



German Economic Team Moldova

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**Assessing the Potentials of a Cluster-Oriented
Approach to Attract Investment Projects from the
Automotive Supply Industry to Moldova**

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About the German Economic Team Moldova

The German Economic Team Moldova (GET Moldova) advises the Moldovan government and other Moldovan state authorities such as the National Bank on a wide range of economic policy issues. Our analytical work is presented and discussed during regular meetings with high-level decision makers. GET Moldova is financed by the German Federal Ministry of Economics and Energy. Our publications are publicly available at our website (www.get-moldova.de).

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Executive Summary

The automotive industry plays an important role for the economic and investment attraction activity in many countries in Central and Eastern European countries. The findings from the analysis of investment projects by German automotive suppliers in selected countries indicate significant differences in the investment patterns within the region. Those differences relate amongst others to the role of different tier levels, product groups and activities.

The outlook regarding future investment potentials of the automotive supply industry remains positive. The internationalization process of the industry has not yet come to end. In particular medium-sized tier 2 and tier 3 suppliers will have to intensify their efforts to strengthen their international footprint. The competitive position of Eastern and Southeastern Europe is likely to improve vis-à-vis the more mature Central European automotive locations where investors increasingly face difficulties to find qualified employees and to cope with rising salaries.

The findings on the investment dynamics and competitive position give rise to the conclusion that there are promising potentials to attract investment from the automotive supply industry to Moldova.

In order to tap the full investment potential, the scope of target groups should be refined and widened and pro-active investment promotion efforts should be intensified. The **target group definition** should focus on segments that complement existing investment projects and contribute towards the development of related value chains (e.g. tier 2 and tier 3 suppliers of metal, plastics and mechatronic parts and components, trailer assembly).

With respect to **promotion instruments and activities**, the key focus should remain on pro-active lead generation campaigns – in particular in the context of relevant trade fairs. In addition to trade fair visits, congresses attracting automotive suppliers should form part of the marketing mix. The scope of intermediary marketing should be extended, focusing on regional development agencies and cluster organisations with a focus on the automotive supply industry in Germany. Finally, lead generation campaigns should be complemented by image building activities (in particular PR and social media).

Considering the preconditions in Moldova as well as international experience, efforts to foster the development of the automotive supply industry should not be limited to refining and intensifying investment promotion efforts but should also encompass **industrial development measures based on a cluster-oriented approach**. There are promising synergies between the two policy areas.

Against this background, the automotive supply industry should be considered as a **pilot cluster** to test the approach in Moldova. Key focus should be on skills and infrastructure development measures. A key priority should be the development of a target group oriented offer of **production space for rent**. Furthermore, the portfolio of cluster services and activities should comprise information, business development and internationalisation platforms, innovation support and cluster marketing. To improve the environment for cluster development, it should be considered to introduce financial support programmes aiming at innovative SMEs and to realign the investment incentives in Moldova.

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1 Introduction

International experience shows that investment promotion can make a significant contribution towards economic transformation when the efforts are carefully targeted and the projects are well integrated into domestic and regional value chains. Moldova has been successful in attracting major foreign investment projects in the automotive supply industry, in particular in labour-intensive areas – such as wiring harnesses. MIEPO (Moldova Investment and Export Promotion Organization) is now interested in reviewing and updating the target group selection and scope of investment promotion instruments and activities.

This review coincides with efforts of the Ministry of Economy to leverage clusters for industrial development. With assistance from the German Economic Team Moldova, a roadmap has been drafted proposing to introduce a cluster-oriented approach in different steps and phases, including amongst others testing the approach in selected policy areas and pilot clusters.

Against this background, this paper aims at identifying synergies between investment promotion and cluster development measures. Based on an analysis of regional investment patterns in the automotive supply industry, a refinement of the target group definition and promotion activities is proposed. Key emphasis is on target groups which contribute towards an extension and upgrading of the existing value chains. Furthermore, complementary recommendations to support a cluster-oriented development process are derived.

The paper is structured as follows: An analysis of investment patterns in the automotive supply industry (chapter 2) and an outlook with respect to future investment potentials (chapter 3) form the starting point. Considering research on location decision criteria in the automotive supply industry (chapter 4) as well as the findings from interviews with industry and investment promotion experts, the competitive position of Moldova is assessed in chapter 5. Taking into account the investment potentials as well as strengths and weaknesses of Moldova as an automotive investment location, recommendations are derived in chapter 6. They address both investment promotion as well as cluster development measures aiming at generating synergies between both areas.

2 Investment patterns and dynamics in the automotive industry

The automotive industry exhibits very strong investment dynamics at the international scale. According to the most recent FDI Report by FDI Intelligence¹, in 2015, capital investment by automotive OEMs and suppliers amounted to US\$ 27.5 billion and US\$ 22.9 billion, respectively, which accounts in total for about 7% of global foreign direct investment recorded. Close to 500 greenfield projects by automotive suppliers have been identified by FDI Intelligence in that year.

The automotive industry plays an important role in CEE's and SEE's economic and investment attraction activity. Thanks to low labour costs, the educated workforce, geographical proximity to Western European markets, government support and infrastructure improvements, the region has become an attractive destination for investment by global car manufacturers and suppliers.

While investment announcements concerning big OEM factories are in the focus of the attention, much of the regions automotive success stems from automotive suppliers that have built a formidable network across the region. This network was initially fostered in particular by German automotive suppliers.

¹ FDI Intelligence: FDI Report 2016 – Global greenfield investment trends, 2016

Nowadays, it not only employs vastly more people than full car manufacturing, but also accounts for a considerable share of the region's automotive related exports.

In the 1990s, the globalization of OEMs combined with follow-sourcing and the trend towards modularization were important drivers for a consolidation and internationalisation process of German suppliers, in particular at the tier 1 level which comprises companies that are direct suppliers to OEMs. Only large suppliers with an international network of production sites were able to develop the necessary R&D capacities and to withstand the increasing cost-pressure by OEMs.

As part of the process, German suppliers started to globalize their locations. In international comparison, in CEE, the number of sites of German suppliers increased at the highest rate worldwide (fivefold) between 1988 and 2004. Germany was the Western European country that relocated the supply industry in the most radical way to CEE as well as later also increasingly to SEE.

