



# ECONOMIC IMPACT ASSESSMENT OF THE PORT CITY COLOMBO

Corporate Finance & Valuation Consulting



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## Abbreviations

<b>GoSL</b>	Government of Sri Lanka
<b>PCCDP</b>	Port City Colombo Development Project
<b>CBD</b>	Central Business District
<b>CMA</b>	Colombo Metro Area
<b>CPCC</b>	CHEC Port City Colombo (Pvt) Ltd
<b>CHEC</b>	China Harbour Engineering Company Ltd
<b>CCCC</b>	China Communications Construction Company Ltd
<b>DCR</b>	Development Control Regulation
<b>GFA</b>	Gross Floor Area
<b>GDP</b>	Gross Domestic Product
<b>BoP</b>	Balance of Payment
<b>FDI</b>	Foreign Direct Investment
<b>Ha</b>	Hectare
<b>Sqm</b>	Square meters
<b>Sq.ft</b>	Square feet





# Executive summary

The Port City Colombo Development Project (“PCCDP”, “Port City” or “Project”), located in the central business district of Colombo next to Galle Face Green, is currently being developed by CHEC Port City Colombo (Pvt) Ltd (“CPCC”) with an initial investment of c. USD 1.4bn. The reclamation of 269 ha of land was completed in January 2019 and the development of common infrastructure is currently in progress.

The common infrastructure is expected to be completed by 2021, while the construction of all real estate developments are envisaged to be complete by 2041. As per the Master Plan, the city will include 5.7mn sqm of Gross Floor Area (GFA). This includes residential, commercial, retail, hospitality sectors and space for other social infrastructure.

The main objective of our assessment is to identify the economic variables through which the Project will contribute towards the economy and estimating the potential impact. Primarily, the impact was assessed on the following,

- 1. Employment**
- 2. Foreign direct investments**
- 3. Value addition**
- 4. Balance of payment**
- 5. Government revenue**

However, it should be noted that the assessment was undertaken based on the Master Plan developed for the Port City and it was assumed that the Project will progress as planned. Our work did not include the evaluation of the feasibility of the Project.

Given the long term nature and the different stages involved during which the Project will impact the economy, the assessment was classified broadly to reflect the distinct nature of each stage. Therefore, the assessment was undertaken under the following stages,

- 1. Reclamation, infrastructure development and land lease** - This stage entails the reclamation of the 269 ha of land which is now complete and the development of common infrastructure (roads, utility etc.). This includes both stages of the common infrastructure development and the lease of land plots on a 99 year basis.
- 2. Construction stage** - Subsequent development of real estate within Port City was assessed under this stage. This stage which will span across c. 20 years and includes the construction of all real estate within the Port City. However, the construction period may vary based on the economic climate prevailing during that period.
- 3. Operational stage** - This stage includes the operations of the businesses within Port City and assumed to reflect a mature year of operation. However, it should be noted that the businesses within Port City will perform based on their industry dynamics and reach a mature stage during different time periods. As businesses operating at present were benchmarked to assess the impact, this stage should reflect the aggregate performance of all the businesses within Port City in a mature/normal year of operation.

The impact was assessed assuming that the Project will progress as planned and reach its full potential without any hindrance. Further it should be noted that the assessment was done as if the Port City was implemented based on current prices (i.e. the Port City is implemented in today’s market conditions), however the market conditions over the implementation horizon may vary and have a significant impact on the output of this assessment.

A scenario analysis was included to supplement the base case assessment considering the potential implications which may curtail its progress as provided by Lakshman Kadirgamar Institute (LKI) (refer page 50).

## Executive summary (cont.)

Total Employment	100% developed	85% developed	60% developed	30% developed
<b>Reclamation/infrastructure/lease of land - jobs</b>	<b>6,400</b>	-	-	-
Direct	1,500	-	-	-
Indirect	4,900	-	-	-
<b>Construction stage - man hours</b>	<b>160,172</b>	<b>136,657</b>	<b>97,489</b>	<b>50,459</b>
Direct	101,375	86,492	61,702	31,936
Indirect	58,797	50,165	35,787	18,523
<b>Operational stage - jobs</b>	<b>210,355</b>	<b>177,097</b>	<b>121,698</b>	<b>55,181</b>
Direct	131,827	111,141	76,685	35,312
Indirect	78,528	65,956	45,014	19,869

Table 1: Employment generated during each stage and scenarios

Skilled and unskilled employment opportunities were generated during the reclamation and common infrastructure development which currently in progress. As shown in Table 1, the reclamation stage was reported to have created job opportunities for c. 1,200 local employees and c. 300 foreign employees while also indirectly creating c. 4,700 jobs.

During the construction of real estate, labour requirement was estimated as the man hours needed to complete the estimated value of each segment within the Port City. In total, the construction stage was estimated to directly generate c. 101,000 jobs, which may include both local and foreign employees based on the skill requirement and the availability of labour in the local market. However, this demand will be spread along the construction period of the Project (c. 20 years).

As the commercial operations of the businesses within Port City reach a mature level, c. 131,000 direct and c. 78,000 indirect jobs have been estimated to be created based on the available gross floor area. This will include the employment opportunities created in the hospitality, healthcare, education and retail sectors, while the commercial space is expected to create service oriented jobs.

Foreign Direct Investments (USD mn)	100% developed	85% developed	60% developed	30% developed
<b>Reclamation/infrastructure/lease of land</b>	<b>4,096</b>	<b>3,684</b>	<b>2,998</b>	<b>2,174</b>
<b>Construction stage</b>	<b>5,598</b>	<b>4,786</b>	<b>3,433</b>	<b>1,809</b>
<b>Operational stage</b>	<b>739</b>	<b>623</b>	<b>429</b>	<b>197</b>

Table 2: FDI during each stage and scenarios

In terms of foreign direct investment, the land reclamation and common infrastructure development stage was estimated to attract c. USD 4.1bn which includes the initial investment made by CPCC (USD 1.4bn) and the proceeds attributable to the lease of land (USD 2.7bn). The investment derived through the lease of land was estimated based on a conservative price of LKR 13mn per perch, which may differ during the actual time of the lease.

During the construction stage, the FDI was estimated at c. USD 5.6bn (assuming 75% of construction cost being foreign funded). As the operations commence, the foreign entities may reinvest profits in Sri Lanka while also repatriate profits which will affect the balance of payment. The reinvestment during the operational stage was considered as the FDI and this was estimated to be c. USD 0.7bn per annum.



# Executive summary (cont.)

Value addition to GDP (USD mn)	100% developed	85% developed	60% developed	30% developed
<b>Reclamation/infrastructure/lease of land</b>	<b>4,555</b>	<b>3,771</b>	<b>2,463</b>	<b>894</b>
<b>Construction stage</b>	<b>13,034</b>	<b>10,863</b>	<b>7,475</b>	<b>3,406</b>
Direct	6,933	5,778	3,976	1,812
Indirect	6,101	5,085	3,499	1,594
<b>Operational stage</b>	<b>11,752</b>	<b>9,852</b>	<b>6,687</b>	<b>2,888</b>
Direct	5,505	4,626	3,163	1,406
Indirect	6,247	5,225	3,524	1,482

Table 3: Value addition during each stage and scenarios

The value addition towards the GDP will be two fold, where the investments and consumption within the Port City will directly contribute towards the GDP. This will also create an indirect impact as the payments flow through. The reclamation, infrastructure development and lease of land stage and the construction stage were estimated to contribute c. USD 4.6bn and c. USD 13bn respectively which includes both the direct and indirect impact. the operational stage is estimated to add c. USD 11.8bn per annum towards the country's GDP on an annual basis which similarly includes both the direct and indirect impact. This is mainly driven by the commercial, residential and retail space with the Port City.

Balance of payment (USD mn)	100% developed	85% developed	60% developed	30% developed
<b>Reclamation/infrastructure/lease of land</b>	<b>1,328</b>	<b>1,359</b>	<b>1,411</b>	<b>1,472</b>
<b>Construction stage</b>	<b>4,160</b>	<b>3,480</b>	<b>2,304</b>	<b>893</b>
<b>Operational stage</b>	<b>4,598</b>	<b>3,859</b>	<b>2,628</b>	<b>1,150</b>

Table 4: Balance of payment during each stage and scenarios

Balance of payment may witness a positive impact during all three stages despite outflows arising through the importation of material for construction. This will be offset as the proceeds on land lease and the sale of residential units commence. During the initial stage, if less land is assumed to leased, there will be less outflows in terms of repatriation of profits and repayment of debt used for funding the lease.

The operational stage may witness outflows in terms of profits and wages being repatriated through foreign entities and workers, while from the importation of goods for the operations may also lead to out flows. However, the export of services and tourism spending in Port City may offset the outflows and may lead to a positive impact on the balance of payment as the operations take place.



## Executive summary (cont.)

Government revenue (USD mn)	100% developed	85% developed	60% developed	30% developed
Reclamation/infrastructure/lease of land	1,619	1,346	891	345
Construction stage	2,770	2,305	1,574	697
Operational stage	811	684	474	222

Table 5: Government revenue during each stage and scenarios

The government revenue will primarily flow in the form of tax income and the proceeds due from the lease of marketable land. During the first stage, majority of the government revenue will be derived through the lease of land plots. In construction stage, tax revenue will be derived through import duty, income tax, value added tax and other revenue in the form of obtaining licenses and applicable fees.

As operations commence, import duties, value added tax, income tax on wages and profits and withholding tax will be the primary contributors towards the government revenue. This was estimated at c. USD 800mn per annum.

The Port City Project will have a significant impact on the national economy, in terms of employment generation, attracting FDIs, GDP contribution, BOP, and government revenue when it progress as planned. However, delays in construction and any negative developments and barriers could affect the attraction of FDIs to the Port City Project and other investment projects in Sri Lanka.

In this context, it would be beneficial to have a clearly defined regulatory policy framework for Port City, as this would support the achievement of the Project's potential and contribution towards the economy.



# 1

# Introduction



# Introduction of Colombo Port City Development Project

In 2004, the Western Region Megapolis Master Plan was prepared by CESMA International (a subsidiary of Singapore Housing and Development Board) to guide urban development across the Western Region of Sri Lanka for the following 15 years. The Master Plan was reviewed in 2015 through a series of workshops, to devise the direction for Colombo and the Western Region.

During the process, several projects were identified as strategic projects for implementation. The Colombo Port City Development Project was identified as a priority project in the Central Business District (“CBD”) and the Colombo Metro Area (“CMA”).

The Project was launched on 17 September 2014 by the then President of Sri Lanka, Mahinda Rajapaksa and the President of the People’s Republic of China, Xi Jinping.

A Master Plan for Port City was prepared for an estimated 269 ha reclaimed site. The plan for Port City was to develop a planned city adapted to the Sri Lankan context and the site-specific conditions, which could tap into the geographic region and environment to create a community for business, living, and leisure.

