PROJECT EXPORTS FROM INDIA: STRATEGY FOR REENERGIZING AND REORIENTING



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PROJECT EXPORTS FROM INDIA: STRATEGY FOR REENERGIZING AND REORIENTING

Exim Bank's Occasional Paper Series is an attempt to disseminate the findings of research studies carried out in the Bank. The results of research studies can interest exporters, policy makers, industrialists, export promotion agencies as well as researchers. However, views expressed do not necessarily reflect those of the Bank. While reasonable care has been taken to ensure authenticity of information and data, Exim Bank accepts no responsibility for authenticity, accuracy or completeness of such items.

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EXECUTIVE SUMMARY

With merchandise exports witnessing a slowdown during the past decade, there is a need to focus on newer avenues for export growth from India. Project exports is one such sector of opportunities for India. Export of engineering goods on deferred payment terms and execution of turnkey projects and civil construction contracts abroad are collectively referred to as 'Project Exports'. With growing impetus to infrastructure projects across most developing countries, and multilateral financial institutions scaling up their investments across various infrastructure segments, the scale of opportunities in project exports is large and growing. Indian exporters can leverage these opportunities as they have already developed substantial competitiveness in this sector. Strengthening of capabilities in project exports will also be crucial from the point of view of positioning the Indian economy higher on the exports value chain.

DEMAND - SUPPLY SCENARIO

Infrastructure investments are a growing source of increase in demand for project exports across the globe. According to recent estimates, nearly 3 percent of global GDP is invested in infrastructure annually. With growing world population, increasing urbanization, and accelerating pace of economic development, infrastructure demand is set to continue growing rapidly across the globe.

Several Indian companies are tapping the emerging opportunities in project exports, and making substantial contributions to the exchequer. According to the data collated by the Project Exports Promotion Council (PEPC), the project exports from India were valued at US\$ 8.2 billion during 2016-17, accounting for nearly 1.9 percent of the overall exports (merchandise and services combined) from India. There has been substantial moderation in the value of project exports thereafter, which could be partly attributed to the widespread slowdown across economies, and deteriorating fiscal position in several developing economies.

In order to supplement the data collated by the PEPC, Exim Bank conducted a survey of select project exporters in India. As per the survey, during FY16-FY18, companies reported securing contracts valued at nearly US\$ 17.7 billion. In the survey, power sector has emerged as the topmost sector for project exports from India, with companies securing several contracts in the segment of

transmission and distribution. In value terms, nearly 48 percent of the contracts secured were in the power sector. Renewable energy (share of 11 percent), transport (10 percent), railway (10 percent), and other construction (9 percent) were the other major sectors for project exports from the country.

In terms of markets, Middle East is among the top destinations for project exports from India, with UAE and Qatar being the top two destinations for the surveyed companies during FY16-FY18, with shares of 16 percent and 12 percent, respectively. Bangladesh (share of 11 percent), Kuwait (7 percent), Mauritius (4 percent), and Afghanistan (3 percent) were the other top destinations.

While the significant presence of Indian companies in project exports can be partly attributed to the growing prowess of Indian companies, the role of Government of India has also been pivotal in creating an enabling environment. The Government of India's support to developing partner countries through the Lines of Credit (LOC) program helps create mutually beneficial partnerships with other developing countries and creates opportunities for Indian companies. Apart from the positive spillovers of the programmes of the Government of India, a robust institutional structure for medium to long term financing has also played an important role in promoting project exports from India. The Export Credit Agencies (ECAs) in India— the Export - Import Bank of India (Exim Bank) and ECGC Ltd., provide a conducive environment for project exports from the country.

MULTILATERAL DEVELOPMENT BANK FUNDED PROJECTS

Multilateral Development Bank (MDB) funded projects represent a significant part of the total project exports undertaken across the globe. These projects are a source of business opportunities, as they require substantial goods, equipment, civil works and consulting services across a wide spectrum of sectors. The projects allow exporters to capitalize on their competitive advantage and showcase their domain expertise.

Over the past five years (2014-2018), contract awards for projects financed by MDBs such as the World Bank (WB), the Asian Development Bank (ADB), the African Development Bank (AfDB), the Inter-American Development Bank (IDB) and the European Bank for Reconstruction and Development (EBRD) cumulatively amounted to nearly US\$ 155.7 billion. During this period, the overall contracts secured by Indian companies in MDB funded projects have witnessed a significant upsurge. Overall contracts secured by Indian companies in ADB, AfDB and the World Bank funded projects amounted to US\$ 21.0 billion during 2014-2018. A significant share of the projects has been secured through International Competitive Bidding (ICB).

India is among the top ICB winning countries across projects funded by major MDBs. Majority of these ICB contracts have been secured in domestic projects, but, India is also among the top project exporter in the overseas markets, particularly in Sub-Saharan Africa, Middle East and North Africa regions. While Indian contractors specialize in energy, transport, and water/ sanitation sectors across all the regions in MDB funded projects, they also face fierce competition in each of these sectors, particularly from China.

COMPARISON WITH KEY COMPETITORS

Analysis of contract awards across major sectors and regions/countries in MDB funded projects awarded through international competitive bidding indicate that India's top competitors across its major sectors and regions of operation are China, South Korea, and Turkey. The survey of project exporters conducted by Exim Bank also indicates that China and Turkey are among the top two competitors for Indian project exporters. A comparative analysis of India vis-à-vis its top competitors is undertaken in the Study, to understand their relative market presence, and comparative advantages, as also identify the areas for improvement for Indian companies.

Comparison of the region-wise share of India and its competitors in the ICB contracts secured in World Bank funded projects indicates a clear hegemony of China in the regions of South Asia, East Asia and Pacific, and Sub-Saharan Africa. In Europe and Central Asia, and Middle East and North Africa, Turkey secured the maximum value of ICB contracts in World Bank funded projects during 2014-2018, among the countries taken into consideration. The success in the Latin America and Caribbean (LAC) market has been limited for India, as also its competitors.

Analysis in the Study further indicates that strong government support, robust ECA framework, and focus on enhancing technological capabilities are some of the commonalities between India and its competitors. In some areas such as cheaper raw material costs, countries such as China have clear advantages over Indian companies. On the other hand, India's human resource capabilities are perceived to be a key strength by Indian project exporters.

CHALLENGES

Respondents to Exim Bank's survey on project exports perceive high political risks, institutional delays (such as land acquisition, planning and approval delays, passiveness in decision making), financial constraints (cash flow issues, delay in payments, credit unavailability), and low labour productivity as the major challenges faced by Indian project exporters in overseas projects.

Concentration of Project Markets

Survey responses, as also the trends in MDB projects secured by Indian companies, indicate that Indian project exporters have limited presence in geographies other than Africa, South Asia and the Middle East. In the emerging markets of Latin America and Caribbean, wherein the opportunities for infrastructure projects are significantly large, Indian presence is very limited. The survey results indicate that high competition and absence of favorable project opportunities are the top factors restricting Indian project exporters from exploring newer geographies and sectors.

Especially in the context of the LAC region, another reason for lesser engagements by Indian companies is that India is not yet a member of the IDB, because of which Indian companies are not permitted to bid for any of the IDB funded projects in the LAC region. It is noteworthy that membership to the IDB was one of the key advantages that enabled Chinese contractors to diversify their operations into the LAC region.

Low Bid Conversion Ratio in Select Regions

Analysis of the tenders for EBRD funded projects indicates that the bid conversion ratio of Indian companies is low. Other developing countries had a better rate of success than India in the EBRD funded projects during 2018. A key reason for low bid conversion ratio could be absence of regional experience and thus low probability of success in this region. Contracts secured by India in Europe and Central Asia are fairly lower than that secured by competitors such as Turkey and China in the World Bank funded projects as well. Clearly, there is need for a roadmap for entering these geographies and gaining experience.

Data Constraints

Consolidated data on project exports is currently not available on a timely basis. In the past, the Working Group Mechanism provided access to Exim Bank to collate data on project exports. In order to liberalize and simplify the procedure related to project exports, the Reserve Bank of India (RBI), in July 2014, decided to dispense with the structure of the Working Group. As a result, Exim Bank no longer has access to the data on project exports and hence is not in a position to analyse the performance of Indian exporters.

In order to facilitate compilation of consolidated data on project export contracts / supply contracts on deferred payments on an all India basis, AD Category-I banks were advised by the RBI to send a copy of post award approvals for project

export contracts / supply contracts to the Exim Bank as and when such approvals are accorded. The AD Category I banks were also advised to email data in the format as prescribed in the circular to Exim Bank. However, the reporting of the data has been a challenge.

In absence of the data from banks, the current source of data on projects is either PEPC or Directorate General of Commercial Intelligence and Statistics (DGCIS). But, there is disparity in the data compiled by the DGCIS and the PEPC. While DGCIS compiles data on exports of only project goods and not project exports, PEPC compiles the data on project export orders secured by Indian firms during a financial year, even though the underlying trends concerning products and services utilized in overseas projects is not being generated since there is no head or code for project exporter to declare the same.

Financial Constraints to Project Exports

Providing competitive finance is one of the key factors in success of project exports. In fact, according to the Report to the U.S. Congress on Global Export Credit Competition, foreign buyers rarely approach financing as an afterthought. Rather, financing is regularly a core component of evaluating bids and identifying sourcing—complete with weighting scales on relative financing terms. The ability to secure sizeable, low-interest facilities is an important aspect of securing project exports.

Given the important role of ECAs in providing low interest, long tenor financing support for projects, there is a need to strengthen these institutions in India. It may be noted that the capital base of ECAs in competitor countries is much higher than that of Exim Bank. Further, regulatory requirements for Exim Bank are also stricter than several other ECAs.

Further, a chief concern for financiers of project exports in India is that the credit risk profiles of many large, diversified engineering, procurement and construction (EPC) contractors in India remain largely constrained due to the after-effects of aggressive bidding in the past, as also their leveraged balance sheets and other policy bottlenecks. Given the broader credit issues prevailing in the Indian economy pertaining to the rising non-performing assets, the problem of over-leveraged balance sheets of companies and stricter regulatory norms have constrained the lending capacity of banks and financial institutions, as the approval and appraisal processes have been tightened. The tougher financing environment translates into reduced opportunities for project exports, as also stalling of projects under implementation.

Large Unmet Gap in Infrastructure Financing

Many of the developing countries do not have sufficient funds to finance their projects and are highly dependent on concessional financing sources and official development assistance (ODA) in order to meet their financing needs. While the demand for infrastructure financing is steep, the official international support for infrastructure has remained near stagnant in the recent period.

While ODA is stagnating, increasing incidences of debt distress in many low income countries as well as the increasing risk of debt distress, makes even the multilateral development banks wary of financing all the worthy projects through loans, due to the low debt servicing capability of such countries. Private participation can alleviate the financing challenges and create opportunities for project exporters, but the issue of bankability of projects has long been one of the key bottlenecks in attracting private capital to meet the investment gap. A study by the B20 task force on infrastructure emphasizes that the investment gap in infrastructure is not the result of a shortage of capital, but a result of a lack of bankable and investment-ready projects.

High Political Risk and High Business Risk in Project Countries

Survey results indicate that high political risks and business risks in project countries are a major constraint faced by Indian project exporters. There are two major reasons for high business risk. Firstly, there are risks in operational phases such as financing and re-financing risks, cost overruns due to changes in operational cost, due to factors such as wage increases. Secondly, the risks arise out of changes in economic factors such as exchange rate volatility, inflation, interest rate volatility, as well as certain socio-economic factors such as the demographic profiles of the local labor, labor laws, etc.

Political risks are also high in developing countries because the likelihood of policy level changes is greater. The suddenness and uncertainty of political risk make it difficult to accurately predict and control it, thus, making it a key obstacle for international contractors and necessitating implementation of risk management strategies.

Institutional Challenges in Project Country

Institutional challenges in project country could lead to delays in project completion. These include issues related to land acquisition, planning and approval delays, passiveness in decision making, changes in tax norms or industry regulations, among others.

Labour Related Issues in Project Country

The limited availability of skilled and affordable labour and low labour productivity in the project countries are some of the serious issues concerning Indian project exporters in overseas markets. Project exporters also consider the limited availability of professional project managers to be a constraint in project exports. Region-wise analysis of labour productivity in India's key destinations indicate that Sub Saharan Africa, which is among the top destinations for Indian project exporters, has the lowest labour productivity, with the growth in output per worker remaining sluggish over the past two decades. Other major destinations for Indian project exporters such as South Asia and South East Asia, also exhibit low labour productivity in comparison to regions such as Europe and Central Asia, where Indian presence is relatively low.

Further, non-tariff barriers such as high visa fees and non-issuance of multientry visa of longer periods to project implementation and commissioning professionals in some markets are also a concern with regard to labour. Unlike export of commodities, project exports have a longer execution and realization period. Therefore, it is imperative to have multi-entry visa, with clear processes and minimal restrictions for personnel employed by Indian project exporters.

Further, a number of countries promote a national labour preference system and impose a quota on the number of foreign workers. Quotas are often used to protect the national labour force, but such prohibitive, inconsistent restriction on movement of manpower raises not only the project cost, but also hampers the productivity.

STRATEGIES

An ambitious and all-encompassing action plan is necessary for building the bridge between challenges and opportunities, inertia and inventiveness, and status quo and advancement for the project exporters in India. There is a need to develop sectoral capabilities where currently the presence of Indian companies is limited vis-à-vis other top competitors such as China. There is also a need to diversify the markets for project exports, and tap relatively lesser explored geographies in Latin America and Caribbean, East Asia and Pacific, and Central Asia. Other than these, there is need for across the board engagement in several other areas delineated subsequently.

Strengthening Export Credit Agencies

ECA support not only creates political goodwill, but also promotes commercial interest of the country providing development assistance. Strengthening the ECA

support mechanism in India will be a sine qua non for boosting project exports from the country.

Additional Capital Infusion

As a development financial institution, Exim Bank does not raise funds through retail deposits, and primarily taps the bond markets. Despite the recent efforts towards increasing the authorized capital of Exim Bank, and additional infusion of equity, the share capital of Exim Bank remains significantly lower than its counterparts in other countries. Clearly, further capital infusion would be required in a sustained manner to facilitate greater quantum of project exports from the country.

Regulatory Easing

Exim Bank's borrowing limit is pegged to 10 times its Net Owned Funds, at par with commercial banks in India. However, such a leverage rule is not followed by other key similar ECAs across the globe. Therefore, enhancing the leverage ratio to 20 times may be considered, with suitable Board level safeguards, wherever necessary.

Further, as a niche institution, Exim Bank of India must necessarily have a higher degree of concentration of exposures. In this context, the existing prudential limits for Single Borrower and Borrower Group prescribed by the RBI prevent the Bank's funding to commercial projects. Therefore, relaxing the prudential limits for Exim Bank could be considered. The RBI's IRAC norms could also be relaxed for Exim Bank's Policy Business as the backstop guarantee of GOI is available for such lending.

Further, Exim Bank could be exempt from income tax like other ECAs such as those in the US, Canada and Japan, which may enable it to plough back its entire profits into its operations and facilitate the up-scaling of credit volumes.

Minimum Local Content Requirement

The LOCs have been instrumental in enabling Indian project exporters to enter new geographies, expand their existing businesses, and avoid payment risk from overseas importers. Under the Lines of Credit facility, the stipulated local content requirement stands at a minimum of 75 percent of the value of the contracts, with a relaxation of 10 percent on a case-to-case basis.

Exim Bank's survey responses indicate that many Indian project exporters believe that meeting the minimum content requirement could be a challenge, particularly in civil construction projects like roads, railways etc. In the Indian

context, while relaxing the minimum national content requirement may not be prudent; in line with best practices adopted by some ECAs, a value-added approach for calculation of minimum content requirement could be considered, in certain segments of project exports.

Widening the Scope of Concessional Lending

It may be noted that developing countries need the loans structured in concessional terms, with longer tenor and greater moratorium. Currently, GOI provides concessional financing to Least Developed Countries (LDCs) and Heavily Indebted Poor Countries (HIPCs) under the Indian Development and Economic Assistance Scheme (IDEAS), with a minimum grant element prescribed by IMF / WB, achieved through lower interest rates, longer tenor and greater moratorium. The interest rates in other schemes that promote project exports from the country, viz., Buyer's Credit under National Export Insurance Account (BC-NEIA) and Concessional Financing Scheme (CFS) are linked to LIBOR and do not satisfy the minimum grant element mandated by the IMF / WB for LDCs / HIPCs. Widening the coverage of concessional lending through these programmes could generate goodwill among the LDCs / HIPCs and project India as a partner for aid cooperation. Besides, such a move would support project exports, provide employment opportunities within the country, and encourage Indian companies to gain experience in various countries / regions, thereby enabling them to qualify and bid for projects funded by MDBs, as also on commercial terms.

Risk Mitigating Instruments in Foreign Currency

Role of insurance and guarantee facilities is also important in enhancing competitiveness of exports. Currently, cover from ECGC Ltd. is instrumental in mitigating the risks associated with project exports. However, ECGC Ltd., as per norms of the Insurance Regulatory of Development Authority of India (IRDA), is not allowed to extend cover in foreign currency. Insurance cover in foreign currency can significantly reduce the transaction costs for exporters. Thus, insurance/ guarantee cover should also be available in foreign currency. Special dispensation needs to be accorded by IRDA to ECGC Ltd. for providing cover in foreign currency under BC-NEIA. Regulatory supervision for such foreign currency cover can be provided by the RBI, which is also the regulator for export credit in the country.

Adoption of Consortium Approach in Bidding

India's current performance in terms of securing large multisector projects leaves a lot of room for improvement when compared to competitors such as China.

Chinese companies have successfully adopted consortium approach for securing such contracts. In China, several players, having expertise in different sectors, come together and bid for complex, multisector projects.

Indian contractors should be encouraged to adopt a consortium approach for bidding and execution of projects. Pooling of resources, complementary skills, and the ability to draw upon the resources with a collaborative approach can be particularly beneficial for securing and executing a comprehensive range of projects spanning across a wide range of sectors. Even within a sector, consortium approach can help pool capacities of exporters and help bid for larger value contracts.

Encouraging Local Presence and JVs in Project Markets

An analysis of the responses to the Exim Bank survey indicates that nearly 87.5 percent of the total respondents are open to the idea of collaborating through joint ventures (JVs) in project countries. In fact, nearly 75 percent of the respondents have already entered into such collaborations in the past, mostly in the regions of Middle East, Africa, and a few in South East Asia. Indian companies need to be supported and encouraged to form JVs in the opportunity markets.

Having a local presence in the country of the project significantly enhances the probability of success in securing a contract. Local presence helps Indian contractors to interact with the market players and assess their competitive position at an early stage. Local presence also helps companies in bidding for contracts under National Competitive Bidding.

Sub-Contracting Approach for Smaller Players

Companies of small and medium size could also consider the possibility of engaging in project exports by way of securing sub-contracts from major European/ American/Japanese companies. In order to encourage this, the office of MDBs in India, ED (India)'s office in MDBs, together with Indian Missions abroad could send out alerts advising the project exporters of such opportunities in advance. Gaining exposure to international projects through these subcontracting opportunities can help strengthen capacities and allow companies to bid independently over time.

Considering Inclusion of Project Exports in FTA/RTA Negotiations

Prospects of project exports should also be considered while negotiating FTAs/RTAs with other countries. Negotiations should also strive towards facilitating greater ease in movement of natural persons to execute the projects abroad. The possibility of including award of visa for workmen and officials of Indian contractor

executing the projects on priority basis in such agreements with partner countries could also be considered. Further, the visa fees and duration could also be as per the general rule of reciprocity in this regard. Such negotiations will especially be useful in East Asia as project exporters face stiff competition from the Chinese project exporters in these geographies.

Membership with the IDB

Indian companies are losing out on significant opportunities in the emerging markets of Latin America and the Caribbean, as India is not a member of the IDB. IDB funded projects could provide opportunities for Indian project exporters to penetrate the LAC market for project exports. Projects funded by the IDB are implemented across LAC region in 26 countries and provide significant procurement opportunities for companies and organizations from IDB member countries. Over the past five years, total contract awards by IDB cumulatively amounted to US\$ 16.8 billion, presenting significant opportunities in sectors such as healthcare, agriculture, transportation, climate change, water, and energy.

In the past, India took memberships in MDBs in other regions, such as the AfDB, which has led to substantial increment in the number of contract awards secured by Indian contractors, and also led to substantial incremental generation of political goodwill for the country. Therefore, Indian government could consider taking up membership in the IDB, on account of the considerable geopolitical as well as economic benefits for India.

Addressing Data Related Issues

There is need for the RBI to mandate AD Category-1 banks/ Exim Bank to submit data on post award approvals at regular intervals in a structured format. The RBI could then serve as a source point for data on project exports. Further, an HS-code could be given for shipments pertaining to supply contracts / project exports, which would enable better collation of data on project exports. Once this facility is available to project exporters, defining and incentivising project exporters would also be easier. A streamlined incentive structure would encourage Indian companies to source more Indian goods while executing overseas projects.

Detailed procurement data covering Indian participation in projects funded by MDBs, including important aspects such as bid conversion ratio, also need to be collated with the help of the office of various MDBs in India, and ED (India)'s office in MDBs. Currently, such data is not disseminated through publicly available data sources of major MDBs, with exception in the case of the EBRD.

Creating Awareness about Procurement Opportunities

There is need for organizing detailed awareness programs and workshops for preparing Indian exporters to tap the opportunities arising in MDB funded projects. Apart from focusing on information pertaining to procurement opportunities and bidding processes, these workshops could train exporters in preparing responsive bids, apprise them about the specific requirements (standards, regulations, technical features, etc.) in the project countries, and encourage a more collaborative approach towards bidding for projects. Such programs can be conducted by the Department of Commerce, in consultation with industry associations, Exim Bank, resident missions of MDBs, and other key stakeholders.