2.1 Important investment locations of the automotive supply industry in the region

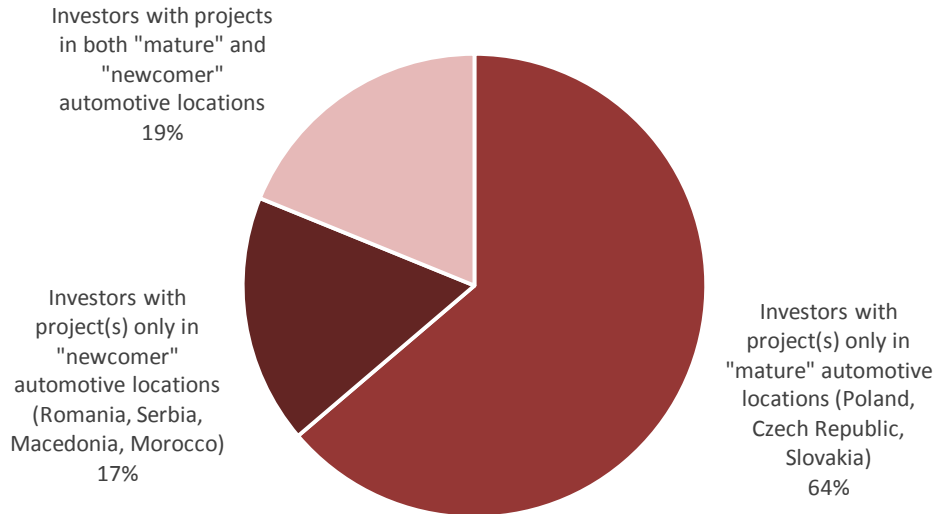
In the 1990s, after "pioneering" investments – amongst others by VW, Fiat, Renault, GM and Daewoo – Poland, Hungary, the Czech Republic and later also Slovakia were the most important investment destinations for automotive suppliers. With the modernization of Dacia which attracted various suppliers, Romania also became a major investment location. Recently, partly due to increasing costs in Central Europe, the geographical focus has widened towards the East and South. Countries, such as Ukraine, Serbia, Macedonia and Morocco, are increasingly successful in attracting automotive suppliers.

As part of the research for this policy paper, investment projects carried out by German automotive suppliers in selected countries in CEE, SEE and North Africa after 1990 have been identified using a spectrum of different sources.² The results from the analysis of the investment destinations of the identified projects confirm the investment trends outlined above. The majority (64%) of the German automotive suppliers identified invested in the period under review only in the more "mature" CEE automotive locations Poland, Czech Republic and Slovakia. This high proportion also reflects the earlier start of investment activities in those countries.

Approximately 20% of the suppliers invested both in the "mature" locations as well as in the "newcomer" destinations Romania, Serbia, Macedonia and Morocco. Typically, the first investment project was realized in a "mature" location before projects in the "newcomer" destinations were taken on. In a few cases, highly labour-intensive operations (e.g. wire harnesses or textiles) have already been relocated from countries in Central Europe to more cost-competitive locations. In other cases, suppliers have intensified their efforts to optimize the division of work and linkages between their sites in different countries.

² In collaboration with MIEPO (Moldova Investment and Export Promotion Organization), the following countries have been selected: Poland, Czech Republic, Slovakia, Romania, Serbia, Macedonia and Morocco. In total, 120 investment projects with a sufficient base of information have been identified using amongst others the following sources: commercial databases and membership directories of trade associations, publications and online platforms of investment promotion agencies, websites of chambers of commerce and industries, companies' websites and press releases, specialised journals and studies.

Figure 1 German investors in the automotive supply industry since 1990 by investment destination



Source: Own research

German automotive suppliers with projects in both types of investment locations include:

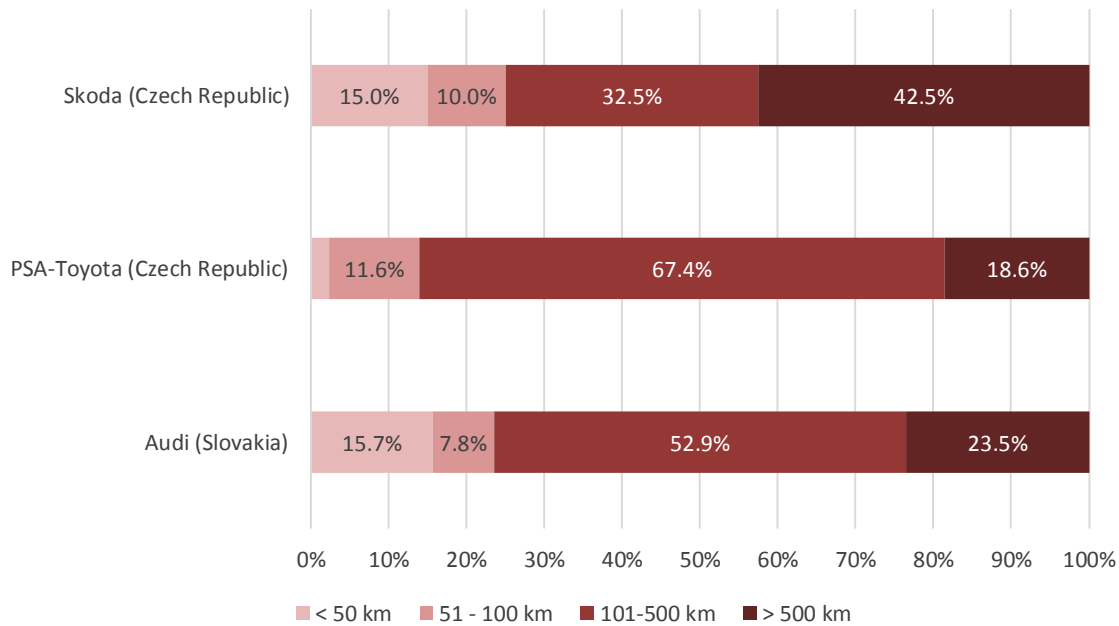
- Aunde
- Bosch
- Continental
- Dräxlmaier
- Eberspächer
- Grammer
- Kirchhoff
- Kostal
- Kromberg & Schubert
- Leoni
- Röchling
- Schaeffler
- Webasto

During the entire period under review, only a minority of 17% of the German suppliers invested only in a “newcomer” location. However, the findings clearly indicate a geographic shift with respect to investment priorities in the course of time. Among the investment projects carried out after 2010, the majority has been realized in “newcomer” countries, with Romania taking the lead as preferred investment location followed by Macedonia.

2.2 Role of proximity to OEMs

Follow-sourcing is considered a key driver for investment decisions by automotive suppliers. The high proportion of supplier locations in the region indicates that the OEMs are exerting some pressure on their main suppliers to locate in their proximity. However, there seems to be quite a bit of flexibility and room to manoeuvre where exactly to locate, depending upon the position within the value chain and the actual product or service supplied.

