Non-Technical Summary

Effect of Enterprise Break-ups on Performance: Case of Former Yugoslav Republic of Macedonia

Lubomír Lízal, CERGE-EI, Prague, Czech Republic

Polona Domadenik, Institute for South East Europe (ISEE) and University of Ljubljana, Slovenia

Marko Pahor, Institute for South East Europe (ISEE) and University of Ljubljana, Slovenia

Correspondence: Lubomir Lizal
CERGE-EI
Politickych veznu 7
111 21 Praha 1
Czech Republic

e-mail: lubomir.lizal@cerge-ei.cz

As the Central and East European (CEE) countries embarked on the transition from a planned to a market economy in the 1990s, the restructuring of state and socially owned enterprises (SOEs) became a major policy issue in the region. One of the most important forms of restructuring observed during the CEE transition was the massive breakup of SOEs since it leads to (1) altering (reducing) the size of firms, (2) increasing the number of firms, and, finally (3) allows to bring in new management. As analyzed in Lizal et al. (1995, 2001) for Czechoslovakia, many divisions (subsidiaries) of SOEs broke away from their "master enterprise." In Macedonia, that became independent in 1991, the break-ups occurred more spontaneously and without any supervision of government or its officials. A wave of spin-offs occurred at the beginning of 1990s, giving rise to a large number of new firms led by new top management. In this respect, Macedonia is another specific case among transition economies where large number of break-ups occurred at the beginning of privatization.

The important question is whether the break-ups have systematic economic effects by improving or worsening the performance of the spun off subsidiaries and/or the remaining master enterprises. CEE countries have displayed major problems with management's appropriation of profit and assets stripping in the presence of weak ownership and legal frameworks. Moreover, timing of many break-ups and the way of SOEs privatization conducted in Macedonia, where insiders were able to become new owners, indicate that there might be a systematic correlation between the spin-offs and method of privatization adopted. As reported in many descriptive studies Macedonia belongs among countries with clear rent-seeking behavior of managers resulted in assets-stripping and siphoning of profits. Our analysis based on data for the period of 1991-1999 fills up an important gap in understanding Macedonian way of pre-war transition and represent an important policy-relevant study for main economic policy decision-makers in Macedonia. Moreover, our findings on Macedonian enterprises should be of general interest in the transition context in providing additional evidence on early restructuring and its subsequent effect on enterprise performance in the environment where the institutional structure and legal protection were very weak.

Our study is new in several aspects and enhances the insight on breakups in transition economies provided by Lizal et al. (2001). First, our data covers all breakups that appeared and these changes are well documented by the state agencies. In addition, we possess data on multiple breakups when the original enterprises split into more than two new entities. Such types of fragmentation are more frequent than simple spin-off of a new firm. This guarantees that our results are more robust that those of Lizal et al. (2001), who limited their study to spin-offs of a single subsidiary from the master enterprise due to lack of documentation of the splits in Czechoslovakia. Also, our time span is almost a decade long thus sufficient enough to separate pre- and post-split periods, although we have finally excluded years of hyperinflation and war turmoil. Finally, we use data on all Macedonian enterprises; a country that was not subject to many economic studies yet.

It is assumed that the compensation of the top management of the firm before the break-up is an increasing function of performance of the entire firm, while after the split it is a positive function of the performance of the remaining master enterprise only. Analogously, the compensation of the management of a subsidiary before the spin-off is an increasing function of performance of the entire firm, adjusted for the relative importance of the subsidiary, but it becomes a positive function of the performance of the subsidiary only after the split. Rational behavior of managers (whose utility solely depends on the performance of the enterprise) in this setting yields two competing hypotheses:

1. *Break-ups occur because the top managers of the SOEs discard poorly performing divisions in order to improve the performance of the (remaining) master enterprises, or*
2. *Break-ups are observed because managers of the divisions (subsidiaries) of SOEs spin more efficient units away from the master enterprises.*

Since the firms under central planning were often created artificially large, we also allow for the situation in which the enterprises suffered from diseconomies of scale. In case of inefficiencies of scale the performance of both post-split remaining units can be improved by unbundling (split).