Bridging the Infrastructure Financing Gap

Co-Financing / Parallel Financing for Greater Project Opportunities

There is a need to leverage financial assistance from the government and also promote co-financing / parallel financing of infrastructure projects with other international funding agencies such as MDBs, ECAs, and national DFIs. Such collaboration can substantially enhance the project financing capabilities, while also meeting the growing infrastructure requirements. Bridging funding gaps in projects funded by Exim Bank through co-financing / parallel financing by MDBs and other ECAs could be considered. GOI support may also be required to make the co-financing / parallel financing approach effective, by aligning the differences in funding structures and cost of fund between MDBs and Exim Bank.

Knowledge Sharing for Encouraging Private Participation

Public-Private Partnerships (PPPs) have seen a rise in the last two decades and according to the World Bank, PPPs are now used in more than 134 developing countries, contributing about 15-20 percent of total infrastructure investment. India has deployed the PPP model in various sectors with commendable dexterity. Success of India's PPP program is attributable to well-crafted reform efforts by the government, and ably executed by the private sector, banks and other financial intermediaries.

India's enabling environment for PPPs has a strong focus on project preparation and capacity building, and India is at the right place to offer technical assistance and cooperation in development of PPP projects in other developing countries. India could increase its efforts towards sharing best practices for development of PPP regimes, particularly in Africa. This will not only create better financing environments in developing countries, but also create greater opportunities for Indian companies to invest and execute contracts in these countries.

Developing Project Preparation Facilities for Creating Bankable Projects

A solid pipeline of bankable projects is still lacking in most developing countries. In this regard, comprehensive approaches to develop project preparation facilities are required in order to increase the number of projects ready for implementation. The objective of a project preparation facility is primarily to make 'investment-ready' projects.

There are several project preparation facilities operating across different regions. The Government of India and Indian financial institutions have also taken major steps in this direction. More such steps can be taken by ECAs, MDBs and national DFIs in the sphere of creating more bankable projects, and crowding in additional finance. Further, while India has clearly taken a number of steps towards creating bankable projects, India's engagement in project preparation facilities are mostly limited to early stages of project development activities. More facilities are required to also engage in post-preparation activities and concentrate on implementation and post-implementation stages as well.

CONCLUSION

The Study has taken an essential first step of evaluating the performance of project exporters in India over the recent years and analysing key aspects of their competitiveness in the international market. Based on a thorough analysis, comprising desk research and survey inputs received from select project exporters, the Study identifies major challenges for the sector in India and recommends pertinent strategies for alleviating these concerns. These strategies identified across key dimensions such as greater financing support, operational improvements, strategic institutional membership, building capacities, considering inclusion of project exports in FTAs/RTAs, encouraging collaborative participation of project exporters, addressing data issues, and bridging infrastructure financing gaps, will be crucial for propelling the sector on a higher growth trajectory.

CHAPTER 1: INTRODUCTION

Execution of turnkey projects and civil construction contracts, and export of engineering goods on deferred payment terms, are collectively referred to as 'project exports'. Project exports are broadly divided into four categories viz.

- Civil construction projects: Civil construction projects involve civil works, steel structural work, and erection of utility equipment, and include projects for building dams, bridges, airports, railway lines, roads and bridges, apartments, office complexes, hospitals, hotels, and desalination plants.
- Turnkey projects: Turnkey projects involve supply of equipment along
 with related services, and cover activities from the conception stage to the
 commissioning of a project. Typical examples of turnkey projects are: supply,
 erection and commissioning of boilers, power plants, transmission lines, substations, plants for manufacture of cement, sugar, textiles and chemicals.
- Consultancy services: Services contracts, involving provision of know-how, skills, personnel and training are categorised as consultancy projects. Typical examples of services contracts are: project implementation services, management contracts for industrial plants, hospitals, hotels, oil exploration, charter hire of rigs and locomotives, supervision of erection of plants, CAD/CAM solutions in software exports, finance and accounting systems.
- Supply contracts: Supply contracts primarily involve export of capital goods and industrial manufactures. Typical examples of supply contracts are: supply of stainless steel slabs and ferro-chrome manufacturing equipment, diesel generators, pumps and compressors.

Project exports from India have been increasing steadily over the years, indicating the growing prowess of Indian companies. From a modest beginning in the early 1970s, Indian companies have continued to make impressive progress in a number of areas like civil construction projects in sectors such as roads, railways, dams, airports etc.; turnkey projects in areas of power generation, transmission and distribution, industrial plants etc.; technical services in areas such as engineering design, project engineering, operation and maintenance of industrial plants etc. Indian project exporters have carved a niche for themselves, particularly in the developing country markets.

DATA LIMITATION

The analysis in this study is subject to certain data limitations. Uniform and comparable data pertaining to project exports is currently unavailable at both the global and India level. Data for construction services, a segment of project exports, is available from Balance of Payment (BOP) statistics, but the data on other type of project exports such as supplies, engineering and consultancy services, etc. are unavailable.

Data on contracts secured by companies in Multilateral Development Bank (MDB) funded projects is a good indication of the opportunities, comparative advantages in sectors and regions, and broad trends in overall project exports. There is lacunae in data for contract awards as well. For instance, in the case of the Asian Development Bank (ADB) funded projects, segregated data on contract awards by procurement mode is unavailable. Also, in case of the ADB, detailed and uniform data on contract awards for goods, services, civil works and consultancy is not available on an annual basis, but rather on a monthly basis. Further, in the case of the Inter-American Development Bank (IDB) funded projects, data for contract awards in consultancy services is only available for 2017 and 2018. Similarly, in the case of the European Bank for Reconstruction and Development (EBRD) funded projects, due to absence of a data dissemination portal, contract awards data are not uniformly available in a format suitable for analysis, and has to be sourced from annual procurement reports of the EBRD.

Data for project exports from the Project Export Promotion Council (PEPC) and Directorate General of Commercial Intelligence and Statistics (DGCIS) also has shortcomings as highlighted in subsequent chapters. To supplement the existing data on project exports, data has been collated by the Export-Import Bank of India (Exim Bank) at firm-level.

SIGNIFICANCE OF PROJECT EXPORTS

Project exports are indicative of technical maturity and industrial capabilities of a country. Growing project exports from any country signals an upward movement in its position in the global value chain of goods and services.

Project exports are being increasingly recognized for their multi-fold effect on export growth. Project exports not only earn foreign exchange for the country, but also boost the economy in many ways, including through enhanced exports of high value goods and services, cross-country transfer of new technology, generation of project revenues, training of personnel and a resultant high-skilled employment generation in the economy. Besides, since the realizations from

overseas projects are spread over a longer term period, project exports help absorb fluctuations in foreign exchange due to outflows by providing regular inflow of foreign exchange. Further, project exports help companies in establishing strategic presence across different regions, and thereby creating entry points for firms to enhance their exports of high value engineering goods, raw material, consultancy services, as also to enable manpower exports.

NEED FOR THE STUDY

With merchandise exports witnessing a slowdown for a major portion of the past decade, there is need to focus on newer avenues for export growth from India. Project exports present one such sector of opportunities for the Indian economy. With growing impetus being given for infrastructure projects across most developing countries, and multilateral financial institutions scaling up investments across various infrastructure segments, the scale of opportunities in the sector is expected to grow manifold. These opportunities can be leveraged by Indian exporters as they have already developed substantial competitiveness in this area. Strengthening of capabilities in this segment will also be crucial from the point of view of positioning the Indian economy higher on the exports value chain.

An essential first step for ensuring that the sector indeed emerges as a driver of exports and economic growth in the country, would be to evaluate the performance of project exporters in India over the recent years and analyse key aspects of their competitiveness in the international market. This shall entail a detailed assessment of the competitive strengths of Indian project exporters, as also the challenges faced by the exporters across key segments and markets. This study is an attempt to provide a broad perspective on the current scenario of project exports in India, as also to provide pertinent strategies and recommendations for boosting project exports from the country.

CHAPTER 2: GLOBAL DEMAND FOR PROJECT EXPORTS AND INDIA'S SUPPLY CAPABILITIES

DEMAND FOR PROJECT EXPORTS

Infrastructure projects are a growing source of increase in demand for project exports across the globe. Technological changes, more pragmatic attitudes of governments, a greater sensitivity towards the contribution of infrastructure to economic growth and poverty alleviation, and a renewed commitment towards social and environmental concerns have together created a paradigm shift in infrastructure development in both developed and developing countries alike. Countries are moving away from the traditional ways of financing infrastructure, which tend to weigh down on the fiscal balance of governments, and adopting innovative ways of financing infrastructure investments. Amidst these emerging nodes of growth in financing sources and mechanisms, the role of MDBs and development finance institutions (DFIs) remains important. The mandate of these institutions to address infrastructure needs has significantly underpinned infrastructure development, and offer tremendous opportunities for project exporters.

Infrastructure Investment Needs

According to recent estimates, nearly 3 percent of global GDP¹ is invested in infrastructure annually. With growing world population, increasing urbanization, and accelerating pace of economic development, infrastructure demand is set to continue growing rapidly across the globe.

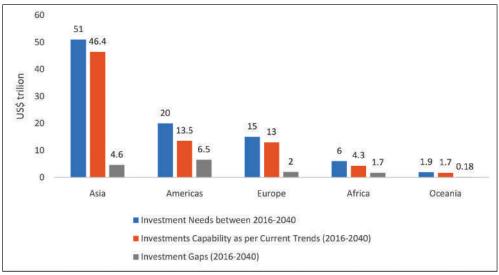
Throughout the developing world, the challenge is clear for governments: there is a need to deliver quality infrastructure that caters to the needs of the public, not only to survive, but also to prosper. According to an analysis undertaken by the GI Hub, in collaboration with Oxford Economics, the need for infrastructure investment is forecast to reach US\$ 94 trillion by 2040 across 50 countries, and an additional US\$ 3.5 trillion is likely to be required by these countries in order to meet the United Nations' Sustainable Development Goals of universal provision of clean water, sanitation, and electricity.

¹"Global Infrastructure Outlook: Infrastructure Investments Needs of 50 Countries, 7 sectors to 2040", Oxford Economics and Global Infrastructure Hub, A G20 Initiative, July 2017

Asia, in particular, has the largest overall infrastructure needs, requiring nearly US\$ 51 trillion of investments during 2016-2040, and accounts for more than half of the global infrastructure investment needs (Exhibit 1). Interestingly, despite the large infrastructure needs, the region is forecast to have a relatively small investment gap of nearly 9 percent of overall infrastructure needs (US\$ 4.6 trillion), indicating that the current spending levels in the region are sufficient to meet majority of the region's investment demands.

Meanwhile, in the Americas, the infrastructure investment needs are estimated at nearly US\$ 20 trillion, while in Europe and Africa, the infrastructure needs are estimated at US\$ 15 trillion and US\$ 6 trillion, respectively, by 2040. To meet their investment need, all regions will need to increase spending as a proportion of GDP relative to what has been spent in the recent past, with the exception of Asia, which has a relatively lower investment gap and a higher current level of infrastructure spending.

Exhibit 1: Region-wise Cumulative Infrastructure Investment Needs, Capabilities as per Current Trends and Investment Gaps (2016-2040)



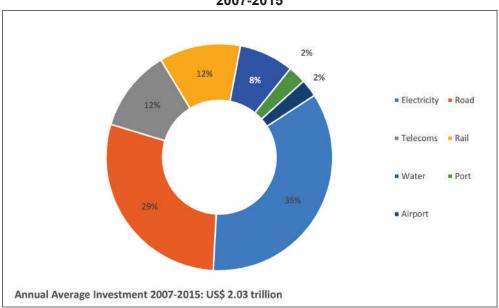
Source: Global Infrastructure Hub, Oxford Economics

The centrality of infrastructure in investments across regions is evident from the fact that nearly 20 percent of the total fixed investment in Africa is dedicated to infrastructure, 9 percent in the Americas; and nearly 14 percent in case of Asia during 2007-2015².

²Global Infrastructure Outlook: Infrastructure Investments Needs of 50 Countries, 7 sectors to 2040", Oxford" Economics and Global Infrastructure Hub, A G20 Initiative, July 2017

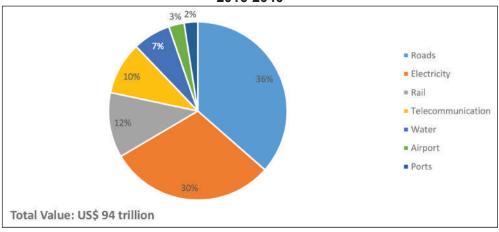
Analysis of the structure of global infrastructure spending during 2007-2015 indicates that infrastructure spending has been dominated by two sectors viz. electricity and roads, which jointly account for nearly two-thirds of total infrastructure spending globally, followed by telecommunication and rail, that account for nearly 12 percent each of total infrastructure spending (Exhibit 2). Cumulative spending needs during 2016-2040 are expected to continue to remain the highest for road and electricity sectors, accounting for a share of 36 percent and 30 percent, respectively in the total infrastructure investment needs. This would be followed by the rail and telecommunication sector, with estimated share of 12 percent and 10 percent, respectively in the infrastructure investment needs. Water sector is another area of growing significance and is likely to provide greater opportunities for project exporters over the forthcoming years, with an estimated cumulative infrastructure spending requirement of nearly US\$ 6.4 trillion during 2016-2040, accounting for a share of 7 percent in the total infrastructure investment needs (Exhibit 3).

Exhibit 2: Sectoral Share in Average Annual Infrastructure Investment 2007-2015



Source: Global Infrastructure Hub, Oxford Economics

Exhibit 3: Sectoral Share in Cumulative Infrastructure Investment Needs 2016-2040

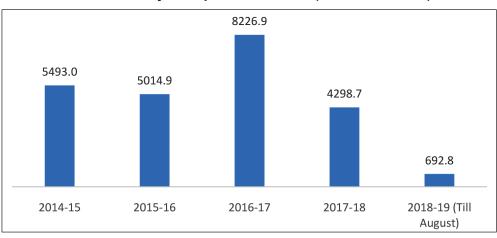


Source: Global Infrastructure Hub, Oxford Economics

INDIAN SUPPLY CAPABILITIES

Several Indian companies are tapping the emerging opportunities in project exports, and making substantial contributions to the exchequer. Project exports from India were valued at US\$ 8.2 billion during 2016-17, accounting for nearly 1.9 percent of the overall exports (merchandise and services combined) from India. While there has been substantial moderation in the value of project exports thereafter, this could be partly attributed to the widespread slowdown across economies, and deteriorating fiscal position in several developing economies.

Exhibit 4: Project Exports from India (Value in US\$ Mn)



Source: Project Exports Promotion Council

While the significant presence of Indian companies in project exports can be partly attributed to the growing prowess of Indian companies, the role of Government of India (GOI) has also been pivotal in creating an enabling environment. The Government of India's support to developing partner countries through the Lines of Credit (LOC) program helps create mutually beneficial partnerships with other developing countries and allows Indian companies to be partners in the process.

These LOCs, which are routed through the Exim Bank, enable buyers in developing countries to import developmental and infrastructure projects, equipment, goods and services from India, on deferred credit terms. It is a demand driven, development oriented, and non-prescriptive program, which is in line with the Indian policy of nurturing development partners for mutual growth as opposed to the traditionally more hierarchical relationship implied in a donor-recipient relationship. While Indian companies get opportunities to execute projects in an international environment, there is substantial savings on the part of project costs to the borrower countries as India offers 'AAA' technologies, which are 'Appropriate, Adaptable, and Affordable' to the developing countries.

Apart from the positive spillovers of the programmes of the Government of India, a robust institutional structure for medium to long term financing has also played an important role in promoting project exports from India. The Export Credit Agencies (ECAs) in India— Exim Bank and ECGC Ltd., provide a conducive environment for project exports from the country.

Key Sectors and Markets

The statistics on project exports, as compiled and published by the Project Exports Promotion Council (PEPC), provides limited information about the trends and direction of projects exports from India. In an attempt to analyze the various aspects of project exports from the country, Exim Bank has undertaken a primary survey of a sample set of companies engaged in this sector.

To supplement the data on project exports from the PEPC, Exim Bank conducted a survey of project exporters in India. During FY16- FY18, companies reported securing contracts valued at nearly US\$ 17.7 billion. In the survey, power sector emerged as the topmost sector for project exports from India, with players securing several contracts in the segment of transmission and distribution projects. Nearly 48 percent of the project secured were in the power sector. Renewable energy (share of 11 percent), transport (10 percent), railway (10 percent), and other construction (9 percent) were the other major sectors for project exports from the country (Exhibit 5).

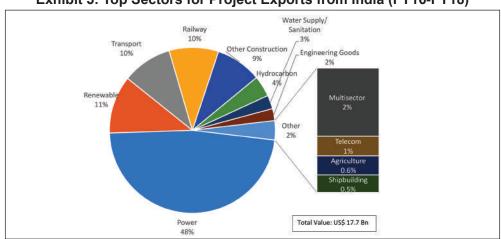


Exhibit 5: Top Sectors for Project Exports from India (FY16-FY18)

Source: Based on Exim Bank Survey

In terms of markets, Middle East is among the top destinations for project exports from India, with UAE and Qatar being the top two destinations with shares of 16 percent and 12 percent, respectively. Bangladesh (share of 11 percent), Kuwait (7 percent), Mauritius (4 percent), and Afghanistan (3 percent) were the other top destinations (Exhibit 6).

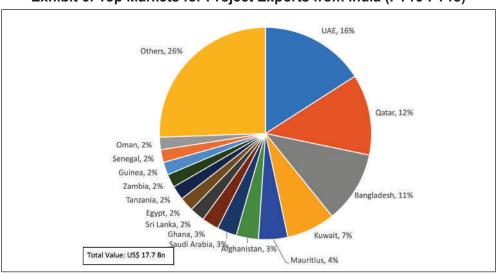


Exhibit 6: Top Markets for Project Exports from India (FY16-FY18)

Source: Based on Exim Bank Survey

These projects were financed through a variety of routes—sovereign funding, multilateral funding, national development bank funding, LOCs of the Government of India, among others. Several of the projects were secured through international bidding. An analysis of the bidding conversion ratio (number of bid won/ number of bid submitted) indicates that in the recent years project exporters have been relatively more successful in winning projects through the competition route. The bidding conversion ratio was 45.1 percent during 2018-19, up from 15.3 percent in 2015-16 (Table 1), indicative of the improving competitiveness of Indian exporters in the project exports space. However, it may be noted that this ratio may be inflated as it includes contracts awarded under the Lines of Credit program of the Government of India, wherein the level of competition is relatively lower as only Indian companies are eligible for bidding under these projects.

Table 1: Trends in Bidding for Overseas Projects by Indian Exporters

Year	No. of Overseas Projects Bid For	No. of Overseas Projects Won	Overall Bid Conversion Ratio	Average of Bid Conversion Ratio
2014-15	167	37	22.2%	37.0%
2015-16	178	39	21.9%	15.3%
2016-17	268	74	27.6%	46.6%
2017-18	292	75	25.7%	38.5%
2018-19	242	96	39.7%	45.1%

Note: Sample size is 13 companies Source: Based on Exim Bank Survey

INDIA'S PROWESS IN CONSTRUCTION SERVICES

In terms of value, construction services are one of the largest areas of opportunities for project exporters. Over the past few decades, the global construction industry has turned into a more integrated and globalized sector. The opportunities in construction services are large and growing. Global construction services exports have witnessed a tremendous upsurge since the early 2000s, growing at a Compound Annual Growth Rate (CAGR) of 9.4 percent between 2005 and 2018. Global exports of construction services were valued at US\$ 109.4 billion in 2018, up from US\$ 34 billion in 2005. India's share in global construction services exports has nearly tripled over the same period, from 1 percent in 2005 to 2.9 percent in 2018 (Exhibit 7), indicating increasing internationalization and improving competitiveness of Indian construction companies. This increase comes at a time when India's share in global merchandise exports has stagnated and even declined in the recent years, relegating its share to a mere 1.7 percent in 2018.



Exhibit 7: Global Construction Services Exports and India's Share

Source: IMF, Exim Bank Research

The competition in the sector is getting more intense, with increasing number of new entrants in the market. For India to etch a higher share in the global construction services market, there will be a need for an all-encompassing action plan, including aspects related to operational improvements, technology upgradation, better project management, improved finance availability, among others.

CONCLUSION

Global demand assessment and analysis of India's supply capabilities indicates that the project exports sector is already headed for a substantive upgrade in its contribution to India's exports, economic growth, and employment. Indian companies have been able to secure projects funded through a variety of sources, and procurement mode. Several countries that are among the major destinations for contracts secured by Indian project exporters do not have strong fiscal position, and hence, international financial institutions are a major source of finance for these projects. The subsequent section analyses the contracts awarded in projects funded by some of the major international financial institutions, and the performance of Indian companies in securing such contracts, to gain deeper insights into the competition landscape.

CHAPTER 3: MDB FUNDED PROJECTS: TRENDS, OPPORTUNITIES, AND INDIAN PERFORMANCE

MDB funded projects represent a significant part of the total project exports undertaken across the globe. These projects are a source of business opportunities, as they require substantial goods, equipment, civil works and consulting services across a wide spectrum of sectors. The projects allow exporters to capitalize on their competitive advantage and showcase their domain expertise.

Business opportunities exist at each stage of the project cycle viz. identification, preparation, appraisal, negotiation/approval, implementation, and evaluation. However, it is during the implementation stage that the largest number and greatest value of contracts are awarded. Securing a contract funded by MDBs results in tremendous multiplier effect in the domestic economy in general, and exports sectors in particular. The resultant positive spillover effect could spread across multiple sectors.

VOLUME OF MDB CONTRACTS

Over the past five years (2014-2018), contract awards for projects financed by MDBs such as the World Bank (WB), the Asian Development Bank, the African Development Bank (AfDB), the Inter-American Development Bank and the European Bank for Reconstruction and Development cumulatively amounted to nearly US\$ 155.7 billion. In 2018, contract awards by these MDBs collectively amounted to nearly US\$ 32.2 billion, presenting significant opportunities for companies. Contracts for civil works held the highest share in terms of value during the period 2014-2018 in all of the MDBs, followed by contracts for goods, and contracts for services.

