available
- quantitative restrictions on foreign trade were eliminated

In the growth and development literature the opinion that strongly outward policies² have a positive effect upon economic performance is reflected in the works of Marshall (1890), Lewis (1980), Feder (1983) and Kavoussi (1984). More recently results from Sachs and Warner, 1995 show that openness adds to a country’s economic performance.

Unfortunately, this was not to be the case in Russia, where trade policy was characterised with the persistence of huge import subsidies and export restrictions (see pp416-225, Gros and Steinherr, 1995, for a discussion of Russian external liberalisation) contributing to the delay in exporting to developed countries, as compared to Eastern Europe, as shown in Table 1.

¹ Gros and Steinherr, 1995, pp130.

² Notably a policy of trade neutrality (see Thirlwall, 1999, pp436), where there are few trade or foreign exchange controls and no discrimination between the purchase of domestic and foreign goods.

Table one: Foreign trade of selected Transition Economies by direction 1997-9

Exports, growth rates in %.

	1997	1998	1999
From E. Europe			
to ECE	6.6	-5.2	-21.4
Developed market economies	6.8	16.8	4.9
EU	6.5	17.2	4.5
From Russian Fed.			
Intra CIS	4.6	-17.9	-29.9
Non CIS	-1.2	-15.8	-3.0
ECE	6.0	-21.9	-8.7
Developed market economies	-0.2	-13.8	-6.7
EU	2.4	-17.1	-5.1

Source: The Economic Survey for Europe, 2000, C4, p124.

Before the 1998 crisis the Russian authorities had announced a gradual programme of trade liberalisation, however in 1997 the weighted average tariff rate rose to 13.9%³, still a considerable rate. However, before 1998 Russia was awarded a rank of 2 on the IMF's index of trade restrictiveness, where 1 represents the most open trade regime. Russia's ranking has since increased to 5, due to the increased use of restrictive trade measures⁴.

See table two for a comparison of the restrictiveness of trade and exchange regimes.

In addition, the over valuation of the rouble until recent times has hindered exporting, yet this situation has been somewhat rectified, following the collapse of the rouble in the summer of 1998 (Wright et al, 2000.)

³ IMF staff country Report: Russian Federation: Recent economic developments. No.99/100. This figure is of importance, as it is for this year, 1997, that I have export data for.

⁴ Export taxes were re-introduced in early 1999 on crude oil, natural gas as well as other commodities. Exports of food were prohibited, yet import duties on some essential consumer goods were removed in November 1998

As for Belarus and Ukraine distortions to foreign trade also exist.

One of the major deterrents to exporting in Belarus is the existence of a multiple currency practice where 5 exchange rates are set. Two of which are official and three parallel, the offshore, domestic interbank and street cash rate. The official exchange rate, being highly overvalued is set by the National Bank of Belarus which is applied to 30% of export proceeds surrender requirement, this acts as a major disincentive to exporting activities. The street rate is about 80% more depreciated than the official rates⁵.

Since Belarus is a member of the CIS customs union along with Kazakhstan, The Kyrgyz Republic, Russia and Tajikistan, it has adopted a trade regime similar to that of Russia. However Belarus' ranking on the IMF trade restrictiveness has been higher for 1997 and 1998, compared to Russia.

Trade liberalisation had been slow in Ukraine until 1994, but by 1997 the regime had become fairly liberal, yet non-tariff barriers such as export surrender requirements and administrative allocations of foreign exchange, still plagued the transparency of the system. Export restrictions were minor, with export taxes (of 30-75%) on live animals and skins. Import tariffs were not high, compared with other CIS countries, in fact, less than 0.5% of all imports were subject to tariff rates greater than 30%. During 1997 plans were made to harmonise excise taxes on domestic and foreign goods.

After the 1998 crisis the policy response was to encourage exports, in contrast, imports were hampered by the system of seasonal tariffs for certain agricultural goods.

Ukraine's position in restrictiveness of trade policy compared to other selected transition economies is shown below.

⁵ See IMF staff country Report: Recent economic developments in Belarus. No. 99/100 for more details on the foreign exchange market.

Table two: A comparison of the restrictiveness of trade and exchange regimes

	1995	1996	1997
Russia	0.71 ⁶	0.94	0.94
Belarus	0.47	0.47	0.24
Ukraine	0.71	0.71	0.71
Poland	1.0	1.0	1.0
Hungary	1.0	1.0	1.0

Source: Growth experience in transition economies, IMF SM/98/228

If table three is referred to, it is clear that Russia, Ukraine and Belarus are lagging behind in re-orientating their exports to non transition economies, compared to Poland and many other countries of Central and eastern Europe. 77.5% of Poland's exports are going to non-transition economies, compared to Russia, Ukraine and Belarus, this is a substantial amount.

Table three: the percentage of exports going to non-transition economies, in 1997.

	% of exports to non TE's
Belarus	9.9
Poland	77.5
Russia	61.9
Ukraine	34.8

Source: EBRD, 1999

⁶ A value close to 1 represents a more liberal regime

Despite the tardiness of Russia, Ukraine and Belarus to alter the direction of their exports it is clear that some enterprises are involved in export activity. This paper seeks to explore the determinant of exporting in those firms, which have managed to export to countries outside of the former CMEA. The extent to which firms are exporting in my sample is shown below in table four.

Table four: the percentage of firms exporting in this sample

	1995	1997
Belarus	34.3	43.3
Russia	16.8	17
Ukraine	19.4	22.2

2. EXPORT BEHAVIOUR AT THE ENTERPRISE LEVEL

DATA AND THE SURVEYS

Data was collected from privatised medium and large industrial firms in the 3 countries, spanning principal industrial regions and sectors. The questionnaires were sent to those enterprises that had been privatised under the main manufacturing enterprise privatisation programme as opposed to *de novo* firms, in the retail and service sector.

