



Tapping Potential amid Changing Dynamics



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PROJECT EXPORTS FROM INDIA: TAPPING POTENTIAL AMID CHANGING DYNAMICS

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EXECUTIVE SUMMARY

The Covid-19 pandemic has brought about significant disruptions in global supply chains. Consequently, governments around the world are looking to develop policies for stimulating their economies, and focusing on investments in infrastructure projects. With growing impetus being given to infrastructure projects across most countries, the scale of opportunities for project exports is large and growing.

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'. Indian exporters have already developed substantial competitiveness in this sector which can help them leverage the emerging opportunities. This Study is an attempt to identify the opportunities, assess the strength of Indian project exporters, and recommend strategies for tapping the potential in the sector.

DEMAND FOR PROJECT EXPORTS

Infrastructure investments are an important 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. In 2020, nearly 2,551 global infrastructure projects were announced, registering a y-o-y increase of 5.5 percent, valued at an estimated US\$ 739 billion. Nearly two-third of these projects were in the power sector, of which majority of the projects were in the renewable energy sector. This sector is likely to remain the focus area in the forthcoming years, given the rising focus on building green infrastructure and reducing carbon emissions.

PROJECT EXPORTS FROM INDIA

Projects are financed through a variety of routes, including funding by sovereigns, multilateral development banks (MDBs), development financing institutions, as also by the governments and/ or government backed institutions in other

countries. Uniform and comparable data pertaining to project exports is currently unavailable at both the global and India level. In the absence of comprehensive data on project exports, the Study attempts to tie in and integrate several disparate sources of data to provide insights on the performance of project exports from the country.

According to the data from the Project Exports Promotion Council (PEPC), project exports from India peaked 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 for two consecutive years thereafter, which could be partly attributed to the widespread slowdown across economies, and deteriorating fiscal position in several developing economies. Thereafter, in 2019-20, project exports from India recovered substantially, registering a y-o-y growth of 10.6 percent to reach US\$ 4.3 billion. Due to the supply and demand side disruptions caused by the Covid-19 pandemic, project exports as reported by the PEPC members moderated to US\$ 1.8 billion in 2020-21. Project exports recovered thereafter in 2021-22 to reach US\$ 2.7 billion. It may be noted that this value of project exports reported by the PEPC is only based on data reported voluntarily by the PEPC members, and the actual value of project exports would be higher.

As per data from the PEPC, Middle East is the most important region for project exports from India. Saudi Arabia was the topmost destination for Indian project exporters, and accounted for a share of 20.6 percent in the total value of contracts secured by Indian project exporters cumulatively during 2016-17 to 2021-22, followed by Bangladesh (share of 12.6 percent), the UAE (11.4 percent), Qatar (8.6 percent), and Oman (5.5 percent), among other destinations. In terms of sectors, power sector with a share of 47.3 percent emerged as the topmost sector for project exports from India, with players securing several contracts in the segment of transmission and distribution projects during FY17 to FY22, followed by hydrocarbons sector (18.4 percent), other construction (9.1 percent), water supply and sanitation (6.6 percent), and transport (5.4 percent), among others.

Indian companies have been able to secure large value of contracts in MDB funded projects. Analysis in the Study indicates that during 2017-2021, the overall value of contracts awarded to Indian companies in projects financed by the major MDBs, viz. the World Bank, the Asian Development Bank, the African Development Bank Group, and the European Bank for Reconstruction and Development, cumulatively amounted to an average of US\$ 5.2 billion per year.

Construction services are one of the largest areas of opportunities for project exporters in terms of value. India's share in global construction services exports has steadily increased, from 0.8 percent in 2011 to 3.3 percent in 2020, 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, reducing to 1.6 percent in 2020.

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) programme helps create mutually beneficial partnerships with other developing countries and creates opportunities for Indian companies. In the period from FY19 to FY22, 210 contracts valued at US\$ 4.6 billion were approved under the LOC funded projects, which helped Indian project exporters in making significant headway in various sectors and markets. Apart from the positive spillovers of the programmes of the GOI, 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 (India Exim Bank) and ECGC Ltd., provide a conducive environment for project exports from the country.

MULTILATERAL DEVELOPMENT BANK FUNDED PROJECTS

Multilateral Development Bank 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 (2017-2021), contract awards for projects financed by MDBs such as the World Bank (WB), the Asian Development Bank (ADB), the African Development Bank Group (AfDB), the Inter-American Development Bank (IDB) and the European Bank for Reconstruction and Development (EBRD) cumulatively amounted to nearly US\$ 191.0 billion. In terms of procurement mode, in 4 out of the 5 MDBs analyzed in the Study viz. ADB, AfDB, IDB and EBRD, 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 81 percent in the total value of contracts awarded by these MDBs during 2017-2021. Owing to the change in the World Bank's procurement framework for Investment Project Financing in July 2016, request for bids, which is also a competitive mode of procurement constituted majority of the contracts awarded in the World Bank funded projects, during 2017-2021.

India is among the top supplier countries across projects funded by major MDBs. The overall value of contracts secured by Indian companies in the ADB, the AfDB, the World Bank and the EBRD funded projects cumulatively amounted to US\$ 26.1 billion during 2017-2021, with the largest value of contracts secured in 2020. Majority of these contracts have been secured in domestic projects, but India is also among the top project exporters in the overseas markets, particularly in South Asia, Sub-Saharan Africa, and Middle East and North Africa regions. While Indian contractors specialize in energy, transport, and water supply/sanitation sectors across all the regions in MDB funded projects, they also face fierce competition in each of these sectors, particularly from China.

IMPACT OF COVID-19 ON PROJECT EXPORTS

Despite weaker demand and supply side disruptions, global infrastructure projects announced during 2020 witnessed an increase of 5.5 percent, as compared to 2019¹. However, analysis of monthly data reveals that the number and value of infrastructure projects announced witnessed intermittent periods of growth and decline during 2020, as the investment sentiments changed in response to the ebb and flow of Covid-19 cases across geographies. Meanwhile, global construction services exports also witnessed intermittent periods of steep decline and growth during 2020 and H1-2021. Overall, global exports of construction services recorded a y-o-y decline of (-) 18.4 percent during 2020; reaching a level of US\$ 85.8 billion during the year.

For all MDBs, except the EBRD, there was an increase in procurement opportunities during 2020, either in volume or value terms, or both. The countercyclical function of the MDBs played a vital role in delivering much needed financing for ameliorating the economic and social costs of the pandemic. In 2021, however, contract award opportunities reduced across several MDBs, even though the need for multilateral financing for development remained pronounced.

Among major MDBs, ADB stands out for its strong financial support during the pandemic period, and the resultant increase in the value of contract awarded

¹Refinitiv Infrastructure 360

in the projects during 2020. ADB allocated a large portion of its crisis financing through a new budget support instrument, the Covid-19 Pandemic Response Option (CPRO), which provided fiscal support to governments to implement countercyclical expenditure programmes to mitigate the impact of the pandemic. Contracts awarded in World Bank funded projects also recorded a remarkable increase in 2020, both in terms of number and value, and the trend continued in 2021 as well.

India's construction services' exports were also impacted due to the pandemic, registering a y-o-y decline of (-) 3.9 percent during 2020; witnessing steep decline in Q2 and Q3 of 2020, and recovering slowly thereafter. In Q2 2021, exports of construction services from India were again severely impacted, owing to the disruptions caused by the second wave of the pandemic in the country, but there was a sharp recovery thereafter in Q3 2021. Contracts secured in MDB funded projects by Indian companies were relatively resilient to the pandemic induced disruptions. The value of contracts secured by the Indian companies in projects funded by the World Bank, the EBRD and the ADB witnessed an increase during 2020, but it declined for projects funded by the AfDB. India's stronghold in MDB funded projects in the South Asian region continued, and Indian companies were also able to secure contracts in lesser explored geographies such as Turkmenistan. In 2021, value of contracts secured by Indian companies in the WB and ADB funded projects declined, but there was a strong recovery in contracts secured in the AfDB funded projects.

Due to the Covid-19 pandemic, the debt burden of the world's low-income countries further exacerbated, rising by 12 percent to a record US\$ 860 billion in 2020². Recognizing the impact of the pandemic on the low-income countries, the G20 in April 2020 put in place the Debt Service Suspension Initiative (DSSI) as a framework to address the liquidity problems of low-income countries. However, the DSSI was only a temporary liquidity support mechanism. Given the looming risk of default by a large number of borrowing governments, the G20 and Paris club countries have agreed to coordinate and cooperate on debt treatments for up to 73 low-income countries through the 'Common Framework (CF) for Debt Treatments beyond the DSSI', which is designed to ensure broad participation of creditors with fair burden sharing. This fiscal strain and debt relief framework will have implications on development financing, and consequently on project exports.

²World Bank

The Covid-19 pandemic has also led several governments to turn to their ECAs as part of their toolkit for addressing the economic challenges. To that end, the Study discusses the changes in the trajectory of ECA support during 2020, and the policy measures adopted by various ECAs including India Exim Bank, ECGC, Korea Exim Bank, Exim China, the US Exim, and Export Development Canada, to mitigate the adverse impact of Covid-19.

COMPARISON WITH KEY COMPETITORS

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

Comparison of the region-wise share of India and its competitors in the contracts secured in the World Bank funded projects indicates a clear hegemony of China in the regions of East Asia and Pacific, Europe and Central Asia, and Sub-Saharan Africa. In the Middle East and North Africa, Turkey secured the maximum value of contracts in the World Bank funded projects during 2017-2021, among the competitor countries taken into consideration. In the South Asia region, Indian companies faced strong competition from Chinese companies, while in the Latin America and the Caribbean (LAC) market, the success has been limited for Indian companies, as also for their competitors from China, Turkey and South Korea.

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 India Exim Bank's survey on project exports perceive high cost of raw material, high political risks, high business risks, remote site access and severe site weather constraints, institutional delays (such as land acquisition, planning and approval delays, passiveness in decision making), and low labour

productivity as the major challenges faced by Indian project exporters in overseas 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. An analysis of political risk across different regions indicates that the top markets for Indian project exporters viz., Africa, South Asia and the Middle East also have higher political risk as compared to other regions, as evinced by the average score of the regions based on the country risk estimates by Euromoney.

There are two major reasons for high business risk. Firstly, there are risks in operational phases such as financing and re-financing risks and cost overruns due to changes in operational cost, due to factors such as wage increase. 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, labour 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.

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 LAC, wherein the opportunities for infrastructure projects are significantly large, Indian presence is very limited. The survey results indicate that lack of competitive financing, high competition, lack of expertise/ specialization/ prior experience 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.

Scope for Improving Bid Conversion Ratio in Select Regions

The bid conversion ratio for Indian companies has improved over the years, but there remains further scope for improvement, as the recent improvement comes on the back of low participation rates in MDB funded projects and inclusion of bid data on projects funded under Lines of Credit, where competition is limited as only Indian companies can bid for these projects. Analysis of the tenders for EBRD funded projects indicates that the bid conversion percentage for India is better than its competitors such as China and Turkey. However, analysis further indicates that the number of EBRD tenders in which Indian companies participated is itself low as compared to other competitor countries, thereby affecting the share of Indian companies in the EBRD contracts. A key reason for low number of contracts secured by Indian companies could be the absence of regional experience. Clearly, there is a need for mechanisms to disseminate information on project opportunities, especially in relatively untapped geographies, and assisting companies in preparation of responsive bids.

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 India 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, India 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 project 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 India 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 India Exim Bank. However, the reporting of the data has been a challenge.

In the absence of the data from banks, the current source of data on projects is the PEPC. PEPC compiles the data on project export orders secured during a financial year, even though the underlying flow of products and services utilized in overseas projects during the execution phase is not captured since there is no head or code for project exporters to declare the same. Moreover, the data compiled by the PEPC pertains to contracts awarded to PEPC members only, and the submission of such data is done by members on voluntary basis.

Therefore, the figures reported by the PEPC may be an underestimation of the actual figures.

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 weighing scales on relative financing terms. The ability to secure sizeable, low-interest facilities is an important aspect of securing project exports.

An analysis of the responses to the survey of project exporters conducted by India Exim Bank indicates that lack of competitive financing is the topmost reason that restricts Indian project exporters from exploring opportunities in newer geographies such as Latin America, and newer sectors such as health, social projects, education, renewable energy, irrigation, etc. Financial constraints can also result in delays in completion of projects and in many cases, may also affect the quality of execution of projects.

Better Government Support to ECAs of Competitor Countries

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 India Exim Bank. Further, regulatory requirements for India Exim Bank are also stricter than several other ECAs.

Besides, borrowings of ECAs in countries like South Korea, Canada, the US, and Japan are also guaranteed/ supported by their respective governments. India Exim Bank's access to funds is constrained by the commercial rates applicable on its domestic borrowing as also the incidence of withholding tax on overseas borrowings, which in turn restricts the Bank's ability to offer internationally competitive credit packages whose terms are competitive vis-à-vis that of the international banks and ECAs of other countries. Such GOI guarantees will be available to the recently set up DFI viz. The National Bank for Financing Infrastructure and Development (NBFID), for its borrowing from multilateral institutions, sovereign wealth funds, and other foreign funds³.

Domestic Challenges to Financing for EPC Companies

A chief concern for financiers of project exports in India is that the credit risk profiles of many large, diversified engineering, procurement and construction

³As per Chapter V (22) of the National Bank for Financing Infrastructure and Development Act, 2021

(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. The broader credit issues prevailing in the Indian economy, pertaining to the high 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. The tougher financing environment translates into reduced opportunities for project exports, as also stalling of projects under implementation. The economic contraction and additional shocks from the Covid-19 pandemic have put further pressure on enterprises' liquidity and cash flow position. Besides, the pandemic is also likely to adversely impact the asset quality of the banking system.

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 G20 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.

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 indicates 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 decade. Other major destinations for Indian projects such as South Asia and Southeast 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 manpower deployment 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 presence of Indian companies is currently 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 the Caribbean, East Asia and Pacific, and Central Asia. Other than these, there is need for across-the-board engagement in several other areas delineated hereunder.

Strengthening Export Credit Agencies

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.

Regulatory Easing and Borrowing Support

India Exim Bank's borrowing limit is pegged to 10 times of 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. Therefore, enhancing the leverage ratio to 20 times may be considered, with suitable Board level safeguards, wherever necessary. Further, as a niche institution, India Exim Bank 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 affect the Bank's funding to commercial projects. Therefore, relaxing the prudential limits for India Exim Bank could be considered. The RBI's IRAC norms could also be relaxed for India Exim Bank's Buyer's Credit under the National Export Insurance Account (NEIA). Further, India 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.

The GOI could also consider waiving off the withholding tax on India Exim Bank's overseas borrowings. The GOI guarantees as available to the recently set up, National Bank for Financing Infrastructure and Development could also be considered for India Exim Bank on its overseas borrowings.

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 extends concessional financing to countries under its development partnership programmes. India Exim Bank is an important agent of the Government of India's development assistance programmes such as the Lines of Credit, Concessional Financing Scheme (CFS) and Buyer's Credit under National Export Insurance Account (BC-NEIA) for supporting industrial and infrastructural development in other developing countries. While majority of the support under the LOC programme meets the IMF concessionality requirement, the interest rates in programmes such as the BC-NEIA and CFS are linked to floating interest rates and do not satisfy the minimum grant element mandated by the IMF/ WB for LDCs/ HIPCs, and thus cannot be classified as concessional lending. 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.

To enhance the scope of concessionality, interest subvention could be provided under Buyer's Credit Programme of India Exim Bank. It may be noted that the GOI provides interest subvention on pre-shipment and post-shipment credit to a wide array of sectors and MSMEs, to enable exporters in these sectors to offer competitive pricing in the international market. Further, the GOI also provides interest equalisation support for GOI-supported Lines of Credit, which allows Indian project exporters to tap opportunities for infrastructure development in overseas markets. There is also a need to provide a similar support to project exports under the Buyer's Credit under NEIA and Buyer's Credit-Commercial programmes of India Exim Bank. These facilities allow project exporters to take up large scale projects in different markets, including the advanced countries that cannot be accessed through the support provided under the LOC programme.

Given the significance of competitive financing in securing overseas contracts, the GOI could consider providing an interest subvention for project exports supported under the Buyer's Credit programme of India Exim Bank. This would compensate for the differential in interest rates and substantially improve the cost competitiveness.

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 of India (IRDAI), 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 the IRDAI 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.

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.

India Exim Bank's survey responses indicate that many Indian project exporters believe that meeting the minimum content requirement could be a challenge,

especially in far away markets, 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, and in select geographies. Further, in the context of civil construction projects executed by Indian companies, relaxation of domestic content requirement could be considered by GOI for key raw materials from the current levels of 75 percent to 50 percent, with the condition that raw materials be sourced locally from the project country itself to the extent of the relaxation provided to the company. In such cases of relaxation, strict restriction may be imposed on imports of raw materials from any third country.

Countertrade as a Mechanism for Enhancing Project Exports

In the wake of the Covid-19 related disruptions, tepid demand and volatile commodity prices, coupled with limited fiscal capacity to combat the economic impact of the pandemic, the debt servicing ability of several developing countries was severely affected. To that end, countertrade presents an effective way of mitigating risks associated with financing developmental projects in countries at risk of debt distress, and concomitantly providing the fiscally constrained countries with financial support for achieving their developmental goals without dipping into scarce foreign exchange resources. Furthermore, countertrade can also serve as an effective market diversification strategy for project exporters, as it can open project export opportunities for Indian companies in lesser explored geographies that face restrictions in outward remittances including foreign exchange crisis like sanctions, currency restrictions etc.

A countertrade strategy would also be worth considering from the viewpoint of recovery of dues or securing future repayments in the developmental partnership programmes of the GOI, typically in resource abundant countries. Developing an effective ecosystem for countertrade with appropriate policy support for financing developmental projects in partner countries through this route, could open up new opportunities for boosting project exports.

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. Going forward, opportunities in multinational and multisector projects are likely to increase

manifold in Africa, on account of the newly formed African Continental Free Trade Area (AfCFTA). Indian companies need to prepare for multiregional and multisector opportunities emerging out of these developments through closer engagements with each other and adoption of a consortium approach.

Encouraging Local Presence and JVs in Project Markets

An analysis of the responses to the India Exim Bank's survey indicates that all respondents are open to the idea of collaborating through joint ventures (JVs) in project countries. In fact, nearly 60 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 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.

Considering Inclusion of Project Exports in FTA/ RTA Negotiations

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 and the Government of India is actively engaged in negotiations for free trade agreements for enhancing India's market access in key markets of the region. In fact, the Government of India has already signed a Comprehensive Economic Partnership Agreement with the UAE. RTA/FTA 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.

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 the IDB cumulatively amounted to US\$ 13.6 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 in the region, and also led to generation of political goodwill for the country. Therefore, Indian government is already considering taking up membership in the IDB, on account of the considerable geopolitical as well as economic benefits for India. The membership in IDB could be taken on priority basis.

Addressing Data Related Issues

There is need for the RBI to mandate AD Category-1 banks/ India 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, 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. 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 is need for organizing detailed awareness programmes 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 programmes can be conducted by the Department of Commerce, in consultation with industry associations, India 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 India 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 India 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 programme is attributable to well-crafted reform efforts by the government, and able execution 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.

Greater Emphasis on Sustainable/ Renewable Sector

There has been a growing focus on renewable energy projects globally over the recent years, and several European ECAs have been at the forefront in terms of financing renewable-energy projects in 2020. Among developing economies, the ECAs of China and India have also been proactive in the renewable-energy sector in the recent years. While the GOI has earmarked concessional Lines of Credit worth US\$ 2 billion for solar projects in Africa out of its US\$ 10 billion concessional LOCs for Africa committed during India-Africa Forum Summit (IAFS)-III, the uptake of such LOCs by partner countries has been relatively low, particularly in Africa. This is also partly attributable to the lack of domestic capacities for supply of solar panels to fulfill the minimum content requirement under the LOC program.

Improving cost competitiveness in the renewable energy sector would be critical as financing alone would not be a panacea for growth in project exports from this segment. According to some estimates, in 2020, Indian manufactured solar modules were nearly 33 percent more expensive than Chinese counterparts⁴. While the GOI has introduced several programmes over the recent years to strengthen the domestic solar manufacturing capabilities, nevertheless, given the extent of competition faced by Indian companies from Chinese firms, there is a need to enhance the quantum of support provided by GOI to the domestic solar PV manufacturers, in order to improve their cost competitiveness in the international market. This would also enhance the capabilities of Indian project exporters in the renewable energy segment.

Capacity Building of Smaller Companies in Project Exports

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.

⁴Jain, R., Dutt, A., and Chawla, K. (2020). Scaling Up Solar Manufacturing to Enhance India's Energy Security. New Delhi, CEEW.

Push/ Pull Programmes for Enhancing Participation of Smaller Companies in Project Exports

Push/ pull programmes are untied financing programmes, wherein countries aim to "push" or "pull" future sourcing of goods and services towards their country, by offering financing support to major multinational manufacturers, in return for their commitment to source from smaller domestic companies in the future. The primary aim of these programmes is to augment the procurement of goods and services from domestic suppliers to enable greater integration in the global supply chains. These programmes also pair financing with matchmaking between domestic suppliers and foreign buyers. Several ECAs, including EDC (Canada) and SACE (Italy) have successfully implemented such a strategy. A similar programme could be developed for India, which could be used to incentivize sub-contracting to smaller players from major companies in project export contracts.

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, considering inclusion of project exports in FTAs/ RTAs, encouraging collaborative participation of project exporters, addressing data issues, capacity building of smaller companies in project exports 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, export of engineering goods on deferred payment terms, as also rendering of services abroad 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.

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 chains 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 time 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 a need to focus on newer avenues for export growth from India. Moreover, the Covid-19 pandemic has brought about significant disruptions in global supply chains. As part of their de-risking operations, companies are looking at alternative destinations for their supply chains. Recognizing the opportunities arising from such de-risking by multinational companies and driven by their need to bolster the domestic manufacturing, the Government of India (GOI) has announced several initiatives under its Atmanirbhar Bharat Campaign to attract investments, strengthen manufacturing, and localize greater share of the value chain within the country. These measures are expected to gradually nudge the country towards becoming a global hub of manufacturing, thereby enhancing India's high value-added exports. Project exports has also been an area of focus for the GOI as part of its Atmanirbhar Bharat campaign. The GOI announced ₹3,000 crore worth of support to India Exim Bank for promotion of project exports through Lines of Credit under the IDEAS scheme, as part of the Atmanirbhar Bharat package 3.0. The GOI has also recently approved the continuation of the National Export Insurance Account (NEIA) Trust and approved infusion of ₹ 1,650 crore in the Trust, to provide further boost to project exports.

The economic fallout of the Covid-19 pandemic is compelling governments around the world to come up with policies for stimulating the global economy. A tried-and-tested method to boost economic growth in the short-term and provide wide developmental benefits in the long term is infrastructure investment. Countries around the globe are set to launch the largest round of infrastructure investment since the post-2008 financial crisis stimulus measures. With growing impetus being given for infrastructure projects across most 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. The Study would also analyse the challenges in the aftermath of the pandemic, as also the opportunities arising due to the pandemic-induced changes to business models and developmental priorities.

