Abstract

The position of enterprises, industries and economies on the market depends on their response to a wide range of incentives, market trends, technological changes, government policies and institutional reforms. The adjustments made by companies so as to take over their rivals’ market are commonly referred to as restructuring. It is important to understand enterprise restructuring since the ability of enterprises to compete determines the ability of their nations to grow and to provide better standard of living. Over past two decades enterprise restructuring has been prominent feature of firm behaviour in Central and East European countries. Institutional reforms in these countries have required enterprises to introduce changes in their behaviour in order to survive. Bearing this in mind, this paper looks into forms, objectives of and reasons for enterprise restructuring in transition. It also identifies major patterns of enterprise restructuring and discusses which factors and forces have motivated firms to choose particular pattern of restructuring. Finally, paper provides review of methodological issues pertinent to existing analyses of this process.

Keywords: enterprise restructuring, transition, institutions, Central and East European countries
1. INTRODUCTION

The position of enterprises, industries and economies on the market depends on their response to a wide range of incentives, market trends, technological changes, government policies and institutional reforms. By making adjustments to their behaviour, economic units (agents) can secure their survival and seize their rivals’ market. These adjustments, which are commonly referred to as restructuring, can take various forms ranging from changes in relative size of different sectors within an economy to the creation of new industrial networks, changes in the input mix, output basket and the technology of production, and financial and operational changes in the behaviour of enterprises. Forms and determinants of restructuring at enterprise level are particularly important as the key to overall national competitiveness lies in the ability of enterprises to compete. This ability, in turn, is closely linked to the restructuring efforts of firms.

Over past two decades enterprise restructuring was prominent feature of firm behaviour in Central and East European countries (CEECs). It was one of most important mechanisms of the successful transformation of former socialist countries into market-oriented economies. The changing environment characterised by institutional reforms, the rise of new and the decline of old sectors, the release of previously suppressed demand partially met by the large scale entry of foreign firms, the break-up of traditional enterprise networks (particularly including those in other socialist countries), and increasing competition required enterprises to make adjustments in their behaviour in order to survive under the new conditions.

The objective of this paper is to explore determinants, forms and outcomes of enterprise restructuring in the period of transition. To this end, paper poses question of what enterprise restructuring means. It also discusses its objectives and forms as well as the major reasons for enterprise restructuring in transition. The paper identifies major patterns of enterprise restructuring in transition conditions and explores what factors and forces have motivated enterprises to choose particular patterns of restructuring. Finally, the paper provides an overview of methodological issues pertinent to existing analyses of enterprise restructuring in transition and discusses their implications for understanding of nature of this process.

The paper is structured as follows. Next section explains the basic concepts of restructuring at economy, industry and enterprise levels. Main features of firm behaviour in former centrally-planned economies and major changes in socio-economic framework of these economies that acted as impulse for enterprise restructuring are discussed in section 3. Section 4 identifies the major patterns of enterprise restructuring, their determinants and outcomes. Also, it discusses methodologies used in existing studies on enterprise restructuring in transition. By doing this it highlights the shortcomings and gaps in the present state of knowledge. Finally, section 5 concludes.
2. WHAT IS ENTERPRISE RESTRUCTURING?

2.1. Basic concepts

Enterprise restructuring is the process through which an enterprise adjusts its behaviour to changes in its circumstances arising from actions of rivals, changes in market conditions, technological changes, institutional reforms or economic policies. These changes provide the enterprises with an opportunity to change their operations in order to expand their market share (often at the expense of their rivals). Enterprises which do not react to changes in their circumstances will ultimately suffer the consequence and may be driven out of the market. However, the competitiveness of nations and industries rests on the back of their enterprises - whose ability to compete in turn depends on their behaviour. From here it follows that enterprise restructuring holds the key to competitiveness of enterprises, industries and national economies (Lieberman, 1990; Mathieu, 1996; Hare, 2003).

Enterprise restructuring is part of the wider concept of economic restructuring which also includes changes in the relative size of different sectors of the national economy, development of new forms of inter-enterprise networks and changes in the structure of production at the level of industry (Kuznets, 1957; Chenery, 1960; Djankov and Murrell, 2002; Hare, 2003). In this context, enterprise restructuring is a response to incentives created by the economy-wide or industry-side restructuring. Systemic changes, institutional reforms, changes in demand, technology or the availability of new resources pave the way for changes in relative size of sectors within an economy which in turn motivates enterprises to adjust their behaviour and take advantage of the new circumstances – or ignore the new conditions and face the consequences. This adjustment is facilitated through the creation of industrial networks, acquisitions or foreign direct investment as well as through cooperation with research centres and training institutes (Mathieu, 1996; Radosevic and Sadowski, 2004).

Irrespective of the reason for changed circumstances, restructuring takes place within individual enterprises through adjustments in both financial and operational dimensions. Financial restructuring encompasses activities such as rescheduling, write-off or swapping of debt for equity and its objective is to restore and improve solvency and financial stability of the enterprise (Claessens, 2005). In this context, financial forms of enterprise restructuring are complemented by operational restructuring which takes place through improvements in the efficiency of production, adjustments of managerial incentives, organisational changes as well as improvements in the quality of existing products and changes in product mix (Carlin et al., 1994; Grosfeld and Roland, 1996; Djankov and Murrell, 2002). By developing new and better ways of combining knowledge and resources, enterprises can defend themselves against the threat of bankruptcy and expand their market share. Hence, enterprise restructuring can be understood as a process whose objective is to secure the
survival of an enterprise in a changing environment and to increase its cash value, profitability and market share (Pohl et al., 1997).