The questionnaire captured quantitative characteristics, such as investment levels, employment, sales etc. as well as more qualitative variables to represent managerial strategy and attitudes, scaled by a Likert response from 1-7.

The surveys were conducted in 1997 and 1998 giving data for a total of 230 companies, by a team of academics from the Centre for Research on Enterprise in Emerging Markets, from the University of Nottingham Business School⁷.

About a third of the Ukrainian firms and 20% of those of Belarus were Ex all Union Enterprises, these firms should have been affected by the collapse of COMECON,

⁷ Led by Dr. I. Filatotchev and Dr. M. Wright.

providing the rationale for studying the factors behind the decision to export in this new changing environment.

3. PURPOSE OF RESEARCH AND LITERATURE REVIEW

Other studies have focused upon the macroeconomic response to destabilisation and industrial decline, (see Gomulka, 1995, Hendley et al.1998, among others.) In addition Otani and Villanueva (1990) and Lal and Rajapatirana (1987) have examined the impact of export growth on GNP growth.

Here an attempt will be made to examine one particular response to the Transitional Recession of the enterprise sector in Russia, Ukraine and Belarus - *which types of firms reacted to the change in incentive structure and begun to undertake export activities to developed countries?*

Exporting represents the first step in the internationalisation process, and can be seen as a step to more advanced entry modes, such as joint ventures or production abroad.

However, exporting can be viewed as the most frequent involvement for firms in foreign markets for firms.

Cavusgil (1984) identifies that determinants of exports at the aggregate level have been researched extensively, and actively suggests that researchers replicate the standard research frame, which focuses on organisational and internal firm characteristics, with various samples. This study adopts some of the variables proposed by Cavusgil, yet examines firms from transition economies which have recently been subject to trade liberalisation, thus some modifications are added.

This section will present studies of exporting firms in the developed and less developed countries, with the aim of identifying some of the main factors behind the decision to

export. Several schools of literature shall be mentioned, emanating predominantly from strategic management, economics and international business.

International business

Experiential knowledge is a fundamental part of the internationalisation process (IP). The behavioural model of internationalisation is based on the theory of growth of the firm (Penrose, 1959) and the behavioural theory of the firm (Aharoni, 1966), which claims that the internationalisation process is an incremental process. Johanson and Vahlne (1977) present the learning model of internationalisation, which suggests that export success may be dependent on a firm's export history. Their model underlines the dynamic nature of the IP: an outcome of a decision constitutes the input of the next, thus the present state of the internationalisation process can explain its future course.

Thus we have:

$\Delta I = f(I)$ where $I =$ state of internationalisation.

In the transition context, for firms in the FSU to reorientate trade to the West they will need experience of general exporting activities.

With increasing experiential knowledge of markets and clients, firms will become more able to evaluate opportunities in foreign markets and reduce the risks of undertaking activities abroad (Kogut and Singh, 1988).

This study focuses on the first step of the IP- the decision to export, but the experiential knowledge approach attempts to capture the entire *establishment chain* (Johanson and Wiedersheim, 1975):

EXPORTING —————> MARKETING SUBSIDIARY —————> FOREIGN PRODUCTION

The internationalisation model encapsulates the establishment chain and psychic distance⁸ elements and barriers to international expansion. Firms with negligible experience of foreign markets aim to reduce their psychic distance, and aim to select a market near to themselves geographically, but more importantly culturally (in terms of similar business culture, language and customs etc.)

For example, Hornell et al, (1972) found that firms had entered markets a short psychic distance away and then moved on to more distant markets

However Eriksson et al. (1997) find that experiential knowledge is a costly acquisition, which the internationalisation process requires firms to gain this knowledge of clients, institutional factors, such as local laws and customs.

Thus it can be claimed that a firms decision to export is affected by its perceptions of psychic distance and its ability to overcome this.

As a consequence, additional commitments to foreign markets will be made in small steps, unless a company has very large resources or a source of experience- for example a multinational.

This paper shall seek to determine why firms take the first step of the internationalisation process (exporting), an element which is not widely explored in the experience literature.

In a transition context Radosevic and Hottop (1999, pp171) assert that “*trade is an essential part of the catching up process through the several learning mechanisms it entails.*” Their study defines two learning mechanisms; learning based on scope economies,⁹ which involves an increase in the number of products exported, and learning based on scale economies or the experience curve. My study will concentrate on what the above mentioned research refers to as “*deepening*”- an increase in the market share for

⁸ Psychic distance is “... the sum of factors preventing the flow of information from and to the market. Examples are differences in language, education, business practice, culture and industrial development,” Johanson and Vahlne, 1977.

⁹ Economies of Scope are said to be achieved when a firm can produce several products together at less cost than could a group of single product firms, see Milgrom and Roberts, 1992, pp107.

existing goods.

Industry membership will also alter a firm's decision process (Rao, 1977) and several other studies (Johanson and Williamson Paul, 1975 and Lim et al, 1991,) of the export developmental model concentrate upon certain industrial sectors, such as engineering, metals and industrial equipment.

Dominguez and Sequeira (1992) examine the determinants of exporter's performance in central America and find that industry membership is an important determinant of export strategy. Their findings show that the food industry is least reactive (i.e. not concerned with export incentives) while paper and chemical industries were at the opposite extreme.

Obviously some industries are more export orientated, as we have seen above, in Russia the oil industry is heavily involved in foreign trade, thus when studying export propensity it is necessary to consider industry membership.