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 the 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 the multilateral development bank 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 ADB funded projects, segregated data on contract awards by procurement mode is unavailable. Similarly, in the case of the EBRD funded projects, due to absence of a data dissemination portal, contract awards data are not uniformly available in a suitable format for analysis, and has to be sourced from annual procurement reports of EBRD. Meanwhile, with the revamping of the World Bank's Procurement Policy in July 2016, the modes of procurement of goods, works and non-consulting services have changed and are not comparable with data for earlier periods. The procurement methods and definition of sectors vary across the MDBs, and while the Study attempts to harmonize these data across the various multilateral banks, it is only an approximation.

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

DEMAND FOR PROJECT EXPORTS

Infrastructure projects are an important 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 multilateral development banks (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.

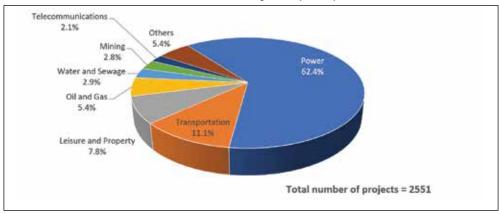
Infrastructure Investment Trends and Gaps

According to recent estimates, nearly 3 percent of global GDP⁵ is invested in infrastructure annually. With growing world population, increasing urbanization, and accelerating pace of economic development, infrastructure demand is set to continue its upward trajectory.

In 2020, nearly 2,551 global infrastructure projects were announced, registering a y-o-y increase of 5.5 percent. These projects amounted to an estimated US\$ 739 billion. Nearly two-third of the infrastructure projects were in the power sector, which accounted for 62.4 percent of the total number of infrastructure projects announced globally in 2020. Besides power sector, transportation sector was a key sector for infrastructure projects in 2020, accounting for a share of 11.1 percent, followed by leisure and property (share of 7.8 percent), oil and gas (5.4 percent), water and sewage (2.9 percent) and mining (2.8 percent) (Exhibit 1).

⁵"Global Infrastructure Outlook: Infrastructure Investments Needs of 50 Countries, 7 sectors to 2040", Oxford Economics and Global Infrastructure Hub, A G20 Initiative, July 2017

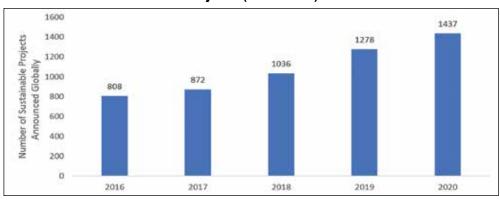
Exhibit 1: Sector-wise Global Infrastructure Projects Announced – by Number of Projects (2020)



Source: Refinitiv Infrastructure 360; India Exim Bank Research

Within the power sector, renewable energy projects (such as biomass, geothermal, hydroelectric, solar and wind energy projects) accounted for nearly 90.3 percent of the total projects announced in the sector in 2020, indicating the growing global focus on building sustainable infrastructure. In fact, the number of renewable energy projects announced have steadily risen, registering a robust CAGR of 15.5 percent during 2016-2020, to reach 1,437 projects in 2020, up from 808 projects in 2016 (Exhibit 2). With the rising focus on green infrastructure, and as governments plan to stimulate their economies while also meeting their carbon reduction targets, the focus on renewable energy projects is likely to continue.

Exhibit 2: Global Renewable Energy Projects Announced – by Number of Projects (2016-2020)



Source: Refinitiv Infrastructure 360; India Exim Bank Research

However, despite the rising global demand, infrastructure investment gap remains significant. 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, with an estimated investment gap of nearly US\$ 15 trillion.

Asia, in particular, has the largest overall infrastructure needs, requiring nearly US\$ 51 trillion of investments during 2016-2040, and accounting for more than half of the global infrastructure investment needs (Exhibit 3). 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 3: Region-wise Cumulative Infrastructure Investment Needs, Capabilities as per Current Trends and Investment Gaps (2016-2040)



Source: Global Infrastructure Hub, Oxford Economics

**Roads

**Roads

**Electricity

**Rail

**Telecommunication

**Water

**Airport

**Ports

**Total Value: US\$ 94 trillion

Exhibit 4: Sectoral Share in Cumulative Infrastructure Investment Needs (2016-2040)

Source: Global Infrastructure Hub, Oxford Economics

Cumulative spending needs during 2016-2040 are expected to be the highest for road and electricity sectors, accounting for shares 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 shares 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, a share of 7 percent in the total infrastructure investment needs during this period (Exhibit 4).

INDIAN SUPPLY CAPABILITIES

Several Indian companies are tapping the emerging opportunities in project exports and are making substantial contributions to the exchequer. As per data from the Project Exports Promotion Council (PEPC), project exports from India peaked 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 for two consecutive years thereafter, which could be partly attributed to the widespread slowdown across economies and deteriorating fiscal position in several developing economies. Nevertheless, in 2019-20, project exports from India recovered substantially, registering a y-o-y growth of 10.6 percent to reach US\$ 4.3 billion. Due to the supply and demand side disruptions caused by the Covid-19 pandemic, project exports as reported by the PEPC members moderated to US\$ 1.8 billion in 2020-21. Project exports recovered thereafter in 2021-22 to reach US\$ 2.7 billion

(Exhibit 5). It may be noted that this value of project exports reported by the PEPC is only based on data reported voluntarily by the PEPC members, and the actual value of project exports would be higher.

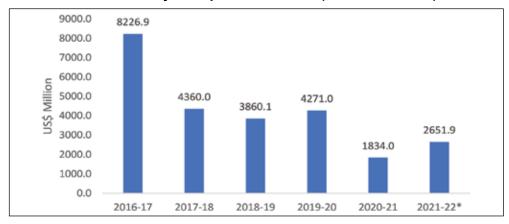


Exhibit 5: Project Exports from India (Value in US\$ Mn)

Notes: *- Provisional data

The data pertains to contracts awarded to PEPC members only; however the submission is on voluntary basis and therefore the actual figures may be higher.

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 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) programme 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 Export-Import Bank of India (India 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 programme, 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. In the period from FY19 to FY22, 210 contracts valued at US\$ 4.6 billion were approved under the LOC funded projects.

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— India Exim Bank and ECGC Ltd., provide a conducive environment for project exports from the country.

Key Markets and Sectors

As per data from PEPC, Middle East is the most important region for project exports from India. Saudi Arabia was the topmost destination for Indian project exporters, and accounted for a share of 20.6 percent in the total value of contracts secured by Indian project exporters cumulatively during 2016-17 to 2021-22, followed by Bangladesh (share of 12.6 percent), the UAE (11.4 percent), Qatar (8.6 percent), and Oman (5.5 percent), among other destinations (Exhibit 6).

In terms of sectors, 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. During FY17 to FY22, nearly 47.3 percent of the project secured by Indian companies, in terms of value, were in the power sector, followed by hydrocarbons sector (share of 18.4 percent), other construction (9.1 percent), water supply and sanitation (6.6 percent), and transport (5.4 percent) (Exhibit 7).

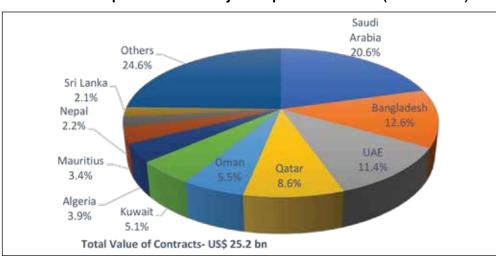


Exhibit 6: Top Markets for Project Exports from India (FY17-FY22*)

Note: * - Data for 2021-22 is provisional

Source: Project Export Promotion Council; India Exim Bank Research

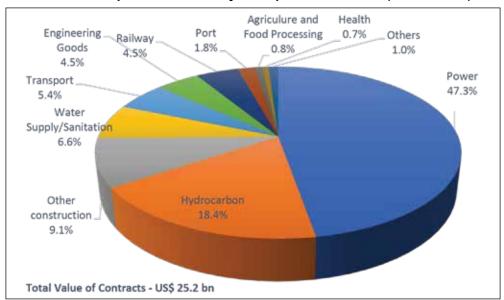


Exhibit 7: Top Sectors for Project Exports from India (FY17-FY22*)

Note: * - Data for 2021-22 is provisional

Source: Project Export Promotion Council; India Exim Bank Research

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, with large and growing opportunities in the sector. Global construction services exports have witnessed a steady upsurge since the mid-2000s, registering a CAGR of 4.2 percent between 2007 and 2019. Global exports of construction services were valued at US\$ 105.1 billion in 2019. However, in 2020, global construction services exports witnessed a sharp decline, to reach US\$ 85.8 billion, primarily owing to the disruptions caused by the Covid-19 pandemic.

India's share in global construction services exports has steadily increased, from 0.8 percent in 2011 to 3.3 percent in 2020 (Exhibit 8), 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, reducing to 1.6 percent in 2020.

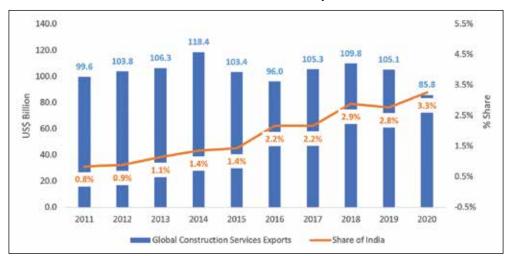


Exhibit 8: Global Construction Services Exports and India's Share

Source: IMF, India 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 in projects funded by MDBs results in tremendous multiplier effect in the domestic economy in general, and exports in particular. The resultant positive spillover effect could spread across multiple sectors.

VOLUME OF MDB CONTRACTS

Over the past five years (2017-2021), contract awards for projects financed by MDBs such as the World Bank (WB), the Asian Development Bank (ADB), the African Development Bank Group (AfDB), the Inter-American Development Bank (IDB) and the European Bank for Reconstruction and Development (EBRD) cumulatively amounted to nearly US\$ 191 billion. This does not include the data for contracts awarded in EBRD funded projects in 2021, due to unavailability of data for this period.

In terms of number of contracts awarded, as well as the value of contracts awarded, opportunities in the World Bank funded projects were the largest during the period 2017-2021, with 1,25,501 contracts amounting to US\$ 76.4 billion awarded during this period. During 2017-2021, among the MDBs taken into consideration, in terms of number of contracts awarded, there was an average annual increase only in the cases of World Bank and EBRD funded projects (reference period is 2017-2020 for EBRD). Number of contracts awarded in the World Bank funded projects registered an AAGR of 38.1 percent during 2017-21, while the contract awarded in the EBRD funded

projects registered an AAGR of 3.7 percent during 2017-20. Meanwhile, on an average, there was a decline in both the value of contracts and number of contracts awarded in the IDB funded projects as well as the AfDB funded projects during 2017-2021. In the ADB funded projects, on an average, while there was an increase in the value of contracts awarded during the period under consideration, the number of contracts awarded has contracted (Table 1).

Table 1: MDB Contract Awards (2017-2021)

MDB	Cumulative Number of Contracts Awarded (2017-2021)	Growth in Number of Contracts Awarded (AAGR: 2017-21; %)	Cumulative Value of Contracts Awarded (2017-21) US\$ Mn	Growth in Value of Contracts Awarded (AAGR: 2017-21; %)
World Bank	1,25,501	38.1%	76,370.5	3.8%
Asian Development Bank	36,724	-1.2%	76,167.9	14.2%
Inter-American Development Bank	30,950	-3.8%	13,623.5	-10.3%
African Development Bank	13,878	-4.0%	14,129.6	-9.0%
European Bank for Reconstruction and Development*	1,229	3.7%	10,701.8	13.8%
Total	2,08,282	-	1,90,993.3	-

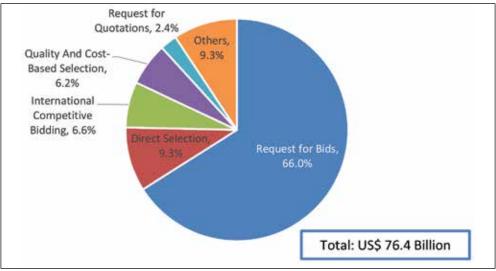
^{*}Data for EBRD is for 2017-2020

Sources: ADB, AfDB, EBRD, IDB, World Bank, India Exim Bank Research

There are various procurement methods to secure an MDB funded project, including International Competitive Bidding, Request for Bids, National Competitive Bidding, Direct Selection, Single Source, Request for Proposals, Quality and Cost-based Selection, among others. An analysis of the mode of procurement of the aforementioned MDBs over the past five years indicates that, in 4 out of the 5 MDBs analyzed in the Study viz. ADB, AfDB, IDB and EBRD, international competitive bidding was the most prominent mode of procurement in terms of value of contracts awarded, accounting for an

average share of nearly 81.0 percent in the total contracts awarded by these MDBs during 2017- 2021. In the World Bank funded projects, request for bids constituted majority of the contracts awarded during 2017-2021, accounting for a share of nearly 66.0 percent in the value of total contracts awarded, owing to the change in the World Bank's procurement framework for Investment Project Financing (IPF) in July 2016 (Box 1). Other major procurement methods in the World Bank funded projects included direct selection (share of 9.3 percent) international competitive bidding (6.6 percent), quality and cost-based selection (6.2 percent), and request for quotations (2.4 percent), among others (Exhibit 9). It may be noted that 'request for bids' and 'request for quotations' are also internationally competitive mode of procurements defined by the World Bank.

Exhibit 9: Procurement Method-wise Contracts Awarded in the WB Funded Projects (2017-2021) – By Value of Contracts



Source: World Bank, India Exim Bank Research

Box 1: Changes in World Bank's Procurement Policy w.e.f. July 2016

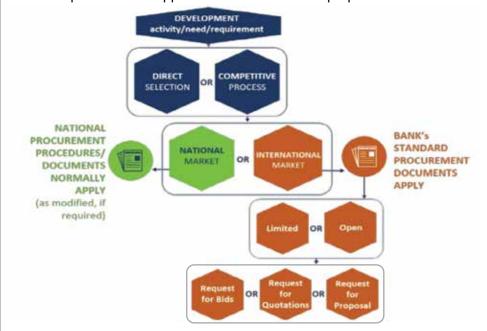
The World Bank had modernized its procurement framework for its Investment Project Financing (IPF) projects in July 2016. Accordingly, the set of rules applicable for a particular procurement depends on whether the project was approved by the World Bank before or post July 2016.

Procurement processes of projects which were approved by the World Bank prior to July 1, 2016, are usually governed by the World Bank's Procurement Guidelines (for Goods, Works and Non-Consulting Services) and Consultant

Guidelines (for the selection and employment of consultants). Meanwhile, IPF Projects which were approved after July 1, 2016 are governed principally by the Procurement Regulations brought about in July 2016.

The procurement process is defined in the Procurement Regulations as the process that starts with the identification of need and continues through planning, preparation of specifications/ requirements, budget considerations, selection, contract award and contract management. While each procurement is unique, they broadly follow a similar process and can be split into seven key stages viz. i. developing strategy; ii. planning the procurement; iii. inviting offers; iv. receiving offers; v. evaluating offers; vi. awarding contract; and vii. managing the contract.

The Procurement Regulations provide a variety of selection methods and approaches to market options, which allows for greater flexibility in designing individual procurement approaches that are fit-for-purpose.

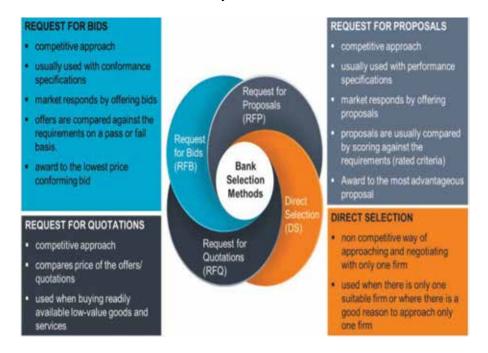


The selection method (also known as the procurement mode) is the process by which the Borrower approaches the market to invite offers. The Borrower selects the appropriate selection based on: a) the nature of the goods and services to be procured and the extent to which the Borrower is able to specify their requirements; b) the level of competition in the market and how many suppliers in the market are able to meet the Borrower's needs; and c) the estimated cost of the goods and services to be procured.

As per the revised procurement regulation (Section VI), the selection methods for the procurement of Goods, Works and Non-consulting Services include the following:

- 1. Request for Bids
- 2. Request for Quotations
- 3. Request for Proposals
- 4. Direct Selection

The selection methods are broadly defined as follows



As a result of the changes in the World Bank's procurement policy, the share of Request for Bids, Request for Proposals and Request for Quotations, cumulatively, in the total value of contracts awarded had steadily increased from 34.6 percent in 2016 to 78.2 percent in 2019, before moderating to 68.5 percent in 2021; the share of international competitive bidding concomitantly reducing from 42.3 percent in 2016 to zero percent in 2021.

TOP SUPPLIER COUNTRIES

During 2017-2021, China secured the largest value of contracts in the World Bank and the AfDB funded projects, second largest value of contracts in the ADB funded projects and the fifth largest value of contracts in the IDB funded projects. During the same period, India secured the largest value of

contracts in the ADB funded projects and was placed at the second and third positions in terms of value of contracts secured in the World Bank and the AfDB funded projects, respectively. India could not secure any contract under IDB funded projects, as it is currently not a member of the IDB. In EBRD funded projects, India secured only one project in 2020— a supply of goods contract in the natural resources sector of Egypt. On the other hand, China was the second largest supplier in terms of value of contracts in the EBRD funded projects during 2016-2020.

World Bank Funded Projects

China accounted for the largest share of 22.7 percent in the total value of contracts awarded in the World Bank funded projects during 2017-2021, followed by India, with a share of 14.6 percent. Other major competing nations in the WB funded projects include Turkey (share of 3.5 percent), Brazil (2.9 percent), and Vietnam (2.7 percent), among others (Exhibit 10).

Others, 44.5%

India, 14.6%

India, 14.6%

Bolivia, 1.6%

Vietnam, 2.7%

Spain, 1.7%

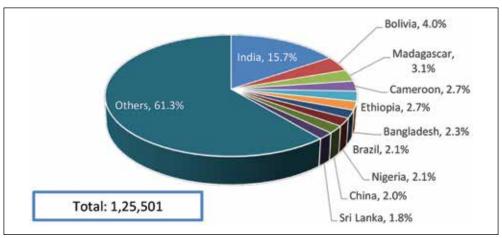
Total: US\$ 76.4 Billion

Exhibit 10: Top Countries Securing Contracts in the World Bank Funded Projects – By Value of Contracts Awarded (2017-2021)

Source: World Bank, India Exim Bank Research

In terms of number of contracts awarded in WB funded projects, India accounted for the largest share of 15.7 percent in the total number of contracts awarded during 2017-2021. During the same period, China had a share of only 2.0 percent in the number of contracts awarded in the WB funded projects (Exhibit 11). Domestic contracts accounted for bulk of the contracts secured by India during the period under consideration— 97.8 percent in terms of number of contracts secured and 87.4 percent in terms of value of contracts secured.

Exhibit 11: Top Countries Securing Contracts in the World Bank Funded Projects – By Number of Contracts (2017-2021)

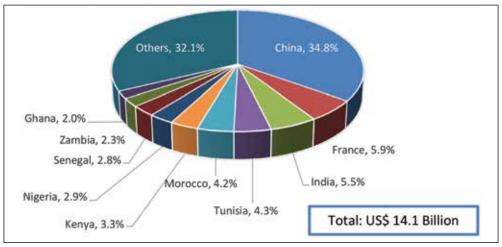


Source: World Bank, India Exim Bank Research

African Development Bank Funded Projects

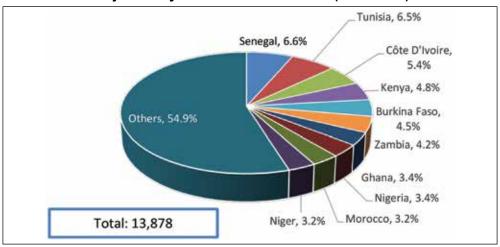
In the case of AfDB funded projects, majority of the contracts in value terms were accorded to non-regional members. China, France and India collectively accounted for more than 46 percent of the total value of contracts awarded during 2017-2021, with China alone accounting for 34.8 percent of the total value of contracts (Exhibit 12). India was a supplier for 5.5 percent of the value of contracts awarded in the AfDB funded projects during 2017-21. Among regional members, Tunisia, Morocco, Kenya, Nigeria and Senegal were the top supplier countries in terms of value of contracts during the period under consideration. Senegal and Tunisia also emerged as the topmost supplier countries in terms of number of contracts secured in the AfDB funded projects, accounting for 6.6 percent and 6.5 percent, respectively of the total number of contracts awarded during 2017- 2021 (Exhibit 13). Other top 10 countries in terms of number of contracts secured during the period were also regional members like Coté d'Ivoire, Kenya, and Burkina Faso, among others. China and India were not among the top 10 suppliers in terms of number of contracts, with shares of only 2.4 percent and 1.1 percent, respectively, in the total number of contracts awarded in the AfDB funded projects during 2017-21.

Exhibit 12: Top Countries Securing Contracts in the AfDB Funded Projects- By Value of Contracts Awarded (2017-2021)



Source: AfDB, India Exim Bank Research

Exhibit 13: Top Countries Securing Contracts in the AfDB Funded Projects- By Number of Contracts (2017-2021)



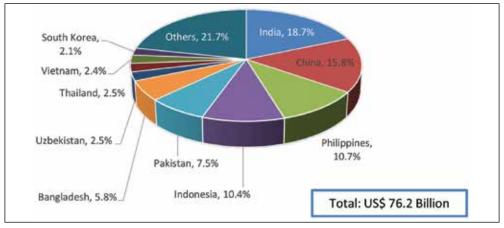
Source: AfDB, India Exim Bank Research

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, with the top four countries viz. China, India, Philippines and Indonesia, collectively accounting for more than half of the total contracts in terms of value during 2017-2021. India's share was the largest at 18.7 percent of the

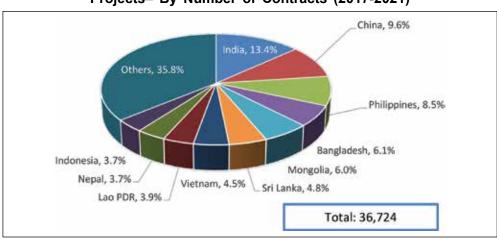
total value of contracts awarded in the ADB funded projects, followed by China with a share of 15.8 percent (Exhibit 14). India was also the largest supplier in terms of number of contracts secured in the ADB funded projects, although its share was relatively lower at 13.4 percent of the total number of contracts awarded during 2017-2021. In terms of number of contracts awarded, as noted in the case of other MDBs, China's share was relatively lower at 9.6 percent of the total number of contracts awarded in the ADB funded projects during the period under consideration (Exhibit 15).

