WHO GETS PRIVATISED? AN EMPIRICAL ANALYSIS OF POLISH MANUFACTURING

by
Katarzyna MIKOLAJCZYK
Cracow University of Economics, Poland
and
Barbara M. ROBERTS*
University of Leicester, UK

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ABSTRACT**: This paper employs a multinomial logit model to examine what determines the choice of a particular firm for a given privatisation method. A variety of hypotheses about possible determinants of ownership change are tested using an extensive data set for Polish manufacturing at the beginning of transition. The results at a firm as well as at a sector level give strong support to the hypothesis of the importance of resource constraints on the choice of ownership. Large firms with high financing requirement are more likely to be owned by outsiders. High sectoral capital intensity discourages small insider owned firms while high degree of product differentiation is a constraint for different investors, with the exception of outsiders. We also find that firm quality, measured by profitability and exporting outside the Soviet block, appeals to all types of investors but, additionally, privatisation offers outsiders ways of entering sectors with substantial entry barriers.

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** Résumé en fin d’article; Zusammenfassung am Ende des Artikels; resumen al fin del artículo.
1. Introduction

East European countries at the beginning of transition were characterised by a very small private sector. Initial dramatic increases in the size of the private sector have to be attributed mainly to privatisation in the narrow sense. This narrow sense privatisation is based on the ownership transfer of assets and production facilities of the former state sector, rather than growth of the indigenous private sector starting new investment projects. Only some firms were chosen for privatisation and this process of selection of enterprises is not well documented and analysed.

Megginson and Netter (2001) comment on a limited understanding of the determinants of privatisation and stress the need for different privatisation methods for different types of assets. In the context of transition, the emphasis is on the relationship between privatisation and performance, rather than the determinants of privatisation (see e.g. Djankov and Murrell 2002 for a survey). At the same time it is recognised that the endogeneity of the timing and method of privatisation complicates any attempts to establish a causal relationship between privatisation and performance (Carlin and Landesmann 1997).

There are some studies with primary interest in the impact of privatisation on performance, but they examine the determinants of ownership change so that predicted ownership shares can be used later on as explanatory variables in performance analysis. For example, Marcinéin and van Wijnbergen (1997) in their analysis of Czech privatisation estimate a selection rule first before analysing several measures of performance. Similarly, Smith et al. (1997) use a two-stage Tobit procedure to control for simultaneity between privatisation and firm performance during spontaneous privatisation in Slovenia. In contrast to this, Jones and Mygind (1999) and Jones et al. (2003) specifically concentrate on ownership changes rather than the link between privatisation and performance. Among different studies, there is some overlap in the firm-level determinants of ownership, such as size, profitability and capital intensity.

In this paper we focus on the process of selection of state-owned enterprises for privatisation and the choice of privatisation

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1 More recently competition and policy reforms, rather than ownership as such, are identified as important factors affecting restructuring and performance (see e.g. Carlin et al. (2001) and Aghion et al. (2002)).
methods, depending on both firm-level as well as industry specific characteristics. A unique dataset is employed which is constructed by linking the database of all privatisation transactions recorded by the Polish Ministry of Ownership Transformation and the database compiled from the financial statements of all state-owned enterprises which were eligible for privatisation. It covers privatisations initiated between 1990 and 1993, the period when privatisations peaked. Moreover, at the beginning of transition all state-owned enterprises were available for privatisation, in contrast to the later period, where best enterprises might have already been restructured. A multinomial logit model is used to examine what determines the choice of a particular firm for a given privatisation method, leading to the conclusion that different characteristics appeal to different types of investors.