In terms of number of contracts awarded, as well as the value of contracts awarded, opportunities in World Bank funded projects were the largest during the period 2014-2018 (Table 2). However, contract awards in World Bank funded projects have witnessed a sharp fall, registering a negative CAGR of 31.7 percent in terms of value and a negative CAGR of 29.7 percent in terms of number of contracts awarded, during 2014-2018. Similarly, there was sharp fall in the the value of contracts awarded in the IDB funded projects during the same period, registering a negative CAGR of 10.5 percent.

Table 2: MDB Contract Awards (Cumulative 2014-2018)

MDB	Number of Contracts Awarded (2014-2018)	Growth in Number of Contracts Awarded (CAGR: 2014- 18; %)	Value of Contracts Awarded (2014- 2018) US\$ Mn	Growth in Value of Contracts Awarded (CAGR: 2014-18; %)	Percent Share of ICB in Total Contracts awarded (2014-2018)
World Bank	38,074	-29.7	63,210.7	-31.7	43.9
Asian Development Bank	7,074	2.9	51,738.8	11.0	100
Inter-American Development Bank	17,010	33.6	16,858.2	-10.5	65.4
African Development Bank	13,024	4.6	13,666.7	6.8	74.6
European Bank for Reconstruction and Development	1,166	16.9	9,725.4	19.4	68.7
Total	76,348	-	155,742.00		-

Note: - In case of the ADB, all contracts are categorised as OCB (open competitive bidding), as ADB has discontinued the usage of nomenclatures such as ICB & NCB. Sources: ADB, AfDB, EBRD, IDB, World Bank

There are various procurement methods to secure an MDB funded project, including International Competitive Bidding, National Competitive Bidding, Single Source, Request for Proposals, Quality and Cost-based Selection, among others (See Box 1). An analysis of the mode of procurement of the aforementioned MDBs over the past five years indicates that, in all of the 5 MDBs analysed in the Study, international competitive bidding (ICB) was the most prominent mode of procurement in terms of value of contracts awarded, accounting for an average share of nearly 70 percent in the total contracts awarded by these MDBs during 2014-2018.

Box 1: Modes of Procurement in MDB funded Projects

Open competition is generally considered as the most efficient mode of public procurement. In most cases, MDBs require their borrowers to obtain goods, works and services through International Competitive Bidding, which is open to eligible suppliers, service providers and contractors. However, there are several other methods of selection in circumstances where ICB is not the most appropriate method of procurement. These methods of procurements, inter alia, include the following:

Limited International Bidding (LIB): LIB is essentially ICB by direct invitation without open advertisement. Under LIB, bids are sought from a limited number of potential suppliers across the world, although broad enough to assure competitive prices. It may be an appropriate method of procurement where there are only limited numbers of suppliers. Domestic preference is not applicable in the evaluation of bids under LIB.

National Competitive Bidding (NCB): NCB is the competitive bidding procedure normally used for procurement of goods and works from within the country. Like ICB, NCB procedures also provide adequate competition among participants in order to ensure value for money. NCB may be considered appropriate when foreign contractors and suppliers are not likely to be interested in bidding, or the advantages of ICB are likely to result in administrative or financial burden.

Shopping: Shopping is a procurement method based on comparing price quotations obtained from several national suppliers, usually at least three to ensure competitive prices. Shopping is intended to be a simple and rapid procurement method and is one of the least competitive procurement methods.

Direct Contracting: Direct Contracting is adopted in certain special cases. For instance, in case of articles which are specifically certified as proprietary in nature, or where only a particular firm is the manufacturer of the articles demanded, or in case of an extension of existing contracts for goods/works awarded with the prescribed procedures, justifiable on economic grounds.

Quality and Cost Based Selection (QCS): QCS is generally used for services, and uses a competitive process among shortlisted firms that takes into account the quality of the proposals and the cost of the services in the selection of the successful firm. The relative weight to be given to the quality and cost is determined for each case depending on the nature of the assignment.

Least Cost Selection: This method is appropriate for selecting consultants for assignments of a standard or routine nature (audits, engineering design of noncomplex works, and so forth) where well-established practices and standards exist. Under this method, a "minimum" qualifying mark for the "quality" is established. Those securing less than the minimum qualifying mark are rejected, and the firm with the lowest price is selected.

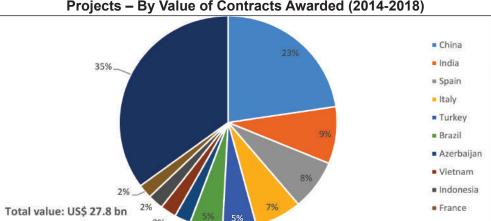
Single Source Selection: This method is appropriate in certain cases wherein there is clear advantage over competition. For instance, in tasks that represent a natural continuation of previous work carried out by the firm, or in emergency cases, such as in response to disasters and for consulting services required during the period of time immediately following the emergency, or for very small assignments, or when only one firm is qualified or has experience of exceptional worth for the assignment.

TOP SUPPLIER COUNTRIES

China was, by far, the country that secured the highest ICB contracts by value, during 2014-2018 in the World Bank and the AfDB funded projects, and secured the second highest ICB contracts by value in the ADB funded projects and fourth highest by value in IDB funded projects during the analysed period. During the same period, India secured the highest ICB contracts by value in the ADB funded projects and was placed at the second and fourth positions in terms of value of ICB contracts secured in the World Bank and the AfDB funded projects, respectively. India could not secure any contract under the IDB funded projects, as it is currently not a member of the IDB.

World Bank Funded Projects

China accounted for the largest share of 23 percent in the total value of ICB contracts awarded in the World Bank funded projects during 2014-2018, followed by India, with a share of 9 percent. Other major competing nations in ICB contracts in WB funded projects include Spain (share of 8 percent), Italy (7 percent), Turkey (5 percent) and Brazil (5 percent), among others (Exhibit 8). However, in terms of number of contracts awarded in the World Bank funded projects, both China and India accounted for a relatively smaller share in the total number of contracts awarded of 8.6 percent and 5.1 percent, respectively, during 2014-2018 (Exhibit 9). Bangladesh and Vietnam emerge as major countries in terms of number of ICB contracts secured in World Bank funded projects, although their share in terms of value of ICB contracts secured is substantially lower. Domestic contracts account for bulk of the ICB contracts secured by Bangladesh and Vietnam.



Others

Exhibit 8: Top Countries Winning ICB Contracts in the World Bank funded Projects – By Value of Contracts Awarded (2014-2018)

Source: World Bank, Exim Bank Research

■ China Bangladesh Vietnam India ■ France Kyrgyzstan 5.1% Kenya 59.0% Nepal 2.1% ■ Ukraine 2.1% ■ Serbia 2.0% 1.8% Others 1.8% 1.7% Total Number of Contract: 4778

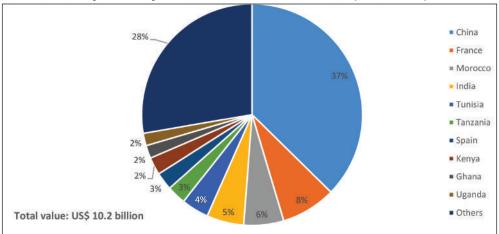
Exhibit 9: Top Countries Winning ICB Contracts in World Bank funded Projects – By Number of Contracts (2014-2018)

Source: World Bank, Exim Bank Research

African Development Bank Funded Projects

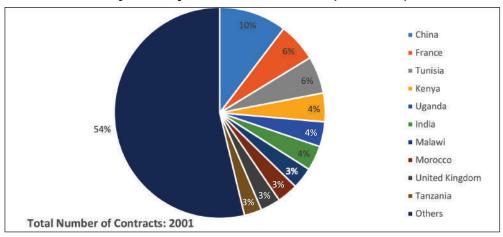
In case of the AfDB funded projects, majority of the ICB contracts in value terms were accorded to non-regional members. China, France, India and Spain collectively accounted for more than 50 percent share in total value of ICB contracts awarded during 2014-2018, with China alone accounting for 37 percent share in total value of ICB contracts (Exhibit 10). Among regional members, Morocco, Tunisia, Tanzania and Kenya were the top supplier countries in terms of value of ICB contracts secured during the period under consideration. Meanwhile, in terms of number of contracts awarded, China accounted for a relatively smaller share of 10 percent in the total number of contracts awarded during 2014-2018 (Exhibit 11). Other major countries in terms of number of ICB contracts secured during the period were France and Tunisia (share of 6 percent each), Kenya, Uganda and India (share of 4 percent each).

Exhibit 10: Top Countries Winning ICB Contracts in the AfDB funded Projects – By Value of Contracts Awarded (2014-2018)



Source: AfDB, Exim Bank Research

Exhibit 11: Top Countries Winning ICB Contracts in the AfDB funded Projects – By Number of Contracts (2014-2018)



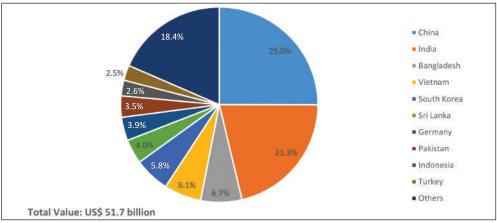
Source: AfDB, Exim Bank Research

Asian Development Bank Funded Projects

Unlike the AfDB funded projects, in the case of the ADB funded projects, majority of the contracts in terms of value were awarded to regional members such as China, India, Bangladesh, Vietnam and South Korea, which collectively accounted for more than three-fourth of the total contracts awarded in terms of value during 2014-2018. China's share was the largest at 25 percent of the total value of contracts awarded in the ADB funded projects, followed by India (share

of 21.3 percent). Top non-regional members include countries such as Germany and Turkey (Exhibit 12). In terms of number of contracts awarded also, China's share was the largest, at 23.4 percent during the period under consideration. The share of India in terms of number of contracts secured stood at 18.2 percent, followed by Vietnam (9.3 percent), and Bangladesh (5.5 percent).

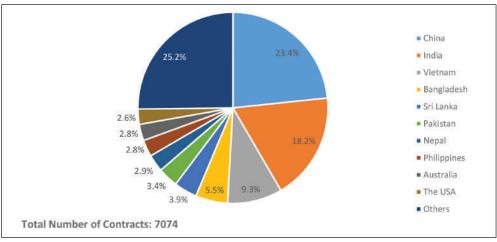
Exhibit 12: Top Countries Winning Contracts in the ADB funded Projects— By Value of Contracts Awarded (2014-2018)



Note: - In case of the ADB, all contracts are categorised as OCB (open competitive bidding), as ADB has discontinued the usage of nomenclatures such as ICB & NCB.

Source: ADB, Exim Bank Research

Exhibit 13: Top Countries Winning ICB Contracts in the ADB funded Projects- By Number of Contracts (2014-2018)

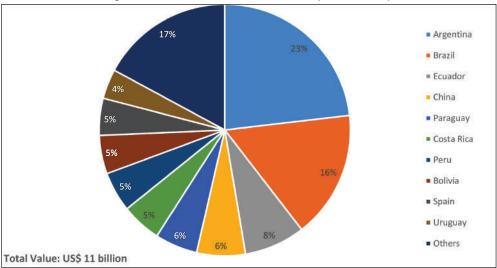


Note: - In case of the ADB, all contracts are categorised as OCB (open competitive bidding), as ADB has discontinued the usage of nomenclatures such as ICB & NCB. Source: ADB, Exim Bank Research

Inter-American Development Bank Funded Projects

In case of the IDB funded projects, majority of the ICB contracts in terms of value were bagged by regional members. China and Spain were the only major non-regional members among the top 10 countries securing ICB contracts in the IDB funded projects during 2014-2018, with shares of 6 percent and 5 percent respectively (Exhibit 14). In terms of number of contracts awarded also, majority of ICB contracts were bagged by regional members such as Argentina, which accounted for a share of 14 percent in the total number of ICB contracts awarded during the period under consideration, followed by Costa Rica (12 percent) and Nicaragua (10 percent), while non-regional members did not feature among the top 10 countries (Exhibit 15).

Exhibit 14: Top Countries Winning ICB Contracts in IDB funded Projects –
By Value of Contracts Awarded (2014-2018)



Source: IDB, Exim Bank Research

Argentina 23% Costa Rica Nicaragua Guatemala Ecuador Brazil 4% Paraguay Bolivia - Chile 6% Dominican Republic 8% Others **Total Number of Contracts: 2151**

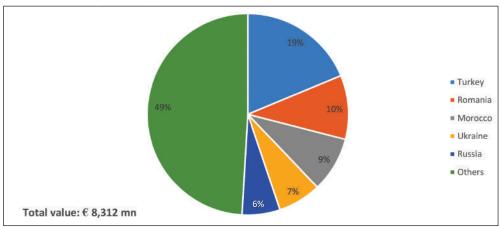
Exhibit 15: Top Countries Winning ICB Contracts in the IDB funded Projects- By Number of Contracts (2014-2018)

Source: IDB, Exim Bank Research

European Bank for Reconstruction and Development Funded Projects

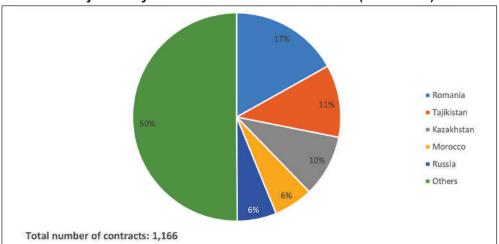
In case of the EBRD funded projects, the top five countries securing ICB contract represent more than 50 percent of the overall value of ICB contract awarded during 2014-2018. Turkey has won the highest value of ICB contracts, accounting for 19 percent of the overall ICB contracts awarded in the EBRD funded projects during 2014-2018, followed by Romania and Morocco, with shares of 10 percent and 9 percent respectively, in the total value of ICB contracts (Exhibit 16). In terms of number of ICB contracts awarded, however, Turkey does not feature among the top five winning countries, and majority of ICB contracts were bagged by Romania, which accounted for a share of 17 percent in the total number of ICB contracts awarded, followed by Tajikistan (11 percent) and Kazakhstan (10 percent), which were not among the top countries in terms of value of contracts (Exhibit 17).

Exhibit 16: Top Countries Winning ICB Contracts in EBRD funded Projects- By Value of Contracts Awarded (2014-2018)



Source: EBRD, Exim Bank Research

Exhibit 17: Top Countries Winning ICB Contracts in EBRD funded Projects- By Number of Contracts Awarded (2014-2018)



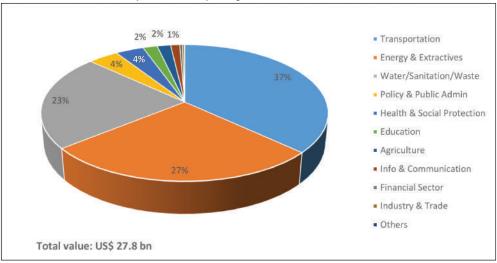
Source: EBRD, Exim Bank Research

MAJOR SECTORS

World Bank Funded Projects

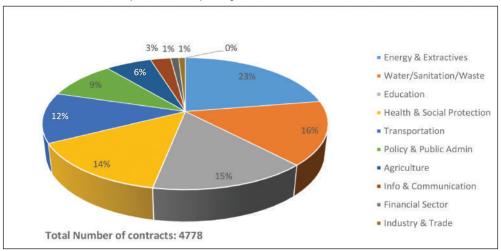
On account of the large size of contracts in the sectors of transportation; energy and extractives; and water, sanitation and waste, these accounted for the largest share in terms of ICB contracts awarded in the World Bank funded contracts during the 2014-2018 period, with shares of 37 percent, 27 percent and 23 percent, respectively. Other sectors like health and social protection (4 percent), policy and public administration (4 percent), and education (2 percent) have relatively smaller shares in value terms (Exhibit 18). However, in terms of number of contracts awarded, social sectors such as education, health and social protection accounted for a relatively higher share in total ICB contracts, at 15 percent and 14 percent respectively. Policy and public administration and agriculture also accounted for relatively higher shares in terms of number of contracts with shares of 9 percent and 6 percent, respectively (Exhibit 19).

Exhibit 18: Sector-wise ICB Contracts Awarded in the WB funded Projects (2014-2018) – By Value of Contract



Note: Financial Sector, Industry & Trade, and Others accounted for less than 1 percent share Source: World Bank, Exim Bank Research

Exhibit 19: Sector-wise ICB Contracts Awarded in the WB funded Projects (2014-2018) – By Number of Contract

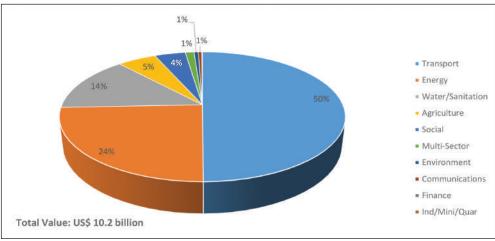


Source: World Bank, Exim Bank Research

African Development Bank Funded Projects

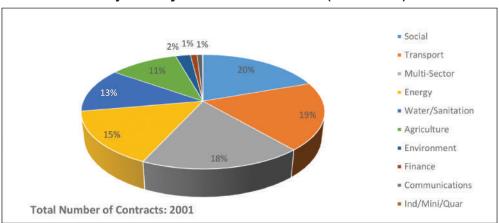
In terms of value, half of the ICB contract awarded in the AfDB funded projects during the period 2014-2018 were in transport sector, followed by energy sector (24 percent), and water and sanitation sector (14 percent), reflecting the AfDB's strategic focus on the development of infrastructure in Africa, as also larger value of contracts in these sectors. Other major sectors included agriculture (5 percent) and social sector (4 percent) (Exhibit 20). However, in terms of number of contracts, social sector accounted for the largest share of 20 percent in total ICB contracts awarded during the period under consideration, indicating the increased emphasis on not just hard but also soft infrastructure in the region (Exhibit 21). Other major sectors in terms of number of contracts were transport sector (share of 19 percent), multi-sector projects (18 percent), energy (15 percent), water and sanitation (13 percent) and agriculture (11 percent).

Exhibit 20: Sector-wise ICB Contracts Awarded in the AfDB funded Projects (2014-2018): By Value of Contract



Note: Finance and Ind/Mini/Quar account for a share of less than 1 percent Source: AfDB. Exim Bank Research

Exhibit 21: Sector-wise ICB Contracts Awarded in the AfDB funded Projects: By Number of Contract (2014-2018)



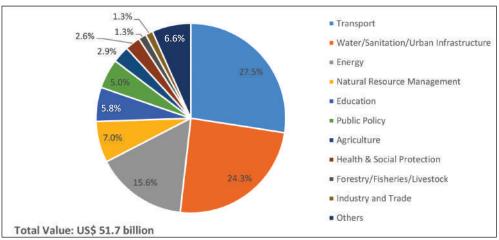
Note:Ind/Mini/Quar account for a share of less than 1 percent Source: AfDB, Exim Bank Research

Asian Development Bank Funded Projects

In terms of value, during the period 2014-2018 (cumulative), transport sector accounted for the largest value of contracts awarded in the ADB funded projects (27.5 percent), followed by water, sanitation and urban infrastructure (24.3 percent), energy (15.6 percent), natural resource management (7 percent), education (5.8 percent) and public policy (5 percent) (Exhibit 22). This is partly

due to the focus of the ADB on the development of infrastructure in emerging and developing member countries, and also partly due to the fact that the cost for infrastructure projects, particularly those in the transport, water, sanitation and urban infrastructure, and energy sector, tend to be comparatively higher than those in other sectors like agriculture, social sector, education and health. In terms of number of contracts awarded also, transport sector accounted for a relatively higher share of 26 percent in total ADB contracts (Exhibit 23), followed by water, sanitation and urban infrastructure (share of 23.9 percent), energy (15.5 percent), natural resources (5.9 percent) and public policy (5.7 percent), during 2014-2018.

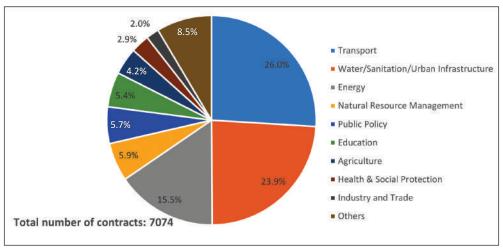
Exhibit 22: Sector-wise Contracts Awarded in the ADB funded Projects— By Value of Contract (2014-2018)



Note: - In case of the ADB, all contracts are categorised as OCB (open competitive bidding), as ADB has discontinued the usage of nomenclatures such as ICB & NCB.

Source: ADB, Exim Bank Research

Exhibit 23: Sector-wise Contracts Awarded in the ADB funded Projects— By Number of Contract (2014-2018)



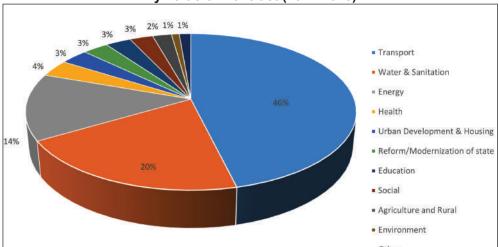
Note: - In case of the ADB, all contracts are categorised as OCB (open competitive bidding), as ADB has discontinued the usage of nomenclatures such as ICB & NCB.

Source: ADB, Exim Bank Research

Inter-American Development Bank Funded Projects

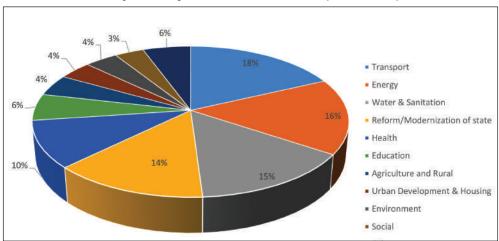
In terms of value, during the period 2014-2018 (cumulative), transport sector accounted for 46 percent of the ICB contracts awarded in the IDB funded projects (Exhibit 24), followed by other sectors such as water and sanitation, and energy, with shares of 20 percent and 14 percent respectively. However, in terms of number of ICB contracts, the share of transport sector was relatively lower at 18 percent during the same period, followed closely by energy sector (16 percent share) and water and sanitation (15 percent) (Exhibit 25). This is partly due to the high value of projects in transport infrastructure sector. In terms of number of contracts, other sectors such as reform and modernization of state, health and education have a relatively higher share when compared to that in terms of value.

