

BUSINESS OPPORTUNITIES IN GERMANY | GERMANY AS A BUSINESS LOCATION

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www.gtai.com



What we do



International marketing of
Germany as a business and
technology location



Economic promotion of the new
federal states and Berlin

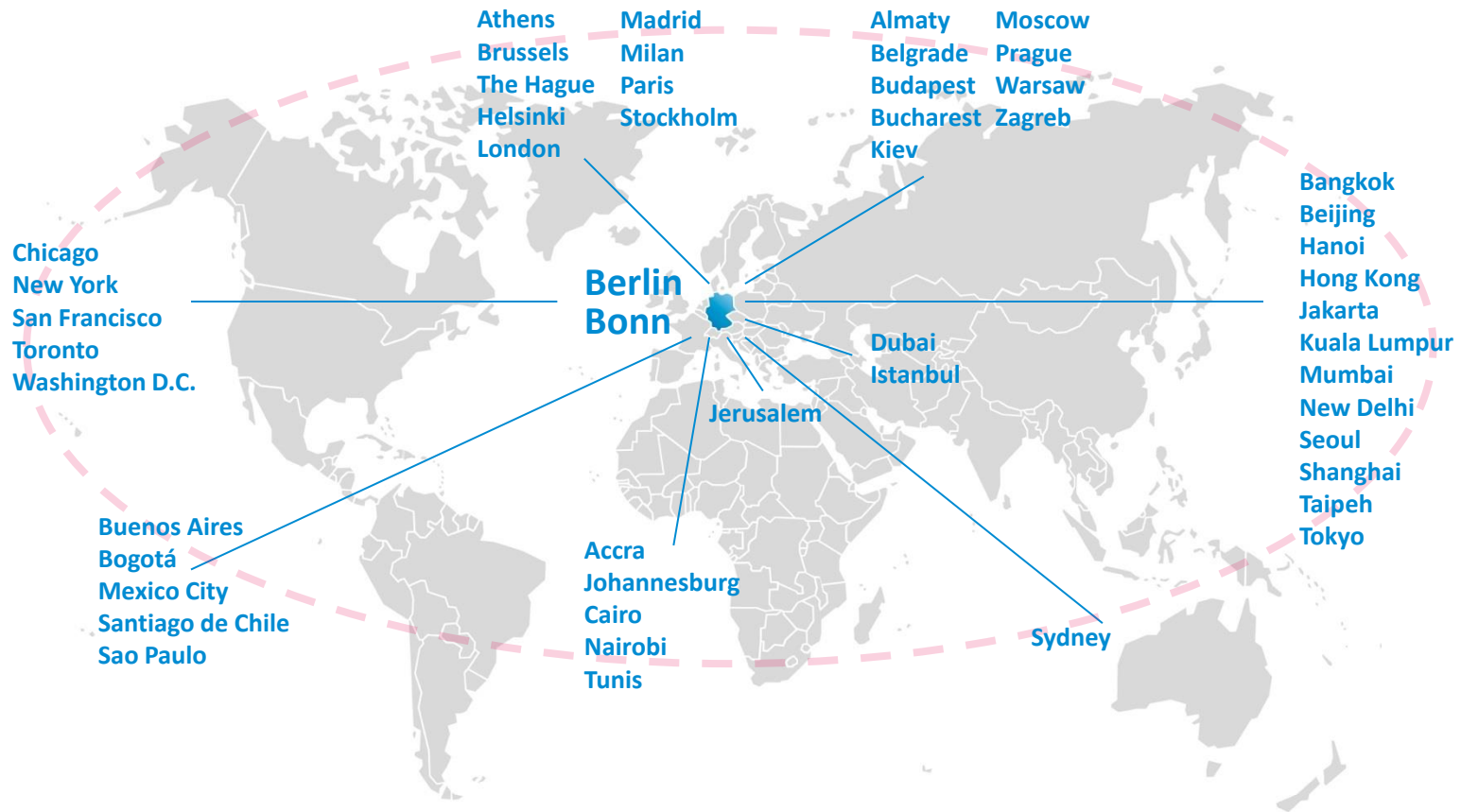


Investment promotion for
international greenfield
investments



Export market information for the
German economy

In 50 locations worldwide GTAI serves German and international companies



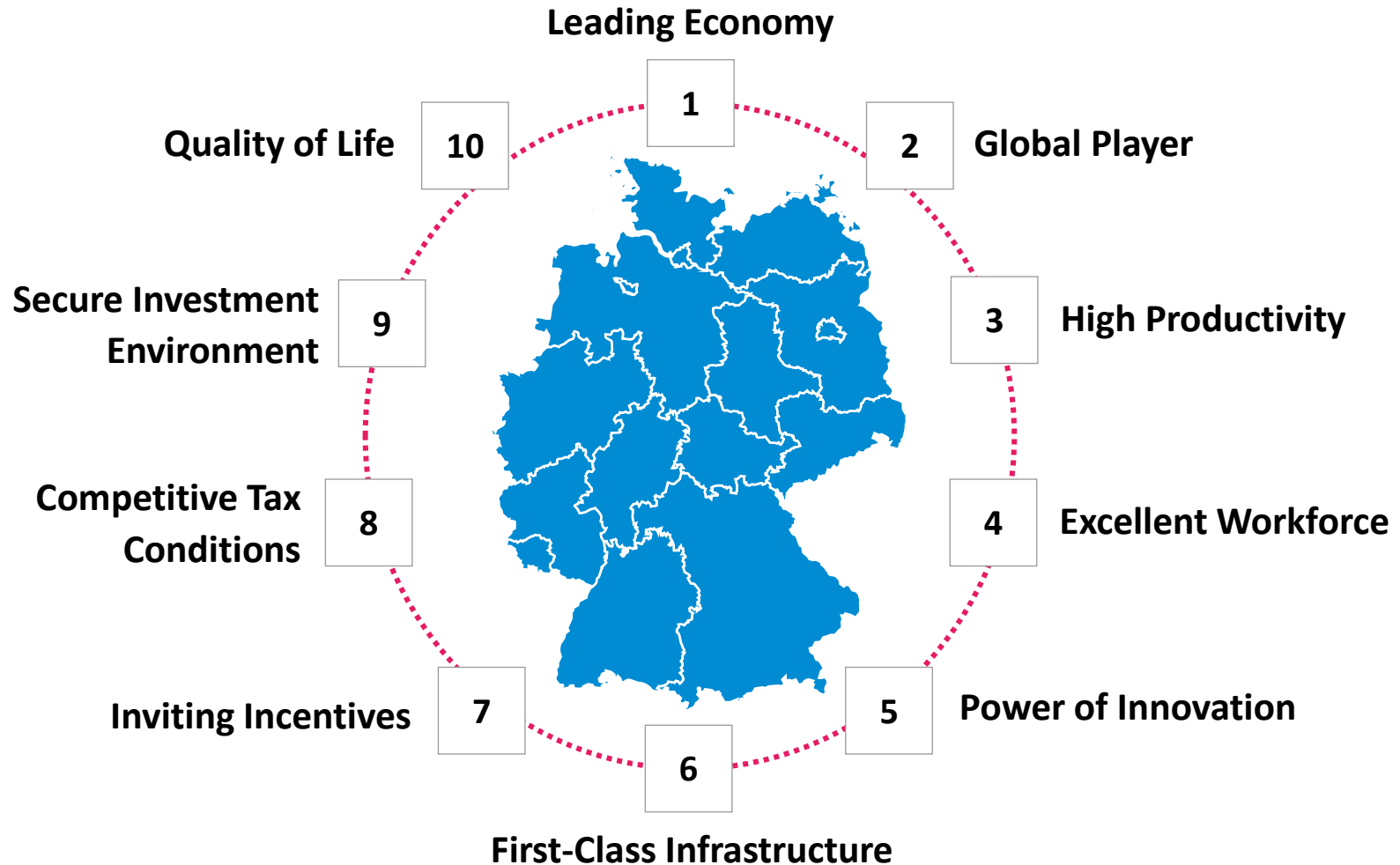
GTAI - strong with partners

As the hub for a global network, we maintain close working relationships to a number of institutions.



Germany - No. 1 Investment Location

Good arguments to be successful in Germany



Leading Economy

Germany is Europe's largest market.