## Project Timeline<sup>1</sup>

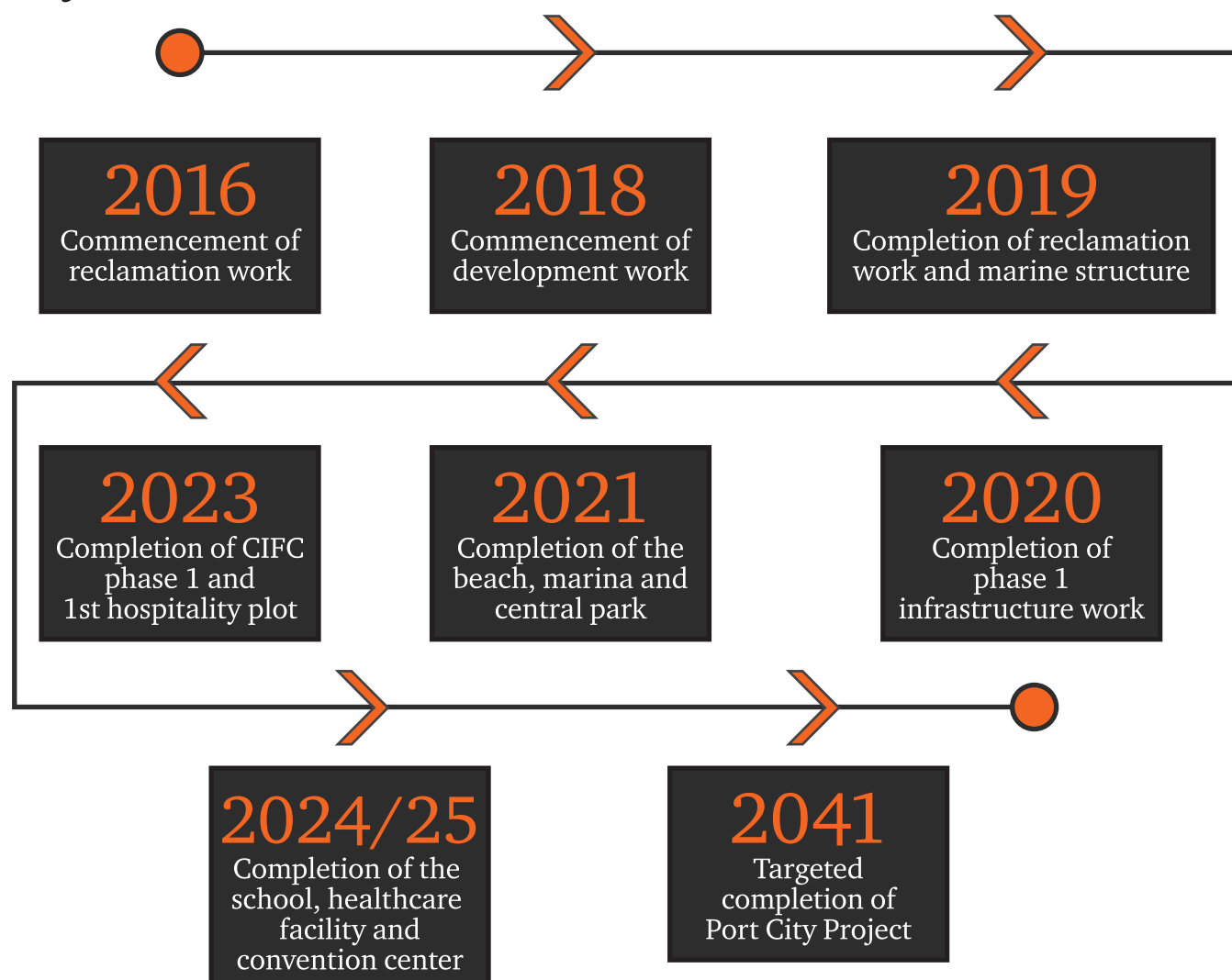


Figure 1. The timeline of Port City Project

<sup>1</sup>CPCC Management



# Background of CHEC Port City Colombo (Pvt) Ltd

CHEC Port City Colombo (Pvt) Ltd (“CPCC”) is the local promoter of the Project and it is a subsidiary of the China Harbour Engineering Company (“CHEC”), which is a subsidiary of China Communications Construction Company, Ltd (“CCCC”). In order to undertake the Project, CPCC has entered into a public private partnership arrangement with the Government of Sri Lanka (“GoSL”) to invest c. USD 1.4bn<sup>2</sup> in return for the leasehold rights for the 116 ha of marketable land.

CCCC is a multinational engineering and construction company which offers services such as engineering and construction, infrastructure planning, investment and attracting investments for large scale masterplan developments.

CCCC is a group of companies with more than 60 wholly owned subsidiaries and share-holding companies. It has set up 193 overseas branches and offices in 103 countries and regions around the world and operates in more than 135 countries and regions.

In 2018, CCCC generated over USD 88<sup>3</sup> bn in revenue, and is listed on the Hong Kong Stock Exchange and the Shanghai Stock Exchange. It is ranked 93rd out of the Fortune 500 companies in 2019 and was ranked 3rd by the Engineering News Record (“ENR”) on the list of top 250 international contractors for 2018. Globally, the company has over 170,000 employees across its international locations.

CCCC’s projects include primary or secondary land consolidation, engineering, construction of traffic and municipal infrastructure along with real estate and commercial facilities implementation. Some of CCCC’s most notable work includes the Shantou New East Coastal Area Development project and Guangzhou Nansha New District Development project.

CCCC has been actively involved with development projects in Sri Lanka since 1998, including the Southern Highway, Outer Circular Highway, Hambantota Port, Mattala International Airport and Colombo South Container Terminal.



Figure 2: Group structure of CPCC

<sup>2</sup>CPCC Management

<sup>3</sup><https://fortune.com/global500/2019/china-communications-construction/>

# Structure of the Colombo Port City Project

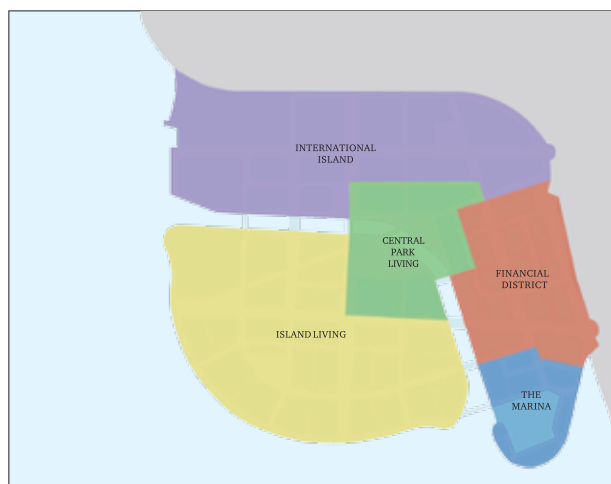


Figure 3: Precincts in Port City



Figure 4: Aerial view of the reclaimed land

Based on the concept of township planning, the Port City will be divided into five distinct precincts, as described in the Development Control Regulation (DCR).

## 1. Financial district

This is the business and commercial center of Port City covering c. 40 ha and it will be the extension of the existing Central Business District (CBD) of Colombo. It is estimated to accommodate a population of 11,000 residents in addition to providing employment opportunities. The buildings in this precinct will have height restrictions and would range between 25 to 60 storeys depending on the specific plot.

## 2. Marina district

Located around the quay, this will be the leisure destination for both employees in the CBD and residents from the whole of Colombo, covering an area of c. 15 ha. The estimated population once occupied would be 5,000 residents. Buildings in this precinct will range from 3 to 30 storeys. The District also includes residential, mixed use, and waterfront developments.

## 3. Central Park living district

Concentrated around the central park, this will be a residential area covering c. 35 ha. This is expected to accommodate a population of 10,000 residents. Buildings will range in height from 10 to 40 storeys in this district.

## 4. Island living district

This district is an urban residential area with close proximity to the sea, waterfront beach, canal, and central park, covering c. 95 ha. This is estimated to accommodate a population of 26,000, primarily residents. Buildings will range in height from 4 to 30 storeys comprising mainly of villas and medium rise apartments.

## 5. International Island district

The International Island will be spread over 85 ha and would house a convention centre, educational institution and business centres, complementing the Financial District to the south. This is planned to accommodate a residential population of 26,000. Buildings will range in height from 4 to 45 storeys, with most in the range of 25 to 35 storeys.

Source: CPCC Management, DCR, Port City Colombo website



# Ownership of land and uses

## Land ownership

The total reclaimed land was officially handed over to the Urban Development Authority (UDA) in October 2019. Based on the tripartite agreement signed between CPCC and the GoSL (represented by the Urban Development Authority and the Ministry of Megapolis and Western Development), 116 ha of marketable land is to be vested with CPCC to be leased out on a 99 year basis in return to the investment made by the Company for the reclamation and common infrastructure development of the Project.

The total reclaimed land amounts to 269 ha and c. 34% of it will be common area which will include the roads, parks etc. GoSL holds the entirety of the reclaimed land and 43% (116 ha) is leased to CPCC on a 99 year basis.

In addition to the land reclamation and development of the common infrastructure, CPCC will be involved in sales and marketing, setting up the Estate Management Company (EMC) and the development of Colombo International Financial Centre.

EMC will be created as a joint venture between CPCC and the GoSL to maintain the common infrastructure within the Port City.

## Use of space as per the Development Control Regulation

The Development Control Regulation (“DCR”) reflects the vision and concept as proposed in the CPCDP Master Plan. The DCR provides a mechanism and guidelines for the implementation of the CPCDP Master Plan and the developments within the Port City.

The DCR is organized under four volumes and covers urban design, utility, landscape and sustainability. The strategies identified in the Master Plan is translated into plot level regulations, which would be followed by public and private developers.

As per the DCR, the Project will include a maximum permissible Gross Floor Area (GFA) of 5.7mn<sup>4</sup> sqm (excluding the car parks). As portrayed below, this will include residential, commercial, retail, hospitality and other space allocated for social infrastructure.

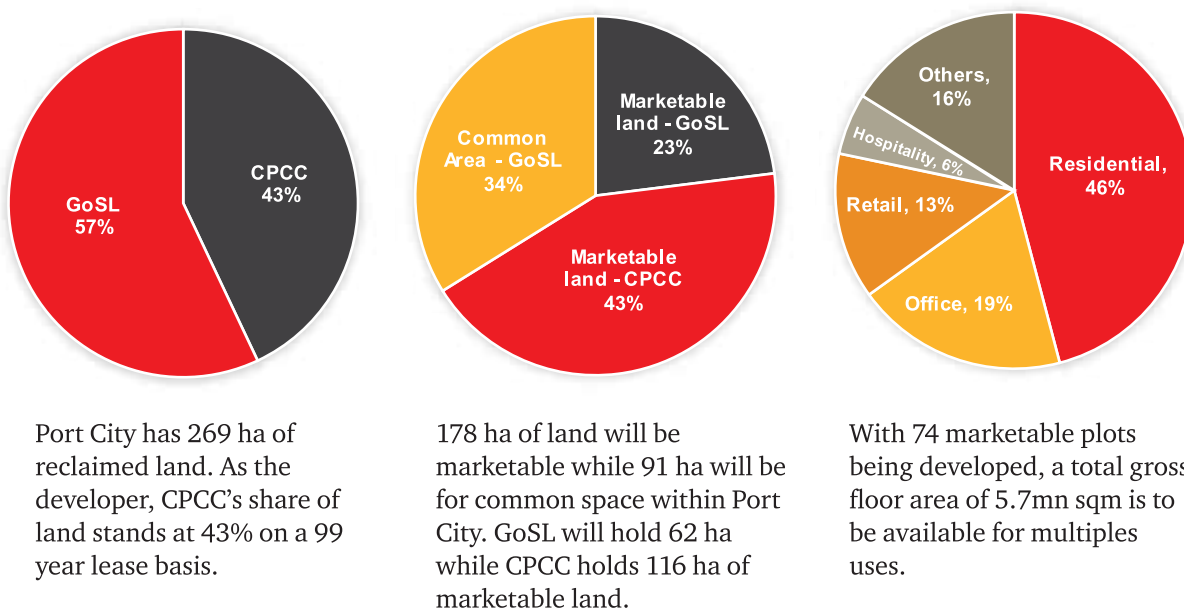


Figure 5: Land ownership structure of the reclaimed land and buildable gross floor area

<sup>4</sup>CPCC Management | Source: CPCC, DCR

# Introduction to Economic impact assessment

## Introduction – Purpose of the study

The Port City Project is a planned city development undertaken by CPCC on a reclaimed land area with an extent of 269 ha. The reclamation of the land has been completed as of January 2019 and the common infrastructure development is currently in progress. The development is undertaken under two phases and the whole Project is expected to be completed by 2041.

The area within Port City is segregated into five different precincts and will include commercial space, retail space, residential, hospitality segment and social infrastructure which in total will have a GFA of 5.7mn sqm (6.9mn sqm including car parks). For the purpose of this assessment, the “Other” segment which has mixed use was apportioned between Residential, Retail and Office space.