Exhibit 24: Sector-wise ICB Contracts Awarded in the IDB funded Projects— By Value of Contract (2014-2018)



Source: IDB. Exim Bank Research

Exhibit 25: Sector-wise ICB Contracts Awarded in the IDB funded Projects- By Number of Contract (2014-2018)



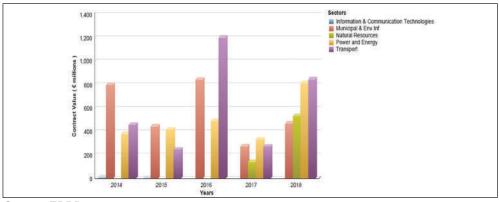
Source: IDB, Exim Bank Research

European Bank for Reconstruction and Development Funded Projects

In EBRD funded projects also, transport sector recorded the highest share in terms of value, at € 3.045 billion over the past five years, followed by municipal and environment infrastructure (MEI) sector, at € 2.847 billion during 2014-2018 (Exhibit 26). However, in terms of total number of contracts, the MEI sector had

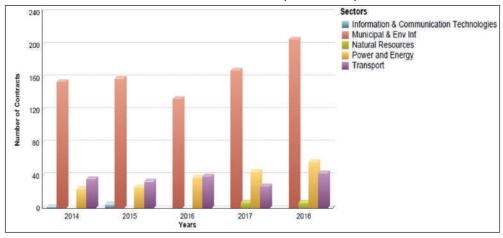
the highest contracting activity with nearly 823 out of the total 1,166 contracts awarded in this sector, cumulatively during 2014-2018 (Exhibit 27).

Exhibit 26: Sector-wise Contracts Awarded in EBRD funded Projects- By Value of Contract (2014-2018)



Source: EBRD

Exhibit 27: Sector-wise Contracts Awarded in EBRD funded Projects- By Number of Contract (2014-2018)



Source: EBRD

INDIA'S POSITION IN MDB PROCUREMENT

Over the past five years, the overall contracts secured by Indian companies in MDB funded projects have witnessed a significant upsurge. Overall contracts secured by Indian companies in ADB, AfDB and the World Bank funded projects have witnessed CAGRs of 23.5 percent, 13.1 percent and 5.1 percent, respectively, during 2014-2018 (Exhibit 28). In EBRD funded projects, Indian participation was

very limited. During 2014-2018, only two contract awards were secured by Indian companies. These were supply and installation contracts in the power sector of Georgia and Ukraine, in 2014 and 2015, respectively.

4000 3456.5 3500 3000 2653.0 2500 US\$ Million 2209.1 2215.8 2155.3 1818.8 1786.5 2000 1629.6 1484.1 1500 988.5 1000 500 167.8 80.9 132 2 134.5 56.8 2014 2015 2018 2016 2017 ■ World Bank Contracts ■ ADB Contracts

Exhibit 28: Overall Contracts Secured By Indian Companies – By Value of Contracts

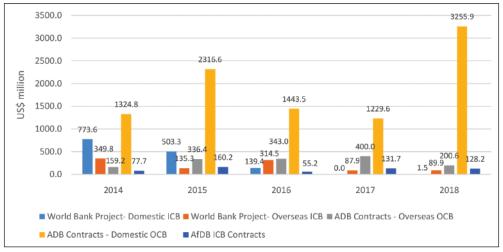
Note: - In case of the ADB, all contracts are categorised as OCB (open competitive bidding), as ADB has discontinued the usage of nomenclatures such as ICB & NCB. Source: World Bank, ADB, AfDB, Exim Bank Research

Majority of the contract secured by Indian companies in the AfDB funded projects have been through the ICB mode, which accounted for nearly 97 percent of the total value of contracts secured by Indian companies in 2018, as India is a non-regional member of the AfDB. ICB contracts secured by Indian companies in the AfDB funded projects have witnessed a robust growth in the recent period, with the value of such contracts registering a CAGR of 13.3 percent during 2014-18. However, the share of ICB contracts secured by Indian companies in World Bank projects has been relatively smaller, at 4.1 percent in 2018. This was mainly because majority of the total contracts secured in World Bank and ADB funded project by Indian companies were domestic projects secured through other procurement modes. The major procurement mode for such contracts in World Bank projects was request for bids, which accounted for nearly 57.7 percent of total contract awarded to Indian companies. In case of the ADB funded projects, the share of overseas contracts in total contracts secured by Indian companies stood at 5.8 percent in 2018.

If we look at projects secured overseas, over the past five years, ICB contracts secured by Indian companies in the World Bank funded projects have dropped significantly during 2014-2018, recording a negative CAGR of 28.8 percent,

owing to a significant drop in overall contracts awarded in World Bank projects worldwide, during the same period. In case of the ADB funded projects, Indian companies recorded a moderate CAGR of 5.9 percent in the contracts secured in overseas projects, while domestic contracts secured witnessed a CAGR of 25.2 percent during the past five years (Exhibit 29).

Exhibit 29: Overall ICB Contracts Secured By Indian Companies— By Value of Contracts



Note: - In case of the ADB, all contracts are categorised as OCB (open competitive bidding), as ADB has discontinued the usage of nomenclatures such as ICB & NCB.

Source: World Bank, ADB, AfDB, Exim Bank Research

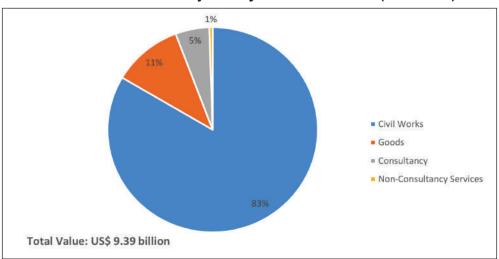
Nature of Contracts Secured by Indian Companies

Civil construction contracts, involving design and construction of civil work, road construction, steel structural works, etc. accounted for the largest share in total value of contracts secured by Indian companies across the projects funded by the three MDBs viz. the ADB, the World Bank and the AfDB, over the period 2014-18. In the ADB funded projects, civil work accounted for nearly 64.0 percent of total value of contracts secured by Indian companies (Exhibit 34), while in the World Bank (Exhibit 30) and the AfDB funded projects (Exhibit 32), it accounted for a much higher share of 83 percent and 86 percent, respectively, reflecting the greater scale of competitiveness of India in securing such contracts. This was followed by supply contracts that accounted for a share of 11 percent in the World Bank funded projects, 10 percent in the AfDB funded projects, and 18 percent in the ADB funded projects secured by Indian companies during 2014-18 (Exhibit 30, Exhibit 32 and Exhibit 34). However, in terms of number of contracts, the share of civil works was much lesser, which is particularly stark in the cases of

contracts secured in WB funded projects and AfDB funded projects, at 29 percent (Exhibit 32) and 35 percent (Exhibit 34), respectively. The share of civil works in contracts secured in the ADB funded projects stood at 55 percent (Exhibit 35), indicating that Indian companies secure larger value contracts in the WB and the AfDB funded projects as compared to the ADB funded projects

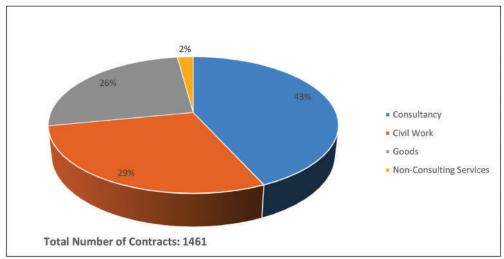
At 43 percent, the share of consultancy services was the largest, in terms of number of contracts secured in the WB funded projects, during 2014-2018, while in the ADB funded projects, the share of consultancy contracts stood at 23 percent and in the AfDB funded projects, the share of services contracts collectively stood at 35 percent of the total number of contracts awarded during the period under consideration.

Exhibit 30: Nature of Contracts Secured By Indian Companies in the World Bank funded Projects- By Value of Contract (2014-2018)



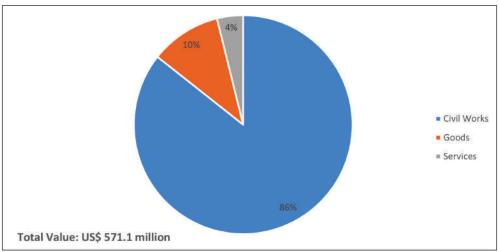
Source: World Bank, Exim Bank Research

Exhibit 31: Nature of Contracts Secured By Indian Companies in the World Bank funded Projects- By Number of Contract (2014-2018)



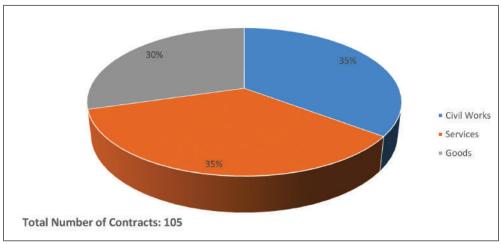
Source: World Bank, Exim Bank Research

Exhibit 32: Nature of Contracts Secured By Indian Companies in the AfDB funded Projects - By Value of Contract (2014-2018)



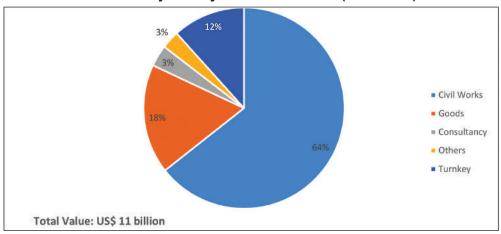
Source: AfDB, Exim Bank Research

Exhibit 33: Nature of Contracts Secured By Indian Companies in the AfDB funded Projects - By Number of Contract (2014-2018)



Source: AfDB, Exim Bank Research

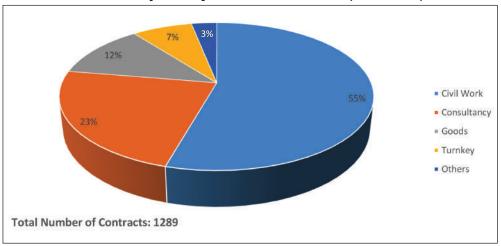
Exhibit 34: Nature of Contracts Secured By Indian Companies in the ADB funded Projects: By Value of Contract (2014-2018)



Note: - In case of the ADB, all contracts are categorised as OCB (open competitive bidding), as ADB has discontinued the usage of nomenclatures such as ICB & NCB.

Source: ADB. Exim Bank Research

Exhibit 35: Nature of Contracts Secured By Indian Companies in the ADB funded Projects: By Number of Contract (2014-2018)



Note: - In case of the ADB, all contracts are categorised as OCB (open competitive bidding), as ADB has discontinued the usage of nomenclatures such as ICB & NCB.

Source: ADB, Exim Bank Research

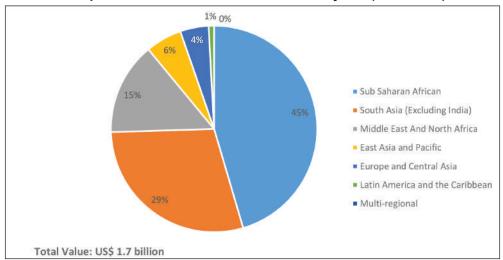
Regional Presence of Indian Players

World Bank Funded Projects

An analysis of total overseas contracts bagged by Indian companies indicates that Sub Saharan Africa has been the largest market where Indian companies have won contract awards, and the region accounted for nearly 45 percent of the total overseas contract awards secured by Indian companies in World Bank funded projects during 2014-2018 (Exhibit 36). This was followed by South Asia (excluding India), which accounted for a share of 29 percent, and Middle East and North Africa (15 percent). Other regions such as East Asia and Pacific region, and Europe and Central Asia accounted for relatively lower share of 6 percent, and 4 percent respectively, while Latin America and the Caribbean accounted for a meagre share of 1 percent in total overseas contract awards secured by Indian companies in World Bank funded projects during 2014-2018 (Exhibit 36).

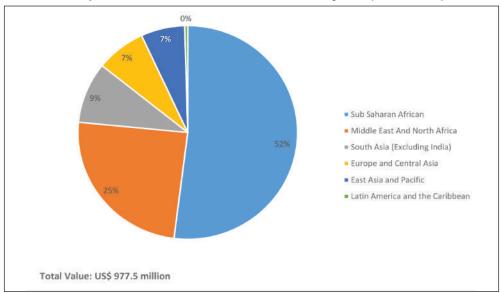
In terms of ICB contracts secured in World Bank funded projects in overseas locations, largest value of contracts have been secured in the Sub Saharan Africa region (share of 52 percent) during 2014-2018 (Exhibit 37), followed by Middle East and North Africa (25 percent share) and South Asia (excluding India) (9 percent). It is noteworthy that majority of the total contracts secured in World Bank funded projects by Indian companies were secured through other procurement modes such as request for bids.

Exhibit 36: Region-Wise Total Overseas Contracts Secured by Indian Companies in the World Bank funded Projects (2014-2018)



Source: World Bank, Exim Bank Research

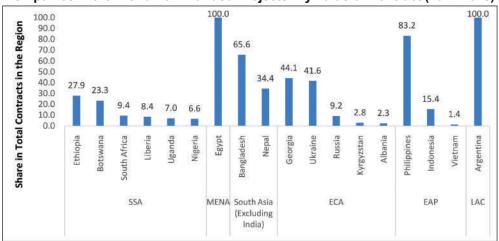
Exhibit 37: Region-Wise Overseas ICB contracts secured by Indian Companies in the World Bank funded Projects (2014-2018)



Source: World Bank, Exim Bank Research

In Sub-Saharan Africa, Ethiopia was the largest destination for Indian companies, with a share of 27.9 percent in the total value of contracts secured in WB funded projects by Indian companies in the region during 2014-2018 (Exhibit 38), followed by Botswana (23.3 percent), South Africa (9.4 percent), and Liberia (8.4 percent) (Exhibit 38). In the Middle East and North Africa region, Egypt was the only destination for ICB contracts in World Bank funded projects for Indian companies during 2014-2018. In Europe and Central Asia region, Georgia and Ukraine were the top destinations for Indian companies, accounting for shares of 44.1 percent and 41.6 percent, respectively, followed by Russia (share of 9.2 percent), Kyrgyzstan (2.8 percent) and Albania (2.3 percent). Within South Asia (excluding India), Bangladesh was the top project country for Indian companies, which accounted for 65.6 percent of the total ICB contracts awarded in World Bank funded projects to Indian companies within the region (excluding India), followed by Nepal (share of 34.4 percent). In East Asia and Pacific region, Philippines was the largest destination for Indian companies for ICB opportunities in World Bank funded projects during 2014-2018, with a share of 83.2 percent, followed by Indonesia (15.4 percent) and Vietnam (1.4 percent). In Latin America, the presence of Indian players was limited to Argentina only (Exhibit 38).

Exhibit 38: Top Project Countries for ICB Contracts secured by Indian Companies in the World Bank funded Projects: By Value of Contract (2014-2018)



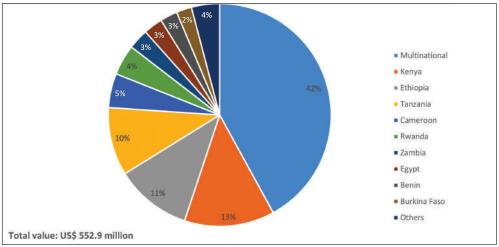
Note: SSA: Sub Saharan Africa; MENA: Middle East and North Africa; ECA: Europe and Central Asia; EAP: East Asia and Pacific; LAC: Latin America and the Caribbean

Source: World Bank, Exim Bank Research

African Development Bank Funded Projects

Multinational projects accounted for nearly half of the ICB contracts secured by Indian companies under the AfDB financed projects during 2014-2018, accounting for 42 percent of the total contracts secured by Indian companies during the period. After multinational projects, Kenya accounted for the highest share in total contracts secured by Indian companies (13 percent) in the AfDB funded projects. Other major project countries for Indian companies in the AfDB funded projects included Ethiopia (11 percent), Tanzania (10 percent), Cameroon (5 percent) and Rwanda (4 percent) (Exhibit 39).

Exhibit 39: Top Project Countries for ICB Contracts secured by Indian Companies in the AfDB funded Projects: By Value of Contract (2014-2018)

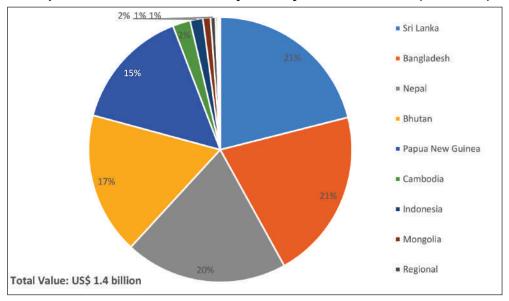


Source: AfDB, Exim Bank Research

Asian Development Bank Funded Projects

Domestic projects accounted for bulk of the contracts secured by Indian companies in the ADB funded projects as well, with a share of 87 percent in total contracts secured during 2014-2018. However, in terms of overseas contracts, Sri Lanka, Bangladesh, and Nepal were the major project countries for Indian companies in case of the ADB funded projects. In the Pacific region, Papua New Guinea is the only country that features among the top project countries for Indian companies in the ADB funded projects, accounting for a share of 15 percent in total overseas contracts. Several East Asian countries such as Cambodia, Indonesia, Vietnam, Myanmar and Lao PDR feature among the top project countries for Indian companies in ADB funded projects (Exhibit 40).

Exhibit 40: Top Project Countries for Overseas Contracts secured by Indian Companies in the ADB funded Projects – By Value of Contract (2014-2018)



Note: - 1. In case of the ADB, all contracts are categorised as OCB (open competitive bidding), as ADB has discontinued the usage of nomenclatures such as ICB & NCB.

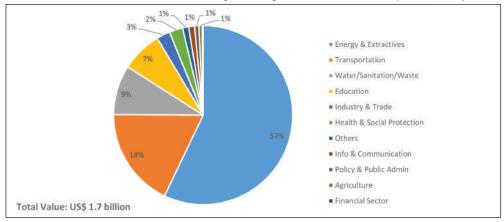
2. Countries other than those labelled in the Exhibit have a share of less than 1 percent Source: ADB, Exim Bank Research

Sectoral Analysis

World Bank Funded Projects

In the case of India, largest value of overseas ICB contracts in the World Bank funded projects during 2014-18 were secured in the energy and extractive sector, with a share of 57 percent, followed by transport (18 percent), water, sanitation and waste (9 percent), education (7 percent) and industry and trade (3 percent) (Exhibit 41).

Exhibit 41: Sector-wise Overseas ICB Contracts secured by Indian Companies in the World Bank funded Projects: By Value of Contract (2014-2018)



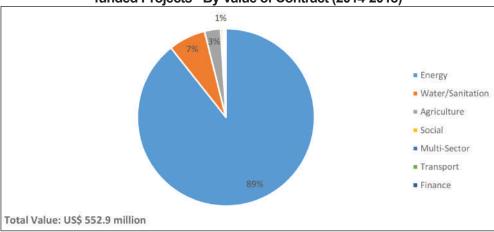
Note: Financial sector accounted for a share of less than 1 percent

Source: World Bank, Exim Bank Research

African Development Bank Funded Projects

Energy sector accounted for majority of the value of contracts awarded to Indian companies in the AfDB funded projects, accounting for 89 percent of total value of contracts secured during 2014-2018 (Exhibit 42), followed by water/ sanitation sector (7 percent share), agriculture (3 percent) and social sector (1 percent).

Exhibit 42: Sector-wise ICB Contracts secured by Indian Companies in the AfDB funded Projects - By Value of Contract (2014-2018)



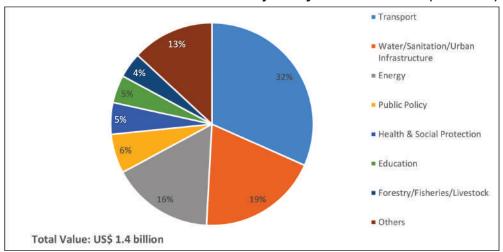
Note: Multi-sector,transport and finance had a share of less than 1 percent

Source: AfDB, Exim Bank Research

Asian Development Bank Funded Projects

Transport is the largest sector for Indian companies in the overseas contracts secured in the ADB funded projects, accounting for 32 percent of the total contracts secured during 2014-2018 (Exhibit 43), followed by water/ sanitation/ urban infrastructure (19 percent), energy (16 percent), public policy (6 percent) and health & social protection (5 percent).

Exhibit 43: Sector-wise Overseas Contracts secured by Indian Companies in Contracts Secured in the ADB funded Projects-By Value of Contract (2014-2018)



Note: - In case of the ADB, all contracts are categorised as OCB (open competitive bidding), as ADB has discontinued the usage of nomenclatures such as ICB & NCB.

Source: ADB, Exim Bank Research

Competitor Analysis by Region

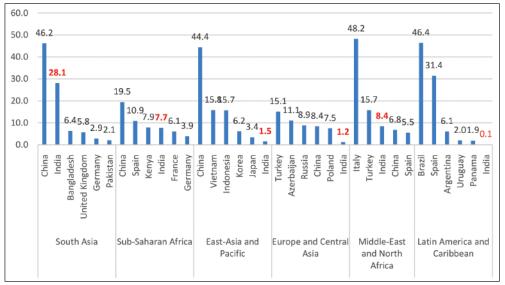
World Bank Funded Projects

Region-wise, China is the top most competitor for Indian companies in the World Bank funded projects in Sub-Saharan Africa, South Asia, and East Asia and Pacific regions as it is the topmost supplier in these regions. Turkey is the topmost supplier country for World Bank funded projects in the Europe and Central Asia region and the second largest supplier in the MENA region, after Italy (Exhibit 44).

In case of overall World Bank funded projects, India was the second largest contract awardee in the South Asian region with a share of 28.1 percent in the total ICB contracts in the region, with majority of the contract awards being in domestic projects.

