

**Competitive Pressure and its Social Consequences in EU Member States
and in Associated Countries**

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Workpackage 5

**Integrated framework to analyse the impact of competitive pressure and enlargement
on the interaction between corporate sector, labour market and households**

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A summary paper with policy conclusions and recommendations

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Introduction

This report is a summary of the results achieved within the project. First it presents the main results of the five workpackages and provides the most important recommendations and policy suggestions. It follows the structure of the project by starting with the corporate sector – competitive pressure and institutions, foreign direct investment – which is followed by the labour market. The results and the recommendations related to households cover the income structure, inequality, its perception and demand for redistribution. Finally the linkages among these three aspects of economic and societal dimensions are analysed.

Summary

Competitive pressure in the corporate sector, its institutional aspects and policy framework (WP1)

The growing competitive pressure faced by firms in the new EU members and acceding countries from Central and Eastern Europe affected their behaviour and performance. Two important aspects of enterprise adjustment are looked at in-depth: (i) the changes in firm's pricing behaviour against the background of a combination of growing competitive pressure and immature markets that are still marred by numerous imperfections; (ii) the firms' responses to a combination of growing competitive pressure and institutional interactions and change. The empirical results are highlighting the specificities of the ongoing restructuring of the corporate sectors in the emerging market economies of Central and Eastern Europe.

The effect of competitive pressure in imperfect markets and the effect of market imperfections on firms' pricing behaviour and performance are discussed as the relationship between price markups and returns to scale in imperfect markets and the implications of this relationship for the empirical estimation of these two parameters. An approach is proposed for the empirical estimation of markup ratios with an adjustment for the case of non-constant returns to scale. The idea of this approach is first to determine the average returns to scale index for a group of firms and then to use it in order to make an adjustment to the markup ratio for the same category of firms.

The suggested approach was tested on balance sheet data for Bulgarian and Hungarian manufacturing firms. The use of identical methodology allows producing fully comparable results for the two countries. Using the suggested approach, an estimate of sectoral markups and returns to scale indexes for both countries was made with and without the adjustment for non-constant returns.

Adjusting for non-constant returns to scale is essential in the presence of considerable market distortions, as is the case in these transition economies. The application of standard procedures for estimating average price markups based on the assumption of constant returns to scale may lead to serious biases. This may occur if the markup is estimated for a group of firms, which is heterogeneous with respect to the actual returns to scale index at which different firms operate. In particular, the empirical analysis showed that small manufacturing

firms tend to operate with decreasing returns to scale. Ignoring this fact in the estimation of their markup ratios will result in a considerable upward measurement bias in their estimated price markups. Moreover, this will also be the case when markups are estimated for groups of firms, which lump together small and larger firms. One of the general practical conclusions of this exercise is that empirical research in this area should devote special attention to the relationship between returns to scale and price markups and the related implications.

The relationship between returns to scale and their price markups was analysed empirically. A strong positive correlation between the estimated sectoral returns to scale and price markups indices was found, which is in line with the theoretical prior. The importance of correcting markup estimates by the returns to scale factor is highlighted by the fact that this positive relationship is not observable for the unadjusted markups. The proposed correction in the markups helps to restore this theoretically important relationship.

A characteristic difference between the returns to scale estimates for the two economies was found, which corresponds to the prior knowledge on the transition path the two countries took. On average, returns to scale in Hungarian manufacturing sectors were found to be higher than those in Bulgaria; besides, Bulgarian manufacturing firms were found to operate at decreasing returns to scale much more often than Hungarian firms, which typically operated at increasing returns to scale. These outcomes are consistent with the fact that Hungary is more advanced in the process of establishing a functioning market economy. This result reinforces the previous finding that the actual enterprise responses to competitive pressure may differ in the stages of economic transformation in these countries. Indeed, the in-depth empirical analysis based on micro data is a valuable (and probably remains unique) source of information in investigating these specificities of the adjustment process in these emerging market economies.

While the differences in average markup estimates are negligible, the sectoral structures of markup ratios are very different, reflecting differences in the market structure of the two economies. This means that after the strongly concentrated socialist market structures were dismantled through liberalisation and corporate restructuring in the early phases of transition, the subsequent evolution of concentration and market power in the two countries followed different paths. Note that identical methodology to firm level data was used for two countries with some important differences in the market conditions, and come up with qualitatively similar empirical results. This is a further evidence of the robustness of the results and of the conclusions that one can draw from them.

Furthermore a methodology for cross-country analysis of firms' responses to competitive pressure, institutional interactions and change was developed and applied to empirical data for the countries concerned. The proposed methodology is a two-step approach. In the first step, meso-level, sectoral indicators are computed, which eliminate the effect of firm-specific, time-varying factors that are not directly related to institutional interactions and change. In the second step, these meso-level indicators are used for a cross-country analysis of the firms' responses to competitive pressure, institutional interactions and change, in conjunction with other relevant factors. This two-tier approach was used for two meso-(sectoral) level variables: the average markups by NACE sectors and the average productive efficiency by NACE sectors computed for different countries.

The estimation results based on firm-level data for three countries, Bulgaria, Hungary and Romania, make it possible to gain further insights into the effects of competitive pressure on firm behaviour and performance and highlight some of its transmission mechanisms, taking into account institutional interactions and change. Most of our empirical results are consistent with the theoretical priors. Thus our results presented indicate a strong positive statistical association between higher overall competitive pressure in the corresponding market and the average technical efficiency of the firms operating in this market. We also find that a higher degree of monopolization or oligopolisation of the market is associated with higher markup ratios, suggesting that firms with a dominant position are more likely to extract rents through higher monopolistic prices. An increasing investment ratio seems to be a positive factor in driving mark-ups down and efficiency up. The degree of foreign penetration in the local ownership structure is generally associated with higher average efficiency in these sectors. In turn, financial pressure (related to high indebtedness and, possibly, soft budget constraints reducing competitive pressure) tends to be negatively associated with firm efficiency, except for the cases when debt is inherited and fought against using strengthened fiscal and financial policies.

The empirical results are consistent with the theoretical priors mostly. They indicate a strong positive statistical association between higher overall competitive pressure in the corresponding market and the average technical efficiency of the firms operating in this market. A higher degree of monopolisation or oligopolisation of the market is associated with higher markup ratios, suggesting that firms with a dominant position are more likely to extract rents through higher monopolistic prices. The degree of foreign penetration in the local ownership structure is generally associated with higher average efficiency in these

sectors. In turn, financial pressure (related to high indebtedness and, possibly, soft budget constraints reducing competitive pressure) tends to be negatively associated with firm efficiency.

At the same time some findings suggest that excessive competition on the local markets can be detrimental to the domestic firms of these immature market economies, possibly due to the weakness of local firms to withstand competitive pressure. This is especially the case with competitive pressure generated by high import penetration in the domestic markets. These empirical results indicate some destructive effect of excessive import penetration: it tends to be associated with lower average productive efficiency of domestic firms in the same sector.

No statistically significant association was found between the indicator of institutional change and progress in market reforms used in the model (the EBRD index of “progress in transition”) and the meso-level variables measuring firms’ responses. On the one hand, this outcome may suggest that the policy and institutional changes that are being introduced nominally do not actually translate into motivational driving forces for the firms. It may also be a sign of weak enforcement of policy and regulation by the public bodies and other regulatory institutions entrusted with the implementation of policy and regulation. On the other hand, this outcome may be due to impreciseness in the data, calling for further research into the refinement of the methodology and its empirical application.

Firms’ responses to competitive pressure in imperfect markets

The analysis of the changes in firms’ productive efficiency was undertaken within the modelling framework of production functions and production frontiers. To assess the impact of competitive pressure on total factor productivity, the production/frontier functions were augmented into a functional form that contains exogenous “determinants” of productive efficiency. This allows to distinguish between the variation in output which is caused by variation in factor inputs and those changes in the level of output that are assumed to be attributed to the efficiency of resource transformation per se, i.e. the efficiency of the underlying production technology. In the augmented production functions the set of quantitative measures of competitive pressure was used. These models have been tested on the basis of enterprise data for all four Central and East European countries: Bulgaria, Hungary, Romania and Slovenia.

The analysis of the changes in firms' pricing policy was performed in the context of models of monopolistic pricing behaviour. By its theoretical definition, the markup ratio reflects the pricing behaviour of firms endowed with market power and using that power to set prices higher than their marginal costs. Looked from the opposite angle, the markups can be regarded as reflecting the degree of competition that firms face in the market. In other words, different levels of price markups (say, at the sectoral level) should be associated with varying nature and levels of competitive pressure (within each sector). To assess the impact of competitive pressure on firms' markups, varying coefficients models were used augmented with variables measuring competitive pressures. These models were been tested on the basis of enterprise data for Bulgaria and Hungary and, partially, for Romania.

One specific feature of the countries studied is the existence of numerous market imperfections that distort firms' behaviour as well as their responses to competitive pressure. Special attention was devoted to this aspect both in terms of its theoretical and empirical implications. In particular the relationship between price markups and returns to scale in imperfect markets and the implications of this relationship for the empirical estimation of these two parameters was assessed. An approach for the empirical estimation of markup ratios with an adjustment for the case of non-constant returns to scale was followed. The idea of this approach is first to determine the average returns to scale index for a group of firms and then to use it in order to make an adjustment to the markup ratio for the same category of firms. The suggested approach was tested on balance sheet data for Bulgarian, Hungarian and Romanian manufacturing firms. The use of identical methodology allows producing fully comparable results for the countries. Using the suggested approach, for both countries sectoral markups and returns to scale indexes were estimated with and without the adjustment for non-constant returns.

The competition effect of cross-border capital movement and domestic spillovers of FDI (WP2)

When a firm sets up a plant overseas or acquires a foreign plant, it does so in the expectation of realizing a higher rate of return than a given home country firm with an equivalent investment. The source of the higher return is the technological advantage alluded to. Whatever its source, the only way domestic firms can gain from external benefits is if some form of indirect technology transfer takes place — multinational firms will not simply hand

over the source of their advantage. The theoretical literature identifies four channels through which spillovers might boost productivity in the host country: imitation, skills acquisition, competition, and exports.

Spillover Channels

Imitation is the classic transmission mechanism for new products and processes. One mechanism commonly alluded to in the theoretical literature on technology transfer from developed to developing economies is reverse engineering. Its scope depends on the complexity of products and processes, with simple manufactures and processes easier to imitate than more complex ones. The same principle applies to managerial and organizational innovations, although these are thought to be easier to imitate. Imitation is, of course, not the same as replication, and it would be surprising if the rents accruing to multinational firms were entirely dissipated by the process. However, any upgrading to local technology deriving from imitation could result in a spillover, with consequent benefits for the productivity of local firms.

Adoption of new technology can also occur through the acquisition of human capital. Even when the locational pull for FDI is relatively low wages, multinational firms tend to demand relatively skilled labour. Generally, they will invest in training, and it is impossible to lock in such resources completely. This inability to fully protect investment in human capital has long been an argument for infant industry protection as a response to potential first-mover disadvantages. The movement of labour from multinational firms to other existing or new firms can generate productivity improvements through two mechanisms: through a direct spillover to complementary workers and through knowledge carried by workers who move to another firm. The knowledge that workers bring with them is the most important channel for spillovers, and some empirical work supports this.

Many models emphasise the role of competition. Unless an incoming firm is offered monopoly status, it will produce in competition with indigenous firms. Even if indigenous firms are unable to imitate the multinational's technology and production processes, entry of the multinational firm puts pressure on them to use existing technology more efficiently, yielding productivity gains. Greater competition leading to a reduction in X-inefficiency is analogous to one of the standard gains from arm's length trade and is frequently identified as

one of the major sources of gain. In addition, competition may increase the speed of adoption of new technology.

A further indirect source of productivity gain might be through exports. Crudely, domestic firms can learn to export from multinationals. Exporting generally involves fixed costs to establish distribution networks, create transport infrastructure, and learn about consumers' tastes, regulatory arrangements, and so on in overseas markets. Multinational firms generally come already armed with such information and exploit it to export from the new host country. Through collaboration, or more likely imitation, domestic firms can learn how to penetrate export markets. There is a growing body of literature that links exporting and productivity. Recent work on Germany, Mexico, Morocco, Spain, the United Kingdom, the United States, and Venezuela suggests that productivity levels are higher in exporting firms than in nonexporting firms. Central to this literature is whether firms self-select into exporting or increase their productivity after entering export markets.

Foreign direct investment (FDI) is often seen as an engine to economic growth and development, an assumption that has led many governments around the globe to try and attract multinationals by offering generous financial incentives. One of the main rationales for these policy interventions is the belief that domestic firms can benefit from the presence of foreign multinationals through positive spillovers allowing them to improve their productivity. While some case studies provide evidence suggestive of positive spillover effects the results from econometric analyses are mixed.