Organisational factors such as firm size may encourage or hinder a firm's export behaviour. Bonnacorsi (1992) highlights the channels in which size may influence the firm: through limited resources, scale economies and risk perception. Empirical conclusions have been very mixed on this matter, Perkett, (1963) found a positive correlation between firm size and the percentage of firms that export, others have found no significant relation (Bilkey and Tesar, 1975). Cavusgil 1976 found that very small firms do not export, and after firms reach a certain size, there is no correlation, but in-between these points exporting is correlated with firm size. However, Bonaccorsi (1992) raises the important issue of causality, exporting may provide firms with the opportunity to grow.

In this study a variable for firm size shall be used, namely the number of employees, however Reid (1982) proposes other measures which could be used such as the number of product lines or technical employees.

General attitudes towards internationalisation will also feature strongly in a firm's decision

to export. We will hypothesise that if a firm has a foreign partner it will be more likely to export, this follows from the fact that the firm is likely to be more “outward looking.” In addition it is widely recognised by the existing international business literature already reports that skills and knowledge necessary for exporting can be obtained from the presence of foreign partners (see Johanson and Vahlne, 1997)

Strategic management

The presence of or lack of *perceived obstacles* to exporting activities obviously affects a firm’s decision to either begin or increase exporting activities. A study by Bilkey and Tesar (1975) differentiates between institutional or infrastructural obstacles, most frequently cited ones being insufficient finance, government restrictions and a lack of market connections. Brenton and Gros (1997) argue that trade policy in the EU may constrain or encourage the export ability of the transition economies accordingly. European Agreements between the EU and the Central and East European countries and the Baltic Republics have freed non-agricultural products from tariffs and quantitative restrictions. However anti- dumping investigations have hindered export expansion somewhat, Poland being the most severely affected. In 1995 two cases were initiated involving exports of wood, non alloy and unwrought zinc to the EU. Hungary has also suffered with measures being taken against its exports of iron and steel.

The threat of these measures may prevent other countries furthering their export expansion. Although Brenton and Gros argue that anti dumping measures have not had an effect on more technologically advanced exports to the EU.

Lal and Rajapatirana (1987) survey the impact of foreign trade regimes in other developing countries. They report that a NBER study (Bhagwati, 1978) quantifies the effects of alternative trade regimes on a country’s growth rate. He shows that the growth

rate does not benefit from import substituting regimes. Thus maybe an export promotion strategy could be worth adopting.

For the transition economies the trade regime selected by the government is likely to affect the decision of firms to export or not. If the government adopts “strongly outward orientated policies¹⁰” with very few foreign exchange controls and supportive industrial policies for export promotion the propensity of firms to export will increase. For this reason, in following work a dummy variable will be added, in order to represent the country’s trade regime. In addition the regression analysis in this paper shall include three dummy variables or controls for Russia, Ukraine and Belarus. For example the patterns of exporting since the Russian crisis differ for the three countries in this study, particularly following the Russian crisis of 1998. In Russia the impact is still being felt, in 1999 export taxes were applied on crude oil, gas and non-ferrous metals, the export of foodstuffs was completely banned. In brief, trade restrictiveness increased in Russia. Belarus responded to the decline in its exchange rate and increased growth of exports to non CIS countries by 14% in 1998, however quantitative restrictions still exist on food and timber. Ukraine’s response to the crisis was to liberalise exports by reducing the number of products subject to mixed tariffs and harmonising excise tax on domestic and foreign production. This is clearly a very different export policy from that of Russia.

However, this may not be the case for developed countries: Cavusgil (1984) propounds external factors (such as policy, exchange rate levels and demand) are poor predictors of export behaviour.

The extent of industrial crisis should also be accounted for, claim Pearce and Robbins (1994). In the transition context this can be related to the collapse of the CMEA, Buck et

¹⁰ Thirlwall, A, “Growth and Development,” 1999. In contrast to outward orientated policies a country may adopt more inward looking attitudes, such as import substitution and tariff protection.

al (1999) explore how the level of industrial crisis exposes firms to the need for retrenching¹¹ in terms of labour and capital disposal. Here it is hypothesised that retrenchment actions in terms of gross involuntary dismissals and gross physical disposals of capital assets capital are negatively related to managerial and employee ownership. This is caused by managerial entrenchment, entailing collusion with other employees, which reduces the likelihood of a programme of labour dismissals being passed. Simultaneously it is proposed that the extent of retrenchment activity is influenced by the level and direction of changes in industrial demand, which is found to be an important predictor. The impact of changes in industrial demand will be applied as a factor inducing the need to seek markets abroad, and expand exports. Terpstra and Sarathy (1994) identify that exports provide a vehicle to increase capacity utilisation.

Also, Czinkota and Ronkainen (1988) divide motivations for internationalisation between *pro-active and reactive*, excess capacity coming under the reactive rubric. If a situation of excess capacity in terms of production capabilities exists then expansion into international markets could be seen as an attempt to distribute fixed costs across on a larger base. If fixed costs have already been sunk in domestic production then the international pricing scheme can be used on variable costs, yet this could have serious implications charges for dumping exports.

Liuhto and Jumpponen, 2001 examine the internationalisation of largest firms in the Baltic countries, their survey shows that domestic factors, such as small country size push companies abroad. In addition, the second most frequent reason given by firms for internationalisation is "*the necessity to survive*" (p12) as the EU can offer a more stable market.

Thus it can be argued that the extent of industrial decline and the general state of the

¹¹ It is hypothesised that managers and employee ownership will be negatively associated with labour retrenchments as employees can be expected not to favour dismissals.

domestic environment, within the transition context, will affect the decision to export. Here it will be measured as the official reported decline in output as a percentage of the level in 1993.