## Breakdown of GFA as per the DCR Vs. the GFA as used for the assessment

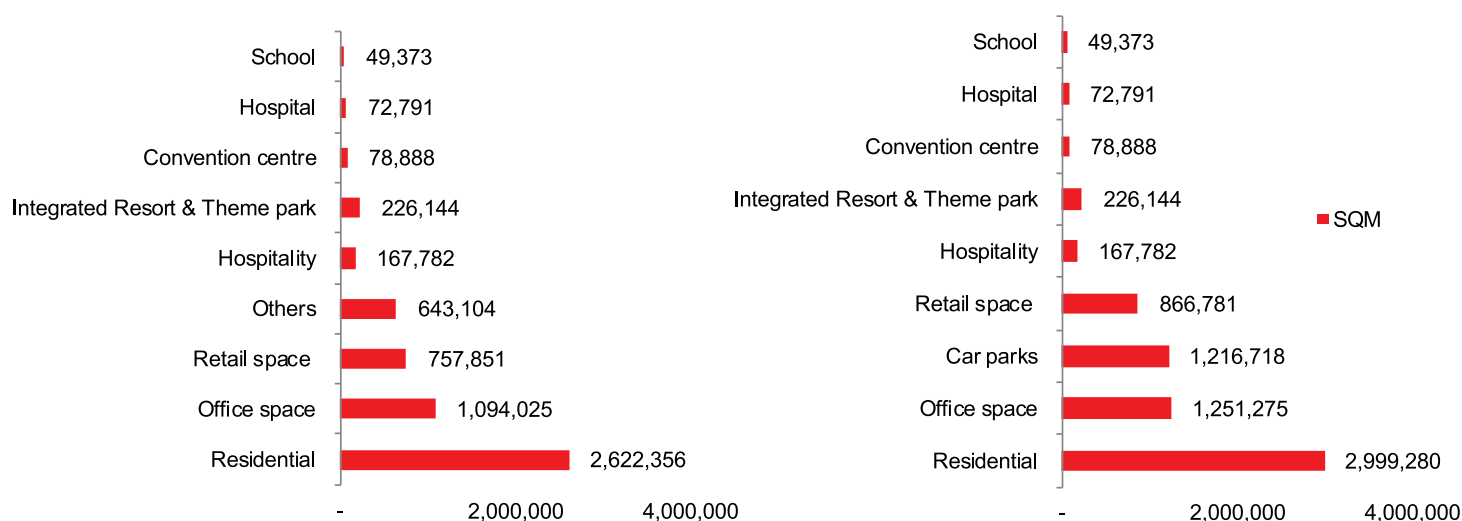


Figure 6: GFA as per the DCR and the constructed area used for the assessment

PwC was engaged by CPCC to undertake an impact assessment of the Port City with regards to key economic variables. The objective of the assignment is to understand the potential impact of the Project over the project timeline and once at maturity, including a breakdown of the impact by various sectors and segments.

The primary objective of this study is to assess the economic impact derived through the Port City Project during the identified stages (land reclamation, construction and operational stages). The following key variables were considered to assess the impact on the economy by the Port City.

1. Employment
2. Foreign direct investments
3. Balance of payment
4. Value addition
5. Government revenue

Source: CPCC Management, DCR, PwC analysis



# 2

# Methodology



# Methodology

Economic impact analysis is a method of understanding the economic contribution of an investment project towards a region or a country. Impact studies typically measure three major channels through which a project could add value to an economy, as shown below.

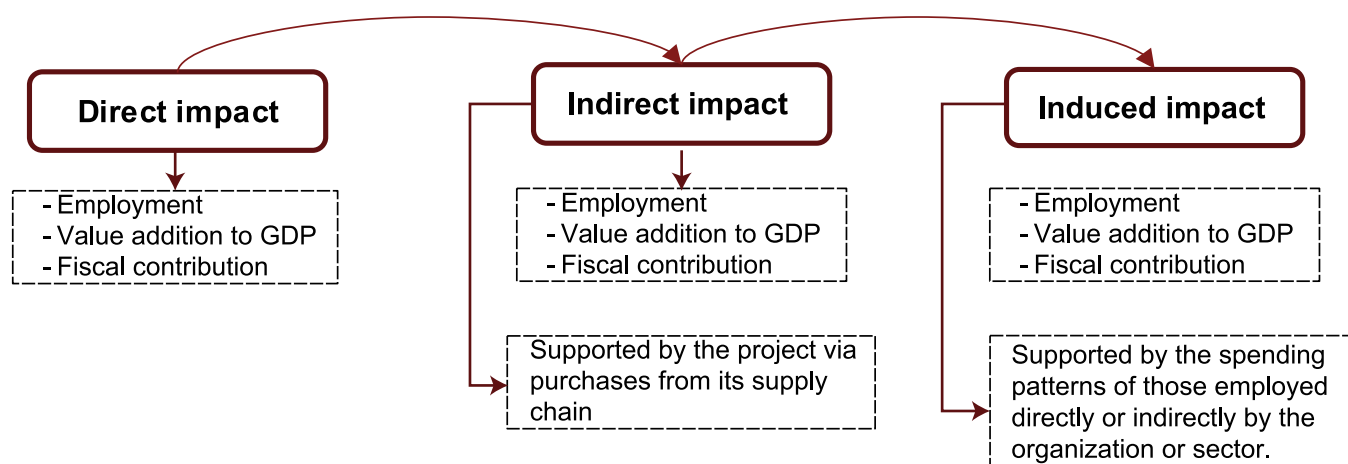


Figure 7: Flow of economic impact

Such studies would usually rely on financial and economic data to generate estimates of output, value addition, employment, and associated tax revenues. In other words, the impact from all three of the above channels would be quantified under the economic analysis.

An input-output model would provide a reliable framework for quantifying the economic impact of a project through all the above channels. However, the Input-Output model, developed by the Department of Census and Statistics of Sri Lanka in 2017 (base year is 2010), suffers from some limitations (refer page 20). Hence, it is less appropriate to depend entirely on Input-Output model.

On the other hand, econometric modeling would be challenging due to the significant data requirement and the limited availability of such information in Sri Lanka. Hence, this study has employed a mixed method. First, a financial model was developed for each sector using data collected through primary and secondary sources, with the financial models converted into economic models using multipliers derived from the Input-Output model. The financial models also established key parameters such as capital-labour ratio, value added-output ratio, skilled-unskilled labour ratio and import intensity. Some assumptions were made in consultation with CPCC and industry sources. As such, number of assumptions have been employed for this assessment while the input-output table inherits certain limitations, therefore the estimated results should be treated cautiously.

The land reclamation stage has already been completed before our assessment, hence the data for that section of the analysis was readily available. For reference, the land reclamation stage takes into account the impact of land reclamation, common infrastructure development and lease of land. It should be noted that some of the common infrastructure was yet to be developed, hence we have made necessary estimates where required. However, it is expected that most of the common infrastructure requirement will either be completed before starting construction of buildings and/or simultaneously be undertaken.

For analytical easiness, this study aims at capturing the economic benefits accruing to the national economy during one-full year operations of the Port City. This study assesses the economic impact for a single year at maturity, where all the economic units/sectors perform at 'normal' level. This 'normal' level is defined as the average performance recorded by national and international firms in an average year.



# Methodology (cont.)

In planning the assessment, we decided to broadly classify the Project into three distinct stages (refer figure 8). However, such demarcation may be less visible in actual practice. For instance, certain operations may start before completing all the construction activities. However, this would only affect the timing of the assessment, and not the key output figures. The economic impact is assessed during the following three stages of the Project. It should be noted that the assessment was undertaken assuming that the development/operations of the Port City is carried out today, relying on the information available at present.

1. Reclamation, infrastructure development and land lease
2. Construction stage
3. Operational stage

As the reclamation work is already complete, we relied on the historical information provided by CPCC to assess the economic impact during this phase of the project. For reference, this phase also includes estimates for the development and maintenance of the common infrastructure.

In addition, the land reclamation and common infrastructure development stage also include the lease of land by both the GoSL and CPCC. This encapsulates the revenue earned by the GoSL and CPCC and the subsequent reinvestment, taxes, and repatriation of profits by the promoter. When determining the estimated property prices, we considered similar transactions where property was leased on a long term basis. The Port City may be able to demand a premium given its location and other benefits, however we also note that the prices may vary given the DCR limitations for each plot.

The gross floor area specified in the DCR is the maximum buildable space allowed for each plot, with the developer on a given plot allowed to design the structure to meet the maximum available GFA or lesser. However, for this assessment, the GFA specified by the DCR was considered in order to estimate the construction cost and determine the scale of operations for potential businesses operating within Port City.

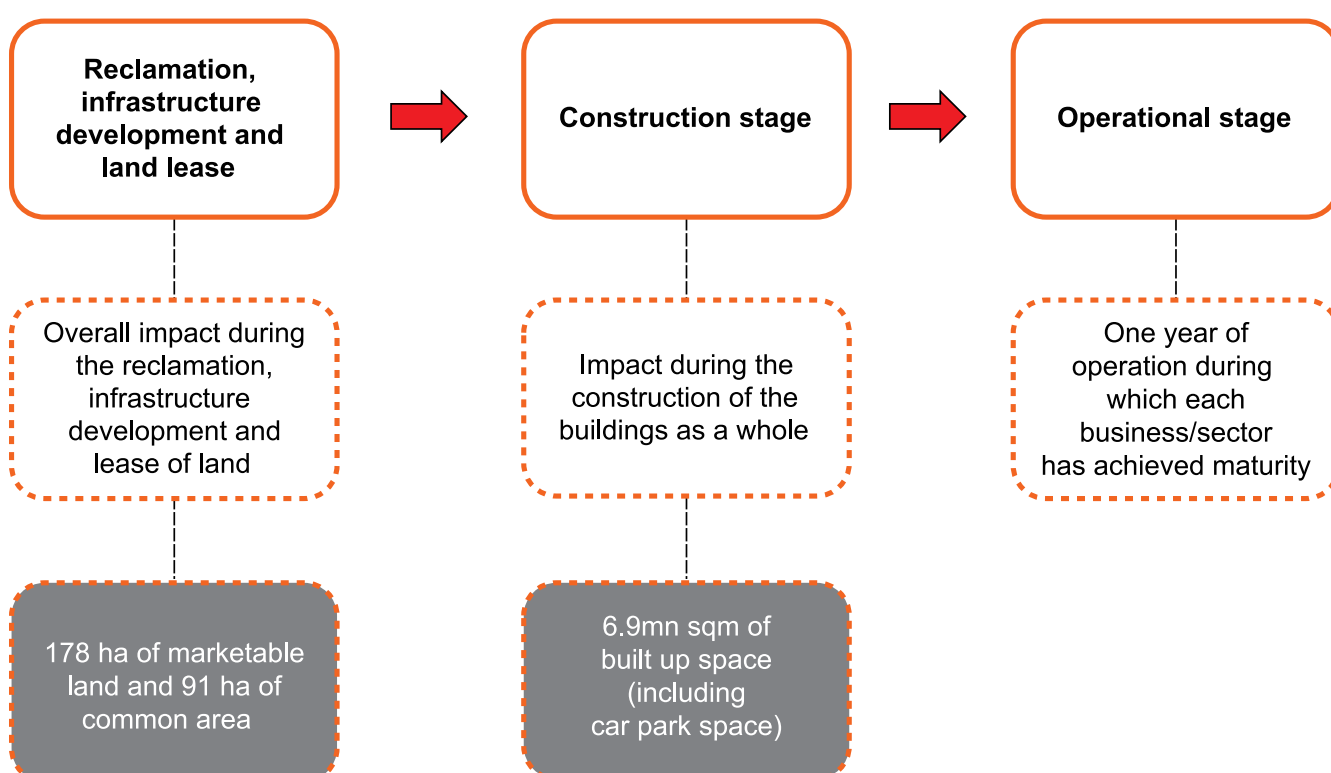


Figure 8: Stages of development as assumed for the assessment



## Methodology (cont.)

The second stage consists of the construction of the buildings and required infrastructure for the commercial operations of the businesses within the Port City. This assessment was undertaken based on the maximum permissible GFA available under each sector as designated by the DCR. For the purpose of this assessment, we have apportioned the space allocated under “Others” between residential (c. 59%), retail (c. 17%) and commercial (c. 24%) space proportionally, since this space can be used for any of the aforementioned purposes at the developers’ discretion.

To estimate the construction costs of the Port City, we have considered the construction costs incurred by comparable peers and for similar projects across the region. We have not considered any cost escalations as a result of potential delays in completing any real estate development/s.

Local and regional projects were considered for the benchmarking exercise to assess the expected scale of each sector and the required investment over the construction stage. After determining the scale of specific properties (i.e. number of rooms in the hotel, number of beds in the hospital etc.) based on the available GFA and key parameters, we estimated the investment required for the construction stage. We then apportioned the construction investment between materials purchased, labour costs incurred, services consumed and constructor’s profits to assess the impact in detail.

When evaluating the operational stage of the Port City, we have assumed that the sectors and companies are operating at a mature level. We incorporated this assumption by benchmarking the project against existing local and foreign companies, which are currently in operation.

The aggregate of the impact of each sector was taken to derive the impact for the whole Project over one full year of operation. However, we note that each business may reach maturity at different stages of time during the operations of the Port City, and therefore the timing of this economic impact in reality may not occur in the same year for all sectors.

