Prospects for Indo-German Collaboration in High-Technology Manufacturing

Executive Summary

सत्यमेव जयते

Embassy of India
Berlin, Germany

EY
Building a better working world

I. Essentials and key findings

With the power of its fast growing 1.25 billion population, India is on its way to higher GDP growth. Make in India will deliver the key requirements for enabling India to become the manufacturing hub in Asia. An investor-friendly environment is being created focusing on skill development, liberalization of sectors and ease of doing business.

"Prospects for Indo-German Collaboration in High-Technology Manufacturing" is picking up the key elements of the agenda. Profiles of the 13 relevant sectors have been composed demonstrating the critical key performance indicators.

Considering legal and regulatory facts as well as obstacles perceived by German Companies, a roadmap has been developed. The roadmap presents the steps to be taken by all stakeholders, including the governments on how to overcome the current challenges to facilitate greater trade and investments in High-Technology sectors.

Government of India (GoI) is investing trillions of Rupees in education, infrastructure, smart and green projects. In connection with India's affinity to high technologies this can be an incubator multiplying German investments into India.

Strong Indo-German ties and complementary strengths of both countries – large pool of highly skilled low cost workforce in India and German manufacturing and technological competitiveness – provide a great opportunity for both countries to leverage their relative strengths for development of their societies. Intensified cooperation in High-Technology Manufacturing sectors is a win-win situation for both countries!

The main findings of the study are based on market research and responses from the "Delphi study".

Key finding 1:

German companies are favorably inclined to invest in the Indian High-Tech market

Key finding 2:

India is assumed to be the highest performing country among the BRIC markets

Key finding 3:

There is high market readiness in India for High-Tech products

Key finding 4:

Indo-German collaboration in High-Tech Manufacturing can become an important part of the Make in India initiative

Key finding 5:

A set of challenges are impacting German companies' investment decisions

Key finding 6:

Seven High-Tech sectors offer greatest convergence for Indo-German collaboration

Key finding 7:

India has strong IT and Space sector capabilities that German companies could benefit from

Key finding 8:

Recent GoI initiatives in FDI, ease of doing business and infrastructure can significantly impact the business environment in High-Tech sectors

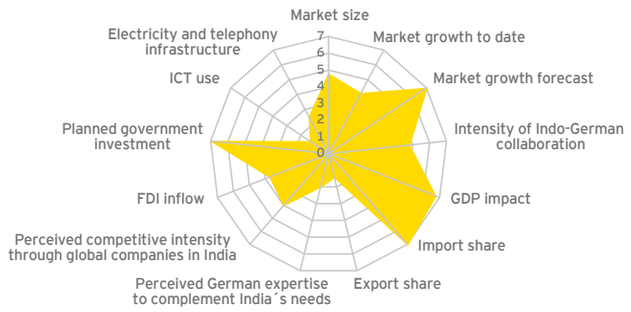
Key finding 9:

Indo-German collaboration in High-Tech Manufacturing has the potential to favorably impact both economies

II. Analysis of High-Tech Manufacturing sectors identified in the study

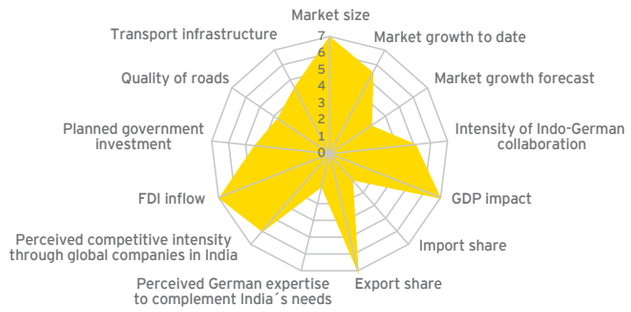
Each sector has been analysed based on the responses from decision makers in companies with regard to their perception about key performance indicators, e.g. market attractiveness, key challenges, economic potential, market readiness and high-technology solutions.

Sector analysis: ESDM



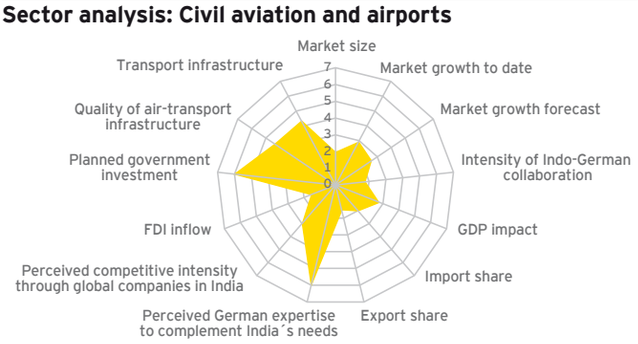
Source: IESA/F&S, fDi Intelligence, MOSPI, MOCI, CMIE, EY analysis

