Programme to Support the Green Modernisation of the Ukrainian Economy

CONCEPT NOTE ON

Green Modernisation of the Ukrainian Economy

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CONTENTS:

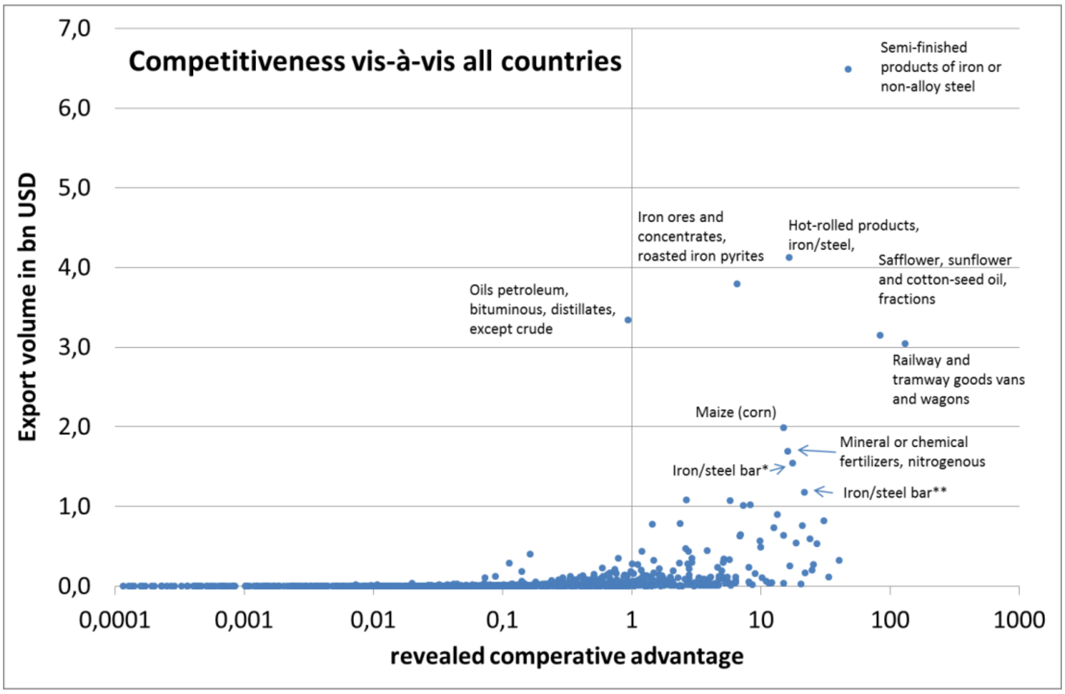
Introduction

Ukraine is in a difficult economic situation due to four main reasons: (1) The macroeconomic stance is characterised by high and rising public debt and a high risk of rising inflation. (2) Many important institutions – such as the legal system and almost all parts of the administration – have been very weak. (3) The current political situation in the east has huge repercussions on the business climate. And (4) finally the economic structure of Ukraine (i.e., its "business model" vis-à-vis the rest of the world) is outdated, leading to a lack of competitiveness. All these factors – that are somewhat interrelated – are responsible for the sluggish economic growth that has characterised Ukraine's economy since 2008.

The (geo-) political problem which is probably the most important barrier to growth in the short-term cannot be solved by Ukraine alone. There are numerous proposals, technical assistance projects and domestic reform projects on the poor institutions (corruption, rule of law, …) and the macroeconomic situation (see for example the 'Economic Reform Agenda for Ukraine' by the Deutsche Beratergruppe in der Ukraine (2014)). In this paper we will thus focus on the current 'business model' of the Ukrainian economy, the challenges it faces and line out how a 'modernisation' strategy could look like.