2. The privatisation programme in Poland

In 1990 the Polish parliament approved the Law on Privatisation of State-Owned Enterprises and founded the Office of Ownership Transformation. The legislation allowed for three main methods of privatisation (Bornstein 1997). Under ‘capital privatisation’ some state-owned enterprises were to be transformed into joint-stock companies to be sold to private investors. The Ministry of Ownership Transformation started this process by transforming a state-owned enterprise into a joint stock company with the state as a single shareholder, although often the initiative belonged to the enterprise concerned. Privatisation through ‘liquidation’ was very popular. Under this procedure, a given state-owned enterprise is dissolved and its assets are sold, transferred to another company or leased. This method can be applied to two types of enterprises. Insolvent enterprises are closed down and their assets sold but the legislation allows for solvent enterprises ceasing to exist, with their assets acquired by a new private company. Although the programme of mass privatisation did not come into operation until much later, between 1990 and 1993 some enterprises were designated for this method of privatisation. This leads to four possible paths of privatisation: by sale, mass privatisation, dissolution in order to privatise and dissolution because of bankruptcy. These are the main methods of privatisation under

2 The largest number of privatisations was recorded in 1992 and dropped dramatically thereafter (Polish Statistical Yearbook, different issues).
Polish legislation. Moreover, these four categories correspond to the classification used in the reporting of privatisation incidents by the Statistical Office. The first method should guarantee an outsider ownership, while mass privatising usually leads to dispersed ownership. The remaining two methods are often associated with assets acquired by the insiders.

Privatisation episodes are reported to the Polish Central Statistical Office at the point when privatisation proceedings are initiated using special questionnaires, stating the type of privatisation method involved. We use these questionnaires to identify the firms being privatised in a given year, and compare them with all state-owned firms which were eligible for privatisation at this time. Firm-level characteristics come from their balance sheets. We also use the main database to evaluate some industry level characteristics such as concentration or sectoral capital intensity. Our data covers privatisations which started between 1990 and 1993, with firm-level characteristics going back to 1988. The number of cases of privatisation we start with coincides with the totals given in the report on the progress in privatisation (Ministry of Ownership Transformation 1995). Some observations had to be excluded due to incomplete data. In the end we cover some 800 cases of privatisation, with around 3000 eligible state-owned enterprises in each year.

3. Modelling framework

A multinomial logit model is used to examine what determines the choice of a particular firm for one of the four privatisation methods introduced in the previous section. The motivation is similar to the approach in the models of take-over activity where the probability of acquisition depends on the characteristics of potential targets, such as size, growth or profitability.

3 The Polish Central Statistical Office routinely collects this data from all firms employing five or more workers. The coverage is very high in terms of sales, with the firms in the database accounting for around 90 per cent of manufacturing sales.

4 The actual privatisation process might not have been completed until much later. For example mass privatisation has not been implemented till 1996 but our interest is in the initial choice of enterprises for different privatisation methods and we are able to capture this process in our analysis.
In transition literature, ownership change depends on the characteristics designed to capture the quality of the firm (Earle and Estrin 1997). It seems that all types of investors should be interested in high performing firms. On the other hand, workers in poor performing firms might be more concerned with preserving their jobs and inclined to acquire their failing firms. In general, it is expected that particular firm characteristics will make them attractive to different types of investors who have different objectives and who may face different budget constraints.

In the first place we include size, measured by the number of employees. It is predicted that large firms will be more attractive to outsiders such as institutional investors. Insiders, such as managers or employees, are less likely to invest in large firms because they cannot afford to do so or because they are more risk averse. As a measure of quality, firm profitability is taken. Moreover, as there is a lot of empirical evidence that exporters are performing better than non-exporters (see e.g. Bernard and Jensen 1999), we also include the share of exports in total output as a potential indicator of quality. For the period before the collapse of the CMEA (Council for Mutual Economic Aid) we examine the share of exports outside the Eastern block, rather than the share of total exports. This coincides with Walsh and Whelan (2000) who make a distinction between the CMEA and EU trade to conclude that inherited trade orientation is an important determinant of performance. Firms that are EU trade oriented perform significantly better than those firms that inherited products historically produced for the CMEA markets under central planning. Trade orientation is a dummy variable that is set to 1 if a firm exports outside the CMEA block.

Productivity, rather than profitability, can also be used as an indicator of firm quality. As far as the takeover literature is concerned, there is no consensus about whether it is low or high productivity that should lead to ownership change (McGuckin and Nguyen 1995). One hypothesis is that firms with high productivity are more likely to experience ownership change, because good firms are more attractive than bad ones. In contrast to this, under matching hypothesis, plants with low productivity due to poor match are more likely to change owners than those with good matches. This is motivated by the gains available from replacing the managers of badly performing firms.