Figure 2 Distance between supplier sites and selected OEM locations in CEE



Source: Sander van de Rijdt: “Zuliefernetzwerk der Automobilindustrie in Osteuropa”, 2011, own calculations

According to recent research on supplier networks in Eastern Europe³, only a rather small proportion of suppliers is actually operating in close proximity to OEM sites. In the case of selected locations in the Czech Republic and Slovakia, only between 2% and 15% of the identified suppliers had their sites within a distance of less than 50 kilometres of their key customer. On the other end of the spectrum, a much larger share of suppliers had their site in a distance of more than 500 kilometres.

The products manufactured in proximity include amongst others larger interior modules, such as seats and cockpits. The product range shipped over longer distances comprises high-value electronic systems, e.g. navigation, ABS, ESP, sound, anti-theft, lane change and parking assistance systems as well as smaller commodity parts (mostly metal and plastics) and components which can be easily transported, such as seals, hoses and pipes, belts, valves, springs, bearings and brake pads.

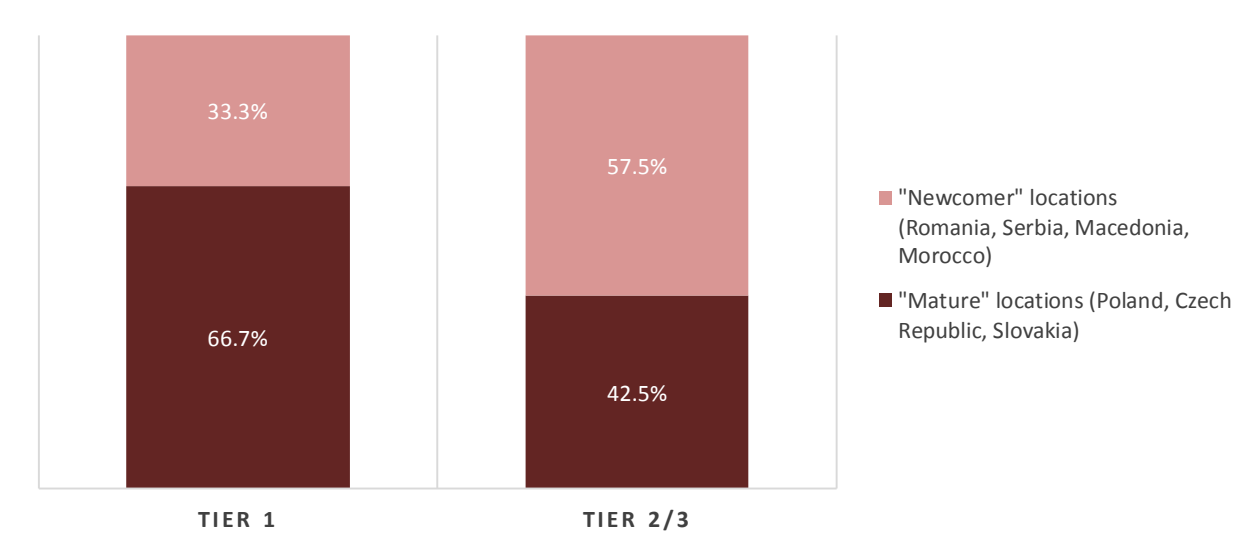
2.3 Investment patterns at different tier levels

The tier 1 level which comprises direct suppliers of OEMs – such as Bosch, Continental and Dräxlmaier – already has a very strong international footprint. Taking the proportion of employees abroad as a proxy for the degree of internationalisation, tier 1 suppliers have a stronger international presence than their customers. On average, the share of employees at foreign locations amounts for leading German suppliers to about 65%. In labour-intensive areas, such as wiring harnesses or interior components, more than 90% can be reached. In comparison, at the OEM level, shares between about 30% and 55% have been recorded. On the other side of the supplier pyramid, the international presence is much lower. The internationalisation process of the still rather fragmented tier 2 and tier 3 level is still at an early stage.

³ Sander van de Rijdt: “Zuliefernetzwerk der Automobilindustrie in Osteuropa”, 2011

Our findings on the investment patterns at the different tier levels indicate that for a country like Moldova, tier 2 and 3 suppliers offer a more promising investment potential than direct suppliers to OEMs. Tier 1 investment tends to concentrate on the “mature” automotive locations which also host the majority of OEM sites in the region. About 70% of the identified projects by German tier 1 suppliers have been carried out in “mature” automotive investment locations.

Figure 3 Investment locations of different tier levels



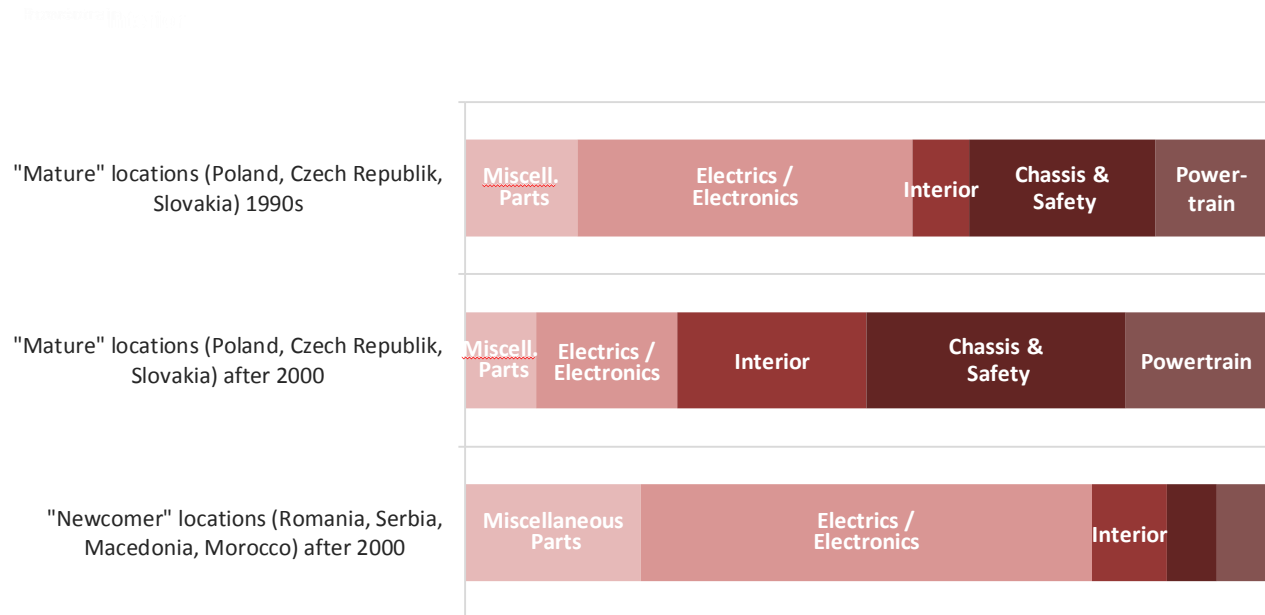
Source: Own research

In comparison, the newcomer locations tend to be much more successful in attracting tier 2 and tier 3 investment projects. Close to 60% of the projects by tier 2 and tier 3 suppliers have been realised in the countries Romania, Morocco, Serbia and Macedonia. The pressure to manufacture in close proximity to the customers seems to be lower at the tier 2 and tier 3 level allowing more flexibility in the site selection process.

