REGIONAL DIFFERENCES IN SMALL FIRM DEVELOPMENT:

THE CASE OF POLAND
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Abstract.
Polish small firm development has been impressive in the 1990s. However regional differences in macro-economic development have widened and have been accompanied by regional differences in small firm development at the micro level. The findings of a survey of the Polish small firm stratum reveal substantial qualitative differences between small firms in developed and less developed parts of the country. Small firms in the more developed region have a greater degree of development in eighteen variables, stretching from the legal form of ownership to investment and restructuring. These differences are understood within a systemic competitiveness model. They point to the need for differential, rather than generic, regional small firm policy as well as to a theoretical conception of the small firm in which considerable variation in structure, conduct and performance is acknowledged.

JEL classification: C22, C52, L00, P27

Key Words: Polish small firms; surveys, regional differences
Introduction

The Polish small firm sector has developed powerfully since the 1989 Transitional Economic Programme commenced. From 1989-1999 the number of firms in the private sector increased by 5 times to reach over 2.8 million. Small firm growth and employment has been powerful for most of the decade with a significant slowdown towards the end reflecting general macroeconomic conditions. By this time 8.8 million people were working in the market sector of which 46.5% were in small and medium enterprises (SMEs). Accompanying this development have been growing regional disparities in GDP per capita. Information on small firms at a regional macro level is limited. However, as in many countries, there is particularly an absence of information at the disaggregated micro level of small firms in the regions. We refer especially to information on qualitative aspects of firm's performance and functioning - for example information on differences in legal structure, networking arrangement, new technologies, performance indicators, optimism, investment plans, foreign capital participation and the like. This has to be provided by survey material.

The purpose of this paper is to use original survey material in order to examine qualitative regional differences at the micro level in Polish small firms. Our hypothesis is that regional differences in macroeconomic development are reflected in qualitative differences in small firm development. Research into regional or national differences in small firms, or longitudinal research into small firms across time in the same area or
country usually concentrates on quantitative phenomena, e.g. the number of firms, their employment and/or production levels. However comparative research into small firm qualitative differences is more scarce, i.e. into how small firm's are organised and how they behave. To the best of our knowledge such work has not been done before in Poland.

The structure of this paper is as follows. Part 1 gives the broad background of the two chosen regions used for the survey. Part 2 describes briefly the general characteristics of Polish small firms emerging from the survey. Part 3 describes the regional differences in small firms that exist between Gdansk and Lublin. Part 4 explores theoretical and policy implication. Part 5 concludes.

Part 1. Two Contrasting Regions.

In order to understand regional differences in small firms at the micro level in Poland we examined two contrasting areas. The province of Lubelskie is in southeast Poland and borders on the Ukraine. Industrialisation is lighter than in the developed Polish provinces and there is a preponderance of large firms in the industrial structure indicating the presence of older industries. Agriculture plays a significant part in the region employing 30% of the workforce, many of whom are under-employed yet trading in the informal sector. Lubelskie is by no means in the last economic rank of Polish provinces yet belongs in that group that has been called Poland B - provinces generally east of the Vistula, less developed, more agricultural and bordering Russia. Pomorskie, by contrast,
is a more developed and industrialised region in northwest Poland and closer to the EU - representative of what has been called Poland A. The two provinces have virtually the same population numbers (2.2 million) yet Pomorskie is 50% more urbanised. Besides having an industrial sector 120% larger, it also has a 40% industrial productivity advantage over Lubelskie. There is a significant and growing difference between the GDP per capita of Poland A and Poland B (see Fig 1). Unsurprisingly, Pomorskie experiences positive net migration from within Poland while Lubelskie has negative net migration. There is a 20% difference (2001) between wage levels in the private sector of their regions - a far greater differential can be observed between other select regions. By choosing a more developed and less developed region to examine simultaneously a more balanced picture of small firms is gained. Important regional differences in small firm development were expected to emerge from surveys of the two areas.