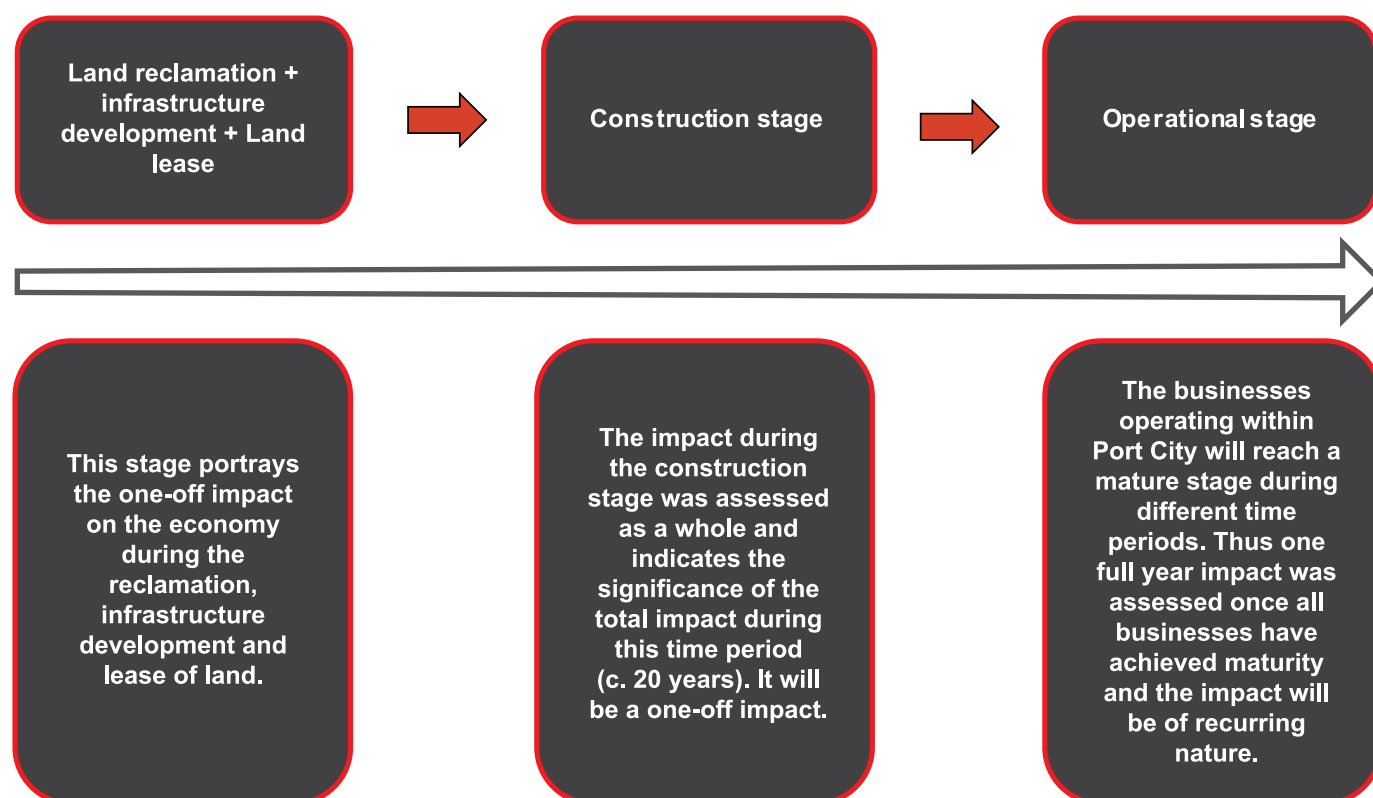


Figure 9: Nature of the impact during each stage

# Methodology (cont.)

## Information used

This study has relied upon data collected at three different levels, as shown in the diagram below.

The macro data was collected from few sources such as Construction Industry Census of 2013/14, Input-Output Model of 2010, and Construction Industry Survey of 2017. The meso level data were collected from firms in each given industry or sector, including both Sri Lankan and foreign firms. Finally, we also conducted key informant (industry experts) interviews to further refine the data and insights collected at the macro- and meso-levels. This study is based on the application of certain assumptions and the key informant interviews were a supporting factor in developing the same.

The financial information related to the local and foreign companies were obtained from publicly available sources such as the company websites, published annual reports, shareholder announcements, the Colombo Stock Exchange (website), Emerging Markets Information Service (EMIS), Reuters (website) and company websites. Information related to the land reclamation and the infrastructure development during stage 1 and 2 were provided by CPCC.

CPCC and local industry experts provided input to determine certain key parameters of the construction stage and operational stage of Port City. In addition, the information in the DCR was used to determine certain parameters for the assessment (gross floor area, car park requirement, plot and height restriction). Additionally, analysis and parameters provided by Lakshman Kadirgamar Institute was incorporated to develop the scenario analysis.

Further, publicly available industry statistics were obtained from Central Bank of Sri Lanka (CBSL), Sri Lanka Tourism Development Authority (SLTDA), Department of Census and Statistics (SL), Singapore Tourism Board, Ministry of Tourism (India), International Construction Market Survey (Turner and Townsend) and Supplementary Environment Impact Assessment Report (2015).

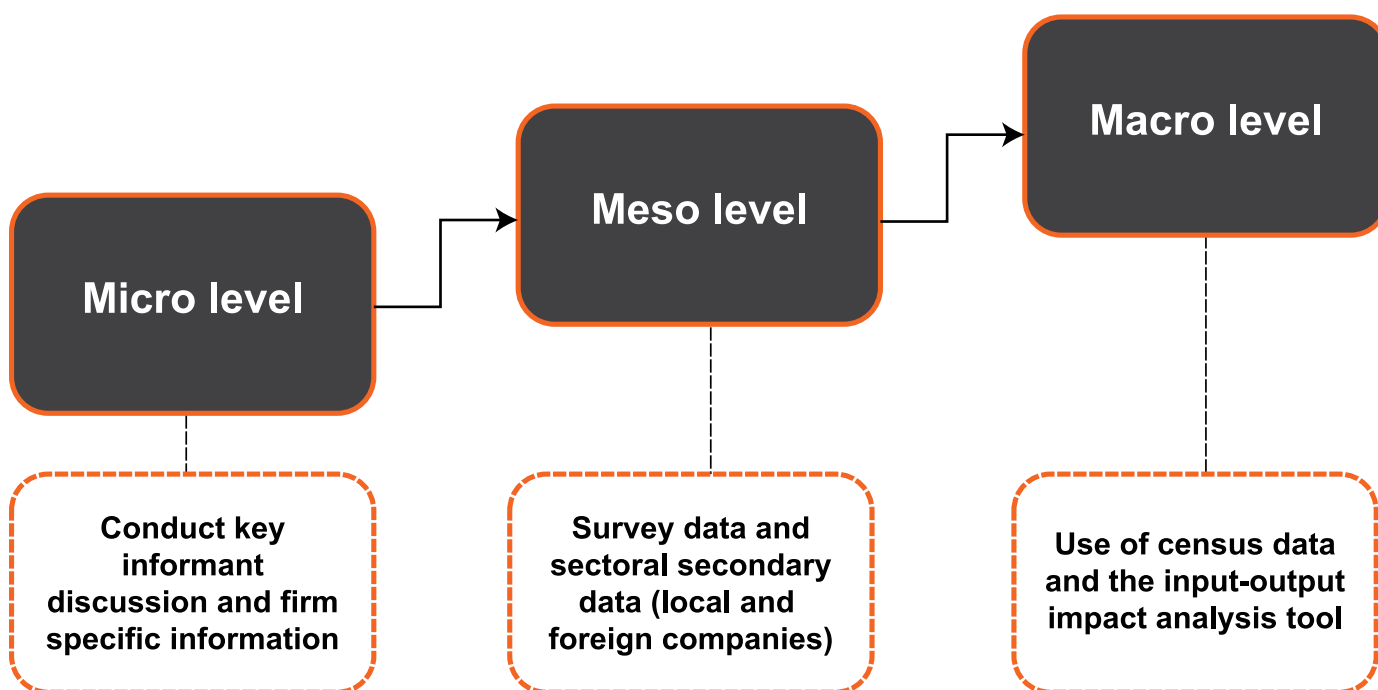


Figure 10: Levels of information used for the assessment



## Limitations of the assessment

Following limitation were identified when undertaking the assessment, as it may assist the users to get a clear understanding of the results as outlined in this report.

- **Time Period** - The Port City Project is currently in the initial stages of development and the construction is estimated to take c. 20 years for completion. The assessment was based on the current parameters, whereas the actual performance may differ significantly with passage of time given the long term nature of the Project.
- **Impact of inflation** - As the assessment was undertaken during 2019, the information broadly reflects the information as available during the assessment period. It should be noted that the assessment was undertaken based on the collected data and the impact from inflation was not considered for the assessment.
- **Classification of stages** - In order to quantify certain variables, the Project was classified into several distinct stages. However, this may not be seen in practice where the development of the Port City and the operations of certain segments within the Port City may take place simultaneously.
- **Environmental factors** - The assessment was undertaken assuming the Project will proceed as planned and reached full completion. The potential implication from internal and external political, economical, social and technological factors were not considered (please refer Scenario Analysis).
- **Benchmarking** - Local and foreign companies were used to estimate the impact during the operational stage of the Port City. Further, we have made certain assumptions regarding the weightages of sectors in estimating the impact from the commercial sector. It should be noted that the actual sectors and weightage may vary from the assumptions made, which would affect the economic impact, both at maturity and beyond. In addition, the operations of the Marina was not considered due to the unavailability of comparable peers given that it is the first operation of its kind.
- **Tax amendments** - The information was collected based on tax policy and regulations as prevalent prior to December 2019 and certain amendments were carried out to suit the new tax policy and regulations which was announced in December 2019 (refer page 40). However, the potential simulative impact derived through the new tax amendments were not captured, as it is too early to make any substantiated quantifications of the impact. Further, the proposed amendments to the Inland Revenue Act which will come into effect from April 2020 may have additional implications.
- **Assumptions employed** - As Port City is the first reclamation project undertaken in Sri Lanka, certain assumptions regarding lease of land and foreign ownership were made in consultation with CPCC. In the absence of available industry data, CPCC has provided certain facts and inputs, but the findings are not reflective of CPCC's expectations/business plans etc.
- **Limitations in the input-output table** - According to the Department of Census and Statistics of Sri Lanka, the input-output table suffers from the following limitations<sup>5</sup>,
  - Unavailability of enough comprehensive data
  - Unavailability of trade and other services related survey
  - Unavailability of cost of production survey for some agricultural crops
  - Mismatch of used classifications by data providing stakeholder agencies in collection, organization and dissemination of data

<sup>5</sup>Supply & use table (SUT) and Symmetric input-output table (SIOT) 2010 (web release)



3

# Assumptions





# Financial assumptions

## 1. Hospitality segment

As per the DCR, a maximum GFA of 318,545 sqm has been allocated for the hospitality segment, with 167,782 sqm allocated for city hotels and 150,763 sqm allocated for an integrated resort and theme park. The hotels are expected to be in the 4 & 5-star class range which may be preferred in a prime location.

### 1.1 City Hotels - Construction stage

The allotted GFA for this segment was used to determine the size of the hotels to be built in the Port City. To estimate the number of rooms based on the available GFA, 40% of the space was assumed to be allocated for the rooms based on comparable hotel properties. An average room size of 484 sq. ft was assumed considering a 50:50<sup>6</sup> split between 4 and 5 star rated hotels each sized at 430 - 540 sq. ft (40 to 50 sqm) respectively. Room size of 4 and 5 star hotels in Colombo ranged between 300 – 450 sq. ft for the standard rooms, while executive rooms and suites reached up to 2,200 sq. ft per room.

GFA allocated - sq. ft mn	1.8
% of space allocated for rooms	40%
Average room size - sq. ft	484
Total number of rooms	1,491
Construction cost per room - USD	200,000
Total construction cost - USD mn	298

Table 6: Assumptions on construction parameters for the city hotels segment

The total estimated number of rooms in the city hotel segment is 1,491 based on the parameters assumed. This will be the total number of rooms given the maximum available GFA for the sector, whereas the developers may opt to build the hotels with different specifications which may result in changes to the total room count. The total construction cost of this segment was determined based on the estimated number of rooms and construction cost per room. Construction cost of USD 200,000<sup>7</sup> per room (excluding land) was determined based on properties built in Sri Lanka and in the region for 4 and 5 star rated hotels. The estimated total construction cost of this segment amounted to c. USD 298mn based on the assumptions employed (excluding land cost). Cost of constructing the required parking space is estimated separately based on the parameters specified in the DCR.