Share of Total GDP and Population in the European Union (2015)

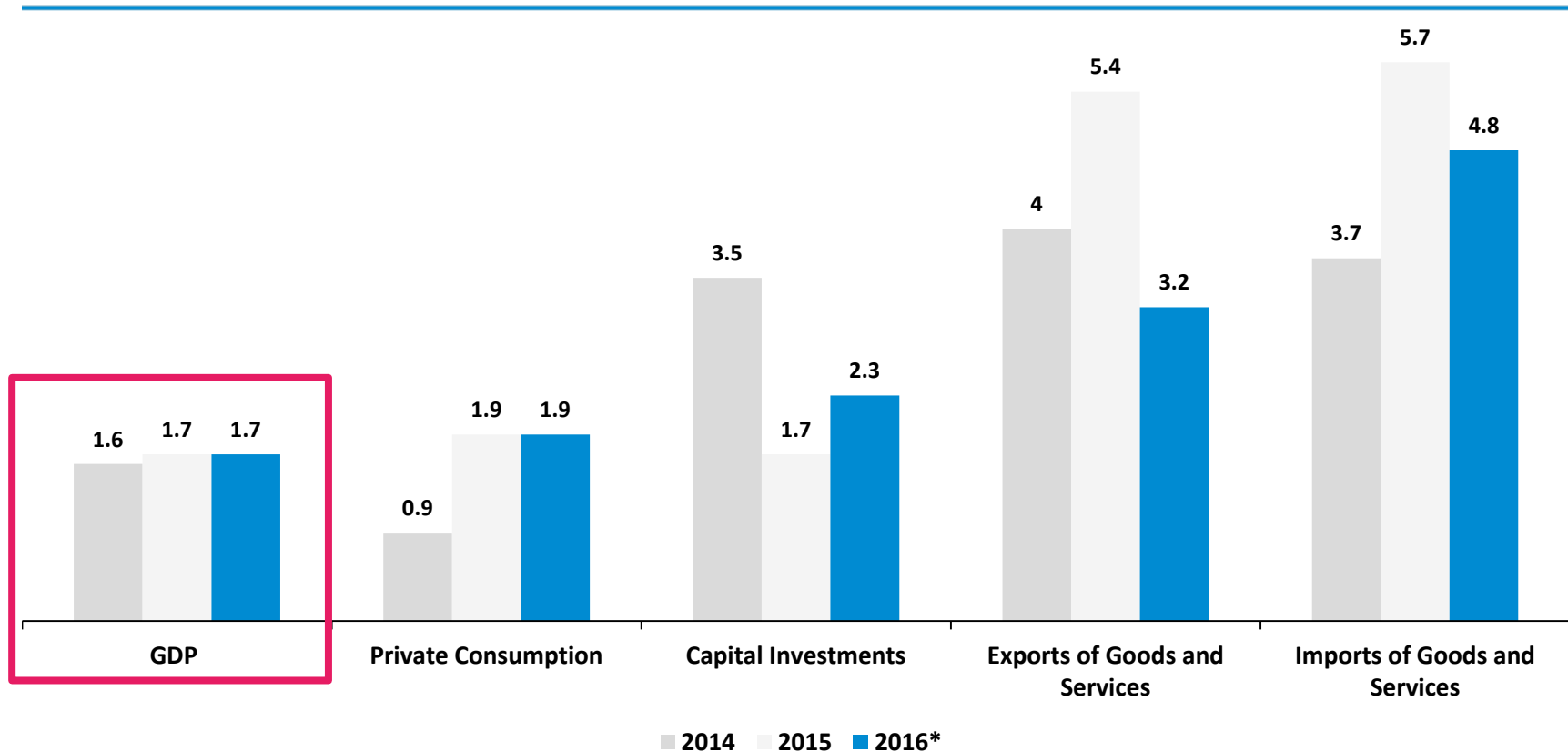
	GDP (in EUR bn)	Share of Total GDP (EU 28)	Population (in m)	Share of Total Population (EU 28)
Germany	3,026	21%	81	16%
France	2,184	15%	66	13%
UK	2,568	18%	65	13%
Italy	1,636	11%	61	12%
Spain	1,081	7%	46	9%
Netherlands	678	5%	17	3%
Sweden	444	3%	10	2%
Poland	428	3%	38	7%
Czech Republic ¹	155	1%	11	2%
Hungary	109	1%	10	2%
USA ²	16,172		323	
Japan ²	3,710		127	
EU 28	14,625	100%	508	100%
Euro Area	10,400	71%	338	67%

Source: Eurostat 2016 Federal statistical office Germany 2016, US Census Bureau 2016, Japanese Statistics Bureau 2016

Economic Development

The federal government expects continuous growth.

Growth Rates (2014 – 2016, in percent)



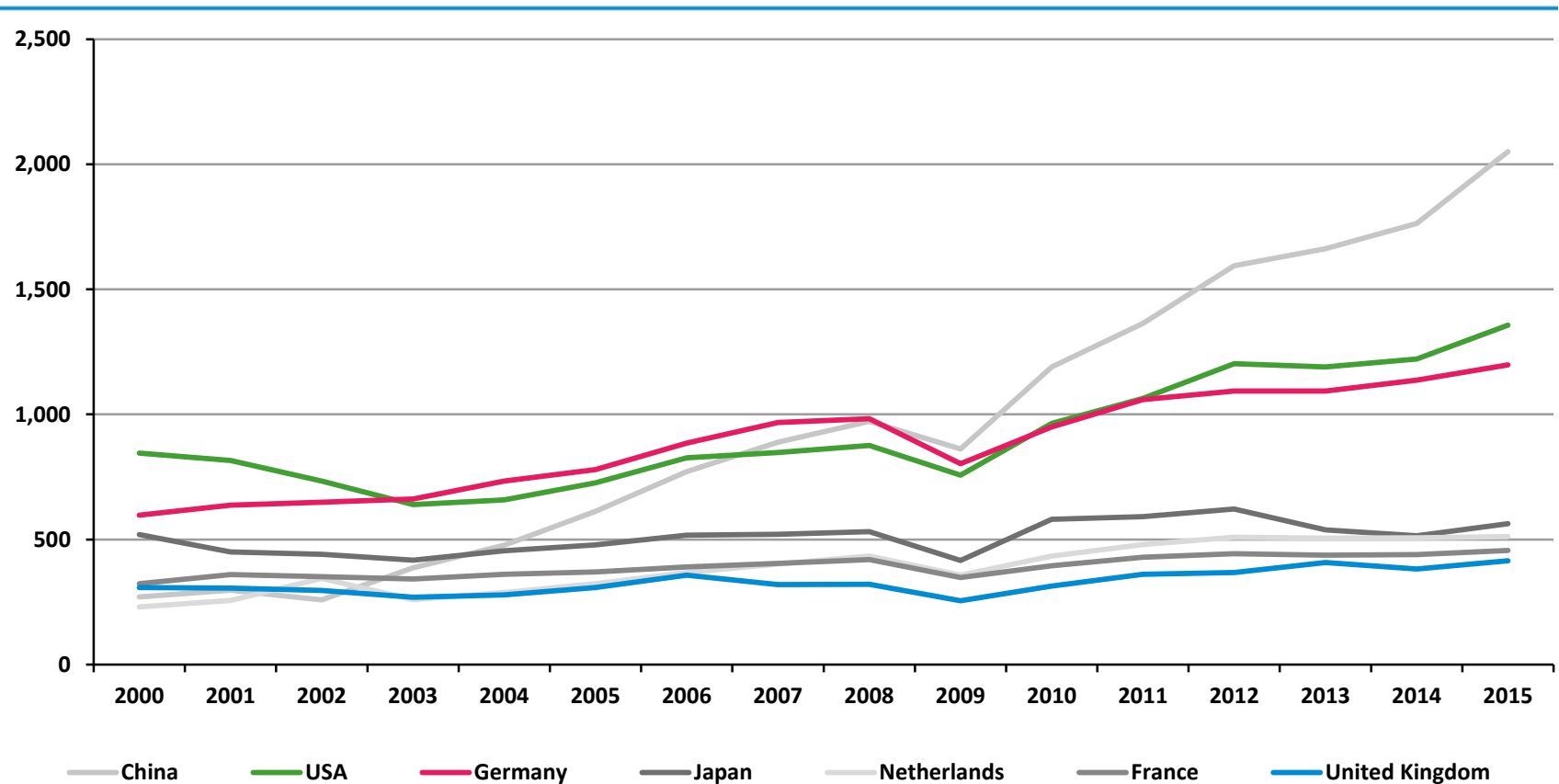
Note: *projections by the federal government

Sources: Federal Government 2016

Global Player

German products are world-renowned, making the country a global export leader.

Development of Export of Goods (2000-2015, in EUR bn)



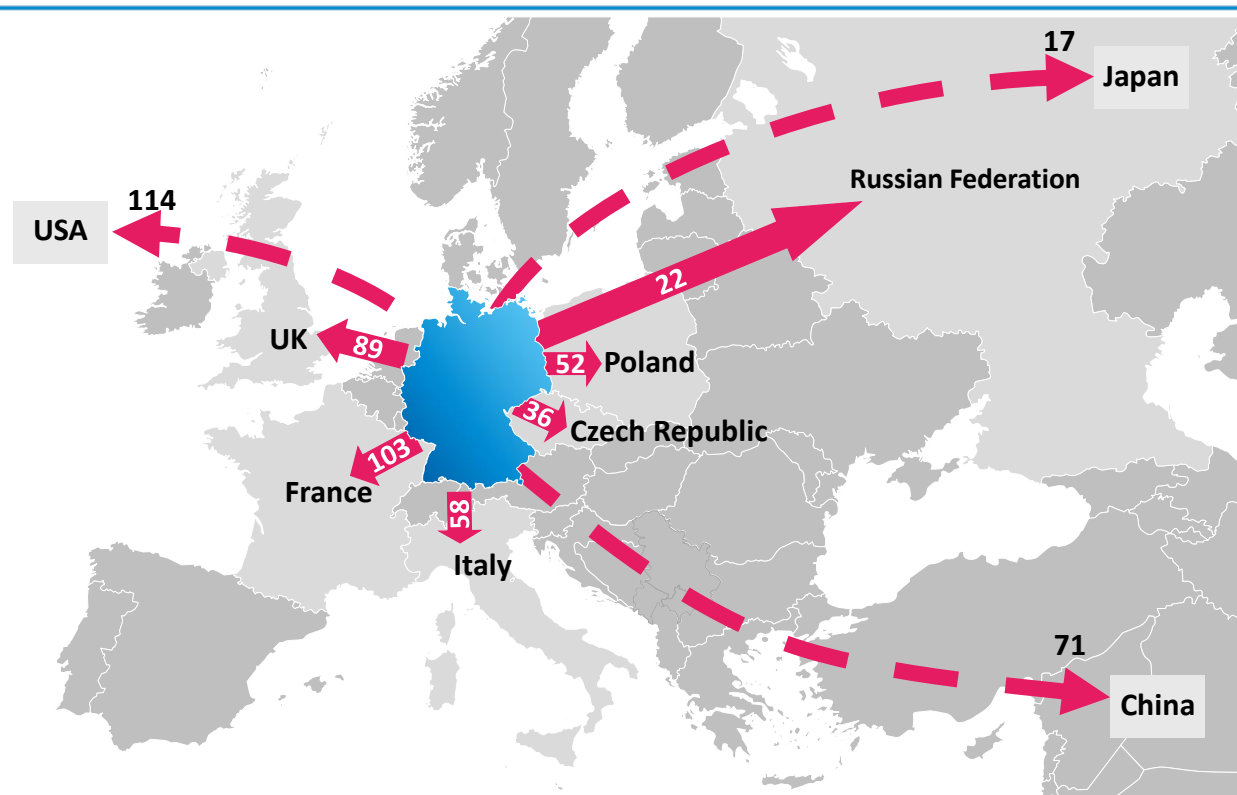
Source: World Trade Organization 2015

Import/Export Hub

Germany is **the** focal point for goods and services in Europe.