There are also some other characteristics that might put off certain types of investors. The negative characteristics might apply to capital intensity and financing requirement. Compared to outsiders, insiders are less likely to invest in capital intensive firms. Moreover,
financing needs are presumed to constrain large foreign and institutional investors less than individual small investors. We measure financing requirement by short-term credit.

Many of the above firm characteristics attracting or deterring different types of investors can also be interpreted in terms of risk and uncertainty. Investors who value current consumption over uncertain future consumption would choose a more profitable firm. Insiders are usually considered more risk averse and for this reason insider ownership should be associated with higher profits.

There are also some hypotheses regarding different privatisation methods. Sale of assets is considered preferable on the grounds of improving efficiency and generating government revenue. On the other hand, relying exclusively on this method would be too slow and mass privatisation was pursued to overcome shortage of finance and to increase public support. This might imply that ‘better’ enterprises were chosen for privatisation by sale rather than for mass privatisation.

Our specifications also include some sectoral variables. The rationale is as follows. The privatisation programme was also seen as a way of restructuring certain sectors of the economy and privatisation is equivalent to leaving the state-sector and entering the private sector. For this reason factors included in standard models of entry and exit (see e.g. Shapiro and Khemani 1987, Geroski, 1995) could be useful in explaining the determinants of ownership change. Also, some investors might be interested in a particular firm because of their industry affiliations. It might be the attractiveness of certain sectors rather than the characteristics of a firm that appeal to potential investors. Among sectoral variables we include concentration (measured by a four-firm sales concentration ratio C4), the degree of turnover (measured by entry rate), and capital intensity. The consumer-good dummy is added to proxy entry barriers associated with product differentiation. Following Roberts and Thompson (2003), the size of the state-owned sector (measured by the proportion of state-owned firms in the total number of firms in a given industry) is included to allow for additional barriers in a transitional economy.

4. Empirical results

We model the probability of being selected for a different privatisation method using a range of firm level as well as sectoral
Table 1 – Descriptive statistics: definitions, means and standard deviations

|                  | All firms | By sale | Mass privatisation | Dissolved in order to privatise | Dissolved because of bankruptcy |
|------------------|-----------|---------|--------------------|---------------------------------|--------------------------------|
|                  | mean      | stdev   | mean               | stdev                           | stdev                          |
| Size (employment, thousands of workers) | 0.746     | 1.967   | 1.314              | 1.333                           | 1.801                          |
| Profitability (Price-cost margin)       | 0.074     | 0.262   | 0.232              | 0.168                           | 0.130                          |
| Productivity (ratio of sales to employment; milliards of 1990 Zloty per worker) | 0.258     | 3.477   | 0.267              | 1.037                           | 0.167                          |
| Capital intensity (capital stock to sales ratio) | 1.020     | 1.565   | 0.918              | 0.892                           | 0.632                          |
| Short-term credit (log of short-term credit; millions of 1990 Zloty) | 5.558     | 4.112   | 7.569              | 3.610                           | 7.792                          |
| Export share (exports to sales ratio)   | 0.129     | 0.198   | 0.223              | 0.227                           | 0.181                          |
| Trade orientation (dummy equal to 1 if exports outside the CMEA) | 0.544     | 0.498   | 0.869              | 0.339                           | 0.948                          |
| Old (dummy equal to 1 if firm existed before 1990) | 0.751     | 0.432   | 0.966              | 0.181                           | 0.980                          |
| Size of state sector (proportion of state-owned firms in an industry) | 0.558     | 0.255   | 0.656              | 0.248                           | 0.594                          |
| Concentration (four-firm sales concentration ratio) | 0.392     | 0.219   | 0.469              | 0.232                           | 0.475                          |
| Entry rate (number of new firms to the industry total) | 0.501     | 0.659   | 0.259              | 0.308                           | 0.284                          |
| Consumer industry dummy                 | 0.332     | 0.471   | 0.373              | 0.485                           | 0.235                          |
| Number of observations                   | 8043      | 236     | 153                | 213                            | 215                            |