### Operational stage

Based on the number of rooms estimated for the city hotel segment, local city hotels and similar star rated hotels in the region were considered to benchmark the operations. Foreign hotels were included in the benchmarking exercise, to account for the potential of a renowned hotel chain managing the property/s.

Occupancy of selected listed city hotels in Colombo ranged between 48% and 76% in FY19. An occupancy rate of 77% was assumed for the sector during a mature year of operation, similar to the occupancy registered by hotels operating in the region (c.73% SL average – 2018 CBSL annual report). The occupancy in Singapore has been +80% during 2019 facilitated by the trade and commerce, retail, marina etc., while Malaysia has seen occupancy in the range of 60-70% on the back of alternative accommodation and over supply of rooms. Further, the inclusion of commercial space, convention center, hospital, marina etc. could become drivers for demand within the Port City as operations mature, enabling the hotels to maintain above par occupancy levels compared to city hotels in Colombo.

<sup>6</sup>CPCC Management | <sup>7</sup>PwC analysis

Source: CSE, EMIS, PwC analysis, CPCC Management, SLTDA, Company websites



# Financial assumptions (cont.)

Average occupancy	77%
Room rate per night - USD	176
F&B revenue as a % of room revenue	91%
Other revenue as a % of Room and F&B revenue	8%
Gross profit margin	70%
Operating profit margin	30%
Staff per room	2.3

Table 7: Operational parameters employed for the city hotels

The F&B revenue and other revenue were estimated based on the historical performance of local peers. Gross profit margin of the peer companies averaged at 70%. Cost of sales was estimated based on the assumed GP margin and c. 40% of the cost was allocated to F&B. Supplies for F&B could be sourced locally or imported, thus a 50:50 split was employed between locally manufactured and imported goods. Staff per room was determined based on the local city hotels, which ranged between 1 and 3 employees per room.

Based on the peer company leverage of c. 39% during the operational stage, it was assumed that 39% of construction cost would be financed through debt. However, this may be lower than the leverage assumed by a hotel developer during the construction period. VAT, TDL (Tourism Development Levy) and income tax of 8%, 1% and 14% were employed respectively to estimate the government revenue during the operational stage.

In addition, a depreciation of 6% ( % of sales) and a dividend payout ratio of 41% was employed based on the selected peer averages.

## 1.2 Integrated Resort and theme park

### Construction stage

A total land area of 226,144 sqm has been allocated for an integrated resort and theme park segment. The theme park will be built on c. 30% of the allotted space, while the balance will be used for the resort (60%) and as retail space (10%). The total GFA available under this segment amounts to 2.4mn sq. ft, which will comprise of the resort and the theme park (excluding the retail space which is accounted under the retail segment).

Based on the space allocated for the resort, 30% was considered as the space taken for rooms based on local resort properties. An average room size of 538 sq. ft (50 sqm) was assumed per room. A comparatively smaller room size was assumed for the proposed resort, due to its location within the city compared to the peer 5 star rated resorts which are primarily located along the coastal areas of Sri Lanka with room sizes ranging between 500 to 2,500 sq. ft.

60% space allocated for the resort hotel (sq. ft)	1,622,798
% of space allocated for rooms	30%
Average room size (Sq. ft)	538
Total number of rooms	905

Table 8: Construction parameters employed for the resort hotel

Source: CSE, EMIS, PwC analysis, CPCC, SLTDA





# Financial assumptions (cont.)

Based on the assumptions employed, the resort is estimated to contain c. 900 keys. Construction cost per room was assumed to be USD 180 per sq. ft<sup>8</sup> which amounts to c. USD 323,000 per room. In order to estimate the construction cost for the theme park, USD 70 per sq. ft was assumed based on the construction costs for regional theme parks. However the cost of construction may vary depending on the brand of the operator for the theme park. Estimated total construction cost of this segment amounted to c. USD 349mn (excluding land cost).

## Operational stage

This segment includes the operations of both the hotel and the theme park.

With the theme park being allocated 15 acres of GFA, the total annual visitors for the park was estimated based on an assumption of 1,500 visitors per day based on visitor data for local and regional theme parks.

Ticket price per visitor was estimated based on the average ticket prices across comparable theme parks in the region. Accordingly, the ticket prices at selected theme parks ranged between USD 16 and USD 58 per person, depending on the location and available activities, with an average of USD 32 per person. Therefore, we have used a ticket price of USD 32 per person in our assessment.

Room revenue was projected based on the number of available rooms, expected occupancy of 78% and the average room rate of USD 264 per night. Occupancy and the average room rate were assumed, taking into account the prevailing occupancy and room rates in comparable resorts in the country and the region.

Average number of visitors per day	1,500
Ticket price per visitor (USD)	32
Number of rooms	905
Average room rate (USD)	264
F&B costs as a % of F&B revenue	46%
Salary costs as a % of total revenue	15%
Utility costs as a % of total revenue	5%
EBITDA margin	36%

Table 9: Operational parameters employed for the resort

F&B revenue is expected to be driven by the number of visitors to the theme park and the hotel. Hence, the F&B revenue for theme park and hotel were estimated separately, based on comparable resorts operating locally and in the region. As such, F&B revenue as a percentage of theme park ticket sales and room revenue were 31% and 46% for the theme park and hotel respectively. Similarly, the merchandise income, which includes the sale of goods within the theme park, was estimated at 29% of ticket sales, and is in line with the ratio at comparable theme parks.

Based on the assumption, total annual revenue applicable to this segment amounted to USD 127mn which includes both the revenue attributable to the hotel and the theme park.

Resort - employees per room	2
Theme park - employees per acre	8

Table 10: Staffing requirement for the IR & Theme Park.

<sup>8</sup> CPCC Management

Source: CSE, EMIS, PwC analysis, CPCC, SLTDA



## Financial assumptions (cont.)

Direct costs relating to F&B is estimated to be 40% of F&B revenue, while we assumed the split of direct costs between locally sourced and imports to be 50:50, similar to the city hotel sector. Salary expense was estimated based on the total number of employees required for the resort and theme park. Two employees per resort room and eight employees per acre of theme park was assumed based on comparable peers to estimate the total employee requirement during the operational stage. Total employees amounted to 2,260 while an average monthly salary of c. LKR 74,000 was assumed based on the city hotel sector peers. Utility costs is expected to be 5% of the total revenue, which was derived from the average utility costs observed at comparable integrated resorts which included theme parks.

An EBITDA margin of 36% was employed based on the selected peers and results in an EBITDA of USD 46mn for this segment. A leverage of 47% was incorporated (on the construction cost) based on the peers to estimate the finance cost during the operational stage of the hotel. However, the actual debt funding assumed by the developer during the construction period may differ.

The tax rates applicable to the city hotel segment was considered to assess the government revenue. Reinvestment is expected to be around c. 4% of the total revenue, derived from the average of capex to sales ratio of comparable resorts with theme parks. Dividend payout ratio of c. 18% was used based on the selected peers.

*Source: CSE, EMIS, PwC analysis, CPCC*



# Financial assumptions (cont.)

## 2. Healthcare sector

The DCR specifies a maximum GFA of 72,791 sqm (c. 783,515 sq. ft) as the space available for the construction of the hospital. The hospital is assumed to have a capacity of 350 to 400 beds (lower end of 350 assumed for the assessment) and expected to provide a wide spectrum of medical services. In order to benchmark the operations of the hospital, both local hospitals and foreign hospitals in Malaysia and Singapore were considered.

### Construction stage

Based on the features of the comparable hospitals, the space requirement for the hospital in Port City was determined. GFA per bed ranged between c. 900 to 2,200 sq. ft based on the selected peers. In consultation with CPCC, a GFA of 2,000 sq. ft<sup>9</sup> per bed was arrived considering the need for multiple theaters, consultancy rooms etc. to provide tertiary and quaternary care and this requires a total built area of 700,000 sq. ft for the hospital (excluding the car park).

Number of beds	350
GFA per bed - sq. ft	2,000
Total GFA based on 350 rooms - sq. ft	700,000
Construction cost per bed - USD	278,709
Total construction cost - USD mn	98

Table 11. Construction related parameters for the hospital

A construction cost of USD 140 per sq. ft was assumed based on regional average construction cost and this amounted to a total construction cost of USD 98mn which includes the construction of the building and the cost of medical equipment assuming that the existing duty exemptions for large scales projects prevail. The construction cost may vary depending on the specialization and the services offered by the hospital. Further, the construction cost was estimated based on the total sq. ft of 700,000 and this excludes the construction cost of a multi-story car park and the investment required for the land.

<sup>9</sup>CPCC Management | Source: CSE, EMIS, PwC analysis, CPCC, Turner and Townsend (2019 survey)





# Financial assumptions (cont.)

## Operational stage

Listed hospitals in Sri Lanka, Malaysia and Singapore were benchmarked to estimate the contribution during the operational stage of the hospital. Healthcare services revenue per bed of USD 862<sup>10</sup> was assumed based on the selected healthcare service providers. Local annual healthcare service revenue per bed ranged between USD 131 – 344 for the selected companies. The average revenue per bed of the regional peers stood at c. USD 1,700. The derived average revenue per bed was based on both the local and regional peers, with the assumption that the healthcare service within Port City being priced at a premium compared to the existing local hospitals in Colombo. However it maybe provided at a discount compared to the regional peers given the lower cost structure and in order to be attractive for medical tourism.

Per day healthcare revenue per room - USD	862
Pharmaceuticals revenue as a % of healthcare	5%
Other revenue as a % of pharma and healthcare	22%
GP margin	47%
EBITDA Margin	21%
Number of staff per bed	6

Table 12: Operational parameters for the hospital

Pharmaceutical revenue was considered in proportion to healthcare revenue and was estimated at 5% of healthcare revenue, based on local hospital data. Similarly, other revenue was estimated as 22% of healthcare and pharmaceutical revenue. Total revenue based on the combined assumptions employed was USD 141mn. Gross profit margin of the selected peers ranged between 31% - 62%, with the average of 47% employed as an assumption. The pharmaceutical procurement cost was segregated as imports (85%) and locally procured (15%), based on Sri Lanka's pharmaceutical import requirement (BMI report 2Q2019). EBITDA margins for peers ranged between 16% - 30%, we have considered the average of 21% for this assessment.

Total number of staff required for operations was estimated based on the number of staff employed per bed for peer companies. This parameter ranged between 4 and 8 for the selected peer group, with the average of 6 staff per bed being employed for this exercise. Total staff count of 2,059 was estimated based on the 350 beds assumed for this segment.

Average leverage (c. 45%) assumed by the peer companies was employed to estimate the finance cost applicable to this segment. Government revenue was estimated based on the applicable VAT rate of 8% and an income tax rate of 14%.

The maintenance capex was estimated as a percentage of revenue and a rate of 10% was applied based on the peer companies, while a dividend payout ratio of 58% was assumed for the healthcare segment based on the selected peers.

<sup>10</sup>PwC analysis | Source: CSE, EMIS, PwC analysis, CPCC, BMI report



# Financial assumptions (cont.)

## 3. Residential segment

The Port City project is expected to supply c. 24,000 housing units during the construction stage up to 2041, which will include both apartments and individual houses. CPCC expects the apartments to be smaller in size compared to the relatively larger luxury apartment category currently seen in Colombo.

### Construction stage

The total GFA allocated for the residential segment within the Port City amounts to c. 3.0mn sqm. Given the total available floor area, 70% of the area was assumed to be saleable space with each unit estimated to have an average floor area of 942 sq. ft. The saleable space of properties benchmarked ranged between 70% to 85% locally and in the region. The total number of units were estimated based on an assumption of 1,345 sq. ft per unit (125 sqm) of GFA as provided by CPCC.

GFA allocated – sq. ft mn	32
Saleable area % of GFA	70%
Saleable area per house - sq. ft	942
Number of units	23,994

Table 13: Construction parameters for the residential segment

Total construction cost was estimated based on the available GFA for this segment. Construction cost per sq. ft was assumed to be USD 120 based on market rates and in consultation with CPCC. The total construction cost amounts to USD 3.8bn. This excludes the cost of land and the construction of underground/multi story parking complex.