German Exports (2015, in EUR bn)

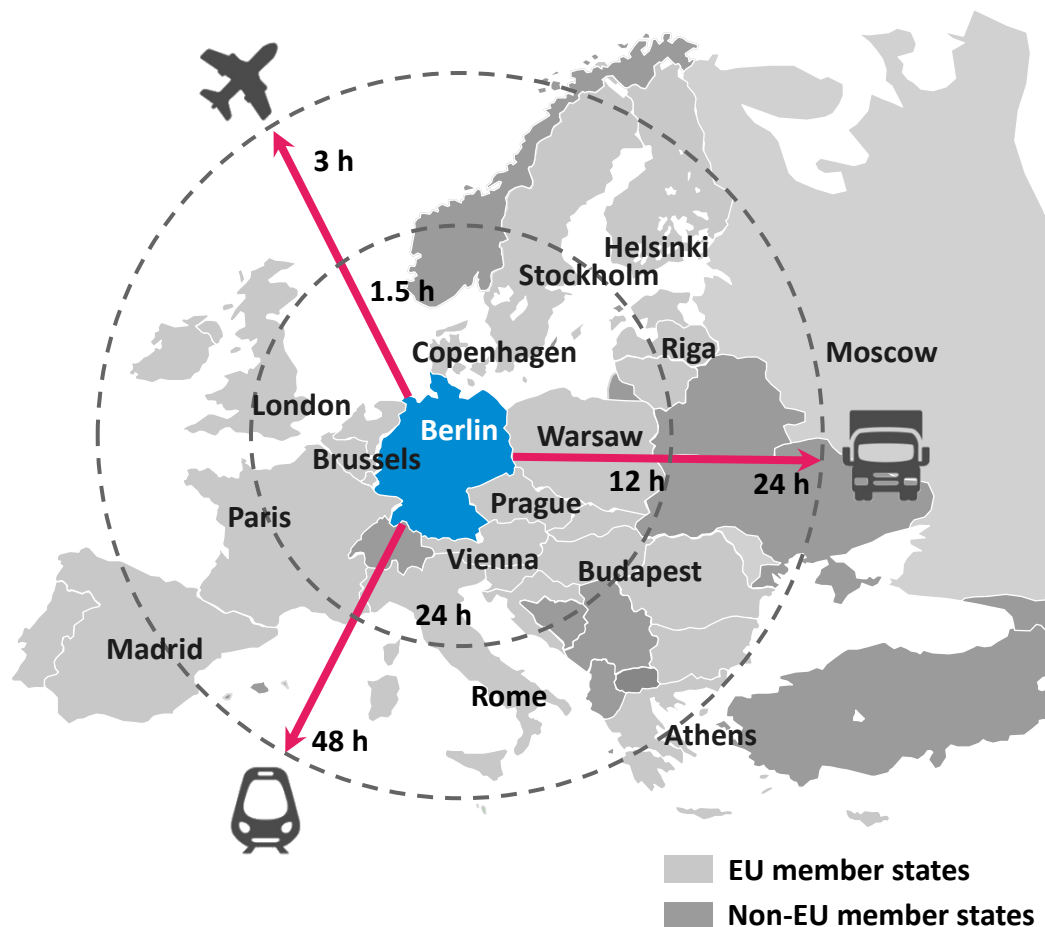
Total German Exports to the World: EUR 1,196 bn



Source: Federal Statistical Office 2016

Central Location - First-Class Infrastructure

EU's new geographic center is in Germany: Providing rapid and easy access to all European markets.



2015	EU28	Germany
Population mn	508	81
GDP (in EUR bn)	14,625	3,026
GDP Growth (YoY)	1.9%	1.7%
Inflation	0.0%	0.1%
Unemployment	9.4%	4.6%

Benefits

- A state-of-the-art transportation infrastructure and logistics capabilities able to serve all European markets
- From Germany, nearly all of Europe can be reached by air in 3 hours and by road in 24 hours (flight, truck, and railway hours from Berlin).

Source: Eurostat 2016

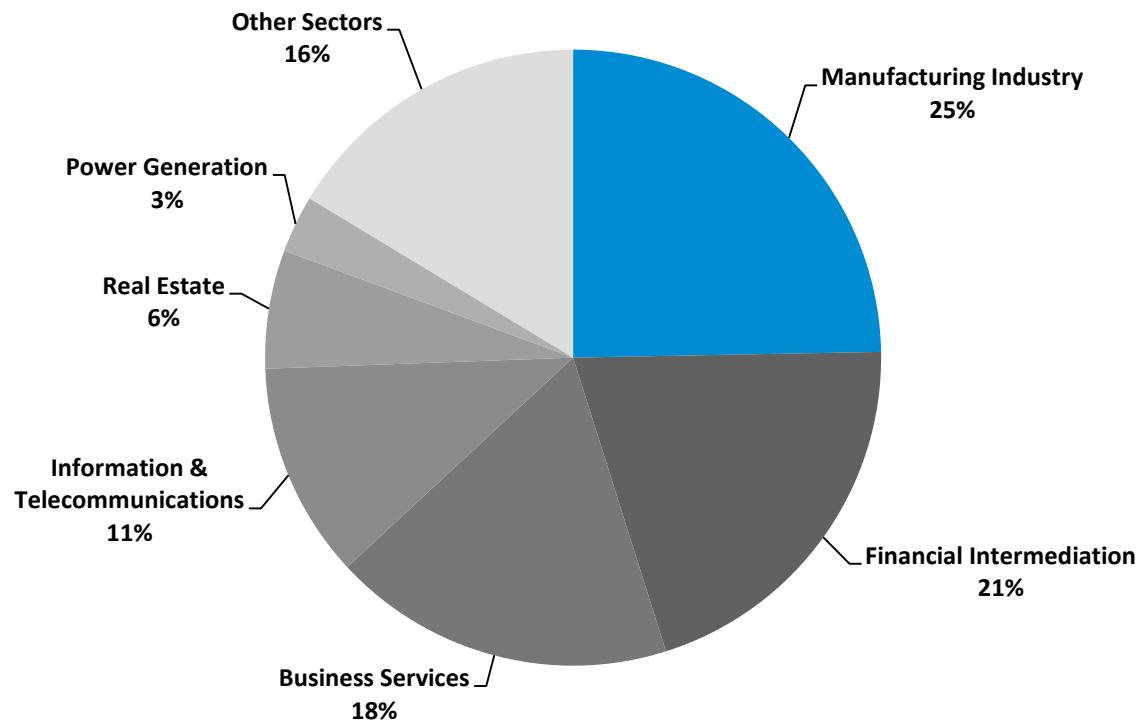
Note: EU-28's center: 42 km east of Frankfurt/Main in Meerholz, Hessen

Institutional FDI Statistics: Bundesbank

Foreign companies invest foremost in the manufacturing industry followed by financial and business services.

FDI Stocks in Germany (2014)

Origin of capital by Sector

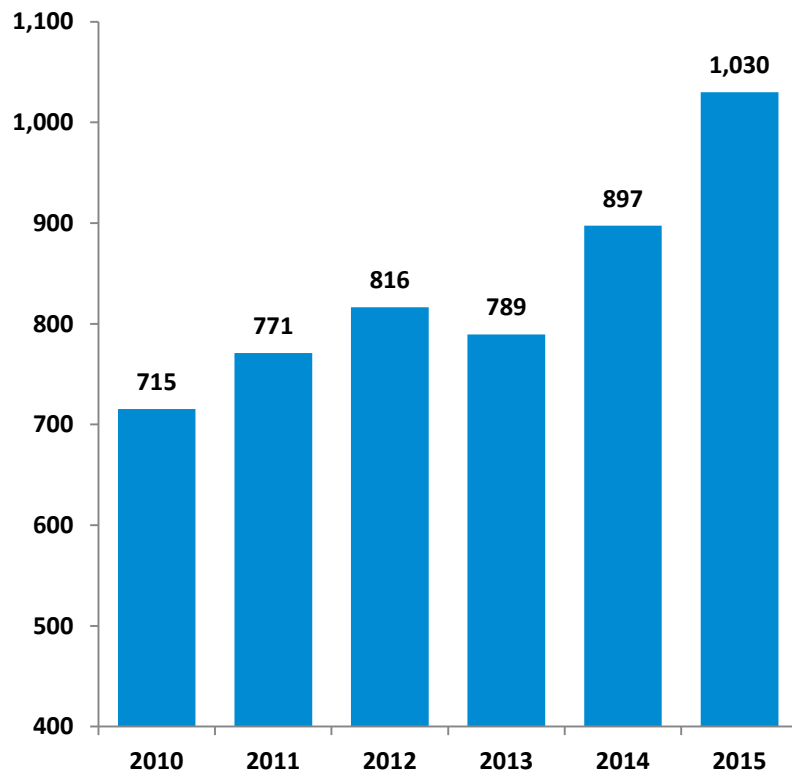


Source: Bundesbank 2016

Institutional FDI Statistics: UNCTAD

With EUR 1 trillion of foreign investments, Germany attracts major inward investment.