Barker and Duhaim (1997) extend the impact of decline, they suggest that firm based decline, where performance is below the industry average, the need for strategic change is high. Yet a firm in decline, which is in a relatively competitive position, compared to other firms in that industry, can be expected to exhibit less particular strategic change, especially if they are suffering from a cyclical decline. This is a particularly important issue for firms in transition economies, which have endured a transformational decline.

Boeker (1997) examines other aspects of managerial and CEO characteristics, such as job tenure, succession and diversity, and their impact upon strategic change¹².

As organisational leaders can be seen as the motivating force behind change in products or the markets which firms operate in, we can expect that a change in the chief executive or other top management will increase the probability of a change in organisational strategy (Ocasio, 1993.) Thus when top management succession transpires new skills and ideas will influence the firm's strategy, therefore we can tentatively hypothesise that a change in top management will positively affect the firm's decision to export to the West.

Cavusgil (1984) expands on this behavioural theory of the firm, and includes variables that represent senior management's attitudes to expectations of profits, security and commitment to allocate resources to exporting. This study concludes that government policy may be more effective if it concentrated on altering managerial perceptions and expectations.

Managerial strategies towards growth can obviously be expected to affect export intensity

¹² Here strategic change is defined as the absolute percentage of annual change in degree of diversification, Boeker uses a classic entropy measure (taken from Jacquemin and Berry, 1992) which is calculated as entropy = $\sum_{i=1}^n P_i \ln(1/P_i)$, where P_i is the % of a firm's total sales in the i th business,

or propensity. Barney, 1997, illustrates that a firm can adopt various growth strategies, however in transition economies a lack of financial and managerial resources may mean that managers can only select one particular strategy. Thus, it will be hypothesised that there will be a negative association between exporting activities and a strategy of pursuing new domestic markets for existing products. Alternatively, results may show that a synergy exists between domestic and external strategy.

Economics and corporate governance

While successful industrial restructuring does not only depend upon *ownership structure* it may have an considerable affect on strategic restructuring, defined as export reorientation and changes in firms' product mix. The EBRD Transition Report (1995) argues that the structure of *control* and *financial constraints* may also be very important for restructuring.

Filatotchev and Mickiewicz, 2001, also highlight the importance of the structure of corporate control and financial constraints on restructuring in the post Communist transition environment. They claim that a shift in corporate control will result in two effects¹³ firstly, it will induce a change in management and create an environment, which will allow deeper restructuring, and secondly it will relax resources and financial constraints making shifts in strategy possible.

In their detailed literature review they make several conclusions, one being particularly relevant to this research: foreign ownership produces better performance results, possibly due to the fact that foreign owners have access to external finance and do not have to rely on the underdeveloped domestic banking system. Interestingly they find that the main agency problem is not that of dispersed ownership, but the expropriation of minority

and is the number of firm's businesses.

¹³ Allowing for time lags, as a shift in corporate governance will not have an immediate effect on firm performance (see p4).

shareholders' rights by controlling shareholders, caused by the inadequacy of the legal environment in many transition economies.

However, foreign ownership is not that prolific in Russia¹⁴, the Russian privatisation programme has given control particularly to insiders (employees and managers see Blasi, 1997)¹⁵, which has hindered restructuring.

Kozarzewski and Woodward (2000) document similar findings for Poland in that initially lease leveraged employee owned firms constituted around a third of all privatised firms under the Ministry of Privatisation, however the managerial and non managerial ownership has been falling since the onset of privatisation until present (from 41% to 36.7% and 51.3% to 32.3%, respectively). The impact of these employee owned firms is that restructuring has largely been of a reactive nature, product innovation and technological innovations have not been witnessed on a major scale.

However those firms with dominant outsiders¹⁶ (particular foreign ownership) could be expected to undertake more restructuring. Thus an effective corporate governance system may be the driving force for restructuring, as objectives and willingness to restructure varies for different types of shareholder.

In an exporting context, Liuhto and Jumpponen, (2001) find in their studies of Baltic firms that foreign ownership's influence appears in the top ten reasons for firms to commence internationalisation

Wagner et al. (1998) argues that board member composition may contribute to the corporate governance procedure and organisational performance. Board members are able to select and monitor the CEO and other top management, develop business strategy and create business objectives. Their report documents the inconsistencies in results of the

¹⁴ In this sample foreign ownership is particularly low: foreign owners own less than 1% of the voting shares.

¹⁵ The Transition Report (1995) documents that workers and managers are dominant owners in half of the enterprises, the situation in Poland is slightly more balanced.

¹⁶ In this sample 13% of firms have a dominant outsider owner in 1997.

empirical research on insider and outsider majorities, presenting a positive and negative impact on performance, (see Pearce and Zahra, 1992, and Boyd 1994.)

This disagreement among research may be caused by the theoretical approach adopted.

From a resource based perspectives outsiders provide resources for a firm to survive and develop. Similarly agency theory (Berle and Means, 1932) claim that insiders are less likely to represent owners' interests.

Conversely, advocates of the positive insider effect (Hoskisson et al. 1994) argues that insiders possess specialised knowledge and experience about their firm, which outsiders do not have access to¹⁷.

Wagner et al used 301 firms from Standard and Poor (1990-94) to test the hypothesis that greater homogeneity, of insider or outsider ownership would be associated with greater levels of organisational performance. Their results confirmed that the relationship between outside ownership and performance is an inverted U shape.¹⁸ Research in the sphere of organisational demography provides a case for the *homogeneity effect*, for example Ancona and Caldwell (1992) show that greater similarity between group members encourages teamwork and performance.