### Sales and maintenance

The selling price per sq. ft for on-going and completed luxury apartments in Colombo ranged between USD 274 – 400. The property with the highest price ranged between USD 397 - 628 for two to four bed room houses from the selected comparable peers. With the housing units in Port City considered to be relatively smaller, the average of two and three-bedroom prices were considered, and it amounted to USD 480 per sq. ft. The higher price point from the selected peers were assumed to estimate the selling price given the location of the Project. Based on the parameters assumed and the assumption of all the housing units completely being sold, the total revenue was estimated at c. USD 10.8bn.

As the apartments are sold and occupied, a per unit maintenance cost of USD 1,140 per annum was estimated based on exiting properties and a premium of 25% as expected by CPCC. The total maintenance cost is estimated to be c. USD 27mn per annum for the total number of residential units.

# Financial assumptions (cont.)

## 4. Car parks

Each segment was assessed based on the GFA prescribed by the DCR and excludes the space required for car parks. Thus, the required parking space was estimated based on the parameters prescribed by the DCR. The required number of parking bays and the related cost of construction was estimated separately based on the space requirement suggested by the DCR.

The DCR specifies the minimum required space for the car parks and motor bikes based on different type of uses of the GFA. However, additional provisions may be needed, based on the actual demand for the development.

Segment	Number of car park slots required	Number of Motor Bike slots required	Total space required (sq. ft)	Basis
Commercial	6,256	6,256	2,626,377	1 car park space and 1 motor bike space per 200 sqm of GFA
Retail space	3,467	5,779	1,530,111	1 car park space for 250 sqm and 1 bike park space for 150 sqm of GFA
Residential	26,394	5,279	10,398,016	1 car park for each housing unit plus additional 10% for visitors. 20% of the car parking space for motor bikes
Hospitality	839	168	330,495	1 car park space for 200 sqm of GFA plus 20% of the car parking space for the motor bikes
Hospital	1,036	207	408,210	1 car park space for each bed and 1 car parking space for 1/3 of the total staff. Additional 20% of the car park space for motor bikes
Convention and Exhibition centre	1,578	394	624,120	1 car parking space for each 50sqm of GFA and 1 motor bike space for each 200 sqm space
International School	20	8	8,008	1 car park for every 2 class rooms plus additional 20% for visitors. 40% of the car parking space for motor bikes
Integrated Resort	1,131	226	445,457	1 car park space for 200 sqm of GFA plus 20% of the car parking space for the motor bikes

Table 14: Estimated car parking space based on the parameters specified in the DCR

A gross floor area of 388 sq. ft (36 sqm) per parking bay was considered to derive the total area required for the car parks, while 32 sq. ft was employed per motor bike space. The GFA of 388 sq. ft was considered for the car parking space to account for the ramps and access ways within the parking area. The total construction cost is estimated based on the estimated space requirement and construction cost per sq. ft. The total construction cost for the accumulated car parking space was based on a construction cost of USD 70 per sq. ft and this amounted to USD 917mn.

Source: PwC analysis, CPCC Management, DCR



# Financial assumptions (cont.)

## 5. Commercial segment

The commercial space has not been specifically designated for any particular industry, however it is expected that it will be focused on service-oriented companies. Based on the assumption of the commercial space being designated for service oriented companies, sectors such as Information Technology, Financial Services, Maritime Services, Professional Services and Operation of Regional Head Quarters were considered for this assessment.

### Construction stage

Gross floor area of 1.3mn sqm was considered for the commercial space for this assessment and this includes the apportioned portion of “Other” segment which was not specifically classified as per the DCR. Following assumptions were employed to estimate the construction cost of the commercial space.

GFA allocated in Port City (in mn sq. ft)	13.5
Construction cost per sq. ft	120
Total construction cost (USD mn)	1,616
Rentable space as a % of total GFA	70%

Table 15: Construction parameters for commercial space

The construction cost per sq. ft of USD 120 was assumed in consultation with CPCC to estimate the construction cost for the segment. A rentable space of 70% was determined from the total gross floor area based on A Grade office space available in Colombo.

The total construction cost is estimated at (excluding the land cost and car parks) c. USD 1.6bn for the commercial buildings.

### Operational stage

The commercial space at Port City will not be restricted to specific industries and the dynamics of this sector may vary depending on the industries and companies which opt to operate within Port City. However restrictions will apply for industrial activities that produce material, energy, chemicals and any hazardous/toxic waste.

In order to estimate the potential impact from the operations of this segment several local and foreign companies were benchmarked. However, it should be noted that the economic impact arising from this segment may vary based on the actual companies which may occupy the space and the way in which they contribute towards the economy.

Following service sectors were selected to estimate the operational scale of this segment,

Sectors	Share	GFA in sq. ft
Financial sector	20%	2,733,400
Information Technology services	40%	5,466,800
Maritime services	25%	3,416,750
Other professional services and regional HQ	15%	2,050,050

Table 16: Sectors assumed within commercial space

Based on the service related exports of Sri Lanka, Information and Communication Technology (ICT) industry has recorded c. 18% average annual growth between 2006 and 2016. ICT sector accounted for c. 5% of the service exports in 2016 compared to c. 1% contribution from financial services exports. IT sector was assumed to be largest contributor towards the commercial space based on the growth trend and higher contribution to service exports of Sri Lanka.

Source: CSE, EMIS, PwC analysis, CPCC, DCR, National Export Strategy of Sri Lanka 2018-2022

# Financial assumptions (cont.)

Based on the total built up area of the commercial space, 70% of the space is assumed to be rentable/usable. The scale of operation for each sector was determined based on the number of employees and the space required per employee. The space required for one employee was used to derive the total number of employees for each segment. The assumption for space per employee was determined through benchmarking the specific sectors assumed to operate within the space as follows.

Sectors	Sq. ft per employee	Number of employees
Financial - Bank	130	3,626
Financial - Insurance	130	3,626
Financial - Others	80	11,785
IT services	80	47,140
Maritime services	150	15,713
Professional services	80	5,893
Regional HQ relocations	150	6,285
<b>Total employees</b>		<b>94,069</b>

Table 17: Estimated total number of employees under the commercial space

When undertaking the benchmarking exercise, both local and foreign companies were considered. For the Banking and Insurance segments, foreign banks operating in Sri Lanka and local insurance companies were benchmarked, while other sectors have a mix of both local and foreign companies. Information from 27 companies from various service sectors were selected to benchmark the commercial space and foreign companies operating in countries such as India, Malaysia, China, UK and USA were considered to represent various service sectors from the selected categories. The averages as given in Table 18 is based on the selected peer companies for the purpose of this assessment.

Sectors	Avg. revenue per employee per annum (in USD)	Avg. salary cost per employee per annum (in USD)	EBITDA Margin
Financial– Bank*	81,035	17,579	61%
Financial– Insurance*	55,287	8,207	20%
Financial– Others**	66,429	24,813	15%
IT services	56,376	29,930	28%
Maritime services	119,499	7,031	7%
Other Professional services***	92,174	30,716	22%

Table 18: Operational parameters employed for the commercial sector

The rental expenses were estimated using a base rate of LKR 600 per sq. ft (per month). Total rental expense was estimated based on the total rentable space for each sector. Meanwhile, depreciation ranged between 1% to 5% of topline for the selected sectors.

Income tax rates of 14% and 24% were considered for the sectors, depending on the nature of the operations, while the VAT (8%) was employed to assess the potential impact on government revenues. IT sector will be exempted from taxes considering the export nature of its operations. The maintenance capex and dividend payout were estimated based on the peer companies.

\*Banks & Insurance – Net interest income and Net earned premium per employee

\*\*Financial – Others include asset management companies

\*\*\*Other professional services include companies providing corporate and legal advisory services, media, real estate services and engineering consultation services.

Source: CSE, EMIS, PwC analysis, CPCC, DCR



# Financial assumptions (cont.)

## 6. Retail Segment

GFA applicable for the retail sector amounted to 0.9 mn sqm (c. 9.5 mn sq. ft) after the apportionment of the “Other” segment. For the purpose of assessing the economic impact from the operations of retail sector, we looked at comparable retail businesses operating in consumer durables, fashion, hypermarkets and supermarkets in Sri Lanka and in the region. In addition to high end malls, this segment may also include small scale retail outlets (i.e around the quay area).

### Construction stage

The construction cost for the retail sector was estimated based on a per sq. ft cost of USD 100 per sq. ft (CPCC Management), which will include malls and small standalone retail outlets. Excluding the land cost and construction of car parks, the estimated total construction cost for the retail sector amounted to USD 933mn.

GFA allocated in Port City (sq. ft in mn)	9.3
Construction cost per sq. ft - USD	100
Total construction cost - USD mn	933
Rentable space as a % of total GFA	60%

Table 19: Parameters for the construction of retail space.

### Operational stage

The rentable space was assumed to be 60% of the total available GFA under this segment, while it ranged between 45% and 82% for established retail malls in the region.

Comparable businesses recorded an average revenue per sq. ft (of retail floor area) of USD 347, which was employed for the assessment while the metric ranged between USD 207 and USD 478. This resulted in a total revenue of USD 1.9 bn.

Average annual revenue (USD per sq. ft)	347
Gross profit margin	38%
Operating profit margin	7%
Number of employees (per 1,000 sq. ft)	5

Table 20: Operational parameters employed for the retail sector

Cost of sales from retail sector is expected to be 62% of revenue based on comparable businesses while 30% of the goods sold were assumed to be a locally manufactures given the limited product offerings presently in the country.

The total number of employees for this segment was based on the assumption of 5 employees per 1,000 sq. ft of retail floor area. In order to estimate the total salary cost for retail operations, we relied upon the average salary of USD 5,153 per employee per annum (c. LKR 76,500 per month) based on local peers.

Source: CSE, EMIS, PwC analysis, CPCC Management





## Financial assumptions (cont.)

Recognizing the low probability of retailers also being the developer or owner of their retail spaces, we computed the possible rental cost to the retail businesses setting up in Port City. As such, the rent was assumed to be on average USD 67 per sq. ft (LKR 1,000) per month based on the prevailing rental rates for retail spaces in properties in proximity to Port City.

Operating profit margin of c. 7% was applied based on the margins earned by peer companies. As the retail businesses may operate in the retail mall as tenants, the interest cost was computed based on the average interest cover ratio witnessed for the peer companies. An interest cover of 4.5x (of profit before tax) was used to estimate the finance cost applicable for the sector.

# Financial assumptions (cont.)

## 7. International School

The Port City Project will include an international school with boarding facility as part of the social infrastructure within its scope. The school is expected to be focused on catering to expatriates working in the Port City and greater Colombo, which will result in premium pricing.

### Construction stage

The school is expected to have a capacity of 1,000<sup>11</sup> students while the boarding facility will have a capacity of 300<sup>12</sup> students. A maximum permissible GFA of 49,373 sqm was allocated for the international school and the boarding facility. The following assumptions were employed to estimate the built-up area required for this segment.

GFA in sq. ft per student	275
Number of students	1,000
sq. ft area of the International School	275,000
Average size of a hostel room (in sq. ft)	250
Capacity of the hostel - No. of students	300
Common area	30%
sq. ft area of the hostel	37,500
Total built up space of the school and hostel - sq.ft	312,500

Table 21: Parameters for the school and boarding facility.

The total investment was estimated based on the per sq. ft construction cost of USD 75 and the parameters assumed to determine the built-up space. The total construction cost amounted to USD 24mn for the construction of the international school and the boarding facility.

### Operational stage

The parameters to determine the operational features of the school were based on similar international schools operating in Sri Lanka and across the region. The following fee structure was assumed to benchmark the operational income and expenses.

Avg. annual fee per student (pre to high school) in USD	19,393
Admission fee per student – USD	2,000
Monthly boarding fee per student - in USD	850

Table 22: Fee structure employed for the international school

<sup>11, 12</sup>CPCC Management | Source: CSE, EMIS, PwC analysis, CPCC Management



# Financial assumptions (cont.)

Staff and utility expenses as a % of revenue	
International school	26%
Boarding school	30%
Overall EBITDA margin	56%

*Table 23: Utility expense and EBITDA margin for the educational institution*

Total admission fee income was estimated based on the intake of 48 new students for a year (2 classes with 24 students each). The annual fee was estimated based on 1,000 students and the assumed average annual fee, while the boarding income was estimated for the 300 students per annum. Total income generated from the school and boarding facility was estimated at USD 23mn during a mature year of operation and operating at the assumed full capacity.

