

Prioritising target groups for investment attraction measures in Germany

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Executive summary

Based on the results of the target group assessment, the initial focus of investment attraction efforts in Germany should be on the automotive, life sciences and electronic / electrical equipment industries

- The table below summarises the findings from the assessment, which placed main emphasis on the dimensions (1) investment potential, (2) competitive position and (3) development impact
- Defining target groups is a dynamic process. The selection should be regularly reviewed taking into account results achieved, changes in the investment environment and an upgrading of the target group mix

Target group	Investment potential	Competitive position	Development impact	Recommendations
Automotive	++	++	+	Priority 1: Systematic investment attraction efforts recommended complemented by measures promoting linkages
Life sciences	++	0	++	Priority 1: Systematic investment attraction efforts recommended complemented by measures strengthening the ecosystem
Electronics/ electr. equipment	++	+	+	Priority 1: Systematic investment attraction efforts recommended exploiting synergies with other target groups
Machinery	+	0	++	Priority 2: Main focus on collaboration with intermediaries supporting innovation transfer and cooperation projects

Executive summary

Furthermore, it is recommended to integrate segments at the interface to the IT industry and to place particular emphasis on medium-sized enterprises and companies that have already invested in Central European locations

- Tech-driven investments play an increasing role in FDI patterns and Ukraine's IT competences offer the potential to develop a differentiating profile
- Against this background, it is recommended to integrate segments at the interface between manufacturing and IT (e.g. digital healthcare products)
- Furthermore, across the defined industries, a main focus should be on companies, that have already established operations in Central Europe
- Their headquarters should be directly approached to discuss potential relocation projects
- In addition, considering the current situation, measures should not focus exclusively on large companies, but equally target medium-sized enterprises
- In Germany, privately owned medium-sized enterprises offer a substantial investment potential. At the same time, they tend to be less sensitive to geopolitical and investment climate risks than publicly listed large companies

Executive summary

The figure below shows the proposed target groups and segments integrating the interface between manufacturing and IT industries:

		IT & digital integration
Automotive	<ul style="list-style-type: none">• Mechatronic components (e.g. sensors, switches, control components)• Metal and plastic components (e.g. metal pressing and welding assemblies, metal stamping, hoses, tubes and brackets for air flow system) incl. spare parts / aftermarket• Assembly of trailers and commercial vehicles	<ul style="list-style-type: none">• Projects relying on automotive IT competencies (e.g. embedded systems, navigation and autonomous driving tools and solutions)
Life sciences	<ul style="list-style-type: none">• Generics• Medical devices• Rehabilitation products• Diagnostics• Contract research organisations	<ul style="list-style-type: none">• Digital healthcare products / services (e.g. wearables, clinical data solutions)• AI applications in diagnostics and treatment
Electronics and electrical equipment	<ul style="list-style-type: none">• Electronic components for other target groups (e.g. automotive, machinery and medical devices) as well as for further application areas• Household appliances• Energy technology (e.g. components for smart metering, transformers and generators, electrical winding and insulation products)	<ul style="list-style-type: none">• IoT and smart energy solutions• Embedded software development
Machinery	<ul style="list-style-type: none">• Cleantech solutions (e.g. machinery and equipment for the areas energy efficiency / renewably energy, resource efficiency, circular economy)• Automation and control solutions• Agricultural equipment and machinery	<ul style="list-style-type: none">• Industry 4.0 solutions• Supply chain management solutions• Smart farming / digital solutions for agri-food industry

Outline

1. Introduction
2. Role of German FDI in CEE and Ukraine
3. Target group assessment
4. Target group prioritisation and segmentation

1. Introduction

Considering changes in investment patterns, this Policy Briefing identifies promising target groups for investment attraction efforts in Germany

- In the context of the “Make in UA” programme, UkraineInvest is planning to intensify its promotional measures with a main focus on manufacturing FDI
- Empirical research and practical experience confirm that a targeted approach increases the effectiveness and impact of investment attraction efforts
- Defining target groups is a dynamic process. The selection should be regularly reviewed taking into account changes in the investment environment