1. Current 'business model' of the Ukrainian economy

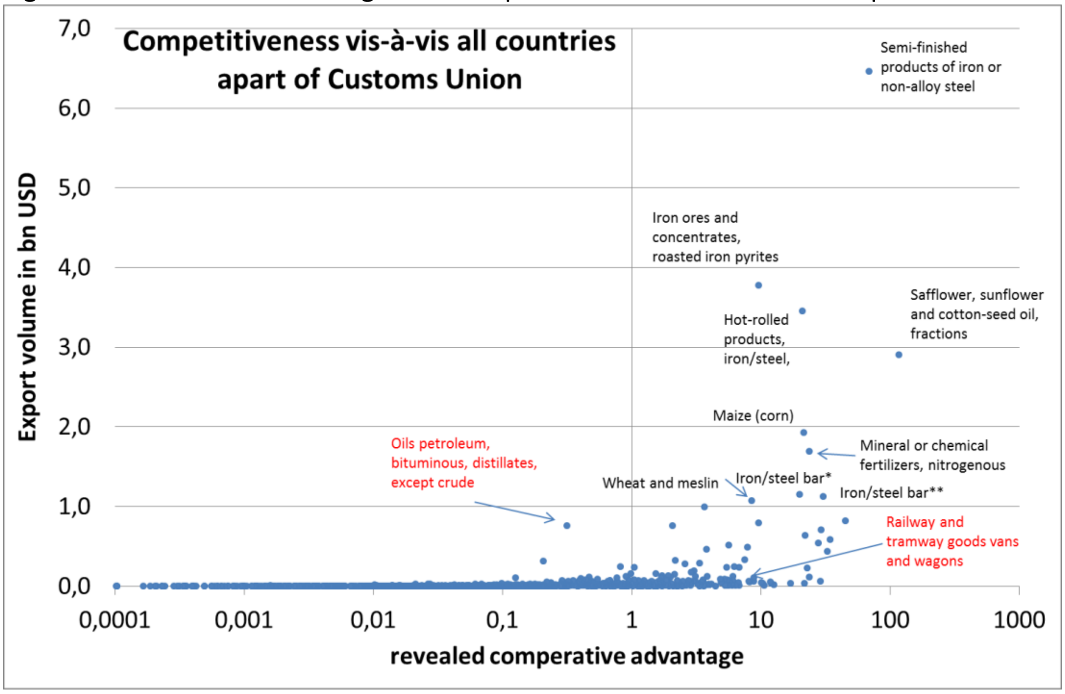
Ukraine is a very open economy with a lot of value added being exported to the EU, Russia and the rest of the world. This implies that certain sectors in Ukraine are competitive on the world market. These are in particular two main categories: 'food' and 'ores and metal'. For both, Ukraine reveals a comparative advantage, i.e., it exports more of those products than one would expect from a country with similar total exports (see Figure 1). The good news is that Ukraine is not a commodity-exporter, but generates some value added domestically by, for example, processing agricultural products into food. On the other hand, exports from sectors with high value added such as 'Machinery and Transport Equipment' are underrepresented in Ukraine's export basket.



Source: Own calculation based on UN Comtrade

Current exports might not fully reveal in which sectors Ukraine is (or is not) competitive. A large share of the exports (30%) go into the Eurasian Customs Union. And these exports might not be due to the good quality or low price of the products, but because of legacy trade-links. So if these exports are stopped, it is unclear whether Ukraine might redirect those products to other markets. In fact, there are two main product categories that are affected: 'railway wagons' and 'refinery products' (see Figure 3).

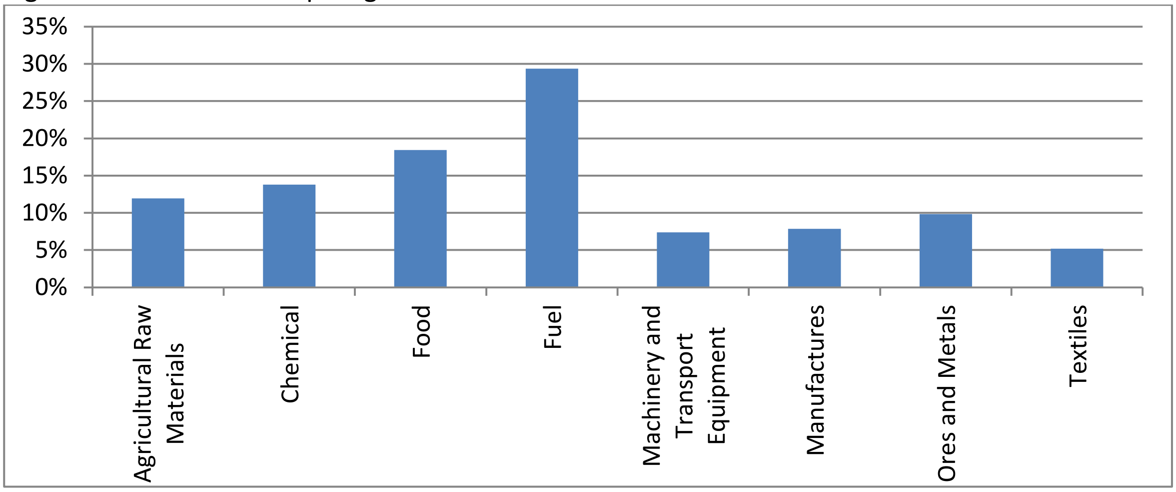
Figure 3: Sub-sectors according to their export volume and revealed comparative advantage