Bethel and Liebeskin (1993) also examine the impact of ownership on corporate restructuring. Their study, using 388 Fortune 500 firms that survived during the period 1981- 1987, found that "blockholders exert a disciplinary effect on managers," this concentration can be associated with better organisational performance. *Blockholders*, or owners who have large blocks of shares have the incentive and the ability to ensure that the management runs the firm smoothly and efficiently- in brief, the benefits of monitoring management outweigh the costs (Demsetz, 1983)

Mickiewicz's (1996) study of sales reorientation concludes that ownership is an important

¹⁷ See Oswald and Jahera, " Research note and communications; the influence of ownership on performance: an empirical study," Strategic Management Journal, 1991 for a study on majority insider ownership and positive impact on performance.

factor when examining the structure of sales. This study, focusing on Polish firms from 1991-4, shows that the *de novo* private sector has a more spatially diversified structure of sales¹⁹ than others, while co-operatives tend towards a more concentrated sales structure. Wakelin (1998) proposes that innovation is also vital determinant of exporting propensity. She adopts two variables to represent innovation levels: a dichotomous variable showing if a firm is an innovator or not, and a continuous one to represent the number of past innovations²⁰. Her principal findings are that non-innovative firms are more likely to export than innovative ones of the same size, however the *number of past innovations* positively affects the probability of a firm being an exporter. Therefore innovative and non-innovative firms behave differently in terms of export status and levels of export. For this sample data is not available on the number of innovations a firm has made, thus the annual level of investment level shall be included, as investment can be expected to have an impact on a firm's export capabilities.

Hitt et al (1997) hypothesises that the causality between international diversification (ID) and innovation runs the opposite way. International diversification offers the firm an incentive to invest in maintaining its innovation capabilities, assists in the generation of resources for innovation, as well as exposing the firm to new ideas and challenges.

Nevertheless, in this study, we shall assume that innovation is a driver of export propensity, by assuming that global competition has reduced product life cycles, so that international diversification will provide the firm with the opportunity to amortise investment across a broader base.

The main results of the literature review can be summarised in the following table.

¹⁸ This is highly dependent on the type of performance measure.

¹⁹ Diversification is measured by a Herfindahl index, a more diversified structure of sales would have a lower Herfindahl index.

²⁰ These are obtained from the SPRU archive, these variables may reduce the size bias from using levels of R&D expenditure.

Table five: a literature review summary

INTERNATIONAL BUSINESS

Determinant	Researchers	Impact on exporting
Experiential knowledge and the learning model of exporting	Johanson and Vahlne, 1977 (Uppsala school)	(+) export success is dependent on exporting history
Psychic distance	Johanson and Vahlne, 1977 (Uppsala school)	(+) firms export first to psychically near countries and then move on to more distant markets, in terms of culture, language etc
Attitudes to internationalisation- presence of foreign partner	Johanson and Vahlne, 1977 (Uppsala school)	(+) firms that are more outward looking more likely to have FP, who possess knowledge and skills for exporting.
Firm size	Bonnacorsi, 1992 Cavusgil, 1984 Bilkey and Tesar, 1975	(+/-) a deluge of research. Mixed results

STRATEGIC MANAGEMENT

Determinant	Researchers	Impact on exporting
Presence of obstacles- institutional/infrastructural	Bilkey and Tesar, 1975	(-) e.g. government, finance
Industrial crisis	Pearce and Robbins, 1994 Buck et al, 1999	(+) acts as a push factor to exporting
Change in TMT	Ocasio, 1993	(+) change in TMT increases probability of change in organisational strategy

ECONOMICS AND CORPORATE GOVERNANCE

Determinant	Researchers	Impact on exporting
Ownership structure: inside versus outside ownership	Blasi et al, 1997 Filatotchev et al, 1999 Mickiewicz ,1996	(+/-) outsiders (+) impact on exporting (Blasi) de novo firms more spatially diversified (Poland, Mickiewicz)
Investment levels	Wakelin, 1998	(+) past innovations positively effect exporting

4. SELECTED VARIABLES AND HYPOTHESES

a) Dependent variable 1- *export intensity* : this is a continuous variable representing the percentage of exports in total sales in 1997, and is shown in model 1a) and b) which use autoregression and linear regression

b) Dependent variable 2- *export propensity* : this is a categorical variable which equals 1 if is a firm exporting abroad in 1997 or zero otherwise, and is shown in models 2a) and 2b), which both use logistic regression.

Independent variables

1a)E_CMEA95: this represents exports to the former CMEA in 1995. This will be used to test for *psychic distance*. Referring to the establishment chain of internationalisation, a firm will first export to a psychically near country and then expand activities to countries further away, in term of geographic and cultural proximity. This is measured as a percentage of total sales. It will be hypothesised that exports to the former CMEA in year y_{t-2} will positively affect exports abroad in year y_t .

1b) EABR95: this represents exports abroad in 1995, as a percentage of total sales. This variable allows us to test for possible *learning effects and path dependency* in exporting, as suggested by Johanson and Vahlne (1977) and we will hypothesise that exports abroad will have a positive affect upon export abroad in 1997.

2) LIM_NGVR, LIM_FGVR: these two variables represent *perceived obstacles*: and illustrate which factors constrain a firm's exports such as restrictions of national government or foreign government. These variables can be expected to have a negative impact on the decision to export, and are both measured on a Likert scale, where 1 is not important and 7 is of great importance.