Exhibit 14: Top Countries Securing Contracts in the ADB Funded Projects- By Value of Contracts Awarded (2017-2021)



Source: ADB. India Exim Bank Research

Exhibit 15: Top Countries Securing Contracts in the ADB Funded Projects- By Number of Contracts (2017-2021)

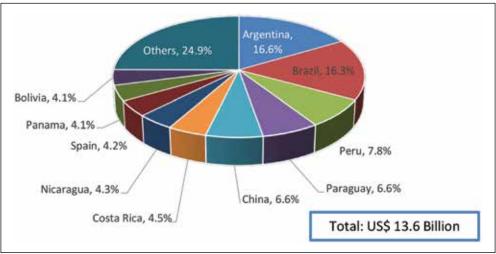


Source: ADB. India Exim Bank Research

Inter-American Development Bank Funded Projects

In the case of the IDB funded projects, majority of the contracts in terms of value were bagged by regional members, with Argentina (share of 16.6 percent), Brazil (16.3 percent), Peru (7.8 percent) and Paraguay (6.6 percent) being the top supplier countries. China and Spain were the only major non-regional members among the top 10 countries securing contracts in the IDB funded projects during 2017-2021, with shares of 6.6 percent and 4.2 percent, respectively, in the total value of contracts awarded in the IDB funded projects during this period (Exhibit 16). In terms of number of contracts awarded also, majority of contracts were bagged by regional members, with Honduras accounting for the largest share of 17.0 percent in the total number of contracts awarded in the IDB funded projects, followed by Peru (11.5 percent) and Argentina (7.3 percent). No non-regional members featured among the top 10 countries in terms of number of contracts secured in the IDB funded projects (Exhibit 17).

Exhibit 16: Top Countries Securing Contracts in the IDB Funded Projects- By Value of Contracts Awarded (2017-2021)



Source: IDB. India Exim Bank Research

Projects – By Number of Contracts (2017-2021)

Peru, 11.5%

Peru, 11.5%

Argentina, 7.3%

Brazil, 3.4%

Bolivia, 4.3%

Paraguay, 5.5%

Guatemala, 6.2%

Total: 30,950

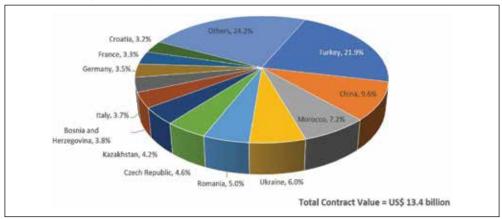
Exhibit 17: Top Countries Securing Contracts in the IDB Funded Projects- By Number of Contracts (2017-2021)

Source: IDB, India Exim Bank Research

European Bank for Reconstruction and Development Funded Projects

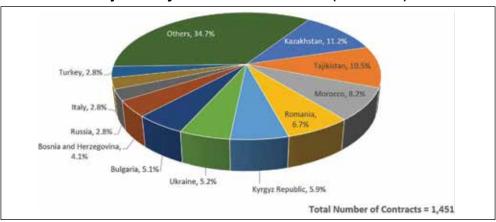
In case of the EBRD funded projects, the top five countries securing contracts accounted for nearly 50 percent of the overall value of contracts awarded during 2016-2020. Turkey has won the highest value of contracts, accounting for 21.9 percent of the overall value of contract awarded in the EBRD funded projects during 2016-2020, followed by China, Morocco and Ukraine, accounting for shares of 9.6 percent, 7.2 percent, and 6.0 percent, respectively (Exhibit 18). In terms of number of contracts awarded, however, both Turkey and China did not feature among the top ten countries securing contracts. Kazakhstan accounted for the largest share of 11.2 percent in the total number of contracts awarded in the EBRD funded projects, followed by Tajikistan (10.5 percent), Morocco (8.2 percent) and Romania (6.7 percent) (Exhibit 19).

Exhibit 18: Top Countries Securing Contracts in the EBRD Funded Projects- By Value of Contracts Awarded (2016-2020)



Source: EBRD, India Exim Bank Research

Exhibit 19: Top Countries Securing Contracts in the EBRD Funded Projects—By Number of Contracts (2016-2020)



Source: EBRD, India Exim Bank Research

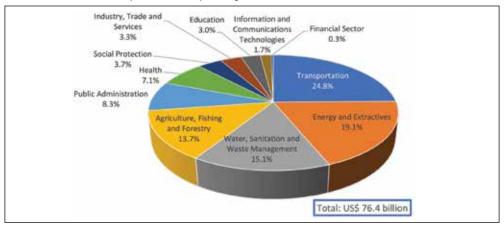
MAJOR SECTORS

World Bank Funded Projects

On account of the large size of contracts, the sectors such as transportation; energy and extractives; and water, sanitation and waste management accounted for the largest share in terms of value of contracts awarded in the World Bank funded projects during the 2017-2021 period, with shares of 24.8 percent, 19.1 percent and 15.1 percent, respectively. Other sectors like

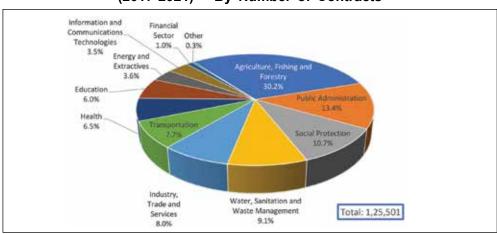
agriculture, fishing and forestry (share of 13.7 percent), public administration (8.3 percent) and health (7.1 percent) have relatively lower shares in value terms (Exhibit 20). However, in terms of number of contracts awarded, agriculture, fishing and forestry accounted for the largest share of 30.2 percent in contracts awarded in the WB funded projects during 2017-21, followed by public administration (share of 13.4 percent), social protection (10.7 percent) and water, sanitation and management (9.1 percent) (Exhibit 21).

Exhibit 20: Sector-wise Contracts Awarded in the WB Funded Projects (2017-2021) - By Value of Contracts



Source: World Bank, India Exim Bank Research

Exhibit 21: Sector-wise Contracts Awarded in the WB Funded Projects (2017-2021) – By Number of Contracts

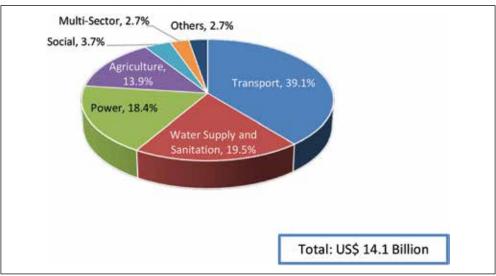


Source: World Bank, India Exim Bank Research

African Development Bank Funded Projects

In terms of value, transport sector accounted for nearly 39.1 percent of the contracts awarded in the AfDB funded projects during the period 2017-2021, followed by water supply and sanitation sector (19.5 percent), and power sector (18.4 percent), reflecting the AfDB's strategic focus on the development of infrastructure in Africa, as also the relatively larger value of such contracts. Other major sectors in terms of value of contracts included agriculture (share of 13.9 percent) and social sector (3.7 percent) (Exhibit 22). However, in terms of number of contracts, agriculture accounted for the largest share of 35.9 percent in the total contracts awarded in the AfDB funded projects during 2017-21, followed by water supply and sanitation (share of 17.1 percent), multi-sector projects (15.2 percent), social sector (10.7 percent) and transport (8.5 percent), among others (Exhibit 23).

Exhibit 22: Sector-wise Contracts Awarded in the AfDB Funded Projects – By Value of Contracts (2017-2021)



Source: AfDB. India Exim Bank Research

Projects – By Number of Contracts (2017-2021)

Others, 6.2%

Transport, 8.5%

Agriculture, 35.9%

Multi-Sector, Water Supply and Sanitation, 17.1%

Exhibit 23: Sector-wise Contracts Awarded in the AfDB Funded Projects – By Number of Contracts (2017-2021)

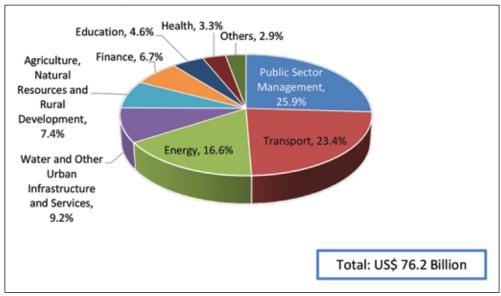
Source: AfDB, India Exim Bank Research

Asian Development Bank Funded Projects

Total: 13,878

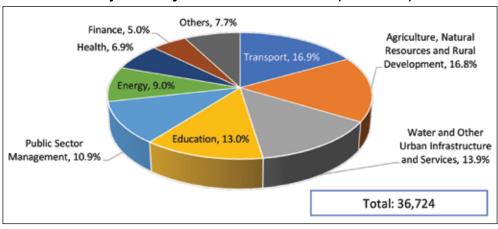
Unlike other MDBs, public sector management accounted for the largest value of contracts awarded in the ADB funded projects (25.9 percent) during the period 2017-2021. This is partly due to the increasing focus of the ADB on supporting public sector management reforms including institutional strengthening of ministries and government agencies, supporting e-governance, policy advice for longer-term fiscal stability and sustainable improvements in public services, among others. Other key sectors in terms of value of contract included transport sector (share of 23.4 percent), energy (16.6 percent), water and other urban infrastructure and services (9.2 percent), and agriculture, natural resources and rural development (7.4 percent) (Exhibit 24). Transport sector accounted for the largest share of 16.9 percent in the total number of contracts awarded in the ADB funded projects during 2017-2021 (Exhibit 25), followed by agriculture, natural resources and rural development (share of 16.8 percent), water and other urban infrastructure and services (13.9 percent), and education (13.0 percent), among others.

Exhibit 24: Sector-wise Contracts Awarded in the ADB Funded Projects – By Value of Contracts (2017-2021)



Source: ADB, India Exim Bank Research

Exhibit 25: Sector-wise Contracts Awarded in the ADB Funded Projects – By Number of Contracts (2017-2021)

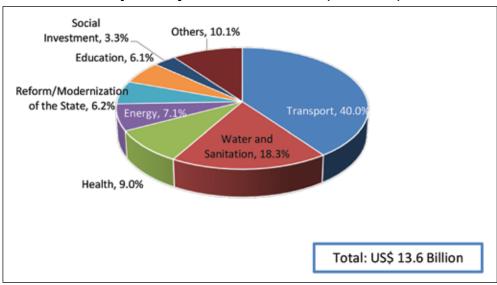


Source: ADB. India Exim Bank Research

Inter-American Development Bank Funded Projects

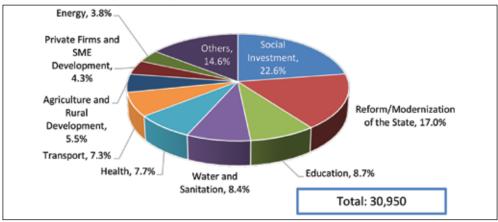
During the period 2017-2021, transport sector accounted for nearly 40.0 percent of the total value of contracts awarded in the IDB funded projects (Exhibit 26), followed by water and sanitation, and health, with shares of 18.3 percent and 9.0 percent, respectively. However, in terms of number of contracts, the share of water and sanitation, and transport sectors were relatively lower at 8.4 percent and 7.3 percent, respectively, during the period under consideration, partly due to the high value of projects in these infrastructure segments. In terms of number of contracts, the share of social investment sector was the largest at 22.6 percent, while that of reform and modernization of the state was the second largest at 17.0 percent, indicating the greater significance accorded to public sector reforms in the IDB funded projects during the period under consideration (Exhibit 27).

Exhibit 26: Sector-wise Contracts Awarded in the IDB Funded Projects- By Value of Contracts (2017-2021)



Source: IDB. India Exim Bank Research

Exhibit 27: Sector-wise Contracts Awarded in the IDB Funded Projects- By Number of Contracts (2017-2021)

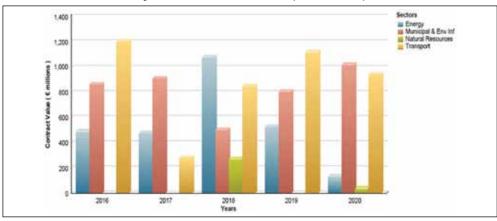


Source: IDB, India Exim Bank Research

European Bank for Reconstruction and Development Funded Projects

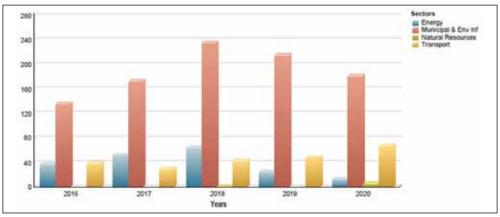
In the EBRD funded projects as well, transport sector recorded the highest share in terms of value of contracts awarded during 2016-2020, followed by Municipal and environment infrastructure (MEI) sector (Exhibit 28). Total value of contracts awarded in the transport sector amounted to \in 4.403 billion. However, in terms of total number of contracts, the MEI sector had the highest contracting activity with the sector accounting for 943 out of the total 1,451 contracts awarded in the EBRD funded projects cumulatively during 2016-2020 (Exhibit 29).

Exhibit 28: Sector-wise Contracts Awarded in EBRD Funded Projects— By Value of Contracts (2016-2020)



Source: EBRD

Exhibit 29: Sector-wise Contracts Awarded in EBRD Funded Projects-By Number of Contracts (2016-2020)



Source: EBRD

CONTRACTS SECURED BY INDIA IN MDB FUNDED PROJECTS

Over the period 2017-2021, the overall contracts secured by Indian companies in MDB funded projects have witnessed a significant upsurge. The overall value of contracts secured by Indian companies in the ADB, the AfDB, the World Bank and the EBRD funded projects cumulatively amounted to US\$ 26.1 billion during 2017-2021, with the largest value of contracts secured during 2020 (Exhibit 30). During 2017-21, cumulative value of contracts secured by Indian companies in projects funded by the ADB, the AfDB, the World Bank, and the EBRD, amounted to an average of US\$ 5.2 billion per year. In terms of volume, there has been a consistent increase in the overall number of contracts secured by Indian companies in the MDB funded projects (ADB, AfDB, WB and EBRD) during the period 2017-2021. Number of contracts secured by Indian companies registered an AAGR of 17.8 percent during the period under consideration, primarily due to the consistent increase in number of contracts secured by Indian companies in World Bank funded projects (Exhibit 31). Analysis of the volume and value of contracts secured indicates that on an average, Indian companies are winning relatively larger value of contracts in the AfDB and ADB funded projects, as compared to the WB funded projects. In the EBRD funded projects, Indian participation has been limited, but there has been some traction in the contracts secured in the recent period. One contract was secured by an Indian company in 2020 in the EBRD funded projects, for supply of goods in the natural resources sector of Egypt.

Exhibit 30: Overall Contracts Secured by Indian Companies –

By Value of Contracts

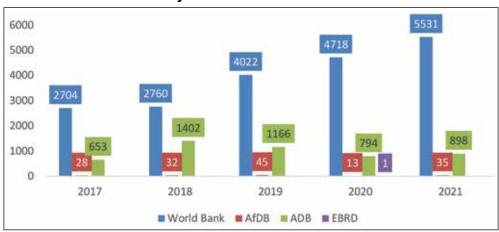


Note: Data for EBRD is not available for 2021

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

Exhibit 31: Overall Contracts Secured by Indian Companies –

By Number of Contracts



Note: Data for EBRD is not available for 2021

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

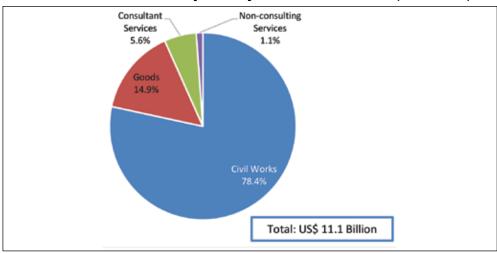
Nature of Contracts Secured by Indian Companies

Civil construction contracts, involving design and construction of civil work, road construction, steel structural works, etc. accounted for the largest share

in the total value of contracts secured by Indian companies across the projects funded by the ADB, the World Bank and the AfDB, over the period 2017-2021. In the World Bank and the ADB funded projects, civil works accounted for nearly 78.4 percent and 64.9 percent of the total value of contracts secured by Indian companies in these MDBs during 2017-21 (Exhibit 32 and 36). In the AfDB funded projects, civil works accounted for a much higher share of 93.0 percent in the value of contracts secured by Indian companies (Exhibit 34) during the period under consideration. However, in terms of number of contracts, civil works had a lower share of 34.0 percent in the AfDB funded projects (Exhibit 35). As against this, the share of civil works in the number of contracts secured by Indian companies in the World Bank and the ADB funded projects stood at a relatively higher 51.8 percent and 49.1 percent, respectively (Exhibit 33 and 37). This indicates that Indian companies secured larger size of civil works contracts in the AfDB funded projects as compared to the ADB and the World Bank funded projects.

The competitiveness of Indian companies in the services sector is also evident from the relative share of the services sector in the number of contracts secured by the Indian companies in the MDB funded projects. Consultant services accounted for a share of 7.5 percent in terms of numbers and 5.6 percent in terms of value, in the contracts secured by Indian companies in the WB funded projects, during 2017-2021 (Exhibit 32 and 33). In the AfDB funded projects, services contracts accounted for the largest share of 39.9 percent in

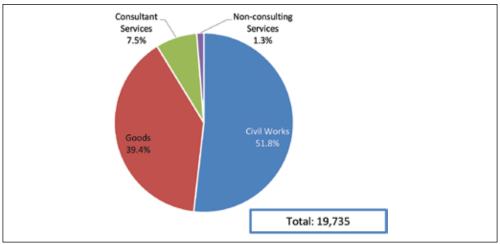
Exhibit 32: Nature of Contracts Secured by Indian Companies in the World Bank Funded Projects- By Value of Contracts (2017-2021)



Source: World Bank, India Exim Bank Research

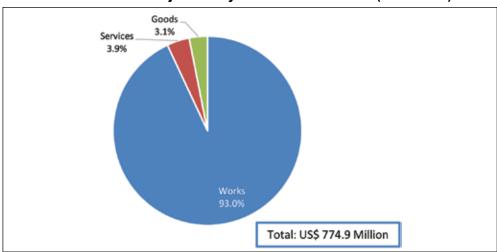
the number of contracts secured by Indian companies during 2017-21 (Exhibit 35), although the share of services contracts in terms of value was much lower at 3.9 percent of the contracts secured by Indian companies (Exhibit 34). In the ADB funded projects, consulting services contracts accounted for 37.2 percent of the total number of contracts secured by Indian companies during 2017-21, while other services accounted for another 5.7 percent (Exhibit 37).

Exhibit 33: Nature of Contracts Secured by Indian Companies in the World Bank Funded Projects- By Number of Contracts (2017-2021)



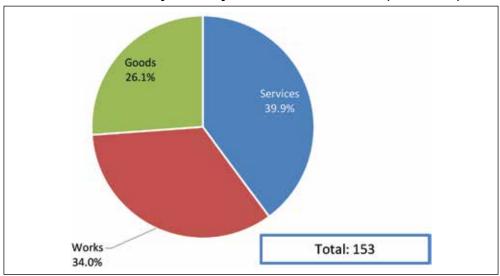
Source: World Bank, India Exim Bank Research

Exhibit 34: Nature of Contracts Secured by Indian Companies in the AfDB Funded Projects - By Value of Contracts (2017-2021)



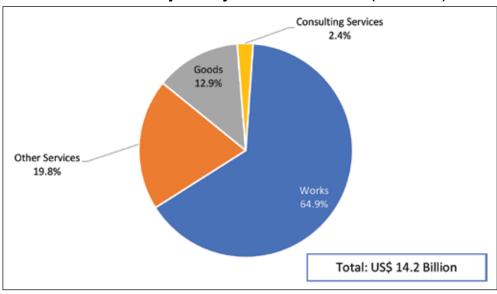
Source: AfDB, India Exim Bank Research

Exhibit 35: Nature of Contracts Secured by Indian Companies in the AfDB Funded Projects - By Number of Contracts (2017-2021)



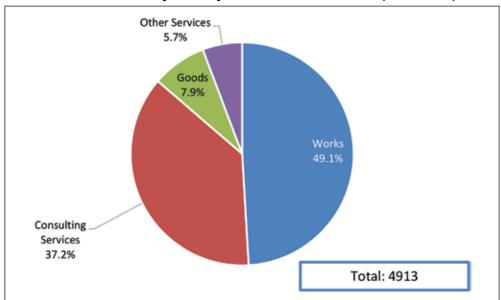
Source: AfDB, India Exim Bank Research

Exhibit 36: Nature of Contracts Secured by Indian Companies in the ADB Funded Projects: By Value of Contracts (2017-2021)



Source: ADB, India Exim Bank Research

Exhibit 37: Nature of Contracts Secured by Indian Companies in the ADB Funded Projects: By Number of Contracts (2017-2021)



Source: ADB, India Exim Bank Research

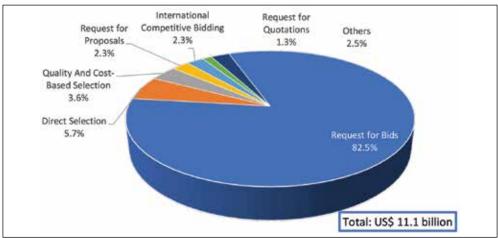
Procurement Mode-wise Contracts Secured by Indian Contractors⁶ World Bank Funded Projects

In terms of value, request for bids was the largest mode of procurement for Indian companies securing contracts in the World Bank funded projects, accounting for a share of 82.5 percent in the total value of contracts secured by Indian companies in the World Bank funded projects cumulatively during 2017-2021, followed by other procurement modes such as direct selection (share of 5.7 percent), quality and cost-based selection (3.6 percent), and request for proposals (2.3 percent) and international competitive bidding (2.3 percent), among others (Exhibit 38).

However, in terms of number of contracts, the share of request for quotations in the total contracts secured by Indian companies was the highest at 55.4 percent, while that of other modes such as request for bids, direct selection, and quality and cost-based selection were relatively lower at 28.4 percent, 8.4 percent and 2.5 percent respectively, during 2017-2021 (Exhibit 39).

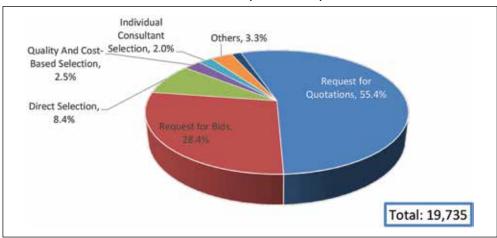
⁶ The analysis only includes the World Bank and the AfDB funded projects, as segregated data on contract awards by procurement mode is unavailable in the case of the ADB funded projects.

Exhibit 38: Procurement Mode-wise Contracts Secured by Indian Companies in the World Bank Funded Projects – By Value of Contracts (2017-2021)



Source: World Bank, India Exim Bank Research

Exhibit 39: Procurement Mode-wise Contracts Secured by Indian Companies in the World Bank Funded Projects – By Number of Contracts (2017-2021)



Source: World Bank, India Exim Bank Research

AfDB Funded Projects

International competitive bidding (ICB) was the largest procurement mode for contracts secured by Indian companies in the AfDB funded projects during 2017-21, accounting for a share of 97.4 percent in the value of contracts

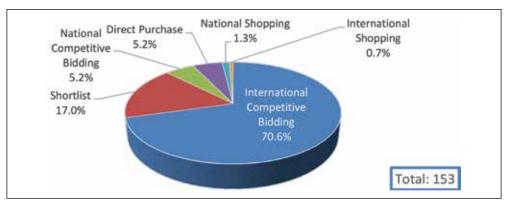
secured by Indian companies, followed by other procurement modes such as shortlist (share of 1.4 percent), direct purchase (0.9 percent), national competitive bidding (0.2 percent), and national shopping (0.1 percent) (Exhibit 40). However, in terms of volumes, the share of ICB in the total number of contracts secured by Indian companies was relatively lower at 70.6 percent, while that of other modes such as shortlist, direct purchase and national competitive bidding were relatively higher at 17.0 percent, 5.2 percent and 5.2 percent respectively, during 2017-2021 (Exhibit 41).