Sector analysis: Automotive



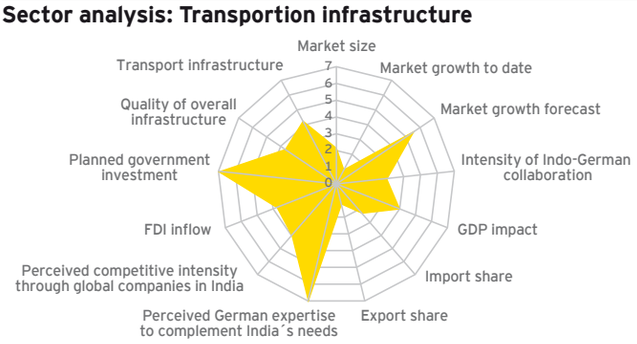
Source: SIAM, ACMA, fDi Intelligence, MOSPI, MOCI, CMIE, EY analysis

Sector analysis: Civil aviation and airports



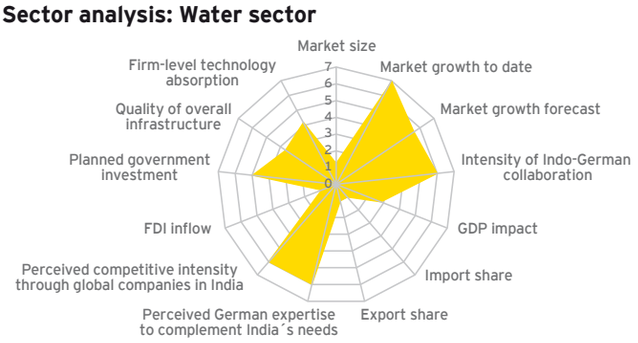
Source: Make in India, fDi Intelligence, MOSPI, MOCI, CMIE, EY analysis

Sector analysis: Transportion infrastructure



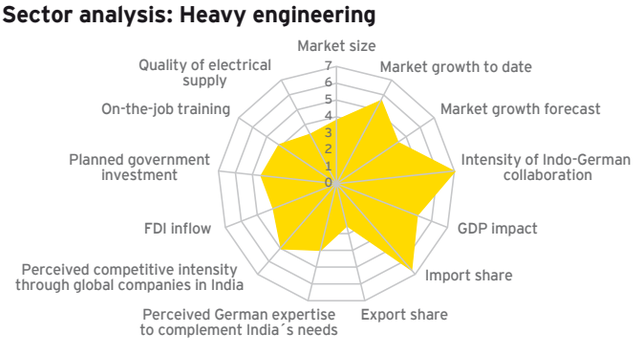
Source: BMI Research, fDi Intelligence, MOSPI, MOCI, CMIE, EY analysis

Sector analysis: Water sector



Source: Global Water Intelligence, fDi Intelligence, MOSPI, MOCI, CMIE, EY analysis

Sector analysis: Heavy engineering



Source: DHI, fDi Intelligence, MOSPI, MOCI, CMIE, EY analysis

III. Regulatory Framework for High-Tech sectors

The export control regulations of India and Germany are not identical, as both countries adopt different systems of classifications for their strategic trade control systems. An analysis of the regulations of export control and dual use items reveals that these regulations have varying impact across the sectors covered in the study. The impact depends on the project for which the special materials would be used. India's membership in the multilateral export control regimes can significantly ease these restrictions. There is a need for building greater trust in India's intellectual property rights (IPR) system among German companies to facilitate greater collaborations in High-Tech sectors.

IV. Case study on Machine tools sector

Gedee Weiler (GDW), a successful Indo-German venture in the machine tools sector complemented by their efforts to skill people in India, provides an encouraging example of how Indo-German cooperation can be made to work successfully and sustainably. Overcoming the current challenges of export controls, infrastructure and skill development can lead to successful collaborations in this area.

V. Roadmap for Indo-German partnership in High-Tech Manufacturing

To support Indo-German High-Tech collaborations both within the existing regulatory framework as well as in the relevant sectors for the future, the following strategic instruments are recommended for implementation:

1. High level political support for High-Technology cooperation
2. High-Tech partnerships for Make in India
3. Setting up of High-Tech industrial clusters
4. Setting up centers of excellence
5. National network of manufacturing technology centers
6. Skill development in High-Tech sectors
7. Venture capital and start-ups as High-Tech stimulators
8. Investor facilitation and "hand-holding" (support for starting/ established businesses)
9. Export control workshops
10. IPR workshops

VI. Contact information

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