To demonstrate that these regional macroeconomic differences between Poland A and B are not trivial we have averaged (see Fig.1) the regional GDPs of 3 provinces, representative of Poland A and 4 provinces representative of Poland B - a sample suggested by The Polish Agency for Enterprise Development (2001 p63). In 1995 the gap between their averaged GDP per capita was 30% but by 2000 it had widened to 40%. Serious divisions in Poland are increasing prior to EU accession and look likely to continue. The Polish Foundation for SME promotion and Development (2000) comments ....
"Intensified polarisation of regions has been observed in Poland since 1989. It is likely that (EU) integration processes will increase the competitive power of the largest urban agglomerations (being places where contacts with abroad are concentrated) and border regions, especially in the western border zone…." (p121)

Part 2. General Characteristics of Lublin and Gdansk Small Firms

Two surveys of Polish small firms were completed in 1999 in Lublin and Gdansk, the respective capitals of the above regions. A proportionate stratification sampling method was used across the NACE sectors of industry, trade, construction, transport and services. The sample consisted of 5% of the small firm population in both areas. Separate reports on the small firm picture in Lublin on the one hand and Gdansk on the other were completed. Statistical investigations were also carried out testing for optimism in the small firm stratum. An examination of the regional differences between small firms, the object of this paper, remained to be carried out. Let us firstly briefly outline the overall picture of small firms in the two regions that emerges from the surveys. This will allow us to then better focus on their regional differences.

Examination of the survey material for both Gdansk and Lublin shows that Polish small firms are overwhelmingly young, private sector firms and owned by sole proprietors. Most are self-financing and object to high cost bank loans. They tend to be locally focussed with few export outlets and low in national presence. Most describe themselves
as of medium level technology. Few engage in franchising, subcontracting and licensing, especially in less developed regions. Trade union membership is low and there is little investment in training and human capital. Little emphasis is put on management training. Nevertheless they have considerable optimism. Profits and investments have been positive for most of the decade though with some deceleration in the latter part. Around 20% of firms have engaged in recent organisational change and some even in restructuring. The majority were optimistic concerning their prospects on EU accession and anticipated greater demand and production. Surprisingly they did not fear foreign competition or capital mobility. Many small firms expressed confidence in the prices and quality of their products and were also optimistic concerning expansion in the 1999-2001 period stressing their good knowledge of the market and the high quality of their employees. However disadvantages in marketing and new technologies were evident. Anomalies were also evident - e.g. high expectations concerning the EU coexisted with little preparation for it and even with some protectionist sentiment. Small firm's belief in their employees was reassuring yet there was little investment in the training of their workforce. The surveys indicate an optimism reflecting the impressive expansion of the 1990s. However examination of publications, within and outside of Poland, that have analysed the small firm stratum shows a picture of a comparatively under-powered small and medium firm stratum that faces considerable difficulties within the EU (Smallbone et al.2001). The optimism of the Polish small firm stratum is almost certainly indicative of expectations of advantages (FDI and EU funding for example) from joining the EU that have been reflected in other EU small economies such as Ireland and Greece.
Substantial differences at the level of the small firm exist between the two regions. They are summarised in Tables 1 and 2. Gdansk, being more industrialised and urbanised than Lublin, has a more developed private sector. It has a greater number of small firms and a faster increase in the larger of these small size firms. It also has more firms legally constituted as limited companies and partnerships rather than sole proprietors - thus indicating that many of its firms have past beyond the elementary form of legal ownership: Table 1, Part A illustrates this. Lublin has 43% of its small firms in the legal form of sole proprietorship - exactly the national average for this size class, while Gdansk at 32% has significantly less - implying there are more partnerships and limited companies in the Gdansk region than Lublin. Gdansk also has more international orientation with more foreign capital and ownership. Five percent of Gdansk firms have a mixture of foreign capital, 2% were established entirely with foreign capital and 2.5% have some participation in foreign enterprises. In Lublin by contrast the presence of foreign capital is a rarity. Like Lublin firms, the majority of small firms in Gdansk (75%) were set up on individual initiative but, unlike Lublin, 20% were a spin off or buy-out of the assets of another company.