2.2. Patterns of enterprise restructuring

Enterprise restructuring is commonly divided into either defensive or strategic restructuring (Carlin et al., 1994; Grosfeld and Roland, 1996). In the terminology of Grosfeld and Roland (1996), defensive restructuring takes place within existing capacities of enterprise through scaling down of activities such as closing, selling or leasing of unprofitable units or shedding excessive labour. However, it does not include activities such as the development of new products or product lines or the improvements in technology of production which are often identified as factors and forces that enable an enterprise to outperform its rivals in dynamic imperfect competition. As scaling down of enterprise activities cannot last indefinitely and enterprise will eventually face closure, defensive restructuring may be labelled as a pattern of restructuring that secures the survival of an enterprise in the short run.

Strategic restructuring, on the other hand, is a pattern of enterprise behaviour which creates foundations for sustainable development of enterprises in the long run. It involves active and radical reorganisation of enterprise’s activities, improvements in the efficiency of production through investment in new equipment, introduction of innovations in production process and creation of incentives which will increase the productivity of labour. It also implies changes in the structure of products through improvements in quality of existing products and development of new ones. It is embarked upon by enterprises which recognise the irreversibility of the systemic change and undertake adjustments in their operations in order to outperform their rivals in the long run (Grosfeld and Roland, 1996).

It should be emphasised that strategic and defensive restructuring are not independent or mutually exclusive concepts. Some enterprises embark on defensive restructuring first, because of insufficient resources or incentives, and engage in strategic restructuring later when, for example, new and insightful owners take over the company and obtain sufficient resources for investment. As the behaviour of enterprise in any period can be understood in terms of the outcome of its past decision and their consequences, any mistakes made during defensive restructuring will act as impediment to strategic restructuring (Brada, 1998). Enterprises which fail to react proactively to changed circumstances will lose some of their market to rivals with severe consequences for their financial performance and their value. This would in turn, reduce their attractiveness to new owners of capital, skilled managers and qualified workers, thus making the pursuit of strategic restructuring more difficult for themselves (Grosfeld and Roland, 1996).

Summing up the findings from this section, we can better understand the nature of enterprise restructuring and its relevance for competitiveness of
enterprises, industries and economies. Enterprise restructuring describes the process of adjustment of enterprises to various changes in their environment. It has two main objectives: to enable enterprises to defend themselves against developments that threaten their survival, and to help them outperform their rivals. As national competitiveness is ultimately linked to the ability of enterprises to compete, enterprise restructuring can be identified as a process that holds the key to competitiveness of enterprises, industries and economies.

3. REASONS FOR ENTERPRISE RESTRUCTURING IN TRANSITION

The behaviour of enterprises in centrally-planned economies had little in common with the behaviour of their counterparts in market economies. The two groups responded to different kind of incentives, had different scope of activities and pursued different objectives. Their differences were embedded in features of their economic systems. When these features changed in former socialist countries, enterprises had to adopt new principles of behaviour and reorganise their activities in a way which would make them capable of surviving in a market environment. It therefore follows that two sets of factors influenced enterprise restructuring in transition: the behaviour of enterprises in centrally-planned economies and the systemic change in these countries (Lavigne, 1999; Djankov and Murrell, 2002).

3.1 Enterprise behaviour in centrally-planned economies

In western industrialised economies, economic activity is coordinated through market mechanism. The key role in the functioning of this mechanism belongs to prices which convey to owners of means of production information about opportunities for employment of their resources and about preferences of buyers. Based on this information, enterprises autonomously make decisions about various aspects of their behaviour from the choice of suppliers to production methods and the product mix. In former centrally-planned economies, the coordinating role was delegated to the administration (or a central planning office) which substituted the price system and covered all aspects of economic life through a network of bureaucratic plans. This also included the behaviour of enterprises from their objectives to their internal organisation and their contacts with both domestic and foreign suppliers and customers. Hence, the running of socialist enterprises required more technical skills than just managerial competencies. In practice the functioning of socialist enterprises was flawed and

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1 The features of centrally-planned economies have been exhaustively analysed in the literature and their detailed discussion would go beyond this paper. Instead, here we present only few stylised facts. For detailed discussion interested reader should consult Kornai (1992), Gros and Steinherr (1995) or Lavigne (1999).
consequently beset with difficulties amongst which low efficiency, lack of incentives for innovation and of financial discipline were the most obvious.

The growth strategy of nearly all centrally-planned economies was based on the concept of rapid industrialisation\(^2\). The main tools for pursuit of this strategy were the central control of prices and international trade. In general, the system used the combination of subsidies and taxes to keep prices of strategically important goods, primarily inputs in basic industries low while many other goods, primarily consumer goods, were overpriced (Kornai, 1992). Through the same mechanism exchange rates were fixed (and subsidised) to facilitate the import of strategically important goods such as raw material and intermediate goods and to increase the export of goods for final use abroad (Lavigne, 1999). The consequences of such practice were shortages which created sellers’ markets in these economies and lowered the efficiency of their enterprises.