However, the literature to-date is subject to a number of shortcomings, which can explain at least part of the failure of detecting any significant spillover effects on domestic firms. Firstly, most papers restrict themselves to attempting to detect *horizontal* spillovers by, say, relating the productivity (growth or level) of firm i in industry j to the presence of foreign multinationals in the same industry j , defined using the standard 2, 3 or 4 digit classification.

This largely neglects the possibility of gains for domestic firms from *vertical* linkages with multinationals even though arguably some of these links will be between industries within the same 2 or 3 digit classification. Secondly, in many studies the coefficient indicating spillovers is constrained to be the same for all firms, i.e., all domestic firms are assumed to benefit equally from FDI. This has been recognised in some recent work stressing the importance of domestic firms' absorptive capacity in order to benefit from spillovers. Thirdly, it is usually assumed that FDI is homogeneous and therefore that the potential

spillover effect is the same for all types of FDI. However multinational investment is quite heterogeneous with respect to its relationship with local firms, which can be assumed to have implications for any spillovers.

Taking into account the export orientation of foreign MNEs yields interesting insights. Only domestic market oriented MNEs generate positive spillovers through forward linkages for domestic firms. Domestic exporters also gain from backward linkages with export oriented multinationals, but experience reductions in productivity due to backward linkages with domestic market oriented multinationals. These findings are in line with some of the case study evidence, that domestic firms benefit more from backward linkages with multinationals that are embedded into an international production network. In general this evidence underlines the importance of buyer-supplier linkages for productivity spillovers. Thus, stressing the importance of backward linkages these findings lead to conclude that forward linkages are likely to be also conducive for positive spillovers.

There seems to be a widely held assumption on the part of policy makers that inward foreign direct investment (FDI) brings benefits over and above the additional investment to the host country. In particular, multinational enterprises (MNEs) are seen as being vehicles for inflow of new technology, which may “spill over” to domestic firms and, hence, foster development and assist catching up in less developed economies. Furthermore, MNEs introduce higher levels of competition in the economy. This may be particularly relevant for transition economies which, after opening up markets aim at increasing productivity growth and levels of competition in the economy.

The inflow of foreign knowledge may benefit domestic firms as they may learn from multinationals, allowing them to upgrade their own production process and as a result increase productivity. The theoretical argument for why one may expect such “productivity spillovers”, as they are usually referred to, from foreign multinationals is straightforward. Given the multinationals’ limited knowledge of the local market, and distance from their parent firm, they are generally at a disadvantage compared with local firms in the host country. Hence, multinationals will only be able to locate profitably abroad if they have some sort of offsetting advantage. This takes the form of a “firm specific asset” (FSA), such as superior production technique, know-how or management strategy, which has at least to some extent the characteristics of a public good and enables the firm to locate profitably abroad. These FSAs can be transferred at low or zero cost between subsidiaries of the same firm.

The possibility of productivity spillovers arises because multinationals may find it difficult to protect a leakage of an FSA to other firms in the host country. The public good characteristics imply that once the FSA is out on the external market it can be used by other firms as well, due to it being to some extent non-rival and non-excludable. The inability of the multinationals to protect the asset is due to a number of reasons. Firstly, labour may move from multinationals to domestic firms, taking with them some of the knowledge of the FSA. Secondly, domestic firms supplying to or purchasing inputs from multinationals may be exposed to the superior technology used in the foreign firm. Thirdly, domestic firms may be in competition with multinationals on the final product market, hence being able to learn from the foreign competitor. These mechanisms may be particularly important in transition economies, which are likely to have fairly high levels of human capital but lack up to date technology and management practices. The crux however of transition is the introduction of market discipline to domestic firms. The introduction of market discipline may be the main virtue of foreign entry in a transition context.

The purpose was to analyse the role of productivity spillovers in different transition economies. Moreover, using firm-level census data for Hungary and Bulgaria for the period 1995-2001 a detailed analysis of the different effects of foreign MNEs is provided on the productivity of domestic firms. A comparison between those two countries is interesting as Hungary is one of the most advanced transition economies whilst Bulgaria is more representative of the group of relative laggards.

Second, surprisingly little attention has been paid in the spillover literature more generally to the potential for productivity spillovers based on the importance of FSA of foreign owned affiliates. So far one seems to have taken the presence of FSA for granted and assumed that the potential for productivity spillovers is simply proportional to the output presence of foreign-owned firms in the industry. Presumably, this is due to the idea that FSA are unobservable. It is assumed that while this may be the case the production technology of foreign affiliates in the local economy may still give an impression of the importance of FSA that are transferred within multinationals to their foreign establishment and therefore the potential of productivity spillovers in the industry. Indeed, it has been well established in both the theoretical and empirical literature that multinationals are more technologically advanced among a number of observable dimensions. Thus it is expected that the potential of productivity spillovers increases in the capital intensity of foreign multinationals in the industry. The role of materials in the production of foreign affiliates is ex ante unclear. To the

extent that materials are imported from the home country they may reflect the extent to which FSA are transferred within the firm. The purchases of materials in the host economy may also be expected to yield significant benefits to local firms.

The results suggest that one should be careful not to exaggerate the positive role of foreign firms in enhancing the productivity of domestic firms in transition economies. Interestingly, whilst direct competition tends to be associated with negative effects in most developed economies this is not necessarily the case in transition economies. While for Hungary a leader in transition results are similar to those obtained for example in the UK, Bulgaria, a laggard in transition appears to suffer less the more direct it has to face up to foreign competition. Moreover, it was found using different specifications that the capital-intensity of foreign MNE plays an important role in explaining the potential of productivity spillovers. However, the actual extent of productivity spillovers is importantly affected by the absorptive capacity of domestic firms.

The empirical analysis shows that there are substantial differences in results between the two countries. This is not unexpected, as Hungary is one of the more developed of the Central and Eastern European transition economies while Bulgaria is arguably a relative laggard in terms of economic development. More specifically, some evidence for positive productivity spillovers to domestic exporters was found in Hungary. These spillovers, however, only emanate from capital and material intensive multinationals. There is some weaker evidence that capital intensive FDI can also benefit domestic exporters in Bulgaria. It is also showed that the results are different for large and small domestic firms (with the former more likely to benefit) and public and private domestic firms (where the latter are more likely to benefit) in the Hungarian data. These results thus show that allowing for heterogeneity in FDI as well as taking account of differences in the type of domestic firm are important when evaluating potential spillovers.

The trade off between investment incentives and exit costs for the location of FDI was also investigated. While some recent theoretical work has focused on this, there does not appear to have been any empirical work in this area. This analysis considered the effect of profit taxation (as a measure of investment incentives) and an index of hiring and firing costs (proxying exit costs) on the location of US outward FDI in 33 host countries for the period 1986 to 1996. Given that the data are on FDI stocks a dynamic model of the determinants of FDI is estimated using a generalised method of moments (GMM) estimation technique.

The empirical results are as follows. US FDI is positively affected by investment incentives and low levels of firing costs. These results are robust to a number of different empirical specifications. In particular, they do not change following the inclusion of other measures of investment costs in the host country, and allowing for different coefficients for developed and developing countries, or countries with relatively high and low levels of perceived economic risk.

Competition-driven labour market developments, their institutional and policy implications (WP3)

As transition started, most former socialist economies experienced a very substantial adjustment on the labour markets. Suddenly increasing competitive pressure, together with the wholesale reduction of state subsidies brought significant changes both in employment and in wage determination practices. Aggregate employment declined dramatically in many countries. This adjustment to the emerging market conditions led to large movements in employment and wage structure. Obviously, magnitudes and the time path of these developments varied substantially from country to country, depending on the particular characteristics of the transition process.

Labour market adjustment was part of the overall transition process: its speed and depth very much reflected the particular characteristics of the structural adjustment in the economy and society. It was strongly influenced by policies limiting or accommodating structural adjustment, on the form and timing of the privatisation process, and on the external environment of the economy. Labour market adjustment had direct social consequences: mass unemployment, quickly increasing income differentials, all having obvious social and political effect. The three economies, compared in this research, Bulgaria, Hungary and Romania, followed very different strategies, and the time path of the transition process was very different. Still, some long-run consequences are strikingly similar: for example, aggregate employment was 70-75% of the 1989 level in 2004 in all three countries. This indicates that there were very powerful economic forces, competitive pressures determining the basic directions of the adjustment process. These forces shaped the overall dynamics of labour market adjustments. However, different groups of firms in different phases of the transition process may have experienced variations to these overall characteristics, as there were substantial variations in initial conditions and competitive pressures.

Three aspects of labour adjustment: job-flows, labour demand, and wage determination were analysed in the three economies. The most important characteristics were compared, and the measurable effect of competitive pressure on labour market outcomes was identified, whenever possible.

Macroeconomic stabilisation clearly had a positive effect on labour reallocation in Bulgaria. However, net job destruction prevailed in the entire period, resulting in declining total employment in the corporate sector. Net job destruction, however, was much smaller in manufacturing than in other sectors; most of the job flows represented restructuring rather than downsizing. Capital intensive sectors, like engineering continued destroying jobs on a large scale, however, the more labour intensive sectors started to increase overall employment during the fast reallocation after the stabilization shock was over.

Before macroeconomic stabilisation, the very intensive job reallocation was dominated by job destruction in Hungary, too. However, there is evidence of substantial job creation even in this very volatile period. Firms seemed to operate rather flexibly on the labour market in almost all sectors throughout the entire sample period. There were clear sectoral differences: manufacturing on the whole had positive net job creation between 1997 and 2001. Engineering was the job creation powerhouse of the Hungarian corporate sector until 2001. On the other hand mining and agriculture shed labour almost continuously. However, the period 2001-2 is different from the second half of the 1990's: while the late 1990's were characterised by net job creation in several sectors that stopped after 2000. Clearly, Hungary being a small open economy, international business cycle had a strong effect on the export markets. But 2001 also brought substantial wage rises, stipulated by the government minimum wage regulation, which also had a negative effect on the flexibility of labour markets.

Job destruction strongly dominated job reallocation in Romania during the period 1999-2002, although the situation clearly improved markedly even in this short period. Labour intensive sectors, like light industries, fared somewhat better, but trade was the only sector with net job creation.

Size matters in job reallocation. Small firms reallocated labour much more intensively in all three economies; however, the balance was very negative in Bulgaria and Hungary. Net job creation at small firms became positive in 2000 in Romania, which is very different from the other two economies. The possible interpretation is that macroeconomic stabilization in the

mid 1990's was successful both in Bulgaria and in Hungary, tightening financing constraints substantially. The tight liquidity constraint especially restricted the dynamic small firms, having negligible collateral. As real stabilization was repeatedly postponed in Romania, liquidity was more freely flowing to the corporate sector, and that helped financing expanding small firms.

Job reallocation tended to be slower at larger firms, but in Bulgaria and Hungary larger firms were more successful in net job creation. That clearly was linked to the successful privatisation in Hungary: as multinational firms moved in, they reorganised the newly acquired firms, and fast expansion was accompanied by intensive net job creation. Also, the substantial FDI inflow concentrated net job creation into some sectors with relatively high capital intensity in Hungary, like engineering. The situation was the opposite of that in the other two economies; net job creation was mostly concentrated on labour intensive sectors.

Ownership clearly was an important factor: the remaining state-owned sector had negligible job creation in Hungary and Romania, and although their job creation rate was somewhat larger in Bulgaria, it clearly was lower than in the private sector. On the other hand, foreign-owned firms were net job creators in the post-stabilisation Bulgaria and in Hungary in the period 1994-2001. FDI clearly contributed substantially to job reallocation, to the restructuring of the economy.

Job destruction was very persistent in all three countries: persistence rates frequently exceeded 90%. The only exception was Bulgaria before stabilization: the relatively low job destruction rates were coupled with low persistence, indicating that job destruction was frequently the result of random fluctuations rather than restructuring in that period. The huge persistence of job destruction indicates the depth of the restructuring process: inefficient firms, unable to compete under the increased pressure, had to downsize their activities permanently.

Job creation rates are less persistent, but these figures frequently still were larger than the roughly 60% typical to developed market economies. Small firms were less likely to create jobs permanently than larger ones. High persistence in both job creation and job destruction indicates a strong differentiation of firms: unsuccessful firms almost permanently downsized, while there were dynamic firms with substantial productivity gains, which could increase output at phenomenal rates. The *average* expanding firm grew by at least 25% annually in Hungary between 1992 and 2001, and by more than 30% in Romania between 1999 and

2002. However, in three out of four years the *average* expanding Romanian firm increased output by more than 50%, driven by huge productivity gains.

