



Lessons from machine building sector transformation in Belarus, Moldova, and Ukraine

Sierż Naurodski

Kiev, June 23, 2016

KEY POINT

Machinery can be considered more vulnerable in Belarus and Ukraine, and less vulnerable in Moldova

Country summary:

- 1. Belarus' machine industry is highly dependent on Russian market**
- 2. Ukraine's machine products are of low competitive advantage**
- 3. Moldova is turning into machinery components supplier**

MACHINERY IN BELARUS, MOLDOVA, AND UKRAINE HAVE DIFFERENT DEVELOPMENT PATTERNS

	Belarus		Ukraine		Moldova	
	2005	2013	2005	2013	2005	2013
Industry value added, % of GDP	44.0	41.9	32.3	26.2	16.3	17.1
Machine building value added, % of GDP	6.7	4.6	3.3	2.0	0.6	0.8
Machine building output relative to GDP, %	18.9	16.2	13.5	9.2	1.9	2.2
Machine building output, % of industry	19.0	18.1	12.7	9.7	3.4	5.6
Employment in machine building sector, % of industry employment	29.2	25.8	22.6	17.2	9.7	8.4
Export of machine building sector to total export of all HS commodities, %	19.3	18.2	13.1	16.3	5.6	14.9

Source: World Bank, Input-Output tables, National Statistical Offices of Belarus, Moldova, and Ukraine

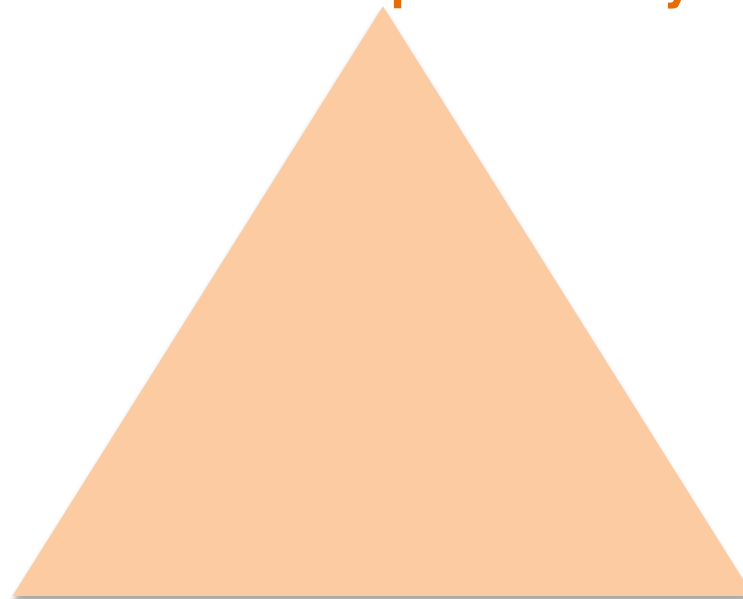
V4 COUNTRIES ARE CONSIDERED TO BE THE BENCHMARK MACHINERY TRANSFORMERS

	Czech Rep		Hungary		Poland		Slovakia	
	2005	2013	2005	2013	2005	2013	2005	2013
Industry value added, % of GDP	28,1	27,9	22,1	22,0	22,1	22,1	26,3	22,9
Machine building value added, % of GDP	8,0	9,8	7,7	8,5	3,5	na	5,1	6,5
Machine building output relative to GDP, %	32,3	41,0	36,5	37,9	14,6	na	30,1	45,2
Machine building output, % of industry	28,5	35,1	34,8	38,5	16,0	na	19,6	28,6
Employment in machine building sector, % of industry employment	27,9	32,1	29,6	34,3	19,4	17,8	23,9	29,3
Export of machine building sector to total export of all HS commodities, %	51,2	55,0	62,0	53,0	39,6	38,4	44,9	57,9

Source: Eurostat

KEY SUCCESS POINTS OF MACHINERY TRANSFORMATION

I. Companies' efforts: **Flexible focus on specific market segments and investments provided by strategic investors**



II. Local governments' efforts:
**Highly coordinated initiatives
by local and central
authorities**

III. Central government efforts:
**Economic policy aimed at
improvements in business
climate and the quality of
governance**