3)G_D96_94:this represents the industry's officially reported decline in real output as a % of 1993 output, this can be expected to positively affect the decision to export. Alternatively,

domestic sales and export activity may be complementary, as a collapse in production at home could affect the ability of a firm to secure an export market. For example, if domestic sales fall, which may cause a decline in investment or other deeper restructuring policies, this may prevent a firm from undertaking policies to create new products for export, initiating marketing strategy etc. thus the firm would be not in a position to seek export markets

4) EMPLOY: This variable represents *firm size* and is measured by the number of employees. Due to the lack of conformity of results in other studies examining size, no hypothesis shall be made

5) EMP, FOR: *ownership*- EMP will be a continuous variable representing the percentage of voting shares held by employees, FOR is similar, representing the percentage of voting shares held by foreigners. It will be hypothesised that the foreign ownership shall be positively linked to export. In contrast, it will be hypothesised that inside owners shall block deeper restructuring policies such as exporting, as we can expect insider ownership to be negatively associated with corporate risk taking, as exporting requires investment and sunk costs we can class exporting as a risky strategy (See Wright, 1996).

6) NEW DIR: *a change in directorship*- this will be a dichotomous variable which has been found to be a factor in the decision to export as found by Filatotchev et al. 2000. If a firm has had a new director the variable equals one, and zero otherwise.

7) MAN_DOM: *managerial strategy towards growth*-if management are allocating resources towards seeking new domestic markets for existing products we can expect this to be negatively associated with export. Again this is measured on the Likert scale.

8) INVST: this represents *annual investment in million current roubles*, and it will be hypothesised that lagged annual investment will positively affect exporting in 1997.

9) Foreign partner: *the presence of a foreign partner*: a firm that has a foreign partner is more likely to export as it will benefit from resources, knowledge, skill etc. This

is a dichotomous variable, being one if a firm has a foreign partner, and zero otherwise.

Controls: country dummies are included for Russia and Ukraine: CR and CU, as well as firm size described above.

This gives the following testable hypotheses:

H1: exports to the former CMEA in 1995 will positively affect exports abroad in 1997, representing the psychic distance phenomenon.

H2: exports in 1995 will positively affect exports in 1997, representing path dependencies of exporting.

H3: perceived obstacles to exporting posed by national and foreign governments recognised by management will negatively affect exporting.

H4: industrial decline can be expected to positively affect exporting representing a “push factor” to exporting.

H5: firm size will positively/negatively affect exporting

H6: foreign ownership will positively affect exporting.

H7: insider ownership can be expected to negatively affect exporting.

H8: a change in the directorate of the firm can be expected to positively affect exporting.

H9: managerial strategy geared towards the allocation of resources to seeking new domestic markets will negatively affect exporting.

H10: lagged investment will positively affect exporting.

H11: the presence of a foreign partner shall positively affect exporting.

5. RESULTS

For descriptive statistics and collinearity statistics please see the annex.

Regression Results

Model 1 a) is linear regression with an independent variable E_CMEA95 (exports to the former CMEA) in order to test for psychic distance, as explained above in the literature review.

Model 1b) exchanges E_CMEA95 for E_ABR95 (exports) to test for path dependency, and uses autoregression techniques. Autoregression becomes the necessary technique, as I will use a lagged dependent variable as one of my independent variables. If plots of this variable against residuals are referred to (see *diagnostics* section, below), evidence of autocorrelation is present. This means that the error term will exhibit a systematic pattern. I will assume that I have a second order autoregressive scheme, where errors are estimated from the following:

$$\mathbf{u}_t = r_1 \mathbf{u}_{t-1} + r_2 \mathbf{u}_{t-2} + \mathbf{e}_t .$$

The exact maximum likelihood method of autoregression is employed which can cope with missing data within the series and is useful when one of the independent variables is the lagged dependent variable, and instrumental variables are hard to obtain (see SPPS for Windows, Trends, release 6.0, 1993)

Model 2 a and b) used logistic regression, with the dependent variable being eabr1- which equals 1 if a firm exports and zero otherwise.

Table six: regression results

Dependent variables: eabr97, for export intensity (model 1a and b) eabr1, for export propensity (model 2a and b)

	Model 1a) Linear regression	Model1b) Autoregression	Model2a) Logistic regression	Model2b) Logistic regression
Constant	3.7(6.3)	7.3(4.0)†	-2.9 (1.8)†	-3.9(6.4)
e_cmea95/e_ab r95 <i>exports to former CMEA/abroad in 1995</i>	0.07(0.08)	0.67 (10.1)***	0.1(0.1)	0.3 (0.1)*
LIM_NGVR <i>Limitations to exporting from national governments</i>	-0.19 (-1.9)†	-1.3 (-2.4)*	0.03(0.2)	-0.2(0.3)
LIM_FGVR <i>Limitations to exporting from foreign governments</i>	0.24 (2.5)*	0.7(1.3)	0.004(0.2)	-0.4(0.3)
G_D96_94 <i>Industrial decline</i>	0.19 (1.9)†	0.04(0.7)	0.04(0.02_	-0.05 (0.03)†
EMPLOY <i>Firm size</i>	0.38 (3.9)***	0.004 (4.4)***	0.002 (0.0005)* *	0.001 (0.0007)†
EMPL97 <i>Insider ownership</i>	0.15 (1.6)†	0.006(0.2)	0.02(0.02)	-0.007(0.02)
FGRN97 <i>Foreign Ownership</i>	-0.08 (-0.9)	-0.3(-1.9)†	0.035(0.04)	-0.006(0.05)
NEW_DIR ^a <i>Change in director</i>	-0.07 (-0.7)	-2.6 (-1.4)	0.4(0.8)	0.4(1.3)
MAN_DOM <i>Managerial allocation of resources to seeking domestic markets</i>	-0.1(-1.2)	-0.6(-1.2)	-0.2(0.2)	-0.06(0.2)
INVT <i>Investment</i>	0.03(0.3)	-0.003 (-2.2)*	9.81E-06 (5.02E-05)	-5.0E-05(1.2)