In Sub-Saharan Africa, India stood as the fourth largest contract awardee, with a share of 7.7 percent in the total ICB contracts in World Bank funded projects in the region. In the MENA region, India emerged as the third largest contract awardee, with a share of 8.4 percent in the total ICB contract awards. However, in East Asia and Pacific, as well as Europe and Central Asia, India's share remains meagre at 1.5 percent and 1.2 percent of the total ICB contracts awarded in World Bank funded projects in the regions during 2014-2018 cumulatively (Exhibit 44). India's share in ICB projects in Latin America and Caribbean region stood at a negligible 0.1 percent.

Exhibit 44: Region-Wise Top Competitors for Indian Companies in ICB Contracts in World Bank funded Projects - By Value of Contract (2014-2018)



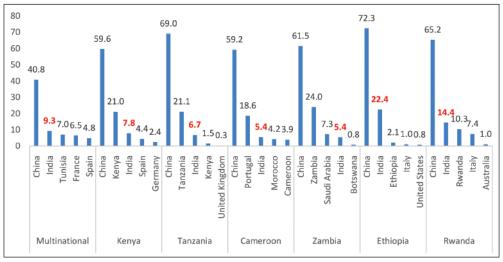
Source: World Bank, Exim Bank Research

African Development Bank Funded Projects

China was also the largest competitor for Indian companies in ICB contracts awarded in the AfDB funded projects as well during 2014-2018, and held significantly larger shares in each of the top markets for Indian companies in Africa (Exhibit 45). India held the second largest share in multinational projects with a share of 9.3 percent in total value of contract awards in multinational projects, as well as in Ethiopia and Rwanda, with shares of 22.4 percent and 14.4 percent, respectively, in the total value of contract awards in these countries. India was the third largest supplier in Kenya, Tanzania, Cameroon, and was the fourth largest

supplier in Zambia during the 2014-2018 period. Other non-regional competitors for India include Spain, France, Italy, Turkey, and Germany, among others.

Exhibit 45: Country-wise Top Competitors for Indian Companies in ICB Contracts in AfDB funded Projects - By Value of Contract (2014-2018)

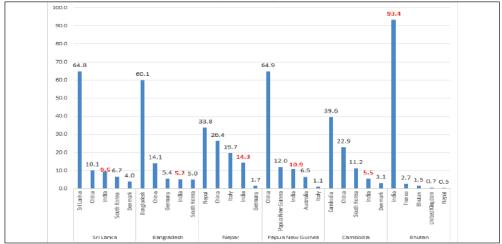


Source: AfDB, Exim Bank Research

Asian Development Bank Funded Projects

China is also the top most competitor in all the top project countries for Indian companies in the ADB funded projects, except Bhutan, where India was the key player with a share of 93.4 percent in the contracts awarded in the ADB funded projects in the country during 2014-2018 cumulatively. India was the third largest supplier in Sri Lanka and Papua New Guinea, with shares of 9.5 percent and 10.9 percent, respectively during 2014-2018 cumulatively, and was the fourth largest supplier in Bangladesh, Nepal and Cambodia, with shares of 5.2 percent, 14.3 percent and 5.5 percent respectively, during the same period. Other than China, top competitors for India in the contract opportunities emerging in the ADB funded project include South Korea, Germany, Italy, United Kingdom and Denmark, among others (Exhibit 46).

Exhibit 46: Country-wise Top Competitors for Indian Companies in Contracts in ADB funded Projects -By Value of Contract (2014-2018)



Note: - In case of the ADB, all contracts are categorised as OCB (open competitive bidding), as ADB has discontinued the usage of nomenclatures such as ICB & NCB.

Source: ADB, Exim Bank Research

Competitor Analysis by Sector

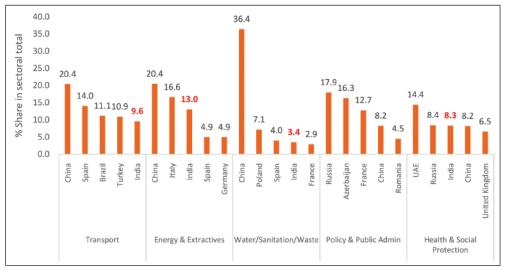
Sector-wise analysis of data also showed that China has been the top most competitor for Indian companies, particularly in transport, energy and water sectors, which are among the top 3 sectors for Indian companies in terms of contract opportunities in the MDB financed projects.

World Bank Funded Projects

In the World Bank funded projects, China secured the largest value of ICB contracts in the transport sector, energy and extractive sector, and water, sanitation and waste sector, accounting for 20.4 percent, 20.4 percent and 36.4 percent share in the total value of ICB contracts awarded respectively in each of these sectors during the 2014-2018 period (Exhibit 47). In the transport sector, China was followed by Spain (share of 14.0 percent), Brazil (11.1 percent), Turkey (10.9 percent) and India (9.6 percent) as the top supplier. In the energy and extractives sector, China was followed by Italy (16.6 percent), India (13.0 percent), Spain and Germany (4.9 percent each), while in the water/ sanitation/ waste sector, top countries other than China included Poland (7.1 percent), Spain (4.0 percent), India (3.4 percent) and France (2.9 percent). Russia secured the largest share of ICB contracts in the policy and public administration sector, with a share of 17.9 percent, followed by Azerbaijan (16.3 percent), France (12.7 percent), China (8.2

percent) and Romania (4.5 percent). Meanwhile, in the health and social sector, UAE secured the largest value of ICB contracts, with a share of 14.4 percent, followed by Russia (8.4 percent), India (8.3 percent), China (8.2 percent), and the United Kingdom (6.5 percent) (Exhibit 47).

Exhibit 47: Sector-wise Top Competitors for Indian Companies in ICB Contracts Awarded in the World Bank funded Projects - By Value of Contract (2014-2018)

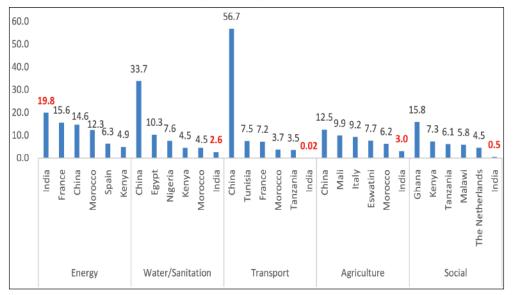


Source: World Bank, Exim Bank Research

African Development Bank Funded Projects

China is also the top competitor in terms of value of contracts awarded in the AfDB funded projects in 3 out of the 5 top sectors for Indian companies viz. water and sanitation, transport and agriculture. India, on the other hand, was the topmost contract awardee for ICB contracts in energy sector projects funded by the AfDB, with a share of 19.8 percent. In other sectors, India's share was relatively much smaller (Exhibit 48). Other non-regional competitors in the AfDB funded projects include France, Spain, Italy, and the Netherlands.

Exhibit 48: Sector - wise Top 5 Countries Winning ICB Contracts Awarded in the AfDB funded Projects - By Value of Contract (2014-2018)

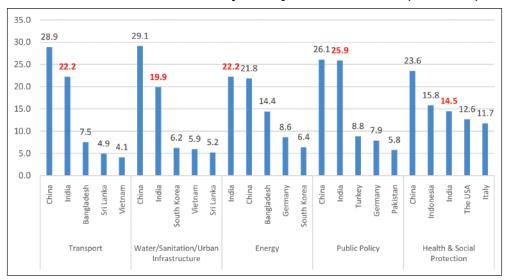


Source: AfDB, Exim Bank Research

Asian Development Bank Funded Projects

In the ADB funded projects, China secured the largest value of contracts in the transport, water, sanitation and urban infrastructure sector, public policy and health and social protection, accounting for 28.9 percent, 29.1 percent, 26.1 percent and 23.6 percent shares in the total value of contracts awarded respectively in each of these sectors during the 2014-2018 period (Exhibit 49). Meanwhile, India secured the largest value of contracts in energy sector, with a share of 22.2 percent, followed by China (21.8 percent). India was the second largest supplier in the transport sector, water, sanitation and urban infrastructure sector, and public policy, with share of 22.2 percent, 19.9 percent and 25.9 percent, respectively during 2014-2018. Other top competitors in ADB funded projects across key sectors of operations include Germany, South Korea, Italy and Turkey, among others.

Exhibit 49: Sector-wise Top competitors for Indian Companies in Contracts Awarded in the ADB funded Projects -By Value of Contract (2014-2018)



Note: - In case of the ADB, all contracts are categorised as OCB (open competitive bidding), as ADB has discontinued the usage of nomenclatures such as ICB & NCB.

Source: ADB, Exim Bank Research

CONCLUSION

India is among the top ICB contract winning countries across projects funded by major MDBs. While majority of the ICB contracts secured by Indian companies in World Bank projects and ADB projects are predominately in the domestic market, India is also among the top project exporting countries in the overseas markets, particularly in the regions of Sub-Saharan Africa, Middle East and North Africa. While Indian contractors specialize in energy, transport, and water/sanitation sectors across all the regions in MDB funded projects, they also face fierce competition in each of these sectors, particularly from China. Certain key competitors from other emerging markets include those from South Korea and Turkey, which are particularly competitive in the regions of East Asia and Pacific, and Middle East and North Africa respectively. Other major competitors include developed countries such as Spain, Italy, France and Germany, among others, who have developed their skills, expertise, technology, and market presence through decades of experience in overseas construction.

To develop a roadmap for boosting project exports from India, it will be important to analyze the strengths of Indian companies in their area of core competencies, as also investigate the challenges which they face across geographies. For

example, analysis in this section indicates that while Sub-Saharan Africa is the top most region for Indian project exporters, the market share of India in certain key sectors of operations, such as water/ sanitation, transport, agriculture and social sectors, is much below than that of its competitors. A thorough examination of the comparative advantages and the constraints faced by project exporters is therefore warranted.

CHAPTER 4: INTERNATIONAL COMPARISON

Analysis of contract awards across major sectors and regions/countries in MDB funded projects awarded through international competitive bidding indicates that India's top competitors across its major sectors and regions of operation are China, South Korea, and Turkey. China, particularly, is one of the topmost competitors for India in ICB projects, as noted in the analysis in the previous chapter. A survey of project exporters conducted by Exim Bank also indicates that China and Turkey are among the top two competitors for Indian project exporters, followed by developed nations such as Spain, Germany, France and the USA. A comparative analysis of India vis-à-vis its top competitors is undertaken, to understand their relative market presence, and comparative advantages, as also identify the areas for improvement for Indian companies.

Segurated Score of Responses 10 Central France 1254 Brain Iral Andrew Control Responses 10 Tribles Tribles Score of Responses 10 Tribles Tribl

Exhibit 50: Top Competitor Countries for Indian Project Exporters

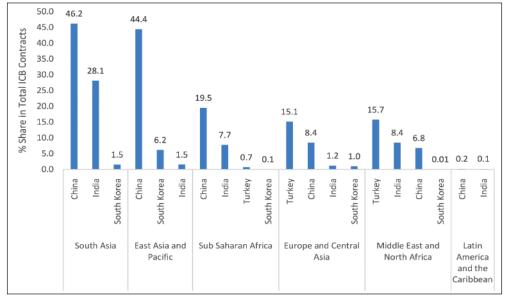
Note: Based on weighted sum of scores given to survey responses

Source: Exim Bank Research

REGIONAL PRESENCE

Comparison of the region-wise share of India and its competitors in the ICB contracts secured in World Bank funded projects indicates a clear hegemony of China in the regions of South Asia, East Asia and Pacific, and Sub-Saharan Africa. In Europe and Central Asia, and Middle East and North Africa, Turkey secured the maximum value of ICB contracts in World Bank funded projects during 2014-2018, among the countries taken into consideration. The success in LAC market has been limited for India, as also its competitors—China, Turkey and South Korea.

Exhibit 51: Region-wise Share of India and its Competitor Countries in the Value of ICB Contracts secured in World Bank funded Projects (Cumulative 2014-2018)



Source: World Bank, Exim Bank Research

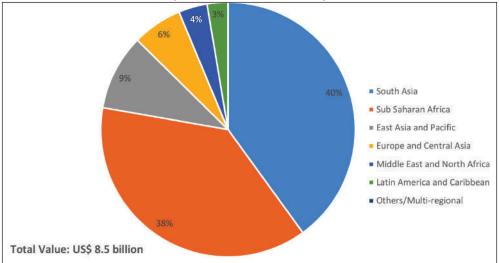
China

As seen in the previous chapter, China is the key competitor in the top regions where Indian companies operate. South Asia and Sub Saharan Africa are the top regions for overseas contracts³ secured by Chinese companies in the World Bank funded projects, with a share of 40 percent and 38 percent in total such contracts secured by China during 2014-2018 (Exhibit 52). These regions are also the top two regions for overseas contracts secured by Indian project exporters in the

³Not including domestic contracts

World Bank funded projects. Interestingly, the share of East Asia and Pacific region in total overseas contracts secured by Chinese firms in the World Bank funded projects is lower. South Korea has emerged as one of the key players in the East Asia and Pacific region.

Exhibit 52: Regional Presence of Chinese Companies in Overseas Contracts Secured in Projects funded by the World Bank (Cumulative 2014-2018)



Note: 1. Overseas contracts refer to contracts secured by China outside its own geography 2. Others/ multi-regional has a share of less than 1 percent Source: World Bank, Exim Bank Research

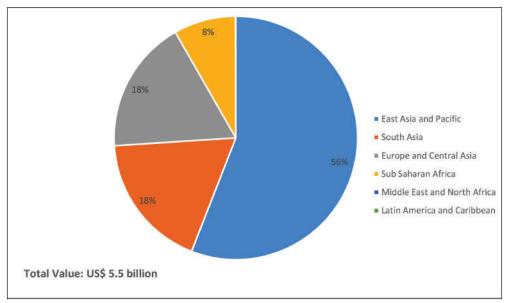
South Korea

The overseas contracts secured by South Korea in the World Bank funded projects is mainly concentrated in the region of East Asia and Pacific, which accounts for a share of 56 percent in total such contracts secured by the country during 2014-2018 (Exhibit 53), followed by South Asia (share of 18 percent), where South Korea is one of India's main competitors after China. Unlike China and India, the share of Europe and Central Asia in overseas contracts secured is relatively larger for South Korea, at around 18 percent.

Exhibit 53: Regional Presence of South Korean Companies in Overseas

Contracts Secured in the Projects funded by the World Bank

(Cumulative 2014-2018)



Note: 1. Overseas contracts refer to contracts secured by South Korea outside its own geography

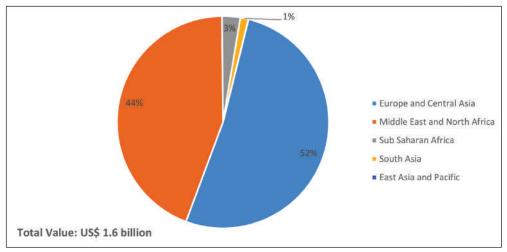
2. Middle East and North Africa, and Latin America and Caribbean have a share of less than 1 percent

Source: World Bank, Exim Bank Research

Turkey

Like Indian companies, Turkish companies also began pursuing project export opportunities in foreign markets in the 1970s. In the current scenario, Turkish companies have expanded their activities across various regions. The major markets for Turkish companies in overseas contracts secured in the World Bank funded projects are the regions of Europe and Central Asia, and Middle East and North Africa, with shares of 52 percent and 44 percent, respectively (Exhibit 54). The presence of Turkish contractors in other regions such as South Asia and Africa, is much lower when compared to China, India, and South Korea.

Exhibit 54: Regional Presence of Turkish Companies in Overseas Contracts Secured in Projects funded by the World Bank (Cumulative 2014-2018)



Note: 1. Overseas contracts refer to contracts secured by Turkey outside its own geography 2. East Asia and Pacific has a share of less than 1 percent

Source: World Bank, Exim Bank Research

KEY STRENGTHS OF COMPETITORS

Analysis of the survey responses indicates that government support to project exports is considered to be a key competitive strength of India's competitors. Other key strengths, as per the survey response include better access to finance, cheaper raw materials, technological advancements, and low cost of labour. Each of these aspects has been discussed in detail, with respect to the top competitor countries for Indian companies, viz. China, South Korea and Turkey.

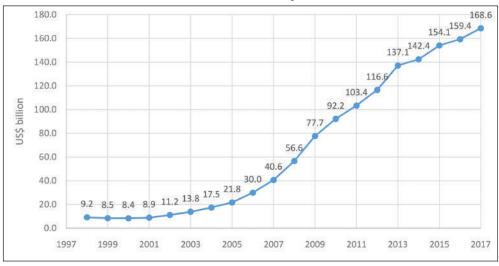
Government Support

The role of government in promoting project exports is pivotal, and is generally considered to influence the competitive advantage of project exporters. In this context, incentives structures, government policies for supporting the construction activities, and mutual business agreements between countries are among the key differentiating factors. According to the responses to the Exim Bank survey, only 21 percent respondents perceive institutional support to be among the key strengths for Indian project exports, while nearly 78.9 percent respondents believe that government support has been one of the key strengths of their competitors.

China

One of the major reasons for success of Chinese companies in project exports is government support in the form of subsidies, as also the bilateral agreements signed by the Chinese government with other countries. Many developing countries particularly in Africa have established longstanding relationships with China, built upon bilateral agreements between the respective governments. These agreements have enabled Chinese contractors to obtain a large number of projects, particularly in construction segment, in these countries, and in turn, have accumulated substantial experience in these geographies⁴. Further, the Government of China extends concessional loans, routed through the Exim Bank of China, which is low-interest credit facility to borrowing developing countries, in order to fund long tenor projects such as manufacturing projects, infrastructure construction projects and social welfare projects in the borrowing country, in turn, facilitating exports of Chinese products, technology services and other goods. As a result of the impetus given by the Chinese government, the gross annual revenues of Chinese companies in construction projects have risen exponentially over the past two decades, particularly after China's accession to WTO in 2001 (Exhibit 55).

Exhibit 55: Gross Annual Revenues of Chinese Companies from Global Construction Projects



Source: Johns Hopkins SAIS China-Africa Research Initiative

⁴Are Chinese contractors competitive in international markets?, ZHEN YU ZHAO and LI YIN SHEN, January 2008

South Korea

Government support in South Korea has also been an important factor for internationalization of companies in the country. Since the 1970s, the South Korean government has implemented policies to support domestic construction companies' expansion into the overseas construction market. The Government of South Korea has encouraged the overseas expansion of the construction industry through the enactment of the Overseas Construction Promotion Act (1975) as a means of securing foreign currency. Some of the supportive policies by the Korean government include providing information on overseas construction orders; education and training; reporting the status of construction and construction orders; and recommending collaboration between domestic companies. In addition, the International Contractors Association of Korea (ICAK), established as part of the Overseas Construction Promotion Act (1975) engages in a broad range of activities, such as international negotiations for orders in the private sector, education and training of human resources, assistance in covering the cost of overseas market research, and dispatching independent research groups⁵. The Government of South Korea also provides bilateral official development assistance loans under the Economic Development Co-operation Fund (EDCF), which is administered through Exim Bank of Korea, which not only encourages a sound economic relationship between Korean companies and partner countries but also promotes project exports from the country.

Turkey

In this respect, even the Turkish government has supported the Turkish companies, especially through signing bilateral agreements with host countries. In the 1980s, the government's support in the form of a trade agreement with the then Soviet Union was one of the key factors that helped the Turkish companies reinforce their competitiveness in Russia. The Turkish government has sustained its active role in supporting the construction industry by introducing additional support for those companies that intend to establish business in foreign markets⁶. For instance, under the Bridge Credit Program of the Turkish government, executed through Export Credit Bank of Turkey, a credit facility of up to US\$ 25 million has been made available for Turkish Overseas Contractors, including construction and consultancy companies, in order to mitigate the impact of financial crises on their overseas operations, as also to protect their investments and their long-term

⁵Comparative Study of Japanese and Korean Construction Industries' Overseas Market Strategy", JUNSEOK LEE, SHUZO FURUSAKA

⁶Analysis of International Competitiveness of the Turkish Contracting Services, Beliz ÖZORHON, Sevilay DEMIRKESEN, December 2014

competitive strength in other countries' markets by keeping construction sites and mobilization-engine parks functioning⁷.

India

On similar lines, the Government of India (GOI), in 2003-04, formulated the Indian Development Initiative (IDI), now known as the Indian Development and Economic Assistance Scheme (IDEAS), with the objective of sharing India's development experience through capacity building and skill transfer, trade and infrastructure development. Under IDEAS, GOI provides concessional financing to partner countries for large scale and often complex project exports through the Lines of Credit programme, which is routed through the Exim Bank. The LOC programme creates opportunities for project exports from India. The GOI also supports Indian companies for strategically important infrastructure projects abroad through the Concessional Financing Scheme (CFS), routed through Exim Bank, which is discussed in detail in the forthcoming section. However, given the quantum of opportunities that exist for project exporters, the support from Indian government remain relatively lower when compared to the competitor countries.

Better Access to Finance

Exim Bank's survey responses indicate that nearly 75 percent of the respondents perceive better access to finance as one among the key strengths of their competitors, while less than 30 percent respondents believe that financial support is among the key strengths of Indian project exporters.

Export Credit Agencies play an important role in facilitating and financing project exports. ECA products can be offered either as supplier's credit or buyer's credit. In a supplier's credit, the ECA offers deferred credit to the supplier in the home country, who in turn is in a position to offer deferred credit to the buyers abroad, enabling them to import from India. In a buyer's credit, the ECA provides directly to the buyer, allowing the buyer to finance its purchase of the domestic exporter's goods or services. ECA participation in major project financing transactions generally use buyer's credit structures and are on a long-term basis. India and its key competitors taken into consideration in the present analysis have a strong ECA framework in their respective countries.

⁷Source: Export Credit Bank of Turkey

China

Better access to finance is particularly a key strength for Chinese contractors. Projects undertaken by Chinese companies in the international market usually get financed through several modes, including through the provision of concessional financing by the Chinese government / government backed agencies to the partner country, and equity investments by Chinese state-owned enterprises in the project country. Presence of such financing channels enhances the competitiveness and global positioning of Chinese companies⁸.