On the one hand, shortages in supply of inputs generated disruptions in production. To ensure continuity of production managers had to build up stocks of inputs and to hire more workers than needed (Knell and Rider, 1992). On the other hand, the seller’s market enabled enterprises to exhaust (and even go beyond) economies of scale without the need to introduce new technologies or to economize on inputs. In addition, the lack of demand-induced incentives in combination with the absence of private ownership meant that enterprises did not need to innovate. In market economies, the rights to use assets, to appropriate returns on them and to bear the consequences of the changes in the value of those assets, motivate individuals to introduce new products, new modes of production or to develop new channels of communication with their buyers and suppliers. Such incentives were absent in centrally-planned economies as the means of production were the property of the state and state ownership was not a clearly defined concept. Hence, it was not clear who should be responsible for maintaining capital (Gros and Steinherr, 2004). For these reasons, compared to their counterparts in market economies, the intensity of energy and intermediate goods use per unit of output was several times higher among enterprises in centrally-planned economies (Knell and Rider, 1992; Gros and Steinherr, 1995).

The low efficiency of socialist enterprises was further entrenched by their involvement in economic and social activities and by the presence of soft-budget constraints. In market economies the activities of enterprises are confined in majority of cases to their core activity. However, in centrally-planned economies enterprises were required to handle many non-core activities such as political, administrative and social services (Lavigne, 1999). Such practices presented additional burden for their cost structure but it also distracted managers from their core activities. Another source of inefficiency was the existence of soft-budget constraints. In principle, the formal obligation for the repayment of

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\(^2\) This concept implies development of economy in concentric circles where initially all resources are concentrated in development of basic industries so that they can later serve as the basis for the development of more sophisticated industries.
loans existed but in hierarchy of enterprise’s objectives, it was less important than the quantitative plan targets and fulfilment of social welfare activities. Liquidity problems were solved through administrative refinancing by banks. When enterprises were unable to meet their loan repayment requirement, banks would roll over and prolong the defaulted loans. Such soft budgetary constraints resulted in poor financial discipline, contributing to further inefficiency and loss-making operation of enterprises.

Bringing all these features together, it can be seen that enterprises in centrally-planned economies had different objectives than their counterparts in market economies and running them required more technical and political rather than entrepreneurial skills. They lacked the knowledge of activities and skills which are needed for survival in a market environment. The inherent characteristics of centrally-planned economies had negative effects on the efficiency of enterprises and left them without the need for, and the incentive to innovate.

3.2 Institutional reforms in transition

In the course of transition many institutions of centrally-planned economies were modified or replaced with those more typical for market economies. In economic terms, the most important reforms took place in fields of prices, foreign trade, property rights and the financial sector (Lavigne, 1999). They were undertaken with the expectation that the new environment will motivate enterprises to restructure and eliminate the problems inherited from the socialist period. The removal of subsidies, the pressure of previously unsatisfied demand, intensified foreign competition and easier access to new technology were expected to induce adjustments in the input and product mix and improve the efficiency of enterprises while the new private property rights were expected to create competition, facilitate innovativeness and signal the irreversibility of changes (Aghion et al., 1994; De Melo et al., 1996; Megginson and Netter, 2001; Mickiewicz, 2005). On the financial side, the banking sector reform was expected to increase financial discipline of enterprises through the introduction of hard budget constraint (Borish et al., 1996). In addition, non-banking financial institutions such as stock-exchanges or investment funds were recognised as important mechanisms facilitating the transfer of property rights from the state to the private sector (Druzic, 2006).

The speed, content and timing of the introduction of above mentioned reforms varied among transition economies due to their specific political and social circumstances. The progress of transition economies in pursuit of the above reforms has been traced by the EBRD in Transition Reports (EBRD, various years) using a progress in transition index ranging from 1 to 4 with the higher values indicating the adoption of standards typical of market economies. Following the EBRD, and for the sake of simplicity, the European transition countries are grouped into the three main groups of Central and East European Countries, including the Baltics (CEECs), South East European Countries
(SEECS) and East European and Caucasus countries\footnote{The first group includes transition economies that joined EU in 2004 and Croatia; the second group includes Albania, Bosnia and Herzegovina, Bulgaria, FYR Macedonia, Montenegro, Romania and Serbia; and the third group includes Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine.} and their progress in different areas of reform are discussed below.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure1.png}
\caption{Progress in price liberalisation, 1989-2010}
\end{figure}

As Figure 1 shows, all transition countries abandoned administrative prices in early stage of transition. In some countries such as the Czech Republic and Poland prices were liberalized at the very start of transition in almost all sectors, except the energy sector, while in others prices were liberalised gradually by retaining price controls in sectors considered as socially important (Marangos, 2003).
In most of transition countries external trade liberalisation took place more slowly than price liberalisation as tariffs were recognised by governments as a valuable source of revenues for financing of reforms. There was also fear that without some protection, domestic producers would be eliminated from market by their foreign rivals even before they had a chance to engage in restructuring. As we can see from Figure 2, the process of trade liberalisation was fastest in CEECs. Due to the obligations undertaken in the process of EU accession, all quantitative and administrative restrictions on trade were moved and full current account convertibility introduced in the early stage of transition in these countries (Gros and Steinherr, 2004). But even by 2000, only few transition economies had introduced capital account convertibility (EU candidates being these few countries).