FDI Stocks in Germany
(2010-2015, EUR bn)



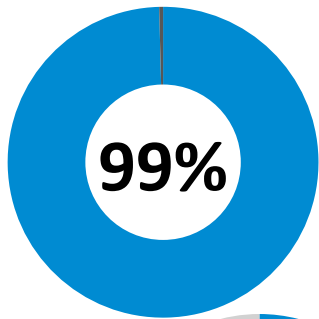
International Ranking of Inward FDI Stocks
(2015, in EUR bn)

Rank	Country	Stocks
1	USA	5,133
2	Hong Kong	1,444
3	UK	1,339
4	China	1,121
5	Germany	1,030
6	Singapore	899
7	Switzerland	765
8	France	709
9	Canada	694
10	Netherlands	649
...		
	Poland	196
	Japan	157
	Czech Rep	104
	Hungary	85
	Slovak Rep	44
	EU-27	7,140
	World	22,948

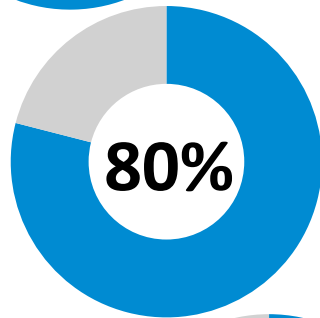
Note: exchange rate: yr. end 2010-15, Source: UNCTAD 2016

German Mittelstand

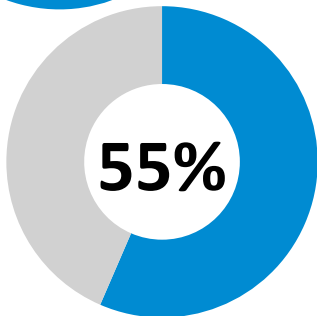
Small and medium-sized companies are the social and economic backbone of the German economy



99% of all enterprises are the German Mittelstand comprising of about 3.6 million registered small and medium sized companies (SME)¹. These companies each employ a staff of less than 500 employees.



80% of all employees in Germany work for SMEs². With almost 23 million workers, the German Mittelstand is a major employment driver.



55%* of Germany's net value added is contributed by German SMEs³.

Notes: 1) ifm estimation for 2015 2) as of December 2014, including apprentices in dual vocational training 3) as of 2012; Source: IfM Bonn 2015

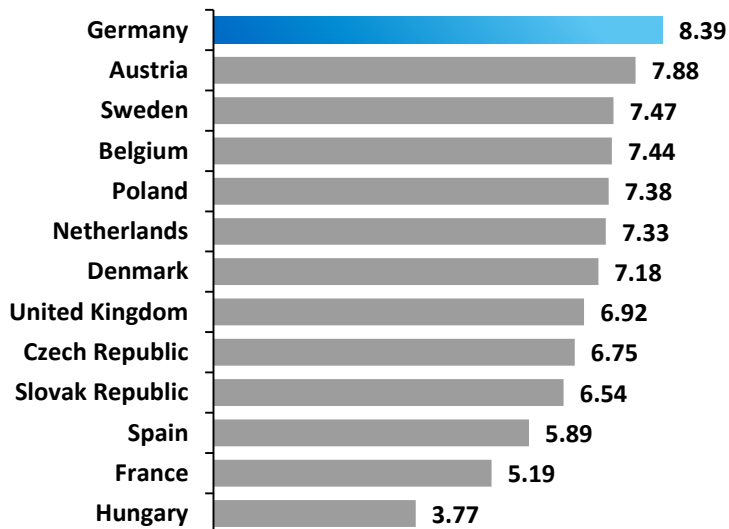
German Mittelstand

By European comparison, Germany's SMEs are highly efficient at moderate labor costs

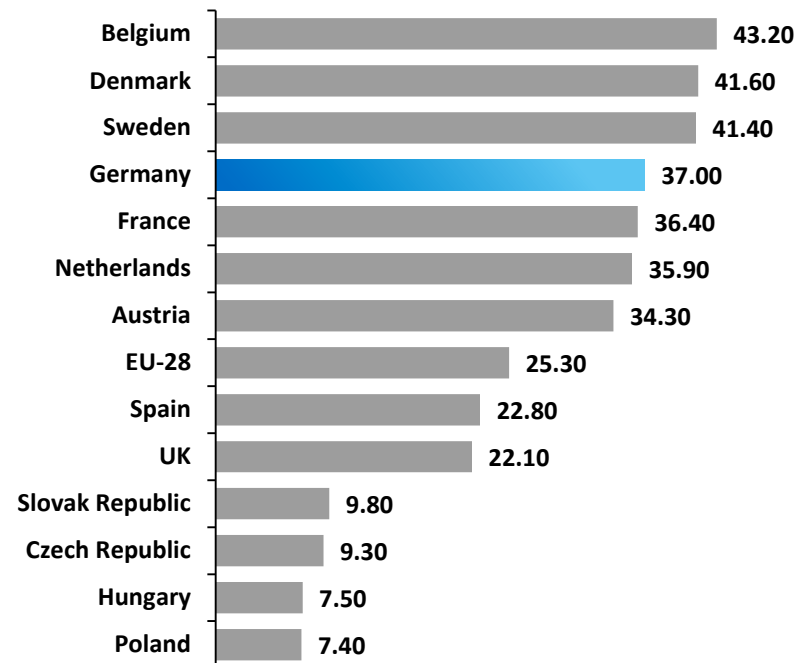
Efficiency of Small and Medium-Sized Companies (survey, 2015)

How efficient are small and medium-sized enterprises by international standards?

0 = low and 10 = high



Industrial Labor Costs (2014, EUR per employee per hour)

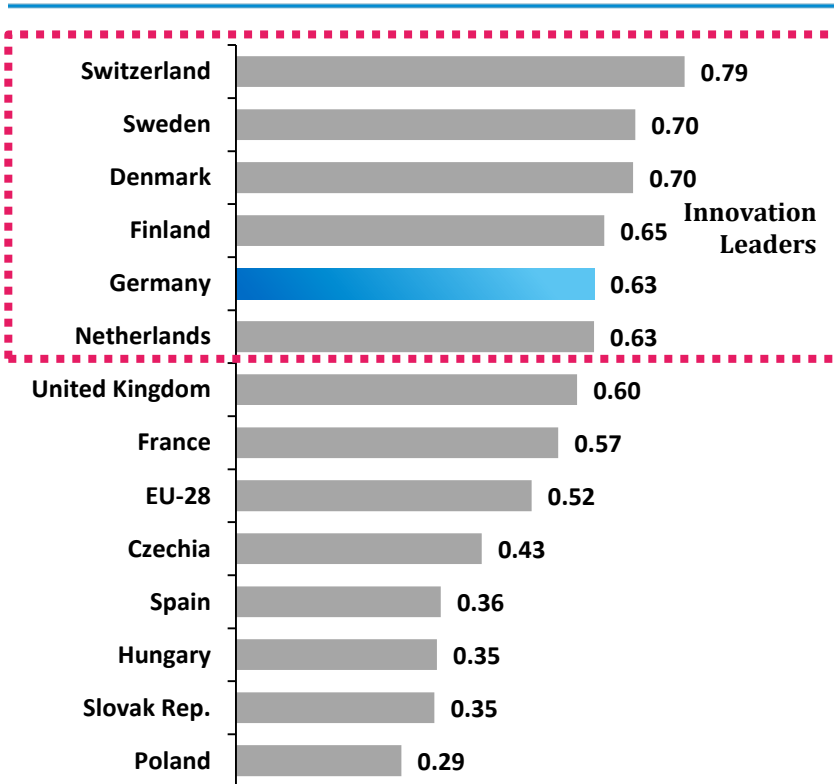


Right chart: Data for manufacturing companies with 10 or more employees only, labor costs excluding apprentices. Please be aware of strong labor cost/ salary variations within German regions. For detailed salary information, please contact Germany Trade & Invest. Source: IMD World Competitiveness Yearbook 2015 (left), Federal Statistical Office calculations based on Eurostat 2015 (right)

German Ingenuity in Europe

Germany is the central R&D location in Europe, providing a sound innovation environment for research-oriented investments.