Exhibit 40: Procurement Mode-wise Contracts Secured by Indian Companies in the AfDB Funded Projects – By Value of Contracts (2017-2021)



Source: AfDB, India Exim Bank Research

Exhibit 41: Procurement Mode-wise Contracts Secured by Indian Companies in the AfDB Funded Projects – By Number of Contracts (2017-2021)



Source: AfDB, India Exim Bank Research

In the ADB, all contracts are awarded through International Competitive Bidding. Accordingly, all contracts secured by Indian companies in the ADB funded projects were through the ICB mode.

Top Regions/Countries for Indian Suppliers

World Bank Funded Projects

Analysis indicates that majority of the contracts secured by Indian companies in WB funded projects were domestic contracts, which accounted for 87.4 percent of the total value of contracts secured by Indian companies during 2017-2021, amounting to US\$ 9.7 billion. Domestic projects accounted for nearly 96.8 percent of the total value of contracts secured by Indian companies in the WB funded projects in the South Asia region during 2017-21. An analysis of the total overseas contracts⁷ bagged by Indian companies in the WB funded projects indicates that Indian companies have secured the largest value of contracts in Sub Saharan Africa, with the region accounting for more than half of the total overseas contract awards secured by Indian companies. Within Sub Saharan Africa, West African region⁸ accounted for the largest share of 34.9 percent in the value of overseas contracts secured by Indian companies in the WB funded projects during 2017-21, and East African region⁹ accounted for a share of 24.7 percent (Exhibit 42). South Asia¹⁰ (excluding India) was also an important region for Indian companies, accounting for a share of 23.3 percent in the total value of overseas contracts secured by Indian companies in the WB funded projects. Other regions such as Middle-East and North Africa11, East Asia and Pacific region¹², and Europe and Central Asia¹³ and Latin America and Caribbean¹⁴ accounted for relatively lower shares of 11.9 percent,

⁷Overseas contracts are those secured by Indian companies outside India.

⁸As per WB classification, West Africa region includes Nigeria, Senegal, Cote d'Ivoire, Burkina Faso, Cameroon, Ghana, Niger, Liberia, Central African Republic, Mali, Guinea, Benin, Congo R, Gabon, Sierra Leone, Togo, The Gambia, Chad, Mauritania, Guinea-Bissau, and Cabo Verde.

⁹East Africa Region includes Ethiopia, Kenya, Congo DR, Tanzania, Uganda, Mozambique, Angola, Zambia, Malawi, Burundi, Madagascar, South Sudan, Rwanda, Somalia, South Africa, Botswana, Sao Tome and Principe, Lesotho, Zimbabwe, Sudan, Eswatini, and Comoros.

¹⁰South Asia includes India, Pakistan, Bangladesh, Afghanistan, Nepal, Sri Lanka, Maldives and Bhutan.

¹¹MENA region includes Egypt, Tunisia, Iraq, Lebanon, Morocco, West Bank and Gaza, Iran, Djibouti, Yemen, and Jordan.

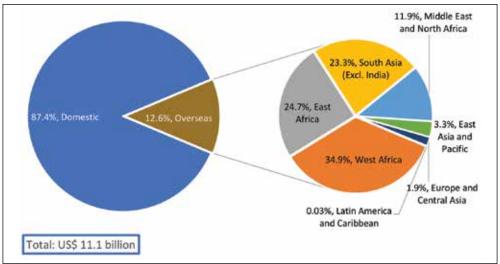
¹²East Asia and Pacific includes China, Vietnam, Indonesia, Myanmar, Lao PDR, Papua New Guinea, Samoa, Cambodia, Vanuatu, Philippines, Micronesia, Mongolia, Tonga, Timor-Leste, Solomon Islands, Kiribati, Fiji, Tuvalu, Marshall Island, Thailand, and Palau.

¹³Europe and Central Asia includes Turkey, Ukraine, Uzbekistan, Kazakhstan, Poland, Russia, Georgia, Belarus, Albania, Azerbaijan, Tajikistan, Serbia, Romania, Armenia, North Macedonia, Croatia, Bosnia and Herzegovina, Moldova, Kyrgyzstan, Bulgaria, Kosovo, Montenegro, Western Balkans, and Caucasus.

¹⁴LAC region includes Ecuador, Argentina, Brazil, Colombia, Bolivia, Peru, Haiti, St Maarten, Nicaragua, Dominican Republic, Paraguay, Mexico, Costa Rica, Panama, El Salvador, Dominica, Honduras, Uruguay, Guyana, St. Lucia, Jamaica, Belize, Chile, Guatemala, St. Vincent and Grenada, and Caribbean Islands.

3.3 percent, 1.9 percent, and 0.03 percent respectively, in the value of overseas contracts secured by Indian companies in the WB funded projects during 2017-21.

Exhibit 42: Region-Wise Share of Contracts Secured by Indian Companies in the World Bank Funded Projects during 2017-2021 (In Terms of Value)



Note: Overseas contracts are those secured by Indian companies outside India Source: World Bank, India Exim Bank Research

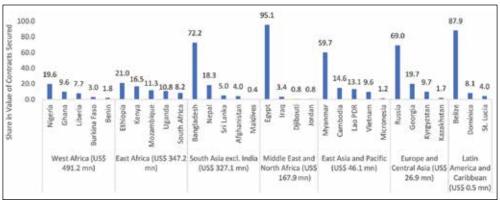
In Western Africa, Nigeria was the top project country for Indian companies, accounting for a share of 19.6 percent in the total value of contracts secured by Indian companies in the WB funded projects in the region during 2017-21, followed by Ghana (share of 9.6 percent), Liberia (7.7 percent), Burkina Faso (3.0 percent) and Benin (1.8 percent).

In Eastern Africa, Ethiopia was the largest project country for Indian companies, with a share of 21.0 percent in the total value contracts secured by Indian companies in the WB funded projects in the region during 2017-21 (Exhibit 43), followed by Kenya (16.5 percent), Mozambique (11.3 percent) Uganda (10.8 percent), and South Africa (8.2 percent).

Within South Asia (excluding India), Bangladesh was the top project country for Indian companies, accounting for 72.2 percent of the total value of contracts awarded in World Bank funded projects to Indian companies within the region (excluding India), during the period under consideration followed by Nepal (share of 18.3 percent), Sri Lanka (5.0 percent) and Afghanistan (4.0 percent).

In the Middle-East and North Africa region, Egypt was the major project country for contracts secured by Indian companies in the World Bank funded projects during 2017-2021, with a share of 95.1 percent in the overall value of contracts secured by the Indian companies in the region.

Exhibit 43: Region-wise Top Project Countries for Overseas Contracts Secured by Indian Companies in the World Bank Funded Projects -By Value of Contracts (2017-2021)



Note: Totals may not add up to 100 percent for a region as regional projects are not included in the Exhibit.

Source: World Bank, India Exim Bank Research

In East Asia and Pacific region, Myanmar was the largest project country for Indian companies in the World Bank funded projects during 2017-2021, with a share of 59.7 percent in the overall value of contracts secured by Indian companies in the region during 2017-21, followed by Cambodia (share of 14.6 percent), Lao PDR (13.1 percent) and Vietnam (9.6 percent).

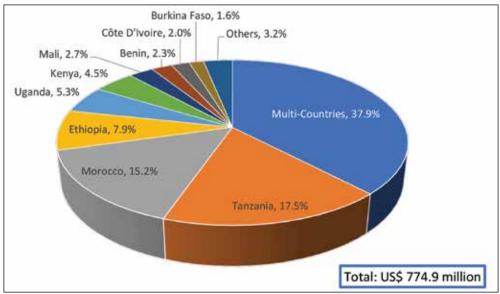
In Europe and Central Asia region, Russia was the top project country for Indian companies, accounting for a share 69.0 percent in the value of contracts secured by Indian companies in the World Bank funded projects in the region during the period under consideration, followed by Georgia (share of 19.7 percent), Kyrgyzstan (9.7 percent) and Kazakhstan (1.7 percent).

In Latin America and the Caribbean, the presence of Indian players in contracts for the WB funded projects was limited to Belize, Dominica and St. Lucia only, which accounted for 87.9 percent, 8.1 percent and 4.0 percent, respectively, in the total value of contracts secured by Indian companies in the region (Exhibit 43).

African Development Bank Funded Projects

Multinational projects accounted for 37.9 percent of the value of contracts secured by Indian companies in the AfDB financed projects during 2017-2021. Several East African countries also featured among the top project countries for contracts secured by Indian companies in the AfDB funded projects. Tanzania accounted for the second largest share of 17.5 percent in the total value of contracts secured by Indian companies in the AfDB funded projects during 2017-21, followed by Morocco (15.2 percent), Ethiopia (7.9 percent), Uganda (5.3 percent), and Kenya (4.5 percent), among others (Exhibit 44).

Exhibit 44: Top Project Countries for Contracts Secured by Indian Companies in the AfDB funded Projects: By Value of Contracts (2017-2021)



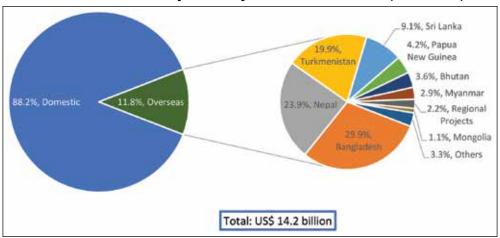
Source: AfDB, India Exim Bank Research

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 88.2 percent in the total value of contracts secured by Indian companies during 2017-2021. In terms of value of overseas contracts, South Asian countries such as Bangladesh, Nepal, and Sri Lanka 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 10 project

countries for Indian companies in the ADB funded projects, accounting for a share of 4.2 percent in the total value of overseas contracts secured by Indian companies in ADB funded projects during 2017-21. Besides, among Central Asian countries, Turkmenistan is the only country that features among the top 10 project countries for Indian companies in the ADB funded projects, accounting for a share of 19.9 percent (Exhibit 45).

Exhibit 45: Country-wise Contracts Secured by Indian Companies in the ADB Funded Projects – By Value of Contracts (2017-2021)



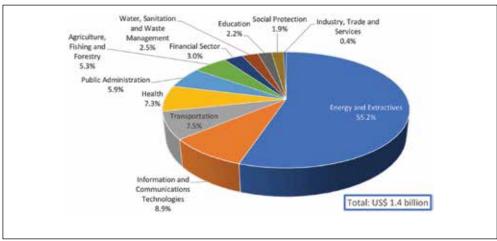
Source: ADB, India Exim Bank Research

Sectoral Analysis

World Bank Funded Projects

For India as a supplier, the largest value of overseas contracts in the World Bank funded projects during 2017-2021 were secured in the energy and extractive sector, with a share of 55.2 percent, followed by information and communication technologies (8.9 percent), transportation (7.5 percent), health (7.3 percent), and public administration (5.9 percent), among others (Exhibit 46).

Exhibit 46: Sector-wise Overseas Contracts Secured by Indian Companies in the World Bank Funded Projects: By Value of Contracts (2017-2021)

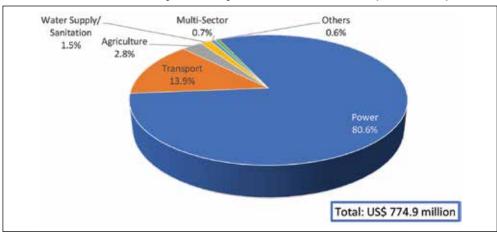


Source: World Bank, India Exim Bank Research

African Development Bank Funded Projects

Power sector accounted for majority of the value of contracts awarded to Indian companies in the AfDB funded projects, accounting for 80.6 percent of the total value of contracts secured during 2017-2021 (Exhibit 47), followed by transport (share of 13.9 percent), agriculture (2.8 percent), water supply and sanitation sector (1.5 percent), among others.

Exhibit 47: Sector-wise Contracts Secured by Indian Companies in the AfDB funded Projects - By Value of Contracts (2017-2021)

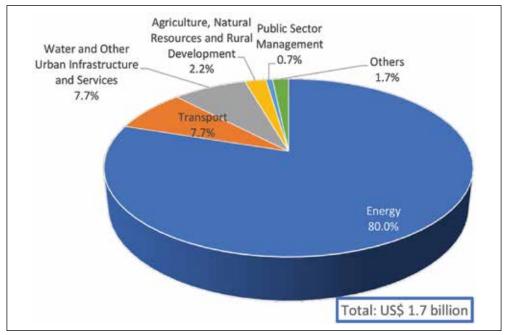


Source: AfDB, India Exim Bank Research

Asian Development Bank Funded Projects

Energy was also the largest sector for Indian companies in terms of value of contracts secured in the ADB funded projects, accounting for 80.0 percent of the total value of contracts secured during 2017-2021 (Exhibit 48), followed by transport sector, and water and other urban infrastructure sector (7.7 percent each), agriculture, natural resources and rural development (2.2 percent) and public sector management (0.7 percent), among others.

Exhibit 48: Sector-wise Overseas Contracts Secured by Indian Companies in the ADB Funded Projects -By Value of Contracts (2017-2021)



Source: ADB, India Exim Bank Research

Region/Country-wise Competitor Analysis

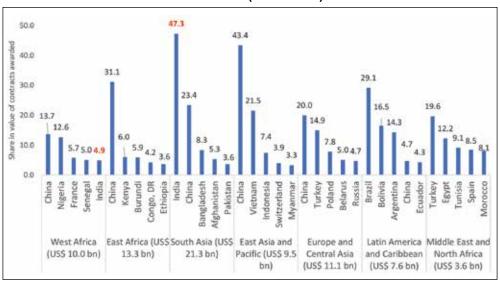
World Bank Funded Projects

Analysis indicates that China and Turkey were the top competitors for India in contracts awarded in the WB funded projects. During 2017-21, China was the topmost supplier in the World Bank funded projects across the regions of Africa, Europe and Central Asia, and East Asia and Pacific and was also among the top 5 supplier countries in the regions of South Asia and LAC. Turkey was the topmost supplier country for contracts awarded in the World

Bank funded projects in the Middle East and North Africa (MENA) region (Exhibit 49). In the South Asian region, India secured the largest value of contracts with a share of 47.3 percent in the total value of contracts secured in the region during 2017-21, but majority of the contracts were secured in domestic projects. Similarly, Brazil secured the largest value of contracts in the Latin America and the Caribbean region, but nearly 96.4 percent of the contracts secured by Brazil in the region were domestic projects.

In West Africa, India was the fifth largest supplier in terms of the value of contracts awarded in the WB funded projects, with a share of 4.9 percent in the total value of contracts awarded in the region during 2017-21. In East Africa, MENA region, East Asia and Pacific, Europe and Central Asia, and Latin America and Caribbean, India does not feature among the top five suppliers in the region.

Exhibit 49: Region-wise Top Competitors for Indian Companies in Contracts Awarded in World Bank Funded Projects – By Value of Contracts (2017-2021)



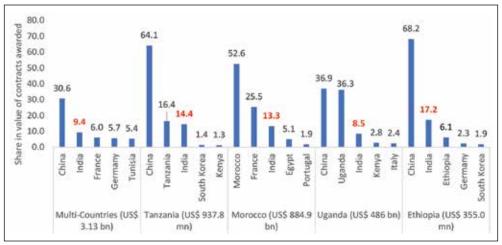
Source: World Bank, India Exim Bank Research

African Development Bank Funded Projects

China was also the most important competitor for Indian companies in the contracts awarded in the AfDB funded projects during 2017-2021. China held significantly larger shares than India in most of the top markets for Indian companies in the African region, including multinational projects (Exhibit 50).

India held the second largest share in multinational projects, accounting for 9.4 percent of the total value of contract awarded for multinational projects in the AfDB funded projects during 2017-21. In the AfDB funded projects during 2017-21, India was also the second largest supplier in Ethiopia, and the third largest supplier in Tanzania, Morocco and Uganda. Other non-regional competitors for India include France, South Korea, Italy and Germany, among others.

Exhibit 50: Country-wise Top Competitors for Indian Companies in Contracts Awarded in AfDB Funded Projects - By Value of Contracts (2017-2021)



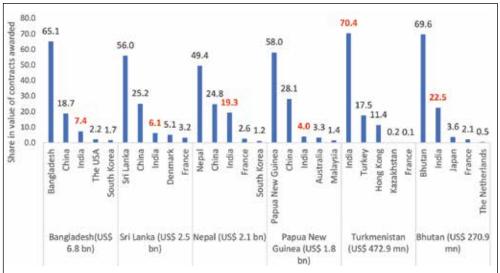
Source: AfDB, India Exim Bank Research

Asian Development Bank Funded Projects

Among the top 6 project countries for India in terms of value of overseas contracts secured in the ADB funded projects during 2017-21, India was the topmost supplier in Turkmenistan with a share of 70.4 percent in the value of contracts awarded in the project country. India was the second largest supplier in Bhutan, with a share of 22.5 percent in the value of contracts awarded in ADB funded projects in the country during the period under consideration. Besides, India was the third largest supplier in the remaining top project countries viz. Bangladesh, Nepal, Papua New Guinea and Sri Lanka, with shares of 7.4 percent, 19.3 percent, 4.0 percent and 6.1 percent in the total value of contracts awarded in ADB funded projects in these countries, respectively, during 2017-21. China was also among the key competitors in 4 out of the 6 top project countries for Indian companies in

the ADB funded projects. Other than China, top competitors for India in the contract opportunities emerging in the ADB funded projects include South Korea, France, Turkey, and Denmark, among others (Exhibit 51).

Exhibit 51: Country-wise Top Competitors for Indian Companies in Overseas Contracts Awarded in the ADB Funded Projects – By Value of Contracts (2017-2021)



Source: ADB. India Exim Bank Research

Sector-wise Competitor Analysis

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

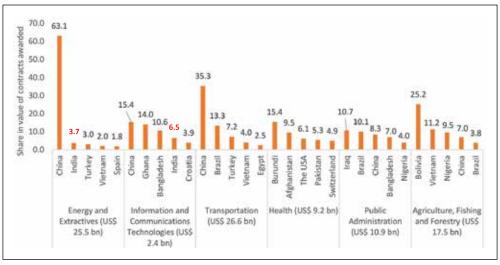
World Bank Funded Projects

In the World Bank funded projects, China secured the largest value of contracts among all supplier countries, in the sectors of energy and extractive, information and communication technologies and transport, accounting for shares of 63.1 percent, 15.4 percent, and 35.3 percent in the total value of contracts awarded, respectively, in each of these sectors during the 2017-2021 period (Exhibit 52). India followed China as the second largest supplier in the sector of energy and extractives with a share of 3.7 percent in the total value of contracts awarded in the sector in the WB funded projects during the

period under consideration. India was also the fourth largest supplier in the information and communication technologies sector, accounting for a share of 6.5 percent in the value of contracts awarded in the section during 2017-21. In other sectors, India's share was relatively lower, and it did not feature among the top 5 suppliers.

Turkey was the third largest supplier in the energy and extractives sector, accounting for a share 3.0 percent in the total value of contracts awarded in the sector, while Ghana and Bangladesh were the second and third largest suppliers in the information and communication technologies sector, accounting for shares of 14.0 percent and 10.6 percent, respectively in the total value of contracts awarded in the sector, during 2017-2021. Turkey and Brazil were also important competitors for India in the transport sector. Meanwhile, for contracts awarded in agriculture, fishing and forestry sector, Bolivia was the largest supplier, accounting for a share of 25.2 percent in the total value of contracts awarded in the sector in the World Bank funded projects, followed by Vietnam, with a share of 11.2 percent, and Nigeria, with a share of 9.5 percent.

Exhibit 52: Sector-wise Top Competitors for Indian Companies in Contracts Awarded in the World Bank Funded Projects - By Value of Contracts (2017-2021)



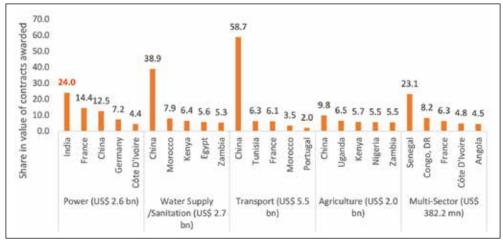
Note: Sectoral totals may exceed overall value of contracts awarded, as same projects may be mapped across multiple sectors by the World Bank

Source: World Bank, India Exim Bank Research

African Development Bank Funded Projects

In terms of value of contracts secured, China is also among the top competitors for India in the AfDB funded projects in 4 out of the top 5 sectors viz. water supply and sanitation, transport, power and agriculture. Other non-regional competitors for Indian companies in these sectors in the AfDB funded projects include France, Germany and Portugal. India was the largest supplier of value of contracts in power sector projects funded by the AfDB, with a share of 24.0 percent in the overall contracts awarded in the sector during 2017-21, while France was the second largest contract supplier in the power sector with a share of 14.4 percent (Exhibit 53). In other sectors, India's share was relatively lower, and it did not feature among the top 5 suppliers in AfDB funded projects.

Exhibit 53: Sector-wise Top Competitors for Indian Companies in Contracts Awarded in the AfDB Funded Projects - By Value of Contracts (2017-2021)



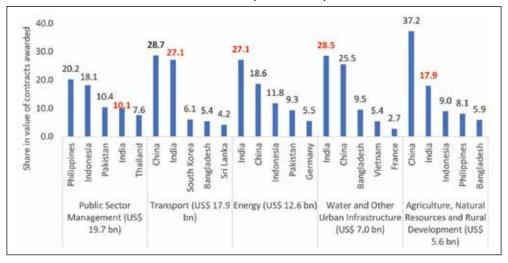
Source: AfDB. India Exim Bank Research

Asian Development Bank Funded Projects

In the ADB funded projects, India secured the largest value of contracts in the energy sector and water and other urban infrastructure sector, accounting for shares of 27.1 percent and 28.5 percent in the total value of contracts awarded, respectively in each of these sectors during the 2017-2021 period (Exhibit 54). China was the closest competitor to India in these two sectors.

China was the largest supplier in the transport sector, and agriculture, natural resources and rural development sector, accounting for shares of 28.7 percent and 37.2 percent in the total value of contracts awarded in these sectors, respectively. China was a key competitor for India in these two sectors, where India was the second largest supplier for ADB contracts. Besides China, several emerging players such as Bangladesh, Indonesia, South Korea, Philippines, Vietnam and Pakistan have also emerged as top competitors for Indian companies in the power sectors where they have secured largest value of contracts in the ADB funded projects.