Critical to the success of Chinese contractors in regions such as Africa and developing Asia has been the important use of the country's state backed financial institutions. A phalanx of state funding agencies has been supported by massive national reserves of accumulated liquidity over the past decade. These agencies include the China Development Bank (CDB), Industrial and Commercial Bank of China (ICBC) China International Trade and Investment Corporation (CITIC), China Export and Credit Insurance Corporation (CECIC), Sinosure and the China Export-Import Bank, that provide financing support at subsidized interest rates to both overseas governments, as well as Chinese enterprises for equity participation in overseas projects.

The Export-Import Bank of China (Exim China) is one of the most important pillars of the ECA framework in China. It is a state-funded and state-owned policy bank of the People's Republic of China (PRC), with the status of an independent legal entity. Exim China promotes and supports foreign trade, and is the implementing agency of the Chinese government's "going global" strategy. Exim China, extends export / import credit to Chinese exporters, loans towards overseas construction contracts / investment projects undertaken by Chinese companies, and is the sole agency for operating concessional loans from the Chinese government and Preferential Export Buyer's Credit authorized by the Chinese Government, with an objective of forging closer strategic and cooperative relationships with developing countries (across Africa, South Asia, South Pacific Region, Caribbean Region, and member states in ASEAN and Shanghai Cooperation Organization).

Support programmes by Exim China that promote project exports from China include:

I. Concessional Loans by the Government of PRC: The Concessional Loan is typically a medium-/long-term low-interest credit designed to fund manufacturing

⁸The International Competitiveness of Chinese Construction Firms, Ali Parsa, Simon Huston, June 2015

projects, infrastructure construction projects and social welfare projects in the borrowing country, which can generate healthy economic returns / social benefits, while at the same time facilitate procurement of Chinese mechanical / electronic products, technology services and other goods by the borrowing country. The borrowers are normally the sovereign agencies of the borrowing governments. Under certain circumstances, the borrowers can also be financial institutions or other organizations designated by the borrowing governments and recognized by the Bank, which shall be guaranteed by the sovereign agencies thereof.

II. Preferential Buyer's Credit: Preferential Buyer's Credit refers to a medium / long-term credit with preferential terms and conditions, aimed at promoting China's economic and trade cooperation with other developing countries. The borrowers include the sovereign agencies of the borrowing governments or financial institutions or other organizations designated by the borrowing governments and recognized by the Bank, and guaranteed by the sovereign agencies thereof.

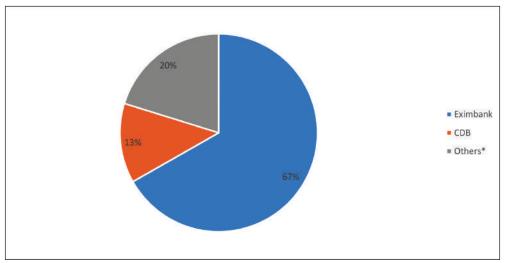
III. Guarantees: Exim China also issues international guarantees (including stand-by LCs) comprising both financing (loan guarantee, capital leasing guarantee, compensation trade guarantee, guarantee for payment deferral by 12 months or more, and other guarantee for clients' financing activities) and non-financing guarantees (tender guarantee, performance guarantee, advance payment guarantee, quality guarantee, customs duty payment guarantee, maintenance and repair guarantee, guarantee for payment deferral by 12 months or less, etc. under trade and contracting projects) aimed at export of Chinese-made mechanical and electronic products, high- and new- tech products, assisting overseas projects implemented by the Chinese companies (overseas construction contracts, offshore processing trade and overseas investment projects) and international tendering projects located in China that are financed by international financial institutions or by foreign government loans.

Importantly, China's Belt and Road Initiative (BRI), announced almost six years ago, has put emerging markets around the world at an inflection point on their trajectory towards economic development. For many countries, the BRI presents an opportunity to obtain infrastructure financing that they might not otherwise get, and without a conditionality such as the requirement for economic reforms. In turn, BRI provides business opportunities to Chinese companies.

Recent data suggests that annual Chinese loans to African governments have witnessed a multifold increase, particularly since BRI was initiated. From nearly US\$ 1 billion worth of loans in 2001, Chinese loans increased to nearly US\$ 13

billion in 2013, and peaked at US\$ 30 billion in 2016⁹. Majority of these loans were extended by Exim China, and the CDB, which accounted for a share of 67 percent and 13 percent, respectively, in the total loans extended to the African governments by China (Exhibit 56). Further, China's lending in the region of Latin America and the Caribbean is also substantial. Chinese policy banks' finance to governments and state-run companies in LAC stood at nearly US\$ 7.7 billion in 2018, mainly extended by China Development Bank and Exim China. These two financial institutions have provided a cumulative finance of over US\$ 140 billion in LAC region since 2005¹⁰.

Exhibit 56: Annual Chinese Loans to African Governments by Lender: Cumulative (2000-2015)



Note: *Others Includes commercial Chinese banks and Chinese contractors Source: Johns Hopkins SAIS China-Africa Research Initiative

South Korea

South Korea also has a competitive ECA financing architecture. Export-Import Bank of Korea (Exim Korea) is the official ECA of South Korea, established with an aim to facilitate export transactions and enhance economic cooperation with foreign countries through the provision of financial support for export and import transactions, overseas investments projects, and the development of overseas natural resources. Exim Korea's financing products include Loans, Guarantees, Trade Finance, and Investment.

⁹Based on loans data from Johns Hopkins SAIS China-Africa Research Initiative

¹⁰Cautious Capital: Chinese Development Finance In LAC, China-Latin America Report, February 2019

Exim Korea's loans and guarantees facility that provide a boost to project exporters are broadly classified as under-

- I. Economic Development Co-operation Fund (EDCF): EDCF is a bilateral Official Development Assistance loan program established by the South Korean Government in 1987, and administered through Exim Korea, through which it seeks to facilitate industrial growth and improve the economic stability of developing countries, and thereby encourage a sound economic relationship between the Korean companies and the partner countries. The EDCF offers two types of loans viz.
- Loans to foreign governments, government agencies, and other eligible organizations to support the economic development of developing countries; and
- b) Loans to Korean firms for overseas investment projects.

Among these, Development Project Loans (DPLs) and Equipment Loans for infrastructure building, account for the largest proportion of Exim Korea's lending assistance to developing countries.

- <u>II. Export-Related Loans</u>: Export related loans include export promotion loan, export growth loan, export project loan, and export facilitation loan. Through these loans, Exim Korea finances working capital requirement, capital investments, R&D, and overseas marketing activities of companies seeking to begin or expand exports.
- <u>III. Overseas Business-Related Loans</u>: Overseas Business-Related Loans extended by Exim Korea includes Overseas Project Loan, which includes financing to South Korean companies operating projects abroad without establishing an overseas subsidiary. This facility also includes
- a) Overseas Investment (for Korean companies to invest in foreign companies in the form of share capital and/or shareholder loan);
- b) Overseas Business Loan (financing foreign subsidiaries of South Korean companies); and
- c) Overseas Business Facilitation Loan (financing to entities that contribute to the overseas business activities of South Korean companies).

IV. Guarantees: Guarantees are mainly in the form of Financial Guarantees and Performance Guarantees. Financial Guarantees are through Export-Related

Financial Guarantee (for companies eligible for Export-Related Loans), Import-Related Financial Guarantee (for companies eligible for Import-Related Loans), and Overseas Business-Related Financial Guarantee (for companies eligible for Overseas Business-Related Loans). Performance Guarantees are in the forms of bid bonds, advance payment bonds, performance bonds, warranty bonds, and retention bonds.

Export Credit Bank of Turkey (Turk EximBank) is the ECA in Turkey. Turk EximBank was established in 1987 as Turkey's official export credit agency, to meet the financial needs of export sectors in line with the developments taking place in the global economy and Turkish economy. One of its main objectives in to enhance the competitiveness of exporters, overseas contractors and investors in the international markets through specialized financial services including short, medium and long term cash and non-cash credit, insurance and guarantee programs.

Turkey

Turk EximBank's financing programmes related to project exports include

<u>I. Buyer's Credit - International Project Loans</u>: This refers to financing support to foreign borrowers (ministries, institutions, entities or banks), aimed at financing their import of Turkish goods and services with respect to the projects undertaken by Turkish contractors overseas, as also the ships built by Turkish shipbuilders. Under this facility, there is a coverage provided for commercial and political risks. International project loans are available for overseas contractors and shipbuilding companies established according to the Turkish commercial code, with an overseas contracting certificate (permanent or temporary) issued by the Ministry of Environment and Urbanisation of the Republic of Turkey.

<u>II. Guarantees:</u> Under this facility, guarantee letters, including performance guarantee and pre-financing guarantee, are issued to Turkish construction contractors who have undertaken construction projects in overseas market.

India

In India as well, Exim Bank has been playing a key role in providing an impetus to the growing internationalisation of Indian companies, by extending funded/non-funded assistance. To spur Indian project exports, Exim Bank extends funded and non-funded facilities for overseas turnkey projects, civil construction contracts, technical and consultancy service contracts, as well as supply of goods. Exim Bank's flagship programmes for facilitating project exports include:

<u>I. Line of Credit</u>: LOCs refer to concessional credit, routed through Exim Bank of India, that are extended to partner developing countries, under the Indian Development and Economic Assistance Scheme of the GOI, with the objective of sharing India's development experience through, capacity building and skills transfer, trade, and infrastructure development, and for creating socio-economic benefits in the partner country. Exim Bank extends LOCs at the behest and with the support of GOI and also on its own.

II. Buyer's Credit under National Export Insurance Account (BC-NEIA): Through the BC-NEIA, Exim Bank promotes India's project exports to traditional as well as new markets in developing countries, which need deferred credit on medium or long term basis. Exim Bank, through BC-NEIA, facilitates project exports from India by way of extending credit to overseas sovereign governments and government-owned entities for import of Indian goods and services from India. Exim Bank obtains credit insurance cover under GOI's NEIA through the ECGC Ltd. NEIA is a trust set up by the Ministry of Commerce and Industry, GOI, and administered by the ECGC Ltd.

III. Concessional Financing Scheme (CFS): Under the CFS, the GOI supports Indian companies to execute strategically important infrastructure projects abroad. The strategic projects financed under this scheme need to have substantial backward linkages including employment generation, and demand for material and machinery from India. The scheme has been extended till 2023. The scheme is operated by Exim Bank, and backed by counter guarantee. The objective of the scheme is to support those Indian entities that are unable to bid for large projects abroad due to high cost of financing, and face high competition from bidders from other countries such as China, Japan, Europe and the USA, on account of availability of cheaper credit for a longer tenure in these competing countries.

IV. Export Project Cash Flow Deficit Finance (EPCDF): EPCDF facility is provided to Indian Project exporters executing project export contract overseas. The facility is available in domestic and foreign currency, and is provided to help the project exporters to meet their temporary cash flow deficits during contract execution period.

<u>V. Guarantees</u>: Advance Payment Guarantee, Performance Guarantee, Retention Money Guarantee, and several other guarantees are provided to Indian project exporters securing overseas or deemed export contracts.

Although ECA support mechanism of India comprehensively covers similar financing products as its competitors, unlike other ECAs, the current position of Exim Bank is of paradoxical nature requiring the Bank to play a development role in supporting national exports (including project exports and overseas investments) and the resultant economic growth, while being bound by prudential norms that are applicable to commercial banks. Further, unlike other ECAs, Exim Bank of India is constrained by a relatively lower capital base, with a capital stock of US\$ 1.78 billion as of March 31, 2019, which is much below that of Exim China (which is at US\$ 21.8 billion) and Exim Korea (which is at US\$ 10.6 billion). To enable Exim Bank to meet the increasing needs of Indian project exporters, a strong positioning in terms of capital is imperative, along with relevant regulatory easing.

Technological Capability

Technology plays a key role in securing and executing international projects. Access to the latest technologies at competitive cost, and bargaining power for its transfer can greatly influence competitiveness of companies.

China

Chinese construction firms have been making tremendous progress in improving productivity by using advanced technologies. The implementation of huge volumes of construction projects in China during the past two decades has been driving the development of Chinese construction technologies. Chinese construction enterprises have advanced construction technologies in certain areas, including highway and railroad bridges, tunnels and underground, retaining structure for deep foundation pits, super high-rise buildings, blasting technology, large structure and equipment hoisting, pre-stressed concrete and mass concrete pouring. This has led to the execution of a number of world-class projects by Chinese companies, such as Three-Gorge Hydropower Project¹¹. As a result of execution of such construction projects, Chinese companies now have major technical advantages in a number of areas, and are now capable of undertaking more technically complex projects abroad, which was previously not possible for them.

South Korea

In the case of South Korea, one of the reasons for the cost competitiveness of companies is the government's deliberate effort to develop capabilities by helping firms to locate sources of technology and negotiating favorable terms

¹¹Are Chinese contractors competitive in international markets?, ZHEN YU ZHAO and LI YIN SHEN, January 2008

for accessing these. In the early 1960s, South Korea had to rely almost totally on foreign sources of technology, due to lack of technological capability. South Korea launched its First Five-Year Economic Development Plan in 1962, after which, its policy strategy was geared to promoting the inward transfer of foreign technologies, while also focusing on developing domestic capacity to assimilate, and enhance the use of transferred technologies. In 1965, nearly 0.5 percent of South Korea's GDP was spent on R&D, of which 80 percent of the effort was undertaken by the government. However, by the mid-1990s, Korea's R&D spending increased to over 2 percent of GDP, of which, more than 70 percent was accounted for by the private sector¹². It has been found that the best South Korean firms needed 10 to 20 years to absorb complex capital goods technologies to the level of becoming internationally competitive. By making continuous and massive investments in research and development and in innovation, South Korea has succeeded in building a unique innovation system that supports sustainable growth of the South Korean industries.

Turkey

Similarly, in Turkey, construction firms developed technological capacity through acquisition and transfer of technology. Recognizing the need to develop additional technical capabilities among contractors, and the need to integrate technology and innovation management as a part of the businesses of the construction firms, as also to encourage more investments in R&D, the Turkish government has placed the concept of innovation in the construction sector as one of its main targets under the Tenth Development Plan (2014–2018) of the Ministry of Development. The main objective for the government under the plan is to attain high-value-added and sustainable supply of construction, engineering, architecture, technical consultancy and contracting services, through an innovative approach, by ensuring a level of production and service quality that conforms to international standards. Accordingly, under the plan, the government has been promoting the domestic production of advanced material, intelligent building technologies, high technology construction machines and implementation tools for improving the durability.

India

From the Indian perspective, however, the current state of technology, other than a few niche areas where India holds technological advantage, particularly simple civil construction projects, in executing complex projects has been lagging

¹²Technology, globalization, and international competitiveness: Challenges for developing countries, Carl Dahlman

behind in comparison to other countries. As per the survey responses, only 37 percent respondents perceive technology as an advantage for Indian project exporters in the overseas market, whereas nearly 50 percent respondents perceive technology to be a competitive strength of their competitors. Several steps have been taken by the Government to enhance technology adoption in various categories of project exports. For example, Global Housing Technology Challenge-India aims to bring the most innovative construction technologies to India through a competitive platform. It aims to give a boost through the development of domestic technological research, and building platforms for knowledge sharing and networking across the sector. The technological capabilities of Indian companies are evident from their engagement in critical, high-technology projects. For example, Exim Bank had supported an Indian company for delivering major components for ITER (International Thermonuclear Experimental Reactor) project. ITER Organisation, which is based in France, has been established under the auspices of International Atomic Energy Agency (IAEA) and has seven participant countries including India. Clearly, India is making significant headway in high-end technology project exports space.

Cheaper Availability of Industrial Raw Material

Cheaper availability of raw material is a key factor for the competitiveness of competitors, particularly those from China. Relatively low cost of construction machinery, material and equipment facilitates the reduction of the bidding price for contractors. Chinese contractors usually choose the materials and equipment made in China, the prices of which are lower compared with those made in developed countries. Past research suggests that the cost per square metre of construction to Chinese contractors is one-quarter of that of the Europeans companies¹³. Therefore, the practice of awarding construction contracts to the lowest bidder gives an advantage to the Chinese firms. According to one of the past surveys conducted among Chinese contractors, the prices of some mechanical and electric components made in China, such as turbine, generator, transformer and circuit breaker, are about 70 percent of those made in the developed countries¹⁴. Accordingly, the construction costs to Chinese contractors are much lower. Further, China is the top most producer of crude steel in the world, producing nearly 928.3 million tonnes in 2018 (share of 51.3% in global production), whereas India, despite being the second largest producer of steel, remains significantly behind China in terms of production capacity, at 106.5

¹³The International Competitiveness of Chinese Construction Firms, Ali Parsa, Simon Huston, June 2015

¹⁴Are Chinese contractors competitive in international markets?, ZHEN YU ZHAO and LI YIN SHEN, January 2008

million tonnes in 2018¹⁵. Consequently, in 2018, due to relatively abundance of steel, the average finished steel prices in China are much lower, at US\$ 565 per tonne¹⁶, as compared to India where the average price stood at approximately US\$ 805 per tonne¹⁷. Clearly, Chinese contractors have a significant supply and cost advantage in sourcing steel vis-à-vis India.

Human Resource Capabilities

Manpower costs assume a major part of the expenses in overseas projects, and have a profound effect on a company's business performance. The knowledge and management skill of overseas project managers also plays a crucial role in determining the timely execution of projects.

China's human resource capabilities have been one of its key strengths, particularly with regard to executing overseas construction contracts. Chinese contractors have utilized the low cost of manpower in the country during the early stages of their internationalization. The annual average salary of working staff in the Chinese construction industry in 2005 was about US\$ 1600, while that in the Indian construction was nearly US\$ 600 in 2004, the USA construction industry in 2002 was about US\$ 29 000, and about US\$ 48000 in the Japanese construction industry in 2002¹⁸. However, in the later years, Chinese domestic labor prices have grown rapidly and the salary for overseas workers has also increased manifold, making employment of Chinese labour abroad more costly. Consequently, more local labour has been put to use by Chinese contractors in overseas projects in recent years, particularly in Africa, and focus has been directed towards improving skills of Chinese workers so as to enable them to be deployed as trained managers and supervisors to ensure proper project management. Past studies show that Chinese workers usually attend an intensive training programme before they are sent to overseas construction sites¹⁹. In particular, most Chinese workers are multi-skilled and could be involved in each stage of construction. Furthermore, according to a report by Pheng et al. (2004), Chinese manpower has exhibited a high degree of motivation and adaptability to work in different environments, which facilitates efficiency and cost reduction.

¹⁵World Steel Association

¹⁶Average price of hot rolled bars and cold rolled coils during Jan 2018 to December 2018, sourced from Steelbenchmarker

¹⁷Average finished steel prices are based on prices of hot rolled coils (3.15 mm) and cold rolled coils (0.63 mm) in the Delhi, Chennai, Mumbai and Kolkata market, Sourced from CMIE Industry Outlook

¹⁸Are Chinese contractors competitive in international markets?, ZHEN YU ZHAO and LI YIN SHEN, January 2008

¹⁹Ibid.

Even in the case of Turkey, the low cost of labor is considered to be among the main strengths in competitive bidding by companies during the period 1972-2012. In this period, Turkish contractors managed to undertake a high number of projects abroad mainly due to lower employment costs compared to those of its competitors²⁰.

As per responses to the Exim Bank survey, human resource capabilities (i.e, cheap, highly skilled and high adaptability) of Indian companies is believed to be one of the core competitive strength of Indian companies as well.

CONCLUSION

From the above analysis, it is noted that strong government support, robust ECA framework, and focus on enhancing technological capabilities are some of the commonalities between India and its competitors. In some areas such as cheaper raw material costs, countries such as China have clear advantages over Indian companies. On the other hand, India's human resource capabilities are perceived to be a key strength by Indian project exporters. Learning from best practices of other countries and honing key strengths will be important for India.

²⁰Analysis of International Competitiveness of the Turkish Contracting Services, Beliz ÖZORHON, Sevilay DEMiRKESEN, December 2014

CHAPTER 5: CHALLENGES

In order to analyze the challenges and constraints faced by Indian project exporters in overseas projects vis-à-vis their competitors, Exim Bank conducted a survey of major project exporters in the country. Maximum respondents to the survey believe that high political risks, institutional delays (such as land acquisition, planning and approval delays, passiveness in decision making), financial constraints (cash flow issues, delay in payments, credit unavailability), and low labour productivity are among the biggest challenges faced by Indian project exporters in overseas projects (Exhibit 57). The key challenges faced by project exporters are discussed in detail in this Chapter.

Lack of skilled and affordable labour locally 35 30 Financial constraints Low Local labour productivity 25 20 15 10 Lack of institutional support Remote site access and severe from Home Country site weather constraints Institutional delays in Project High business risk in Project Country Country High political risks in Project Country

Exhibit 57: Challenges Faced by Indian Project Exporters

Note: Based on weighted scores given to survey responses

Source: Exim Bank Research

CONCENTRATION OF PROJECT MARKETS

Survey responses, as also the trends in MDB projects secured by Indian companies, indicate that Indian project exporters have limited presence in geographies other than Africa, South Asia and the Middle East. Interestingly, the key markets for Indian project exporters viz., the Middle East and Africa, are also considered the most challenging geographies by the exporters (Exhibit 58).

In the emerging markets of Latin America and Caribbean, wherein the opportunities for infrastructure projects are significantly large, Indian presence is limited. As per the data on World Bank contract awards secured by Indian companies, Argentina is the only country in the LAC region wherein Indian contractors have secured projects through international competitive bidding. This is in spite of the fact that 62.5 percent of the respondents in the project exports survey did not consider greater distance from home country as a barrier for project execution. Nearly 68.8 percent of survey respondents also did not consider local/regional language as a significant barrier.