Source: Own calculation based on UN Comtrade

In the past years, the demand for Ukraine's main export goods developed differently. While global food exports grew by almost 20%, metal exports grew by less than 10% (see Figure 4). Deeper analysis is required to spot, for which subsectors growing markets can be expected (e.g., renewables technology) and which subsectors of the same main sectorial category might be declining (e.g., printing machines).

Figure 4: Global sector export growth rate 2008-2012



Source: wits.worldbank.org

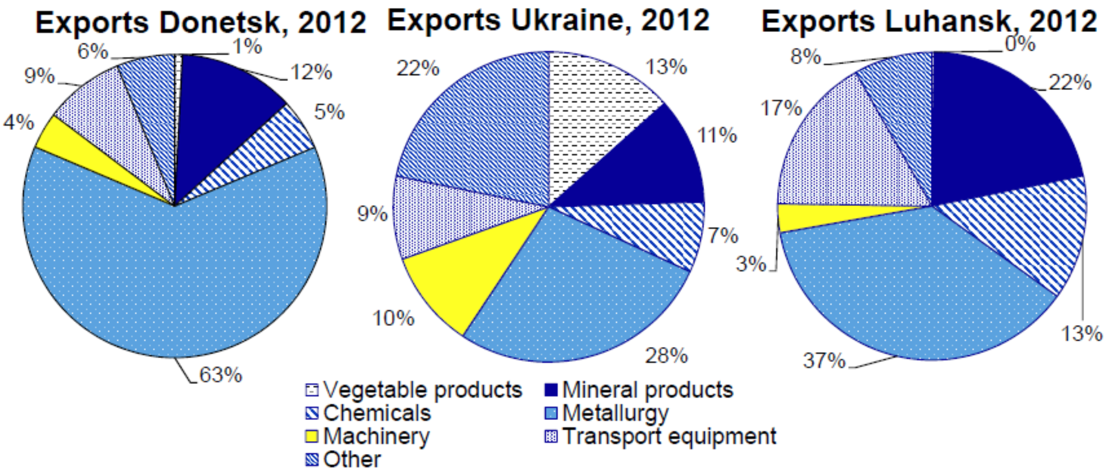
Finally, it is important to analyse which sectors promise high domestic value added. Currently, Ukraine exports a number of goods where value added is comparatively low for two reasons: First, Ukraine exports goods whose value is largely enshrined in the import of the corresponding intermediary goods. For example, Ukraine imports natural gas to produce fertilisers. But as natural gas is the main cost in fertiliser production, the value added in Ukraine is – despite the substantial export volumes - rather low. And second, Ukraine sells rather homogenous goods (non-differentiated) that fact stiff global competition. Therefore the export price is not much higher than the cost of the inputs. For example, steel is a global commodity that only earns money in periods of global scarcity. In the current downturn, steel over-production translated in falling steel-prices, making many existing steel-mills unprofitable.

So deeper analysis is required to identify the sectors where Ukraine might be able to generate relatively higher value added, due to its specific endowment with production factors (e.g., specific skilled labour) and other conditions (e.g., access to the EU market).

Excurse: Regional view

Regions are quite different in their export structure. Metallurgy makes up for 63% of exports of Donetsk, more than twice the share it has in Ukraine's overall exports (see Figure 5).

Figure 5: Export structure of Donetsk and Luhansk compared to entire Ukraine



Source: Ukrstat

So a modernisation strategy needs to take into account regional specificities.