Exhibit 54: Sector-wise Top Competitors for Indian Companies in Contracts Awarded in the ADB Funded Projects - By Value of Contracts (2017-2021)



Source: ADB. India Exim Bank Research

CONCLUSION

India is among the top supplier countries across projects funded by major MDBs. While majority of the contracts secured by Indian companies in the World Bank funded projects and the ADB funded projects are in the domestic market, India has also emerged as one of the top suppliers in the overseas markets, particularly across Africa, Middle East and North Africa, and South Asia (excluding India). While Indian contractors specialize in energy, transport and water supply/sanitation sectors across all the regions in the MDB funded projects, they also face fierce competition in each of these sectors, particularly from China. Apart from China, India also faces stiff competition from other

emerging markets such as 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 France, Spain and Germany, among others, who have developed their skills, expertise, technology and consequent market value 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 Africa is the topmost region for Indian project exporters, the market share of India in certain key sectors of operations, such as water supply/sanitation, transport, agriculture and social sectors, is below that of its competitors in several geographies. A thorough examination of the comparative advantages and the constraints faced by project exporters is therefore warranted. Alongside, analysis of competitive strengths and constraints in some emerging opportunity sectors will also be important.

CHAPTER 4: IMPACT OF COVID-19 ON PROJECT EXPORTS

The Covid -19 outbreak led to strong demand and supply side shocks. Pandemic induced restrictions across the geographies affected the movement of both material and manpower for construction projects, thereby impacting on-going project delivery, companies' liquidity and whole business models. There was also a demand-side shock as many of the developing countries faced foreign currency problems as their limited forex earning activities were severely hit and precious foreign currency reserves were being employed to finance import of health related equipment/ consumables including vaccines. The pandemic stretched public budget of countries and the room for public expenditure on infrastructure narrowed with the increasing focus on healthcare.

TRENDS IN INFRASTRUCTURE PROJECTS

Despite weaker demand and supply side disruptions, global infrastructure projects announced during 2020 witnessed an increase of 5.5 percent as compared to 2019¹⁵. During 2020, a total of 2551 infrastructure projects worth US\$ 739 billion were announced, globally. However, a closer look at the monthly project announcements reveals that the number of project announcements witnessed a dip after March 2020, as most countries imposed strict lockdowns and pandemic induced restrictions. During April 2020, total of 159 infrastructure projects were announced, as compared to 251 in March 2020, a month-on-month (m-o-m) decline of (-) 36.7 percent. The value of projects announced witnessed an even sharper m-o-m decline in April 2020, estimated at (-) 82.2 percent. The number and value of infrastructure projects announced witnessed intermittent periods of growth and decline during 2020, as the investment sentiments changed in response to the ebb and flow of Covid-19 cases across geographies (Exhibit 55).

Although infrastructure needs are more pronounced in the developing countries, the infrastructure projects announced during 2020 were more concentrated in the developed countries. Of the infrastructure projects announced during 2020, the largest value of projects were announced in the region of North America, with

¹⁵Refinitiv Infrastructure 360

an estimated share of 22.7 percent in the total value of infrastructure projects announced during 2020. Western Europe was the other major region with a share of 18.4 percent in the total value of infrastructure projects announced during 2020 (Exhibit 56). Regions of Middle East, Africa, and South Asia, which are important project countries for Indian project exports, were not among the top five regions of infrastructure project announcements in 2020.

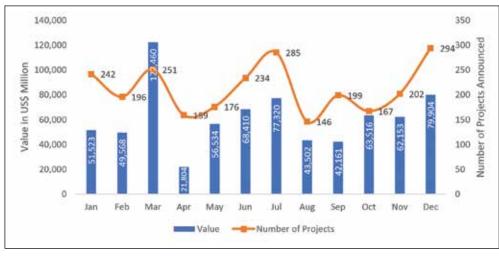


Exhibit 55: Infrastructure Projects Announced in 2020

Source: Refinitiv Infrastructure 360, India Exim Bank Research

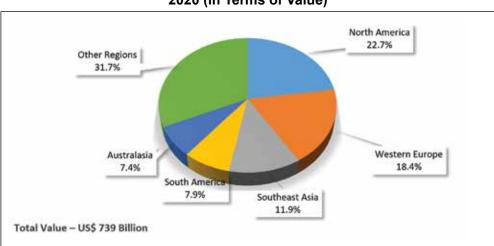


Exhibit 56: Top 5 Regions for Infrastructure Project Announcements in 2020 (in Terms of Value)

Source: Refinitiv Infrastructure 360, India Exim Bank Research

IMPACT ON EXPORTS OF CONSTRUCTION SERVICES

As a result of the Covid-19 associated disruptions to movement of raw material and manpower, the global construction services' exports witnessed a steep decline from US\$ 27.3 billion in the 4th quarter of 2019 to US\$ 19.3 billion in the first quarter of 2020, a significant quarter-on-quarter (q-o-q) decline of (-) 29.3 percent and y-o-y decline of (-) 28.1 percent. The construction services' exports remained subdued in the second quarter of 2020, registering a marginal q-o-q growth of 1.2 percent during the quarter. There was a significant increase in construction services exports during the 4th quarter of 2020, but exports once again dipped in the first quarter of 2021, coinciding with the increase in Covid-19 cases across several geographies (Exhibit 57). Overall, global exports of construction services recorded a y-o-y decline of (-) 18.4 percent during 2020, reaching a level of US\$ 85.8 billion during the year.

China is the largest country for exports of construction services, with estimated exports of US\$ 23.9 billion during 2020¹⁶. China's construction services' exports witnessed a decline from US\$ 7.9 billion in the 4th quarter of 2019 to US\$ 3.6 billion in the 1st quarter of 2020 as the country was gripped in the talons of the Covid-19 pandemic. The decline in China's construction services' exports in Q1 2020 accounted for 53.8 percent of the decline in the global construction services exports during this period. The shortage of manpower and restriction in movements in China and other countries where the exports were directed, resulted in a sudden decline in the exports of construction services. China's construction services' exports witnessed a sharp increase in Q2 of 2020, reaching US\$ 5.8 billion, with q-o-q growth of 62.6 percent. The construction services' exports continued to grow till Q4 of 2020, before once again moderating in Q1 2021.

27.3 30.0 26.9 25.8 25.5 24.8 25.0 21.9 21.6 19.3 19.6 19.7 **JS**\$ Billion 20.0 15.0 10.0 5.0 0.0 2019 2019 2019 2019 2020 2020 2020 2020 2021 2021 Q3 Q4 Q4 Q1 Q2 Q1 Q2 Q3 Q1 Q2

Exhibit 57: Global Construction Services Exports (US\$ Billion)

Note: Due to differences in frequency of data reporting by countries, quarterly values may not add up to the yearly total elsewhere.

Source: ITC Trade Map, India Exim Bank Research

¹⁶ITC Trade Map

Although there has been a decline in the construction services exports of majority of the largest construction services' exporting countries in 2020 as compared to 2019, there were some exceptions to this general trend. Construction services' exports from the Netherlands, for example, increased to US\$ 4.4 billion in 2020, as compared to US\$ 3.5 billion in 2019 (Table 2).

Table 2: Construction Services' Exports from Top 10 Exporting Countries (Value in US\$ Billion)

Country	Value in 2019	Value in 2020	Y-o-Y Growth
China	28.0	23.9	-14.4%
Japan	10.6	7.4	-29.8%
South Korea	9.1	6.4	-29.3%
Russia	4.8	4.7	-1.8%
The Netherlands	3.5	4.4	23.8%
The UK	4.9	3.7	-25.7%
Denmark	5.8	3.4	-41.4%
India	2.9	2.8	-3.9%
France	2.8	2.7	-3.1%
Belgium	3.8	2.7	-29.9%

Source: ITC Trade Map, India Exim Bank Research

IMPACT ON CONTRACTS AWARDED IN MDB FUNDED PROJECTS

For all MDBs, except the EBRD, there was an increase in procurement opportunities during 2020, either in volume or value terms, or both. The countercyclical function of the MDBs played a vital role in delivering much needed financing for ameliorating the economic and social costs of the pandemic. In 2021, however, contract award opportunities reduced across several MDBs, even though the need for multilateral financing for development remained pronounced.

Contracts awarded in World Bank funded projects recorded an increase in 2020, both in terms of number and value, and the trend continued in 2021 as well (Exhibit 58 and Exhibit 59). Other than the World Bank, contract awards in no other MDB witnessed a consistent rise in both volume and value terms, in each of the pandemic affected years, 2020 and 2021.

Contract award opportunities increased in case of the AfDB and the ADB in value terms during 2020, albeit the number of contract award opportunities decreased during the year. In 2021, both number and value of contracts

awarded in the AfDB and ADB funded projects dipped below the levels in 2020 (Exhibit 58 and Exhibit 59).

The value of contracts awarded by the IDB reduced to US\$ 1.8 billion in 2020, from US\$ 2.9 billion in 2019, a y-o-y reduction of (-) 37.9 percent. Number of contracts awarded in the IDB funded projects also decreased during 2020. The decline in number of contracts awarded in the IDB funded projects continued in 2021, but value of contracts awarded in the IDB funded projects increased in 2021 to US\$ 2.1 billion (Exhibit 58 and Exhibit 59).

23.3 25.0 Billion 18.2 20.0 13.9 14.8 14.9 14.4 15.0 /alue in US\$ 10.0 5.0 2.9 2.8 2.7 2.7 2.4 2.4 1.8 2.1 0.0 2019 2020 2021 2019 2020 2021 2019 2020 2019 2020 2021 2019 2020 2021 IDB WB **EBRD** ADB AfDB

Exhibit 58: Contracts Awarded by Major MDBs (in Terms of Value)

Note: Data for EBRD is not available for 2021

Source: IDB, WB, EBRD, ADB, AfDB, India Exim Bank Research

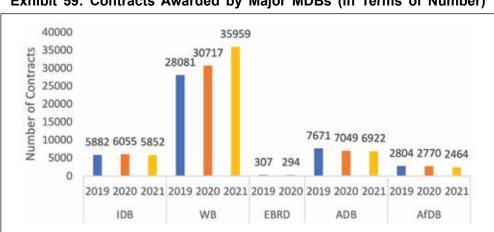


Exhibit 59: Contracts Awarded by Major MDBs (in Terms of Number)

Note: Data for EBRD is not available for 2021

Source: IDB, WB, EBRD, ADB, AfDB, India Exim Bank Research

Among the multilateral development banks, the Asian Development Bank stands out for its strong financial support during the pandemic period, and the resultant increase in the contract awarded in the projects. On the back of increased financial commitments by ADB, contracts awarded in ADB funded projects increased to US\$ 23.7 billion in 2020 as compared to US\$ 14.9 billion in 2019, a y-o-y increase of 59.0 percent. This was the largest quantum of contract award opportunity among MDBs during 2020. The increase in contracts awarded in ADB funded projects during 2020 could be attributed to greater procurement under Policy Based Lending (PBL) by the ADB. The policy- based support of ADB increased from US\$ 4.9 billion in 2019 to US\$ 12.4 billion in 2020. This accounts for 85.2 percent of the increase in the value of contracts awarded by the ADB during 2020.

ADB allocated a large portion of its crisis financing through a new budget support instrument, the Covid-19 Pandemic Response Option (CPRO). The CPRO provided quick-disbursing fiscal support for governments to implement countercyclical expenditure programmes to mitigate the impacts of the pandemic. Nearly all CPROs fall into the sector categorization of public sector management and health. As a result, value of contracts in the public sector management increased from US\$ 2.6 billion in 2019 to US\$ 9.4 billion in 2020 in the ADB funded project.

RISING DEBT BURDEN AND DEBT SERVICE SUSPENSION INITIATIVES

Public debt in emerging markets has surged to levels not seen in 50 years, and many developing countries have increasingly taken on debt on non-concessional terms—from private lenders and non-Paris Club members. In 2018, global debt reached a record high of about 230 percent of global GDP and total Emerging Market Developing Economy debt reached an all-time high of almost 170 percent of GDP, an increase of 54 percentage points of GDP since 2010¹⁷. Due to the Covid-19 pandemic, the debt burden of world's low-income countries further exacerbated, rising by 12 percent to a record US\$ 860 billion in 2020¹⁸. Across all low- and middle-income countries, the rise in external indebtedness outpaced Gross National Income (GNI) and export growth. Low- and middle-income countries' external debt to GNI ratio (excluding China) rose to 42 percent in 2020 from 37 percent in 2019, while their debt to export ratio increased to 154 percent in 2020 from 126 percent in 2019.

¹⁷World Bank

¹⁸World Bank

Recognizing the impact of the pandemic on the low-income countries, the G20 in April 2020 put in place the Debt Service Suspension Initiative (DSSI) as a framework to address the liquidity problems of low-income countries. With the encouragement of the WB, IMF and others, G20 economies suspended repayment of official bilateral credit by low-income countries, falling due between May 1 and December 31, 2020; later extending the deadline to December 31, 2021. This initiative was expected to safeguard the lives and livelihoods of millions of the most vulnerable people. The DSSI offered only a temporary suspension of "official sector" or government-to-government debt payments. The payments covered are not forgiven but delayed, with a repayment period of five years and a one-year grace period.

However, the DSSI was only a temporary liquidity support mechanism, but the low-income countries' financing needs to fight the pandemic would certainly go beyond 2021. There is a looming risk of default by a large number of borrowing governments, and the G20 and Paris club countries have already agreed to coordinate and cooperate on debt treatments for up to 73 low-income countries through the 'Common Framework (CF) for Debt Treatments beyond the DSSI'. The framework is designed to ensure broad participation of creditors with fair burden sharing, and includes India, which is not a member of the Paris Club.

IMPACT OF COVID-19 ON INDIA'S PROJECT EXPORTS

India is among the major exporters of construction services globally. India's construction services exports were also impacted due to the pandemic, registering a y-o-y decline of (-) 3.9 percent during 2020. In Q2 of 2020, the construction services exports from India witnessed a y-o-y decline of (-) 12.6, and a q-o-q decline of (-) 29.2 percent. The exports of construction services dipped further in third quarter, before recovering in Q4 2020 and Q1 2021 (Exhibit 60). By Q1 2021 in fact, exports of construction services from India had nearly recovered to the pre-Covid levels recorded in Q1 2019. The construction services exports from India were once again hit due to the pandemic in Q2 2021, dipping below the 2020 level, but recorded a sharp recovery thereafter in Q3 2021.

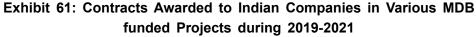
During 2020, value of contracts secured by the Indian companies witnessed an increase in the projects funded by the World Bank, the EBRD and the ADB, while it witnessed a decline in the projects funded by the AfDB. In the projects funded by the ADB, contracts secured by Indian companies increased from US\$ 3.2 billion in 2019 to US\$ 4.3 billion in 2020 (Exhibit 61). India's stronghold in the South Asian region continued, while Indian companies were also able to secure contracts in lesser explored geographies such as

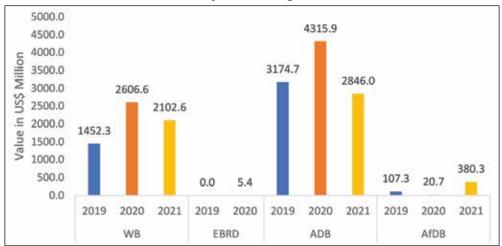
Turkmenistan, where the value of contracts awarded increased from US\$ 0.06 million in 2019 to US\$ 332.8 million in 2020. The contracts secured in Turkmenistan were majorly in the power transmission sector.

US\$ Million

Exhibit 60: India's Construction Exports (in US\$ Million)

Source: ITC Trade Map, India Exim Bank Research





Note: Data for EBRD is not available for 2021

Source: WB, EBRD, ADB, AfDB, India Exim Bank Research

In 2021, value of contracts secured by Indian companies in the World Bank funded projects and the ADB funded projects recorded a decline. The decline

in contracts secured in the ADB funded projects can be partly attributed to the decline in the value of contract award opportunities in the ADB funded projects during 2021. In AfDB funded projects, there was a significant increase in the contracts secured by Indian companies during 2021—increasing more than three times compared to the value of contracts secured in 2019 (Exhibit 61).

ROLE OF ECAS DURING THE PANDEMIC

The Covid-19 pandemic led several governments to turn to their ECAs as part of their toolkit for addressing the economic challenges. ECAs quickly introduced new programmes, enhancements, and adjustments for their customers to respond to the uncertainty. ECAs' countercyclical role re-emerged as they took steps to address financing gaps in the market by increasing capacity. Moreover, some ECAs expanded access to programmes by introducing flexibilities which were aimed at broadening their support to exporters and domestic champions. Some ECAs even reintroduced some programmes and flexibilities first put in place following the global financial crisis, such as EKN's (Sweden) working capital guarantee for large corporates and the European Union's removal of its ban on supporting short-term transactions in higher-income markets by EU ECAs (also known as "marketable risks").

ECAs were focusing not only on exports, but also on supporting domestic companies to help keep domestic economies afloat during the pandemic. Since the start of the Covid-19 pandemic, governments sought to keep domestic companies resilient, in order to protect their countries' economies and help the industrial bases tide over the crisis. According to the US Exim's Competitiveness Report 2020, ECAs focused on supporting exporting companies by providing new general-purpose working capital loans that were not tied to a single export contract. According to data published by the Berne Union, domestic support reached a peak of US\$ 29 billion in H1 2020, 34 percent greater than H1 2019. This comprised support for working capital (e.g., insurance on non-crossborder debt to finance the costs of the exporter) and internationalization (e.g., non-cross-border insurance on debt-financing for long term costs not directly linked to a cross border transaction such as manufacturing capacity expansion). For some ECAs, domestic support was managed under a separate account which could mean the amount of actual domestic support is higher than what was reported by the industry. ECAs supported companies' cash flow in 2020, with an eye on long-term export prospects. Domestic companies that interacted with ECAs under the various schemes announced as part of Covid-19 response were exposed to export tools and future export support opportunities provided by the respective ECAs. Some of the key initiatives by major ECAs are given in Box 2.

Box 2: Steps Taken by Various ECAs to Mitigate the Adverse Impact of Covid-19

India Exim Bank

In accordance with the RBI guidelines relating to Covid-19 regulatory package, the Bank had offered a moratorium package to all the borrowers under its commercial loan portfolio.

India Exim Bank also supported its existing clients with loan outstanding aggregating ₹ 96.87 million under the Emergency Credit Line Guarantee Scheme 1.0 (ECLGS 1.0). The Scheme was introduced as part of the ₹ 20 lakh crore (US\$ 265 billion) comprehensive package announced by the Ministry of Finance, Government of India to aid the Micro, Small and Medium Enterprises (MSMEs) sector in view of the economic distress caused by the Covid-19 pandemic. The Bank further supported its existing clients under a second version of the Scheme (ECLGS 2.0), which was introduced for loan outstanding above ₹ 500 million and up to ₹ 5,000 million.

India Exim Bank also approved policies in place for implementing a resolution framework to address Covid-19 related stress for its eligible borrowers under the commercial loan portfolio and a one-time restructuring of existing loans to MSMEs.

A further positive has been the launch of the Ubharte Sitaare Programme, aimed at offering future export champions a combination of equity, debt and technical assistance. The Ubharte Sitaare (USP) of India Exim Bank is aimed at identifying Indian enterprises with potential advantages by way of technology, products, or processes along with export potential, who are currently underperforming or are unable to tap their latent potential to grow. The nature of assistance under the USP includes a mix of structured support, both financial and advisory services through investments in equity / equity like

instruments; debt (funded and non-funded facilities); and technical assistance (including advisory services, grants and soft loans) to Indian companies.

ECGC

ECGC Limited has played an important role in supporting the Indian project exports industry by providing cost effective insurance and trade related services to meet the growing needs of exporters. To support the exporters

during Covid-19, ECGC extended the time for filing returns like declarations, extension applications, report of default, etc., under the insurance covers. Claim eligibility period (waiting period) under insurance cover was also reduced from 4 months to 1 month. Cover to banks was extended under the Export Credit Insurance for Banks (ECIB) scheme. Time limit for filing of extension in due date for Packing Credit and Post Shipment advances was extended, along with filing of report of default under the ECIB covers. Also, the Government of India approved capital infusion of ₹ 4,400 crore to the ECGC Ltd, over a period of five years, i.e. from FY 2021-2022 to FY 2025- 2026.

Korea Eximbank

An MOU was signed between the Korea Eximbank and the Korea Foundation for International Healthcare (KOFIH), to provide effective support for health and medical aid projects to developing countries. Further, the Korea Eximbank and Shinhan Bank signed an MOU to help restore the export vitality of Korean companies and secure future growth amid the slowdown in global trade due to the Covid-19 pandemic.

The Korea Eximbank also announced the execution of Emergency Financial Support Program (EFSP), a KRW 20 trillion (approx. US\$ 17 billion) relief fund programme for Korean companies suffering financial difficulties from the Covid-19. The volume of the support package was expanded to KRW 57.6 trillion (approx. US\$ 48.9 billion) by the end of 2020.

Exim China

Since the outbreak of Covid-19, Exim China immediately set up a leading group for pandemic control and made timely arrangements for implementing the decisions made by the CPC Central Committee and the State Council. By lowering interest rates, Exim China helped reduce the burden on a number of MSMEs hit hard by the pandemic. This move benefited over 260 MSMEs in 28 provinces, autonomous regions and municipalities, including all MSMEs in Hubei and MSMEs in wholesale and retail, and logistics and transport industry, which were severely hit by Covid-19.

Exim China also set up a special relief fund of RMB 50 billion (approx. US\$ 7.8 billion) to support foreign trade and manufacturing enterprises hit hard by Covid-19.

US Exim

The US Exim announced relief measures, including waivers, deadline extensions, streamlined processing, and flexibility for the US exporters and financial institutions impacted by the Covid-19 pandemic. Relief has been granted for the programmes on Working Capital Guarantee Program, Multi-Buyer and Single-Buyer Short-Term Insurance Program, and Medium-Term Single-Buyer Insurance Policies issued to exporters. Additionally, the US Exim temporarily increased capacity under Pre-Delivery/ Pre-Export Financing Program, the Supply Chain Financing Guarantee Program, and Working Capital Guarantee Program.

Export Development Canada

The Government of Canada enabled support to domestic activities by the Export Development Canada (EDC) during the Covid-19 crisis by temporarily increasing its mandate, effective until December 31, 2021. The Government of Canada, through the EDC and the Business Development Bank of Canada (BDC), made available added financial capacity to help support Canada's oil and gas sector. The commercial support, provided through the EDC and the BDC intended to help Canada's exploration and production, mid-stream, and oil-field companies.

EDC also introduced Canada Emergency Business Account (CEBA), a Covid-19 support programme. Financial support through this programme intended to cover non-deferrable expenses such as payroll, rent, insurance and utilities, with a portion eligible for loan forgiveness.

POST-PANDEMIC RECOVERY: WAY AHEAD

According to the United Nations, the average deficit-to-GDP ratio in LDCs, is expected to rise from 2.9 percent in 2019 to 5 percent in 2021. Consequently, there is a risk that LDCs may be forced to tighten their budgets prematurely. The trend is already evident across geographies. According to the World Bank, Sub-Saharan Africa's recovery is expected to remain fragile given the slow pace of vaccination and delays to major investments in infrastructure and the extractives sector. The Middle East and North Africa and the Latin America and the Caribbean are also expected to post growth too shallow to offset the contraction of 2020. A weak fiscal position and fragile economic recovery would affect the willingness of governments in developing countries to incur additional debt for financing developmental projects.