This rapid differentiation process means that the relatively stagnant aggregate employment was the outcome of the fast destruction of jobs at a large number of firms, unable to operate under the increased competitive pressure, and the usually somewhat slower, but still substantial job creation at the group of successful newly emerging firms, which, on the other hand, could gain market share extremely fast at the expense of the traditional old firms. However, the characteristics of the emerging new economy also depended strongly on the intensity of the FDI: foreign-owned firms were key participants in the restructuring process. In Hungary, where FDI was large, job creation was especially fast in some capital-intensive sectors, while in the other two economies, where FDI flow was smaller, it was concentrated in some labour-intensive sectors. That clearly indicates the importance of liquidity constraints.

Labour demand

Labour demand obviously depends strongly on output dynamics. The output elasticity of labour demand was rather stable in all countries, especially in Hungary: its value typically ranged between 0.4 and 0.5, although slightly declining in several sectors. The output elasticity of labour demand increased substantially in Bulgaria after macro-economic stabilization, and by 2001 it was larger than in Hungary. It fluctuated more in Romania, both over time and over sectors. But basically differences were relatively small.

Wage elasticity varied much more: vary a lot over sectors in all three economies, and they also fluctuate more intensively. Labour demand was only moderately sensitive to wage shocks in Bulgaria, but its importance increased substantially. While labour cost elasticity was close to zero in 1997-8, its typical value was in the -0.3 to -0.5 range in 2001, which is the typical value for many market economies. Labour demand initially was much more sensitive to labour cost in Hungary, however, it got very inelastic by the turn of the century; when the elasticity was frequently insignificant. However, it again became somewhat more elastic, and by 2002 it reached similar levels than in Bulgaria. Wage elasticity is much more unstable, however, in Romania. It varies a lot over sectors and time: it may be insignificant in one year, while labour demand seems to be very elastic in the other with wage elasticities below -1. While corporate labour market behaviour seems to shift gradually in Bulgaria and

Hungary, where year-to-year changes are relatively moderate and most sectors move parallel, it apparently still is very unstable in Romania.

While the output elasticity basically was in the expected range, the labour cost elasticity frequently is very different; in some cases it even had wrong sign, although that almost always was insignificant. The general tendency of the wage elasticity seems to reflect macroeconomic conditions. In turbulent periods firms may either be oversensitive to the cost of labour, when the competitive pressure is extreme, as in Hungary in the pre-stabilisation period, or in Romania in the sample period, or labour cost may become irrelevant, when companies experience a major shock, like the aftermath of the Bulgarian stabilisation, or the big productivity shock of the late 1990's in Hungary. Thus, wage elasticity fluctuations acted as a sensitive indicator of competitive pressure. The Romanian estimates clearly indicate the instability of the macro-economic conditions.

We augmented the labour demand model with variables measuring competitive pressure and ownership. These variables frequently were significant for the technologically heterogeneous groups of firms, indicating that competitive pressure, indeed, has an effect on labour demand. However, as technology apparently strongly differentiated corporate labour market behaviour, the values of the estimated coefficients may well be biased for those groups. Still, their joint significance matters. However, when analysing the sectoral labour demand estimates, competitive pressure variables are rarely significant. One explanation is that market structure variables, are typically multicollinear. That may be one explanation why results often vary considerably across different sectors (as well as over time). Market pressure variables, however, do not seem to have much effect on Romanian labour demand, no matter, if we look at them individually, or jointly; they just seem to fluctuate randomly. However, some tendencies can be identified in the other two countries. In Bulgaria, market concentration typically has a negative sign, indicating that firms adjust employment downward more easily in oligopolistic markets.

The importance of the market structure variables showed an interesting pattern in Hungary. While individual market structure variables are rarely significant, the joint test frequently is. However, their effect was variable. Competitive pressure, represented by the market structure variables typically influenced corporate labour demand in two periods: in the consolidation period (1994-6) and in 2001-2 when foreign demand eased just when the government raised labour costs substantially for many firms. In the years between, in the period of rapid growth,

the specific competitive pressure, represented by the market structure variables, usually had no measurable effect on employment at firm.

There are characteristic differences in the speed of adjustment over the three economies. Labour adjustment seems to be very fast in Hungary, labour demand always collapses to a simple equation assuming imminent adjustment. That was not the case in the other two countries. The situation in Bulgaria and Romania seems to be closer to an error correction specification around a steady state, except, that the long-run seems to be very unstable in all three countries. It indicates that no stable equilibrium labour market behaviour emerged in any of the three economies, as yet.

Wage determination

The short-run productivity elasticity, measuring rent-sharing, rarely reaches the 0.2 level in developed market economies. In Poland, however, it reached 2 at one stage. The picture of the three countries typically was somewhere in between these two for most of the sample. Productivity differences had an extremely strong effect on wage dynamics in Bulgaria after the macro-economic stabilization; in some sectors it even was greater than one, but it was at least 0.5 for all groups of firms. However, it never reached such extreme levels, as in Poland. Short-run productivity elasticity substantially declined by 2001, but it was still well above the 0.2 level. Sectoral variations were much smaller at the end of the sample period.

The Hungarian situation was more stable, but the coefficients indicated a strong rent-sharing in most periods. Its intensity somewhat declined during the period, but it still exceeded significantly the 0.2 level in most sectors. Rent-sharing was larger and more stable in labour intensive sectors, as the light industries. The situation seemed to change somewhat in 2002, when the coefficients became smaller than previously. It may be related to the slow-down in labour reallocation: consistently to the efficient wage hypothesis, rent sharing seems to be the major vehicle how dynamic firms can attract high quality labour.

The short-run productivity elasticity significant in Romania in almost all cases and its value typically is not less than 0.2. Its values are mostly in line with the other two countries, but it seems to fluctuate randomly. Admittedly, the sample is too short.

The wage curve hypothesis seems to yield somewhat strange results in these countries. One possible explanation is that we use a dynamic model, so unemployment really matters when it changes substantially, and by the beginning of our samples all countries had several year high

unemployment experience; if anything, unemployment rates were decreasing in the sample periods.

Regional unemployment rarely influences significantly the wage determination in Bulgaria. Its sign seems to be random, when significant. Unemployment has a negative effect on wages in Hungary, when significant; however, significant values usually are clustered at the beginning of the sample period. Apparently as the distribution of the regional unemployment stabilised, its effect lost relevance to further wage dynamics. That may also explain the strange Romanian picture: its coefficient sometimes is significant and large, but its direction changes over time. Unemployment rate may there act as a proxy of other, more important regional effects influencing wage dynamics. There are substantial regional wage differences in these countries, but on the whole, unemployment does not have a steady effect on wage dynamics.

Employment level rarely matters. Surprisingly, ownership also has a negligible effect on wage dynamics, although foreign-owned firms in Hungary, for example, pay 50-100% higher wages on average than domestic ones. That, of course, partly reflects differences in human capital of the employees, but it also is related to the substantial productivity differences. Given the strong rent-sharing in all segments of the labour market, there is no room for additional 'ownership premium'.

Competitive pressure, measured at sectoral or firm level had much smaller effect on wages than was experienced for Poland, or, for example, for British firms. These effects seem to drive differences in corporate behaviour rather than causing a measurable shift in levels. The heterogeneity of corporate behaviour depends on sector, and the substantial sectoral differences apparently are related to the variations in competitive pressure. When we estimated the model for technologically heterogeneous groups of firms, competitive pressure variables seemed to be much more important, but those models are ridden by specification problems, mostly related to structural breaks. Although variables representing competitive pressure rarely have significant marginal effect, however, they jointly influence the specification. Thus, competitive pressure rather has an indirect effect on wage determination in all three countries. Their overall effects seem to show up in the heterogeneity of sectoral wage dynamics. Most probably aggregate pressures dominate firm or sector specific ones.

The dynamics of wage determination seems to be rather different in the three countries. The Bulgarian adjustment process seems to be the most standard one. The model could frequently

be simplified to a differenced model for Hungary in the stable growth period of 1996-2000, but not before and after: levels seem to matter when shocks are large. Romanian wage setting seems to be very sluggish. Probably shocks are too large, but wages frequently seem to respond more to lagged effect than to contemporaneous ones. Apparently adjustment is hindered by some market rigidities.

The effect of competitive pressure on income distribution and social policy; public perception, attitudes and norms (WP4)

Income distribution and inequality

The main transformations of the socio-economic structure in all countries have been: decrease of the share of employees, growth in the proportion of self-employed, increase of the proportion of pensioners, hike in the number and share of unemployed, decline in the share of children, and increase in the share of dependants aged 18 years or above. The share of employed (active earners) in total population is low in all four countries. However, in Slovenia and Hungary after the economy recovered the share of active earners has started to increase, whereas in Bulgaria and Romania the very recent economic recovery has not yet mirrored in employment increase.

In view of the changes in the socio-economic structure of households a re-structuring of the household income sources took also place. In all countries, wages and salaries have represented the main income source as they have retained the greatest share in the total equivalent disposable income of households. The sharp increase of the share of pensioners is correlated with increase of the share of pensions. Thus, pensions have represented the second major source of income in all countries.

The shares of income from self-employment are still low, partly due to underreporting. Income from agricultural whereas in Slovenia and Hungary represents a marginal source of income, in Bulgaria and particularly in Romania it has been a major contributor the household's welfare.

In all four countries, income from capital and property, wages and salaries, and, except for Romania, income from self-employment is concentrated at the upper side of the income spectrum. At the opposite side – specifically to the bottom and middle-low – income comes from occasional work, secondary employment (thus sources from work in the informal

sector), and, except for Bulgaria, unemployment benefits and other social transfers. Pensions are concentrated in the lower and middle ladders of the income structure in all countries except Bulgaria, where they are concentrated at the top levels. Income from agriculture goes to the poor in Slovenia and Romania, whereas in Bulgaria and Hungary it is distributed mainly to the better-off households. The distributions of the other sources of income vary from a country to another.

The main two contributors to total inequality were wages and salaries (in all countries), followed by income from household plot in Bulgaria and Romania, income from self-employment in Hungary, and pensions in Slovenia.

At the level of all population, social transfers other than pensions represent a minor contributor to the household budget. The share of this income source represented only 3-4% of the household disposable income in Bulgaria and Romania in 2002. In the better-off countries this share was bigger, namely 6-7% in 2001.

During the investigated period, Bulgaria and Romania were characterized by the highest income inequality and Hungary by the lowest. In Slovenia the large increase in inequality in the first years of transition was followed by a decrease and then by fairly stable values. In Hungary, data indicate a stable growth of income inequality between 1993 and 2001. In Romania, during the second economic recession period (1996-1999) the income inequality decreased as the poverty increased. By contrast, as the economy started to recover (2000-2002) poverty decreased, while the income inequality has increased. The inequality growth in Bulgaria was very high during the period 1992-1995. After 1995 the income inequality has decreased.

In Slovenia the importance of the social protection system increased, with an increasing share of the population receiving cash benefits from this system - be they pensions, parental and maternity benefits, sickness-leave allowances, child benefits, unemployment benefits, scholarships. There is absolutely no doubt that the tax and social protection system contributed significantly to the 'smoothing' of income inequality and - even more - alleviating poverty.

Hungary, instead, after the 'populist' approach adopted in the early '90s has continuously diminished support for the population. The stabilisation package in early 1995 - which went hand in hand with the reduction of the real value of various social transfers, primarily through inflation - ceased the 'populist' situation and Hungary became 'compensator'. The gentle rise

of inequalities took place besides a major shrinking of real incomes. Concerning the households' income on aggregate level, the 1995 stabilisation shock was over by 1997. However, the general growth between 1998 and 2001 did not reach about one third of the population. The inequalities in a small extent grew further, and a significant part of the losers of the previous period could not recover again. The social policy of the years of growth improved the situation of the population around the lower middle of the income ladder, but it missed to reach the poorest.

Bulgaria despite its large share of population in need, particularly unemployed, has implemented a rather 'stingy' and poorly targeted social policy by diminishing the support of the population. Romania, a 'non-compensator' country in the first years of transition increased the support for the population in order to compensate the massive lay-offs from industry that took place in 1995-1997. Afterwards, it reduced the social transfers and put more emphasis on active labour market policies, which are not 'visible' in the households' disposable income.

In spite of the very different social policies implemented in Hungary and Slovenia, the income drop was lower, the inequality rose less and the risk of poverty has been considerable smaller compared to the situation from Bulgaria and Romania, countries in which the economic recession was longer and deeper and the social policies protected less the population against income shocks. However, in all four countries, some social groups became the 'transition losers' first of all those who could not cope with the challenge of competitive pressure.

During the analysed period, in all four countries, the main poverty risk groups have been unemployed (or 'disguised unemployed' as people making a living by working their plots) and the economically dependants. The relative risk of poverty of unemployed is much higher in Slovenia and Hungary compared to Bulgaria and Romania. For children the relative risk of poverty is much higher in Hungary and Romania compared to Bulgaria and Slovenia.