Note: stdev – standard deviation
Table 2 – Firm-level characteristics and the probability of privatisation: multinomial logit estimates

| Method of privatisation | By sale | Mass privatisation | Dissolved in order to privatise | Dissolved because of bankruptcy |
|-------------------------|---------|--------------------|---------------------------------|--------------------------------|
| Size                    | 0.0420**| 0.0636***          | −0.8884***                     | −2.0555***                     |
|                         | (2.26)  | (3.74)             | (−4.56)                        | (−5.41)                        |
| Profitability           | 3.3662***| 1.9219***         | 1.7250***                      | −1.9975***                     |
|                         | (7.02)  | (3.07)             | (3.86)                         | (−9.63)                        |
| Productivity            | 0.4344**| 14.4845***        | 0.0842*                        | 0.1359***                      |
|                         | (1.94)  | (4.49)             | (1.68)                         | (2.56)                         |
| Productivity Squared    | −0.0201 | −27.8357***       | −0.0008                        | −0.0012                        |
|                         | (−1.16) | (−3.98)            | (−1.06)                        | (−1.15)                        |
| Capital intensity       | 0.1930***| −0.1895           | −0.1468                        | 0.0426                         |
|                         | (3.17)  | (−0.97)            | (−1.61)                        | (1.42)                         |
| Short-term credit       | 0.1038**| 0.1085***         | −0.0327**                      | −0.1533***                     |
|                         | (4.71)  | (4.05)             | (−1.76)                        | (−6.30)                        |
| Export share            | 1.0786***| 0.5406            | −0.0731                        | −0.3897                        |
|                         | (3.61)  | (1.25)             | (−0.18)                        | (−0.75)                        |
| Trade orientation       | 0.8935***| 1.9413***         | 0.3413**                       | 0.1518                         |
|                         | (4.06)  | (4.95)             | (1.97)                         | (0.82)                         |
| Old                     | 1.4803***| 1.9550***         | 0.1329                         | 0.8455***                      |
|                         | (3.82)  | (3.03)             | (0.70)                         | (4.12)                         |

Notes: N = 8043, Log likelihood = −3054.36; Year dummies included; z-values in brackets.

***, ** and * indicate significance at the 1%, 5% and 10% level, respectively.

characteristics. State-owned manufacturing firms potentially eligible for privatisation and the cases of privatisations taking place between 1990 and 1993 are pooled giving us over 8000 firms to be analysed. Table 1 gives descriptive statistics for the main variables used in the model, for all firms and for the firms chosen for each privatisation method.

The results for the model with firm-level characteristics only are reported in Table 2. Each column represents a set of estimates for a different privatisation method and the firms remaining state-owned are a comparison group.

Size is significant for all four methods but firms chosen for sale or mass privatisation are larger than their state-owned counterparts. In contrast, dissolved firms tend to be much smaller. The impact of capital intensity varies for different privatisation methods but it is usually insignificant. Short-term credit has a significant effect on
the selection process. The probability of being privatised is positively related to the short-term credit for enterprises privatised by sale as well as for those chosen for mass privatisation. On the other hand, high short-term credit puts off smaller investors and reduces an enterprise’s chances of being privatised by dissolution. The coefficients by size and by short-term credit give strong support to the hypothesis of the importance of resource constraints on the choice of ownership (Jones et al. 2003). Consistent with predictions by Aghion and Blanchard (1998), large firms with high financing requirement are more likely to be owned by outsiders.

The relationship between the probability of being privatised and productivity is nonlinear. The coefficient on the squared term of productivity is negative although not always significant. If productivity is not treated as a quality indicator but serves to denote the scope for efficiency gains, our results give support to matching hypothesis as ownership changes are more likely at low level of productivity. In the context of transition this is consistent with the hypothesis that privatisation is driven by efficiency motives and for this reason government should privatise the least efficient firms first (Gupta et al. 2001). Privatisation is a necessary restructuring process for lower productivity firms, while higher productivity firms are not privatised because restructuring to improve efficiency is not required.