2.4 Investment trends by product groups

Investment patterns in “mature” and “newcomer” locations differ significantly with respect to product groups and activities as illustrated in figure 4 below. In “newcomer” locations, the majority of investors are active in the field of “Electrics / Electronics”. More than 50% of projects have been carried by suppliers in that labour-intensive area. Wiring harnesses and switches are the main products. Investment projects in the product group “Interior” which accounts for 10% of the projects in “newcomer” locations are also dominated by labour-intensive operations, e.g. manufacturing seat covers and elements. Furthermore, a number of investors is manufacturing a wide range of commodity parts and components. Those are subsumed under the category “Miscellaneous parts”. The majority of those investors has a focus on metal and plastics processing. Typical products include clamps and hoses.

Figure 4 Product group / activity focus of investors at different locations



Source: Own research

If the focus is on investment projects after the year 2000, the pattern in the “mature” automotive locations differs significantly. This applies for the distribution of investment projects between the different product groups, but also for the type of activities and operations within the different groups. In comparison, projects in the product group “Electrics/Electronic” are of much less importance (below 20%), while there is more emphasis on the areas “Interior”, “Chassis” and “Powertrain”. Product groups which tend to rely upon more capital- and technology-intensive operations – such as “Chassis” and “Powertrain” are of higher relevance.

Similar differences appear also within the product groups. Products with a higher added value and lower labour-intensity play a more important role in the “mature” investment locations, e.g. control or entertainment modules and systems in the area of “Electrics/Electronics”. Those operations are typically located at sites with a (highly) qualified skills base. Furthermore, components that are bulky, expensive to transport or have to arrive at the OEM site just-in-time or just-in-sequence – such as cockpits and seat modules in the product group “Interior” – are much more strongly represented in the “mature” automotive locations, due to the high concentration of OEM sites.

However, it should be noted that there has been an upgrading process in the investment pattern in the “mature” location in the course of time. The investment pattern during the 1990s comes much closer to the structural characteristics observed in the “newcomer” locations after 2000 – with some minor deviations due to the stronger presence of OEMs which tends to attract a larger network of suppliers in areas – such as “Chassis” and “Powertrain”. Actually, in various cases, projects have been carried out by the same companies in the 1990s in CEE locations and after 2000 in the “newcomer” destinations, e.g. by Aunde (“Interior”) or Dräxlmaier, Leoni, Kromberg & Schubert and Kostal (“Electrics/Electronics”).

3 Outlook: future investment potentials of the automotive supply industry

The outlook regarding investment potentials of the (German) automotive supply industry remains positive – from the perspective of CEE and SEE countries. The internationalisation process of the industry has not yet come to an end. In particular medium-sized tier 2/3 suppliers – e.g. in the areas of plastics and metal processing (injection moulding, casting, forging, stamping, machining, surface treatment, assembly of components) will have to intensify their efforts to strengthen their international footprint.

Automotive suppliers surveyed by Boston Consulting and Fraunhofer IPA⁴ expect to increase the number of their global manufacturing sites by an average of 9% over the next five years. Nearly 60% of the surveyed suppliers' total production sites – including many core manufacturing operations for certain products – are expected to be located in emerging markets some five years from now, compared with only 45% five years ago. CEE and SEE will benefit from this trend. The number of production sites in the region is forecasted to increase by 21% in five years.

Looking ahead, the pressure to cut costs and to open more factories in emerging markets to be closer to customers' sites will be major drivers for manufacturing location decisions by automotive suppliers. At the same time suppliers will have to cope with growing market volatility across the world as well as major technological changes.

The past years have been characterized by a positive development of the automotive supply industry. Thanks to the industry's recovery from the global financial crisis and successful cost-cutting initiatives, the profitability has improved. According to findings of the Global Automotive Supplier Study 2016⁵, in 2015, the industry's profit margins were at an all-time high of about 7.5 %. However, the pressure on costs is likely to increase. Some of the largest OEMs have adopted massive cost-cutting programmes. Suppliers will have to bear some 55 to 65% of these cutbacks.

In this constellation, CEE and SEE countries remain attractive investment locations offering a solution to improve cost-competitiveness and at the same time offering access to major automotive customers and markets. The competitive position of Eastern and Southeastern Europe is likely to improve vis-à-vis the more mature Central European automotive locations where investors increasingly face difficulties to find qualified employees and to cope with raising salaries. At the same time, the competitive pressure within Eastern and Southeastern Europe is likely to increase as more and more countries try to attract automotive suppliers. Also, locations in North Africa are intensifying their investment promotion efforts focusing on labour-intensive operations. One major disadvantage of North African locations in comparison to CEE and SEE relates to logistics with the exception of Morocco which offers good access to European OEM sites.

According to the results of the expert interviews carried out, investment patterns in Eastern and Southeastern Europe are going to be affected to a comparatively minor extent by technological changes – such as the rise of electric vehicles or the optimization for cars for connectivity and digitalization. These trends will definitely alter business models and production processes as well as supplier relationships. According to the interviews, investments in Eastern and Southeastern Europe, however, are likely to focus also in the future on products for vehicles with conventional drives. Potentials related to connectivity are rather seen based on outsourcing models. Investment projects by service providers, e.g. software developers setting up subsidiaries, are not expected in the short- and medium-term.

⁴ Boston Consulting Group / Fraunhofer Institute for Manufacturing Engineering and Automation (IPA): "The Proximity Paradox – Balancing Auto Suppliers' Manufacturing Networks", 2015)

⁵ Roland Berger / Lazard: "Global Automotive Supplier Study 2016", 2016

4 Location decision criteria of automotive suppliers

Obviously, the relevance of different location criteria varies between investment projects depending upon the motive and individual company context. However, there are some common key drivers for investment decisions in the automotive supply industry allowing a number of general conclusions regarding important location decision criteria and, correspondingly, regarding the competitive position of locations aiming at attracting investment from the industry.