Depreciation was estimated as 2% of revenue, while dividend payout of 45% was employed. Income tax was estimated based on tax rate of 14%



# Financial assumptions

## 8. Convention and Exhibition Center

The convention center within the Port City is envisaged to be built to host international conferences and trade fairs. It is estimated to have a total capacity of 13,000 (8,000 seats and 5,000 exhibition)<sup>13</sup>, which will include a number of venues such as exhibition halls, auditorium, ball rooms and meeting rooms.

### Construction stage

The maximum GFA allocated for this segment amounts to 78,888 sqm and CPCC assumes the event space to be 40,000 sqm.

GFA allocated for the convention center - sqm	78,888
Rentable space as a % of GFA	51%
Event space –sqm	40,000
Construction cost per sq. ft - USD	176
Construction cost - in USD mn	149

Table 24: Parameters for the construction of the exhibition centre

The construction cost was estimated based on a per sq. ft construction cost of USD 176<sup>14</sup>, this resulted in the total construction cost being USD 149mn (excluding investment on land and car park construction cost).

### Operational stage

The parameters for the convention center was benchmarked with similar venues operating in Sri Lanka, India, Dubai, USA and UK. Based on the peer information, a maximum occupancy of 65% was assumed for the primary exhibition hall in this segment. The following rental rates were estimated based on local comparable conference halls, banquet halls and exhibition centers.

	Occupancy	Base rate (LKR) <sup>15</sup>
Exhibition Hall	65%	2,800,000
Auditorium	65%	1,890,000
Ball room	50%	270,000
Meeting Rooms	30%	50,000

Table 25: Assumptions on occupancy and event rates

F&B revenue and other revenue (equipment rental, advertisements, naming rights etc.) were assumed to be 64% and 30% of rental revenue respectively. Dividend payout ratio was assumed to be 40%, while depreciation of 6% on total revenue was considered.

Number of employees for the convention center was estimated based on the comparable peer data collected. The average square foot area per employee amounted to 1,577 based on event space. Accordingly, the total staff requirement for the convention center is estimated to be 273.

<sup>13</sup>CPCC Management, <sup>14,15</sup>PwC analysis | Source: CSE, EMIS, PwC analysis, CPCC

# Common assumptions

## Tariffs and taxes

For the estimation of government revenue during the construction stage an average import tariff of 15% was considered. The rate was determined based on the average investments within the Port City for real estate development being above USD 50mn and the incentives provided by the BOI.

Value added tax (VAT) of 8% was considered while, Nation Building Tax (NBT) was assumed to be exempt based on the new tax provisions and this was a standard rate employed throughout the assessment. Further a stamp duty of 1% and 4% were assumed for the lease of land and sale of residential units respectively. As NBT was prevalent during the data collection stage, the total estimated construction cost, revenues and associated operational costs were adjusted on a high level basis to remove the impact from NBT.

An additional 2% was considered to account for the government revenue in the form of approvals, license fees etc. that may apply during the construction stage. Tourism Development Levy of 1% was considered for the tourism related sectors.

A standard income tax rate of 14% was applied on the profits estimated for the construction companies during the construction stage. Meanwhile, an average income tax of 1% was assumed on the total wage bill estimated during the construction stage as personal income taxes.

During the operational stage, an average income tax of 5% (ranges between 6% and 18%) was applied on the income earned by the employees as salaries. A lower rate was assumed based on the increased threshold (LKR 250,000 per month) and the lower income tax rates based on the new income tax directives as announced during December 2019.

The income tax applicable on the corporates were estimated based on 14% and 24% across all the sectors considered based on the proposed changes to the corporate income tax which will come into effect from April 2020. Meanwhile, 14% was considered for the tourism, education, construction and healthcare sectors. As per the new directive, the profits attributable to the IT services sector was exempted from corporate income taxes.

It should be noted that the above tax rates were applied based on the existing/proposed tax policies, while any concessions or changes in the taxes may affect the estimated government revenue.

Import tariffs (custom duty & VAT 8%)	23%
VAT	8%
WHT (on dividend)	14%
Stamp duty on sale of residential units	4%
Stamp duty on lease*	1%
Approval charges/licenses	2%
PAYE on construction wage	1%
Income tax on construction companies	14%

Table 26: Construction stage related taxes

Average PAYE	5%
Education, Tourism & Healthcare	14%
Others	24%

Table 27: Operational stage related taxes

\*stamp duty on lease computed for 20 years based on a 99 year basis | Source: IRD website, PwC analysis

# Common assumptions (cont.)

## Construction cost

Total construction cost estimated for each sector was estimated based on the selected parameters and it was apportioned between material cost (60%), labour & services (30%) and the profit attributable for the construction company (10%). This was applied across all the sectors.

The construction cost estimates employed for the assessment includes all Engineering, Procurement & Construction costs (EPC) (related to the cost of tangibles, labour etc) and non-EPC costs (consultancy, Project Manager fees, design etc). This is apportioned among material, labour & services and profits based on assumed proportion.

For the purpose of estimating the impact on BOP due to the import of material used for the construction, 43% of the total material cost was determined as locally sourced and the remainder being imported. This was determined based on the Survey of Construction industry.

Based on the total man years estimated for the construction stage, 80% was assumed to be local skilled labour while 90% was assumed to be local unskilled labour. This was employed to estimate the share of foreign and local labour requirement. However, the actual mix may vary based on the availability of local labour during the construction period of the real estate developments.

## Exchange rate and finance cost

A standard exchange rate of LKR 178 per USD was employed for the assessment.

The finance cost during the construction period was estimated based on the amount funded by debt. An interest rate of 7.00% p.a and a repayment period of 20 years was assumed for the purpose of this assessment. The sovereign bond issued in June 2019 ranged between 6.35% (5 years) and 7.55% (10 years). However, this may vary based on the credit quality of the secondary investors and the market condition prevailing during the actual construction period.

The repayment of the debt financing may commence as the commercial operations begin, therefore to assess the impact on the BOP, the debt funding and the total capital repayment was considered during the construction period as it will be paid and affect the BOP. However, this may differ from the actual practice, where the repayment will be spread along the years of operations of a commercial business.

Construction cost- breakdown	
Material	60%
Labour and services	30%
Profit for the construction company	10%

Material	
Locally sourced	43%
Imported	57%

Labour	
Skilled workforce share	27%
Semi/Unskilled workforce share	73%
Local skilled labour share	80%
local unskilled labour share	90%

Table 28: Construction stage related assumptions

Exchange rate (USD/LKR)	178
Finance cost	7.00%

Table 29: Exchange rate and finance cost

Source: CBSL, PwC analysis



# Common assumptions (cont.)

## Foreign direct investments and debt funding

In order to assess the FDI share in base scenario, 50% of the construction cost was assumed to be funded through FDI as equity during the construction stage.

Remaining 50% was assumed to be the debt component, while it being equally funded through local and foreign debt. This results in an effective foreign funding of 75% of total debt, with the balance 25% being local debt.

FDI equity share	50%
Amount of borrowing - total funding	50%
Amount of borrowing - foreign share	50%

Table 30: Funding assumptions

## Lease of land plots

Once the common infrastructure is completed, the Port City will include 174ha of marketable land held by both the GoSL and CPCC. The land will be leased out to developers to construct the different types of real estate. This will later be occupied by tenants, operator and investors.

The proceeds from the initial lease of land was estimated based on a per perch price of LKR 13mn. This was based on properties in closed vicinity which were leased out on 99 year basis. However, small plots in Colombo 1 and adjacent areas were selling at much higher rates. The assumed price per perch for the land was employed for the purpose of this assessment and the actual price at which the land is leased may differ.

Further, the pricing for each plot will be based on several factors within the Port City. As the Port City is segregated into five different precincts, the plots in each precinct will have different uses and building regulations. Further, the connectivity within the Port City will also be a key factor in determining the convenience and price for each plot. In addition, recognition of Port City as a Special Economic Zone (SEZ) may also affect the pricing of the land.

Meanwhile the common land (91 ha) was based on the initial investment made by CPCC on the reclamation and was valued at LKR 5.6mn per perch.

## Marketable and common land (USD mn)

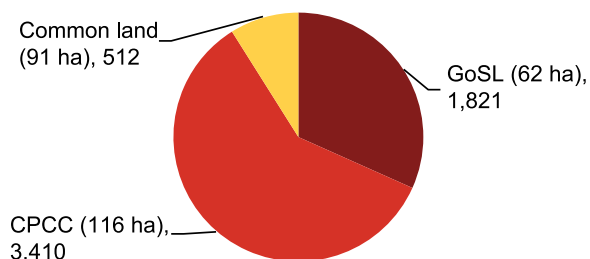


Figure 11: Breakdown of estimated land value

Source: PwC analysis, CPCC



## Adjustments made to reflect the new tax initiatives

The information required for the assessment of the economic impact was collected from various local sources prior to the tax amendments. Therefore the source data reflects the market dynamics prevalent during the previous tax policies. In order to adjust the collated data and to maintain the currency of the assessment, the following changes were made.

1. The new VAT rate of 8% was considered across the construction and operational stages and it was assumed that the companies operating within the Port City will exceed the new VAT threshold of LKR 300mn p.a.
2. As per the new tax amendments, NBT was removed across all the sectors. In order to remove the impact of NBT on the collated data, high level adjustments were made to the construction cost, revenues and intermediate costs, while NBT was not considered when estimating the government revenue. We have also assumed that there would not be any increase to the operating revenues across all sectors from the withdrawal of NBT.
3. Income tax on individuals will be charged at 6%, 12% and 18%, while the threshold was increased to LKR 250,000 per month. Previously we assumed an average income tax of 2% in construction and 10% in operations stage. This was reduced to 1% and 5% respectively, as the income tax rates were reduced and the threshold was increased.
4. An income tax rate of 14% was assumed for the construction and healthcare sectors compared to the previously applied 28%. The standard rate of 28% applicable for the other companies were reduced to 24% based on the newly proposed corporate tax rates which will come into effect from April 2020.
5. Income tax applicable on the IT services was removed as majority of its revenue was assumed as exports. For the IT sector under the commercial space, we have assumed 90% of the revenue to be exports and assumed to be exempted from corporate income tax.
6. Contribution from withholding tax towards government revenue was estimated based on the dividend assumed for each sector.
7. In addition to the direct impact, the reduction in taxes may also have a simulative impact on the volumes. However, its too early to estimate the potential impact on volumes and this was not considered in the assessment.

# 4

# Economic Impact

- Results & Discussion





# The economic impact of Port City

The Port City Project is estimated to add +130,000 direct jobs during its operations...

## Employment Creation

The employment creation was assessed during the stages identified and the metrics used to estimate the number of jobs differ for each stage. Therefore, it should be noted that the number of jobs generated in each stage cannot be simply added to derive the total number of jobs created by the Port City, while it should be assessed separately.

During the land reclamation stage, c. 6,400<sup>16</sup> direct and indirect employment opportunities were generated, with the Project providing nearly 1,500 direct jobs<sup>17</sup> which includes 1,200 local and 300 foreign employees. This includes skilled and unskilled employees directly working on the site and the administrative staff.

<b>Total employment</b>	<b>5,700 – 7,000</b>
Direct – Local	1,100 - 1,300
Direct - Foreign	270 - 330
Indirect jobs	4,400 – 5,400

Table 31: Employment created during reclamation stage

The man hours required during the construction stage was estimated based on the projected construction cost for each category of real estate development. The man hours required during the construction stage was estimated to be between 144,000 and 176,000. It is important to note that our estimation indicates the full-time equivalent man years. Foreign direct man years were estimated as 10% to 15% of the total direct requirement.

Construction stage		Operational stage	
<b>Man hours required</b>	<b>144,000 – 176,000</b>	<b>Total employment</b>	<b>190,000– 232,000</b>
Direct – Local	79,000 – 97,000	Direct – Local	96,000 – 117,000
Direct - Foreign	11,000 – 14,000	Direct - Foreign	23,000 – 28,000
Indirect jobs	53,000 – 64,000	Indirect jobs	71,000 – 87,000

Table 32: Man hours created during construction stage

Table 33: Employment created during operational stage

During the operational stage of Port City, it is expected to generate employment opportunities for both 'white collar' and 'blue collar' workers. This was determined based on the available built up GFA and it amounted to 190,000 – 232,000 jobs (direct and indirect). It should be noted that the number of jobs were estimated based on the maximum GFA as specified by the DCR, if a developer opts to scale down the built up area, the resulting estimates may differ.