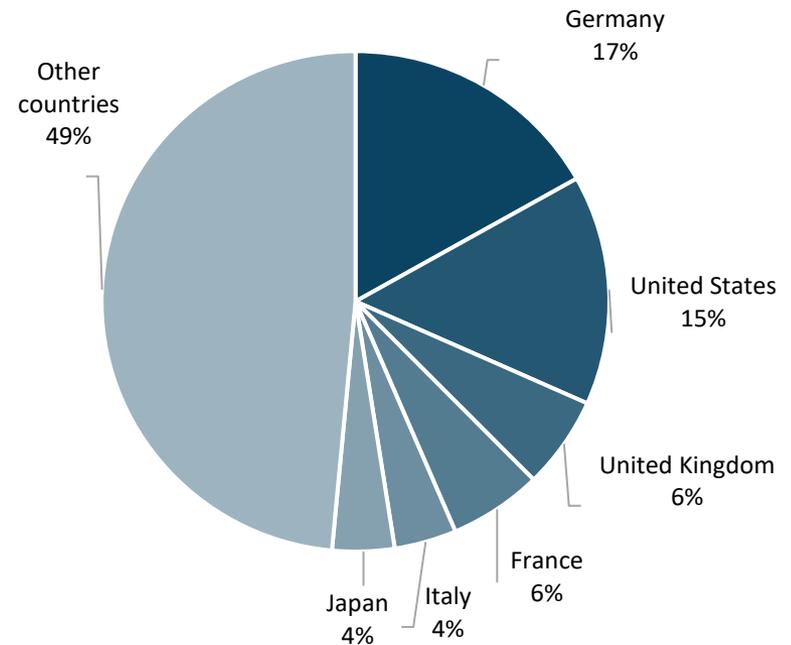
- The German Economic Team has been asked by UkraineInvest to assess and prioritise target groups for investment attraction measures in Germany
- The assessment, which was carried out based on interviews with investment and industry experts in Ukraine and at the international level as well as complementary research, focuses on the three dimensions:
 - (1) Investment potential also considering the impact of the pandemic
 - (2) Competitive position of Ukraine from the perspective of the target groups
 - (3) Development impact, e.g. in terms of linkage and employment effects

2. Role of German FDI in CEE and Ukraine

Germany is the leading source country for FDI projects in Central and Eastern Europe (CEE)

- Between 2009 and 2019, Germany accounted for 17% of FDI projects in CEE – ahead of the US (15%), the UK and France (both 6%)
- According to the conducted interviews, German companies are showing robust investment dynamics during the pandemic, albeit shifting the focus from new projects to expansions
- The future outlook remains positive
- CEE countries are expected to benefit from changes in investment patterns that have been accelerated by the pandemic such as increasing nearshoring activities

Breakdown of FDI projects in CEE by source country (2009-2019)



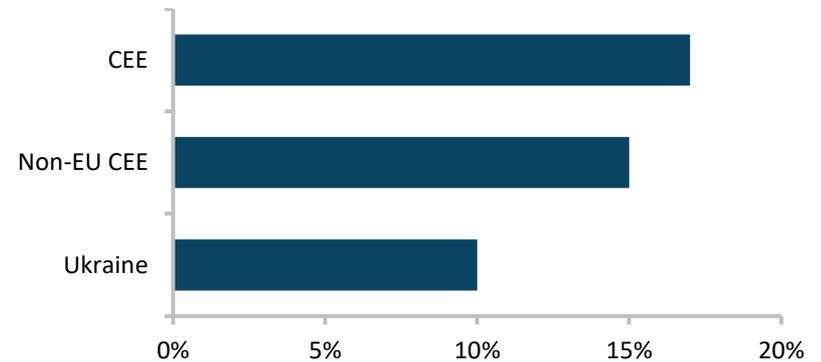
Source: EY European Investment Monitor / National Strategy to increase Foreign Direct Investment in Ukraine 2021