I. COMPANIES EXPERIENCE IS DIFFERENT ACROSS COUNTRIES: UNDERINVESTMENT IN BELARUS AND UKRAINE, GOOD EXPORT DIVERSIFICATION IN MOLDOVA

BELARUS:

based on large state-owned post-Soviet enterprises > quality of products changes slowly > low return on investment > competitiveness remain dependent on terms of trade

UKRAINE:

dependent on domestic raw materials located in Eastern Ukraine > capital and technology deficit > low productivity (two-thirds of the national average) > low international competitiveness > ownership issues and low corporate governance quality

MOLDOVA:

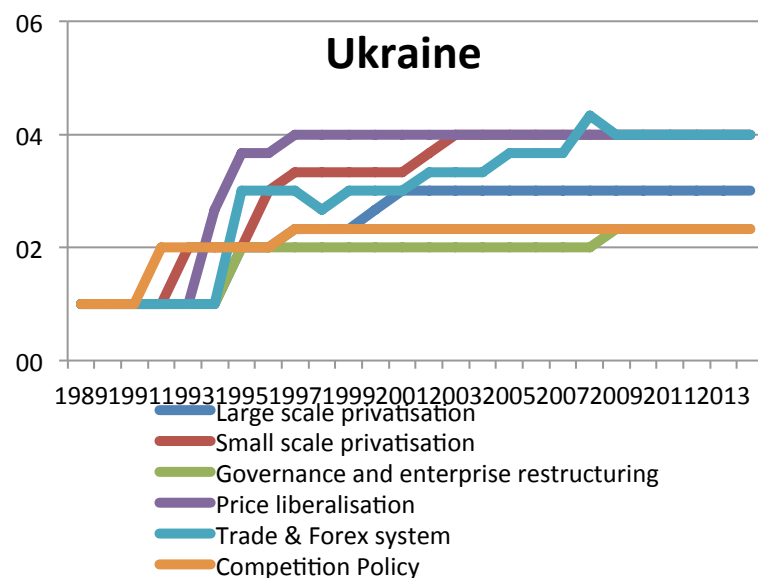
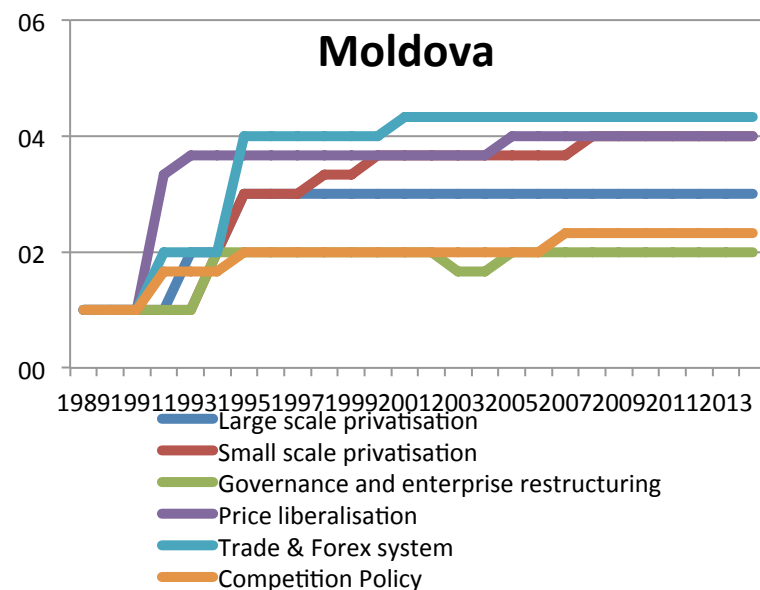
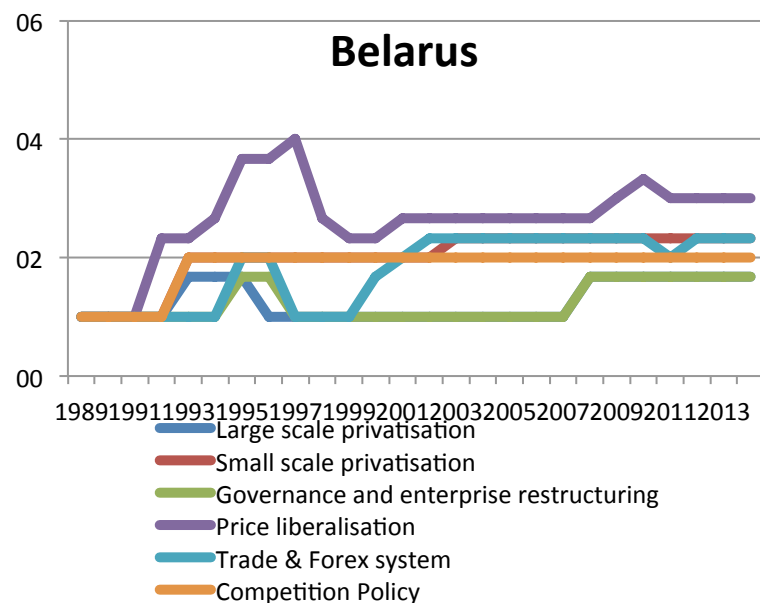
development of tier 2 suppliers of fabricated metal products and equipment, as well electrical machinery > relatively high capital intensity (as compared to BY and UA) > better export diversification > increasing share in GDP > however, ownership issues and low corporate governance quality