**Source:** EBRD Structural indicators database 2011

**Figure 2:** Progress in external trade liberalization, 1989-2010
Property rights reforms in transition countries took place through two main channels: development of de novo private sector and privatisation of former state-owned enterprises. It was recognised from the beginning that the development of new private sector would be a lengthy process and, therefore, the emphasis had to be placed on the privatization of state-owned enterprises. Most studies distinguish between small privatisation and large-scale privatisation. The former expression describes development of small entrepreneurship through either sales or renting of assets to small private persons in previously underdeveloped or undeveloped sectors such as services, trade or construction. As Figure 3 shows, small privatisation took place in the three groups of countries with different intensity. CEECs went furthest in this process but by 2010 neither group had reached levels of small entrepreneurship in the economy close to that of advanced market economies.

The privatization of large state-owned enterprises took place over a longer time and through several methods ranging from sale to foreign or domestic buyers to mass privatization schemes which consisted of often free transfer of shares to citizens through vouchers, either with or without the involvement of investment funds (Lavigne, 1999). These reforms went furthest and fastest in CEECs although, as Figure 4 shows, none of three groups have succeeded in reaching the level of advanced market economies.\(^4\) The level of private property

\(^4\) EBRD (2010) defines these standards as structure with more than 75% of privately owned enterprises and effective corporate governance.
rights reached in countries of Eastern Europe and Caucasus is particularly low and they, even in advanced stage of transition, remain dominated by state ownership.

Source: EBRD Structural indicators database 2011

Figure 4: Progress in large-scale privatisation, 1989-2010

The financial sector in transition economies was reformed through the creation of a two-tier banking sector and through the development of non-banking financial institutions. As Figure 5 shows, the banking sector reform started earliest in CEECs - indeed, in some countries such as Hungary and Poland some reforms had been implemented even before the beginning of transition (Lavigne, 1999). By the advanced stage of transition these countries made significant progress towards the standards of banking laws and regulations typical for advanced industrialised economies. In the other two groups the reform of banking sector took place at a much slower pace and although by 2010 these countries had achieved substantial progress in solvency of banking sector, opened market to private banks and liberalised interest rates, they had made little or no progress in other areas of the banking sector reforms (EBRD, 2010).

5 EBRD (2010) defines these standards as existence of well-functioning banking competition under effective supervision, development of term lending to private enterprises and financial deepening.
In the non-banking segment of financial sector, reforms took place through the establishment of stock-exchanges, investment funds, insurance markets and pension funds. In nearly all transition countries the establishment of stock-exchanges was among the first measures introduced. They served primarily as a way of familiarizing citizens of transition economies with the principles of capital market and they were also expected to facilitate large-scale privatisation (Lavigne, 1999). The ability of investment funds to restructure state-owned companies in the early stages of privatisation was limited as they did not have the necessary skills and expertise and were not well prepared for efficient monitoring of the companies in their portfolio. They also did not have access to finance which was needed for effective restructuring and in some countries they were not allowed to participate in the mass privatisation programme (Albania) or were allowed to participate only in last round of privatization which included mostly loss-making companies with poor prospects for survival (Hashi and Xhillari, 1999; Mickiewicz, 2005; Druzin, 2006).

The development of other non-banking financial institutions was slower. State owned insurance companies retained their privileged position for most of the transition period while pension funds did not emerge until the second part of 1990s (Lavigne, 1999). Figure 2.6 reflects these developments. As in other fields of reform, the most notable progress was recorded in CEECs where the regulatory framework for the functioning of capital market was established early on, facilitating the emergence of non-bank financial institutions. However, in the other two groups of countries, the development of capital market and other non-bank institutions is still in rudimentary form.
Bringing all of these findings together we can see that the main reforms, which were necessary to transform the former centrally-planned economies into market economies, were initiated relatively early in transition and by the advanced stage of transition they were completed in majority of cases. This is particularly true for group of advanced transition economies (CEECs). As a result of these reforms, enterprises were forced to change their behaviour, redefine their objectives in line with the new market economy conditions, respond to the pressure of competition, and actively embark on measures which would improve their efficiency and enable them to increase their market share (in other words, restructuring measures).

3.3. Changes in economic structure of transition economies

Institutional reforms are not the only channel through which enterprise restructuring can be motivated. Incentives may also come from changes in technological capabilities and in the structure of demand which may also induce a faster growth of particular sectors at the expense of others, and create the incentive for inter-sectoral reallocation of resources and adjustments in their product mix and production efficiency. The centrally-planned economies were characterised by their low responsiveness to the above changes (Mickiewicz, 2005). This was particularly evident in the last two decades of their existence when they retained their reliance on heavy industries and concentrated on improving existing technologies while most market economies shifted from the heavy and resource intensive to more sophisticated and less resource intensive
industries such as power engineering, computers and synthetic materials which required changes in the technological framework (Druzic, 2006). As we showed in the previous section, price and trade liberalisation have released previously suppressed and unsatisfied demand and provided better access to the new technologies. In this context, it would be expected that, over time, the economic structure of transition countries will converge to the economic structure of mature market economies. Figure 7 shows the process of structural convergence between three groups of transition economies and EU15 countries in the period 1990-2007.