The survey results indicate that high competition and absence of favorable project opportunities are the top factors restricting Indian project exporters from exploring newer geographies and sectors (Exhibit 59). Especially in the context of the LAC region, another reason for lesser contracts secured by Indian companies is that India is not yet a member of the IDB, because of which Indian companies cannot bid for any of the IDB funded projects in the LAC region. It is noteworthy that membership to the IDB was one of the key advantages that enabled Chinese contractors to diversify their operations into the LAC region. China became the 48th member of the IDB in 2009, which bode well for project exports from China to the region. The success of Chinese firms can be gauged from the fact that China secured 32 contract awards, valued at US\$ 2.1 billion, since it became a member in 2009. The figure may be even higher as it does not include contracts secured by subsidiaries of Chinese companies (who bid as national companies) in these geographies. Since IDB funded projects present opportunities in various sectors of Indian expertise such as energy, water, transport, agriculture, healthcare, and climate change, among others, non-membership to the IDB significantly hinders Indian companies from penetrating into the LAC market.

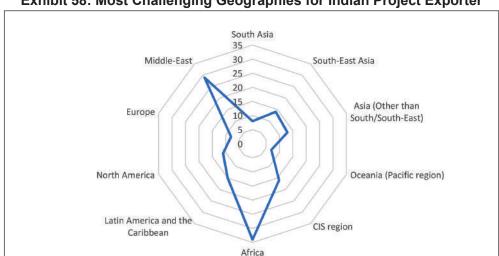
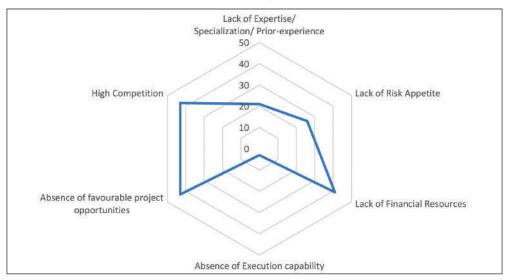


Exhibit 58: Most Challenging Geographies for Indian Project Exporter

Note: Based on weighted scores given to survey responses

Source: Exim Bank Research

Exhibit 59: Factors Restricting Indian Project Exporters from Exploring Opportunities in Newer Geographies/ Newer Sectors



Note: Based on weighted scores given to survey responses

Source: Exim Bank Research

LOW BID CONVERSION RATIO IN SELECT REGIONS

Bidding documents generally outline numerous procedures, conditions and requirements some of which are mandatory in nature. Bids are considered non-responsive if bidders submit bids that deviate from the specifications required by the borrower. Deviations include exceptions, exclusions, qualifications, conditions, stated assumptions, alternative proposals and changes to stated requirements. Such non-responsive bids are rejected during bid evaluation.

While the analysis in Chapter 2 indicates a high bid conversion ratio for Indian companies, the data therein includes contracts awarded under programs such as the LOCs. The competition in bidding processes under LOC is restricted to Indian firms only, and may not be true representation of ICBs, and the resultant actual capabilities of Indian companies in successful bid preparation. Analysis of the tenders for EBRD funded projects indicates that the bid conversion ratio of Indian companies is substantially lower. Other developing countries had a better rate of success than India in the EBRD funded projects during 2018 (Table 3). A key reason for low bid conversion ratio could be absence of regional experience and thus low probability of success in this region. As noted in Chapter 4 of the Study, contracts secured by India in Europe and Central Asia are fairly lower than that secured by competitors such as Turkey and China. Clearly, there is need for a roadmap for entering these geographies and gaining experience.

Table 3: Bid Conversion Ratio in Contracts for EBRD Funded Projects (2018)

Country	Total Number of Tenders Applied For	Total Number of Contracts Won	Rate of Success
China	54	5	9.26%
India	6	0	0.00%
Turkey	53	13	24.53%
South Korea	9	2	22.22%

Source: EBRD

DATA CONSTRAINTS

Consolidated data on project exports is currently not available on a timely basis. In the past, the Working Group Mechanism provided access to comprehensive data on project exports. The Working Group mechanism, was constituted in 1975, as an inter-institutional mechanism comprising the Exim Bank, the Reserve Bank of India (RBI) and the ECGC Ltd. Proposals at bid stage were referred to the Working Group, if the value of the proposal exceeded delegated powers of Exim Bank / commercial banks or did not satisfy the broad conditions of delegated powers.

The Working Group functioned under the auspices of Exim Bank for the purpose of giving package approvals for proposals submitted by exporters to bid for such overseas contracts. In order to liberalize and simplify the procedure related to project exports, the RBI, in July 2014, decided to dispense with the structure of the Working Group. The RBI further announced that Exim Bank / commercial banks could consider awarding post-award approvals without any monetary limit and permitted subsequent changes in the terms of post award approval within the relevant FEMA guidelines / regulations. Project and service exporters could approach Exim Bank / commercial banks based on their commercial judgement, and the Exim Bank / commercial banks would monitor the projects for which post-award approval has been granted by them. As a result of these developments, Exim Bank no longer has access to a comprehensive data on project exports and hence is not in a position to analyse the performance of Indian exporters.

In order to facilitate compilation of consolidated data on project export contracts / supply contracts on deferred payments on an all India basis, AD Category-I banks were advised by the RBI to send a copy of post award approvals for project export contracts / supply contracts as and when such approvals are accorded to the Exim Bank. The AD Category I banks were also advised to email data in the format as prescribed in the circular to Exim Bank. However, the reporting of the data has been a challenge.

In absence of the data from banks, the current source of data on projects is either PEPC or DGCIS. From PEPC, the latest data on project exports contracts secured by Indian firms is available as on April-May 2017-2018. There is also some disparity in the data compiled by the DGCIS and that compiled by the PEPC. While DGCIS compiles data on exports of only project goods and not project exports, PEPC compiles the data on project export orders secured during a financial year, even though the underlying trends concerning products and services utilized in overseas projects is not being generated since there is no head or code for project exporter to declare the same.

Since a header or specific HS code is not allocated to project exports, the project exporters are not able to declare the same in the shipping bill. In case "Project Exports" are declared by the company in the shipping bill, then the bill is considered as "Free Shipping Bill" in the absence of specific HS code and the export is not qualified for any incentives. Therefore, project exporters file exports under different heads resulting in non-availability of consolidated data for project exports. Further, since it is not always possible to segregate products and services in an EPC contract, it is very difficult for a project exporter to

claim Service Exports from India Scheme benefits and they often relinquish the incentives instead of investing time and resources in the process of claim.

FINANCIAL CONSTRAINTS TO PROJECT EXPORTS

Projects are financed through a variety of routes, including funding by Sovereigns, MDBs, Development Financing Institutions (DFIs), as also by Governments and/or Government backed institutions in other countries. Government backed institutions, either DFIs or ECAs, are emerging as an important source of low interest, long tenor financing support for projects. Official export credit from these institutions plays a key role in the financing of large projects, as the commercial market, either locally or internationally, is unable to provide the volume of financing or tenor required by buyers, particularly in sub investment grade markets. Other than buyer's credit, a number of other funded and non-funded instruments and arrangements are also provided by these institutions to facilitate project exports, as also to deal with the diverse risk in such projects.

Providing competitive finance is one of the key factors in success of project exports. In fact, according to the Report to the U.S. Congress on Global Export Credit Competition, foreign buyers rarely approach financing as an afterthought. Rather, financing is regularly a core component of evaluating bids and identifying sourcing—complete with weighting scales on relative financing terms. The ability to secure sizeable, low-interest facilities is an important aspect of securing project exports.

Given the important role of ECAs, there is a need to strengthen these institutions in India. It may be noted that the capital base of ECAs in competitor countries is much higher than Exim Bank. Further, regulatory requirements for Exim Bank are also stricter than several other ECAs.

An analysis of the responses to a survey of project exporters conducted by the Exim Bank indicates that financial constraint emerging from issues such as inadequate cash flow, delay in payment to contractors, credit unavailability, and other financing issues are the among the top challenges faced by Indian project exporters. According to the survey results, lack of financial resources is also among the key reasons that restricts Indian project exporters from exploring opportunities in newer geographies/ newer sectors, such as health, social projects, education, renewable energy, irrigation etc. Such financial constraints can result in delays in completion of projects and in many cases, may also affect the quality of execution of projects.

One of the chief concerns for financiers of project exports in India is that the credit risk profiles of many large, diversified engineering, procurement and construction (EPC) contractors in India remain largely constrained due to the after-effects of aggressive bidding in the past, as also their leveraged balance sheets and other policy bottlenecks. In fact, the average interest cover of infrastructure construction sector stood at nearly 11 times²¹, indicating significantly high interest burden on outstanding debt in these companies. Many of the EPC companies are also in the process of debt resolution²². Given the broader credit issues prevailing in the Indian economy pertaining to the rising NPAs, the problem of over-leveraged balance sheets of companies and stricter regulatory norms have further constrained the lending capacity of banks and financial institutions, as the poor track record in recovering debt have led Indian lenders to tighten approval and appraisal processes and also push up interest rates on such loans. The tougher financing environment translates into reduced opportunities for project exports, as also stalling of projects under implementation.

LARGE UNMET GAP IN INFRASTRUCTURE FINANCING

There is enormous international demand for infrastructure projects in the developing markets as highlighted in Chapter 2 of the Study, but there is a large unmet gap in infrastructure financing. Many of the developing countries do not have sufficient funds to finance their projects and are highly dependent on concessional financing sources and development assistance in order to meet their financing needs.

While the demand for infrastructure financing is steep, the official international support for infrastructure has remained near stagnant in recent period. Official international support in the form of Official Development Assistance (ODA) is a significant source of funding for infrastructure in least developed countries (LDCs), landlocked developing countries (LLDCs), and Small Island developing states (SIDS). These three groups receive a higher share of funds relative to GDP from ODA, when compared to other developing or transition economies such as India, Brazil, and China etc. (Exhibit 60). In fact, ODA is the most important source of non-national funding for LLDCs, particularly for lower-income economies. In some cases, because of special needs in terms of economic infrastructure or lack of access to other sources of development financing, official support is fundamental. Long-term investment in infrastructure for sustainable development, especially in developing countries with special needs (LDCs, LLDCs and SIDS) remains

²¹Based on data from a sample set of 67 companies in infrastructure construction sector from CMIE Prowess Database

²²"Credit Ratio Edges up, Some Headwinds Ahead", CRISIL, April 2019

insufficient and has stagnated in recent times, despite the immense opportunities for infrastructure financing in these countries.

1.4 1.2 1 0.8 0.6 0.4 0.2 0 2005 2006 2007 2008 2010 2011 2013 2014 2015 2016 2017 Developing economies Transition economies -LDCs

Exhibit 60: Total International Support to Infrastructure by Group of Economies - Percentage of GDP

Source: SDG Pulse, UNCTAD

While ODA is stagnating, increasing incidences of debt distress in many low income countries, as well as the increasing risk of debt distress makes even the multilateral development banks wary of financing all the worthy projects through loans, due to the low debt servicing capability of such countries. According to the latest Debt Sustainability Analysis by the International Monetary Fund (IMF), 34 out of the 70 Low-income Poverty Reduction and Growth Trust (PRGT)-eligible countries considered, are in debt-distress or in high risk of debt-distress as of September 30, 2019²³. Most of these countries are in Africa and Asia. Therefore, the client country's inadequate financing capacity poses a significant challenge to contractors. Accordingly, more and more client countries in the international market tend to look up to the contractors to pool in finance for the project in the form of private participation.

Private participation can alleviate the financing challenges and create opportunities for project exporters, but the issue of bankability of projects has long been one of the key bottlenecks in attracting private capital to meet the investment gap. A study by the B20 task force on infrastructure emphasizes that the investment gap in infrastructure is not the result of a shortage of capital, but a result of a lack

²³Source: IMF

of bankable and investment-ready projects²⁴. Creating a pipeline of bankable projects will be crucial to translate the infrastructure needs into infrastructure demand.

HIGH POLITICAL RISK AND HIGH BUSINESS RISK

The survey results also indicate that high political risks and business risks in project countries are as a major constraint faced by Indian project exporters. These risks include the likelihood of changes in the operating environment resulting from unexpected political decisions or events that may lead enterprises to fail to achieve their business objectives. The negative consequences of these risks in project countries include not only financial loss, schedule overrun, and cost overrun at the project level, but also a negative impact on the enterprises' competitiveness, their financial stability, and capacity to execute projects in other geographies.

Two major reasons contribute to the high business risk for contractors in international projects. Firstly, there are risks in operational phases such as financing and re-financing risks, cost overruns due to changes in operational cost, due to factors such as wage increases. Secondly, the risks arising out of changes in economic factors such as exchange rate volatility, inflation, interest rate volatility, as well as certain socio-economic factors such as the demographic profiles of the local labor, labor laws, etc.

Political risk in international projects can arise out of uncertainty related to political events (such as political violence, regime changes, coups, revolutions, breaches of contract, terrorist attacks, and wars), as also due to arbitrary or discriminatory actions (e.g., expropriation, unfair compensation, foreign exchange restrictions, unlawful interference, capital restrictions, corruption, and labor restrictions) by host governments or political groups. Compared with the non-systematic risks (like technical risk, quality risk, procurement risk, and financial risk), political risk is more complex, unpredictable, and devastating and is usually outside the scope of normal project activities²⁵.

Political risks are particularly high in developing countries because the likelihood of policy level changes is greater. For example, the policies concerning appointment of project contractors can change dramatically as a result of a change or replacement of government leaders, leading to substantial business

²⁴Investing in Resilient, Future-oriented Growth Boosting Infrastructure Investment and Balancing Financial Regulation, Business20 Dialogue, G20 Germany, 2017

²⁵"Identifying Political Risk Management Strategies in International Construction Projects", Chang, Hwang, Deng, and Zhao, May 2018

losses. Another example could be any act of terror which may affect personnel security of project contractors in the overseas market. The suddenness and uncertainty of political risk make it difficult to accurately predict and control it, thus, making it a key obstacle for international contractors and necessitating implementation of risk management strategies.

INSTITUTIONAL CHALLENGES IN PROJECT COUNTRY

Institutional challenges in project country could lead to delays in project completion. These include issues related to land acquisition, planning and approval delays, passiveness in decision making, changes in tax norms or industry regulations, among others.

Issues in Land Acquisition

One of the roadblock for major infrastructure projects, either domestic or cross border, in most developing countries, has been the issue of land acquisition. Several projects have been stalled or delayed due to land acquisition issues. Stricter land transfer regulations and land acquisition policies in several developing countries, aimed at protecting the interest of land-owners- especially farmers, have made it difficult for project authorities to acquire land. Such policies also make the scenario unfavorable for private investments in infrastructure projects in the long run, as such policies directly affect the viability of the projects.

Issues in Obtaining Regulatory Approvals and Lack of Coordination between Agencies

Another set of impediments that project executors face while executing a project is obtaining regulatory approvals in a timely manner. Infrastructure projects require multiple clearances from multiple layers of the government. This is a tedious process not only due to the sheer number of approvals, but also because clearances are sequential, and not concurrent. Also, in many cases, there is lack of coordination between the different agencies, which may lead to standoffs on critical approvals, and consequently have serious effects on the execution of projects. For instance, construction permit delays can have a severe impact on a project's profitability, as cash flows start later than anticipated. Even permits issued promptly can contain unforeseen and costly conditions, such as compensation requirements or usage restrictions. Additionally, there are certain cases wherein the delays are due to the unexpected outcomes of environmental and/or social-impact studies²⁶.

^{26&}quot;Mitigation of Political & Regulatory Risk in Infrastructure Projects Introduction and Landscape of Risk", World Economic Forum, January 2015

Obtaining Environmental Permits/ Clearances

The environmental safeguards and guidelines are evolving with the increase in scale and complexity of infrastructure projects across developing nations. Changes in environmental compliance norms may have serious implications, as even a project under implementation may sometimes need to comply with revised standards midway through the execution stage. Clearly, in such cases, better governance will be a big help in mitigating long delays in infrastructure projects.

Changes in Industry Regulation

The economic performance of an infrastructure asset is closely linked to many regulations and is therefore affected by changes to them. The regulations in question might be sector-specific, such as rules on the feed-in tariff of renewable energy or on road usage, or they might be general laws, relating to labour relations or immigration quotas, for instance. Changes of industry regulations can also put the preservation of a level playing field at risk, if those changes lead to incumbent or new players being disadvantaged. For instance, for projects that impact communities or the natural environment – such as airports or dams – the operating regulations are obviously very specific in most countries. Any small change to the details – to permissible noise levels, for example, or water-quality requirements – can have a huge detrimental effect on revenues or cost. The same is true for price caps, which might retrospectively reduce toll road charges, for instance, and thereby lower expected revenues, which particularly affects the project executor under models such as Build-Operate-Transfer and Build Own Operate Transfer.

Taxation and Related Issues

Changes to the existing tax regime, introduction of new taxes, ambiguity in proposed new tax structures are all classic cases of regulatory challenges faced by the players in overseas projects. Any major changes to existing tax regimes, could severely impact projects and their execution.

LABOUR RELATED ISSUES IN PROJECT COUNTRY

The limited availability of skilled and affordable labour, and low labour productivity in the project countries are some of the serious issues concerning Indian project exporters in overseas markets. A few project exporters also consider the limited availability of professional project managers to be a constraint in project exports. Region-wise analysis of labour productivity in India's key destinations indicate

that Sub Saharan Africa, which is among the top destinations for Indian project exporters, has the lowest labour productivity, with the growth in output per worker remaining sluggish over the past two decades. Other major destinations for Indian projects such as South Asia and South East Asia, also exhibit low labour productivity in comparison to other regions such as Europe and Central Asia, where Indian presence is relatively low (Exhibit 61).

From a labour costs perspective, several Asian countries have been facing rapid rise in wages across the spectrum due to an upsurge in minimum wage norms in countries such as Cambodia, Vietnam, Malaysia and the Philippines. The average minimum wage of East and South East Asia was just around 63 percent of the global average in 2015, but has risen to nearly 82 percent in 2019 and is projected to catch up with the global average by the end of the next 10-year period. Labour-intensive businesses in the region, such as construction segments, are particularly affected by the rise in labour cost.

80000 Output per worker in US\$ 2011 constant 70000 60000 50000 40000 30000 20000 10000 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 Middle East and North Africa Europe and Central Asia Pacific Islands South-Eastern Asia Sub-Saharan Africa South Asia

Exhibit 61: Region-Wise Labour Productivity Over The Past 20 Years

Source: ILO, Exim Bank Research

Further, non-tariff barriers such as high visa fees and non-issuance of multientry visa of longer periods to project implementation and commissioning professionals in some markets are also a concern with regard to labour. Unlike export of commodities, project exports have a longer execution and realization period. Therefore, it is imperative to have multi-entry visa, with clear processes and minimal restrictions for personnel employed by Indian project exporters.

These non-tariff barriers are not only a developed world phenomenon, but are equally prevalent in the developing countries. According to a survey conducted by the World Economic Forum in Africa, visa-related obstacles exist across a number of African countries²⁷. In the Democratic Republic of the Congo, for example, there is a requirement for a number of different visas for working professional (entry, exit, working establishment). In Nigeria, the eligibility criteria for a visa for a skilled worker are too demanding, focusing more on formal education level rather than experience gained through work. Procedural obstacles to applying for, processing and renewing visas and work permits are also among the major concerns in several countries in Africa. Problems such as lack of published information on visa requirements (in Algeria, Uganda), non-uniformity in visa requirements between different embassies and high commissions, inconsistency in instructions for supporting documentation such as education certificates (in Egypt, Uganda), inordinate processing time (in Algeria, Chad, Tanzania and Uganda), lead to significant cost hikes and inefficiencies.

Further, a number of African countries promote a national labour preference system and impose a quota on the number of foreign workers. For instance, in Gabon, no more than 10 percent of a company's workforce can be foreign workers. Quotas are often used to protect the national labour force, but such prohibitive, inconsistent restriction on movement of manpower raises not only the project cost, but also hampers the productivity.

 $^{^{\}rm 27} Source$: Lifting Barriers to African Talent Mobility: A Project of the World Economic Forum

CHAPTER 6: STRATEGIES AND THE WAY FORWARD

In the face of slowdown in global merchandise exports, enhancing focus on project exports would be important for strengthening the balance of payment position of the country. An ambitious and all-encompassing action plan is necessary for building the bridge between challenges and opportunities, inertia and inventiveness, and status quo and advancement for the project exporters in India. There is a need to develop sectoral capabilities where currently their presence is limited vis-à-vis other top competitors such as China. There is also a need to diversify the markets for project exports, and tap relatively lesser explored geographies in Latin America and Caribbean, East Asia and Pacific, and Central Asia. The current section delves at strategies required to alleviate the challenges identified in the previous chapter, and builds across the dimensions of greater financing support, operational improvements, strategic institutional membership, building capacities, considering inclusion of project exports in FTAs/RTAs, encouraging collaborative participation of project exporters, among others

STRENGTHENING EXPORT CREDIT AGENCIES

As discussed in previous chapters, governments in several countries create huge opportunities for their project exporters through their strong ECA support mechanism that offers deferred credit to borrower governments at concessional rates of interest. This ECA support not only creates political goodwill, but also promotes commercial interest of the country providing development assistance. Strengthening the ECA support mechanism in India will be a sine qua non for boosting project exports from the country.

Additional Capital Infusion

As a development financial institution, Exim Bank of India does not raise funds through retail deposits, and primarily taps the bond markets. As discussed in the previous chapters, despite the recent efforts by the GOI of increasing the authorized capital of Exim Bank, and additional infusion of equity, the share capital of Exim Bank remains significantly lower than its counterparts in other countries. Clearly, further capital infusion would be required in a sustained manner to facilitate greater quantum of project exports from the country.

Regulatory Easing

Exim Bank's borrowing limit is pegged to 10 times its Net Owned Funds, at par with commercial banks in India. However, such a leverage rule is not followed by other similar ECAs across the globe. For example, Exim Korea is allowed to leverage 30 times of the total amount of paid-in capital and reserve funds; and EDC Canada is allowed 15 times the aggregate of (a) current paid-in capital and (b) retained earnings determined in accordance with the previous year's audited financial statements. Therefore, enhancing the leverage ratio to 20 times may be considered, with suitable Board level safeguards, wherever necessary.