How do poor people make a living? The income portfolio of the poorest is much more diverse and fragmented in Romania and particularly in Bulgaria compared to Slovenia and Hungary. In the latter two countries, the poorest make a living based on three sources of income: wages + pensions + other social transfers. In Bulgaria the income portfolio of the poorest changed drastically in time. However, during the entire period, it appears atypical being dominated by 'others sources', 'other work-related', which at a great extent relate to

the informal sector, and 'other social transfers' (than pensions). The access of the poorest Bulgarians to the formal sector of the economy appears rather restricted.

The major source of income for the Romanian poorest has been agriculture on household plot. Pensions and other social transfers form the second important pillar of the income portfolio of the poorest Romanian households. The third pillar consists in wages and income from non-agricultural self-employment. The share of wages in the portfolio of the Romanian poorest households is considerable larger when compared to Bulgarians but much lower, and declining, in comparison with the Hungarians and Slovenes poorest. Striking is the relatively large and increasing importance of the income from self-employed in the portfolio of the poorest. Because their access to the formal labour market has considerably diminished the Romanian poorest has increasingly adopted self-employment as survival strategy.

Labour markets, competitive pressure and informal sector

The differences between the share of informal sector and the share of the underground sector in the overall national output vary from one country to another within the sample of three referenced countries. The informal economy has a larger share than the underground sector in Romania, while in the case of the other two transition countries (Bulgaria and Hungary) there is a narrower gap documented in various studies. The reason lies in the different sectoral structures of the value added and of the labour. In Romania, the share of agriculture is higher both in GDP and in employment, and given the observed correlation between the size of rural and agrarian sector and the size of the informal economy; one would expect to see a wider presence of informal activities.

The developments within the informal sector in each of the countries follow similar patterns. However, there are different time paths for Hungary, Bulgaria and Romania, with the latter two countries showing a lag behind Hungary in terms of restructuring their economies, reaching the status of functional market economies and thus witnessing a reduction in the share of the informal sector in overall economic activity.

In the beginning of transition, all countries witnessed a strong increase in the share of the informal sector, followed by a decrease after reaching a stable growth path. The main reasons for the outburst of hidden activities were everywhere the dismantling of the former centralised institutional system at a higher pace than the building of new market mechanisms, as well as the variability and intensity of the regulatory framework. Hungary was more rapid

in building market institutions and opening its economy. As a result, the competitive pressures made their appearance at earlier stages of transition within the Hungarian economy and the main drivers to informality lost faster their importance in motivating economic agents to switch to hidden activities than in the other two South-Eastern European countries.

The empirical evidence shows that the increase in the share of informal activities and in the size of informal economy had almost the same determinants in all the three countries. The group of drivers includes the growth rate of the economic output, the income tax rate, the size of non-wage paid labour, the unemployment rate and the long-term unemployment rate, and the real wage index. The increase in income inequality, the high variability of the fiscal system and the increasing gap between the level of official tax rates and the effective tax revenue shares in the GDP, the institutional structure and the administration interference in the economy (the high intensity of regulations) and the high volatility of inflation were also important factors of influence in generating more underground/informal actions.

The informal economy was an escape solution for new SMEs to survive competition from subsidised state-owned institutions and foreign-owned subsidiaries, which used monopolistic tools to gain higher shares on the fragile and weakly protected (against monopolistic behaviour) emerging markets. Faced with increasing bureaucratic obstacles and growing corruption, more and more SMEs increased their informal activity. Bureaucracy is perceived as being a major cause of the growth of the informal sector. Empirical evidence demonstrates that the most important barriers to business are more economic rather than institutional and that the public is very concerned with corruption, administrative barriers and bureaucracy. These are, by order of ranking: taxes and regulations, inflation, unsafe financial system, policy instability, currency depreciation, anti-competition practices, corruption, the judiciary system, economic crime, and poor physical infrastructure.

The expansion of the informal economy is documented to have increased the income inequality at the top end and the low end of the household decile distribution in both Hungary and Romania. It was reported that in Hungary the very rich and the very poor increased their income gaps versus the rest of population during the period of expansion of informal/underground economy. The same phenomenon is also documented in the case of Romania during the late 90s. On the other hand, the poorest county in Hungary and the rich region of Budapest are reported to have the highest shares of informal sector. The same is true for the Romanian regions, where Bucharest and the extremely poor regions struggle with the presence of underground activities the most. The competitive forces of a free market are

producing the same effect, at least during the initial years following restructuring, as the rich people and the rich regions are much more capable of attracting and using the scarce available resources that exist within the yet weakly structured socio-economic system. While the development of market mechanisms helps in generating larger middle-income strata of the population, with less income inter-gaps, the households living below poverty line or close to it will miss the tools and know-how to reach the existing resources and will lower their standard of living even more (at least in relative terms). The informal economy and the competitive pressures working in the same direction in increasing income and regional inequalities should be an alarming signal for the policy makers.

Finally, the most important resource that is shared by formal and informal economy as well and receives the greatest impact from competitive pressures and from any policy actions is the labour (population in general). Evidence suggests that individuals tend to act already as if they were in an overall free market environment, but within the global system represented by formal and informal economies jointly. The first years of transition were characterised by an increase of the share of self-employment in total employment, increase of unemployment and, generally, increase of non-wage paid type of employment, which proved to be one of the main drivers of informal economy.

Although the initial factors that drove people and firms to work underground may have disappeared after several years of transition and the establishment of functional market economy in these countries (considering the lags between them in the various stages of transformation), the share of non-wage paid labour in total employment continues to stay relatively high in all the referenced economies. This is a sign for the existence of a strong pattern of hysteresis in the labour market of these countries, which may add to the administrative barriers and may delay the needed adjustments in mobility and flexibility (which are partially missing for the moment on these labour markets). And this may result in negative feedback given to the development of the competitive free market system.

Public perception consequences of competitive pressure

The analysis is focused on the determinants of satisfaction variables, used as proxies for subjective well-being. Obviously, analysis of the subjective economic well-being depends on the 'richness' of the survey data. For instance, the subjective perception of one's income very much depends on relative income, both relative to one's reference group or relative to one's

past experience. Furthermore, health, education, employment, wealth and other socioeconomic characteristics of the household are important, as well as attitudinal variables.

Needless to say, surveys which contain a long list of such ‘desirable’ data are rare, particularly in Central and Eastern European countries. In all Central and Eastern European countries, in the new transition pressure situation of the early ‘90s, the decline in economic output was accompanied by decline of the real incomes, growing inequality of income, expenditure and assets, and the development of poverty and unemployment. As the market has developed and as the country comes closer to the EU accession, the market pressure overcomes the transition pressure. The economy is recovering and, correlated, the real incomes and employment begin to have a growing trend. Still poverty, growing inequality, underemployment and informal employment (particularly in agriculture) remain major issues to a much larger extent in Romania and Bulgaria compared to Hungary and particularly Slovenia.

Due to low inequality and moderate income levels, formerly socialist countries enjoyed relatively high levels of economic well-being, but low levels of subjective well-being. In the transition period rising inequality and falling incomes have led to a drastic absolute decline in economic wellbeing in the ex-socialist countries. Thus, at the subjective level, transition period was characterised by a “huge satisfaction loss”. The harsher the transition, the larger the decline in population satisfaction. Positive trend of satisfaction and optimism curves started to be recorded as the economy began to recover.

The determinants of subjective well-being in Hungary connected with the competitive pressure components were unemployment, poverty, inequality, uncertainty, perceived mobility, and perceived income and wealth. By analysing the link between satisfaction and the competitive pressure different factors relevant for policy making were highlighted.

- Labour market status is the major element of dissatisfaction, the unemployed and quasi unemployed are significantly less satisfied than workers, controlling for income. People living on the border of activity and inactivity – unemployed, disability pensioners, casual workers and people living on subsidies – report much lower satisfaction.
- The middle-aged people are more dissatisfied than the average. They are more concerned about unemployment, and after living in a long shortage period they are more likely to have immediate consumption and expenditure needs.

- Education has a positive effect on satisfaction, even after controlling for labour market status and household income.
- People that perceive that income and wealth inequality considerable increased tend to be more dissatisfied than the rest of the population. Similarly, respondents who essentially agree that government should restrict the income of the rich are more dissatisfied.

The satisfaction is the reflection of the objective conditions being determined by characteristics of the individual and his/her household: people from households with higher monetary incomes, particularly the younger and more educated, are more satisfied than the “common Romanian” and particularly than people poor and disadvantaged on the labour market. But, in the same time, satisfaction is also part of a more general “culture of openness” defined by positive attitudes and assessments such as positive expectation for the future, lower level of job related uncertainty, upward subjective mobility, selfdefinition as “non-poor” and positive assessment of inequality. In concordance with the Hungarian assessment, the Romanian data indicate how people perceive their actual social position; past mobility and prospect of upward mobility in the future represent the most powerful predictors of the subjective well-being. In terms of the effect of competitive pressure on the subjective level transition have resulted in a considerable satisfaction loss particularly for people exposed to poverty, unemployment, income decline, and increased inequality, which represent (together with corruption) the main perceived consequences of the transition in Romania. Besides the “objective” negative effects of the transition shock, the perception of increasing competitive pressure as “danger” for self (and significant others) lowers further the level of individual satisfaction.

The main policy relevant lessons of the analysis for Romania refer to: (1) marginal labour market status represents a major element of dissatisfaction with own life (alike in Hungary); (2) elderly are more dissatisfied than average particularly if their health is not satisfactory and they cannot afford the necessary medicines or have poor access to health services and (3) in the uncertainty environment of transition, tertiary education by significantly increasing life chances represents a source of life satisfaction.

The probability of a family being satisfied with its income increases with rising disposable income and decreases with family size. Also, older households, i.e. households with at least one member older than 60 years are more likely to be satisfied with their income than

younger households. If age is a proxy for reality; the possibilities of the young become the constraints of the elderly and they are also perceived as such. Older households have not only lower aspirations, but also lower real needs as their wealth, accumulated during the life cycle, is substantially greater than that of younger households – the most important form of wealth being dwellings.

Households living in their own apartment or house are more likely to be satisfied with their income than households living in rented apartments. This is not surprising, considering that the possession of an apartment or a house is something that most households in Slovenia strive to achieve. Thus, families that live in rented apartments or houses perceive much greater income needs, as they must accumulate sufficient savings for the initial investment in housing construction or purchase. Households with unemployed members or children are less likely to be satisfied with their income. Overall, these findings are in broad agreement with other studies of subjective economic wellbeing in transition countries.

Life satisfaction, income distribution and income mobility

People belonging to ‘marginal activity groups’, living on the border of activity and inactivity (casual workers, unemployed, disability pensioners, people living on subsidies) – independently of the income level of their household – are more dissatisfied with their position than the others. From the previous results it follows that this relative dissatisfaction comprises also those who are not on the outskirts of activity, but feel their position uncertain on the labour market and are afraid of the labour market consequences of the competitive pressure.

Besides factual and perceived financial situation, and past mobility processes the future prospects of the people play also very important role in satisfaction formation. Expectations about future prospects for growth and mobility affect both material satisfaction and life satisfaction in general.

Demand for redistribution

The attitude toward redistribution is basically determined by the rough valuation of the wealth position. The Hungarian results show that as people rank their position on the economic scale, the majority of the sample (80 per cent of the population) is placing

themselves in the middle categories, under the median, even if they are slightly above or under this position according to their real value of wealth. The fact, that the majority of people rank themselves lower than the middle, may explain the huge support of redistribution. Surprisingly and contrasting with the expectations, the strongly upward mobile people – *ceteris paribus* – are very favourably to redistribution. This group perceives the changes of their position very well, almost all of them are in the highest three deciles in 2002, so they are the wealthiest. However, their subjective ranking is much lower, according to their subjective valuation of their material situation, none of them is higher than the sixth level. According to the hypothesis the frustration of people discontented with their life affects their opinion concerning restriction of income of the rich. Analysing the nature of the link between satisfaction and demand for redistribution, one can find that dissatisfied respondents are more favourably to redistribution than the average.

People's tolerance of uncertainty and income risk is mainly determined by the assumed cost of losing job and the extent of their concern about it. The more the people are being concerned about losing their job, the more they have a strong tendency to support redistribution. Having experienced unemployment or being concerned about the idea of losing job increase the risk aversion and deeply affect people's view of redistribution policies.

Labour market status is a major element of dissatisfaction and demand for redistribution. Those people are favourably to redistribution who expects either their position to deteriorate in the future, or – surprisingly – their position to improve significantly. If one controls for the cultural and recreation expenditure, those people who expect their position to improve significantly do not support redistribution anymore. Perhaps it is a unique attitude of people having high cultural and recreation expenditure, having presumably high level cultural capital, and they feel antipathy toward the “uncultured rich”. The active people favour redistribution less than passive ones. The situation becomes much clearer active people are disaggregated by their relative income positions. Those respondents oppose only both types of redistribution who were belonging to the two lowest income quintiles in 2000.