Innovation Performance of European Countries by European Union Innovation Scoreboard (2016)



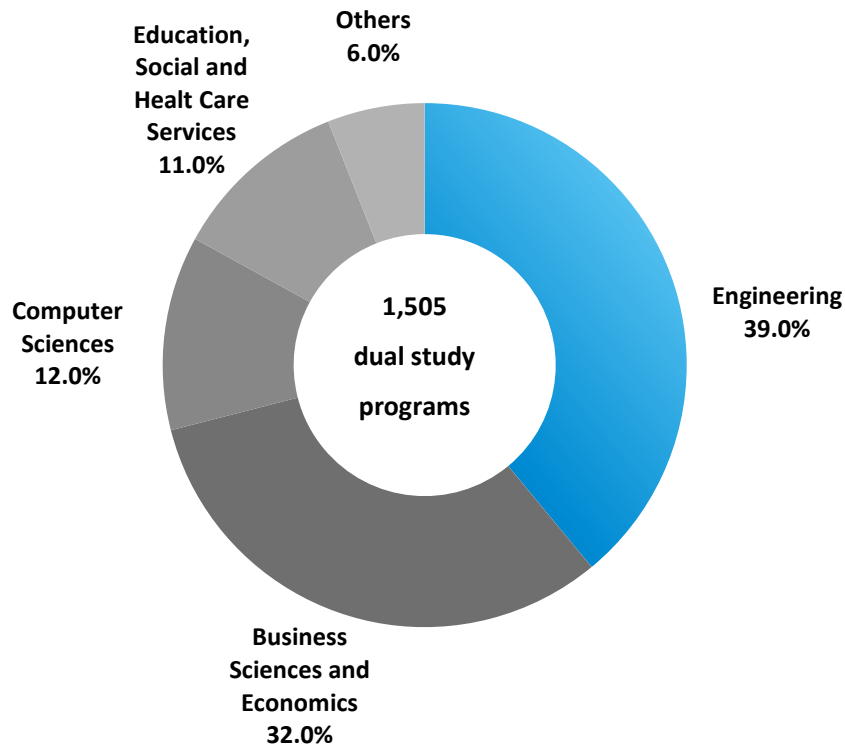
- The comparative assessment of European states in the European Innovation Scoreboard (EIS) underlines Germany's reputation as a leader in innovation performance.
- New doctorate graduates, PCT patent applications and non-R&D innovation expenditures are assessed as Germany's top strengths.

Note: The "innovation index" is a composite of 25 indicators measuring innovation, such as public and business R&D expenditures, educational background, international patent applications; Source: European Innovation Scoreboard 2016. The EIS is an instrument of the European Commission, developed as part of the Lisbon Strategy.

Germany's VET System – Higher Education

In higher education, dual study programs are on the rise.

Dual Study Programs in Higher Education in Germany 2014



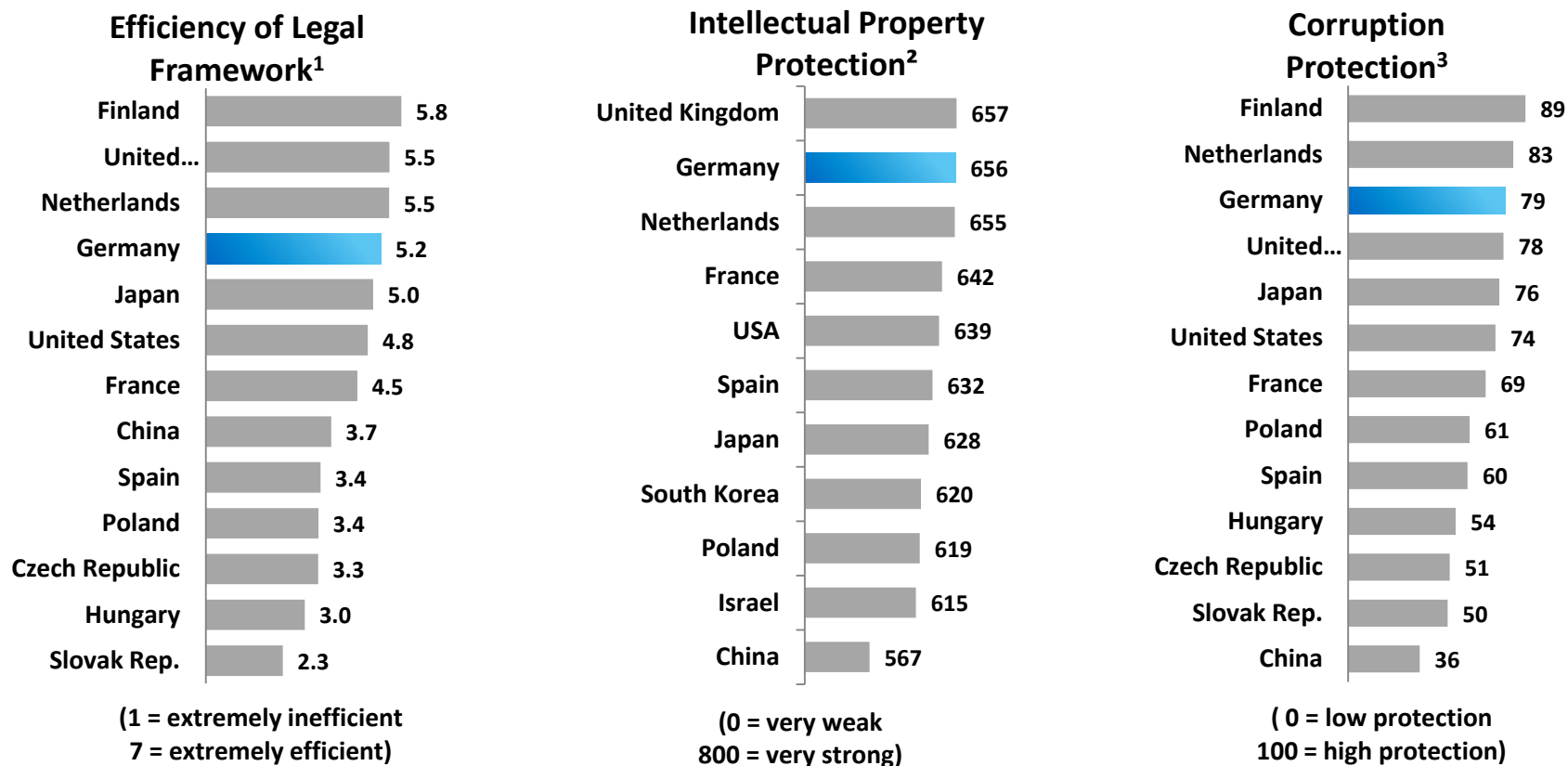
- Since 2004, the number of dual study programs rose from 512 to 1,505 programs in 2014.
- 67%, most of the dual study programs are offered by universities of applied sciences.
- About 41,000 companies recruit participants for dual study programs
- Dual education can include long term internships, distant learning for the academic part and/or overlap with vocational training
- A trend is the rising number of dual study programs for further education

Source: AusbildungPlus 2015

Secure Investment Environment

Germany provides a solid base for investment projects.

Assessment of Planning Security (2013-15, Opinion Surveys)




Source: 1) World Economic Forum 2015-16, 2) Taylor Wessing 2013, 3) Transparency International 2015

Quality of Life

Germany successfully uses its strong economic performance to ensure a high standard of living for the entire population.

Well-Being Index¹ for Selected Countries

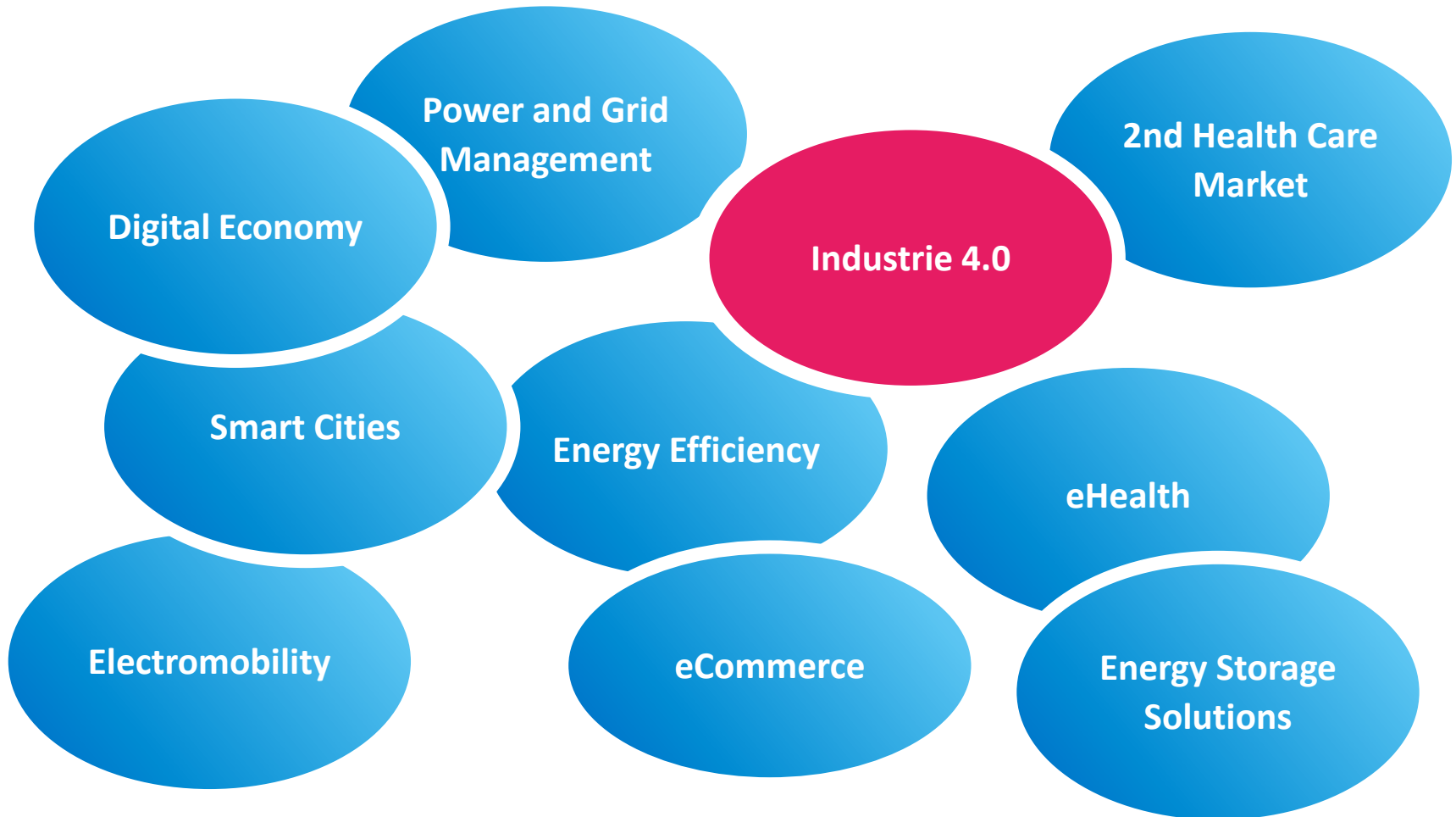
Rank	Country	Rank	Country
1	Norway	20	France
2	Netherlands	21	Japan
3	Finland	...	...
4	 GERMANY	25	Czechia
5	Austria	...	...
6	Denmark	28	Spain
7	Switzerland	...	...
8	Iceland	30	Poland
9	Belgium	...	...
10	Sweden	33	Slovak Republic
...	...	34	Hungary
16	United Kingdom	...	...
...	...	71	China
19	United States		