As already pointed out, in most of the cases, investment decisions by automotive suppliers are driven by cost-pressure, follow-sourcing and the shift in global demand for cars and vehicles. Against this background, most location decisions rest mainly on factors such as operating costs, access to customers and markets, logistics and infrastructure as well as the general business and investment climate. Economies of scale are a cross-cutting factor of major importance in particular when various customers and markets are supposed to be served from a location.

According to a survey by Deloitte and Fraunhofer IPA⁶, operating costs are the most important factor in investment decisions by automotive suppliers. Competitive pressure relates to a wide scope of costs, including labour, logistics, energy and sourcing costs.

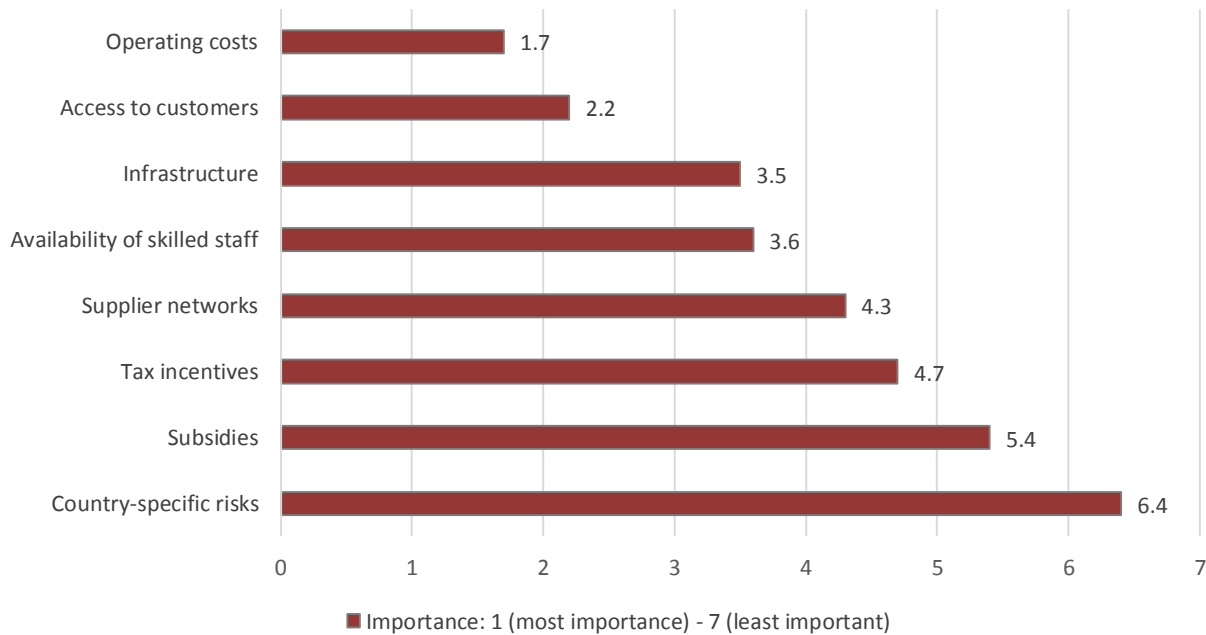
The second most important factor is access to customers followed by infrastructure. Access to customers is mainly determined by the geographical proximity as well as the quality of the traffic and logistical infrastructure. As already mentioned, there is reason to believe, that in many cases, the localization requirements of OEMs and major customers are not as rigid as they are perceived to be. Only a small proportion of parts and assemblies really needs to be delivered on a just-in-time or just-in-sequence basis. Suppliers could make better use of "around the corner" locations by manufacturing labor-intensive components in lower-cost countries that are close to assembly plants in higher-cost countries. This way, they can still remain responsive to customer needs.

Infrastructure, which takes the third position in this survey, relates not only to the traffic and logistical infrastructure but also comprises utilities and the ICT infrastructure and in particular needs-oriented sites and premises. In the automotive supply industry, production facilities for rent are often a decisive factor. Many suppliers do not want or are not able to invest in buildings and, at the same time, have to start operations as soon as possible responding to the demand from their customers. Against this background, many locations have developed dedicated supplier parks with target-group oriented facilities.

The availability of skilled staff represents another major location factor with increasing importance as in many automotive locations – e.g. in Central Europe – automotive suppliers face difficulties to find adequately qualified employees. Shortages often lead to rising labour costs. Many regions have initiated training and qualification schemes as part of cluster programmes to strengthen the competitiveness of the companies and locations. Developing supplier networks which is also mentioned by the respondents is another factor that is often addressed by cluster initiatives.

⁶ Deloitte and Fraunhofer Institute for Manufacturing Engineering and Automation (IPA): "Umbruch in der Automobilzulieferindustrie: Standortoptimierung und Sourcing", 2014

Figure 5 Rating of location criteria by automotive suppliers



Source: Deloitte and Fraunhofer IPA: “Umbruch in der Automobilzulieferindustrie: Standortoptimierung und Sourcing“, 2014

According to the findings, tax incentives and investment grants are of minor importance in comparison and do not play a decisive role in the investment decision. Financial support programmes provide an additional incentive for an investment. However, in most of the cases they cannot compensate for major deficiencies in other areas.

Finally, the average respondent attaches little importance to country-specific risks. Those relate amongst others to the political stability, relevant legislation and regulation (e.g. labour or investment laws) and rule of law. It should be noted, that the importance of this factor varies greatly depending upon the countries under consideration in investment decision processes. There are cases, in which this factor has much more weight than is indicated by the average value in the assessment.

5 Competitive position of Moldova as an investment location for automotive suppliers

Taking into account the location decision criteria, Moldova, in principle, is in a good position to benefit from the investment dynamics in the automotive supply industry. Also the track record shows that Moldova has the potential to attract investment projects from automotive suppliers with a significant development impact. In particular in the fields of wires and wire harnesses (e.g. Dräxlmaier, Gebauer & Griller, Sumitomo, Fujikura), seat covers and further textile-related products (e.g. Lear, Confezione Andrea), major projects were realized by foreign investors with considerable effects on employment creation and export promotion/diversification. In this context, the target-group specific investment promotion competence has been highlighted as a major advantage in the interviews.

Building upon those investments, a range of cooperation-based initiatives have been initiated – in particular by the management of the Free Economic Zone of Balti – focusing on skills and supplier development. Amongst others, vocational training courses and a university programme (automotive engineering) have been introduced. Further training and qualification measures are planned in collaboration with the Technical University Illmenau and the Berufsakademie Eisenach.