While sovereign funding for infrastructure is likely to remain constrained, funding by the MDBs is likely to increase. MDBs provide countercyclical lending at affordable rates, and the aftermath of the Covid-19 pandemic would see greater lending from these institutions to aid economic recovery. In 2020, MDBs (WB, AfDB, ADB, EBRD, and IDB) expanded lending by about 30 percent relative to the level in 2019. The lending commitments continued to expand across several MDBs even in 2021. For example, commitments by the International Bank for Reconstruction and Development (IBRD) for middle-income borrowers rose to US\$ 27.9 billion in FY2020, an increase of 20 percent over the previous year. Commitments by the IBRD further increased to US\$ 30.5 billion in FY2021. The lending by the MDBs is expected to remain considerable given the ongoing nature of the pandemic and heightened need for development financing. This would create more opportunities for Indian companies in the MDB funded projects.

CHAPTER 5: INTERNATIONAL COMPARISON

Analysis of contracts awarded across major sectors and regions/ countries in the MDB funded projects 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, as noted in the analysis in the previous chapter.

A survey of project exporters conducted by India Exim Bank indicates that China, Spain, and Italy are among the top competitors for Indian project exporters (Exhibit 62). As per the survey, among the developing countries, Turkey is another major competitor for Indian project exporters. A comparative analysis of India vis-à-vis its top competitors among developing countries is undertaken, to understand the relative market presence, and comparative advantages, as also to identify the areas for improvement for Indian companies.

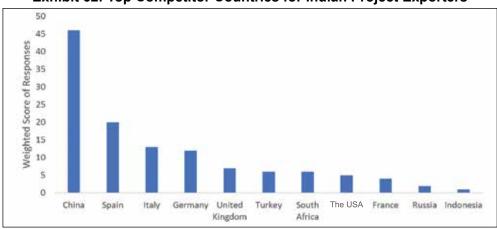


Exhibit 62: Top Competitor Countries for Indian Project Exporters

Note: Based on weighted sum of scores given by survey respondents

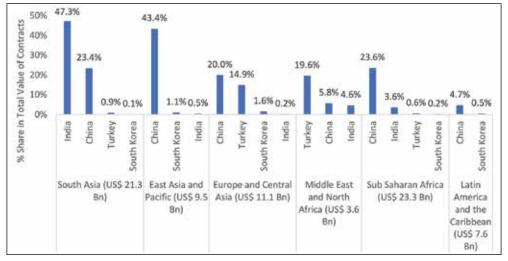
Source: India Exim Bank Research

REGIONAL PRESENCE

Comparison of the region-wise share of India and its competitors in the contracts secured in the World Bank funded projects indicates a clear hegemony of

China in the regions of East Asia and Pacific, Europe and Central Asia, and Sub-Saharan Africa. In the Middle East and North Africa, Turkey secured the maximum value of contracts in the World Bank funded projects during 2017-2021, among the countries taken into consideration (Exhibit 63). In the South Asia region, Indian companies secured the largest value of contracts in the World Bank funded projects but faced strong competition from Chinese companies. The success in LAC market has been limited for India, as also its competitors—China, Turkey and South Korea.

Exhibit 63: Region-wise Share of India and its Competitor Countries in the Value of Contracts Secured in the World Bank Funded Projects (Cumulative 2017-21)



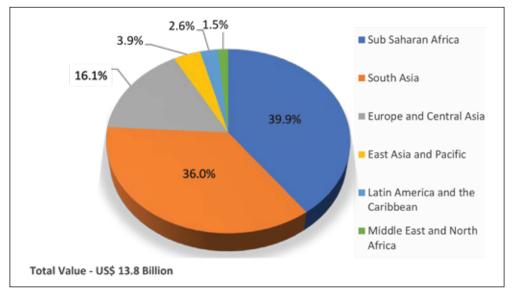
Source: World Bank, India Exim Bank Research

China

As noted in the previous chapter, China is a key competitor in the top regions where Indian companies have secured contracts in the MDB funded projects. Sub-Saharan Africa and South Asia are the top regions for overseas contracts¹⁹ secured by Chinese companies in the World Bank funded projects, with a share of 39.9 percent and 36.0 percent in the total value of overseas contracts secured by China in the WB funded projects during 2017-2021 (Exhibit 64). Both these regions are also important for Indian project exporters.

¹⁹Not including domestic contracts

Exhibit 64: Regional Presence of Chinese Companies in Overseas Contracts Secured in Projects Funded by the World Bank (Cumulative 2017-2021)



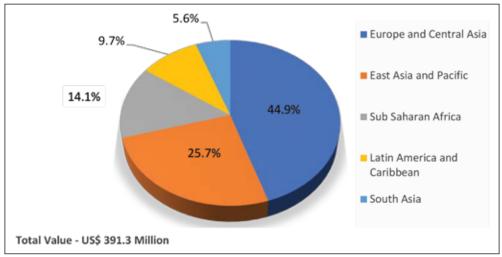
Note: Overseas contracts refer to contracts secured by China outside its own geography. Source: World Bank. India Exim Bank Research

Europe and Central Asia is also an important region for Chinese project exporters. Despite the geographical proximity of Central Asia, the strategic importance of the region, the Connect Central Asia policy of the GOI, and the recent membership in the EBRD, current penetration of Indian companies in this region remains low. China presents a stiff competition for India in its efforts to tap a greater share of opportunities in the Central Asian region.

South Korea

The overseas contracts secured by South Korea in the World Bank funded projects are mainly concentrated in the region of Europe and Central Asia, which accounted for a share of 44.9 percent in the total value of contracts secured by the country in the WB funded projects during 2017-2021 (Exhibit 65), followed by East Asia and Pacific (share of 25.7 percent). India has relatively lesser presence in both these geographies and would face competition from South Korean companies while making inroads in the project opportunities in these geographies.

Exhibit 65: Regional Presence of South Korean Companies in Overseas Contracts Secured in the Projects Funded by the World Bank (Cumulative 2017-2021)



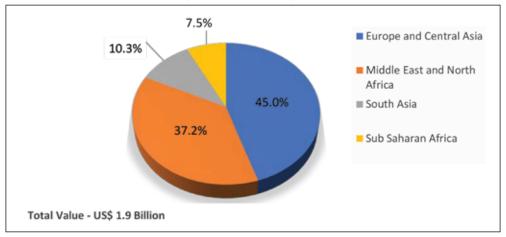
Note: Overseas contracts refer to contracts secured by South Korea outside its own geography.

Source: World Bank, India Exim Bank Research

Turkey

Like Indian companies, Turkish companies also began pursuing project export opportunities in foreign markets in the 1970s. In recent times, Turkish companies have expanded their activities across various regions. The major regions where Turkish companies secured overseas contracts were Europe and Central Asia, and Middle East and North Africa, with shares of 45.0 percent and 37.2 percent, respectively, in the total value of overseas contracts secured by Turkey in the WB funded projects during 2017-21 (Exhibit 66). The presence of Turkish companies in other regions such as South Asia and Sub Saharan Africa, is much lower when compared to China and India.

Exhibit 66: Regional Presence of Turkish Companies in Overseas Contracts Secured in Projects Funded by the World Bank (2017-2021)



Note: Overseas contracts refer to contracts secured by Turkey outside its own geography. Source: World Bank, India Exim Bank Research

KEY STRENGTHS OF COMPETITORS

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

Better Access to Finance

India Exim Bank's survey responses indicate that nearly 90 percent of the respondents perceive better access to finance as the key strength of India's competitors, while 50 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 the country of the ECA. In a buyer's credit, the ECA provides financing 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 longterm basis. India and its key competitors taken into consideration in the present analysis have a strong ECA framework in their respective countries.

China

Better access to finance is particularly a key strength for Chinese companies. 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 countries, and equity investments by Chinese state-owned enterprises in the project countries. Presence of such financing channels enhances the competitiveness and global positioning of Chinese companies²⁰.

Critical to the success of Chinese contractors in regions such as Africa and developing Asia has been the 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 Export-Import Bank of China, that provide financing support at subsidized interest rates to overseas governments, and also to 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, concessional loans from the Chinese government and Preferential Export Buyer's Credit authorized by the Chinese Government, with the 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:

²⁰The International Competitiveness of Chinese Construction Firms, Ali Parsa, Simon Huston, June 2015

- I. Concessional Loans by the Government of PRC: The Concessional Loan is typically a medium/ long-term low-interest credit designed to fund manufacturing 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. <u>Preferential Buyer's Credit</u>: 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. <u>Guarantees</u>: 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 eight years ago, has been an ambitious project by China. For many countries, the BRI presents an easier way to obtain infrastructure financing that they might not otherwise get, and without any conditionality such as the requirement for economic reforms. BRI also benefits Chinese companies in terms of increased business opportunities.

Recent data suggests that annual Chinese loans to African governments have witnessed a multifold increase, particularly since BRI was initiated. From nearly US\$ 0.3 billion worth of loans in 2001, Chinese loans increased to nearly US\$ 18.3 billion in 2013, and peaked at US\$ 29.5 billion in 2016²¹. However, the Chinese loans to African governments witnessed a continuous decline since 2016, reaching a level of US\$ 7.6 billion in 2019. Majority of the loans to African governments during the period 2000-2019 were extended by Exim China, and the CDB, which accounted for shares of 56.1 percent and 24.2 percent, respectively, in the total loans extended to the African governments by China (Exhibit 67). 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\$ 1.9 billion in 2019, mainly extended by China Development Bank and Exim China. These two financial institutions have provided a cumulative finance of over US\$ 138 billion in the LAC region during the period from 2005 to 2020²² (Exhibit 68). However, in 2020, for the first year since 2006, neither of the Chinese policy banks finalized any new loans or credit lines with LAC governments and the trend continued in 2021.

Despite there being no new loans, Chinese firms invested more than ever in LAC infrastructure, particularly in the electricity distribution sector²³.

19.6%

Eximbank

CDB

Others*

Exhibit 67: Annual Chinese Loans to African Governments by Lender: Cumulative (2000-2019)

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

Total Value - US\$ 153.4 Billion

²¹Based on loans data from Johns Hopkins SAIS China-Africa Research Initiative

²²Gallagher, Kevin P. and Margaret Myers (2021) "China-Latin America Finance Database," Washington: Inter- American Dialogue

²³2020: A Point of Inflection in the China-Latin America Relationship? By Rebecca Ray, Zara C. Albright, and Kehan Wang

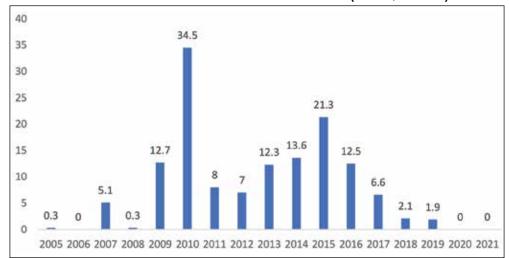


Exhibit 68: China's Loan to LAC Countries (in US\$ Billion)

Note: This includes loans from China's policy banks, China Development Bank and Exim China to Latin American and Caribbean governments and state-owned enterprises Source: China-Latin America Finance Database, www.thedialogue.org

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.

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

I. <u>Economic Development Co-operation Fund (EDCF)</u>: Economic Development Co-operation Fund (EDCF) is a bilateral Official Development Assistance loan programme 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.

- a) 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 and Equipment Loans for infrastructure building, account for the largest proportion of Exim Korea's lending assistance to developing countries.

- II. <u>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 requirements, capital investments, R&D, and overseas marketing activities of companies seeking to begin or expand exports.
- III. <u>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 for financing foreign subsidiaries of South Korean companies; and
 - c) Overseas Business Facilitation Loan for entities that contribute to the overseas business activities of South Korean companies.
- IV. <u>Guarantees</u>: 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 money bonds in order to support transactions that serve to promote exports and enhance export competitiveness, Import-Related Performance Guarantee for all transactions related to imports that are essential for the national economy, and Overseas Business-Related Performance Guarantee for all transactions that facilitate overseas investment or overseas business activities.

Turkey

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 and Turkish economies. One of its main objectives is 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 programmes.

Turk EximBank's financing programmes related to project exports include:

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

I. <u>Line of Credit</u>: LOCs refer to developmental assistance, routed through India Exim Bank, that are extended to partner developing countries, under the Indian Development and Economic Assistance Scheme (IDEAS) of Government of India, 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. India Exim

Bank extends LOCs at the behest and with the support of the GOI and also on its own.

- II. <u>Buyer's Credit under National Export Insurance Account (BC-NEIA)</u>: Through the BC-NEIA, India 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. India 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 goods and services from India.
- 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 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 stiff competition from bidders from other countries.
- IV. <u>Export Project Cash Flow Deficit Finance (EPCDF)</u>: Export Project Cash Flow Deficit Finance (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.
- V. <u>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 other ECAs in competitor countries, unlike other ECAs, the current position of India Exim Bank is of paradoxical nature requiring the Bank to play a development role in supporting project exports through medium to long term financing, while being bound by prudential norms that are applicable to commercial banks. Further, unlike other ECAs, India Exim Bank is constrained by a relatively lower capital base, with a capital stock of US\$ 2.1 billion as of March 31, 2020, which is much below that of Exim China (which is at US\$ 23.0 billion) and Exim Korea (US\$ 11.4 billion) (Table 3). To enable India 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.

Table 3: Comparison of the Share Capital of the ECAs (Values in US\$ Billion)

Year	Exim China	Exim Korea	India Exim Bank
2015	23.1	7.5	1.0
2016	21.6	8.6	1.1
2017	23.1	11.1	1.1
2018	21.8	10.6	1.8
2019	21.1	10.2	1.8
2020	23.0	11.4	2.1

Note: Year refers to the respective financial years for the institutions

Source: Annual Reports of the Financial Institutions

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, incentive structures in countries, 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 India Exim Bank's survey, only 40 percent respondents perceive institutional support to be among the key strengths for Indian project exports, while nearly 80 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 secure a large number of projects, particularly in construction segment in these countries, and in turn, accumulate substantial experience in these geographies²⁴. Further, the Government of China extends concessional loans to developing countries, through Exim China. These low-interest, long tenor credit facility to developing countries, for projects in sectors such as manufacturing, infrastructure construction

²⁴Are Chinese contractors competitive in international markets?, ZHEN YU ZHAO and LI YIN SHEN, January 2008

and social welfare, in turn, facilitate exports of Chinese products, technology services and other goods to the borrowing countries. 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. The revenue has increased from US\$ 9.2 billion in 1998 to US\$ 172.9 billion in 2019 (Exhibit 69). The gross annual revenues of Chinese companies from global construction projects witnessed a robust CAGR of 7.2 percent during 2010 to 2019.

Exhibit 69: Gross Annual Revenues of Chinese Companies from Global Construction Projects



Source: Johns Hopkins SAIS China-Africa Research Initiative

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 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 groups²⁵. The Government of South Korea also provides bilateral official development assistance loans under the Economic Development Co-operation Fund, which is administered through Exim Korea, which not only encourages a sound economic relationship between Korean companies and partner countries, but also promotes project exports from the country.

Turkey

The Turkish government has also supported the Turkish companies, especially through signing of 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 construction companies reinforce their export competitiveness in the Russian market. The Turkish government has sustained its active role in supporting the construction industry by introducing additional support for companies that intend to establish business in foreign markets²⁶. 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 competitive strength in other countries' markets by keeping construction sites and mobilization-engine parks functioning²⁷.

India

The Government of India, in 2003-04, formulated the Indian Development Initiative, now known as the Indian Development and Economic Assistance Scheme. Under IDEAS, the GOI provides development assistance to partner countries for large scale and often complex project exports through the LOC programme, which is routed through India 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

^{25 &}quot;Comparative Study of Japanese and Korean Construction Industries' Overseas Market Strategy", JUNSEOK LEE, SHUZO FURUSAKA

²⁶ Analysis of International Competitiveness of the Turkish Contracting Services, Beliz ÖZORHON, Sevilay DEMiRKESEN, December 2014

²⁷Export Credit Bank of Turkey

Concessional Financing Scheme, which is also routed through India Exim Bank. However, given the quantum of opportunities that exist for project exporters, the support from the Indian government remains relatively lower compared to that of the competitor countries such as China and South Korea.

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 use of advanced technologies. The implementation of huge numbers 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, such as 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 Project²⁸. As a result of the 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.

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 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

²⁸Are Chinese contractors competitive in international markets?, ZHEN YU ZHAO and LI YIN SHEN, January 2008

spending increased to over 2 percent of GDP, of which, more than 70 percent was accounted for by the private sector²⁹. 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 construction industry.

Turkey

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 placed 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 was 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

The technological capabilities of Indian companies are evident from their engagement in critical, high-technology projects. For example, India 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.

However, other than a few niche areas where India holds technological advantage, the current state of technology in the country has been lagging behind other competitor countries. As per the survey responses, 50 percent respondents perceive technology as an advantage for Indian project exporters in the overseas

²⁹Technology, globalization, and international competitiveness: Challenges for developing countries, Carl Dahlman

market, whereas nearly 60 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 to the development of domestic technological research, and build platforms for knowledge sharing and networking across the sector. More such initiatives for across-the-board technological improvement would be critical for success in project exports from the country.

Availability of Equipment and Raw Materials

Cheaper availability of raw material is a key factor for the competitiveness of competitors, particularly China. Relatively lower cost of construction machinery, material and equipment allows reduction of the bidding price by the 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. Research suggests that the cost per square metre of construction for Chinese contractors is one-quarter of that of the Europeans companies³⁰. 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 countries31. Accordingly, the construction costs to Chinese contractors are much lower. Further, China is the topmost producer of crude steel in the world, producing nearly 1032.8 million tonnes in 2021 (share of 53.0 percent in global production), whereas India, despite being the second largest producer of steel, remained significantly behind China in terms of production capacity, at 118.1 million tonnes in 2021³². Consequently, in 2021, due to relative abundance of steel, the average finished steel prices in China are much lower, at US\$ 826.4 per tonne³³, as compared to India where the average price stood at approximately US\$ 1008.6 per tonne³⁴. Clearly, Chinese contractors have a significant supply and cost advantage in sourcing steel vis-à-vis India.

³⁰The International Competitiveness of Chinese Construction Firms, Ali Parsa, Simon Huston, June 2015

³¹Are Chinese contractors competitive in international markets?, ZHEN YU ZHAO and LI YIN SHEN, January 2008

³²World Steel Association

³³Average price of hot rolled coil during 2021, sourced from CMIE Industry Outlook, converted in US\$ as per average exchange rate of 2021 sourced from https://www.exchangerates.org.uk/

³⁴ Average finished steel prices are based on prices of hot rolled coils (3.15 mm) in the Delhi, Chennai, Mumbai and Kolkata market for 2021; Sourced from CMIE Industry Outlook, converted in US\$ as per average exchange rate of 2021 sourced from https://www.exchangerates.org.uk/

Human Resource Capabilities

Manpower costs assume a major part of the expenses in the 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 industry was nearly US\$ 600 in 2004, about US\$ 29000 in the USA construction industry in 2002, and about US\$ 48000 in the Japanese construction industry in 200235. However, in the later years, Chinese domestic labour 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 the 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. In particular, most Chinese workers are multi-skilled and could be involved in each stage of construction.

Even in the case of Turkey, the low cost of labour is considered to be among the main strengths in competitive bidding by companies. According to a report, Turkish contractors managed to undertake a high number of projects abroad mainly due to lower employment costs compared to those in competitor countries³⁶.

As per the responses to the India Exim Bank's survey, human resource capabilities (i.e, cost effective, highly skilled and high adaptability) of Indian companies is believed to be one of the core competitive strengths of the Indian companies.

CONCLUSION

From the above analysis, it emerges 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

³⁵Are Chinese contractors competitive in international markets?, ZHEN YU ZHAO and LI YIN SHEN, January 2008

³⁶Analysis of International Competitiveness of the Turkish Contracting Services, Beliz ÖZORHON, Sevilay DEMIRKESEN, December 2014

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 to further boost project exports from the country.

CHAPTER 6: CHALLENGES

In order to analyze the challenges and constraints faced by the Indian project exporters in overseas projects vis-à-vis their competitors, India Exim Bank conducted a survey of major project exporters in the country. Results of the survey indicates that competition from other countries like China is the biggest challenge for Indian project exporters. High cost of raw material, high political risks, high business risks, remote site access and severe site weather constraints, institutional delays (such as land acquisition, planning and approval delays, passiveness in decision making), and low labour productivity are some of the other challenges faced by Indian companies in executing overseas projects (Exhibit 70). Some of the key challenges faced by project exporters are discussed in detail in this Chapter.

High Political risks in Project country Financial constraints (Cash flow 40. Lack of professional project issues, delay in payment to managers contractors etc) High business risk High cost of raw materials 20 Delay in procurement of resources Lack of skilled and affordable and material labour locally Remote site access and severe site Lack of local labour productivity weather constraints ompetition from other countries Lack of Legal recourse like China Institutional delay in project country

Exhibit 70: Challenges Faced by Indian Project Exporters

Note: Based on weighted scores given to survey responses

Source: India Exim Bank Research

HIGH POLITICAL RISK AND HIGH BUSINESS RISK IN PROJECT COUNTRIES

The survey results indicate that high political risks and business risks in project countries are major constraints faced by the 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.

An analysis of political risk across different regions indicates that the top markets for Indian project exporters viz., Africa, South Asia and the Middle East also have higher political risk as compared to other regions, as evinced by the average score of the regions based on the country risk estimates by Euromoney (Exhibit 71).

Western Europe 80.0 Africa 70.0 North America 60.0 500 9O.O. South Asia Oceania 30.0 20.0 10.0 0.0 South-East Asia East Asia Central Asia Eastern Europe Eatin America and the Middle East Caribbean

Exhibit 71: Region-wise Average Political Risk Assessment Scores

Notes: 1. Political risk assessment scores range from 0 to 100, wherein a higher score indicates lesser political risk and vice versa.

Country-wise scores were obtained from Euromoney Country Risk, which were then standardized and aggregated to calculate the average score of the respective regions.

Source: Euromoney Country Risk; India Exim Bank Research

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, and cost overruns due to changes in operational cost, due to factors such as wage increase. Secondly, there are 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, labour laws, etc. Institutional delays in the project country, which is also among the key challenges faced by project exporters as per India Exim Bank's survey, further aggravates the business risks for contractors in international projects.

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 labour restrictions) by host governments or political groups. Compared with the non-systemic 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 activities³⁷.

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 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.

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 72).

In the emerging markets of Latin America and Caribbean, wherein the opportunities for infrastructure projects are significantly large, Indian presence is very limited. As per the data for World Bank contract awards secured by Indian companies, Belize, Dominica, and St. Lucia were the

^{37 &}quot;Identifying Political Risk Management Strategies in International Construction Projects", Chang, Hwang, Deng, and Zhao, May 2018



Exhibit 72: Most Challenging Geographies for Indian Project Exporters

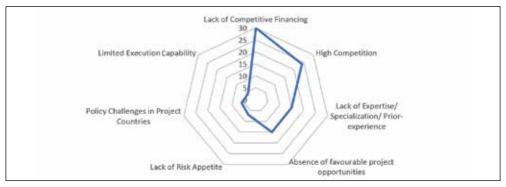
Note: Based on weighted scores given to survey responses.