Privatised firms are profitable with the exception of firms dissolved because of bankruptcy. The probability of being privatised is positively related to the export share for privatisation by sale and for mass privatisation but negatively related for privatisation by other methods. This effect is significant only for privatisation by sale. However, trade orientation is significant for all methods but privatisation via bankruptcy, although the strength of this effect varies. Trade orientation rather than export intensity seems to be a better indicator of the quality of a firm, consistent with Walsh and Whelan (2000) who identify past trade orientation as an important indicator of future performance. The coefficient by the dummy variable ‘old’ is significant for all methods except privatisation by dissolution, indicating that enterprises chosen for this method might have undergone some restructuring (for example a break-up) before being offered for privatisation. In contrast to this, the enterprises selected for other methods existed in the same form before 1990. This gives some support to the hypothesis that insiders exerted control over the privatisation process. There is no evidence though that most profitable enterprises went to insiders. In fact, the best enterprises were privatised by sale.
The interpretation of the results based directly on the coefficients is promoted in Verbeek (2000), with a positive coefficient implying that positive utility is attached to the corresponding characteristic. However, Powers and Xie (2000), p. 231, warn that the marginal effects for multinomial models can be ambiguous and recommend the interpretation based on odds and odds-ratio for a binomial logit model (p.76).

Following this interpretation, the odds of being privatised by sale (versus remaining state-owned) for an exporter to a non-CMEA area (Trade orientation = 1) are 2.44 times those of other firms. The odds of being chosen for mass privatisation, based on trade orientation only and keeping other determinants constant, are even higher (6.97 times the odds for firms not exporting outside the Eastern block). The odds of being privatised increase with profitability for all methods but privatisation via bankruptcy. In particular, a change in profitability by 10 percentage points increases the odds of being privatised by sale by 40 per cent, and the odds of being chosen for mass privatisation by 21 per cent. Size, measured by employment, is a significant determinant of privatisation although it enters the logit regression with a different sign for different methods. The estimated coefficients indicate that for a firm with one thousand less employees the odds of privatisation by dissolution and by bankruptcy increase by 59 per cent and 87 per cent respectively.

While explaining the determinants of ownership change, we also introduce some sectoral variables. The results of multinomial regression with firm-level as well as industry-specific characteristics are given in Table 3. In general, the firm-level variables display a very similar pattern to that seen in Table 2. There are also a number of significant sectoral variables.

Sectoral capital intensity is negative and significant for firms dissolved for privatisation, coinciding with Levy's (1988) conclusion that for developing countries small private firms are disadvantaged in sectors with high capital and financial requirement. For dissolved enterprises, the size of the state sector is negatively related to the probability of being privatised, implying that the larger the state sector the less likely privatisation by dissolution. This effect might be associated with the time profile of privatisation. Privatisation by sale and the initial selection for mass privatisation took place at the very beginning of transition. Later on, when the state-owned sector was becoming smaller as a result of new private firms entering, government had to resort to other methods of privatisation in order to speed up the process of ownership transformation. Although the
Table 3 – Firm- and industry-level characteristics and the probability of privatisation: multinomial logit estimates