Note: 1) Well-Being Index based on Sustainable Economic Development Assessment (SEDA), which is divided into three elements (comprised of ten dimensions) and calculated using 44 different indicators. The elements are economics (Income, economic stability, employment), Investments (Health, education, infrastructure) and Sustainability (Income equality, civil society, governance, environment). The survey covers a total of 163 countries.

Source: "The Private-Sector Opportunity to Improve Well-Being: The 2016 Sustainable Economic Development Assessment" Boston Consulting Group 2016.

Business Opportunity Areas

Germany offers a variety of business opportunities in areas of commerce, digitalisation, innovation and future technologies



German Industries' GDP contribution

The production industry of Germany delivers the highest GDP contribution

Share of Germany's GDP by Segment (2015)

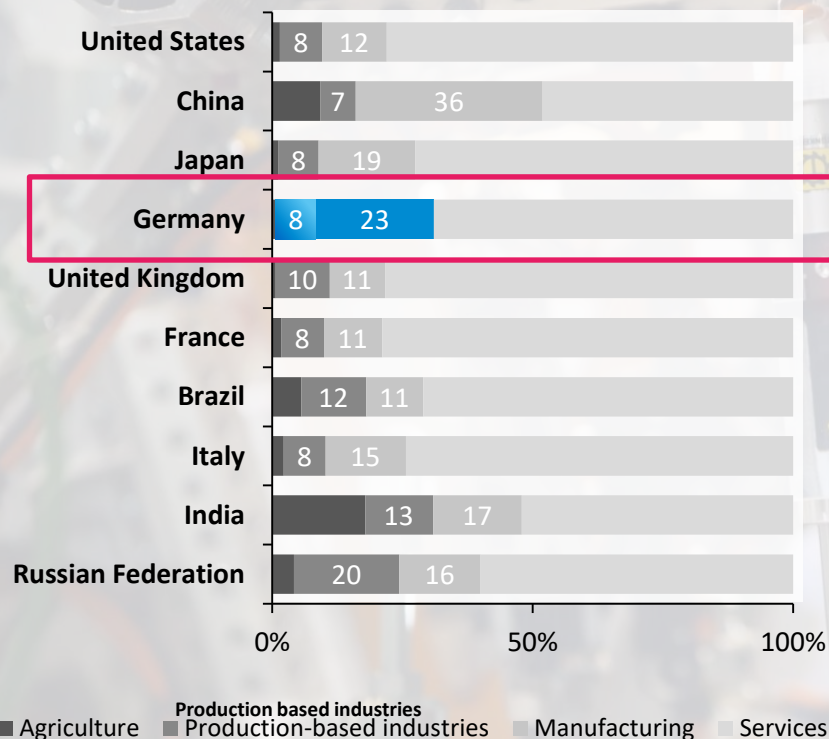


Source: Statista 2016

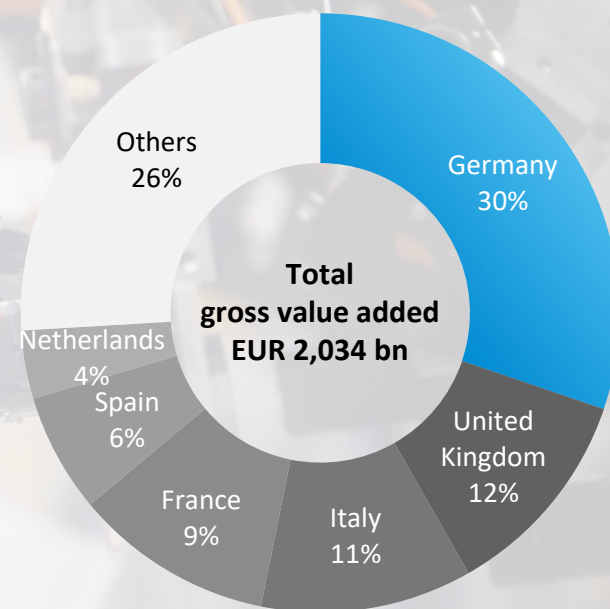
Manufacturing Germany

Germany's share of GDP from industrial production is comparatively high, making Germany the largest manufacturer in Europe

Ten Largest Countries by GDP (2014, in %)



Gross Value Added of EU Manufacturing by Country (2015, in %)

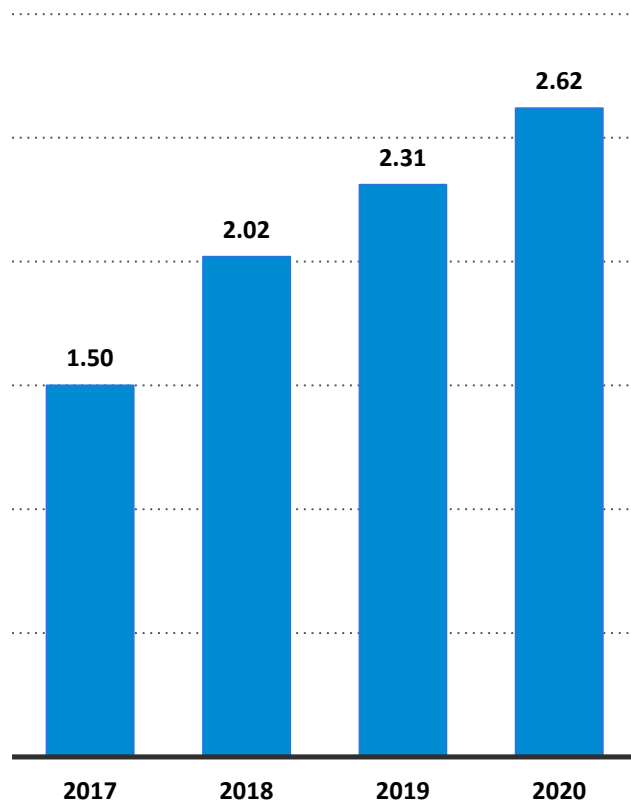


Source: World Bank 2016, Eurostat 2016

Industrie 4.0 related M&P investments

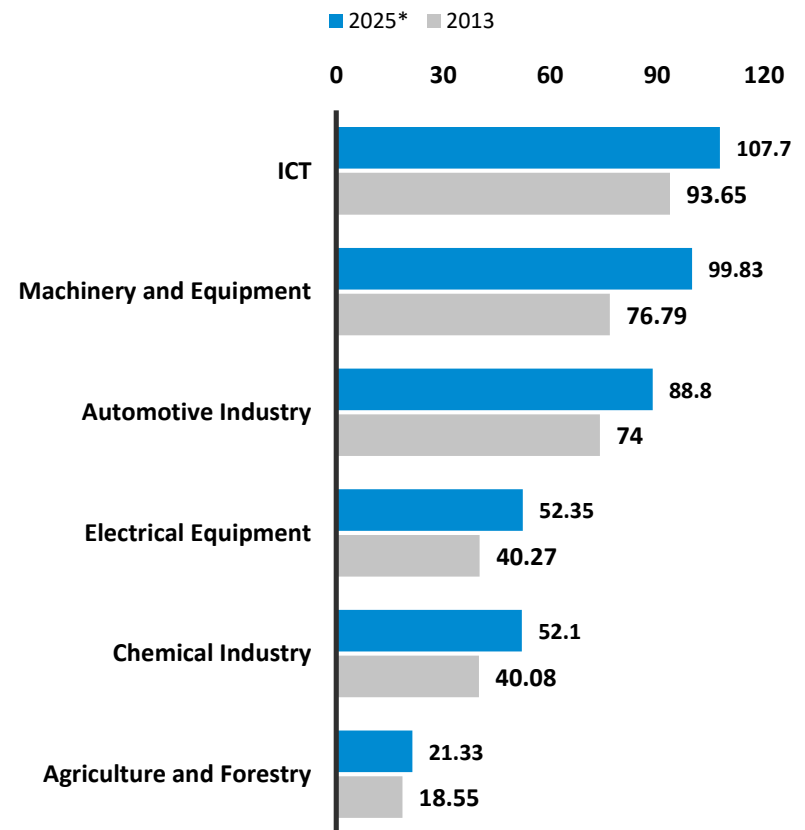
Industrie 4.0 related investments in Manufacturing and Production in Germany are of increasing importance