2. Role of German FDI in CEE and Ukraine

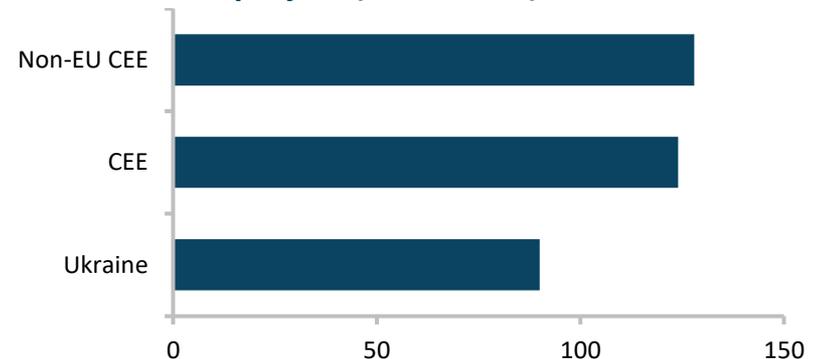
German FDI projects also play a key role in Ukraine. However, the share is lower in Ukraine than in the CEE region as a whole and in non-EU CEE economies

- With a share of 10% in FDI projects in Ukraine between 2009 and 2019, Germany ranks second – behind the United States (18%)
- This compares with a share of 17% in the CEE region as a whole and 15% in non-EU CEE economies
- At the same time, the employment effects of German FDI projects are lower in Ukraine in comparison
- Those findings indicate a potential to increase both the volume and impact of German FDI in Ukraine

Germany's share in all FDI projects (2009-2019)



Average number of jobs created per German FDI project (2009-2019)



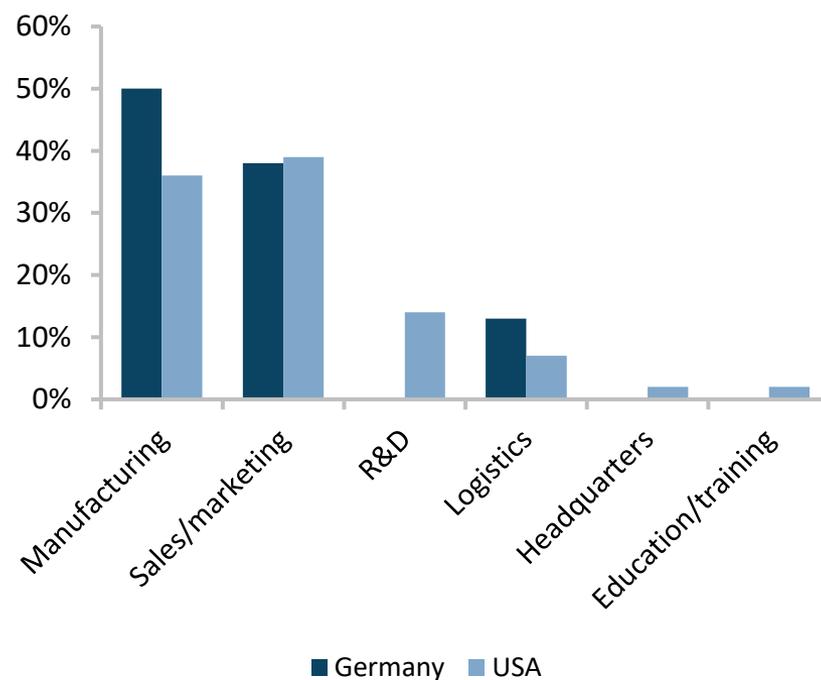
Source: EY European Investment Monitor / National Strategy to increase Foreign Direct Investment in Ukraine 2021

2. Role of German FDI in CEE and Ukraine

German FDI projects in Ukraine strongly focus on manufacturing activities – compared with other source countries

- Manufacturing activities accounted for 50% of German FDI between 2009 and 2019 – with a main focus on automotive
- This share is significantly higher than for other source countries
- On the other hand, no German R&D, education & training or headquarter project could be attracted in this period
- Those findings confirm the important role of Germany as a source country for manufacturing FDI
- At the same time, they indicate that efforts should be intensified to attract R&D-related projects