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D_k = \Sigma_i (S_{TEi} - S_{EU15i})^2
\]

Where \( S_{TEi} \) stands for share of sector \( i \) in transition economy and \( S_{EU15i} \) for the average share of sector \( i \) in EU15. Lower values of the index indicate structural convergence between two economic entities. Our findings indicate that at the beginning of transition, in terms of their economic structure, CEECs were much closer to EU15 countries than the other two groups. It is also evident that the process of structural convergence took place with different intensities in the three groups of transition economies. The largest change took place in CEECs whose economic structures became similar to the EU15 economies already by 2000. The process of convergence in SEECS was slower and their structures did not become similar to those of EU15 until the late stage of transition. Finally, least structural convergence has taken place in the group of East European and Caucasus countries which is particularly true for the period after 1998 when, as
Figure 7 indicates, there was little variation in value of structural convergence index.

All in all, our previous discussion shows that the institutional and systemic characteristics of centrally-planned economies had generated distinctive patterns of enterprise behaviour which had little in common with the behaviour of enterprises in market economies. Furthermore, the incentive system affecting these enterprises had generated numerous problems for them of which particular emphasis should be placed on the problem of efficiency. The replacement of socialist economic system and institutions with those of market economies required enterprises to rethink their objectives and to make adjustments in their organisational, financial and operational practices which would ensure their viability under the pressure of competition. The need for restructuring was further emphasised by changes in the structure of demand which required them to adjust their product mix. Hence, institutional reforms and economy-wide restructuring created an environment in which enterprises could not survive without changing their behaviour.

4. ENTERPRISE RESTRUCTURING IN TRANSITION

During the transition period, enterprises have adjusted numerous aspects of their behaviour from organisational structure to the input and output mix, technology and their relationships with suppliers and customers. The main determinants, forms and outcomes of these changes have been extensively documented in the literature. The general message from this literature is that enterprises in transition have responded to changes in their environment with both defensive and strategic forms of restructuring. In most studies the authors have identified change of ownership, competition, ease of access to finance and the role of managers as factors that can facilitate the adjustment of enterprises to the new environment. The outcomes of restructuring have been manifested in performance of enterprises and in their competitiveness (Grosfeld and Roland, 1996; Djankov and Murrell, 2002). In this section, we will focus our attention on four aspects: i) measurement of enterprise restructuring, ii) determinants of this process, iii) methodological approaches to enterprise restructuring and iv) the shortcomings and gaps in the previous research.

4.1. Measurement of enterprise restructuring

The measurement of restructuring in transition literature takes two main forms. In some studies, the authors have focused on activities undertaken by enterprises to survive in new environment and investigated what factors influence these activities or how these activities affect the performance or competitiveness of enterprises in the short and long run. In other studies the authors have investigated the outcomes of restructuring in context of its determinants (Grosfeld and Roland, 1996; Commander et al., 1999; Djankov and Murrell, 2002;
Domadenik et al., 2008). There are also studies that attempt to establish a relationship between forms of enterprise restructuring and its outcomes (Benacek et al., 1997; Halpern and Korosi, 2001; Carlin et al., 2004). In the rest of this section we will review the two approaches to measuring restructuring and then review the findings on the relationship between forms and outcomes of enterprise restructuring.

Studies focusing on forms of restructuring usually distinguish between defensive and strategic restructuring. The most commonly investigated forms of defensive restructuring include downsizing of employment and output which are perceived as attempts by enterprises to minimise losses caused by declining demand for their products (Estrin and Richet, 1993; Aghion et al., 1994; Grosfeld and Roland, 1996; Coricelli and Djankov, 2001; Domadenik et al., 2008). Following the same reasoning, several studies have investigated defensive restructuring through the ability of firms to reduce their costs (Pinto et al., 1993; Vehovec, 2003). The most commonly used measure of costs is the labour costs, although in some studies authors have also investigated the ability of enterprises to reduce the costs of material, energy and other inputs (Pinto et al., 1993). Finally, several studies have considered the sale of unprofitable units, inventories and other enterprise assets as the indicators of attempts by enterprises to reduce their costs and survive in the new environment (Estrin and Richet, 1993; Djankov, 1999).

On the strategic side of restructuring, studies have focused on adjustments undertaken by enterprises such as the replacement of obsolete capital, changes in their organisational and management structures, changes in methods of production, engagement in innovation activities aimed at improving their efficiency. In this context, investment in machinery and equipment has been one of the most commonly employed indicators of strategic restructuring (Charap and Zemplinerova, 1993; Grosfeld and Roland, 1996; Lizal, 1999; Coricelli and Djankov, 2001; Domadenik et al., 2008). Most authors have approached efficiency of enterprises through labour productivity (Djankov, 1999; Linz, 2000; Djankov and Murrell, 2002; Dimova, 2003) although some studies have used changes in total factor productivity as the indicator of strategic restructuring (Hoekman and Djankov, 1997; Zajc-Kejzar and Kumar, 2006). A different approach was taken by Benacek et al. (1997) who distinguish between allocative efficiency (the ability of enterprises to produce with the optimal mix of inputs) and their technological efficiency. Finally, innovation activities have also been used as indicators of strategic restructuring by some authors using expenditure on R&D or the percentage of sales originating from new products as measures of innovation activity (Carlin et al., 2004; Masso and Vahter, 2007; Domadenik et al., 2008).