In Romania, the demand for redistribution is a combined effect of selfish motives with the agents' perception of the process that generates income distribution and income mobility as distorted. In relative terms, individual's ideology and perceptions of other people's opportunities have more predictive power than his/her position in the social structure.

The Romanian society is characterised by high demand for redistribution. Partly, this is linked to the country history. The nostalgic groups of population still expect the government to act as the “daddy-state”. However, to a larger extent, it represents a reaction to the transition shock. Redistribution policies are expected to “treat” the “unacceptable” inequality resulted from a mobility perceived as inequitable: “this unjust society” (in transition) that pushes many into poverty, while allows few to gain fortunes through corrupted ways.

Income comparisons, aversion to inequality and mobility. An East-West comparative approach

Using mostly panel data, with over one million observations, it is showed that the average income in one’s professional group affects individual subjective well-being negatively in “old” European countries, whereas the correlation is positive in post-transition economies. In Poland, the relative importance of these effects is reversed with the beginning of transition: comparison effects dominate until 1989 whereas information effects are predominant from 1990 onwards. Surprisingly, Americans react positively to a rise in their professional reference income, which makes them closer to East-Europeans than to West-Europeans.

The demand for redistribution is lower in Eastern countries and it is related with the higher perceived income mobility in the East. This suggests that the attitude towards inequality and income distribution divides New European countries and the United States on one side, and the “old Europe” on the other side.

At a time of ongoing European enlargement, uncovering this divergence in preferences is of interest. This divergence could be temporary and come to an end when new member countries stabilise. However, whether and when this will happen is not clear. Can a society keep a high degree of mobility for a long period? Whether this is actually the case of the United-States is still an open question, even though this seems to be the belief of the inhabitants.

Integrated framework to analyze the impact of competitive pressure and enlargement on the interaction between corporate sector, labour market and households (WP5)

The empirical results provide strong evidence that the interactions between corporate sector, labour market, households and institutions as well as the related enterprise behaviour

and performance change with the stages of economic transformation. In this regard it is important to point out that the CEECs that are in the focus of this research effort followed very different paths and strategies during their transition from plan to market.

Prior to 1990, while Slovenia and Hungary economies have already been exposed to market conditions, Bulgaria and particularly Romania had highly centralised economies. By 1990, however, all Eastern European countries were already in a decline. After 1990, all economies in transition experienced at least two years of continuous GDP decline. Nonetheless, the economies with longer exposure to market conditions recovered sooner than the centralised ones. The Slovenian economy did pick up after only two years of negative growth rates and Hungary, since 1993, has posted positive economic growth. By contrast, Bulgaria and Romania faced subsequent drop of the real GDP during 1996-1997, and 1997-1999, respectively. Recovery started only in 1998 in Bulgaria and in 2000 in Romania.

Bulgaria initially tried to minimise the social costs of adjustment by postponing harsh measures in the hope that problems were transitory. In 1996-1997, the deepening macroeconomic imbalances escalated into a severe financial crisis combining a crash in public finances, run on the banks and a collapse of the currency, all of which gave rise to a hyperinflationary hike in early 1997. However, since 1997 the situation has changed radically: the course of economic and political reforms has been firmly set and the policy orientation towards a pluralistic democracy and market economy has gained support among a wide majority of the society. In terms of economic policy, the emphasis was placed on fast macroeconomic stabilisation (based on a currency board arrangement) and acceleration of structural reforms. There was a remarkable turnaround in economic performance: inflation rapidly fell to low single digits, public finances were brought under firm control and the economy grew steadily at a relatively high pace which allowed for the recovery of real incomes and private consumption. Microeconomic liberalisation and privatisation followed macro stabilisation. Foreign direct investment gradually picked up after the turn of the millennia. Notably, the opening of accession negotiations with the EU was an important cornerstone of the post-1997 reforms.

Hungary started with very fast microeconomic restructuring: prices and trade were practically fully liberalised at an early phase, followed by a more gradual liberalisation of the capital markets. Laws on auditing standards and bankruptcies effectively cut off a substantial part of corporate deadweight by 1992, when the banking sector was consolidated. Commercialisation progressed rapidly, and Hungary chose early case-by-case privatisation, facilitating massive

FDI inflow. Economic recovery accelerated soon after the 1995 macroeconomic stabilisation. Hungary created a stable corporate environment, which was favourable export-led growth, and which led to large-scale restructuring of the economy by 2000. The substantial slowdown of export demand in 2001-2 coincided with a significant loosening of the fiscal policy, and with some populist measures, like doubling the minimum wage in two steps. These two important shocks together decelerated structural adjustment.

Romania experimented with several alternative solutions. It frequently attempted to avoid tough decisions. The government repeatedly tried to address some pressing issues without fully implementing consistent reform packages. This led to frequent policy changes, and the lack of clear transition strategy delayed intensive restructuring. Corporate environment remained unstable until recently, which made firms cautious in adjusting to the new, still uncertain market environment. Similarly to the case of Bulgaria, the situation changed radically with the opening of accession negotiations with the EU. In recent years there has been a remarkable turnaround in economic performance and institutional reforms. As part of these reforms, enterprise restructuring was also given a solid boost.

Slovenia was a country that followed a gradualist reform course and managed to go through the transition process with least turmoil. In particular, it prevented the rapid inflow of foreign capital (including FDI) into the country in an attempt to protect domestic producers. Moreover, the country adhered to capital controls for quite some time after the start of economic transformation. On the other hand, it has to be stressed that this specific policy course was underpinned by favourable starting conditions, including relatively high level of economic development, absence of major macroeconomic imbalances, close historic links with major European markets and partners and good level of human capital development. With the process of accession to the EU, these market restrictions were gradually lifted in order to comply with the *acquis communautaire* and this process of market liberalisation was also engineered without major turbulence.

After 1990, Bulgaria, Hungary and Romania faced population decline. Between 1989 and 2003 the Bulgarian population lost more than 1.14 million persons, Hungary about 447 thousand, and Romania lost about 1.34 million persons. By contrast, the Slovenian population remained rather constant. The main cause of population decline was the dramatic decrease of fertility, but also the migration from Romania and Bulgaria. The population structure by age has also considerably changed. The proportion in total population of the working-age category has slightly increased and the proportion of children has continuously decreased,

whereas the share of elderly has grown. Consequently, while the youth dependency ratio diminished, the 'grey dependency' increased considerable. The ageing process was in 2003 most accentuated in Bulgaria, medium in Slovenia and Hungary, and relatively reduced in Romania.

In all four countries, increasing competitive pressure after 1990 resulted in more unemployed, more pensioners, less employment, particularly less employees (wage or salary earners). Romania appears to have suffered more and deeper negative effects: there was a substantially lower share of wage-earners and each of them was due to support 1.4 pensioners (in 2003) plus children and other inactive persons. In addition most of the self-employed were in fact 'disguised unemployed' surviving by doing subsistence agriculture on small plots. Bulgaria was in a somewhat better position compared to Romania by the end of the 1990s, yet it was characterized by high unemployment, high share of pensioners, and self-employment was largely a survival strategy for the unskilled. Hungary and Slovenia have done better; they recovered sooner, have better educated young people, and in relative terms are 'work-rich'. In Slovenia after the initial shock of the early 1990s the proportion of people aged 15-59 in paid jobs grew, reaching a stable level at about 70% after 1998. In Hungary, the rise in employment occurred only after 1998, while in Bulgaria and Romania after the drop in early 1990s the share of employed in the population aged 15-59 remained broadly constant.

There have been major changes in the employment structure by sectors. Throughout the region there was a shift from manufacturing to services while agriculture was hit hard. As a consequence of the liquidation of agricultural cooperatives the number of agricultural earners fell dramatically in most CEECs. Romania was a notable exception, as employment in agriculture grew despite the fall in agricultural production. There, unlike in the other three countries, the major shift from manufacturing to agriculture resulted in much higher shares of self-employment and unpaid family workers in total employment.

The increased number of private enterprises and self-employed was largely a result of the general shift from manufacturing to services. In particular the number of individual entrepreneurs rose up already in the first years of transition. However, their share in employment varies across countries and remains very low in Romania. Due to the opportunities of employment in agriculture, unemployment in Romania is low and is specific to urban areas. By contrast, in Bulgaria rural unemployment is consistently double that in urban areas. While the Romanian rural people are registered as employed (self-employed or unpaid family workers) in agriculture, in Bulgaria rural people are registered as unemployed.

Overall, labour adjustment occurred differently in the four countries. In Bulgaria during the entire period it has been characterized by high unemployment and sharp and long lasting real wage decline (reaching a trough of cumulative 58% drop in 1996). The better “statistical look” in Romania is deceitful due to the high rate of “disguised unemployment” in agriculture and the delayed structural reforms in the country. Compared to these two countries, Hungary and Slovenia experienced a “soft transition”: except for the first years after 1990, although both real wages and employment declined, they varied afterwards but in comparative terms have registered low-medium drop.

Whereas the average wage is highly affected by the level of competitive pressure in the corporate sector, the average pension is more the outcome of the social and income policy provided by the State. Comparing the dynamics of real pensions and real wages, it can be seen that in relative terms pensions were more adversely affected and have recovered more slowly. The average pension in Bulgaria and Romania is comparable to the minimum wage level.

These outcomes reflect the different approaches to income and social policy. Gradualism, consensus seeking and pragmatism are the terms that would probably best describe the approach taken by Slovenia in coping with changing economic and social conditions. The Hungarian state has drastically shifted from a paternalist approach in the first years of transition (1988-1994) to a liberal one, which promoted a more and more restrictive policy after 1995 by tightening the eligibility criteria and lowering the benefits. Social policy in Hungary after 1995 did not compensate any more for the loss of income. Bulgarian policies focused on unemployment reduction during the entire period due to the very high incidence of unemployment. Active labour market policies were extensively applied, encouraging people to train and retrain, find a job, open a business and not to remain dependent on the state. During the 1990s the system was profoundly reformed. Social assistance was also linked to the unemployment policy with the risk of low coverage of the poor. Most benefits declined considerably in real terms while the expenditures for both education and health diminished considerably. In Romania, income policy has been highly distorted, with the tax burden among the highest in Europe. Labour market policy was initially mostly passive, and investment in education remained low or even declined. Recently there have been improvements as result of the economic reforms after 1996 and the reform of the social welfare system in 2001. Public expenditures on health have also been raised. The current

social protection system contributes substantially to poverty reduction, a large share of the impact being due to pensions and child allowance.

Surveys at the household level indicate that in Slovenia, following independence in June 1991 and the transformation shock of 1991-1992, the socio-economic structure experienced little further change after 1993. Similarly, in Hungary the changes in the socio-economic structure slowed down after the first years of transition. Further important changes occurred, however, after the beginning of the recovery in 1997. By contrast, in Bulgaria the long and deep recession resulted in prolonged drastic changes in the socio-economic structure of households. In Romania the most radical transformations of the socio-economic structure happened during the period 1991-1993. After 1995, due to the second economic recession, the negative social transformations continued.

The main transformations of the socio-economic structure in all countries comprise decrease of the share of employees, increase in the proportion of self-employed and pensioners, hike in the number and share of unemployed, decline in the share of children, and increase in the share of dependants aged 18 years or above. The share of employed (active earners) in the total population is low in all four countries. However, in Slovenia and Hungary this has started to increase with the recovery, whereas in Bulgaria and Romania the very recent economic recovery has not yet resulted in a notable increase in employment.

The household income sources have also undergone restructuring. In all countries, wages and salaries represented the main income source. The sharp increase of the share of pensioners is correlated with an increase in the share of pensions. Thus, pensions represented the second major source of income in all countries, except for Romania where they were the third major source. The shares of income from self-employment are still low, partly due to underreporting. Income from agriculture in Slovenia and Hungary represents a marginal source of income; however, in Bulgaria and particularly in Romania it has been a major contributor the household welfare. In all four countries, income from capital and property, wages and salaries, and income from self-employment (except for Romania) is concentrated in the upper side of the income spectrum. Among the bottom and middle-low groups, the prevalent income sources are from occasional work, secondary employment (including work in the informal sector) and unemployment benefits and other social transfers (except for Bulgaria). Pensions are concentrated in the lower and middle ladders of the income structure in all countries, except Bulgaria where they are concentrated at the top levels. Income from agriculture goes to the poor in Slovenia and Romania, whereas in Bulgaria and Hungary they

go mainly to the better-off households. Social transfers other than pensions represent a minor contribution to the household budget.