Network arrangements are generally low in both regions but significantly higher in Gdansk (see Table 1 part B) - for example, 38% of Gdansk small firms have substantial subcontracting arrangements (7 times greater than Lublin's). In addition Gdansk had
three times the Lublin level of co-ownership of other Polish firms and generally has a higher level of formal collaboration between firms or organisations (Table 1 Part C). Not surprisingly Gdansk firms also report such arrangements to be more useful. The exception to this was the high figure of Lublin firms being connected to consumer organisations. Table 1 part D shows significant difference in R&D and innovation with Gdansk having more of both. In Lublin none of the sample had R&D departments employing 2 persons – however they did report 6% of their firms employing some labour in this capacity. In Gdansk on the other hand 6% had R&D departments (employing 2 persons on average). Of the Lublin firms 19% compared with 21% of Gdansk firms had introduced organisational changes in 1998-1999. However a significant gap between the two regions (in favour of Gdansk) was observed in recent restructuring programmes. In Lublin only 1% of small firms get external financial help (e.g. grants) compared to the 7.5% figure of Gdansk. Technological change was divided into two areas – new or improved products and new or improved methods of production. Significantly greater change (Table 2 part A) was once again observed in the Gdansk region with respect to products or services (49% compared to Lublin’s 30%). However with respect to new technologies in the production processes both regions were nearly equal.

Greater numbers of Gdansk firms (60%) were re-investing in 1998-1999 compared to Lublin (31%). The reason for this is perhaps that the Gdansk firms have more profits from which to invest. While it is very difficult to get profit figures from small firms this might be induced from the following. Gdansk firms are more than twice as likely to be investing from their own profits (Table 2 part B) probably indicating higher profit levels
and more confidence in the future. No leasing finances were reported in the Lublin region compared to a 14% contribution from this source towards investment in the Gdansk region. Both regions report a comparable low level of bank loan contribution towards their investment. It is not that bank loans are difficult to get but small firms complain of high interest rates. Excessive demands from the banks in terms of requirements and documentation are also complained about although to a far less extent.

Table 2 Part C shows that zero growth rates were expected by a significant number of firms in both regions (36% in Lublin compared to 29% in Gdansk). Moderate growth rates of between 0-5% were expected by 22% of Lublin’s small firms while only 13% of Gdansk’s population reported such expectation. Significantly greater numbers of Gdansk firms expected higher growth rates in excess of 5% and 10%. In both Gdansk and Lublin only one firm in each sample said it would not continue in business in the following year. Table 2 part D shows Gdansk employees to be more highly educated - for example 20% have a university level education compared to Lublin’s 12%. Knowledge of EU markets was, as expected, at a low level. However, surprisingly, greater knowledge of EU markets was claimed in the Lublin area. Gdansk, with good reason, expects more from the EU than Lublin: 70% of Gdansk small firms compared to 58% of Lublin’s have positive expectations of increased productivity and profitability as well as greater selling opportunities in EU markets. However on average 82% of firms in both regions had made no preparation for this.
In summary, substantial differences were revealed between small firms in Gdansk and Lublin. Gdansk's small firms, belong to a more developed private sector. They have on average a more developed legal structure and engage in more networking arrangements (e.g. sub-contracting) and formal collaboration with research institutes or consultants. They have higher levels of foreign capital participation, greater international orientation, higher levels of innovation and have achieved more improvements in the technological level of their products and services. They have also accomplished significantly more restructuring than Lublin small firms. Although largely self-financing they have more external finance (e.g. grants from governments) and tend to finance their higher level investment from higher levels of profit. They have high levels of leasing revenue compared to Lublin where such sources are non-existent. Their workforce is more educated and they intended (in late 1999) to expand at higher rates than Lublin firms. Lublin small firms do claim some merits however: a greater knowledge of EU markets, greater contact with consumer organisations, higher franchising arrangements and comparable levels of own-firm technology when compared to those of Gdansk. They claim a roughly equivalent level of major organisational change (though less outright restructuring). The surveys showed general optimism in both regions (though more so in Gdansk) concerning EU accession although there were some marked sectoral differences. Short-term growth expectations were optimistic especially for those firms with a recent expansion history.

We should also point out that beside these qualitative differences there exist also regional quantitative differences in small firm development that also reflect the GDP
differences between the regions. The Polish Foundation for SME Promotion and Development note that…

"The high level of economic development in some areas - in terms of GDP per capita - seems side by side with industrialisation, one of the most important factors conducive to concentration of large number of small and medium units" (1998 p90).