| Method of privatisation | By sale          | Mass privatisation | Dissolved in order to privatis e | Dissolved because of bankruptcy |
|-------------------------|------------------|--------------------|---------------------------------|---------------------------------|
| Size                    | 0.0383**         | 0.0578***          | −0.8683***                     | −2.0138***                     |
|                         | (2.06)           | (3.41)             | (−4.43)                        | (−5.25)                        |
| Profitability           | 3.2492***        | 1.4912**           | 1.7927***                      | 1.9912***                      |
|                         | (6.76)           | (2.35)             | (4.01)                         | (−9.53)                        |
| Productivity            | 0.4607**         | 14.9419***         | 0.0992**                       | 0.1453**                       |
|                         | (1.93)           | (4.61)             | (1.96)                         | (2.19)                         |
| Productivity squared    | −0.0222          | −28.0900***        | −0.0009                        | −0.0013                        |
|                         | (−1.23)          | (−4.12)            | (−1.24)                        | (−0.83)                        |
| Capital intensity       | 0.1835***        | −0.4488*           | −0.0574                        | 0.0382                          |
|                         | (2.90)           | (−1.88)            | (−0.67)                        | (1.29)                          |
| Short-term credit       | 0.0985***        | 0.1091***          | −0.0238                        | −0.1529***                     |
|                         | (4.45)           | (4.05)             | (−1.23)                        | (−6.19)                        |
| Export share            | 1.0259**         | 0.4475             | −0.1620                        | −0.3936                        |
|                         | (3.42)           | (1.01)             | (−0.40)                        | (−0.76)                        |
| Trade orientation       | 0.8826***        | 2.0430***          | 0.3377***                      | 0.2434                          |
|                         | (3.88)           | (5.14)             | (1.89)                         | (1.25)                          |
| Old                     | 1.3982***        | 1.5114**           | 0.0188                         | 0.8662***                      |
|                         | (3.50)           | (2.30)             | (0.09)                         | (4.16)                          |
| Size of state sector    | 0.3372           | −0.1411            | −1.1712***                     | −0.7668                         |
|                         | (1.02)           | (−0.32)            | (−3.21)                        | (−1.55)                        |
| Sectoral capital intensity | 0.1565         | −0.1778            | −0.6781**                      | 0.4334                          |
|                         | (0.79)           | (−0.55)            | (−2.30)                        | (1.62)                          |
| Concentration (C4)      | 0.3809           | 0.2808             | 0.0983                         | −1.2148***                     |
|                         | (1.14)           | (0.63)             | (0.27)                         | (−2.70)                        |
| Entry rate              | −0.2800          | −0.6165**          | −0.0959                        | 0.0790                          |
|                         | (−1.60)          | (−1.78)            | (−0.80)                        | (0.56)                          |
| Consumer industry dummy | 0.3164**         | −0.7422***         | −0.2063                        | 0.1235                          |
|                         | (1.98)           | (−3.28)            | (−1.22)                        | (0.61)                          |

Notes: N = 8043, Log likelihood = −3007.66, Year dummies included; z-values in brackets.

***, ** and * indicate significance at the 1%, 5% and 10% level, respectively

sign by the size of state sector is as expected, the coefficient is only significant for the firms dissolved in order to be privatised.

High concentration might have added to the attractiveness of certain enterprises because of their position in relatively monopolised industries rather than because of their individual characteristics. Consistent with this statement the coefficient for concentration has the expected sign but is insignificant for most methods. In contrast to this,
for privatisation because of bankruptcy, concentration is significant and enters with the negative sign, confirming that this method of privatisation is associated with later stages, when the state-sector was smaller and concentration level was lower. The coefficient by entry rate is negative for most methods suggesting that privatisation might have been a way of entering sectors with substantial barriers to entry. This coefficient is significant, though, for mass privatisation only and almost significant for privatisation by sale. The sign and the significance level for the coefficient by the consumer industry dummy varies but there is evidence that enterprises privatised by sale are more likely to manufacture consumer goods, while those chosen for mass privatisation are more likely to come from producer goods industries. This confirms that product differentiation is not a constraint for outsiders, while other types of investors are put off by the prospect of high advertising expenditure and non-price competition.

5. Conclusions

We use an extensive data-set of state-owned manufacturing firms in Poland between 1988 and 1993 to examine the characteristics of firms being privatised by different methods. Several of the firm-specific characteristics have significant effects on the probability of being privatised. In particular, size, profitability, short-term credit and trade orientation are among those with a significant effect on ownership transformations. Sometimes, though, the direction of these effects differs by type of ownership.

Our results give strong support to the hypothesis of the importance of resource constraints on the choice of ownership. In particular, the coefficients by size and by short-term credit indicate that large firms with high financing requirement are more likely to be owned by outsiders. The significance of resource constraints is confirmed by an analysis at the sectoral levels. High sectoral capital intensity discourages small private firms. High degree of product differentiation is a constraint and a barrier to entry for different groups of investors, with the exception of outsiders.

Quality measured by profitability and exporting outside the Soviet block appeals to all investors. Productivity can only be treated as a sign of quality to some extent. As low productivity firms are more likely to change owners, this gives support to the view that privatisation might have been expected to be a way of improving efficiency. Sectoral characteristics such as high concentration and low
turnover attract investors indicating that privatisation offers ways of entering sectors with substantial entry barriers.

Although enterprises selected for mass privatisation display a range of positive characteristics, they are not as profitable, productive and export-oriented as those privatised by sale. Enterprises dissolved because of bankruptcy are less profitable, and tend to produce for local domestic rather than international markets. Privatisation by dissolution, which can be linked to insider ownership, applies to small but profitable enterprises with low capital output ratio and displays characteristics similar to other privatisation methods.