FOREIGN PARTNER ^b	-0.1(-1.3)	0.3 (0.12)	0.5(0.8)	-2.5(1.2)*
C_R ^b <i>Russian country dummy</i>	-0.27 (-2.4)*	-6.9(-2.3)*	-2.1(1.2)†	-4.6(5.7)
C_U ^b <i>Ukrainian country dummy</i>	-0.4(-3.3)**	-7.5(-2.7)**	-2.5(1.0)*	0.9(1.2)
Adjusted R ² / sum of squares	0.3	5575.98		
% correct			89.5	94.8
F	3.8***			
Mc Faddens R ²			0.40	0.7
Chi square			38.7***	62.5***
N	103	254	103	96

***p<0.001, **p<0.01, *p<0.05, †p<0.1 and t values in parentheses

Diagnostics

As already mentioned above, in order to test for the learning effects regression, autoregressive techniques were adopted as the inclusion of a lagged dependent variable (e_abr95) meant that the assumption of independent errors could not be made.

In order to test for correlations between errors the Durbin Watson test statistic for this particular regression is 1.385, and is not especially worrisome. However further detailed examination of plots of standardised predicted values of the dependent variable against standardised residuals (y axis) in figure one suggest that the assumption of independent errors may not hold. Also there is some evidence of non linearity.

The normal probability plot also shows deviations from normality in figure two, with the y axis being expected cumulative probability and x-axis being observed probability.

Figure one: testing for correlations between errors

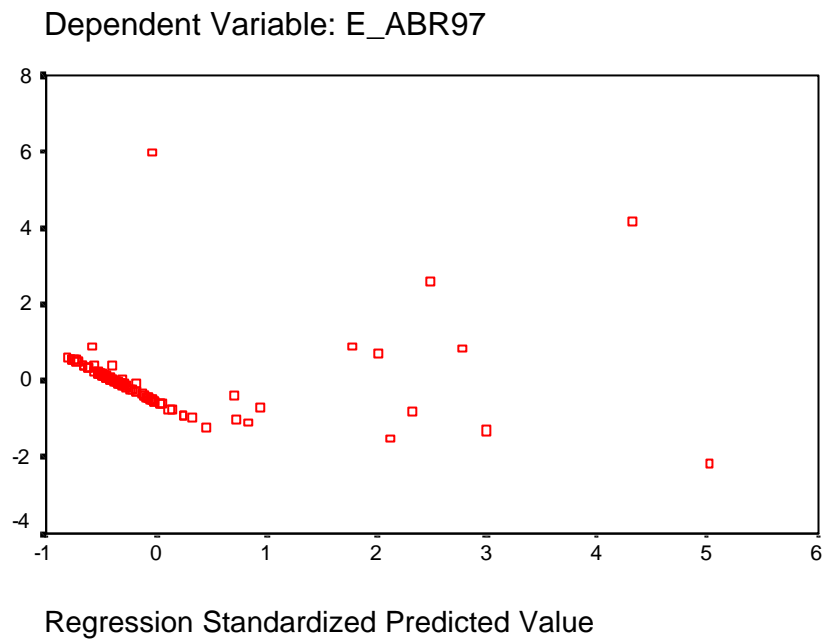
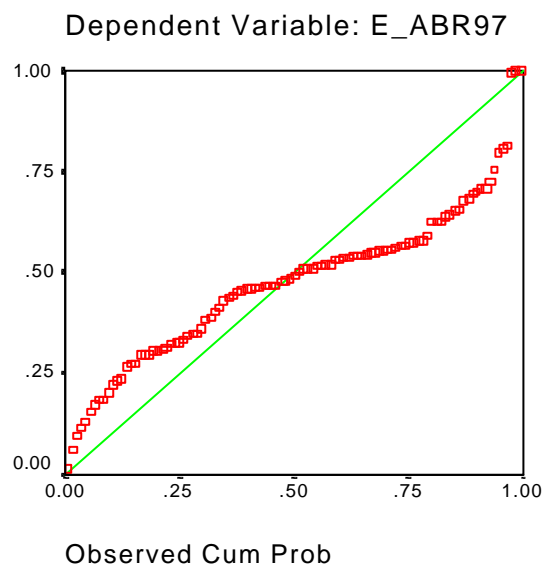


Figure two: the normal probability plot



6. DISCUSSION

Firm level characteristics

For model 1a) industrial decline was slightly significant, and positive, reflecting a “push” factor for the three countries at question, thus a fall in domestic sales leads firms to seek alternative markets abroad. In the logistic regression (2b) industrial decline is significant, suggesting that it influence the decision to export, as well as levels of exporting intensity. Firm size, measured by the number of employees, is strongly significant and positive, in models 1a) and b), suggesting that larger firms are likely to have a higher export intensity. For models 2a) and b) it becomes a less significant factor.

Other controls, such as country dummy variables for Russia and Ukraine, are negative and significant (particularly in the Ukrainian case), for all models except model 2a), highlighting that export intensity is lower in Russia and Ukraine, as compared to Belarus, for this sample.

The annual investment level variable for 1995 was significant and negative in model 1a), contrasting with the work of Wakelin, 1998. Thus in the FSU a firm’s export behaviour is negatively related to lagged investment levels, this may suggest that firms in these three countries do not have sufficient resources to undertake exporting and investment programmes simultaneously, or that past investment is not necessary for future exporting activity, this could be good news for cash starved enterprises.

Corporate governance and ownership

A change in director did not appear to be an important factor in determining export intensity or propensity for all models.