As confirmed by the interviews, Moldova's key strengths as an investment location for the automotive supply industry relate to cost-advantages, particularly the low labour costs which are highly attractive for labour-intensive operations. Furthermore, investors benefit from the proximity to major automotive locations and OEM sites in CEE and Western European countries. Moldova's industrial traditions in related areas, such as electronics or metal processing, represent another argument of relevance.

However, planning and designing investment promotion and industrial development measures, also a number of weaknesses and challenges have to be considered that limit the investment potentials that can be tapped. Infrastructure has been pointed out as a major disadvantage by interview partners. This relates not only to the road infrastructure which still represents a bottleneck for investment projects by manufacturers of highly transport-sensitive products. Above all, the lack of production space for rent is a major disadvantage in comparison to competing locations. According to the findings from the interviews, a number of interested suppliers – especially companies listed on the stock exchange – opted at the end for other locations as Moldova could not fulfil their needs in this respect.

Despite of various initiatives in the recent past aiming at upgrading the supplier and skills base, investment promotion efforts cannot build upon a differentiation from competing locations in those areas yet. The development of supplier networks is still at a rather early stage and a number of gaps in relevant value chains have been mentioned in the interviews, e.g. with respect to moulds and tools, coating and further competences in metal processing. From the point of view of the interview partners, also further skills development measures would be needed in order to widen the scope of investment promotion and industrial development measures (e.g. in metal processing or embedded software development).

Depending upon the specific investment location, investors can benefit from tax-based incentives, e.g. tax relief in Free Economic Zones. However, a number of interview partners has also pointed out that the majority of competitors can offer more attractive incentives to automotive suppliers. As shown in table 1, all countries under consideration offer both tax relief as well as some type of investment or employment grant for investors in the manufacturing sector. Some of the locations – amongst others Romania and Serbia – promote themselves with very substantial support programmes, e.g. with grants up to 50% of the eligible capital expenditure. However, it should be noted the schemes are typically based on quite specific eligibility criteria, e.g. offering only support to greenfield projects or relocations from outside the European Union. Furthermore, in many cases, applicants do not receive the full amount of financial support specified in a given incentive scheme, as the funds that are budgeted for subsidy schemes are usually finite.

As already mentioned, incentives usually are not a decisive factor in investment decisions. However, they play an important psychological role communicating an interest of a country in investments and in developing a specific industry. In this context, a lack of understanding of investors' needs has been mentioned in a number of interviews as another challenge.

Finally, the general investment climate (e.g. labour legislation) and image have been highlighted as challenges for investment promotion efforts. The bank fraud scandal has severely damaged Moldova's reputation as a business and investment location hampering investment promotion efforts.

The findings on the investment dynamics and competitive position give rise to the conclusion that there are promising potentials to attract further investment from the automotive supply industry to Moldova. The country is well-positioned with respect to the most important location criteria, in particular the operating costs. Moldova's weaknesses mainly relate to the factors which are in comparison less important in investment decisions, e.g. supplier networks. One exception is the lack of production space, which significantly limits the investment potentials that can be tapped.

Table 1 Overview of incentive schemes for manufacturing investments in selected countries

Country	Tax relief	Grants	Special features/schemes
Poland	<ul style="list-style-type: none"> • Exemption from income/corporate tax up to 70% of capital expenditure in special economic zones • Exemption from property tax with location-specific conditions 	<ul style="list-style-type: none"> • Investment grant up to 7.5% of eligible expenditure • Employment grant up to 3,500 € per new job 	<ul style="list-style-type: none"> • Special economic zones • Special conditions for SMEs • Special conditions for R&D projects
Czech Republic	<ul style="list-style-type: none"> • Exemption from income/corporate tax for up to 10 years • Exemption from property tax for up to 5 years in industrial zones 	<ul style="list-style-type: none"> • Investment grant up to 10% of eligible expenditure • Employment grant up to 11,000 € per new job 	<ul style="list-style-type: none"> • Special conditions for R&D projects • Training support programmes
Slovakia	<ul style="list-style-type: none"> • Exemption from income/corporate tax up to 35% of capital expenditure 	<ul style="list-style-type: none"> • Investment grant up to 35% of eligible expenditure • Employment grant up to 30,000 € per new job 	
Romania	<ul style="list-style-type: none"> • Reduced income/corporate tax rate in free zones • Exemptions from VAT in free zones 	<ul style="list-style-type: none"> • Investment grant up to 50% of eligible expenditure • Employment grant up to 50% of 2 year employment costs 	<ul style="list-style-type: none"> • Free zones • Special conditions for R&D projects
Serbia	<ul style="list-style-type: none"> • Exemption from income/corporate tax for up to 10 years • Refund of salary tax for new employees for up to 3 years 	<ul style="list-style-type: none"> • Investment grant up to 50% of eligible expenditure • Employment grant up to 7,000 € per new job 	<ul style="list-style-type: none"> • Special conditions for SMEs
Macedonia	<ul style="list-style-type: none"> • Exemption from income/corporate tax for up to 10 years in technological industrial development zones • Exemption from personal income tax, VAT and excise tax (in zones) 	<ul style="list-style-type: none"> • Subsidy for construction cost up to 500,000 € in technological industrial development zones 	<ul style="list-style-type: none"> • Technological industrial development zones • Concessionary land prices
Morocco	<ul style="list-style-type: none"> • Exemption from VAT for 36 months for equipment, materials and tools 	<ul style="list-style-type: none"> • Investment grant up to 20% of eligible expenditure • Land/building acquisition grant up to 20% of eligible expenditure • Grant for external infrastructure up to 5% of eligible expenditure 	<ul style="list-style-type: none"> • Reduced leasing/rental rates in industrial estates • Training support programmes

Source: Websites and investment guides of investment promotion agencies, own research

