

## PRESS RELEASE OF THE WORKING PAPER 2/15

# Impacting innovation behaviour of foreign and domestic firms: the case of Ukraine

#### September 2013

### **OBJECTIVE**

The objective of the working paper is to investigate the factors impacting innovation performance of foreign-owned and domestic firms in three regions of Ukraine. The analysis covers inter-firm cooperation between domestic and foreign-owned firms, their absorptive capacity and local institutional environment in different regions of Ukraine as the main determinants of innovation performance of firms. The paper empirically analyzes the primary data of the enterprise survey, carried out in three regions of Ukraine, close to the Western border Lviv region, close to the Eastern border Kharkiv region and the capital region Kyiv, in two different sectors, namely food and beverages sector and machinery and equipment sector. The focus of the empirical analysis is on the assessment of the innovative performance of survey firms. The impact of such factors as absorptive capacity of survey firms, the way foreign and domestic firms cooperate and their perception towards local institutional quality on the innovation behaviour of firms is analyzed. This press release will give an overview of the most important conclusions and results of the working paper.

#### MAIN RESULTS

The working paper summarizes the main theoretical perspectives concerning the role of inter-firm cooperation, absorptive capacity of firms as well as local institutional environment for the innovation behaviour of firms in Ukraine as a transition economy of the European Neighborhood Policy states (ENP). Empirical analysis is introduced through the means of descriptive statistical results as well as binary logit regression models uncovering the relationship between the factors impacting innovation activities of firms and the output of such activities within three innovation forms: product innovation, process innovation and organizational innovation. The results are the following. Firstly, firms located in the capital are more product-innovators and those located in Lviv are more process-innovators. This leads to overall innovation propensity of firms in Lviv being higher than that of Kyiv. However, we are careful in stating that firms in Lviv are more innovative than those located in the capital due to a lesser technology- and capital-intensity of process







innovations per se. Bordering regions still perform quite poor with regard to absorptive capacity parameters, namely R&D investment and involvement of R&D-related staff, in comparison to the capital. Secondly, we found out that foreign-owned firms are excelling domestic counterparts in terms of innovation progress. Greenfield FDIs are the most innovative firms, whereas domestic new private firms perform the worst. This is also supported by the evidence that domestic firms have much lower absorptive capacity in comparison to the subsidiaries of MNEs that bring along new knowledge and technologies. Thirdly, we came up with the result that food and beverages sector is more innovative as a low-tech industry when it comes to process and organizational innovation forms compared to machinery and equipment sector as a high-tech industry. This is an important result especially considering the transition economies perspective of this paper. Innovation in low-tech industries results in active process and organizational innovations. However, firms in these industries tend to invest in their absorptive capacity parameters much less than those of high-tech sectors, which lowers the ability of firms to learn from their business partners and innovate. And the last but not least, we found evidence of importance of a high quality institutional environment for the innovation propensity of firms. Thus, when institutional framework is supportive towards firms, it impacts positively their innovation performance, but when institutional environment gets thick, it becomes a burden for business agents, which cannot introduce innovations as they get locked in.

The working paper ends up with the policy implications, which are threefold. Firstly, there is a need to introduce more support for the bordering regions, so that to diminish uneven regional development of the state with the capital leading at a very high scale in comparison to the periphery. One way to achieve this is to create certain local region-specific institutional environment in the bordering areas which will encourage structural changes within the existing economic system with Soviet legacy. Secondly, the government shall support domestic firms, so that the technological gap between foreign-owned and domestic firms decreases. There is a need to provide financial incentives especially to domestic new private firms, which will enable them to innovate and become competitive enough towards their foreign counterparts. And thirdly, it is important to increase absorptive capacity of local firms, so that to encourage more product innovations in high-tech sectors, because introduction of new products is essential for the whole manufacturing industry to grow. In order to increase firms' absorptive capacity there is a need firstly, to provide sufficient financial support for innovation activities of the firms, which will allow firms to invest more in R&D as well as training of employees as important absorptive capacity parameters, and secondly, to introduce more research-based education programs at the universities, so that local human capital is skilled enough to enable innovations. Moreover, high quality labor conditions for local personnel should be created, so that employees get motivated to work in tech-related industries as highly competitive and prestigious work environments.