Recognising the long history of loss-making in former socialist enterprises most of authors have taken profitability as an indicator of restructuring efforts (Benacek et al., 1997; Kocenda and Svejnar, 2002; Bakanova et al., 2006). Some authors have, however, argued that restructuring efforts of
enterprises are better reflected in their ability to generate revenues particularly considering the poor accounting system in the early phase of transition and the ability of enterprises to show profit in their financial statements. As Frydman et al. (1997) put it, in the short run, measures of profitability can be affected by accounting methods and as such bear limited information on the actual performance of enterprise. Furthermore, the ability of enterprises to create revenues reflects their orientation towards the new entrepreneurial environment. For this reason, several studies have also evaluated enterprise restructuring by using revenues or the growth of revenues as the indicator of successful restructuring (Frydman et al., 1997; Kocenda and Svejnar, 2002; Carlin et al., 2004; Commander and Svejnar, 2007).

The link between forms of restructuring and enterprise performance or competitiveness has been confirmed in several studies. Improvements in allocative or technical efficiency have a positive effect on profitability of enterprises (Benacek et al., 1997). Furthermore, growth of sales was higher in those enterprises that engaged in the development of new products or opened a new plant (Carlin et al., 2004). Similarly, Dimova (2003) finds that an increase in employment contributes to labour productivity of enterprises while Halpern and Korosi (2001) have found a positive relationship between improvements in efficiency of enterprise and its market share. Finally, Masso and Vahter (2007) have found that productivity tends to be higher in enterprises which have undertaken some process innovations. When taken together, these studies provide strong evidence that strategic restructuring enables enterprises to perform better, even outperform their rivals and expand their market shares.

4.2. Determinants of enterprise restructuring

The transition literature has identified the main factors which facilitate the restructuring of enterprises: the institutional framework, the type of ownership and dominant owners, the ease of access to capital, competition, networking and role of managers and employees (Djankov and Murrell, 2002). Starting with institutional reforms, the early transition literature hypothesised that institutional changes would be sufficient incentive for enterprises to engage in restructuring (Carlin et al., 1994). However, several case studies from this and later periods have challenged this view suggesting that additional incentives and pressures may be needed to motivate enterprises to restructure (Pinto et al., 1993; Lizal, 1999; Commander and Svejnar, 2007).

Another argument originating in the early transition literature revolved around the role of managers and the power of workers in the decision making process as determinants of enterprise restructuring. Several theoretical models postulated that managers may be motivated to engage in restructuring with a combination of positive and negative incentives such as the desire to signal their skills to the managerial labour market (career concerns), the opportunity to gain a stake in the ownership of company after restructuring, as well as government-driven incentives such as hardening of budget constraint, the introduction of
bankruptcy laws and clear definition of property rights (Estrin and Richet, 1993; Aghion et al., 1994; Grosfeld and Roland, 1996). Similarly, it has been argued that the main opposition to restructuring can come from biggest losers in the process, i.e. workers who fear job losses which may arise during restructuring (Aghion et al., 1993). However, the evidence with respect to the role of managers and the power of workers are ambiguous as in some studies both workers and managers were found to be opposed to restructuring while in others they were proven to be important positive factors in pursuit of reforms within enterprises (Pinto et al., 1993; Brada, 1998).

The relationship between ownership and enterprise restructuring has been investigated in the context of differences between state and private owners and between different types of private owners. While both state and privately owned enterprises engaged in defensive restructuring, the evidence of strategic restructuring were more often associated with private ownership (Frydman et al., 1997; Carlin et al., 2004; Domadenik et al., 2008). In general, private enterprises were found to be more productive and cost efficient, investing more in fixed assets, marketing and R&D, taking into account the fact that the two groups’s access to finance is very different (Charap and Zemplinerova, 1993; Dimova, 2003; Robinson, 2004; Domadenik et al., 2008). With respect to different types of ownership, the most comprehensive restructuring took place in enterprises bought by managers or outside owners, particularly foreign owners (Frydman et al., 1997; Djankov, 1999; Robinson, 2004). Foreign owners were able to inject new capital in the enterprise and in the majority of cases they brought know-how and foreign expertise. They also tended to increase the revenues of enterprise, increase its cost efficiency and labour productivity.

In models of enterprise restructuring hard budget constraint is defined as an incentive for enterprises to improve their cost efficiency (Aghion et al., 1994; Grosfeld and Roland, 1996). However, a substantial body of evidence indicates that hard budget constraints have acted as impediment to strategic restructuring of enterprises by blocking their access to financial funds (Carlin et al., 1994; Brada, 1998; Claessens, 2005). Studies undertaken on enterprises in various transition countries have reported a positive relationship between the ability of enterprise to access finance and the extent of its strategic restructuring measured by various indicators such as investment in fixed assets, R&D, training or marketing (Djankov, 1999; Coricelli and Djankov, 2001; Domadenik et al., 2008). However, the findings for defensive restructuring have not been so unambiguous. Carlin et al. (2004) found on a sample of enterprise from 25 transition countries that the existence of soft budget constraint has a positive impact on defensive restructuring while Coricelli and Djankov (2001) argue that the existence of soft budget constraint impeded defensive restructuring of enterprises in Romania.