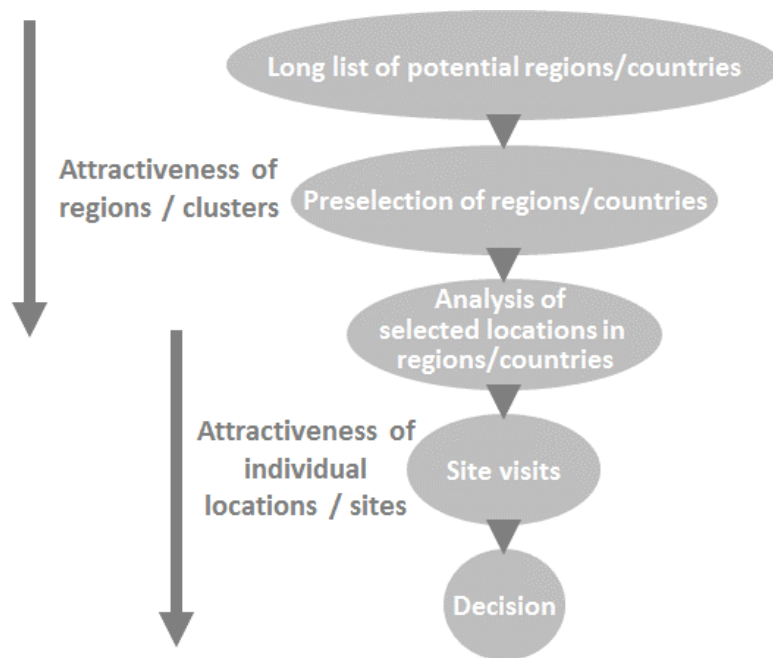
6 Recommendations

Considering the preconditions in Moldova as well as international experience, efforts to foster the development of the automotive supply industry should not be limited to refining and intensifying investment promotion efforts but should also encompass industrial development measures based on a cluster-oriented approach. There are promising synergies between cluster development and investment promotion. Many governments have successfully leveraged clusters to increase the efficiency of their investment promotion efforts.

Around the globe, clusters are regarded as an important driver for innovation, internationalization and enterprise development. Clusters are geographical concentrations of interconnected companies and institutions focusing on related value chains. They are rooted in the triple helix concept, which refers to the cooperation between actors and institutions from three spheres – the private sector, government and academia. Cooperation-based cluster programmes focus on facilitating the development process of (emerging) clusters, on improving the environment for cluster success and on maximizing the impact of clusters.

With regard to attracting new businesses, clusters allow a convincing argumentation in line with needs and location search process of investors. Clusters provide attractive conditions for new or relocating companies, as they enable direct access to supply chains, skilled labour and a reliable and established network of potential business partners. Therefore, an internationally renowned cluster will raise awareness for the region and improve chances to get on the long list of investors searching for new locations and business opportunities. Furthermore, effective cluster support services and mechanism are perceived as an indicator of a business friendly environment.

Figure 6 Role of clusters in investment decision processes



Vice versa, cluster development benefits from investment promotion. In particular foreign investors can make a significant contribution towards technology and innovation transfer and skills development. They can also provide an important base for spin-offs and start-ups. The company Sarob in Balti represents an example for this type of positive effect. Furthermore, many infrastructure projects – such as industrial parks and training centres – only become feasible and sustainable when foreign investors are involved co-financing the projects or contributing as a user or tenant.

Against this background, recommendations for investment promotion and cluster development measures are set out below taking into account synergies between both policy areas.

6.1 Refining and widening the scope of investment promotion measures

The findings from the analysis confirm that Moldova is a good position to attract investment projects of automotive suppliers to the country with a significant development impact. Furthermore, the interviews have identified a range of good-practice in the area of investment promotion which could be extended. There is a high professional level of target group oriented investment promotion in Moldova – also in comparison to other investment promotion agencies at the international level – and the track record is

impressive, with respect to the range of instruments deployed, contacts and leads generated, investment projects attracted and jobs created.

At the same time, the results from the analysis of investment patterns indicate promising investment potentials which have not yet been fully unlocked. In order to tap the full investment potential, the scope of target groups should be refined and widened and pro-active investment promotion efforts should be intensified. Key focus should be on lead generation campaigns in the context of trade fairs and congresses which should be complemented by intermediaries, PR and social media efforts.

More specifically, the following recommendations can be derived:

- 1. Refine the target group definition focusing on segments that complement existing investment projects and contribute towards the development of related value chains.** Defining target groups is a dynamic process. The target group definition should be regularly reviewed taking into account the results achieved, changes in investment trends and a continuous upgrading of the definition with respect to the value added and technology-/knowledge-intensity of the target groups. From today's perspective, the definition should be refined as follows complementing the existing target groups by activities/segments which have a high transport efficiency and contribute towards an upgrading process:
 - **The value chains wiring systems/components and cut and sew based interior products should also in the future form a core part of the target group mix.** Investment potentials are not fully exploited, yet, and Moldova is in a good position to attract further projects with a significant employment impact. In the medium-term, efforts should aim at extending the value chain focusing on products/activities – such as wires and copper products for wiring systems and seat components (e.g. seat frames and structures, seat positioners). In the latter case, particular emphasis should be on niche segments – such as seat components for commercial vehicles.
 - **Tier 2/3 suppliers of metal, plastics and mechatronic components should be integrated into the target group mix.** It is expected, that German suppliers in those areas are going to intensify their internationalisation efforts. Quite often, those suppliers are also active in other markets beyond the automotive industry which supports a diversification process. Domestic companies could benefit from linkages and spill over effects. In particular, metal processing (e.g. metal pressing and welding assemblies) combines automated with manual processes allowing companies to benefit from the low labour costs. Moldova's industrial traditions and competences in related areas can be used as further arguments. Attracting investments from plastics and mechatronic component manufacturers (e.g. switches, sensors, window regulator and control components, plastic components for the fluid and air flow system) could support an upgrading process. As part of investment promotion activities, suppliers that have invested in Central Europe or Romania in the past could be systematically approached aiming at tapping the relocation potential. Investment promotion efforts should be complemented by skills development measures.
 - **In this context, manufacturers of trailers could be targeted aiming at strengthening metal processing competences and value chains.** Trailer assembly represents another promising activity that combines automated with more labour-intensive processes, e.g. welding. Cost-oriented criteria play a major role in location decisions. At the same time, synergies could be generated with respect to skills development supporting a cluster-oriented approach.

- **In the medium-/long-term, development potentials at the interface between the IT and automotive industry should be exploited.** According to the expert interviews, investment potentials in areas such as embedded software development are rather limited in the short-term. The focus is rather on outsourcing activities which, nevertheless, could offer a promising potential with respect to employment creation and export promotion. At the same time, synergies between export and investment promotion could be utilised. In any case, promotional efforts would need to be supported by skills development measures.
- 2. With respect to promotion instruments and activities, the key focus should remain on proactive lead generation campaigns – in particular in the context of relevant trade fairs.** Taking into account international experience, lead generation has proven to be the most effective approach in the context of targeted investment promotion. The objective is to generate quality business leads and secure a greater quantity and quality of investment projects through relationship-building and effective facilitation. Lead generation should be realigned to the updated target group definition. As already practiced, lead generation campaigns should be combined with trade fair visits which help to qualify contacts and support relationship building. Considering the target group definition, the most promising trade fairs are:
- IAA Commercial Vehicles and IAA Passenger Vehicles, Frankfurt
 - IZB International Suppliers Fair, Wolfsburg
 - Global Automotive Components and Suppliers Expo, Stuttgart.