Forecast of Investments in Industrie 4.0 in Germany from 2017 – 2020 (in bn EUR)



Source: Bitkom 2014

Increase of GDP through Industrie 4.0 in selected sectors in Germany for 2025 (in bn Euro, forecast)



Source: Bitkom; Fraunhofer IAO; Statista ID 297985

Smart Manufacturing deployed

Industrie 4.0 in Germany has by far stepped from research to practical deployment in the industries

Wittenstein bastian GmbH – Fellbach, Baden-Wuerttemberg



- Set-up of Innovation Factory for the future of urban production
- High-precision gearings
- Custom-tailored products and solutions

Industrie 4.0 Profile

- Industrie 4.0 technology leads to process optimization: precise, flexible and timely production planning
- Production cycle OLD: 24h
NEW: 15min
- Use of CPS allows real-time picture of production process
- Employee as planner and decision-maker: enhanced competencies

Source: Wittenstein Group, 2016

Contact Us

Germany Trade & Invest is the economic development agency of the Federal Republic of Germany. The company helps create and secure extra employment opportunities, strengthening Germany as a business location. With more than 50 offices in Germany and abroad and its network of partners throughout the world, Germany Trade & Invest supports German companies setting up in foreign markets, promotes Germany as a business location and assists foreign companies setting up in Germany.

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Who we are

Foreign trade and inward investment agency
of the Federal Republic of Germany

GTAI GERMANY
TRADE & INVEST

Shareholder



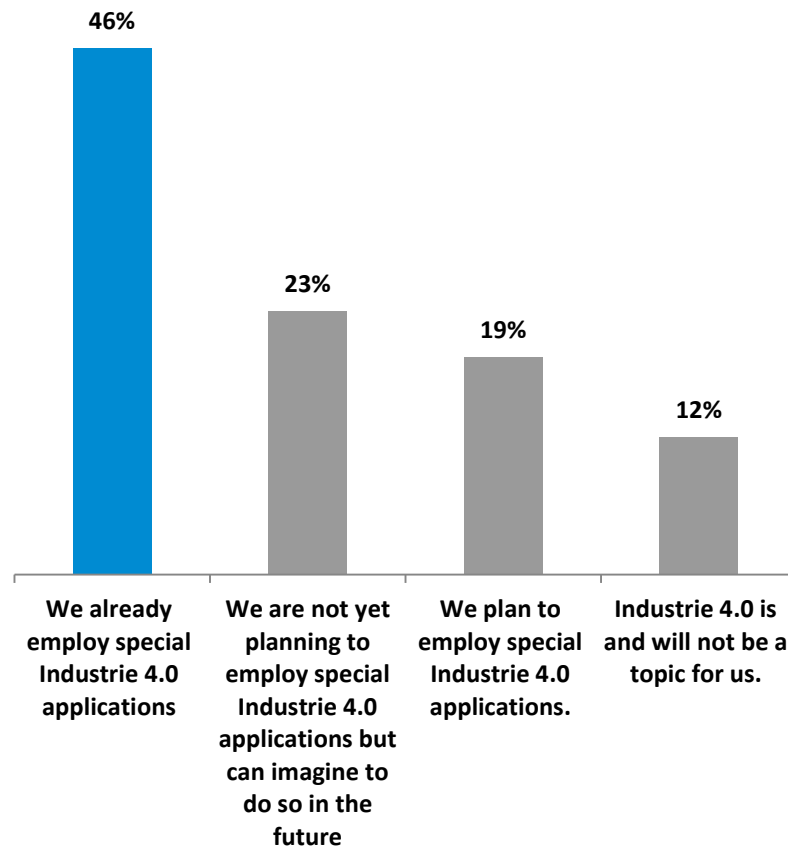
Federal Ministry
for Economic Affairs
and Energy



Industrie 4.0-Implementation in Germany

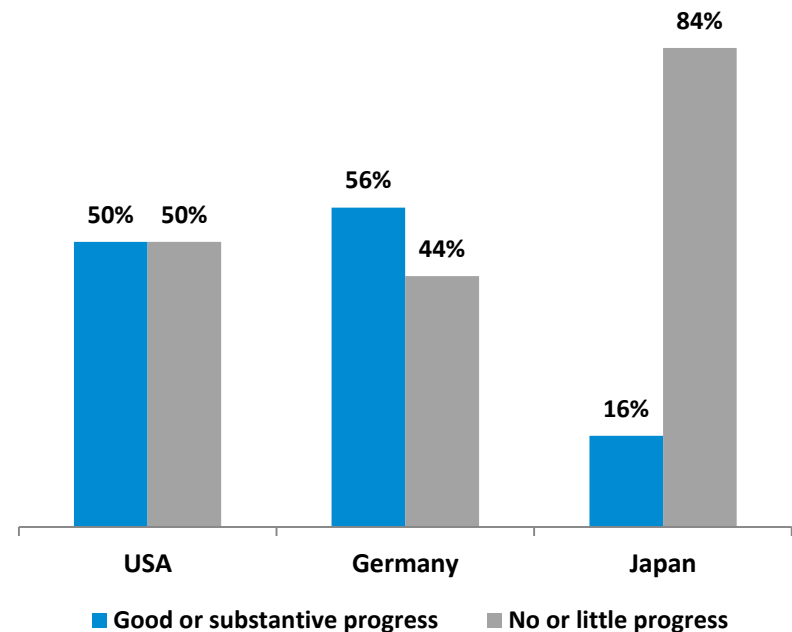
The overall implementation of Industrie 4.0 proceeds apace and will gain further importance in the near future.

Industrie 4.0 Relevance in German Companies (companies with more than 100 employees)



Source: Bitkom Research 2016

Companies' Progress with the Implementation of Industrie 4.0-related Strategies and Applications (in 2016 compared to 2015)



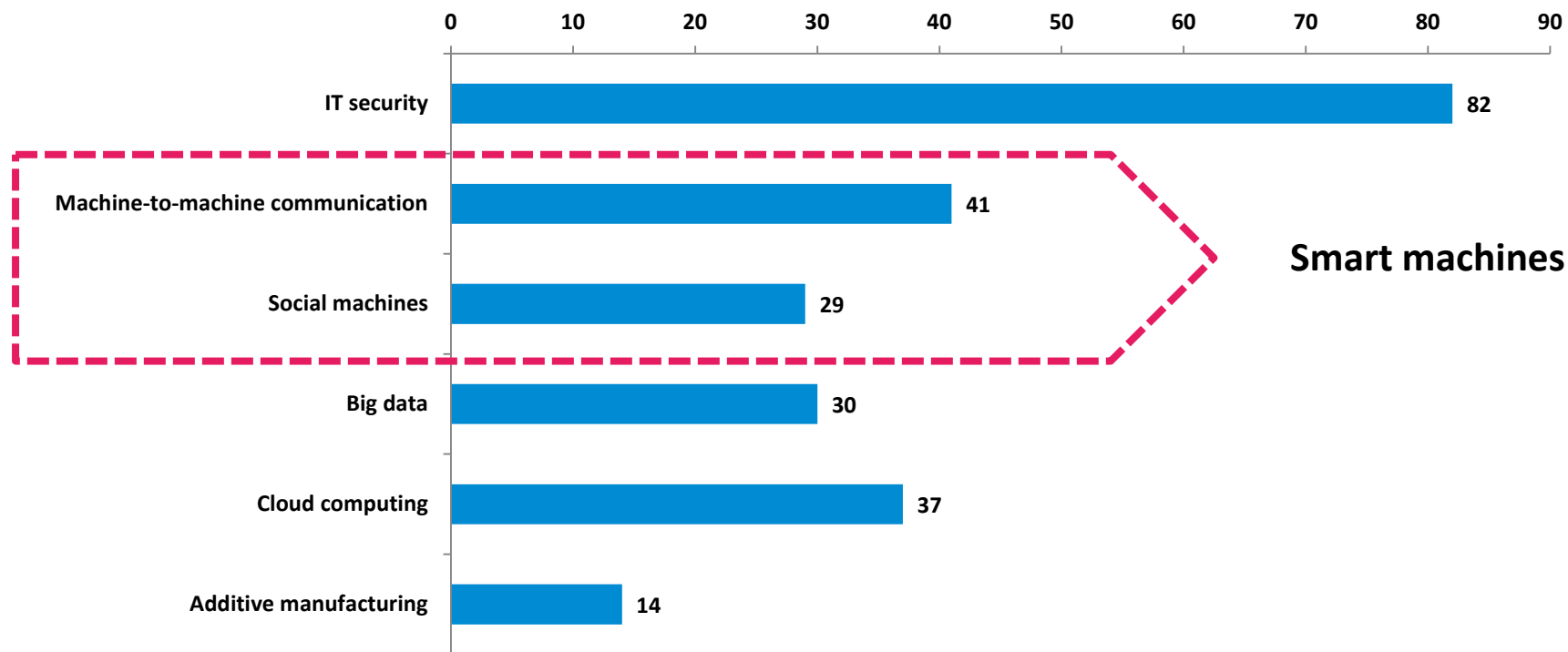
Source: McKinsey 2016

Smart Manufacturing

Besides IT security, smart machines describe the major technology trend for German industrial companies.