II. LOCAL GOVERNMENT EXPERIENCE: ABSENCE OF LOCAL GOVERNMENT REFORMS AND WEAK FINANCIAL DECENTRALIZATION THAT DISCOURAGE LOCAL INITIATIVES

Initiatives of local/regional governments created over 500 000 working places in V4 countries during 20 years in industrial parks and zones. Two examples of successful local initiatives:

1. KECHNEC village (Eastern Slovakia): **Kechnec Industrial Zone, 15 resident companies, over 2'500 employees, 1'053 inhabitants**
2. ŻARÓW village (Western Poland): **part of Wałbrzych Special Economic Zone, EUR 217 mln total investment, EUR 13,6 mln annual expenditure**

III. CENTRAL GOVERNMENT EXPERIENCE: FRAGMENTARY INSTITUTIONAL REFORMS AT DIFFERENT PACE



Source: EBRD Transition Indicators

KEY LESSONS AND DIRECTIONS FOR MACHINERY POLICY DEVELOPMENT IN BELARUS, MOLDOVA, AND UKRAINE

1. **Corporate governance:** seems to be a key issue and a tool for achieving better accountability and improved relationship with investors
2. **Infrastructure:** stable tax system, better educated workforce and good transport infrastructure rather than tax holidays, duty free zones, or other political promises
3. **Authorities cooperation:** smooth cooperation with investors at every level (government, municipality, state-owned company) and the requisite institutional capacities are among the key decisive factors

SWOT STRATEGIES FOR MACHINERY DEVELOPMENT IN BELARUS



1. SO Strategies	3. WO Strategies
<p>a) More efficient utilization of investments b) Increasing share of high value added and engineering products</p> <p>Both strategies aim to improve the competitive positions of Belarusian machinery producers in the EEU market and to diversify the range of products available for export. Both could be used to utilize the sector's education potential.</p>	<p>a) Quality improvement and price reduction b) Improving corporate governance and eliminating state intervention</p> <p>This approach could be used to unload existing stocks and to ensure a better position in the EEU market as the producer of "cheap but reliable machinery products." Improving corporate governance in line with the relevant OECD principles, in both state-owned and private companies, would ensure the sustainability of this approach.</p>
2. ST Strategies	4. WT Strategies
<p>a) More efficient utilization of investments b) Development of machinery components</p> <p>A combination of the two strategies is needed to diversify the sector's export and import risks. The development of components could yield improvements in trade balance and export diversification. This, in turn, could mitigate the vulnerability of the sector in Belarus.</p>	<p>a) Structural change in machinery through privatization (partial or full) b) Improving corporate governance and eliminating state intervention</p> <p>This constitutes the most radical approach for machinery reform in Belarus. Changes in ownership and in the structure of the sector, along with improvements in the quality of management, would allow for attracting foreign investors and technologies, increasing productivity, and cutting cost, which would in turn contribute to improved product quality, launching new products, and expanding into new markets.</p>