Source: India Exim Bank Research

only countries in the LAC region wherein Indian contractors secured projects during 2017-2021. This is in spite of the fact that 70 percent of the respondents in the project exports survey did not consider greater distance from home country as a barrier for project execution. Nearly 60 percent of survey respondents also did not consider local/ regional language as a significant barrier.

The survey results indicate that lack of competitive financing, high competition. lack of expertise/ specialization/ prior experience and absence of favorable project opportunities are the top factors restricting Indian project exporters from exploring newer geographies and sectors (Exhibit 73). Especially in the context of the LAC region, a major 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 in 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 59 contracts valued at US\$ 1.8 billion, since it became a member in 2009. Of these, nearly 92.0 percent of the contracts (in value terms) were secured through international competitive bidding. The value of contracts may be even higher as it does not include contracts secured by the subsidiaries of Chinese companies that can 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 in IDB significantly affects the access of Indian project export companies in the LAC market.

Exhibit 73: Factors Restricting Indian Project Exporters from Exploring Opportunities in Newer Geographies/ Newer Sectors



Note: Based on weighted scores given to survey responses.

Source: India Exim Bank Research

SCOPE FOR IMPROVING 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.

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 39.7 percent during 2018-19, up from 21.9 percent in 2015-16 (Table 4), indicative of the improving competitiveness of Indian exporters in the project exports space.

Table 4: 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
2014-15	167	37	22.2%
2015-16	178	39	21.9%
2016-17	268	74	27.6%
2017-18	292	75	25.7%
2018-19	242	96	39.7%

Note: Based on Sample size of 13 companies. Bid conversion ratio is high due to inclusion of projects under LOC.

Source: Based on Exim Bank Survey

However, the above data includes contracts awarded under programmes such as the LOCs. It is noteworthy that the competition in bidding processes under LOC is restricted to Indian firms only, and hence, the above analysis may not be the true representation of ICBs, and the actual capabilities of Indian companies in successful bid preparation.

In contracts for EBRD-financed projects as well, the bid conversion percentage for Indian companies is better than its competitors such as China and Turkey. While the bid conversion percentage for Indian companies in EBRD funded projects stood at 20.0 percent in 2020, it was lower at 7.6 percent for China and 14.0 percent for Turkey. However, the total number of contracts and the value of contracts secured by Indian companies in EBRD funded projects were relatively low as compared to these competitors. South Korea had better bid conversion ratio than India, but also had a low share in the value of contracts secured in 2020 (Table 5).

Analysis further indicates that the number of EBRD tenders in which Indian companies participated is itself low as compared to other competitor countries, thereby affecting the share of Indian companies in the EBRD contracts. Clearly, there is a need for mechanisms to disseminate information on project opportunities, especially in relatively untapped geographies, and assisting companies in preparation of responsive bids.

Table 5: Bid Conversion Ratio in Contracts for EBRD Funded Projects (2020)

Country	Total Number of Tenders Applied	Total Number of Contracts Won	Share in Total Value of Contracts	Bid Conversion Percentage
China	92	7	9.23%	7.6%
India	5	1	0.20%	20.0%
Turkey	57	8	14.92%	14.0%
South Korea	14	3	0.62%	21.4%

Source: EBRD Annual Procurement Review, India Exim Bank Research

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 India Exim Bank, the RBI and the ECGC. Proposals at bid stage were referred to the Working Group, if the value of the proposal exceeded delegated powers of India Exim Bank/

commercial banks or did not satisfy the broad conditions of delegated powers. The Working Group functioned under the auspices of India Exim Bank for the purpose of giving package approvals for proposals submitted by exporters to bid for 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 India 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 India Exim Bank / commercial banks based on their commercial judgement, and India Exim Bank / commercial banks would monitor the projects for which post-award approval has been granted by them. As a result of these developments, India Exim Bank no longer has access to a comprehensive data on project exports and hence is unable 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 Reserve Bank of India to send a copy of post award approvals for project export contracts / supply contracts as and when such approvals are accorded to the India Exim Bank. The AD Category-I banks were also advised to email data in the format as prescribed in the circular to India Exim Bank. However, the reporting of the data has been a challenge.

In the absence of the data from banks, the current source of data on projects is PEPC. PEPC compiles the data on project export orders secured during a financial year, even though the underlying flow of products and services utilized in overseas projects during the execution phase is not captured since there is no head or code for project exporters to declare the same. Moreover, the data compiled by PEPC pertains to contracts awarded to PEPC members only, and the submission of such data is done by members on voluntary basis. Therefore, the figures reported by PEPC may be an underestimation of the actual figures.

FINANCIAL CONSTRAINTS TO PROJECT EXPORTS

Projects are financed through a variety of routes, including funding by Sovereigns, MDBs, Development Financing Institutions, as also by the 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 the 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 weighing scales on relative financing terms. The ability to secure sizeable, low-interest facilities is an important aspect of securing project exports.

An analysis of the responses to the survey of project exporters conducted by India Exim Bank indicates that lack of competitive financing is the topmost reason that restricts Indian project exporters from exploring opportunities in newer geographies such as Latin America, and newer sectors such as health, social projects, education, renewable energy, irrigation etc. Financial constraints can also result in delays in completion of projects and in many cases, may also affect the quality of execution of projects.

BETTER GOVERNMENT SUPPORT TO ECAS OF COMPETITOR COUNTRIES

Given the important role of ECAs, there is a need to strengthen these institutions in India. As noted in the previous chapter, the capital base of ECAs in competitor countries is much higher than that of India Exim Bank. Further, regulatory requirements for India Exim Bank are also stricter than several other ECAs. For instance, the ECAs in countries like the US, Japan and Canada are currently exempt from payment of income tax. Exemption from income tax enables these ECAs to plough back their entire profits into their operations. Although India Exim Bank was earlier exempt from income tax, its tax exemption status has been withdrawn w.e.f. April 1, 1999 (Table 6). Moreover, regulations on leverage ratio are also relatively more restrictive for India Exim Bank as compared to its peers. Currently, the RBI allows India Exim Bank to leverage only 10 times of its netowned funds (NOF), while its counterparts can have a much higher leverage ratio. Exim Korea, for example, is allowed to leverage 30 times its total amount of paid-in capital and reserve funds.

Table 6: Comparison of Government Support Received by Select ECAs

Export Credit Agencies	Share Capital Infusion	Sovereign Guarantee for borrowings	Tax Exempt Status
India Exim Bank	✓		
US Exim	✓	✓	✓
EDC Canada	✓	✓	✓
JBIC Japan	✓	✓	✓
Exim Korea	✓	✓	
Exim China	✓		

Source: India Exim Bank Research

Besides, borrowings of ECAs in countries like South Korea, Canada, the US, and Japan are also guaranteed / supported by their respective governments. In case of JBIC (Japan), its foreign notes and bonds are guaranteed by the Japanese Government. In case of Exim Korea, Article 20 (Export-Import Financial Debentures) of the Export-Import Bank of Korea Act, provides that "The Export-Import Bank may issue export-import financial debentures as prescribed by Presidential Decree (Para 1); and the Government may guarantee the repayment of the principal and interest accrued therefrom for the export-import financial debentures (Para 2)". India Exim Bank's access to funds from the Gol/ RBI is low and the Bank currently depends entirely on market borrowings, raising funds, inter alia, by way of private placements of rupee bonds/ term loans from banks, at commercial rates. It also taps the international markets by way of a variety of instruments in different market segments, to reduce the cost. As India Exim Bank is fully owned by the GOI, it is treated as guasi-sovereign and its international rating is the same as that of the sovereign. However, India Exim Bank's domestic borrowings are at commercial rates of interest. Moreover, India Exim Bank, like other Indian entities, is also required to pay withholding tax on the interest outgo on overseas borrowings. Where the proceeds of borrowings by India Exim Bank are used for business carried outside India, the Bank is not required to withhold tax in India. But international borrowings for business within India are subject to withholding tax. The incidence of withholding tax on overseas borrowings restricts the Bank's ability to offer internationally competitive credit packages. On account of the critical role of competitive financing in project exports, the GOI could consider waiving off the withholding tax on India Exim Bank's overseas borrowings. Additionally, Government guarantees could also be made available to India Exim Bank's overseas borrowings. Such government guarantees

will be available to the recently set up DFI viz. The National Bank for Financing Infrastructure and Development, for its borrowing from multilateral institutions, sovereign wealth funds, and other foreign funds. As per the act, the GOI shall prescribe a concessional rate of fees, not exceeding 0.1 percent at which Government guarantee may be extended to the Institution, for its borrowings³⁸.

DOMESTIC CHALLENGES TO FINANCING FOR EPC COMPANIES

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 29.5 times³⁹ during 2020-21, indicating significantly high interest burden on outstanding debt in these companies. Many of the EPC companies are also in the process of debt resolution⁴⁰.

Given the broader credit issues prevailing in the Indian economy pertaining to the high NPA levels, 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. However, the tougher financing environment translates into reduced opportunities for project exports, as also stalling of projects under implementation.

The economic contraction and additional shocks from the Covid-19 pandemic have put further pressure on enterprises' liquidity and cash flow position. Besides, the pandemic is also likely to adversely impact the asset quality of the banking system. Strained balance sheet of companies and risk of defaults in the aftermath of the pandemic could set off another vicious cycle of loan losses, capital shortfalls and risk aversion in the banking system. There has also been slowdown in NPA recovery as the IBC remained suspended till March 2021 and the recovery rate under the IBC remains at a low level. In a bid to better manage the NPAs of public sector banks, the Government has set up the National Asset Reconstruction Company Ltd (NARCL), and the India Debt Resolution Company Ltd (IDRCL) to clean up the balance sheets and stem losses. Setting up of these institutions could revitalize the credit growth in the system.

³⁸ As Per Chapter V (Clause 22) Of the National Bank for Financing Infrastructure and Development Act, 2021

³⁹Based on data from a sample set of 185 companies in infrastructure construction sector from CMIE Prowess Database.

⁴⁰"Credit Ratio Edges up, Some Headwinds Ahead", CRISIL, April 2019

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 support⁴¹ 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). In fact, ODA is the most important source of non-national funding for LLDCs, particularly for lower-income economies. The commitment of developed economies as per the SDG target was to dedicate 0.7 percent of their GNI to ODA for developing countries, with 0.15 to 0.20 percent dedicated exclusively to LDCs. However, the actual ODA funds made available to developing countries have failed to reach even half of the commitments in any year during the period 2002-2019. ODA funds made available to LDCs reached the commitment level only once during 2002-2018, in 2006 (Exhibit 74).

Long-term investment in infrastructure for sustainable development, especially in developing countries with special needs (LDCs, LLDCs and SIDS) remains insufficient and has stagnated in recent times, despite the immense opportunities for infrastructure financing in these countries. The official international support to infrastructure accounted for only 19.3 percent of the total official international support in 2019, rising marginally from 18.1 percent in 2010⁴².

⁴¹Comprising official development assistance plus other official flows

⁴²Source: SGD Pulse, UNCTAD

0.8 of Gross National Income of Gross National Income 0.7 0.25 committed/disbursed committed/disbursed 0.6 0.2 0.5 0.4 0.3 0.1 0.2 0.1 0 2006 2007 2009 2009 2010 2011 2012 2013 2015 2015 2015 2016 蒙 × 2002 2004 2006 2008 2010 2012 2014 2016 2018 Disbursements to all developing countries (including LDCs) Disbursements to LDCs -Commitments range-low -Commitments range high Commitment range

Exhibit 74: Net ODA to Developing Countries and LDCs

Source: SDG Pulse, UNCTAD

While ODA to infrastructure 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 bankable projects, due to the low debt servicing capability of such countries. According to the latest Debt Sustainability Analysis by the International Monetary Fund (IMF), 37 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 June 30, 2021⁴³. Most of these countries are in Africa and Asia, the major project destinations for Indian companies. Several of these economies had already reached unsustainable debt burden levels by end-2019. With the onset of the Covid-19 pandemic, the financing needs to combat the impact of the pandemic increased significantly, thereby further limiting the fiscal capacity of developing countries to finance their infrastructure needs.

In the wake of these developments, the Debt Service Suspension Initiative, as discussed previously, provided some temporary relief for the crisis-ridden low-and middle-income economies. However, suspending debt repayments only for a few months (up to December 2021) relies on the assumption that the Covid-19 shock will be short-term in nature, and that economic activity will resume to pre Covid-19 levels by end-2021, to the extent that developing countries joining the initiative will be in a position to bear the suspended debt service repayments over the next few years. As noted above, the pandemic has come at a time when a few countries are already in debt distress, apart from facing issues such as low export revenues, strained government revenues and reduced reserve holdings. To that end, the DSSI's efforts to ease liquidity pressure remains insufficient, as

⁴³Source: IMF

there persist several other issues of structural insolvency and long-term debt sustainability faced by these economies.

In the context of project exports, inadequate financing capacity of the project country would pose a significant challenge to contractors, and would also influence the financing pattern of projects, going forward. More countries are expected to seek private participation in infrastructure projects at the financing stage as well. However, 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 G20 task force on infrastructure emphasizes that the investment gap in infrastructure is not the result of a shortage of capital, but a result of lack of bankable and investment-ready projects⁴⁴. Creating a pipeline of bankable projects will be crucial to translate the infrastructure needs into infrastructure demand, and attract more private investments in infrastructure development.

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 major 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 among the 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

⁴⁴ Investing in Resilient, Future-oriented Growth Boosting Infrastructure Investment and Balancing Financial Regulation, Business20 Dialogue, G20 Germany, 2017

clearances are sequential, and not concurrent. Also, in many cases, there is lack of coordination among 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 studies⁴⁵.

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. 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.

⁴⁵"Mitigation of Political & Regulatory Risk in Infrastructure Projects Introduction and Landscape of Risk", World Economic Forum, January 2015

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

Limited availability of skilled and affordable labour and low labour productivity in the project countries are some of the serious issues faced by the Indian project exporters in the overseas markets. A few project exporters also consider the limited availability of professional project managers to be a constraint for executing project exports. Region-wise analysis of labour productivity in India's key destinations indicates 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 period 2008 to 2019. Other major destinations for Indian projects such as South Asia and Southeast Asia, also exhibit low labour productivity in comparison to other regions such as Europe and Central Asia, where Indian presence is relatively low (Exhibit 75).

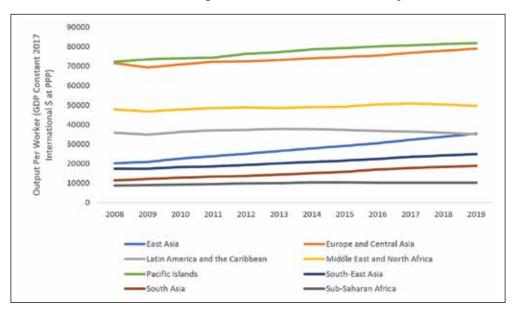


Exhibit 75: Region-wise Labour Productivity

Source: ILO, India Exim Bank Research

From a labour costs perspective, several Asian countries such as Cambodia, Vietnam, Malaysia and the Philippines have been facing rapid rise in wages across the spectrum due to an increase in the minimum wages in these countries. The average minimum wage of East and Southeast Asia was just around 56.4 percent of the global average in 2015 but has risen to nearly 67.3 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, are particularly affected by the rise in labour cost.

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 countries⁴⁶. In the Democratic Republic of the Congo, for example, several different visas (for entry, exit, and working establishment) are required for working professional, which becomes burdensome. In Nigeria, the eligibility criteria for a visa for a skilled worker are considered 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 in the movement of personnel across geographies.

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.

⁴⁶The four main barriers to talent mobility in Africa", Khalid Koser, June 2014, World Economic Forum

CHAPTER 7: STRATEGIES AND THE WAY FORWARD

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 India's 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 improve competitiveness of Indian project exporters. The strategies focus on the key aspects of competitiveness highlighted in earlier chapters viz. greater financing support, operational improvements, strategic institutional membership, building capacities, strengthening bilateral/ multilateral arrangements to boost project exports, and 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.

Regulatory Easing and Borrowing Support

India 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 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, India Exim Bank 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 India Exim Bank could be considered.

The RBI's IRAC norms could also be relaxed for India Exim Bank's BC-NEIA programme.

Further, India 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.

The GOI could also consider waiving off the withholding tax on India Exim Bank's overseas borrowings. The GOI guarantees as available to the recently set up, National Bank for Financing Infrastructure and Development could also be considered for India Exim Bank on its overseas borrowings.

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 towards un-tieing 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 recipient developing countries need the loans structured in concessional terms, with longer tenor and greater moratorium. In some cases, especially for the highly 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.

The Government of India also extends concessional financing to countries under its development partnership programmes. India Exim Bank is an important agent of the Government of India's development assistance programmes for supporting industrial and infrastructural development in other developing countries. While majority of the support under the LOC programme, routed through India Exim Bank, meets the IMF concessionality requirement, the interest rates in programmes such as the BC-NEIA and CFS are linked to the floating interest rates and do not satisfy the minimum grant element mandated by the IMF/ WB for LDCs/ HIPCs, and thus cannot be classified as concessional lending. Lowering the interest rates, and extending the loan tenor and moratorium are some of the ways by which the scope of concessionality can be expanded. 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.

To further enhance the scope of concessionality, interest subvention could be provided under Buyer's Credit Programme of India Exim Bank. It may be noted that the GOI provides interest subvention on pre-shipment and post-shipment credit⁴⁷ to a wide array of sectors and MSMEs, to enable exporters in these sectors to offer competitive pricing in the international market. Further, the GOI also provides interest equalisation support for GOI-supported Lines of Credit, which allows Indian project exporters to tap opportunities for infrastructure development in overseas markets. There is also a need to provide a similar support to project exports under the Buyer's Credit under NEIA and Buyer's Credit-Commercial programmes of India Exim Bank. These facilities allow project exporters to take up large scale projects in different markets, including the advanced countries that cannot be accessed through the support provided under the LOC programme.

Given the significance of competitive financing in securing overseas contracts, the GOI could consider providing an interest subvention for project exports supported under the Buyer's Credit programme of India Exim Bank. This would compensate for the differential in interest rates and substantially improve the cost competitiveness.

Risk Mitigating Instruments in Foreign Currency

Role of insurance and guarantee facilities is also important in enhancing competitiveness of exports. As per global best practices, risk covers are granted in the currency of the credit. However, this is not the case in India.

⁴⁷The scheme was initially due for expiration on March 31, 2021 but was extended without any change in scope and coverage till September 31, 2021. The RBI, vide its notification dated March 08,2022 modified and extended the scheme with effect from October 1, 2021, till March 31, 2024.

In India, cover from ECGC Ltd. is instrumental in mitigating the risks associated with project exports. However, ECGC, as per IRDAI norms, is not allowed to extend cover in foreign currency. This entails additional hedging cost for project exporters or the lending institutions looking for risk mitigating instruments in foreign currency. Especially in context of the BC-NEIA programme, India Exim Bank not only obtains cover from the NEIA through ECGC up to 100 percent of the facility amount, but also an additional 50 percent coverage for exchange rate fluctuations till the repayment.

Credit insurance cover in foreign currency can significantly reduce the transaction costs for exporters. Thus, the insurance/ guarantee cover should also be made available in foreign currency. Special dispensation could be accorded by IRDAI to ECGC Ltd. for providing cover in foreign currency at least under NEIA, if not under other schemes of ECGC, given the long duration of credit extended under the BC-NEIA programme. Regulatory supervision for such foreign currency cover can be provided by the RBI, which is also the regulator for export credit in the country.

REVIEWING MINIMUM LOCAL CONTENT REQUIREMENT

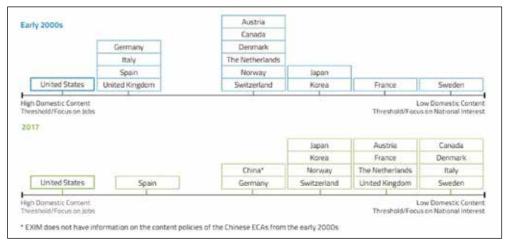
The LOCs have been instrumental in enabling Indian project exporters to enter new geographies, expand their existing businesses, and avoid payment risk from overseas importers. Under the Lines of Credit facility, the stipulated local content requirement stands at a minimum of 75 percent of the value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

India Exim Bank's survey responses as also interactions with project exporters suggests that many Indian project exporters believe that meeting the minimum content requirement could be a challenge, especially in far away markets, 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, aggregate, sand, dust, ballast, petrol, oil and lubricants, spares etc. is such that it is difficult to ship these products from India and, thus, need 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.

The requirement of high levels of domestic content by ECAs is 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 domestic 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 domestic content requirements since 2000 (Exhibit 76).

Exhibit 76: Shift in Domestic Content Requirement in Select ECAs (2000 & 2017)



Source: Exim Bank of the United States, OECD, Berne Union

In effect, there are two approaches adopted by ECAs to provide flexibility to companies in meeting the domestic content requirement. First is to lower the threshold of minimum domestic content required 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 domestic content, towards a long-term strategic approach to macroeconomic expansion and overall national employment.

In the Indian context, while relaxing the minimum domestic content requirement may not be prudent, in line with best practices adopted by some ECAs, the value-added approach could be considered, in order to maximize the flexibility in domestic content requirement in certain segments of project exports, and in select geographies. Further, in the context of civil construction projects executed by Indian companies, relaxation of domestic content requirement could be considered by the GOI for key raw materials from the current levels of 75 percent to 50 percent, with the condition that raw materials be sourced locally from the project country itself to the extent of the relaxation provided to the company. In such cases of relaxation, strict restriction may be imposed on imports of raw materials from any third country.

COUNTERTRADE AS A MECHANISM FOR ENHANCING PROJECT EXPORTS

As discussed in the previous chapter, 37 out of the 70 Low-income Poverty Reduction and Growth Trust (PRGT)-eligible countries considered by IMF in its Debt Sustainability Analysis, are in debt-distress or in high risk of debt-distress as of June 30, 2021. Several of these economies had already reached unsustainable debt burden levels by end-2019. In the wake of the Covid-19 related disruptions, tepid demand and volatile commodity prices, coupled with limited fiscal capacity to combat the economic impact of the pandemic, the debt servicing ability of countries was severely affected. Although the DSSI framework was introduced in April 2020 to address the liquidity problems of low-income countries, the initiative only provides a temporary liquidity support mechanism, and the financing needs of developing economies to fight the pandemic as also to meet their infrastructure needs would certainly go beyond 2021. To that end, countertrade presents an effective way of mitigating risks associated with financing developmental projects in countries at risk of debt distress, and concomitantly providing the fiscally constrained countries with financial support for achieving their developmental goals without dipping into scarce foreign exchange resources. Furthermore, countertrade can also serve as an effective market diversification strategy for project exporters, as it can open project export opportunities for Indian companies in lesser explored geographies that face restrictions in outward remittances including foreign exchange crisis like sanctions, currency restrictions, etc.