The Polish Agency for Enterprise Development (Piasecki et al. 1998 p63), while pointing out that the divisions between Poland A and B were widening, noted that SME numbers were growing faster in Poland A than Poland B. Also specifically taking Gdansk and Lublin as examples the former in 1999 had 50% more small as well as medium size enterprises than the latter. Clearly then quantitative and qualitative differences in regional small firm development are operative in regions of differing macro levels of development.

**Part 4. Theoretical and Policy Considerations**

This paper empirically demonstrates that substantial differences exist across a wide range of variables of small firm development between two contrasting regions in Poland. How can we understand this theoretically? Does this have any significance beyond these provinces, and indeed beyond the Polish border? Does it have any worthwhile policy implications? In order to throw light on these questions we use a systemic
competitiveness model used by the organization Sistema Economico Latinoamericano SELA (1996) originally developed with special application to Latin America economies but which has subsequently been applied in other parts of the world. This views national competitiveness as a result of four interacting levels: Meta (overarching political, economic values and management/institutional capacity of the State), Meso (infrastructure provision - including education and technology), Macro (growth, stability, employment, balance of payments, etc) and Micro (firm's performance, productivity, efficiency, capacity for change etc).

The development of small firms in the Polish transitional economy is clearly driven by changes at the Meta level of the political and economic structure. Millions of SMEs and micro firms have emerged, not as a result of organic market development, but because of political change of the old command economies and the dismantling of the state run organizations. Entreprenuership in Eastern Europe is a survival necessity not a fashion. In addition small firms respond to Macro and Meso conditions at the national level - e.g. the creation of small firms in Poland responds to macroeconomic growth - increasing during the mid 1990s and decreasing towards the end of the decade. Small firms also can grow or be hampered by infrastructural provision at the national level. However within Poland, as in other countries, small firms also develop according to regional advantages. These can be conceived of at the Macro and Meso level also. Regional GDP varies widely in Poland and we have noticed that small firm development is related to these differences. We suspect that there are marked regional differences at the Meso level also - for example, in education, human capital, technological development, ICT provision and
the like. This has not been tested in this paper. What has been shown is that small firm development (a *micro* phenomena and conceived of qualitatively not just quantitatively) is related to regional differences at the macro level. Macro level differences have been growing in the lead up to accession. We do not have the evidence that small firm qualitative differences at the regional level have been growing year by year in response to this since this would have required numerous surveys of the small firm stratum - data that is simply not available in Poland, nor indeed in most countries. However we do have a valuable glimpse of small firm regional difference at a single point of time - late 1999.

Theoretically we can understand these dynamics as follows. Regional, geographic and resource advantages give the Gdansk region significant advantages over Lublin (reflecting the similar advantages of Poland A over Poland B). Consequent regional advantages in GDP per capita, infrastructure provision, urbanization and industrialization allow for the exploitation of external economies of scale, potentialising the development of all firms including the small. Agglomeration advantages, in certain regions, predominate for early and middle stages of Polish growth. Economies of scale, both internal and external are underpinned by these geographic and resource advantages. Small firm development, in Gdansk and Poland A, is at a higher level than in less developed regions because faster regional growth, greater opportunities for growth and profits, higher levels of demand and a more productive environment will necessarily make greater demands upon firm development and encourage greater levels of small firm formation. For example, faster regional growth will stimulate more networking, more foreign capital participation, greater levels of legal development, greater planning and
levels of investment, more complex labour relations, the exploitation of greater economies of scale and the like. All these pressures require greater levels of firm development if such firms intend to survive and grow. In short regional advantages, particularly within the EU context, produce a more intense competitive environment that simultaneously provides more opportunities for growth. The converse applies to the less developed regions. Lubelskie, therefore, despite having the same population numbers as Pomorskie, does not have the same levels of urbanization, industrialisation or GDP per capita. It does not provide the same external economies, regional comparative advantages (resource advantages or geographical proximity to the EU), or *Meso* level provision. Accordingly we expect a lower level of small firm development not only quantitatively but also qualitatively - and that is exactly what we find.