The beginning of transition marks the start of a process of ownership transformation. In the first stage the main preoccupation was with privatising the predominantly state-owned sector. This process was initially helped by different privatisation programmes but has continued in the way ownership changes occur frequently in mature market economies. For this reason it is important to understand the determinants of ownership change and the characteristics that are taken into account and appeal to different types of owners.

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**Qui privatise-t-on ? Une analyse empirique du secteur manufacturier en Pologne**

Les auteurs utilisent un modèle logit multinomial pour examiner ce qui détermine le choix pour différents types de firmes de certaines méthodes de privatisation. Ils testent une variété d’hypothèses sur les déterminants du changement de propriété à partir d’un large ensemble de données sur l’industrie polonaise au début de la transition. Les résultats tant au niveau d’une entreprise qu’au niveau d’un secteur soutiennent fortement l’hypothèse de l’importance des contraintes financières sur le choix de propriété. De grandes entreprises avec des besoins élevés de financement sont plus susceptibles de devenir la propriété de personnes extérieures. Des secteurs très intensifs en capital découragent les petites firmes à propriété interne alors qu’un degré élevé de différenciation des produits est une contrainte pour divers investisseurs sauf les extérieurs. Les auteurs démontrent aussi que la qualité de l’entreprise, mesurée par les profits et les exportations hors du bloc soviétique, attire tous types d’investisseurs mais la privatisation permet aux extérieurs de pénétrer dans des secteurs caractérisés par de fortes barrières à l’entrée.

**Wer wird privatisiert? Eine empirische Analyse der polnischen verarbeitenden Industrie**

Dieser Beitrag bedient sich eines Multinomial Logit-Modells, um zu untersuchen, was für die Auswahl eines bestimmten Unternehmens für eine gegebene Privatisierungsmethode maßgeblich ist. Eine Vielzahl von Hypothesen über mögliche Determinanten des
Eigentümerwechsels wird getestet, wobei ein umfangreicher Datensatz über die polnische verarbeitende Industrie vor Beginn der Aktion Anwendung findet. Die Ergebnisse sowohl auf Unternehmens- als auch auf Sektorenebene stützen stark die Hypothese der Bedeutung von Ressourcen-Constraints auf die Wahl der Eigentümerschaft. Große Unternehmen mit hohem Finanzbedarf werden sich wahrscheinlich eher im Eigentum von “outsiders” befinden. Eine große sektorale Kapitalintensität schreckt kleine Unternehmen im Eigentum von “insiders” ab, während ein hoher Grad von Produktdifferenzierung für verschiedene Investoren einen Constraint darstellt – außer für “outsiders”. Es ist festzustellen, dass Unternehmensqualität, gemessen an Rentabilität und Exporten in Ländern außerhalb des früheren Sowjetblocks, alle Typen von Investoren anzieht. Aber zusätzlich bietet Privatisierung “outsiders” Möglichkeiten des Zugangs zu Sektoren mit erheblichen Marktzutrittsbarrieren.

¿Qué privatización? Un análisis empírico del sector manufacturero polaco

Los autores utilizan un modelo logit multinomial para examinar lo que determina la elección del método de privatización por parte de diferentes tipos de empresas. A este respecto, verifican una serie de hipótesis sobre los factores determinantes del cambio de propiedad a partir de un amplio conjunto de datos sobre la industria polaca al comienzo de la transición. Los resultados, tanto a nivel de empresa como de sector, permiten sostener sólidamente la hipótesis de la importancia de las tensiones financieras en la elección de la propiedad. Las grandes empresas, con elevadas necesidades de financiación, son más susceptibles de caer en manos de inversores extranjeros. Los sectores muy intensivos en capital disuaden a las pequeñas firmas nacionales, mientras que un grado de diferenciación de productos elevado es desalentador para diversos inversores, salvo los extranjeros. Los autores demuestran también que la calidad de la empresa, medida por los beneficios y el volumen de exportaciones fuera del bloque soviético, atrae a todo tipo de inversores. La privatización permite a los extranjeros penetrar en sectores caracterizados por fuertes barreras de entrada.