# Belarus, Moldova, Ukraine.

# Machine Industry Report: Executive Summary

**Project: "Mapping out vulnerable sectors in the Eastern Partnership countries – structural change, Visegrad experience and relevance for EU policy"**
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Manufacturing is the core of the real economy. Planes we are flying, cars we are driving, cell phones and computers we are using are all the products of machine building segment of manufacturing. Machinery is a capital-intensive sector of economy with relatively high value added and know-how content making our lives a bit more easy and cozy. Machine-building sectors in Belarus, Ukraine, and Moldova are at the large extent the heritage of the Soviet Union times. In the report, we tried to see what has changed over the last 15-20 years for machine building in those three countries, which positive results or mistakes have had place due to country specific decisions. We come up to the understanding that machinery can be considered as more vulnerable sector of economy in Belarus and Ukraine and less vulnerable in Moldova.

## Changes in specialization patterns have different speed in the three countries

Belarus, Moldova, and Ukraine are still at the process of structural adjustment of the economy from soviet-type to market-based, although the pace is different for each of the country. Such transition period includes structural move from more labor-intensive and technologically simpler products to more advanced industries and products evolving drifting towards engineering-based industries. In 2012, industry accounted for more than 30% of GDP in Ukraine, 27% in Belarus, keeping significance to GDP relatively high over the last 25 years. In Moldova, share of industry in GDP gradually decreased from 20% in 2007 to 14% in 2012, while its service sector has been developing relatively faster. The output of machine building sector in 2013 accounted for 9.2% in Ukraine, 6.4% of GDP in Belarus, and 3.0% in Moldova (2012). There is the significant share of employment in machine-building sector in case of Belarus and Ukraine, while its share in case of Moldova is considerably lower. In terms of export, machine-building sector accounts for relatively higher share of total exports in Moldova indicating that exported machinery products have comparatively higher value added than in Belarus and Ukraine.

## Machinery in Belarus is highly dependent on Russian market

In Belarus, industry is based on large state-owned post-soviet enterprises including machine-building giants like MAZ (trucks), MTZ (tractors), BELAZ (heavy-weight trucks) and a few others. Despite the fact that some positive moments have had place (for example, huge amounts of investments and huge work in order to reduce energy intensity of machine-building production, etc.), Belarus' machine building sector currently finds itself in rather difficult situation and requires new reforms. Large enterprises have rather out-worn capital, investments are used inefficiently, the quality of goods changes slowly, and price competitiveness remains highly dependent on exchange rate of national currency. Critical dependence on Russia through high share of imported components, fossil fuel and high share of

Russia in export (almost ¾ of products of Belarusian machine building sector are exported to Russia) reflects structural problems of Belarusian economy and absence of institutional reforms over the last 25 years. As a result, after Russia jointed WTO and Russian ruble devaluated significantly in 2014, Belarusian machinery output sank 20% the same year.

## Ukraine's machine products are of low competitive advantage

In Ukraine, the most developed sub-sectors of machinery are railway machine-building, heavy machine-building and machine-building for agriculture. Those are mostly dependent on the domestic raw materials and are located in the East of Ukraine in order to reduce the distance between company and the supplier of raw material. Productivity in machine building is only two thirds of the national average, indicating capital and technology deficit, as well as suggesting problems with international competitiveness. Despite the fact that Ukrainian export of machine building sector is more diversified compared to Belarusian, the level of export diversification in Ukraine is relatively low keeping Russia factor at the crucial level (more than half of products of Ukrainian machine building sector was exported to Russia in 2013). Taking into account current political conflict between Ukraine and Russia, possible loss of access to the Russian market would hit majority of sub-sectors hard. Results for 2014 illustrate that machinery has shrinked in general by over 20%, while most Russian-based subsectors, like railway machine-building, has slumped by over 60%.

## Moldova is turning into machinery components supplier

In Moldova, machinery has experienced significant transformation through privatization and change of output structure. By 2001, 93% of output of machine building sector was produced at non-state enterprises and 90% of workers of machine building sector were employed at non-state sector. Currently, Moldova can be described as raw material supplier and component supplier and there is growing increased interest in the production of components from Western companies. Machine-building sector has been getting more significance in industrial production in Moldova since 2001 and there is an increased focus on the machine-building sector as industry growth driver in Moldova. Today, Moldovan investment in fixed machinery assets are mostly directed into manufacture of fabricated metal products and equipment and manufacture of electrical machinery and apparatus. At the same time, Moldova has made significant improvement in the export diversification. In 1998, Moldova used to have low level of export diversification (77.2% to the CIS market). By 2013, CIS dependence has reduced to 27.5% keeping relatively low dependence on Russian market (21.3% of Moldavian export of machine building sector were sold to Russia in 2013). Yet Russia factor for Moldova turned into an ownership issue, when Russian business controls strategic enterprises of metallurgy and machine building sector placed on the both sides of the Dniester.

## There is a need for further institutional reforms

Governmental rulings on machinery in Belarus, Moldova, and Ukraine are expressed through different forms of economic stimulus, subsidies (hidden and open), soft budget constraints and provision of preferential lending benefiting directly and indirectly companies from machine building sector. However, often it creates inefficient allocation of resources and reduces the incentives for companies to introduce new technologies and innovations, especially in Belarus and Ukraine. There are also issues related to corporate governance. In Belarus, the majority of enterprises are state-owned, which leads to the situation when all critical aspects of enterprise operation, including the choice of factors of production, output and distribution are directly or indirectly affected by governmental policies. In Ukraine and Moldova the situation is different: leading enterprises of machine building sector are privatized, but mainly controlled by local oligarchs and/or Russian business groups. The state of corporate relations in Ukraine and Moldova is characterized by low level of corporate culture, discrepancy between the existing corporate governance practices and globally accepted principles of corporate relations, as well as poor strategic management.