The coefficient for foreign ownership(a continuous variable) is surprisingly negative, and significant for model 1b) This could be explained by the fact that initially foreign owners

are interested in other aspects of restructuring, such as changing the product mix structure, particularly those that they deem to be more urgent and “closer to home”. Alternatively it could be hypothesised that foreign ownership has been firstly motivated by *natural resource seeking, or market seeking*, as identified in the literature (see Dunning, 1993), rather than seek an immediate export platform. When a firm prefers to produce goods for a market where the investment is made firms are said to be market seeking- the large domestic market that Russia possesses is likely to figure strongly here.

These results are mirrored in the coefficient for the presence of a foreign partner, it appears that foreign investors are not interested in exporting activities, however they may not have the power to initiate export policies.

In contrast insider ownership (employees and managers) is positively associated with exporting intensity in three of the models, and significant in model 1a) this may suggest that the high level of insider ownership in Russia, Ukraine and Belarus is not so worrisome from the point of view of exporting. Another possible reason for this relationship is that insiders acquire a controlling stake in firms with better prospects of restructuring and improvement.

Perceived obstacles

As expected an increase in the Likert scale of national government obstacles on exports²¹ perceived by managers decreases a firm’s export intensity, this being significant for both models 1a) and 1b). However an increase in constraints of foreign governments on export sales *increase a firm’s export intensity*, being significant for model 1a) suggesting that as companies become increasingly involved in export activities they gain experience and awareness of the obstacles that are operating.

Managerial strategies

Managerial priorities concerning the seeking of new domestic markets for existing products were negatively associated with the decision to export and export intensity. Yet this variable was insignificant.

Previous exporting behaviour

Model 1a) encapsulates the psychic distance variable, ECMEA95, or exports to the former CMEA in 1995, the coefficient sign was positive, supporting the finding that firstly firms export to psychically “near” countries and then expand their activities to more psychically “distant” markets. This variable was only significant in model 2b).

Previous exporting activity abroad in 1995 was strongly significant and positive in model 1b) and slightly significant for 2b), as expected, providing support for the hypothesis of path dependency of a firm’s exporting history (Johanson and Vahlne, 1977.)

On reflection, this analysis has shown that firm level characteristics, (such as size, investment levels and location), ownership factors, previous exporting experience and perceived obstacles are all instrumental in determining a firm’s export intensity.

²¹ Such as export taxes, overvalued exchange rates etc.

7. CONCLUSION

These results have the following implications:

- ◆ Larger firm size is positively related to exporting.
- ◆ Industrial decline as expected is a positive factor in determining export intensity and propensity, and acts as a “push” factor.
- ◆ Insider ownership is positively associated with exporting activity.
- ◆ Foreign ownership is not associated with the decision to export, or export intensity levels, suggesting that foreign owners are directing sales to the host, and are possibly market seeking rather than sourcing. These results appear to be similar for the presence of a foreign partner too.
- ◆ Previous investment may not be necessary for exporting activities, which is good news for many cash starved enterprises in the FSU
- ◆ Constraints to exporting created by the foreign government appear significant and positive, suggesting that maybe managers only become aware of these constraints upon commencement of a programme. These must obviously be loosened if firms are to export successfully. One of the weaknesses of this study is the absence of variables to represent the status of a country’s trade regime, the magnitude of export tax or existence of quotas, yet it is hoped that some of these effects are captured in the country dummies mentioned below.
- ◆ Managerial strategy towards the domestic market appears to be an insignificant factor in the firm’s decision to export, and for export intensity.
- ◆ Previous export activity has a positive impact on future export activity, as propounded by Johanson and Vahlne (1977) who claim that internationalisation is an incremental process, reflecting path dependencies and the learning model of internationalisation. Thus exporting success is largely dependent on a firm’s exporting history and experiential knowledge.

- ◆ Firms are found to export first to “psychically” near countries and then move on to more psychically “distant” geographic markets, reflecting the psychic distance phenomenon.
- ◆ Country dummies were negative and significant for some of the models, suggesting that exporting intensity and propensity are lower in Russia and Ukraine, as compared to Belarus.

8. ANNEX: DESCRIPTIVE STATISTICS AND COLLINEARITY STATISTICS

Table seven: Descriptive statistics

	Mean	Standard deviation	N
Industrial decline	39.6	18.9	176
Firm size	1099.9	2197.73	269
Investment	4957.6	29007.0	240
Exports abroad 1995	4.2	13.3	266
Exports to the former CMEA 1995	1.1	4.3	266
Exports abroad 1997	6.4	17.1	266
Obstacles to exporting presented by national governments*	2.5	2.1	218
Obstacles to exporting presented by foreign governments *	2.6	2.2	214
Managerial strategy towards domestic markets*	5.8	1.8	254
Insider ownership	55.5	31.1	234
Foreign ownership	0.9	5.3	235

* These variables are measured on a Likert scale, 1= of very little importance, 7= very important.

Some correlation problems were reported for some of the independent variables, but as the diagnostics show below, multicollinearity should not be a serious problem, as all of the variables are well under the threshold Variance Inflating Factor level of 10.

Table eight: multicollinearity statistics.

	Tolerance	VIF
Industrial decline	0.6	1.6
Firm size	0.7	1.5
Investment	0.7	1.5
Exports abroad in 1995	0.8	1.3
Exports to the former CMEA in 1995	0.9	1.2
Obstacles to exporting presented by national governments	0.7	1.4
Obstacles to exporting presented by foreign governments	0.7	1.3
Foreign partner	0.8	1.3
Managerial strategy towards domestic markets	0.9	1.1
New director	0.8	1.2
Insider ownership	0.8	1.2
Foreign ownership	0.9	1.2
Russian dummy	0.6	1.8
Ukrainian dummy	0.4	2.4

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