With respect to product market competition, most studies have focused on the interactions between domestic and foreign enterprises. The starting position in most of these studies is that intensified competition motivates enterprises to change their product mix, search for new markets and improve the
design and quality of their products (Carlin et al., 1994). But it has also been argued that the presence of foreign competitors can have negative effect on domestic enterprises if the absorptive capacity of the latter, i.e. their ability to gain benefits through rivalry with foreign counterparts, is low (Sabirianova Peter et al., 2004). The empirical evidence on the impact of competition on enterprise restructuring has been ambiguous. On the one hand, there is evidence of positive impact of intensified competition on productivity of enterprises and their motivation to introduce new products (Dimova, 2003; Carlin et al., 2004). On the other hand, in some studies competition from foreign rivals was found to negatively influence restructuring of enterprises (Djankov, 1999; Angelucci et al., 2002). These findings have been backed up by several studies on the spillover effects of FDI on domestic enterprises. The explanation for this relationship is that domestic enterprises benefit from FDI mainly through vertical linkages (ownership over domestic enterprises) while the horizontal effects of FDI (competition) have mainly been associated with the exit of domestic enterprises from the market (Hoekman and Djankov, 1997; Damijan and Majcen, 2000; Sabirianova Peter et al., 2004; Zajc-Kejzar and Kumar, 2006).

Finally, in addition to these main determinants of enterprise restructuring, some studies have included additional variables such as size or market orientation. Larger firms were found to create more revenues and have higher productivity while smaller ones were found to invest more (Coricelli and Djankov, 2001; Dimova, 2003; Carlin et al., 2004). Coricelli and Djankov (2001) also argue that firms oriented to export market tend to engage more in strategic restructuring. However, their finding is contradicted by Domadenik et al. (2008) who have found no statistically significant difference between the behaviour of enterprises which compete domestically and those that participate in international markets. The effect of market orientation is therefore ambiguous.

4.3. Methodological issues

The modelling approach to enterprise restructuring in the early transition literature was based on the assumption that external environment motivates enterprises to change their behaviour in order to perform better or become more competitive (they were exogenous). However, in several studies authors have recognised that outcomes of restructuring may act also as its determinants suggesting that there is the problem of endogeneity (Carlin et al., 2004; Domadenik et al., 2008). In addition to this, several studies have also pointed to biases that may arise from the relationship between forms of restructuring and unobserved firm, industry and country specific characteristics (Zaje-Kejzar and Kumar, 2006; Commander and Svejnar, 2007). In the empirical literature, these problems have been treated with different techniques though the degree of attention paid to them has varied in different studies.

The problem of endogeneity has been recognised in the context of the relationship between outcomes of restructuring such as productivity, revenues, etc. and the independent variables such as innovation activities or employment
adjustment, access to finance, type of ownership, the quality of business environment, the extent of competition or other industry and country specific characteristics (Coricelli and Djankov, 2001; Dimova, 2003; Carlin et al., 2004; Zajc-Kejzar and Kumar, 2006; Commander and Svejnar, 2007; Masso and Vahter, 2007). These problems have been dealt with in two ways. On the one hand, authors of some studies have investigated the impact of potentially endogenous variables in lagged forms on the dependent variable which were measured in current period (Coricelli and Djankov, 2001; Dimova, 2003). On the other hand, there were studies that attempted to find suitable instruments for potentially endogenous variables on the basis of theoretical predictions and within limits of their datasets (Carlin et al., 2004; Zajc-Kejzar and Kumar, 2006; Commander and Svejnar, 2007).

The impact of business environment on restructuring of enterprises has been isolated in a straightforward manner through variables which control for industry, region and country specific effects (Frydman et al., 1997; Linz, 2000; Vehovec, 2003; Bakanova et al., 2006; Domadenik et al., 2008). However, this was not the case with unobserved firm-specific characteristics. When these effects were taken as time-invariant authors have either assumed that this individual heterogeneity is uncorrelated with other explanatory variables (Hoekman and Djankov, 2000) or they attempted to eliminate unobserved firm-specific effects by estimating models in differenced form (Vehovec, 2003). Studies that assumed the sources of bias to be time-variant have specified models of enterprise restructuring mainly in two stages where the dependent variable in the first stage was specified in the form of a choice variable and the residuals from this stage were incorporated in the second stage equation to control for potential selection bias (Hoekman and Djankov, 1997; Zajc-Kejzar and Kumar, 2006).

A distinct approach to above problems has been developed in studies using a dynamic framework (Christev and Fitzroy, 2002; Vehovec, 2003; Domadenik et al., 2008; Kolesnikova, 2010). In general, these studies allow for individual unobserved heterogeneity of enterprises and, in that context, for the potential endogeneity between some of the explanatory variables and unobserved firm, industry and country specific characteristics. Furthermore, this approach allows authors to control for path dependency of enterprise restructuring as well as to distinguish between the short-run and long-run impacts of actions which enterprises take in terms of employment adjustment, investment in machinery, equipment and in R&D.

4.4. Shortcomings of the studies on enterprise restructuring in transition

The review of the literature on enterprise restructuring in transition shows that there are several shortcomings in these studies and a number of gaps in the state of knowledge on the subject. Starting with the geographical coverage of current studies, most of the reviewed work is focused on the group of advanced
transition economies labelled as CEECs (Benacek et al., 1997; Frydman et al., 1997; Hoekman and Djankov, 1997; Lizal, 1999; Halpern and Korosi, 2001; Christev and Fitzroy, 2002; Kocenda and Svejnar, 2002; Zajc-Kejzar and Kumar, 2006; Masso and Vahter, 2007; Domadenik et al., 2008). Of other countries, only a few studies have paid some attention to Bulgaria and Romania (Coricelli and Djankov, 2001; Dimova, 2003) and to CIS countries (Djankov, 1999; Linz, 2000; Bakanova et al., 2006; Kolesnikova, 2010) while Vehovec (2003) investigated restructuring of enterprises in Croatia and Slovenia. Finally, Carlin et al. (2004) and Commander and Svejnar (2007) have brought together the data from several transition countries.