Most important technology trends of industrial companies in Germany (2015)

Proportion of respondents



Source: EY; Bitkom Research 2016

Smart Manufacturing deployed

Industrie 4.0 in Germany has by far stepped from research to practical deployment in the industries 1/3

ADIDAS Group – SPEEDFACTORY in Ansbach, Bavaria



- International sporting goods producer Adidas relocates production to Germany by setting up a Speedfactory in Bavaria
- Operation of facility performed by Oechsler Motion GmbH

Industrie 4.0 Profile

- Fully automated footwear production by using robot technology across 4.600 m²
- 3D-printed soles
- 5hrs from order to final product
- In-store customization and digital consumer experience
- Cutting down on shipping emissions and reducing the use of adhesives
- Large-scale production to begin in 2017

Source: www.adidas-group.com

Smart Manufacturing deployed

Industrie 4.0 in Germany has by far stepped from research to practical deployment in the industries 3/3

Delta Shelving Systems GmbH – Fröttstädt / Weimar, Thuringia



- Delta shelving manufactures wire mesh decks for customers in Europe
- Invested in technology - state of the art mesh welding and roll forming machine to integrate with ERP system

Industrie 4.0 Profile

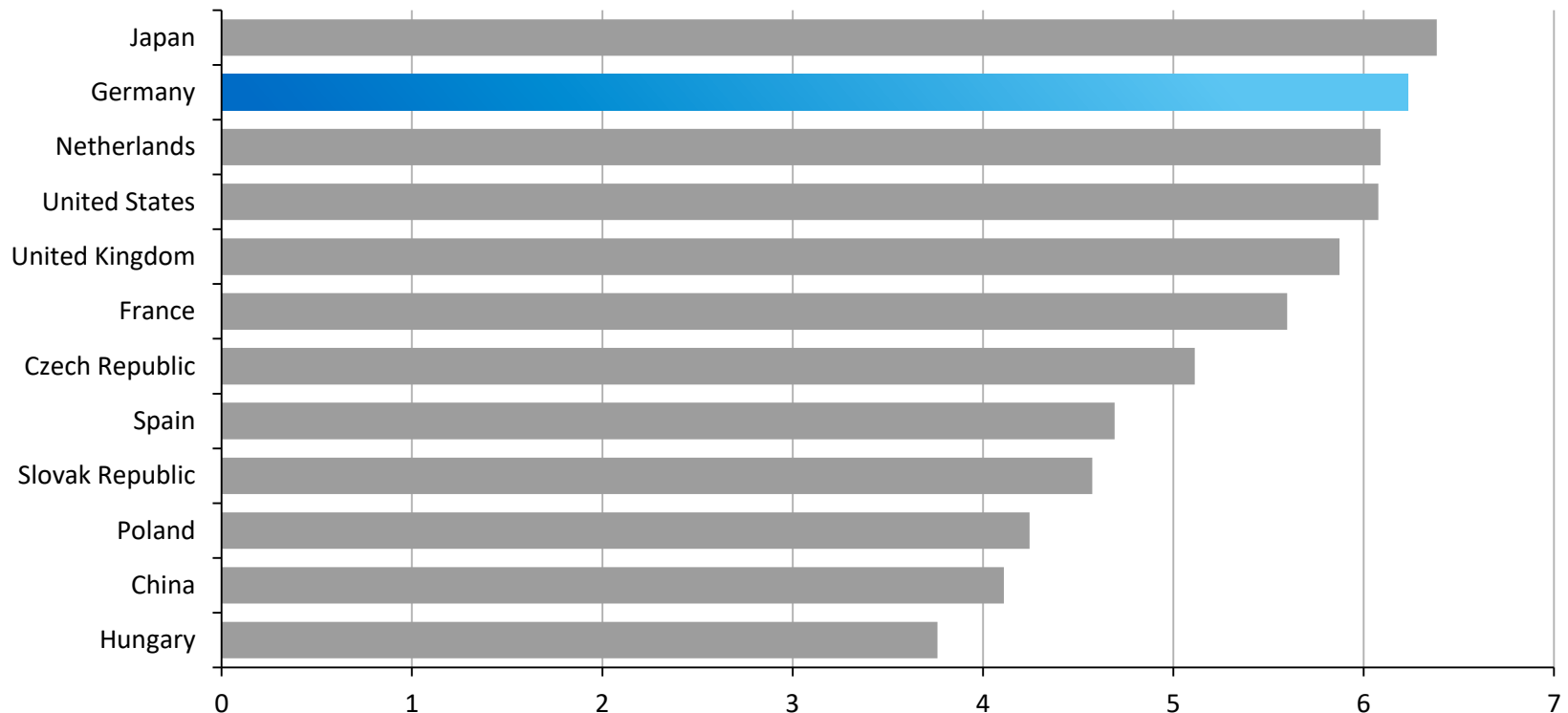
- Award-winning EXPRESSIT e-commerce platform, integrated into an advanced manufacturing environment delivering world-class efficiency
- Production focus on mid-to-low volume and higher complexity markets (e.g. medical applications)
- Storage solution tailored to customer individual needs

Source: www.deltashelving.com; GTAI Markets 2/2014

High Productivity

Germany is widely recognized among executives as a business location with highly efficient production processes.

Assessment of Sophistication of Production Process (2015-16, Opinion Poll)



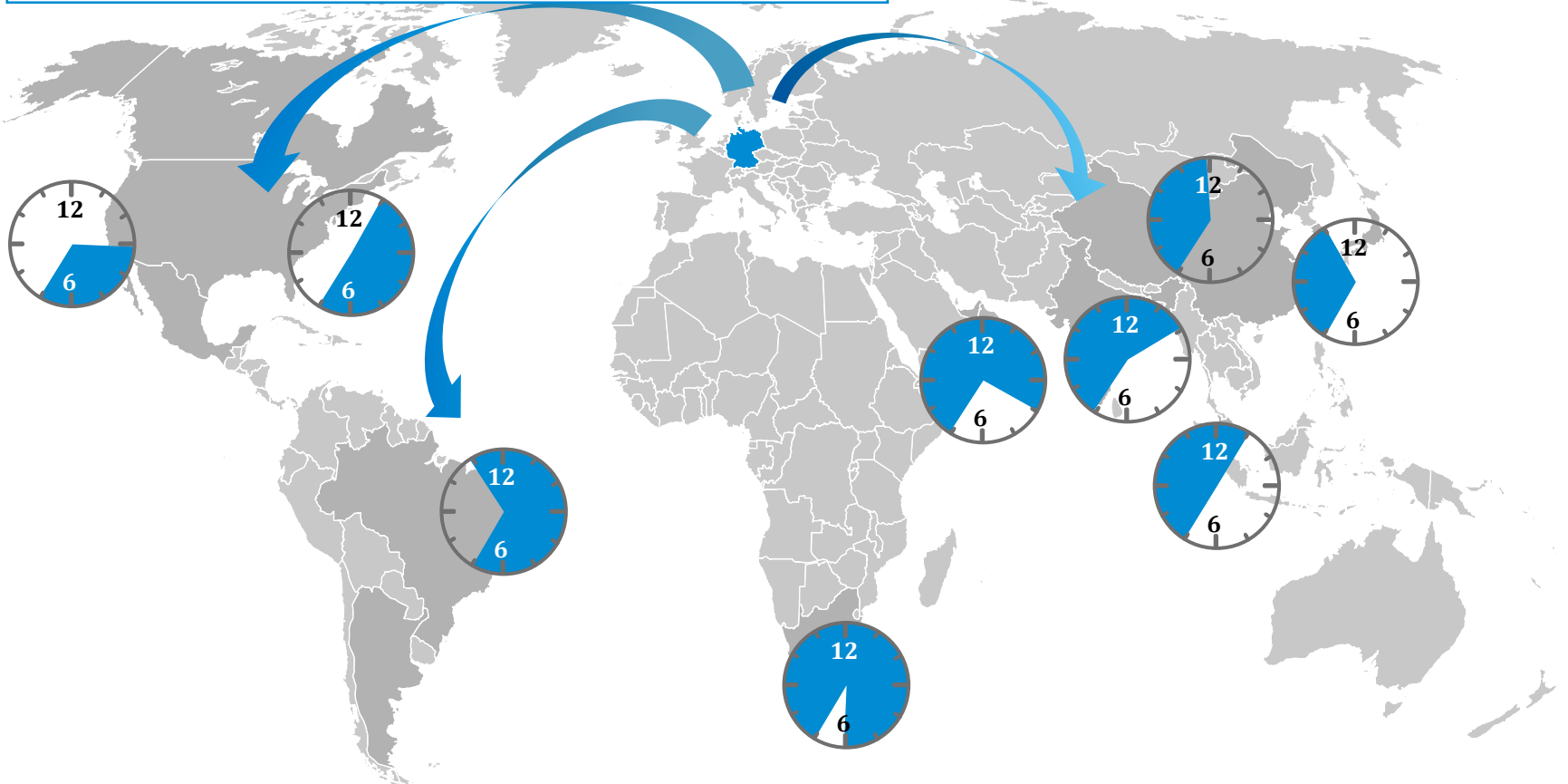
(1=labor-intensive methods or previous generations of process technology; 7= the world's best and most efficient process technology)

Source: World Economic Forum 2015-16

Global Player

International communications made easy: German business hours correspond or overlap with those of all major international markets.

Explanation: Marked area represents the times between 7am to 7pm in Germany when you can contact your business partner abroad.



Note: Assumed business hours in Germany: 7am to 7pm; standard time