Breakdown of FDI projects in Ukraine by activity and source country (2009-2019)



Source: EY European Investment Monitor / National Strategy to increase Foreign Direct Investment in Ukraine 2021

3. Target group assessment

In line with international good-practice, the target group assessment has taken into account the three key dimensions (1) investment potential, (2) competitive position and (3) development impact

- As a starting point, drawing on available analyses as well as interviews with investment and industry experts in Ukraine, a short-list of potential target groups was derived – comprising of:
 - (1) Automotive
 - (2) Life sciences
 - (3) Electronics and electrical equipment
 - (4) Machinery

Key dimensions for selecting target groups for investment attraction measures



3. Target group assessment

The assessment has taken into account the three key dimensions (1) investment potential, (2) competitive position and (3) development impact (cont.)

- At the shortlisting stage, particular consideration was given to the nearshoring potential:
 - According to recent studies, amongst others by UNCTAD and McKinsey, from the perspective of CEE locations, higher-technology value chains exhibit the greatest nearshoring propensity
 - Labour-intensive und regional processing value chains (e.g. textiles, agri-food) may also geographically shift. But those shifts will most likely affect CEE to a lesser extent
- Next, a comparative assessment of the shortlisted target groups was carried out, which is summarised on the next pages:
 - The assessment was based on interviews with investment experts and associations at the international level and complementary research (e.g. review of industry and investment trend studies)
 - Finally, the target groups were further specified – in terms of segments – for the design and implementation of investment attraction measures

3. Target group assessment – Automotive

Investment potential



- One of the TOP 3 manufacturing industries at the global level in terms of value of greenfield FDI in 2020 – despite a sharp decline caused by the pandemic
- Promising investment potential of German companies considering the industry’s size (turnover of approximately EUR 400 bn) and internationalisation pattern
 - Strong international footprint in particular in CEE
 - Increasing nearshoring activities expected
- However, declining pool of investment in “traditional” segments such as wire harnessing due to technological changes
- Investors becoming more demanding focusing on locations with established cluster structures

Competitive position



- Competitiveness confirmed by previous investments (e.g. Prettl, Leoni, Forschner, Kromberg & Schubert) benefiting from Ukraine’s strengths, incl.:
 - Labour force potential (existing skills base due to strong presence of automotive industry plus 130,000 engineering graduates annually)
 - Cost advantages and improved incentive framework
 - Proximity and access to major manufacturing hubs and markets
 - Established cluster structures, wide spectrum of cooperation opportunities in business and R&D landscape (incl. renowned IT companies already serving leading global automotive companies)
- Competitive position improving vis-à-vis Central European locations having to cope with skills shortages and raising costs

Development impact



- Contribution of investment projects towards export-led growth, employment creation and upgrading in international value chains (e.g. by attracting research-oriented projects)
 - One third of global R&D expenditure in automotive industry spent by German companies
 - Potential of R&D-related FDI indicated by projects in the region (e.g. product development office of Dräxlmaier Group in Moldova)
- Related industries benefiting from linkage effects (e.g. IT, electronics, metal, plastics)

3. Target group assessment – Life sciences

Investment potential

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- Increasing role of life sciences sector in global FDI patterns
 - In terms of value of greenfield FDI among TOP 10 manufacturing industries in 2020
 - Robust investment dynamics during the pandemic – bucking the overall trend
 - Positive outlook considering likely investments in strengthening the resilience of value chains
- Growing interest in Eastern Europe and Eastern Partnership countries indicated by recent surveys (e.g. by Kinstellar) as well as investment projects
- Strong position and investment track record of German life sciences companies (e.g. B Braun Melsungen, Dräger, Fresenius, Boehringer Ingelheim, Bayer) incl. projects in Ukraine (e.g. Stada)
- Broad company landscape (1,200 in pharma and biotech, 1,400 in medical devices industry)