Due to the fact that in all four countries wages and salaries still represent the main income source, any policy measure associated with the income taxation system will influence the welfare of the population. The recent reduction in income tax rates in Romania, combined with the enhancement of the tax collection system, has been beneficial to the population. The introduction of the flat tax rate in Romania led not only to the increase of household net real revenues, but also to the increase of profits among Romanian firms. This policy measure expanded the tax base by bringing a lot of firms from the informal to the formal sector, as the competitiveness of the domestic firms has risen after reducing costs, despite the increased competition pressure perceived during pre- and post-accession periods. Income from agriculture in Bulgaria and particularly in Romania has been a major contributor to the households' welfare. Therefore, taxing the agricultural revenues will affect the net income of households, but will reduce the potential primary budget deficits.

Pensions represent the second major (third in the case of Romania) source of income in all countries. The sharp increase of the share of pensioners is correlated with increase of the share of pensions. The level of social insurance tax rates is relatively high even when comparing with other European countries, and is a possible barrier in the entry of foreign firms on the domestic markets even under the expansion of the EU single market. Therefore it may be a factor that partly contains competitive pressure in the short run.

Our research focused on the potential and already observed impact of the informal economy, particularly on competitiveness, labour markets and the business environment. This analysis includes only Bulgaria, Hungary and Romania; Slovenia was not included due to its small share of informal sector.

The shares of informal and underground sectors in national output vary from country to country. The informal economy has a larger share than the underground sector in Romania, while in the other two countries (Bulgaria and Hungary), different estimates point to a narrower gap. Romania is a distinctive case particularly due to its high share of agriculture both in GDP and in employment. The developments within the informal sector in each of the three countries followed similar patterns. In the beginning of transition, all countries witnessed a strong increase of the informal sector, followed by a decrease after reaching a stable growth path. The main reasons for the mushrooming of informal activities were the

fast dismantling of the former restrictions coupled with slow establishment of market regulatory institutions.

In terms of the policy implications, consistent fiscal policy, based on non-discriminatory treatment of economic agents and sectors within economy, helps reducing the informal share of the economy. Lowering the tax rates can encompass partially the negative outcomes, by making formal sector more attractive – supply of social insurance – and increasing domestic cost-competitiveness. The structure of the labour market is an important factor in determining both the share of informal sector and the effects of increased competitive pressure. A large rural population, as it is the case in Bulgaria and Romania, may lower the immediate effect of competition, but also the beneficial long-term effect of technological progress brought by the entry of foreign investments.

With respect to subjective well-being, the research focused on three topics: (1) relation between the objective household standard of living and the subjective well-being of individual actors; (2) relation between income mobility and life satisfaction and (3) population demand for redistribution. The analysis focused on the determinants of subjective well-being used satisfaction variables as proxies. Country studies were realized independently based on poorly comparable data. However, the cross-country comparisons were extended by using comparable explanatory models (Bulgaria was not included due to lack of relevant data).

The analysis highlights that in all three countries (Hungary, Romania and Slovenia) “objective” household income has significant and positive effects on satisfaction. As a general rule, people with larger incomes are more satisfied than the others. Also individuals (not necessary with larger incomes but) considering themselves wealthier look more satisfied. However, above a certain income the level of satisfaction is decreasing, or, at least, stagnating. By contrast, unemployment as well as other marginal positions on the labour market (casual work, underemployment but also disabled) significantly diminish well-being. Not only people with marginal positions on the labour market are more dissatisfied than the others, but also those who feel their positions at risk as a consequence of increasing competitive pressure. Thus, as the countries recover from the transition shock and the growing national income starts to contribute to increasing households income and more new sustainable jobs are created is to be expected an increasing general level of satisfaction.

Secondly, the analysis on Hungary and Romania shows that health related problems negatively affects people satisfaction, while education (particularly the tertiary one) significantly increases satisfaction. Thus, social policies in health and education areas that succeed to cushion population against transition adversities increase both life chances and general level of satisfaction of the population.

Lastly, the “satisfaction loss” during the transition was not the result of increasing competitive pressure alone; it is also a matter of subjective definition of transition as “dangerous” for the self and the relatives. In the general environment of uncertainty and rapid change, how people perceive their actual social position, past mobility and prospect of upward mobility in the future represents very powerful predictors of the subjective well-being both.

The findings regarding relation between income mobility (objective and subjective) and life satisfaction were drawn from a case study for Hungary (panel data are not available in the other three countries). Upward mobility increases satisfaction, but people who had just recently reached a certain income level are less satisfied than those who succeeded to keep at that level for a long while. Furthermore, relatively smaller satisfaction of the upward mobile people is prevalent in the competitive sectors of the economy is a fact that points out that satisfaction is eroded by uncertainty even under conditions of upward income mobility.

Income growth within uncertain circumstances generates relatively smaller rise in satisfaction. If this uncertainty expands also to the future and many are thinking that they cannot expect further improvements, then after a while this may cause also the decrease of satisfaction. Thus, a relatively small but steady growth of population income under the conditions of positive prospects for future seems that would cause larger increase in satisfaction than unusual and one-time raise in income.

According to the results: there is a rather high demand for redistribution both in Hungary and Romania; wealthier individuals are less favourably to redistribution policies; the lower the level of education achieved by an individual the larger his/her support for redistribution; people with marginal positions on the labour market (disabled, unemployed, underemployed) are more in favour of redistribution than the others; health problems (of the individual or of a family member) are a strong predictor of demand for redistribution; people who experienced in the past (in the first years of transition) poverty or hardship (their household was in one of the five lower income deciles) are more in favour of redistribution than the others; the more

the people feel that inequalities are increasing (particularly by illegitimate means), the more they favour redistribution policies.

Recommendations and policy conclusions

Competitive pressure in the corporate sector, its institutional aspects and policy framework (WP1)

Firms in the Central and Eastern European countries that just joined (such as Hungary and Slovenia), or are about to join the EU (like Bulgaria and Romania) are facing growing competitive pressure, especially in the single EU market. At the same time, product, capital and labour markets in these economies are still immature markets and are characterised by numerous imperfections. The effect of the growing competitive pressure faced by firms in the new EU members and acceding countries from Central and Eastern Europe on their behaviour and performance has many policy relevant implications. The theoretical and empirical results highlight some of the specificities of the ongoing restructuring of the corporate sectors in the emerging market economies of Central and Eastern Europe with respect to these policy implications.

Market structure and competitive pressure

The project as a whole employs different quantitative indicators to measure the level and intensity of competitive pressure in the manufacturing sectors of the Central and Eastern European economies. The results highlight some specific features of market structure and competitive pressure in the corporate sectors of the four acceding countries. Being methodologically consistent across countries they also allow direct cross-country comparisons of this aspect of corporate performance in these countries.

One of the important general finding about the evolution of the corporate sectors in the acceding countries is that the ownership transformation in these countries is nearly complete: at present the overwhelming share of output in their corporate sectors is produced in firms which are not controlled by the state. This is indeed a revolutionary change which has been accomplished in a historically very short period of time and which has dramatic consequences for the functioning of all markets and, in particular, for the rising competitive pressure in the corporate sectors. The withdrawal of the state from the running of business

entities is a basic and necessary (though not sufficient) condition for the establishment of a genuine market environment.

Another important and interesting implication of the results is the finding about the high levels of market concentration of the corporate sectors of these countries. The causes for this, however, may differ from country to country: while in Bulgaria, Slovenia and Romania, this high level of concentration is mostly a legacy of the past (when industries were dominated by industrial giants specialized in production for the Soviet and other east European markets), in Hungary it also reflects the entry into the local markets of some large multinationals which managed to seize considerable market shares.

It is also interesting to point out that the high level of concentration has been preserved despite the ongoing entry into the markets of large numbers of *de novo* firms. This can be traced clearly in the case of Bulgaria where the enterprise data set is most comprehensive in terms of the coverage of small *de novo* firms (in the rest of the countries the available data sets do not have the same level of completeness).

The entry to the local markets of foreign capital and firms (most pronounced in Hungary, but recently accelerating in the other countries as well) has had important implications for competitive pressure in the corporate markets. Notably, the direction of the impact has been ambiguous: in the cases when FDI firms have been able to seize considerable share of local markets (often facilitated by various incentives offered by national policies), they have in fact sought to establish strong market positions, even monopolistic ones (Hungary is probably the most conspicuous example). As a result they have often driven local firms out of their traditional markets; while in most cases this was likely related to efficiency superiority, the strengthening of the market positions of FDI firms can be at least partly attributed to special incentives granted by domestic policy (in disfavour of local firms). In these circumstances the impact of FDI firms on market competition may be dubious, and in fact negative. In other countries (e.g. Bulgaria), the inflow of FDI has been scattered in numerous small investments and did not lead to the establishment of new, foreign monopolies. In this case, FDI firms have likely contributed to the increase of market competition in local markets.

Measuring competitive pressure arising from trade is mostly relevant for the tradables sector; due to this more attention was devoted to the corporate performance in the manufacturing sector. Such competitive pressure can arise from two sources: from the import activity of foreign firms in the local markets and from the export activity of local firms in foreign

markets. Both of these factors have been assessed for the countries participating in the project (to the extent that the data allow doing this). The quantification of these indicators for the acceding countries confirms that the openness to trade plays an increasingly important role in shaping the competitive environment of their corporate sectors, both in terms of import penetration and in terms of exposure to foreign markets. These economies have thus been already exposed to strong competitive pressure coming from trade. In fact, during the past more than a decade of economic transformation, there has been a continuous adjustment by their corporate sector to the competitive pressure stemming from trade.

The estimated mark-up ratios for some of the acceding countries confirm the growing competitive pressure in their domestic markets. The absolute level of the mark-up ratios is relatively small and compares well to mark-up ratios for developed market economies reported in other studies. Monopolistic rents (mark-ups) can be equalised with the level of competition in an industry (or a market); hence lower levels of mark-ups are an indication of more competitive markets (industries).

Competitive pressure and enterprise restructuring

The empirical results highlight some important specificities of the ongoing restructuring of the corporate sectors in the emerging market economies of Central and Eastern Europe. In particular, while the empirical results do confirm that competitive pressure affects the firms' adjustment process, the actual adjustment is not always in line with theoretical priors. This may be the result of both the existing market imperfections mentioned above but also may be related to the dramatic overall structural changes that are still underway in these economies. One specific feature that emerges from the empirical findings is that the actual enterprise responses to competitive pressure may differ in the stages of economic transformation in these countries. For all these reasons the in-depth empirical analysis based on micro data is a valuable (and probably remains unique) source of information about the specificities of the actual adjustment process.

The most powerful competitive pressures that have triggered the most discernible and strong responses by firms in Central and Eastern Europe, are those generated by foreign firms on the local markets. This occurs both through the emergence of foreign-dominated manufacturing firms that operate in the domestic manufacturing sectors, and through the competition effects induced through trade liberalisation, resulting in increasing import penetration of the

domestic markets. As to the actual direction of these effects, the results are equivocal, suggesting the incidence of both positive and negative spillovers of foreign induced competitive pressure. On the one hand, there is strong evidence, suggesting that in some cases this type of competitive pressure is associated with active restructuring of the domestic firms that face it, leading to higher productive efficiency and welfare enhancing changes in pricing policies. On the other hand, there is also statistically significant evidence of the opposite outcomes: for example, in some cases higher (probably excessive) levels of import competition tend to be associated with declining efficiency of the domestic firms subject to this type of pressure; in other cases foreign controlled firms tend to exploit local market imperfections and to collect larger monopolistic rents than domestic firms.

The empirical results provide systematic evidence of the recurrence of one specific, and somewhat counterintuitive, feature of enterprise performance in the three Central and Eastern European countries. This is the empirical finding that market power per se (in terms of individual market share) does not seem to be associated with the emergence of monopolistic deadweight such as excessive overpricing or efficiency losses. Rather, at this stage of economic transformation, Central and Eastern European firms tend to employ their market power to grow aggressively and to gain even larger market shares. On the other hand, we find relatively strong evidence that the sheer number of competitors in the segments of the product markets of these countries tends to have a healthy effect on enterprise performance, inducing efficiency gains and reducing price markups.

The empirical results for these Central and Eastern European countries suggest that enterprise behaviour and performance changes with the stages of economic transformation. There are notable differences in the nature of enterprise responses in countries that were less advanced in market reforms (at least in the period that we analyse, 1995-2001) such as Romania and Bulgaria, compared to the more advanced Hungary and Slovenia. Advance in market reforms tends to strengthen the positive spillover effects associated with growing competitive pressure and to reduce the initial gaps. Often, the competitive behaviour of the Romanian manufacturing firms shows higher similitude with the behaviour of Hungarian companies than with the one characterising Bulgarian firms.