Our hypothesis - that qualitative small firm regional development is related to regional macroeconomic development has therefore received confirmation in the particular case we are looking at. Its generalisation is probably safe in inverse relationship to distance from the original object of observation. To generalize outside of these two provinces to Poland A and B is reasonably safe. After all we have established that the concept of Poland A and B has macroeconomic evidence supporting it and that polarization of the Polish regions is a present fact and a future danger. We have established substantial differences in two regions which are representative of Poland A and B. More research can establish that our generalisation to Poland A and B is completely justified by extending the surveys and analysis to other regions. To generalise outside Poland passes into the realm of the speculative - interesting though it is. Could such scenarios typify
other transitional economies and even developing countries? This is a testable hypothesis and subject to future research. In this paper we have used regional GDP per capital to represent regional macroeconomic development and a range of variables to indicate small firm development. To test a similar hypothesis that regional *meso* provision is related to small firm development would require a series of measurable infrastructure variables such as transport, education, ICT provision and the like. That our hypothesis could be generalised to developed economies, like the UK for example, is doubtful. Here we may infer that in some regions external economies of scale are outweighed by diseconomies. Small firm profits for example can be higher outside of the major agglomerations and can benefit from the *'borrowed size effect'* (Phelps et al. 2001). Here we have a reverse phenomenon. The likely explanation for this is two fold: firstly that many small firm regional differences are more operative at lower and middle levels of national economic development when external economies of scale are powerful and are exhausted at higher levels when external diseconomies set in; secondly much depends on *meso* level provision. In developed economies firms can move out of major urban agglomerations and avoid external diseconomies of scale when infrastructure provision allows them to do so (e.g. when transport and IT facilities permit) - they can thus benefit from ("borrow") the benefits of agglomerations.

It is quite likely that these disparities in Poland at the *macro, meso* and, as we have shown, *micro* level will continue with EU accession. Policy considerations are therefore urgent. A useful question to ask is what are the changes in regional competitive conditions that are required to allow greater growth in Poland B. Many answers to this
type of question are pitched at the *macro* and *meso* level - e.g. greater regional investment, fiscal regional advantages, greater infrastructure provision, government institutional focus and so on. However this paper points to the micro level as an important area for policy thought. Regional competitive advantage is improved when firms engage in development, e.g. productivity and innovation developments, higher levels of human capital, greater investment capacity, wider managerial training, greater knowledge of markets, higher levels of investment and technology etc. Much of small firm policy the world over offers a generic provision that applies to all small firms across a country. Piasecka and Rainnie (2000 p28) characterise small firm policy in Poland as strikingly similar to that of regions in the UK. Ironically referring to the Polish "local strategies" they say…..

"Workforce training, the erosion of social protection, the construction of science and business parks, the vigorous marketing of place and ritual incantation of the virtues of international competitiveness and public private partnership seem now to have become the near universal features of so called "local strategies". 

Blazyca et alia (2002) argue that there is a gap between policy and institutions in the Polish regions especially the poorer ones and that this may well exasperate already existing regional differences in the light of EU entry. If small firms are qualitatively different between regions, reflecting levels of regional development, then there is a good case to be made that small firm policy should also be appropriately differentiated. The same policy that works for a faster growing firms in Gdansk may not apply to a slower
growing firms with strong links with the informal sector in Lublin. Small firms are an important part of their regional environment and therefore regional policy should integrate considerations at the Micro level, especially concerning firm performance. The enhancement of regional competitiveness depends on improvements in such performance. Programmes that are conceived at the local level and tailored specially at small firms of a particular region can be more appropriate in enhancing survival, performance and growth. Conversely the understanding of regions can be essential in understanding small firm development levels and performance. 14

An implication of this research is that our theoretical understanding of small firms needs to encompass their heterogeneity. Small firms, definitionally, are usually grouped together according to number of employees (and sometimes capital employed). However their common classification can, at times, disguise more than it reveals. With this point of view in mind Di Tommaso and Dubbini (2000 p5) comment …

"in the light of recent developments in the theory of the firm… the definition of the small firm appears to be far from homogeneous in structure, conduct and performance".