Joint stands with automotive suppliers (including specialised IT companies) from Moldova represent a promising measure generating synergies between investment promotion and business development support. If joint stands are not feasible, trade fair visits should be carried out with an own presence under cost-benefit considerations.

- 3. In addition to trade fair visits, congresses attracting automotive suppliers should form part of the marketing mix.** As confirmed by experience from other automotive locations, specialised congresses can also provide an effective platform to get into contact and build relationships with decision makers in the automotive supply industry. A participation in the congresses “Automobil Forum” and “Auto-Gipfel” in Munich is recommended in this respect.
- 4. The scope of intermediary marketing should be expanded, focusing on regional development agencies and cluster organisations with a focus on the automotive supply industry in Germany.** Intermediaries are an often underestimated source of contacts to investment leads. Existing investors have already been successfully integrated as intermediaries and ambassadors promoting Moldova as an investment location for the automotive supply industry. That approach should be expanded aiming at partnerships with intermediaries in Germany that can offer contacts within the defined target groups. In addition to associations – such as the VDA Association of the Automotive Industry in Germany – in particular regional development agencies and cluster organisations offer a promising potential and are usually open for international collaborations in this respect. For instance, economic development agencies of the German Federal States – such as LEG Thuringia – could be approached. Joint activities with intermediaries could include:
- Joint industry workshops or matchmaking events
 - Utilising events of intermediaries as a platform for presentations
 - Publishing articles in newsletters.

Figure 7 Example for an investment seminar organized in collaboration with an intermediary

5. **The lead generation campaigns should be complemented by image building activities (in particular PR and social media).** Awareness of business and investment opportunities in Moldova is still rather low amongst decision makers in the German automotive supply industry. Articles could be placed in specialised publications and newsletters of associations and further intermediaries (e.g. GTAI Germany Trade and Invest) to raise awareness and to improve the image. The example from Morocco below illustrates this approach.

Figure 8 Example for an article highlighting investment opportunities

For image building and awareness raising, also social media channels represent an option. Twitter accounts are the most commonly used social media channel by investment promotion agencies. Via MIEPO's twitter account, regular updates could be provided on activities and developments of relevance for the automotive supply industry, e.g. announced investment or expansion projects, events and trade fair visits, new service offers etc. However, a high level of time and dedication would be needed. Daily posts are necessary to keep an active profile. A twitter schedule is advisable to plan, organize and monitor the topics and messages.

6.2 Complementary cluster development measures

The government of Moldova is interested in leveraging clusters for industrial development and has adopted a "Concept for Cluster Development in the Industrial Sector", which outlines the objectives and priorities. In order to support the necessary planning processes and policy decisions with respect to the implementation of the concept, the German Economic Team Moldova has examined the preconditions and potentials for introducing a cluster-oriented approach in Moldova⁷.

Taking into account the local context as well as international experience, a proposal for a roadmap has been developed recommending to introduce a cluster-oriented approach in three phases:

- **Pre-cluster phase:** focusing on (1) establishing the analytical base for policy decisions, (2) improving the environment for cluster development, (3) testing the cluster approach in selected policy areas
- **Pilot-cluster phase:** focusing on (1) testing the cluster approach by setting up regional cluster management and support structures for two pilot clusters, (2) orienting further policy areas and instruments towards cluster development
- **Roll-out phase:** (1) launching a targeted and competition-based cluster development programme, (2) fully integrating cluster development into the policy framework.

The results from the analysis carried out for the policy paper at hand confirm the proposed roadmap. They indicate a promising synergy potential between investment promotion and cluster development. This potential should be exploited with an integrated approach which could be implemented based on the following recommendations:

1. **The automotive supply industry should be considered as a pilot cluster to test the cluster approach in Moldova.** According to the proposed roadmap, the cluster development process should be started with a limited number of pilot clusters to raise awareness, motivate stakeholders and gather first-hand experience – e.g. regarding needs, suitable services, institutional and funding mechanisms – which would be helpful for the role-out of a larger scale programme. Considering in particular the internationalisation, growth and employment potential as well as the regional concentration, the automotive supply industry offers promising preconditions and potentials to test the cluster approach.
2. **Key focus should be on skills and infrastructure development measures (in particular production facilities for rent).** Skills and infrastructure development represent important levers to unlock the cluster as well as investment potential. A key priority should be the development of target group oriented production space for rent. In the automotive industry, many investors

⁷ German Economic Team Moldova: "Leveraging Clusters for Industrial Development in Moldova - Preconditions, Potentials and Key Steps to Introduce a Cluster-Oriented Approach", 2016

prefer rental offers as it allows them to save valuable time and to focus their resources on the core processes. Without such an offer, Moldova can tap only part of the investment potential. In the past, a number of investment projects could not be realized in Moldova as investors were in need of rental space and opted at the end for other locations. An offer of approximately 10,000 m² – e.g. with two units of 2,000 - 3,000 m² and one unit of 5,000 m² – represents a sound starting point for a supplier park. It should be assessed if a PPP model (e.g. involving guarantees) could be used for the implementation. Skills development measures should also form a core part of cluster development activities and services. Considering the investment potentials, programmes in the area of metal processing (e.g. welding) could form the starting point.

- 3. Furthermore, the portfolio of cluster services and activities should comprise information, business development and internationalisation platforms, innovation support and cluster marketing.** Also in these areas, synergies can be generated between cluster development and investment promotion. For instance, business development and internationalisation can be supported by joint stands at trade fairs or B2B events with cluster organisations abroad. Innovation support programmes and projects could aim at upgrading suppliers or unlocking the cross-innovation potential between the automotive and IT industry which would be beneficial also for investment promotion measures. The same applies to cluster marketing which can help raise awareness for an investment location.
- 4. It should be considered to introduce financial support programmes aiming at innovative SMEs.** Cluster development requires an integrated approach. To improve the environment and framework conditions for cluster development, related policy areas and instruments need to be aligned towards the defined clusters and industries. According to the interviews, financial support programmes represent an area of high relevance in this respect. Lack of finance has been cited as one major challenges for SMEs in the automotive and related industries. Guarantees or soft loans could be used to address this challenge. In the medium-term, it could also be considered to realign the investment incentives in Moldova, shifting from the current tax-based and spatial focus towards a sectoral/cluster-oriented and grant-based model.

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