The role of public policy

The proclaimed purpose of EU competition policy is to ensure that firms do not endanger the overall aim of a unified common market by means of anticompetitive practices that hinder trade in goods and services between Member States. One of the prominent specificities – and objectives – of Community competition policy is to facilitate the integration of European markets. Institutional independence and operational autonomy in implementation and enforcement also ensure that national authorities are able to perform an advocacy role for the promotion of competition in their respective countries. At the same time, in some circumstances, this approach has induced conflicts with more specific goals dictated by a strict application of criteria of economic efficiency.

In advanced market economies the immediate aim of competition policy is to foster efficient allocation of resources in the traditional economic sense, and therefore such policies stress market behaviour of firms and control of mergers. However, in emerging market economies the immediate goal of competition policy may be bound to be somewhat broader, because there may be less consensus about the desirability of competition policy; economic, legal, social or political institutions are less appropriate for the development of a free market economy; and the public may attribute greater importance to the short term disruptions a market economy can provoke than to its long term benefit, with the result that the immediate objective of competition policy appears to be the emergence of economic opportunities and entrepreneurship in a context in which more attention must be paid to establishing the political acceptance of a market economy. Competition policy therefore appears to have a more regulatory character, thereby allowing it to play an active role in the transformation of economic structures and behavioural patterns.

The empirical analysis covers a period which falls in the aftermath of a deep systemic change in the institutional order in Central and Eastern Europe. This was still a period of rapid and radical institutional change, reinforced by the preparation for EU accession. Public policy in CEE countries typically had an activist stand, in particular in propelling rapid legislative and regulatory changes in harmonizing the domestic regulatory environment with EU's *acquis communautaire*. These ongoing institutional changes were having a strong effect on enterprise behaviour and performance and provoked various interactions between institutional and economic agents.

The competition effect of cross-border capital movement and domestic spillovers of FDI (WP2)

In general, most governments see FDI as having greater potential to improve total factor productivity than an equivalent amount of domestic investment. This would be taken as axiomatic in developing and transition economies and, depending on the origin of the multinational firm, in at least some developed economies. Add to this the potential spillovers from multinational firms to domestic firms that are believed to raise their productivity, yielding a second growth bonus, and it becomes clear why attracting inward investment figures prominently in the policy priorities of so many governments. This leads naturally to three questions: Can active policy intervention influence the level and composition of inward investment? Can particular policies maximize the potential for spillovers, both by encouraging multinationals to transfer technologies and by improving the absorptive capacity of domestic firms? Do targeted policies yield net benefits?

Policy and the Level and Composition of FDI

The role of policy in influencing the level and composition of FDI has been reviewed extensively. Most work relates to developing economies because policy interventions there have in general been more active, though a growing volume of research relates to industrial countries, where most FDI originates. Several key points emerge from this experience.

- Trade policy is relevant. In general, economies with more open trade regimes have done better at attracting FDI and benefiting from it than countries with inward-oriented regimes.
- Although there is some evidence that investment incentives can affect the location choice of multinationals, the effect appears to be small. Even more is argued that competition between potential host governments may render incentives ineffective as they offset each other. Also, this form of competition for FDI may have affected the distribution of incentives and is likely to have redistributed income from host countries to multinational firms.
- Trade-related investment measures (TRIMS), such as local content requirements and minimum export requirements, are often introduced to recapture some of the rents that accrue to multinational firms. Although these measures can have positive welfare

effects on the host country, the evidence does not point to major effects on levels of inward investment in developing economies.

- The quality of local infrastructure is vitally important, in particular communication and transportation facilities, both in attracting initial investments and in sustaining clusters.
- The availability of relatively skilled labour is an important magnet as well as a key driver of agglomeration. It has also been argued that host countries are more likely to benefit from spillovers if they have a large supply of skilled labour and if domestic firms have a high level of technological capacity. Overall the evidence seems to suggest that interventions should strive largely to provide a supportive economic environment. More specifically, this flags a role for education and training policies aimed at upgrading general skills, technology policies aimed at developing clusters, and public investment policies aimed at developing efficient and reliable transportation and communication networks.

Policy and Spillovers

The evidence on spillovers is mixed at best. There are no clear results that domestic firms always and unambiguously gain from the presence of multinational firms. Several factors could be at play. Under the optimistic view that spillovers occur but measurement instruments are not fine enough to identify them, the question is whether governments can implement policies to maximize the prospects for extracting benefits from multinational firms. General policies — designed to change the environment within which multinationals operate — include industrial policy, infrastructure development, trade policy, exchange rate policy, and so on.

There is evidence to suggest that such policies are related to the overall level of inward investment into an economy over a period of time. General policies may turn out to be the most effective means of boosting the probability of positive spillovers. If, for example, absorptive capacity is the critical driver, education and training policy is likely to be the key to facilitating spillovers.

As for specific policies, many TRIMs are targeted at encouraging spillovers. Local content requirements, which have been widely used, are intended to raise the share of local value

added in subsidiary production and in the process encourage upstream development, with the intention of stimulating interindustry spillovers.

Because one can argue that spillovers are more likely if there is some local ownership, local equity requirements are geared to that end. Local hiring targets and expatriate quotas are intended to raise the share of employment accounted for locally, with a view to encouraging spillovers through the transfer of human capital. R&D and technology transfer requirements are intended to make multinational firms commit to some minimum level of R&D expenditures or transfer technology to local firms.

The economics of TRIMs is not straightforward. In general they are second-best measures. For example, analytically a local content requirement is equivalent to an input tariff, though less efficient. What little work has so far been completed on TRIMs has failed to establish a direct link between them and the transfer of useful technologies. This appears to be because many of the measures are difficult to specify precisely and to monitor. But it is also because the more general policies referred to are in practice rather more important.

FDI is a key driver of economic growth and development. Most governments consider attracting FDI a priority, particularly in developing and transition economies. It is given this emphasis not just because it boosts capital formation but also because it can enhance the quality of the capital stock. The reason is that multinationals are assumed to bring with them best practice or, as a minimum, better practice technology and management. Moreover, it is possible (even probable) that a given multinational firm will not be able to protect its superior technology or management fully to prevent some elements from being absorbed by indigenous firms. If spillovers occur, they provide an external benefit from FDI, one that governments are hoping to secure when they offer inducements.

Theory points to reasons why spillovers might arise, but finding robust empirical evidence to support their existence is more difficult. This could indicate that the benefits are in fact illusory, in that multinational firms are effective in protecting their assets. But it could as well be that researchers are looking in the wrong place and with the wrong lens. Many studies focus on the industry rather than the firm or plant. The growing availability of survey data at the firm and plant level makes such study increasingly feasible. Most studies use cross-section data when panel data are required for proper analysis.

Because research on disaggregated data with both cross-sectional and longitudinal variation is still limited, the message is clear: More systematic research is needed. More discriminating

work is also required, analysis that probes what really matters — form of entry (greenfield or acquisition), ownership characteristics, corporate governance, absorptive capacity of domestic firms, and so on.

The consensus in the policy literature is also clear: General policies aimed at altering the fundamentals are more important than specific policies aimed at attracting particular investments. Such specific policies seem to affect primarily the distribution of rents. Governments compete in offering investment incentives and in the process create rents for multinational firms. They then use (at least some) TRIMs to try to reclaim some of those rents.

Both econometric evidence and survey and case study work suggest that the characteristics of the economic environment are generally much more important: infrastructure, local labour market conditions, reliability of communications systems, and so on, as well as the overall macroeconomic and trade policy climate. That, of course, does not mean that selective interventions will cease to be extensively deployed. Governments will no doubt continue to see opportunities for targeted measures, and multinational firms will stand ready to accept them.

If countries want to attract FDI, in particular in manufacturing, providing incentives may not be enough; exit costs also need to be at a level attractive to FDI. This includes, for example, such factors as redundancy payments and ease of firing of workers. Of course, these are exactly the issues currently being debated in the context of potential reform of European labour markets. FDI may provide another angle from which to look at the issue of reforming labour markets in order to remain competitive as a location for international production.

Competition-driven labour market developments, their institutional and policy implications (WP3)

The three countries – Bulgaria, Hungary and Romania – followed very different transition strategies, which obviously influenced corporate labour market behaviour. However, there are some important common characteristics, too.

The first, very important common characteristic is that the transition process destroyed at least one fourth of all jobs over time in all three countries, if compared to employment at system change in 1989. This process proved to be lengthy and difficult in all three

economies: employment declined for years even after strong recovery started. Aggregate employment decline still continued even in 2004 in Romania, while employment started to increase in Bulgaria in 2002 and in Hungary in 1997. However, it seems very unlikely that aggregate employment will reach pre-transition levels in the foreseeable future.

There are important differences if we look at the labour market outcomes at a more disaggregate level. Job reallocation was more intensive in all three economies than typical to developed market economies. However, intensive job reallocation only started after the macroeconomic stabilization in 1997 in Bulgaria, and it is known that job reallocation was less intensive in Romania in the period before 1998, when this sample starts. By 1999, when the Romanian sample starts, adjustment resulted in intensive job reallocation. Hungary, on the other hand, experienced extremely strong reallocation for more than a decade, thus completely restructuring employment in the corporate sector.

Job destruction was intensive in all three economies. However, the very intensive period of job destruction ended in 1995 in Hungary, in 2000 in Romania, while it was relatively less intensive in the pre-stabilization years in Bulgaria, where large-scale corporate restructuring only started after the currency crisis. Job destruction is extremely persistent in all three countries, although persistence is more consistent in Hungary than in the other two countries.

Job creation fluctuated substantially. It was more stable and relatively evenly spread over the sectors in Hungary. In Bulgaria intensive job creation only started in 1998. Job creation rates were significantly lower in Romania even in 2002, and it was very uneven: intensive job creation was mostly concentrated on the Trade sector. Job creation is less persistent than job destruction; however, in Hungary and Romania it is more persistent than typical. It is interesting that state owned companies created relatively many jobs in Bulgaria. In Hungary and Romania, however, the remaining state-owned segment of the economy has extremely low job-creation capacity.

Labour demand was heterogeneous over the sectors in all three economies. It obviously depends strongly on output dynamics. The output elasticity of labour demand was rather stable in Hungary: its value typically ranged between 0.4 and 0.5, although slightly declining in most sectors. The output elasticity of labour demand increased substantially in Bulgaria after macro-economic stabilization, and by 2001 it was larger than in Hungary. It fluctuated more in Romania, both over time and over sectors.

Output elasticity of labour demand was much more stable in all three countries than the wage elasticity. Wage elasticities vary a lot over sectors in all three economies, and they also fluctuate more intensively. Labour demand was only moderately sensitive to wage shocks in Bulgaria, but its importance increased substantially. While labour cost elasticity was close to zero in 1997-8, its typical value was in the -0.3 to -0.5 range in 2001, which is the typical value for many market economies. Labour demand initially was much more sensitive to labour cost in Hungary, but it gradually got very inelastic by the turn of the century; when the elasticity was frequently insignificant. However, it again became somewhat more elastic, and by 2002 it reached similar levels than in Bulgaria. Wage elasticity is much more unstable, however, in Romania. It varies a lot over sectors and time: it may be insignificant in one year, while labour demand seems to be very elastic in the other with wage elasticities below -1. While corporate labour market behaviour seems to shift gradually in Bulgaria and Hungary, where year-to-year changes are relatively moderate and most sectors move parallel, it apparently still is very unstable in Romania.

Competitive pressure, measured at sectoral or firm level, and ownership both have much smaller effect on labour demand in all three economies than output and labour cost. These effects seem to drive differences in corporate behaviour rather than causing a measurable shift in levels. The heterogeneity of corporate behaviour depends on ownership, and the substantial sectoral differences apparently also are related to the variations in competitive pressure. Although variables representing competitive pressure rarely have significant marginal effect, however, they jointly influence the specification. Thus, competitive pressure rather has an indirect effect on labour demand in all three countries.

Wage determination seems to be rather different in the three economies. The short-run productivity elasticity, measuring rent-sharing, typically exceeded the 0.2 level observed in developed market economies. Productivity differences had an extremely strong effect on wage dynamics in Bulgaria after the macro-economic stabilization; in some sectors it even was greater than one, but it was at least 0.5 for all groups of firms. Short-run productivity elasticity substantially declined by 2001, but it was still well above the 0.2 level. The short-run productivity elasticity of wages seems to be more stable in Hungary, but it typically also exceeded the 0.2 level. The picture is less clear in Romania: although short-run productivity elasticity is somewhere between 0.2 and 0.35 for many sectors; it frequently is insignificant, and there are many very small coefficients. However, the relatively large elasticities indicate an unusually intensive rent-sharing in all economies, especially in Bulgaria and Hungary.