3. Conclusion

It is clear that substantial differences exist between small firms in the two regions in our study. In general Gdansk has the greater development of the small firm stratum as well as
greater expectations from the EU and future growth. This is evidenced by the level of the following variables: a higher level of the firm’s legal status, a greater presence of foreign capital, more international orientation, greater network arrangements (such as subcontracting), and formal collaboration with other Polish firms. Gdansk has higher levels of R&D and innovation (including improved technologies with respect to new products and services), higher levels of human capital and a greater degree of external financial help and grants. Gdansk firm’s have greater experience of restructuring arrangements, a greater intention to increase output and higher levels of investment. By contrast small firms in less developed areas are smaller, overwhelmingly of sole proprietorship structure with a low technology level, they have very little networking and no developed form of financing - e.g. leasing. Their levels of education and training are below firms in the developed regions and their export activity is lower - in the eastern provinces there will probably be very little exported to the EU and what exists will be going east to the Ukraine and Belarus.

The hypothesis that such regional developmental difference in small firms reflects regional differences in macroeconomic development has received considerable support since the evidence for a growing divergence between the less developed and more developed areas of Poland has been presented. The explanation why such macroeconomic differences should foster differences at the micro level in terms of qualitative firm development is offered within a systemic competitiveness model. Using the four levels of this model we have suggested that the Polish experience indicates that the dynamics at the small firm Micro level (differences in numerous variables indicating
level of development of the firm) reflect the dynamics at the other 3 levels: *Meta* changes, *Macro* growth and *Meso* level provision. Of these 3 explanatory levels we have concentrated and presented evidence on the *Macro*. We have however indicated where future research might lead in order to include evidence on the link between *Meso* (infrastructure) provision and small firm development. Specifically we offered an explanation of small firm differences between the two regions indicating how *Macro* (and by implication *Meso*) advantages propel the development of firms not only in terms of numbers, turnover and employment (the usual variables measuring the small firm stratum) but also in qualitative development.

The scenario of Poland being regionally polarised in its development is a real threat. Regional policy in Poland, however, is still in its infancy and many of the legal framework requirements are lacking for such a policy to be effective. However our research shows that different levels of development operate not only at a macro level but also at the micro level of small firms. Since small firms in the less developed regions of Poland have substantial differences from those in the more developed areas it implies that SME policy needs to be regionally differentiated within the country - a generic policy applied uniformly to the whole country would be a blunt instrument. ¹⁵

We have suggested how our hypothesis could be tested in other regions of Poland and indeed in other transitional and developing economies. Finally we have indicated that such considerations of the qualitative differences that exist between small firms indicates the need for more theoretical development of our notion of the small firm.
Bibliography.


### Table 1

#### A. Different legal forms

<table>
<thead>
<tr>
<th></th>
<th>Sole proprietor</th>
<th>Partnership</th>
<th>Ltd Comp</th>
<th>State-owned</th>
<th>Joint stock</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lublin</td>
<td>43%</td>
<td>27%</td>
<td>19%</td>
<td>4%</td>
<td>4%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Gdansk</td>
<td>32%</td>
<td>30%</td>
<td>27%</td>
<td>2%</td>
<td>4%</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

#### B. Network Arrangements

<table>
<thead>
<tr>
<th></th>
<th>Co-owners of Polish firms</th>
<th>Participation with Foreign firms</th>
<th>Franchising$^b$</th>
<th>Sub-contracting$^a$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lublin</td>
<td>3%</td>
<td>0%</td>
<td>7%</td>
<td>5.2%</td>
</tr>
<tr>
<td>Gdansk</td>
<td>9%</td>
<td>2.5%</td>
<td>3%</td>
<td>38%</td>
</tr>
</tbody>
</table>

#### C. Formal Collaboration between Firms

<table>
<thead>
<tr>
<th></th>
<th>Suppliers</th>
<th>Research institutes$^c$</th>
<th>Consumer organisations</th>
<th>Collaboration found useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lublin</td>
<td>35%</td>
<td>7%</td>
<td>24%</td>
<td>62%</td>
</tr>
<tr>
<td>Gdansk</td>
<td>77%</td>
<td>13%</td>
<td>8%</td>
<td>97%</td>
</tr>
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</table>

#### D. Variables indicating Change in Small Firms: 1998-1999

<table>
<thead>
<tr>
<th></th>
<th>R&amp;D$^d$</th>
<th>Innovation</th>
<th>Grants</th>
<th>Major organisational change</th>
<th>Restructuring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lublin</td>
<td>0%</td>
<td>30%</td>
<td>1%</td>
<td>19%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Gdansk</td>
<td>6%</td>
<td>49%</td>
<td>7.5%</td>
<td>21%</td>
<td>7%</td>
</tr>
</tbody>
</table>

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a. Sub contracting criterion – 50% of work to come from this activity.
b. Franchising – 45% of firms in both provinces had never heard of or considered using it
c. Research institutes include consulting firms
d. R&D – refers to employing two people in this department. Lublin although registering a figure of 0% did have 6% of its firms reporting some R&D research – employing one person at least part time in this capacity.