Further, as a niche institution, Exim Bank of India must necessarily have a higher degree of concentration of exposures. In this context, the existing prudential limits for Single Borrower and Borrower Group prescribed by the RBI prevents the Bank's funding to commercial projects. Therefore, relaxing the prudential limits for Exim Bank could be considered.

The RBI's IRAC norms could also be relaxed for Exim Bank of India's Policy Business (LOC, CFS and BC-NEIA) done on behalf of the GOI as the backstop guarantee of GOI is available for such higher risk lending.

Further, Exim Bank could be exempt from income tax like other ECAs such as those in the US, Canada and Japan, which may enable it to plough back its entire profits into its operations and facilitate the up-scaling of credit volumes.

Reviewing Minimum Local Content Requirement

The LOCs have been instrumental in enabling Indian project exporters to enter new geographies, expand their existing businesses, and avoid payment risk from overseas importers. Under the Lines of Credit facility, the stipulated local content requirement stands at a minimum of 75 percent of the value of the contracts, with a relaxation of 10 percent on a case-to-case basis.

Exim Bank 's survey responses indicate that many Indian project exporters believe that meeting the minimum content requirement could be a challenge, particularly in civil construction projects like roads, railways etc. This is because, in civil construction projects, the nature of certain key raw materials such as cement, sand, dust, ballast, petrol, oil and lubricants, spares etc. is such that it is difficult to ship these products from India and, thus, needs to be sourced locally, or from neighbouring countries. Further, certain services such as clearing and excavation, aggregate blanketing, asphalt paving etc. are also subcontracted locally due to the nature of these jobs. Additionally, in some countries, as per

local laws, there are certain mandatory local employment clauses.

However, it must be recognized that the requirement of high levels of domestic content by ECAs are important in view of their mandate to promote the domestic industries and expand job creation through enhanced exports—whether directly or indirectly. Nevertheless, it is also true that over the past two decades, many ECAs around the world have been offering a more flexible approach towards their support, instead of purely focusing on national content as the single metric to protect their national interests. Consequently, many ECAs, including India's top competitors such as China and South Korea, and other developed countries such as Italy, Germany and the United Kingdom, have relaxed their national content requirements since 2000 (Exhibit 62).

(2000 & 2017)Austria Canada Germany Denmark

Exhibit 62: Shift in National Content Requirement in Select ECAs

Early 2000s The Netherlands Italy Spain Norway Japan United States United Kingdom Switzerland Korea France Sweden High Domestic Content Low Domestic Content Threshold/Focus an Jobs Threshold/Focus on National Interest 2017 Japan Austria Canada Korea France Denmark China* Norway The Netherlands Italy United States Spain Switzerland United Kingdom Sweden Germany High Domestic Content Low Domestic Content Threshold/Focus on Jobs Threshold/Focus on National Interest * EXIM does not have information on the content policies of the Chinese ECAs from the early 2000s

Source: Report to the U.S. Congress on Global Export Credit Competition, June 2019

In effect, there are two national content-related policy approaches for ECAs to maximize flexibility. First is to lower the minimum national content in an export contract to qualify for maximum allowable support. Second is to determine what qualifies as eligible domestic content, based on value-added. Several countries and their ECAs emphasize on the value creation inherent in product development, design innovation, marketing, after-sale service, and similar high value-added activities. For this purpose, factors such as the overall exports of the company, research and development expenditures, dividends and royalties, and an evaluation of how a given transaction is likely to contribute to the long-term competitiveness of a company, are examined. Such an approach is a shift away from transaction-specific considerations of minimum national content, towards a long-term strategic approach to macroeconomic expansion and overall national employment.

In the Indian context, while relaxing the minimum national content requirement may not be prudent, in line with best practices adopted by some ECAs, as mentioned above, the value-added approach could be considered, in order to maximize the flexibility in national content requirement in certain segments of project exports.

Widening the Scope of Concessional Lending

Development Financing / Concessional Lending is provided by most of the OECD countries. While most of the development assistance extended by the OECD countries are in the form of tied-aid, they are moving away towards untieing of the aid / development assistance. In the OECD countries, either the Governments directly, or through a national agency (including ECAs) provide concessional lending.

It may be noted that the developing countries need the loans structured in concessional terms, with longer tenor and greater moratorium. In some cases, especially Heavily Indebted Poor Countries (HIPCs), IMF debt sustainability framework mandates the countries to borrow only in concessional terms with a minimum concessionality level of 35 percent. Due to conditionalities imposed under the IMF Debt Sustainability Framework, the LDCs are not in a position to borrow without the minimum grant element. The minimum grant element (of 35 percent) could be achieved only with low interest rates, longer tenor and greater moratorium.

Currently, GOI provides concessional financing to LDCs and HIPCs under the IDEAS, with a minimum grant element prescribed by IMF / WB due to lower interest rates, longer tenor and greater moratorium. The interest rates in other schemes that promote project exports from the country, viz., BC-NEIA and CFS are linked to LIBOR and thus are not satisfying the minimum grant element mandated by the IMF / WB for LDCs / HIPCs. Widening the coverage of concessional lending through these programmes would generate goodwill among the LDCs / HIPCs and project India as a partner for aid cooperation. Besides, such a move would support project exports, provide employment opportunities within the country, and encourage Indian companies to gain experience in various countries / regions, thereby enabling them to qualify and bid for projects funded by MDBs and on commercial terms.

Risk Mitigating Instruments in Foreign Currency

Role of insurance and guarantee facilities is also important in enhancing competitiveness of exports. Currently, cover from ECGC Ltd. is instrumental in mitigating the risks associated with project exports. However, ECGC Ltd., as per norms of the Insurance Regulatory and Development Authority (IRDA), is not allowed to extend cover in foreign currency. This entails additional hedging cost for project exporters looking for risk mitigating instruments in foreign currency. Insurance cover in foreign currency can significantly reduce the transaction costs for exporters. Thus, the insurance/ guarantee cover should also be available in foreign currency. Special dispensation needs to be accorded by IRDA to ECGC Ltd. for providing cover in foreign currency under BC-NEIA. Regulatory supervision for such foreign currency cover can be provided by the RBI, which is also the regulator for export credit in the country.

ADOPTION OF CONSORTIUM APPROACH IN BIDDING

Indian contractors should be encouraged to adopt a consortium approach for bidding and execution of projects. Pooling of resources, complementary skills and the ability to draw upon the resources with a collaborative approach can be particularly beneficial for executing a comprehensive range of projects spanning across a wide range of sectors. Even within a sector, consortium approach can help pool capacities of exporters and help bid for larger value contracts.

Consortium approach would help build necessary capacities across diverse sectors, and would be especially useful for securing multisector and multinational contracts. India's current performance in terms of securing large multisector projects leaves a lot of room for improvement when compared to competitors such as China. Chinese companies have successfully adopted consortium approach for securing such contracts. In China, several players, having expertise in different sectors, come together and bid for complex, multisector projects.

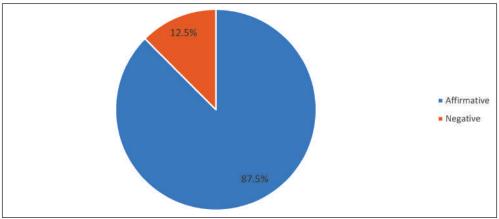
ENCOURAGING LOCAL PRESENCE AND JVs IN PROJECT MARKETS

Having a local presence in the country of the project significantly enhances the probability of success in securing a contract. Local presence helps Indian contractors to interact with the market players and assess their competitive position at an early stage.

NCB is an important mode of procurement across several MDB funded projects. Under NCB, contracts are typically advertised only inside the geography of the project country and in the language of the project country. In practice, smaller-value or labor-intensive contracts are awarded through the NCB route. For bidding for these projects, local presence would be essential.

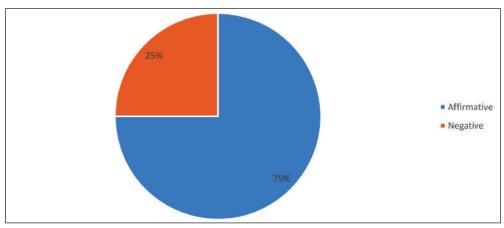
An analysis of the responses to the Exim Bank survey indicates that nearly 87.5 percent of the total respondents are open to the idea of collaborating through joint ventures (JVs) in project countries (Exhibit 63). In fact, nearly 75 percent of the respondents have already entered into such collaborations in the past (Exhibit 64), mostly in the regions of Middle East, Africa, and a few in South East Asia. Indian companies need to be supported and encouraged to form JVs in the opportunity markets.

Exhibit 63: Indian Project Exporters' Openness to the Idea of Joint-Venture in Project Country



Note: Based on Survey Response Source: Exim Bank Research

Exhibit 64: Whether Indian Project Exporters Have Engaged in JVs in Project Country in the Past



Note: Based on Survey Response Source: Exim Bank Research

SUB-CONTRACTING APPROACH FOR SMALLER PLAYERS

Companies of small and medium size could also consider the possibility of engaging in project exports by way of securing sub-contracts from major European/American/Japanese companies. In order to encourage this, the office of MDBs in India, and ED (India)'s offices in MDBs, together with Indian Missions abroad could send out alerts advising the project exporters of such opportunities in advance. Gaining exposure to international projects through these subcontracting opportunities can help strengthen capacities and allow companies to bid independently over time.

CONSIDERING INCLUSION OF PROJECT EXPORTS IN NEGOTIATIONS FOR FTA/RTA

Prospects of project exports should also be considered while negotiating FTAs/ RTAs with other countries. Middle East is among the topmost destinations for Indian project exports. However, with the slump in oil prices, and other challenges such as security issues and civil unrest, project exporters are increasingly diversifying and shifting their focus to other emerging markets in East Asia and Pacific, and Sub Saharan Africa. With growing interest in these markets, incentivizing project exports by considering the project export opportunities in FTA/RTA negotiations may be considered. Negotiations should also strive towards facilitating greater ease in movement of natural persons to execute the projects abroad. The possibility of including award of visa for workmen and officials of Indian contractor executing the projects on priority basis in such agreements with partner countries could also be considered. Further, the visa fees and duration could also be as per the general rule of reciprocity in this regard. Further, greater support will be required through the GOI's programs to access the markets in East Asia as project exporters in these geographies face stiff competition from the Chinese project exporters in these markets.

MEMBERSHIP WITH THE IDB

As noted in the previous chapter, Indian companies are losing out on significant opportunities in the emerging markets of Latin America and the Caribbean. IDB funded projects could provide opportunities for Indian project exporters to penetrate the LAC market for project exports. Projects funded by the IDB are implemented across LAC region in 26 countries and provide significant procurement opportunities for companies and organizations from the IDB member countries.

India's membership in the IDB could present potentially lucrative business opportunities for Indian suppliers, contractors and consultants, in projects funded by the IDB, and allow them to expand their presence in the region. Over the past five years, total contract awards by the IDB cumulatively amounted to US\$ 16.8 billion, presenting significant opportunities in sectors such as healthcare, agriculture, transportation, climate change, water, and energy. Further, IDB promotes and participates in multilateral, bilateral and other co-financing arrangements for its public and private sector projects. Membership with the IDB would also open avenues for co-financing in the region for Indian financiers such as Exim Bank, and would enable Indian financiers to considerably mitigate cross-border risks and payment risks, which are normally associated with project exports. In the past, Chinese government has co-financed several projects with the IDB. In fact, IDB has approved US\$ 1.2 billion for 49 projects across 17 countries through the China Co-financing Fund. The membership will also serve as a vehicle for India to contribute to development of other developing countries that are not currently part of its development assistance programs, and shall complement the GOI's 'Focus LAC' programme.

In the past, India took memberships in MDBs in other regions, such as the AfDB, which has led to substantial increment in the number of contract awards secured by Indian contractors, and also led to substantial incremental generation of political goodwill for the country. Therefore, Indian government could consider taking up membership in the IDB, in line with the geopolitical as well as economic benefits for India.

ADDRESSING DATA RELATED ISSUES

Non-availability of relevant data pertaining to project exports is a challenge from the point of view of policy-level analysis and decision making for enhancing project exports. Recognition and collation of data pertaining to exports from a specific sector is a basic pre-requisite for any exports related measure or policy initiative²⁸.

As noted in the previous chapter, dispensation of the Working Group mechanism for consideration and approval of projects exports and deferred service exports proposals for contract value exceeding US\$ 100 million, has led to dismantling of a structured mechanism for collection of data on major project exports from the country. The RBI's circular advising AD Category-1 banks to send a copy of post award approvals to Exim Bank has also remained ineffective in capturing the data on project exports. Accordingly, there is need for the RBI to mandate AD

²⁸Reviving and Accelerating India's Exports: Policy Issues and Suggestions, Dr. H.A.C Prasad, January 2017

Category-1 Banks/ Exim Bank to submit data on post award approvals at regular intervals in a structured format. The RBI could then serve as a source point for data on project exports

Further, as also mentioned previously, Indian project exporters currently file shipments pertaining to supply of goods to projects and supply contracts under different headings, which results in non-availability of consolidated data for project exports (supply contracts). Therefore, a HS-code could be given for shipments pertaining to supply contracts / project exports, which would enable better collation of data on project exports. Once this facility is available to project exporters, defining and incentivising project exporters would also be easier. A streamlined incentive structure would encourage Indian companies to source more Indian goods while executing overseas projects.

Further, analysis of past procurement data such as number of companies with pre-qualification for bids, number of companies submitting bids (in India and outside India), number of companies successfully securing bids, and reasons for their success/ failures, could provide useful insights to project exporters in planning for future bids. For this purpose, detailed procurement data covering Indian participation in projects funded by MDBs, including important aspects such as bid conversion ratio, need to be collated with the help of the office of various MDBs in India. Currently, such data is not disseminated through publically available data sources of major MDBs, with exception in the case of the EBRD. Therefore, data issue needs to be resolved on a priority basis for strategizing at both operational and policy level.

CREATING AWARENESS ABOUT PROCUREMENT OPPORTUNITIES

There are a number of sources of information throughout the project cycle that can help companies identify, track and prepare for business opportunities in the MDB funded projects. There is a need to create awareness about the project cycle, procurement processes, sources of information on projects and procurement opportunities, the bidding processes, and documentation requirements. In this regard, Exim Bank has been conducting business opportunity seminars with key MDBs at various locations in the country. These are organized with the aim to increase the participation of Indian companies in projects funded by these MDBs.

There is need for organizing detailed awareness programs and workshops for preparing Indian exporters to tap the opportunities arising in the MDB funded projects. Apart from focusing on information pertaining to procurement opportunities and bidding processes, these workshops would train exporters

in preparing responsive bids, apprise them about the specific requirements (standards, regulations, technical features, etc.) in the project countries, and encourage a more collaborative approach towards bidding for projects. Such programs can be conducted by the Department of Commerce, in consultation with industry associations, Exim Bank, resident missions of MDBs, and other key stakeholders.

BRIDGING THE INFRASTRUCTURE FINANCING GAP

Co-Financing / Parallel Finacing for Greater Project Opportunities

Large size of financing requirements for project exports often makes it difficult for a single lender to finance the entire project on its own. In this regard, there is a need to leverage financial assistance from the government and also promote co-financing / parallel financing of infrastructure projects with other international funding agencies such as MDBs, ECAs, and national DFIs. Such collaboration can substantially enhance the project financing capabilities, while also meeting the growing infrastructure requirements. Bridging funding gaps in projects funded by Exim Bank through co-financing / parallel financing by MDBs and other ECAs could be considered. GOI support may also be required to make the co-financing / parallel financing approach effective, by aligning the differences in funding structures and cost of fund between the MDBs and Exim Bank.

There have been instances of such successful co-financing arrangements in the past as well that have enabled MDBs and ECAs to finance transactions and support domestic companies. One such collaborative financing of project was Itezhi - Tezhi Hydro Power Project in Zambia, which involved the development, construction, operation and maintenance of a 120 MW base load hydro power plant, and was a first-of-a-kind public private partnership in the power sector of Zambia, wherein several development finance institutions such as the AfDB and the European Investment Bank; Development Bank of Southern Africa, Dutch development bank FMO, and French development financial institution PROPARCO, came together to do the financing of the project. Although coincidental in nature, the project is an insignia of converging interests of development financiers towards co-financing arrangements. More of such collaborations in terms of co-financing / parallel financing could be envisaged to meet the financing needs in development projects in partner countries, and in turn creation of project opportunities for Indian companies.

Knowledge Sharing for Encouraging Private Participation

Public-Private Partnerships (PPPs) have seen a rise in the last two decades and according to the World Bank, PPPs are now used in more than 134 developing

countries, contributing about 15-20 percent of total infrastructure investment. India has deployed the PPP model in various sectors with commendable dexterity. The country systematically rolled out a PPP program for the delivery of high-priority public utilities and infrastructure and, over the last decade or so, developed what is perhaps one of the largest PPP Programs in the world. Success of India's PPP program is attributable to well-crafted reform efforts by the government, and ably executed by the private sector, banks and other financial intermediaries.

India's enabling environment for PPPs has a strong focus on project preparation and capacity building and India is at the right place to offer technical assistance and cooperation in development of PPP projects in other developing countries. India has already embarked on this journey of technical cooperation, and had hosted the Kenyan National Treasury a 5 day PPP Learning Tour that also included visits to PPP projects. India also had shared its best practice in the Health sector at the Fad Health sector Workshop in Malawi in 2014, where there was tremendous interest from policy makers to draw from India's experiences. More importantly, India has formalised a technical cooperation with the AfDB for knowledge exchange and sharing its expertise under PPP mode of infrastructure development. Under this arrangement, India has agreed to share model agreements and legal documents, to institutionalize PPP in African nations.

Many of the good practices, key policy reforms, and potential pitfalls of PPPs remain the same across countries at various stages of PPP regime development. South-South cooperation in development of robust PPP regimes across the developing world, through sharing of knowledge, good practices and tangible resources can help ensure that countries with emerging PPP regimes avoid making the same mistakes that others have already faced.

India could increase its efforts towards sharing best practices for development of PPP regimes, particularly in Africa. This will not only create better financing environments in developing countries, but also create greater opportunities for Indian companies to invest and execute contracts in these countries.

Developing Project Preparation Facilities for Creating Bankable Projects

As highlighted in the previous chapter, a solid pipeline of bankable projects is still lacking in most developing countries. In this regard, comprehensive approaches to develop project preparation facilities are required in order to increase the number of projects ready for implementation. The objective of a project preparation facility is primarily to make 'investment-ready' projects. These facilities are essential for setting up project pipelines consisting high quality bankable projects, as also in

directing finance from both national and international levels to the local/project level. Project preparation facilities may also be helpful in making the general environment for project investment and realization more enabling.

There are several project preparation facilities operating across different regions. The GOI has also set up a project preparation facility for LOCs to expediously provide free-of-cost Indian consultancy support to overseas governments in the preparatory phase of project formulation and design for project that are considered under the GOI's LOC program. Additionally, GOI had also signed a Project Preparation Fund (PPF) contribution agreement with the New Development Bank, in order to create an enabling environment for project preparation, facilitate the undertaking of feasibility studies, leverage local expertise in the member countries of the NDB, and optimize resource utilization. Exim Bank has also made an attempt in this direction, and along with the African Development Bank, and State Bank of India, has floated the Kukuza Project Development Company to facilitate private sector participation in infrastructure projects in Africa (Box 2). More such steps can be taken by ECAs, MDBs and national DFIs in the sphere of creating more bankable projects, and crowding in additional finance.

Box 2: Kukuza Project Development Company

Addressing the limited institutional capacity in Africa on conceptualization, management, execution of projects and imparting project development capabilities, Indian institutions such as Exim Bank, and State Bank of India have joined hands with the AfDB, and promoted a Project Development Company for infrastructure development in Africa — 'Kukuza Project Development Company (KPDC)'.

The KPDC has been incorporated in Mauritius in July 2015. 'Kukuza' in Swahili means 'a cause to growth'. Reflecting the name, the KPDC is expected to provide specialist project development expertise to take the infrastructure project from concept to commissioning in the African Continent. The KPDC will provide the entire gamut of project development expertise to various infrastructure projects, such as project identification, pre-feasibility/ feasibility studies, preparation of detailed project reports, environmental and social impact assessment, etc. The KPDC shall utilize the domain expertise of each partner during the project development process to establish a bankable and sustainable implementation format based on an in-depth understanding of the concerns of all the stakeholders - public authority, users community, developers/ investors and lenders.

Further, while India has clearly taken a number of steps towards creating bankable projects, India's engagement in project preparation facilities are mostly limited to early stages of project development activities. More facilities are required to also engage in post-preparation activities and concentrate on implementation and post-implementation stages as well.

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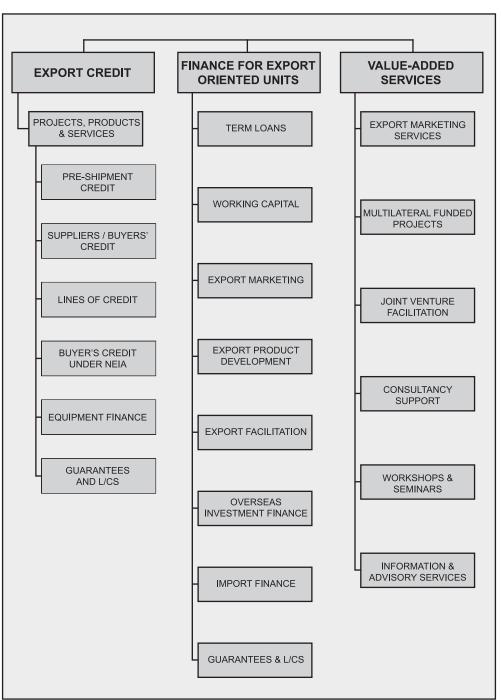
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