2. Challenges

Ukraine's export industry faces three major challenges: (1) it is resource intensive, while resource prices increase. (2) A large share of exports were targeted to the Russian market (30 percent of non-agricultural exports), while the Russian market might remain largely closed for some time and (3) Ukraine's export industry has been active mainly in sectors and segments characterised by low value added, while new competitors with lower cost emerged in these segments (e.g., in Asia for low-to-medium quality machinery).

3. Recommendation

In view of the possible loss of market access in Russia, the Ukrainian government has three strategic options: **laissez-faire**, **conservation** or **modernisation**[1]. Should market access restrictions be implemented quickly by the Russian government, some sectors would be hit hard, probably overstretching the adaption capacity (the use of liquidity buffers or working time reductions) of several subsectors. Left to the market, a lot of the intangible capital (organisation structures, human capital) currently present in existing companies will vanish if these are closed. So a pure market laissez-faire strategy would risk the loss of economic substance and potential, and is thus not advisable. But a state-centred conservation strategy is also not a sensible option, since it would not address the sector's competitiveness problem. Instead, government should develop a modernisation strategy as an intelligent combination of market forces and government intervention. In such a way, government can contribute to the ability of the sector to redirect and diversify exports by facilitating investments, optimising public policy and setting incentives for firms to increase their competitiveness.

3.1. Long-term measures

To become an engine for growth, Ukraine's export industry would need to develop a new 'business model'. Ukraine might have to orient towards new segments (e.g., high quality machinery) or even new sectors (e.g., exporting services instead of chemicals). Given that the incumbent industries are particularly resource intensive and polluting, such a transformation will also imply a greening of Ukraine's economy. Such a 'green modernisation' involves steps targeted to individual sectors as identified in the following matrix:

	Sector/segment is currently small		Sector/segment is currently large	
	Market for these products will shrink	Market for these products will grow	Market for these products will shrink	Market for these products will grow
Ukraine has a competitive advantage		F1	P	F1
Ukraine can develop a competitive advantage		F2	P	F2
Ukraine unlikely to develop a competitive advantage			P	P

[1] This section largely draws on David Saha, Ricardo Giucci, Dmytro Naumenko PP/02/2014 "Ukrainian Machine Building: Strategic options and short term measures in view of trade disruptions with Russia".

(1) Government should deploy measures that help to improve the competitiveness of sectors where (i) Ukraine can have a competitive advantage, (2) the demand is expected to grow and (3) Ukraine can contribute to the value added (F-sectors). Those measures should be 'horizontal'. That is, they should not be exclusively targeted on specific sectors or companies. So instead of 'vertical' measures such as targeted tax breaks or creating special economic zones; Ukraine should invest in infrastructure, improving administrative processes or education. To give an example, if IT-services are to be identified as being part of F, than Ukraine might focus using its scarce public funds and political capital on building-up high-speed internet infrastructure and improving university education of IT engineers.

(2) Support the transition away from those incumbent sectors that are shrinking, contributing too little value added or where Ukraine is not competitive (P-sectors). This might involve programmes for re-educating the workforce in these sectors and targeted social measures. One example, is the coal industry of Ukraine. The coal it produces is not competitive on the world market and it has been subsidised for a long time. Helping coal miners in uncompetitive mines to find new occupations, for example, in renaturalisation projects was successfully tested in East Germany and elsewhere. More importantly, education programmes, especially for the younger generation allows coal miners to qualify for jobs in more promising sectors.

Obviously, incumbent industry has a strong voice, given the political and financial capital of the owners of the corresponding trusts as well as due to the concerns of their large workforce. The incumbents will argue that the sectors can regain competitiveness with below-average environmental standards and subsidised resource prices. But, this is unlikely sustainable strategy, locking-in Ukraine of low value added and high resource use and pollution.

3.2. Short-term measures

Since such a strategy takes time to develop and implement, short run measures are needed in order to protect the economic substance and potential of the sector. Measures should be carefully designed in order not to counteract the competitiveness drive of the modernisation strategy. We identify government-assisted short term work schemes, public procurement schemes in selected goods useful for public infrastructure and an opening of the Ukrainian economy for FDI and joint ventures as short-run measures that should be prepared for the eventuality of massive restrictions to market access in Russia.