Innovation – refers to introduction of technological change in the final products or services.

Grants – refer to external financial help of any sort outside of bank loans.

Restructuring – refers also to mergers and takeovers.
<table>
<thead>
<tr>
<th>A. New or Improved Technologies(^a) 1998-1999</th>
</tr>
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<tbody>
<tr>
<td>Products or services</td>
</tr>
<tr>
<td>Lublin</td>
</tr>
<tr>
<td>Gdansk</td>
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<table>
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<tr>
<th>B. Sources of Financing Investment</th>
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<tbody>
<tr>
<td>Harvest</td>
</tr>
<tr>
<td>Lublin</td>
</tr>
<tr>
<td>Gdansk</td>
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<tr>
<th>C. Percentage of Firms Intending to Increase Output in 2000-2001</th>
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<tr>
<td>Aim to raise output by</td>
</tr>
<tr>
<td>Lublin</td>
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<tr>
<td>Gdansk</td>
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<th>D. Comparative Educational level of workforce</th>
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<tbody>
<tr>
<td>Higher</td>
</tr>
<tr>
<td>Lublin</td>
</tr>
<tr>
<td>Gdansk</td>
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<th>E. State of Knowledge of EU Markets</th>
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<tbody>
<tr>
<td>High</td>
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<tr>
<td>Lublin</td>
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<tr>
<td>Gdansk</td>
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</tbody>
</table>

\(^a\) Technology - refers to introduction of technological change in the producing of products/services or in their production.
Endnotes

1 Thanks are due to Dr. Subrata Ghatak who motivated this investigation and also to Dr. David Smallbone for access to The Centre for Enterprise and Economic Development Research. Usual disclaimers apply.

2 The official definition of SMEs in Poland now follows EU conventions of number of employees thus: micro = 1-9, small = 10-49, medium = 50-249. However in practice definitions vary.

3 This division into Poland A and B is used, for example, by The Polish Agency for Enterprise Development (2000, p63) and the Polish Foundation for SME Promotion and Development (Piasecki et al. 2000 p122).

4 Figures are taken or calculated from official government statistics e.g. www.paiz.gov.pl.

5 Positive net migration is when migration into a region exceeds emigration - while negative net migration is the reverse.

6 These surveys were financed by the European commissions PHARE ACE PROGRAMME 1997, Contract Number p97-8123-R and organised by Prof. Subrata Ghatak of Kingston University.

7 Defined as employing between 10 and 49 employees.


10 Poland has a far higher percentage of sole-proprietorship than other EU countries. It also has a longer age profile, less limited companies and more private sector companies than other Baltic States.

11 While these figures are small we can expect, and Poland certainly hopes for, very significant growth in FDI, especially in its Western provinces.

12 However, by way of an isolated example, the road capacity of the Pomorskie region increased from 1995 to 2001 by 4.4% while that of Lubelskie actually decreased slightly (by 0.6%) in this period.

13 The region around Warsaw is of course an geographical exception to the rough West/East divide of Poland A and B.

14 For an example of how such small firm policy could be differentiated in Poland see Mulhern 2003.

15 For example, and by way of contrast, the needs of a small but fast growing shipping insurance firm in Gdansk are quite different from those of a sole proprietor supplying agricultural livestock in the Lublin area. The Gdansk firm is concerned with the problems of fast growth: access to and integration of changing technologies, upgrading the quality of its workforce, informational requirements concerning the EU, help with take-over and merger laws, franchising and patents activity. The Lublin small proprietor might be concerned with survival in an industry under tremendous competitive pressure from larger firms - or perhaps such an owner should be helped with retraining.