A countertrade strategy would also be worth considering from the viewpoint of recovery of dues or securing future repayments in the developmental partnership programmes of the GOI, typically in resource abundant countries. Countertrade could serve as a debt conversion tool, particularly in resource abundant countries, in the wake of balance of payments difficulties and rising external debt-servicing burden in the borrower countries. Developing an effective ecosystem

for countertrade with appropriate policy support for financing developmental projects in partner countries through this route, could open up new opportunities for boosting project exports.

ADOPTION OF CONSORTIUM APPROACH IN BIDDING

Indian contractors need 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 bidding, 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.

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. Several players, having expertise in different sectors, come together and bid for complex, multisector projects.

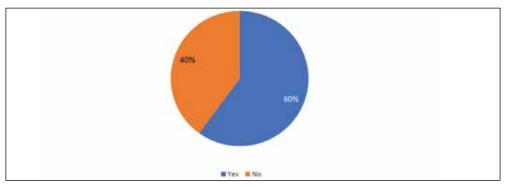
Going forward, opportunities in multinational and multisector projects are likely to increase manifold in Africa, on account of the newly formed African Continental Free Trade Area (AfCFTA). One of the key objectives of the AfCFTA is to augment intra-African trade, which would critically hinge upon improvement of trade related infrastructure, including hard and soft infrastructure at the borders. Indian companies need to prepare for multiregional and multisector opportunities emerging out of these developments through closer engagements with each other and adoption of a consortium approach.

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. Moreover, local presence also helps companies secure contracts awarded under National Competitive Bidding (NCB)—an important mode of procurement across several MDB funded projects. Under NCB, contracts are typically advertised only within 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 India Exim Bank's survey indicates that all respondents are open to the idea of collaborating through joint ventures (JVs) in project countries. In fact, nearly 60 percent of the respondents have already entered into such collaborations in the past (Exhibit 77), mostly in the regions of Middle East, Africa, and a few in South Asia. Indian companies need to be supported and encouraged to form JVs in the opportunity markets.

Exhibit 77: Whether Indian Project Exporters Have Engaged in JVs in Project Country in the Past



Note: Based on Survey Response Source: India Exim Bank Research

CONSIDERING INCLUSION OF PROJECT EXPORTS IN FTA/ RTA NEGOTIATIONS

Prospects of project exports should also be considered while negotiating FTAs/RTAs with other countries. Benefits from the FTAs can help Indian project exporters in bolstering their position in geographies such as the Middle East and Sub-Saharan Africa, and also in diversifying to other emerging markets in East Asia and Pacific, and Europe and Central Asia.

Middle East is among the topmost destinations for Indian project exports and the Government of India is actively engaged in negotiations for free trade agreements for enhancing India's market access in key markets of the region. In fact, the Government of India has already signed a Comprehensive Economic Partnership Agreement with the UAE. Aspects related to ease of movement of material and manpower for project exports should be accorded priority in such negotiations.

As noted in the previous chapter, there are several obstacles for mobility of workforce in markets such as Africa, particularly on matters related to

visa requirements. Therefore, negotiations should 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 contractors 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.

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 IDB are implemented across the 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\$ 13.6 billion, presenting significant opportunities in sectors such as healthcare, agriculture, transportation, climate change, water, and energy. Membership in the IDB can open up these opportunities for Indian companies.

Further, IDB promotes and participates in multilateral, bilateral and other cofinancing arrangements for its public and private sector projects. Membership with IDB could also open avenues for co-financing in the region for Indian financiers such as India Exim Bank and would enable Indian financiers to considerably mitigate cross-border risks and payment risks, which are normally associated with project exports. Such co-financed projects would also be a source of business opportunities for Indian project exporters. In the past, Chinese government has cofinanced several projects with the IDB. In fact, IDB has approved US\$ 1.4 billion for 56 projects across 18 countries through the China Co-financing Fund.

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 in the region, and also led to substantial political goodwill for the country. Therefore, Indian government is already considering taking up membership in the IDB, given the geopolitical as well as economic benefits for India. The membership can be taken on a priority basis, to enable project exporters from India to benefit from the prospective opportunities in the LAC market.

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 initiative⁴⁸.

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 India Exim Bank has also remained ineffective in capturing the data on project exports. Accordingly, there is a 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, 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 publicly 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 several sources of information throughout the project cycle that can help companies identify, track and prepare for business opportunities in MDB funded projects. There is 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, India Exim Bank has been conducting business opportunity seminars with key MDBs at various locations in the country to disseminate information

⁴⁸Reviving and Accelerating India's Exports: Policy Issues and Suggestions, Dr. H.A.C Prasad, January 2017

to Indian project exporters about the upcoming business opportunities in MDB funded projects and share lessons from past experiences in such projects. 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 programmes 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 programmes can be conducted by the Department of Commerce, in consultation with industry associations, India Exim Bank, resident missions of MDBs, and other key stakeholders.

BRIDGING THE INFRASTRUCTURE FINANCING GAP

Co-financing / Parallel Financing for Greater Project Opportunities

Large size of financing requirement for infrastructure projects often makes it difficult for a single lender to finance the entire project on its own. To meet the large infrastructure gap across developing countries, 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, and meet the growing infrastructure requirements. Bridging funding gaps in projects funded by India Exim Bank through co-financing by MDBs and other ECAs could be considered.

There have been instances of such successful co-financing arrangements in the past that have enabled MDBs and ECAs to finance large transactions and support domestic companies. One such collaborative coincidental financing of project was undertaken in the case of Itezhi - Tezhi Hydro Power Project in Zambia, which involved the development, construction, operation and maintenance of a 120 MW base load hydro power plant. This was a first-of-a-kind public private partnership in the power sector of Zambia, wherein several development finance institutions such as the AfDB, the European Investment Bank, Development Bank of Southern Africa, Dutch development bank FMO, India Exim Bank and French development financial institution PROPARCO, came together to finance the

project. Although coincidental in nature, the project is an insignia of converging interests of development financiers towards co-financing arrangements. More such collaborations in terms of co-financing / parallel financing could be envisaged to meet the financing needs for development projects in partner countries, and in turn create project export opportunities for Indian companies. The 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 India 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 the total infrastructure investment. India has deployed the PPP model in various sectors with commendable dexterity. The country systematically rolled out a PPP programme 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 programmes in the world. Success of India's PPP programmes is attributable to well-crafted reform efforts by the government, 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 to other developing countries. India has already embarked on this journey of technical cooperation, which has drawn tremendous interest from partner countries to learn from India's experiences. More importantly, India has formalised a technical cooperation with the AfDB for knowledge exchange and sharing its expertise in 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.

Box 3: GOI Initiatives to Strengthen and Promote PPP in Indian Infrastructure Projects

Over the years, the Government of India has introduced several policy initiatives and institutional mechanisms to encourage PPP model of infrastructure development, with the transportation sector being among the first beneficiaries of such policy impetus. Some of the initiatives that were undertaken to promote PPP in the transportation sector included:

- Long concession period of upto 30 years;
- 100% tax exemption in any consecutive 10 years out of 20 years;
- Right to collect and retain toll;
- Duty free import of certain identified high quality construction plants and equipment;
- Allowing FDI upto 100% in the sector and relaxed ECB norms;
- Standardizing of model bidding documents;
- Development of Model Concession Agreement to provide precise policy and regulatory framework.

Some of the other key initiatives for promoting PPP in India are given below:

- Robust Institutional Committee: The Government of India has streamlined the appraisal and approval mechanism for Central Sector PPP projects to ensure speedy appraisal of projects, eliminate delays, and have uniformity in appraisal mechanisms. With a view to streamline and simplify the appraisal and approval process for PPP projects, institutional structures and procedures have been defined based on the cost of projects.
 - Projects costing upto ₹ 5 crore will be appraised by the Administrative Ministry.
 - Projects costing above ₹ 5 crore but less than ₹ 25 crore will be appraised by the Standing Finance Committee (SFC).
 - Appraisal of projects costing ₹ 25 crore and above but less than ₹ 100 crore will be done by the Expenditure Finance Committee chaired by Secretary of the Administrative Ministry.

- PPP Projects with cost exceeding ₹ 100 crore or where the value of underlying assets is more than ₹ 100 crore (except Ports and NHDP projects) would be appraised and approved by the Public Private Partnership Appraisal Committee (PPPAC).
- PPP projects of all sectors of cost greater than ₹ 100 crore but less than ₹ 250 crore, the appraisal would be done by a Committee comprising the Secretary, Department of Economic Affairs, and the Secretary of the Ministry/Department sponsoring the project. Initially the projects will be appraised by the SFC. SFC will recommend the proposal for approval to the aforementioned Committee.
- New streamlined process for PPP Projects and Asset Monetization: A
 new policy is being formulated by the GOI, for speedy appraisal and
 approval of PPP proposals to avoid institutional delays and ensure
 timely clearance of projects. The policy also focusses on monetization
 of core infrastructure assets, including through InvITs to facilitate
 financing, construction and management of infrastructure.
- Viability Gap Funding Scheme: Recognising that the externalities engendered by infrastructure projects cannot always be captured by project sponsors, a Viability Gap Funding (VGF) scheme was notified in 2006 to enhance the financial viability of competitively bid infrastructure projects which are justified by economic returns, but do not pass the standard thresholds of financial returns. Under the scheme, grant assistance of up to 20% of capital costs of infrastructure projects is provided by the Central Government to PPP projects, thus leveraging budgetary resources to access a larger pool of private capital.
- India Infrastructure Project Development Fund (IIPDF): The IIPDF was set up with an initial corpus of ₹ 100 crore. It is available to the Sponsoring Authorities for PPP projects for the purpose of meeting the project development costs which may include the expenses incurred by the Sponsoring Authority in respect of undertaking feasibility studies, environment impact studies, financial structuring, legal reviews and development of project documentation, including concession agreement, commercial assessment studies etc, required for achieving technical close of such projects, on individual or turnkey basis.

Infrastructure debt funds (IDFs): IDFs were announced by the Government
of India as a vehicle to fund the infrastructure sector. These are investment
vehicles which can be sponsored by commercial banks and NBFCs in India
in which domestic / offshore institutional investors, specially insurance and
pension funds can invest through units and bonds issued by the IDFs. IDFs
essentially act as vehicles for refinancing existing debt of infrastructure
companies, thereby creating fresh headroom for banks to lend to fresh
infrastructure projects.

Additionally, there are several sector-specific initiatives undertaken by the GOI in the recent years to promote and facilitate PPP projects. These include:

- Power Distribution: The GOI has recently launched Revamped Distribution Sector Scheme. One of the key focus areas of the scheme is to implement prepaid smart metering in PPP mode. Besides smart metering for consumers, the scheme has also proposed to take up System metering at Feeder and Distribution Transformer level with communicating feature, simultaneously in PPP mode.
- Digital Infrastructure: The GOI has also recently charted the course for the implementation of BharatNet- a broadband connectivity programme for 6 lakh villages across 16 states of the country, through PPP mode. The PPP Model is expected to leverage private sector efficiency for operation, maintenance, utilization and revenue generation and is expected to result in faster roll out of BharatNet.
- Ports: In order to make major ports more competitive, the GOI, in November 2021, has abolished the provision of the erstwhile Tariff Authority for Major Ports (TAMP), and has allowed the PPP concessionaires at major ports to set tariffs as per market dynamics. Prior to this reform, PPP concessionaires at major ports had to operate as per the TAMP guidelines, whereas private operators were free to charge tariff as per market conditions. This reform is set to provide a level playing field to PPP concessionaires to compete with private ports.
- Transportation: A model concession agreement for the operation and maintenance of electric buses in cities through PPP on operating expenses basis has also been developed by NITI Aayog.
- · Highway: The GOI has also brought out the 'Guiding Principles for

Resolution of Stuck Projects' under execution through BOT (Toll/ Annuity/ HAM), EPC, and Item Rate. These guiding principles lay down the broad framework for resolution and settlement of stuck projects via conciliation, thereby attempting to resolve institutional delays in roadway projects.

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 expeditiously provide free-of-cost Indian consultancy support to overseas governments in the preparatory phase of project formulation and design for projects that are considered under the GOI's LOC programme. Additionally, the GOI had also signed a Project Preparation Fund 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. India Exim Bank, along with the African Development Bank, and State Bank of India, has also floated the Kukuza Project Development Company to facilitate private sector participation in infrastructure projects in Africa (Box 4). More such steps can be taken by ECAs, MDBs and national DFIs for creating bankable projects, and crowding in additional finance.

Box 4: Kukuza Project Development Company

For addressing the limited institutional capacity in Africa for conceptualization, management, execution of projects and imparting project development capabilities, Indian institutions such as Exim Bank, and State Bank of India 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 projects from concept to commissioning in the African continent. The KPDC would 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.

While India has taken a number of steps towards creating bankable projects, India's engagement in project preparation facilities has been 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.

GREATER EMPHASIS ON SUSTAINABLE/ RENEWABLE SECTOR

As noted in Chapter 2, there has been a growing focus on renewable energy projects globally over the recent years, with the number of project announcements in the sector registering a robust CAGR of 15.5 percent during 2016-2020. Despite the disruptions caused by Covid-19 pandemic, the levels of support for renewable energy projects continued to increase in 2020, with the total number of project announcements in the sector witnessing a y-o-y growth of 12.4 percent during the year. European ECAs have been at the forefront in terms of financing renewable-energy projects in 2020. For instance, Denmark's EKF provided high levels of support for renewable energy projects, reporting over US\$ 1.4 billion in activity in 2020, nearly half of which went towards financing the Changhua 1 offshore wind farm in Taiwan. In 2020, EKF also launched its "Green Accelerator" programme to support Danish companies' pre-export activities and formalized a

new partnership with the Danish Energy Agency to support climate-friendly energy exports, underscoring the country's commitment towards promoting renewable energy. On similar line, other European ECAs such as Atradius (the Netherlands), GIEK (Norway), and Euler Hermes (Germany) also reported notable levels of activity in the renewables sector, predominantly in wind projects⁴⁹.

Among developing economies, the ECAs of China and India have also been proactive in the renewable-energy sector in the recent years. China's official export credit support for renewable energy projects was estimated at nearly US\$ 500 million in 2020. This includes Exim China's support for the Gribo Propoli Dam project in Côte d'Ivoire, worth nearly US\$ 286 million, and US\$ 214 million worth of support for the Nyaborongo II hydropower project in Rwanda. As part of its commitment in the International Solar Alliance, the GOI has also earmarked concessional Lines of Credit worth US\$ 2 billion for solar projects in Africa out of its US\$ 10 billion concessional LOCs for Africa committed during India-Africa Forum Summit (IAFS)-III. As committed, the GOI has already announced several LOCs for development of solar power projects and parks in partner countries, which is allowing Indian companies to enhance their reach in the international market for solar projects. Indian solar companies, with assistance from India Exim Bank, secured contracts for a 190 MW DC solar photovoltaic plant in Chile and three solar EPC projects in Egypt. The GOI-LOCs have also helped catalyze solar-power exports for projects including rural-electrification efforts in Senegal (worth US\$ 35.8 million) and solar-park installations in Cuba (worth US\$ 75 million). However, the uptake of LOCs for solar projects by partner countries has been relatively low, particularly in Africa. This is partly attributable to the lack of domestic capacities for supply of solar panels to fulfill the minimum content requirement under the LOC program.

Improving cost competitiveness in the renewable energy sector would be critical as financing alone would not be a panacea for growth in project exports from this segment. According to some estimates, in 2020, Indian manufactured solar modules are nearly 33 percent more expensive than Chinese counterparts⁵⁰. Low cost financing from India Exim Bank, through the GOI-LOCs under the IDEAS programme, has been important for Indian solar companies to gain experience in execution of overseas projects. On a standalone basis, Indian companies may face challenges in securing renewable energy contracts in overseas destinations without improvements in cost competitiveness.

⁴⁹Report To The U.S. Congress On Global Export Credit Competition, June 2021, the US Exim Bank

⁵⁰Jain, R., Dutt, A., and Chawla, K. (2020). Scaling Up Solar Manufacturing to Enhance India's Energy Security. New Delhi, CEEW.

Growth in China's solar industry was driven by two initiatives— first, a US\$ 15 billion annual subsidy and second, a massive domestic solar programme, which attracted substantial investment in solar manufacturing capacities, making China the undisputed leader in the PV cell space. It is important to note that the subsidies offered by China for the development of the solar sector are focused on the infrastructure requirements for the solar projects (both the large-scale solar power projects and the rooftop solar projects) and are therefore, compliant with the WTO norms. In India as well, such incentives would be crucial to mobilize investments to scale up both the existing equipment manufacturing capacities as well as to encourage new entrants in the market. The GOI has already introduced several Central Financial Assistance schemes to promote solar energy in the country, including schemes for development of solar parks and ultra-mega solar power projects; development of grid-connected PV plants on canal banks and canal tops; development of grid-connected solar rooftop; and several offgrid schemes for PV lighting systems and power plants, and installation of solar pumps for agricultural uses, among others. Furthermore, the GOI has also introduced several programmes over the recent years to strengthen the domestic solar manufacturing capabilities. For instance, the GOI has allocated ₹ 4,500 crore (approx. US\$ 605.1 million) towards a production linked incentive scheme for solar PV manufacturing sector. The scheme is likely to enhance the domestic manufacturing capacity of high efficiency solar PV modules and bring cutting edge manufacturing technology to India. Nevertheless, given the extent of competition faced by Indian companies from Chinese firms, there is a need to enhance the quantum of support provided by the GOI to the domestic solar PV manufacturers, in order to improve their cost competitiveness in the international market. This would also enhance the capabilities of Indian project exporters in the renewable energy segment.

CAPACITY BUILDING OF SMALLER COMPANIES IN PROJECT EXPORTS

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 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.

Push/ Pull Programmes for Enhancing Participation of Smaller Companies in Project Exports

Push/pull programmes are untied financing programmes, wherein countries aim to "push" or "pull" future sourcing of goods and services towards their country, by offering financing support to major multinational manufacturers, in return for their commitment to source from smaller domestic companies in the future. Unlike other forms of export and trade-related finance, these push/ pull programmes are not provided for a single project or contract, but rather aim to support the smaller companies to get subcontracts on a long-term basis. Such a strategy can also be adopted by India, to help MSMEs become suppliers for long term project exports undertaken by foreign companies. Several ECAs have successfully implemented such a strategy.

For instance, EDC's (Canada) "pull program", which has recently been renamed "trade connection financing", is an untied financing commitment made to an international buyer, which is leveraged by the EDC to influence the buyer to initiate or augment their procurement from Canadian suppliers. Corporate or project lending provided by the EDC to a targeted foreign company is leveraged to influence their future procurement decisions. These commitments are most often targeted towards large international buyers that are industry leaders and have expansive global or regional footprints. The loans are provided to typically large international companies in strategic sectors or markets for Canadian businesses. Financing support is committed by the EDC without a specific Canadian export contract in place. Instead, the foreign company agrees to cooperate with the EDC to identify supply chain needs and consider Canadian companies as suppliers. Therefore, the pull strategy does not come with a hard commitment from the importer to actually buy Canadian goods or services⁵¹. The EDC also pairs its financing with matchmaking between Canadian suppliers and foreign buyers.

On similar lines, SACE's (Italy) "Push Strategy" entails untied medium/ long-term loans at competitive terms to foreign counterparts to facilitate purchases of Italian goods and services. This programme adopts an economic diplomacy mechanism to strengthen existing business relations and foster the procurement from Italian smaller businesses. Since its launch in 2017, SACE has allocated more than €2.3 billion in transactions to foreign counterparties operating in the oil & gas, infrastructures, petrochemical, automotive, mining, retail, fashion, and mechanical engineering sectors. In 2019, SACE reported that it used its Push Strategy to guarantee a loan of €250 million to a Brazilian company to facilitate

⁵¹Export Development Canada Legislative Review, 2018

Italian businesses', especially SMEs', entry into the Brazilian supply chain⁵². Like EDC, SACE's Push Strategy approach also extends to business matching events between the interested Italian businesses, and the procurement team of the foreign buyers benefiting from the loans under the programmes. As of 2020, 28 such events have been organized to facilitate B2B meeting, resulting in an estimated additional export worth €1.3 billion⁵³.

A similar programmes could be developed for India, which could be used to incentivize sub-contracting to smaller players from major companies in project export contracts.

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, considering inclusion of project exports in FTAs/ RTAs, encouraging collaborative participation of project exporters, addressing data issues, capacity building of smaller companies in project exports and bridging infrastructure financing gaps, will be crucial for propelling the sector on a higher growth trajectory.

⁵²Report to the U.S. Congress on Global Export Credit Competition, 2019, US Exim Bank

⁵³SACE Annual Report, 2020

Annexure 1: Sources of MDB Contracts Data

Sources for contract awards data used for analysis in the Study:

- World Bank: World Bank finances Major Contract Awards
 https://finances.worldbank.org/Procurement/Major-Contract-Awards/kdui-wcs3
- 2. Asian Development Bank: ADB Data Library Operational Procurement Database
 - https://data.adb.org/dataset/operational-procurement-database
- African Development Bank: AfDB Procurement Statistics https://www.afdb.org/en/projects-and-operations/procurement/tools-reports/ procurement-statistics
- 4. Inter-American Development Bank: Project Procurement data www.projectprocurement.iadb.org/en/awardedcontracts
- European Bank for Reconstruction and Development: Annual Procurement Review Reports https://www.ebrd.com/work-with-us/procurement/project-procurement/reports.html

Annexure 2: Business Opportunities in MDB Funded Projects

Resources for information on business opportunities in MDB funded projects:

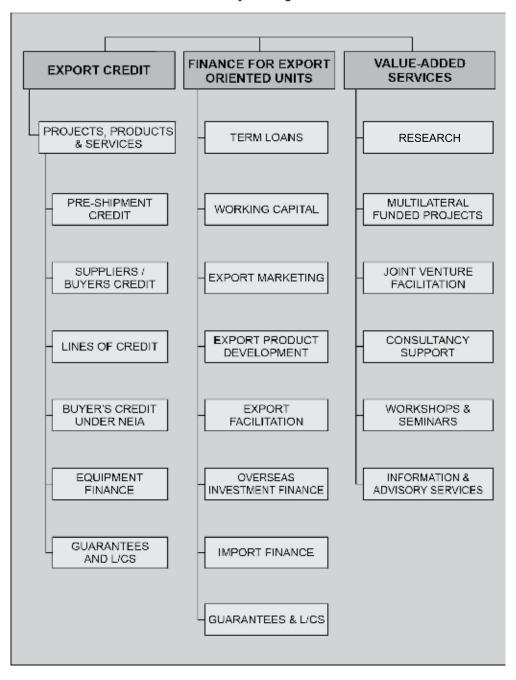
- Asian Development Bank For Goods, Works and Related Services Projects and Tenders https://www.adb.org/projects/tenders/group/goods
- 2. Asian Development Bank For Consulting Services Projects and Tenders https://www.adb.org/projects/tenders/group/consulting
- 3. AfDB Project Procurement opportunities https://www.afdb.org/en/projects-and-operations/procurement
- EBRD Project Procurement opportunities https://www.ebrd.com/work-with-us/procurement.html
- World Bank Project Procurement Opportunities https://projects.worldbank.org/en/projects-operations/procurement?srce=both
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