

Does Service-Sector Liberalization Increase Productivity in the Manufacturing Sector?

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This policy brief summarizes the results of recent research on the effect of service-sector liberalization in Ukraine, 2001-2007, on productivity in the manufacturing sector. We use a sample of manufacturing firms and construct a firm-specific index of service-sector liberalization. We find that the manufacturing firms which more intensively use liberalized services, on average, have gained 9 percent in total factor productivity (TFP). The service liberalization is associated with increased foreign presence which also has a positive and significant effect on TFP. The effect is stronger for domestic and small firms.

The service sector plays a dominant role in modern economies and its importance tends to increase with the level of a country's development. For low-income and middle-income countries, the share of services in the value added has been increasing steadily from 43 percent in 1987 to 59 percent in 2007 (Francois and Hoekman, 2010). The share of services in worldwide trade in goods and services has also been growing dramatically. Currently, it accounts for about 50 percent of the global trade turnover.

The service sector is characterized by network externalities, stringent regulations, and entry barriers. Moreover, transport, telecommunications, trade, and business services plays an important role in determining the price mark-up. Therefore, extensive market power in services can lead to a loss in competitiveness of the entire economy and calls for deregulation efforts. The rising prominence of services has been acknowledged by the WTO, which launched negotiations on trade in services with the Uruguay Round and created the WTO General Agreement on Trade in Services (GATS) in 1994. As a result, service-sector liberalization

has become one of the conditions in the WTO accession negotiations in 1990's and 2000's, including those conducted by Ukraine.

Is Service-Sector Liberalization Beneficial for the Economy?

Among channels of potential benefits, the impact of services on productivity in the manufacturing sector is an increasingly popular research topic. Competitiveness of manufacturing firms in open economies hinges on availability of low-cost, high-quality producer services (Francois and Hoekman, 2010). The literature mentions several theoretical links from service-sector liberalization to the growth in productivity. Increased specialization of producer services leads to gains from trade in services due to increased variety and expanded markets (Markusen, 1989). Lower price, better quality, and a wider choice of services allow more complex organization of a manufacturing firm through further fragmentation of production

activities (Deardorff, 2001). A larger variety of services generates knowledge, and increases its diffusion and exchange (Burgess and Venables, 2004). Outsourcing of services by productive firms in non-stagnant sectors results in more efficient factor allocation that expands both output and production (Oulton, 2001).

Services such as transportation, insurance, professional, or financial services play a very important role in determining export competitiveness of manufacturing firms. In turn, expansion of exports due to lower price margins in services could increase productivity through economies of scale. Competition and further specialization in professional services could reduce transaction and contracting costs, which are quite substantial. As a result, lower transaction costs encourage more outsourcing activities and arm-length trade (Williamson, 1973).

Mounting empirical evidence points to a positive impact of service-sector deregulation on productivity in downstream manufacturing industries. Arnold et al. (2011) establish a positive link between TFP of manufacturing firms and liberalization of the service sector by analyzing the impact of liberalization of services on the performance of approximately ten thousand manufacturing firms in the Czech Republic in 1998-2003. The link is stronger for firms that use service inputs more intensively. A standard deviation increase in the foreign presence in services is associated with a 3.8 percent increase in TFP. Fernandes and Paunov (2011) find that forward linkages from foreign direct investment in services to downstream manufacturing industries account for almost 5 percent of the observed increase in Chilean manufacturing productivity growth. Deregulation and liberalization policies that increase competition among intermediate service providers are linked to increased export competitiveness for high-tech industries (Fink et al., 2005).

Despite an unambiguously positive link between deregulation of services and manufacturing productivity, the endogeneity

of service-sector reforms makes it difficult to demonstrate that there is a direct causal effect of policy changes in services on productivity. For example, as pointed by Francois and Hoekman (2010), the liberalization of the service sector in Eastern Europe coincided with a broad range of reforms carried out as the prerequisite for the EU accession. As a result, it is very difficult to single out the effect of a particular reform that was a part of the broader reform package.

Liberalization of the Ukrainian Service Sector in 2001-2007

Shepotylo and Vakhitov (2011) who investigate the impact of service-sector liberalization on manufacturing productivity in Ukraine in 2001-2007, argue that the Ukrainian episode of service-sector liberalization brings two major advantages of disentangling the effect of service-sector liberalization on productivity. Firstly, the reform package was deliberately limited to service-sector liberalization. Secondly, the reform was to a large extent exogenously imposed on the Ukrainian policy makers by their trading partners as a prerequisite to the WTO accession.

Ukraine has applied for the WTO membership on 30 November, 1993. During 1993-2000, Ukraine substantially liberalized its trade in goods, but not much was done in terms of trade in services. This situation changed in 2001. The favorable political situation during in 2001-2003 (the coalition government held a majority in the Parliament) made it possible to pass more than 20 new laws related to harmonization of national laws and regulations with the WTO requirements.

Regarding services, the Ukrainian government developed new laws and amended the existing ones that regulated activities of TV and Broadcasting, information agencies, banks and banking activities, insurance,

telecommunications, and business services. In 2006, an amendment to the law “On Banks and Banking” permitted foreign banks to open branches in Ukraine, simplified the procedure for opening of banks and subsidiaries, and clearly defined under which circumstances the National Bank of Ukraine can turn down foreign banks’ applications for starting their operations in Ukraine. A sequence of amendments to the law on insurance substantially liberalized the insurance sub-sector. In professional services, the laws “On audit” and “On Bar” have been amended to withdraw the nationality requirements for the market agents.

The legislative effort leveled the playing field for foreign and local service providers, improved market access, and made laws and regulations more transparent. However, this profound deregulation activity was not only encouraged exogenously, but was only induced in the sectors relevant for the WTO accession process. That is why no similar progress in equally important sub-sectors such as infrastructure, utilities, transport, hotel and restaurant was achieved. This was first of all due to a lack of demand for improved market access from internal agents.

The Effect of Service-Sector liberalization in Ukraine on Manufacturing Productivity

The main findings in Shepotylo and Vakhitov (2011) are as follows. An increase in services liberalization index by a standard deviation leads to a 9 percent increase in productivity among manufacturing firms. As an alternative measure of service-sector liberalization indicates, a standard deviation increase in the foreign presence in service sectors leads to a 5.5 percent increase in productivity. The estimated effect is higher than in previous studies, but it is consistent with our prior expectations: the marginal return to service-sector liberalization should be greater for more regulated and less developed countries.

The effect is robust to different estimation methods and to different sub-samples of the data. In particular, it is more pronounced for domestic and small firms, which provides policymakers with additional argument in favor of supporting and developing small- and medium-sized domestic firms. Allowing service-sector liberalization to dynamically influence TFP through the investment channel leads to even higher estimated productivity gains.

Policy Implications

Free access to business-related services is an imperative for a smooth and steady development of an economy. Even though Ukraine has demonstrated impressive leaps towards liberalization of business-related services which are crucial for international trade, other service sectors also crave deregulation. Local utility networks and transportation should be some of the key sectors to liberalize in the next step of liberalization since their share of the total cost structure of all firms is quite substantial.

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