Competitive position

0

- In principle, favourable conditions – in particular with respect to the availability of graduates and specialists (incl. competencies in related areas such as electronics and IT), competitive cost structures, growing domestic market and preferential access to important international markets
- However, intensifying competition at the international level – life sciences sector among the TOP 3 target groups of IPAs around the globe (according to latest WAIPA survey)
- So far, no distinct profile of Ukraine as life sciences location or developed ecosystem
 - Comparatively small size of the sector (e.g. 110 companies licensed for medicine manufacturing)
 - Low labour costs of less importance due to the capital-intensive profile of the industry
 - Low awareness of Ukraine as life sciences location in investor community

Development impact

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- Considerable impact in terms of upgrading the economic, export and employment structure
 - Major contribution of life sciences to R&D spending and exports in several countries fostering the integration into global value chains and markets
 - Potential to create highly-skilled jobs with above average value added per person
- In addition, substantial linkage and image effects of successfully attracted FDI projects
 - Tapping synergy potential at the interface between life sciences and IT sector
 - Raising awareness of Ukraine's value proposition as an innovation-oriented investment location

3. Target group assessment – Electronics / electr. equipment

Investment potential



- Very promising investment potential of electronic and electrical equipment industry at international and regional level
 - Leading manufacturing FDI industry in 2020 at global level accounting for a volume of USD 45.6 bn of greenfield investment
 - Second largest manufacturing industry in Germany (approximately 900,000 employees) with high investment and innovation dynamics
 - Strong international footprint of German companies (15% of total manufacturing FDI stock) and track record in CEE
- Industry exhibiting a considerable nearshoring potential according to several studies (e.g. UNCTAD, McKinsey, European Parliament)

Competitive position



- Competitive value proposition from the perspective of German electronic and electrical equipment companies, as indicated by recent investment projects and enquiries (e.g. Bosch, Kostal)
- Ukraine's key strengths – availability of skilled workers, cost advantages and proximity / access to main markets – of particular relevance for relocations from Central European locations as well as for nearshoring projects
- However, growing competitive pressure in particular from other transition countries (e.g. Moldova, Armenia), that try to attract investment from the electronic industry building on industrial traditions

Development impact



- Promising opportunity to increase the quality and impact of investment projects supporting an upgrading process
- Considerable contribution of industry towards job creation and innovation dynamics
- Potential to promote linkages between electronic / electrical equipment industry and further target groups / important industries in Ukraine (e.g. automotive, medical devices, IT)
- Important role of industry as a driver for exports and integration into international value chains (leading industry in terms of gross exports as share of output at global level)

3. Target group assessment – Machinery

Investment potential

+

- High investment dynamics at global level in recent past (among TOP 10 by value of FDI greenfield projects in 2020)
- Large base of potential investors in Germany (more than 6,500 companies with a turnover of approximately EUR 200 bn and an export ratio of 80%)
- Investment potential of German companies also indicated by recent enquiries in Ukraine
- Positive outlook in light of changes in global value chains – machinery among industries, which are expected to show substantial nearshoring activities according to UNCTAD

Competitive position

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- Favourable conditions with respect to the skills base (e.g. 10,000 graduates from mechanical engineering faculties p.a., competencies in related areas such as IT), operational costs and incentives, industrial tradition, proximity and access to key markets
- However, no differentiation with respect to cluster-related criteria, which play an increasing role in location decisions of the machinery companies
 - Traditionally, strong focus on heavy industry within company landscape (e.g. mining equipment, turbines, engines), which does not form an investment priority of the German machinery industry
 - Machinery clusters mainly located in the eastern part of the country, which is less attractive from the perspective of German machinery companies

Development impact

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- Important role of machinery industry not only for stimulating / diversifying exports, but also for tapping potentials of green and digital transition
 - Cleantech solutions improving the resource and energy efficiency of their customers and contributing to more sustainable and circular value chains
 - Industry 4.0 and further advanced manufacturing solutions contributing to innovation dynamics and enhancing the productivity of their customers
- In addition, promising potential to foster backward linkages into industries such as IT, electronics and metal as well as to support the development of emerging clusters

3. Target group prioritisation and segmentation

Based on the results of the target group assessment, the initial focus of investment attraction efforts in Germany should be on the automotive, life sciences and electronic / electrical equipment industries