SWOT STRATEGIES FOR MACHINERY DEVELOPMENT IN UKRAINE



1. SO Strategies	3. WO Strategies
<p>a) Increasing share of high value added and engineering products b) Expanding access to world markets</p> <p>SO strategies are used to optimize the structure of Ukrainian machinery exports in order to open up new markets and expand existing ones. More advanced products will be also in demand in the wider local market.</p>	<p>a) Improving corporate governance b) Assets modernization</p> <p>Improving corporate governance based on the relevant OECD principles seems to be the core goal for WO strategies. As a priority, best corporate government practices should be enforced in the public companies actively traded at Ukrainian the stock exchange Better accountability and improved relationship with investors is expected to automatically contribute to the process of increasing investments in technologically advanced assets.</p>
2. ST Strategies	4. WT Strategies
<p>a) Increasing share of high value added and engineering products b) Increasing productivity in the sector</p> <p>Increasing productivity and enhancing the output of higher value added products are the core steps that need to be performed during times of economic downturn and diminishing exports. These strategies contribute to export growth and create a foundation for sustainable output growth in the future.</p>	<p>a) Improving corporate governance b) Increasing productivity in the sector</p> <p>As in the case of the WO approach, the stimulation by the Ukrainian government of improvements in corporate governance seems to be the core of WT strategies. In combination with government efforts to promote increased productivity in the sector, this would contribute to attracting foreign investors and technologies, improved product quality, the launching of new products expansion into new markets.</p>

SWOT STRATEGIES FOR MACHINERY DEVELOPMENT IN MOLDOVA

1. SO Strategies	3. WO Strategies
<p>a) Stimulation of subsectors with high value added and engineering products</p> <p>b) Expanding access to the EU market</p> <p>Greater access to the EU market seems to provide new opportunities for Moldovan machinery products. The further optimization of the structure of machinery by developing advanced products will boost machinery exports and utilize a greater share of the local labor force.</p>	<p>a) Improving corporate governance</p> <p>b) Modernization of assets</p> <p>Just as in the case of Ukraine, improving corporate governance based on the relevant OECD principles seems to be the core goal for WO strategies. It is necessary to enforce the principles of corporate governance at public companies in order to achieve greater accountability and better investor relations. This will contribute to increasing investments in technologically advanced assets.</p>
2. ST Strategies	4. WT Strategies
<p>a) Targeted cooperation with European investors</p> <p>Cooperation with EU investors seems to be the only reliable strategy for overcoming existing threats. This strategy is rather easy to implement for the Moldovan government and will contribute to Moldova's expansion into the EU market, increase productivity, and improve ownership structures and management quality.</p> <p>b) Create new state incentive programs and improve the business environment. Attract EU companies to relocate production to Moldova. Subsidies and incentives are necessary to manage tough competition from the region (subsidies offered for job creation in Serbia, Macedonia, etc., and for capital investment (equipment, buildings, etc.) in Romania. Also, the business environment needs to be improved all over the country to offer similar conditions as the ones that prevail in FEZs for all regions.</p>	<p>a) Improving corporate governance and productivity and productivity improvement</p> <p>b) Stimulating small and medium-sized machinery producers</p> <p>If we assume that principles of corporate governance are implemented as part of a strategy pursued by the government of Moldova, some targeted efforts at increasing productivity in the sector are needed to draw foreign investors and technologies into the economy. At the same times policies should aim to stimulate the creation of new businesses by providing opportunities for small and medium size machinery producers. This is the definite way to improve the quality of products, launch new products, and increase exports.</p>



Lessons from machine building sector transformation in Belarus, Moldova, and Ukraine

Sierż Naurodski

Kiev, June 23, 2016