Regional unemployment, indicating market pressure on wages, is expected to have a negative effect on wage dynamics. This 'wage curve' effect was almost always insignificant in Bulgaria. It has the expected negative sign in Hungary, but it only was significant in the relatively early transition years. Unemployment seems to have a very uncertain effect on wage dynamics in Romania; its coefficient sometimes is significant and large, but its direction changes over time. Unemployment rate may there act as a proxy of other, more important regional effects influencing wage dynamics. There are substantial regional wage differences in these countries, but on the whole, unemployment does not have a steady effect on wage dynamics.

Competitive pressure variables and ownership rarely have significant marginal effect, and these coefficients are very unstable even if significant. Their overall effects seem to show up in the heterogeneity of sectoral wage dynamics, but rarely significant within the sectors. Most probably aggregate pressures dominate firm or sector specific ones.

There are characteristic differences in the speed of adjustment over the three economies. Labour adjustment seems to be very fast in Hungary, labour demand always collapses to a simple equation assuming imminent adjustment, and that was also true for the wage equation in the second half of the 1990's. Past levels matter more in Bulgaria, and especially in Romania. In Romania wages seem to respond more to lagged levels of the major variables than to the contemporaneous ones, indicating a very slow adjustment process. These differences in the speed of adjustment may measure differences in national labour regulation, introducing institutional rigidities into the labour market outcomes, it may also reflect differences in corporate governance, but it most probably is related to differences in the overall competitive pressure on the economies.

The effect of competitive pressure on income distribution and social policy; public perception, attitudes and norms (WP4)

Large changes in the socio-economic structure of households occurred in the early years of transition in all four countries. The main transformations of the socio-economic structure in all countries have been: decrease of the share of employees, growth in the proportion of self-employed, increase of the proportion of pensioners, hike in the number and share of unemployed, decline in the share of children, and increase in the share of dependants.

At the level of all population, social transfers others than pensions represent a minor contributor the household budget. Nevertheless, during transition the four states chose different ways for adjusting their social policies:

- Slovenia increased support for the population until both real GDP and real population income were back to the 1990 base.
- Hungary, instead, after the ‘populist’ approach adopted in the early ‘90s has continuously diminished the support.
- Bulgaria despite its large share of population in need, particularly unemployed, has implemented a rather ‘stingy’ social policy by diminishing the support of the population.
- Romania, after the 1995-1997 more ‘generous’ period meant to compensate the massive lay-offs from industry, reduced the social transfers and put more emphasize on active policy, retraining etc., which are not ‘visible’ in the households disposable income.

Absolute income equalizers for the entire investigated period after 1990 were only:

- Unemployment benefits in Slovenia, Romania, and particularly in Hungary, where its absolute value is continuously increasing, which means that income from unemployment benefits is more and more concentrated on the poorest;
- Other social transfers in Slovenia and Romania;
- In Bulgaria, scholarships and other social transfers were absolute equalizers but only in 1992-1995;
- Pensions in Bulgaria and Hungary but only in the first years of transition.

Relative income equalizers (income sources more important for the poor than for the rich) were pensions in Slovenia and Romania for the entire period, in Hungary only after 1993 and in Bulgaria after 1992.

There are work-related income sources that have been less unequally distributed than total household income, that is income sources more important for the poor than for the rich, namely income for agriculture, fringe benefits and income from occasional work in Slovenia, secondary employment and other earnings in Bulgaria, agriculture and self-employment in Romania.

In spite of the very different social policies implemented in Hungary and Slovenia, the income drop was lower, the inequality rose fewer and the risk of poverty has been considerable smaller compare to the situation from Bulgaria and Romania, countries in which the economic recession was longer and deeper and the social policies protected less the population against income shocks. However, in all four countries, the ‘transition losers’ look

the same, households with unemployed (or ‘disguised unemployed’ as people making a living by working their plots) and children.

Income growth within uncertain circumstances generates relatively smaller rise in satisfaction. If this uncertainty expands also to the future and many are thinking that they can not expect further improvements, then after a while this may cause also the decrease of satisfaction. State measures which raise the income of the population in relatively smaller extent, but steadily and preserving also the future possibilities may cause larger increase in the satisfaction than unusual and one-time income increases.

Integrated framework to analyze the impact of competitive pressure and enlargement on the interaction between corporate sector, labour market and households (WP5)

The empirical analysis of the interactions of firms, markets and institutions under competitive pressure has identified the following main links and interactions:

- During the period of economic transformation there has been an intensive entry by new firms into the CEECs’ product markets (both foreign firms and de novo local firms) and this process has been accompanied by intensifying competitive pressures, which strongly affects the inter-firm interactions but also the interactions between firms and workers.
- Firms are indeed very sensitive to competitive pressure: they react and respond to changing competitive pressure by adjusting their behaviour and performance accordingly. We have identified observable responses to changing competitive pressure in aspects such as: the production technology, the efficiency of factor utilization, the firm’s capital structure, the demand for different production factors and the firm’s pricing behaviour, etc. One specific outcome is that the actual enterprise responses to competitive pressure may differ in the stages of economic transformation in these countries.
- The sheer number of competitors in the segments of the product markets has a healthy effect on enterprise performance, inducing efficiency gains and reducing price markups.
- Through the generated competitive pressure, FDI firms operating in the local markets act as powerful engines of restructuring and change in the CEECs’ domestic product markets. However, there are also negative spillovers of excessive foreign induced competitive pressure. The latter may lead to declining of local firms while foreign

controlled firms tend to exploit local market imperfections and to collect larger monopolistic rents than domestic firms.

- Progress in institutional reforms – namely the establishing of functioning institutions of the market economy – is positively associated with the firms' productive efficiency. Moreover, institutional reforms act in conjunction with competitive pressure, reinforcing its positive effect on the firms' behaviour and performance.

The empirical analysis of the interactions between firms and workers under competitive pressure has highlighted the following key links and interactions:

- The restructuring of the firms and markets during the transition from plan to market entails a process of massive reallocation of resources (both physical and human capital) within the economy.
- During the first phases of transition the increased competitive pressure triggered fast destruction of jobs in a great number of CEEC firms; this was accompanied by slower, but still substantial job creation at the group of successful newly emerging firms, which could gain market share at the expense of the traditional old firms.
- Job flows across the CEECs depended strongly on the intensity of the FDI which were key participants in the restructuring process. Job creation was especially fast in successful FDI firms.
- Most newly created jobs require specific skills (modern management and marketing practices together with modern technologies). The changes in education and vocational training allow young people to acquire such skills and be employable. By contrast, workers in traditional firms often find it next to impossible to obtain the necessary skills and many of them are basically unemployable.
- Output elasticities are generally very stable with manufacturing sectors characterized by higher output elasticity than other sectors indicating that *ceteris paribus* increasing manufacturing output generates slightly more jobs than similar growth in other sectors.
- Wage elasticities display characteristic behavioural differences, partly reflecting variations in competitive pressure. When the macro environment is unstable, wage elasticities are larger in absolute terms.

- Rent sharing in wage setting seems to be widespread, albeit declining, in the CEECs; in any case this practice is significantly more prevalent than in mature market economies, partly due to competition among successful firms for scarce human capital resources.
- Overall, the surge in competitive pressure in the CEECs has contributed to a very strong skill-specific selection in the labour markets. Compared to mature market economies educated people have higher employment probabilities while employees with the right skills have higher premia. Both contributed to the increase in wage and income inequality.

The empirical analysis of the interactions between households and the corporate sector under competitive pressure has highlighted the following key links and interactions:

- The increasing competitive pressure in the CEECs after 1990 resulted in major societal structural changes and stratification, with *inter alia* declining labour participation (many dropouts from the labour market), declining employment ratios (less employment), high unemployment rates, increasing dependency ratios (more pensioners).
- Growing competitive pressure has contributed to the ongoing social stratification. Those social groups who could not cope with the challenge of competitive pressure were forced out of employment and of the labour market altogether and became the transition losers. The main poverty risk groups are the unemployed and the economically dependent people.
- The structure of household incomes has undergone dramatic changes. While in four CEECs, wages and salaries are the main income source, with the sharp increase of the share of pensioners, pensions have moved to the second major source of income (except for Romania where they are the third major source of income).
- Growing competitive pressure has contributed significantly to increasing income inequality. Thus the competition-driven differentiation in wages and salaries is the key underlying factor for the inequalities in total income.
- Whereas average wages are influenced by competitive pressure, the average pensions are more the outcome of the social and income policies pursued by governments.
- Regarding subjective well-being, while people with larger incomes and those considering themselves wealthier are more satisfied, above a certain income the level of satisfaction is decreasing or stagnating. Maintaining a good level of income is more important for overall satisfaction than just upward income mobility.

- Not surprisingly, societal marginalisation (e.g. unemployment and underemployment) – largely driven by growing competitive pressure – significantly reduces subjective well-being.

Integrating these results implies identifying chain causal links as well as cross-cutting aspects and links that can be traced through several stages of the analysis. Here are some of the important chain causal links that have been identified, and partly quantified, in this project.

- Market structure – competitive pressure – productivity and x-efficiency gains – demand-*cum*-competition for skilled and motivated labour – skill-based wage formation (rent sharing and skill premia) – wage and income differentiation – well-being perceptions.
- Opening up of CEEC markets – growing foreign competition on domestic markets (FDI firms and imports) – positive spillovers (industrial restructuring, diffusion of managerial and technological know-how, job creation, etc) – negative spillovers (driving out local firms – job destruction, emerging new monopolies, FDI enclaves, etc) – labour market segmentation.
- Competitive pressure – firm adjustment (restructuring but also entry and exit) – job creation and destruction – worker flows – individual success (high paid jobs) and failure (marginalization) – objective and subjective well-being
- Institutional reforms – development of well functioning markets – level of competitive pressure – firm adjustment (incl. rising productive efficiency and responsible market behaviour by firms) – social cohesion – well-being perceptions.
- Competitive pressure – changing labour demand – overhaul of the labour market – income formation – social stratification – demand for redistributive policies.

A key overarching cross-cutting result in this project is that, compared to the past, the economic and social value of human capital in the CEECs has increased enormously, partly as a result of the growing competitive pressure:

- One of the most noticeable features of the transition-related economic restructuring in the CEECs has been the rapid transformation of human capital as a key production factor: if this process took decades to materialise in mature market economies, the transition to a human-capital based post-industrial economy was accomplished within a decade.

- Its rising economic value is reflected in the notable changes in the returns to human capital, which reflect marketable knowledge and skills embodied in the human capital.
- Human capital is becoming a key driving force in shaping the labour market performance in the CEECs. Labour markets have become skill-segmented, with emerging shortages in the high skill segments accompanied by oversupply of low-skill labour.
- The social value of human capital is reflected in the rapidly growing demand for good education and vocational training in marketable skills. The subjective value of marketable knowledge and skills is evidenced in the surveys of individuals' perceptions.

Partly related to the above, the ongoing income differentiation and the related individual perceptions are also affected by the process of human capital formation in the CEECs.

- The perception of relative income/wealth position and the perception of relative income mobility play crucial role in the formation of subjective welfare.
- The main driving forces of job creation and destruction are the human skills closely related to different determinants of human capital.
- Overall, one can conclude, that the core determinants of income differentiation and the resulting individual perceptions are rooted in the process of human capital formation, including the acquisition of various skills to be employed in the labour market.

These – as well as other similar existing – cross-cutting and chain causal links are the core of the methodological approach of developing an integrated socio-economic model of competitive pressure and social values. In the following section we present an example of a prototype model developed on the basis of this methodological approach.

Competitive pressure has many facets and has had wide-ranging effects on firms, households, institutions and society in the CEECs at large. It has been a major engine of economic restructuring in the CEECs and has contributed to improved resource allocation in these economies. Competitive pressure has also been of the main drivers behind the complete overhaul of the CEECs' labour markets. In turn, the societal upshots of competitive pressure are reflected in the changing individuals' perceptions and subjective well being. Notably, the growing competitive pressure in the CEECs has had both positive and negative economic and social effects; the balancing act for policy makers is to find the policy mix that enhances the positive spillovers and suppresses or at least reduces the negative ones.

Labour market positions and labour market expectations have crucial role in shaping subjective welfare. People's tolerance of uncertainty and income risk are mainly determined by the assumed cost of losing job and the extent of their concern about it. The relatively large dissatisfaction and the downward distorted mobility perception may reflect the social exclusion of the families of marginal activity groups. Education and larger cultural and recreation expenditures increase subjective welfare leading to larger satisfaction and lower demand for redistribution. Uncertainty and insecurity reduce the positive effects of upward mobility.

The demand for redistribution is influenced mainly by the labour market situation and expectations and not on the income level. Instead of direct income redistribution the reduction of uncertainty on the labour market and raising employment ratio can be the most important governmental tools for increasing satisfaction and diminishing the demand for redistribution. Policies that result in increasing the income of the population continuously, albeit to a relatively small extent, and provide new opportunities for individuals may induce more positive effect on satisfaction and may reduce the demand for redistribution.