- The table on the right summarises the findings from the assessment
- Considering international experience, a feasible target group selection should comprise 2-3 industries per country / region
- Defining target groups is a dynamic process
- The selection should be regularly reviewed taking into account:
 - Results achieved
 - Changes in investment environment
 - Upgrading of the target group mix

Overview of results from target group assessment

Target group	Investment potential	Competitive position	Development impact	Priority
Automotive	++	++	+	1
Life sciences	++	0	++	1
Electronics/ electrical equipment	++	+	+	1
Machinery	+	0	++	2

3. Target group prioritisation and segmentation

The following recommendations for investment attraction and complementary policy measures can be derived:

Automotive	<ul style="list-style-type: none">• Systematic pro-active investment attraction measures are recommended, e.g. lead generation campaigns in the context of leading trade fairs such as Z Internationale Zuliefermesse und IZB International Suppliers Fair• Promising segments comprise manufacturers of mechatronic, plastic and metal components incl. spare parts / aftermarket• Investment attraction activities should be complemented by measures aiming at supplier development and promoting linkages, e.g. between automotive manufacturers and IT companies
Life sciences	<ul style="list-style-type: none">• Systematic pro-active investment attraction measures are recommended, e.g. lead generation campaigns in the context of leading trade fairs such as CPhI and MEDICA• Promising segments comprise manufacturers of generics, medical devices / diagnostics and contract research organisations• Investment attraction activities should be complemented by policy measures to strengthen the life sciences ecosystem
Electronics / electrical equipment	<ul style="list-style-type: none">• Systematic pro-active investment attraction measures are recommended, e.g. lead generation campaigns in the context of leading trade fairs such as Productronica and Hannover Messe• Promising segments comprise manufacturers of electronic components and household appliances as well as energy technology companies• When designing investment attraction and complementary policy measures, synergies with other target groups should be exploited
Machinery	<ul style="list-style-type: none">• Main focus on collaboration with intermediaries (e.g. associations, cluster organisations)• The collaboration should also entail activities to support innovation transfer and cooperation projects in areas such as cleantech

4. Target group prioritisation and segmentation

In addition, it is recommended to exploit investment potentials at the interface between manufacturing and IT industries

- Tech-driven investments play an increasing role in global FDI patterns
 - FDI projects in ICT increased globally by 70% in the last decade
 - They are expected to display comparatively high investment dynamics throughout and beyond the pandemic
- In 2020, ICT-related investments accounted for more than 20% of all global FDI greenfield projects
- Ukraine's IT competences – e.g. in the area of Artificial Intelligence applications – offer the potential to develop a differentiating profile and stand out from competing locations
- Against this background, it is recommended to integrate segments at the interface between manufacturing and IT industries into the segmentation
- This includes segments, such as digital healthcare products / services (e.g. wearables), automotive IT and Industry 4.0 solutions

4. Target group prioritisation and segmentation

Particular emphasis should be placed on medium-sized enterprises and companies that have already invested in Central European locations

- Across the defined industries and segments, particular emphasis should be placed on companies, that have already established operations in Central Europe
- Their headquarters should be directly approached to discuss potential relocation projects in light of skills shortages and raising costs at several Central European locations
- Furthermore, considering the current situation, investment attraction efforts should not focus exclusively on large companies, but equally target medium-sized enterprises
 - In Germany, privately owned medium-sized enterprises offer a substantial investment potential
 - At the same time, they tend to be less sensitive to geopolitical and investment climate risks than publicly listed large companies

4. Target group prioritisation and segmentation

The figure below shows the proposed target groups and segments integrating the interface between manufacturing and IT industries:

		IT & digital integration
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About the German Economic Team



Financed by the Federal Ministry for Economic Affairs and Energy, the German Economic Team (GET) advises the governments of Ukraine, Belarus, Moldova, Kosovo, Armenia, Georgia and Uzbekistan on economic policy matters. Berlin Economics has been commissioned with the implementation of the consultancy.

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