The studies reviewed above have largely concentrated on the early period of transition, prior to 1997 (Benacek et al., 1997; Frydman et al., 1997; Hoekman and Djankov, 1997; Lizal, 1999; Linz, 2000; Coricelli and Djankov, 2001; Halpern and Korosi, 2001; Christev and Fitzroy, 2002) when the most important issue was whether enterprises will be able to survive in the new market oriented environment. Other studies mainly cover the period up to 2003 (Djankov, 1999; Kocenda and Svejnar, 2002; Dimova, 2003; Vehovec, 2003; Carlin et al., 2004; Masso and Vahter, 2007; Domadenik et al., 2008). The behaviour of enterprises in later years of transition when market institutions were developed and some of these countries joined the EU is largely unknown. In this context, another gap in reviewed literature relates to its time coverage. As we can see, the research on enterprise restructuring in the less advanced transition economies is rather scarce and limited to shorter periods of time.

There is also an evident lack of research which would relate forms of restructuring with its outcomes in terms of performance and particularly competitiveness. Models of enterprise behaviour in most studies analyse individual forms of restructuring against some of its determinants or evaluate enterprise performance on the basis of some of the same determinants. In both cases, the relationship between forms of restructuring and its outcome is implicitly assumed. Little is known about effects of restructuring on market share, export performance or other indicators of competitiveness of enterprises. Also, in these studies, the authors focus on either defensive or strategic forms of restructuring and to the best of our knowledge there is no study that brings together the two forms of defensive and strategic restructuring with their outcomes - whether in terms of performance or competitiveness.

From the methodological standpoint, the existing literature suffers from an important limitation in that most studies fail to treat problems of either selection bias or simultaneity. There is a simultaneous and mutually reinforcing relationship between forms of restructuring and the outcomes of restructuring (improved competitiveness of firms, for example). These problems have been recognised at the theoretical level but, in the majority of empirical studies, have not been treated appropriately. In practice, most studies have used techniques which allowed them to control for either unobserved effects or the endogeneity. In relation to that, much of the existing work is undertaken within a static
framework and only few studies have acknowledged the path dependency of restructuring and placed this process in a dynamic context.

5. CONCLUSION

This paper attempted to broaden understanding of the process of enterprise restructuring in the transition period. The restructuring is a multidimensional process which takes place at macroeconomic, industry and microeconomic levels. Although notions of restructuring differ among these levels, together they form pieces of larger mechanism which can lead to improvements in the competitiveness of national economies in the long run. Enterprise restructuring lies at the heart of this mechanism while the restructuring processes at industry and economy-wide levels act as supporting processes which create the environment facilitating the restructuring of enterprises.

Owing to the problems inherited from the socialist period, the survival of enterprises in transition economies was not possible without restructuring. By the advanced stage of transition, in the majority of countries, the core institutions needed for the functioning of a market economy were established and their economic structures have become similar to those in advanced market economies. In analysing enterprise responses to these changes we have identified two main patterns of firm behaviour and concluded that only those firms who engage in deep or strategic restructuring have been able to survive in the long run.

The review of the current literature on enterprise restructuring identified many gaps in the present state of knowledge. It is evident that studies which relate competitiveness with restructuring while taking into account the dynamic nature of the two concepts, are generally scarce. Moreover, most of the existing studies estimate the effect of individual restructuring measures on firm performance and draw conclusions about the impact of restructuring through the relationship between its determinants and outcomes. Another potential problem has been noted is the inability of existing studies to control for problems of selectivity and simultaneity in models of restructuring. Finally, the majority of studies deal with behaviour of enterprises in early stages of transition and not the later and more mature phases of transition when the gap between many of these economies and mature market economies has been reduced. Furthermore, the present studies almost entirely focus on advanced transition economies, leaving out the less advanced countries.

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Sažetak

Položaj poduzeća, industrija i gospodarstava na tržištu ovisi o njihovim odgovorima na veliki broj inicijativa, tržišnih trendova, tehnoloških promjena, mjera ekonomske politike i institucionalnih reformi. Promjene u ponašanju koje poduzeća poduzimaju kako bi preuzela tržište svojih rivala obično se nazivaju restrukturiranjem. Razumijevanje restrukturiranja poduzeća važno je jer je sposobnost poduzeća da se natječu na tržištu bitna odrednica sposobnosti njihovih gospodarstava da rastu i pruže svojim građanima bolji standard življenja. Tijekom protekla dva desetljeća restrukturiranje bilo je bilo bitno obilježje života poduzeća u zemljama Središnje i Istočne Europe. Institucionalne promjene u ovim zemljama zahtijevale su od poduzeća uvodenje promjena u ponašanju kako bi mogli opstati na tržištu. Imajući navedeno u vidu ovaj rad istražuje ciljeve i razloge restrukturiranja poduzeća u uvjetima tranzicije. Također, rad identificira glavne oblike restrukturiranja i analizira koji su činitelji utjecali na odluku poduzeća o provođenju određenog oblika restrukturiranja. Konačno, rad pruža osvrt na metodologiju korištenu u prethodnim analizama restrukturiranja poduzeća u tranziciji.

Ključne riječi: restrukturiranje poduzeća, tranzicija, institucije, zemlje Središnje i Istočne Europe.

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