The temporary nature of measures should thus firmly be enshrined. Competitive pressures should continue to work on the firms and not the entire burden of the shock should be relieved. Market interventions should be minimised. Three classes of measures should therefore be considered and prepared by the Ukrainian government:

3.2.1. Government-supported short-term work schemes

The instrument of government support to short-term work schemes has been highly popular and successful in the economic crisis that started in 2008. The principle of this measure is that employment relations – and thus the economic substance of firms – are preserved through a concerted effort of employers, employees and government. Workers work significantly less than usual – or not at all – but still receive an, albeit reduced, salary. Firms essentially pay a premium to retain the workers (thus ensuring that only such employment relationships that are likely to become productive again are retained) and the government covers part of the difference between the full salary and the payment of employers. The application of this scheme, with an extended duration, by Germany in 2009 is widely renowned as immensely helpful in overcoming the crisis and preserving industrial structure until the effects of the crisis calmed down.

Ukraine has also used a short-term work assistance scheme, the "partial unemployment benefit" in 2008/2009, with a maximum duration of 180 days for assistance payments. This instrument should be prepared for use again for the possibility of a shock through restrictions on market access in Russia. The instrument has the potential to effectively aid firms in preserving their structure through a period of low capacity utilisation and constitutes a relatively minor market intervention as it should not have an effect on product demand or prices.

In light of the experiences from the use in previous years, the instrument should be updated to improve usability, reduce the potential for abuse of the instrument and streamline administrative procedures. Also, it should be considered to increase the maximum duration over the present 180 days to allow for longer transition phases. However, this should be done under consideration of the financial capability of Ukraine.

3.2.2.Public procurement schemes

Using public procurement to artificially increase demand for some classes of goods constitutes a larger market intervention than short-term work schemes. Such measures may be warranted if short-term work alone will not prevent a large-scale destruction of economic structure and potential in an industry following a shock. This is particularly realistic when an industry does not have a diversified export structure and the domestic market must play a key role in keeping the industry afloat.

Public procurement schemes serve a double goal: Improve the capacity or efficiency of the public body that receives the good and stabilise demand for the supplier of the good. Only where a real need for the goods exists should procurement schemes be set up, as regular tenders with a clear competitive element. This is to ensure an efficient use of public funds and competitive incentives for companies.

A thorough screening of public investment needs and a matching with potentially challenged Ukrainian industries should be undertaken by the Ministry of Industry in order to design possible procurement schemes. These possibilities then would need to be discussed with potential financiers, most likely international development banks. Two examples of possible procurement schemes are:

1. Modernising the wagon fleet of the Ukrainian state railway system. Ukrzaliznytsia's wagon fleet is outdated and in clear need of modernisation, but a fleet renewal programme has not been undertaken due to lack of funds.

2. Renewing energy turbines, generators and related equipment in the power plants of Ukraine in order to improve energy production efficiency. In the electrical equipment and machinery and equipment industries, many companies are producing such equipment. No compromises should be made on the quality of the procured products as efficient energy generation will be a key factor for the future national competitiveness of Ukraine.

3.2.3.Increasing openness to FDI and joint ventures

Investments in capital and technology will be one key ingredient of improving the competitiveness of the machine building sector of Ukraine. As the financial market situation in Ukraine is highly problematic, FDI attraction will play a vital role in ensuring that the required investments are made. Also, foreign investments and joint ventures between Ukrainian and international companies in particular will facilitate an influx of new know-how and methods, both in technical and management aspects, that should further enhance competitiveness. Once the political and military turmoil in Eastern Ukraine calms down, interest of international investors in Ukraine will return. Policy should seize this opportunity by promoting FDI and joint ventures. The cases of the Czech Republic and Slovakia, which both opened their economies to foreign capital before EU accession, illustrate that openness to international investors can also be a key component of a modernisation strategy.

The process of increasing openness to FDI and joint ventures should also include **a revision of the list of companies of "strategic importance"** to Ukraine. This status prohibits the financial involvement of foreign investors in companies of "strategic importance". A revision should ensure that all other measures to protect vital interests (such as legal safeguarding of intellectual property) are exhausted before employing this blunt instrument. An excessively broad definition of "strategic interests" should be avoided in order to prevent significantly negative economic effects to be suffered for uncertain political benefits.