3. *Break-ups result in a superior performance of both the spun off units and the remaining master enterprises and occur because the large former SOEs suffer from diseconomies of scale.*

Nevertheless, various studies and anecdotal evidences suggest that the above outlined scenarios are far from reality in transition economies. As government control over management remained weak in the absence of a solid legal framework, appropriation of profit and asset stripping by managers has become a serious problem in Macedonia as in other transition countries. Moreover, as the methods of privatization allowed for managerial buy-out and since smaller firms with less so-called socially owned capital were evaluated at lower price than before the spin off, management might pursue spin-off strategy to increase the probability of a successful buy-out, although it is inefficient from economic point of view and both units; master and subsidiary firms perform worse than before the spin-off.

4. *Break-ups occur because managers of master firm and/or subsidiaries anticipate future private benefits even if their unit and the master enterprise perform worse as a result of the break-up.*

In this fourth scenario the utility of managers of divisions and master firm does not depend on the performance of their firms and the pursuit of managerial private goals worsens enterprise performance. Such strategy provides evidence against the classical models when the managerial utility is assumed to be bind with the firm's performance.

Based on the four hypotheses we should observe outcomes: (i) the effect of a break-up on performance is positive for the master enterprise and negative for the subsidiary (Hypothesis 1), (ii) the effect is positive for the subsidiary and negative for the master firm (Hypothesis 2), (iii) the effect is positive for both the master enterprise and the subsidiary (Hypothesis 3), and (iv) the effect is negative for both units (Hypothesis 4).

Our analysis of Macedonia, which is a specific case among transition economies where large number of break-ups occurred at the beginning of privatization, shows that there are systemic effects of breakups on the performance. We estimated the effects of the break-ups of enterprises on the subsequent performance of the "master enterprises" and spun off divisions. We have estimated the performance effects by comparing the performance of enterprises that remained intact to the performance of enterprises that experienced spin-offs and the newly established subsidiaries. We have used these performance indicators: Value Added per Labor, Profit per Labor, Profitability (Profit/Capital), Costs per labor, and Sales per Labor.

We have found that the newly established subsidiaries perform worse than the control group with respect to all measures used while the master enterprises seems to be intact or less harmed. Both types seem to be harmed in case of value added per labor, although the safeinstrument suggest that the negative effect was not always affecting the master enterprise. On the contrary the master enterprises seems to be unaffected in case of value per labor while the subsidiaries unambiguously suffered according to this measure. Both master enterprises and subsidiaries do not differ significantly from the control group in case of total costs per labor, although there are signals that the subsidiaries could slightly cut total costs per labor. Thus, the subsidiaries have lower total costs per labor compared to the control group and master enterprises. Also both master enterprises and subsidiaries are not different form the control group in terms of profit per capital although the subsidiaries could be negatively affected. Finally, the masters benefited form the split in terms of sales per labor compared to the control group while the subsidiaries were harmed.

We should note that the 1991 and 1992 values are often rejected as valid instruments. To conclude, the empirical results do not favor unanimously one of the four hypotheses we have tested. Nevertheless, given the fact that subsidiaries have lover profitability per worker although they have reduced total costs per worker and the master enterprises have higher sales per worker and mildly suffered (profit per labor) or were not affected according to other measures (value added per worker, total costs per labor, profit per capital) than the control group, *ceteris paribus*, we can infer that the hypotheses (i) or (iv) in the article receives a strong support.

This means that the break-ups occur because the top managers of the SOEs discard poorly performing divisions in order to improve the performance of the (remaining) master enterprises (in case of sales per labor), or take actions that harm the subsidiaries (all measures) and harm (profit per labor) or do not help the remaining master firm (all remaining measures). In this light the poorer profit per capital performance can be economically well explained - if the master enterprises tries to keep as much capital as possible during the spin-off then its capital stock would be higher and hence the profit per capital appears lower. This means that the master firm keeps more capital than the common portion would be for that type of firm and, consequently, the profit per capital decreases while the other measures of performance might not be affected or improve.

An alternative (in line with the institutional setup) of labor shedding leads to similar outcome. The master enterprise sheds unwanted labor using overstaffed subsidiaries. This would also manifested itself by deterioration of performance measures per labor of the subsidiaries while helping the master enterprise in these measure.