The foreign employees during the operational stage was estimated based on each sector. Foreign employees were assumed to be 10% to 70% of the total employment created, depending on the sector. It is important to note that jobs created in the city are highly productive given workers use of state-of-the-art technology. Further, there might be a potential need for upskilling and reskilling of the existing workforce to suit the job created in the Port City.

Foreign workers maybe required during the initial period to fulfill the knowledge gap and enable the knowledge transfer that may required. Moreover, spillover effect from local workers' productivity gains due to working with skilled foreign workers could also be substantial and benefit the economy. It is expected that relatively higher wages offered by firms operating in the Port City may also affect the wages paid to employees outside Port City.

<sup>16</sup>Supplementary Environment Impact Assessment Report 2015 | <sup>17</sup>CPCC Management

# The economic impact of Port City (cont.)

The Project may attract over c. USD 9.7bn in FDI during its development....

## Foreign Direct Investment (FDI)

Sri Lanka may attract around USD 4.1bn worth of FDI during the reclamation, infrastructure development and land lease stage while around USD 5.6bn worth of FDI will flow into the country during the construction stage. During the operational stage, the reinvestment of profits after repatriation was considered as an FDI and was estimated at c. USD 740mn per annum.

During the reclamation stage, the proceeds from the lease of land was taken into account. This is in addition to the initial investment of USD 1.4bn by CPCC. The income from lease of land was estimated based on the marketable land available for lease and held by CPCC and GoSL. The total value of the marketable land was estimated to be c. USD 5.2bn (178 ha) and was valued at LKR 13mn per perch.

It should be noted that the estimate was based on the assumption that the land plots will be leased (on a 99 year basis), while any other arrangement may affect the estimates. When estimating the income generated from the lease of land, the price per perch was applied across the entire marketable land.

The investments required for construction of real estate will flow as FDI into the country, and could be in the form of either equity or debt. Based on the funding assumptions employed, the FDI flow during the construction stage was estimated at c. USD 5.6bn. The FDI during the reclamation stage and construction stage will have a one-off impact during the envisaged period of construction, which may span across c. 20 years.

Operational stage was estimated to record c. USD 740mn of FDI based on the assumptions employed, and this will have a recurring impact on the economy. This was estimated based on the retained earnings post repatriation of profits by the companies operating within Port City.

At present, Sri Lanka receives around USD 1.0bn to USD 1.5bn of FDI annually. Hence, the expected flow of FDI would be sizable and it is expected that Sri Lanka will be well positioned for attracting FDI due to the Port City development. Moreover, it is expected that there will be a spillover effect as well, where the Port City may encourage FDI flows outside the Project. Taken together, the Port City should be a key driver in attracting FDI in future Sri Lanka.

## Foreign Direct Investment

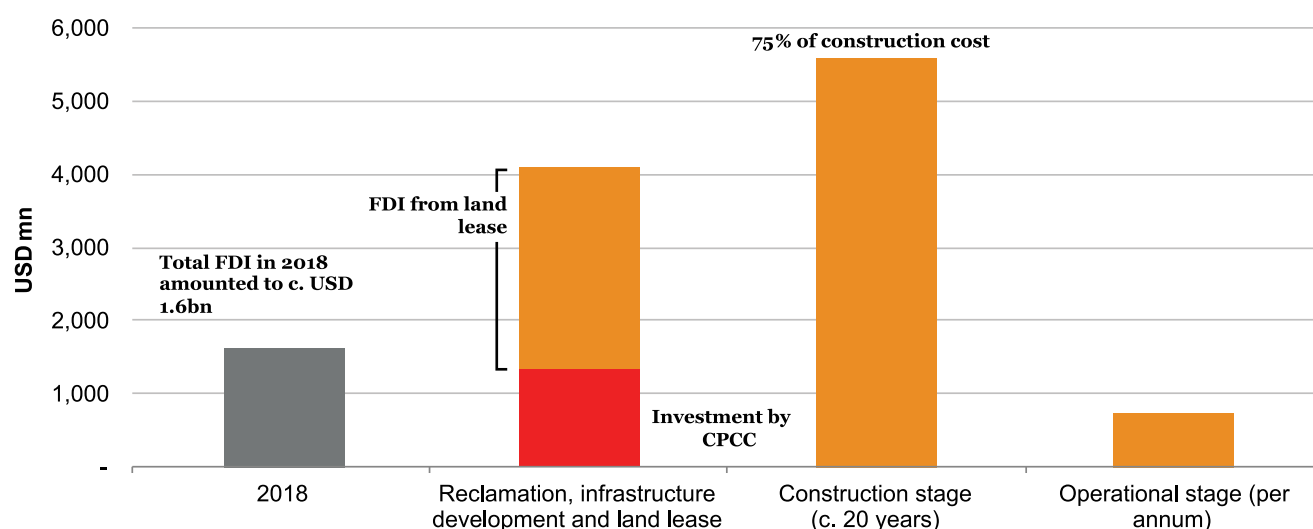


Figure 12: FDI estimates under each stage

Source: PwC analysis, CBSL

# The economic impact of Port City (cont.)

Over USD 5bn in direct value creation per annum as the Project reaches a normal level.

## Value addition to Gross Domestic Product (GDP)

The estimated value addition towards GDP during the reclamation, infrastructure development and land lease stage is c. USD 4.6bn. This is mainly due to the value of the land reclaimed during this stage, which was absent prior to the reclamation. Hence, the value of the land gets added to the GDP directly.

This includes the value generated through the lease of marketable land held by both CPCC (c. USD 3.4bn) and GoSL (c. USD 1.8bn). In addition to the marketable land, Port City also includes c. 91 ha of common land (valued at USD 512mn) which includes the roads, parks, beach etc. In order to value the common land available within Port City, the initial investment on land reclamation was considered.

During the construction period, the value addition towards GDP is estimated to be c. USD 13bn and this may be spread across the 20 year period envisaged for construction. The estimated impact includes both the direct and indirect value addition. On average, this amounts to an annual value addition of c. USD 650mn during the construction period.

Majority of the value addition during this stage is attributable to the sale of residential units as the sales proceeds may flow during the construction period in the form of advances and also since it accounts for c. 53% of the built up space. This is followed by commercial and retail space which together contributes to c. 37% of the built up space.

The operational stage is estimated to contribute c. USD 11.8bn towards GDP on an annual basis. The value addition during the operational stage is mainly driven by the commercial space which accounts to c. 74% of the total estimated value addition, followed by the residential and retail sectors. The consideration of an imputed rent for the housing units was the primary value adding factor for the residential segment.

The value addition from the operational stage is sizable given Sri Lanka's current GDP value (c. USD 89bn in 2018 - CBSL). However it should be noted that the estimated value addition was based on the assumption that all the companies within Port City reach a mature level, with the peer information used for the financial model based on companies currently operating at a mature stage. This implies that around c. USD 550 will be added each year to per capita income during its operational stage (once operation reaches its 'normal' level).

### Value addition to GDP

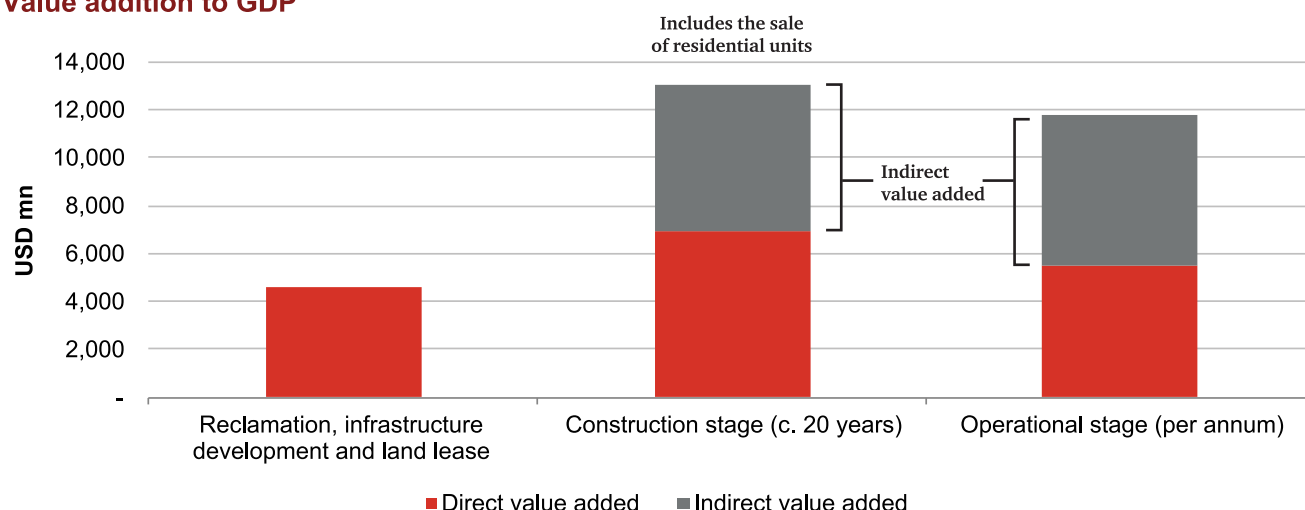


Figure 13: Value addition towards GDP during each stage

Source: PwC analysis



# The economic impact of Port City (cont.)

Positive contribution towards the BOP benefitted through FDI's, sale of residential units and service exports...

## Balance of Payment (BOP)

Balance of payment is positively affected in all three stages. This is mainly due to the fact that the inflow of foreign exchange from FDI's and/or spending on goods/services is higher than the total outflow for loan repayment, expatriation of profits & earnings, and importation of goods and services.

However, there will be a negative impact on the BOP during the initial years of land reclamation and common infrastructure development as well as construction. These negative effects would be offset once the marketable lands and constructed buildings (in particular residential units) are sold out. During the construction stages, importation of raw materials will have a negative impact on BOP (and thus the exchange rate), however, the initial funding and foreign exchange receipts from the sale of housing units in later years will have a positive impact on BOP.

During the operational stage, BOP will have a positive effect mainly due to the foreign earnings receipts from tourism related industries and services exports (IT, maritime and logistics, other professional services, etc.). The commercial sector was estimated as the primary contributor, due to its dependency on service exports. Further, as the sectors within Port City compliment each other, it may support additional foreign spending, specially from tourism-related sectors.

## Balance of Payment

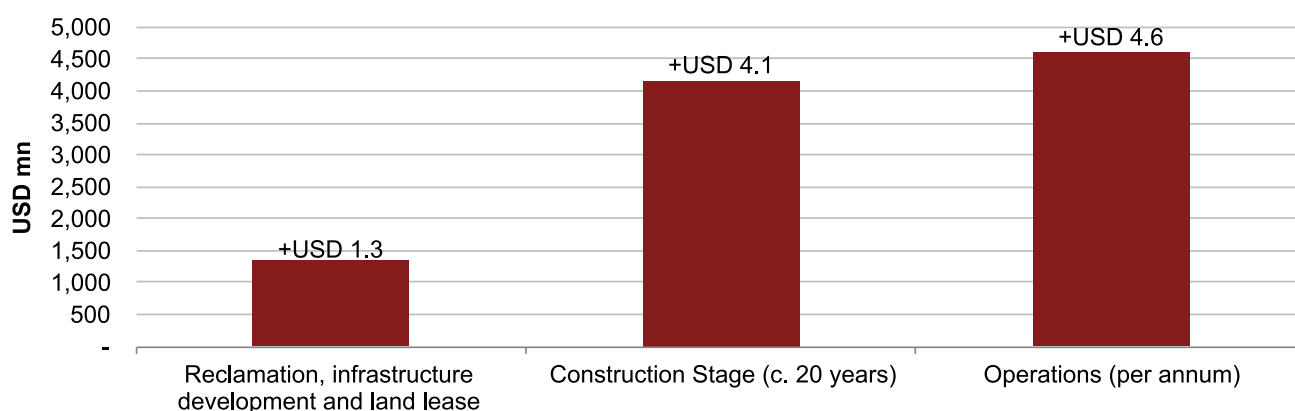


Figure 14: Impact on BOP during each stage of the Project

Source: PwC analysis

# The economic impact of Port City (cont.)

Government may benefit during each stage driven by lease of land and tax income...

## Government revenue

Government revenue will be derived through a number of channels during the development of Port City. At the land reclamation and common infrastructure development stage, GoSL may incur some costs for providing certain infrastructure facilities to outer-border of the port city, namely electricity, water, road access, etc.

Moreover, some concessions and exemptions given on import duty may have a negative impact on government revenue (in terms of loss of royalty payments for sands, import of material etc.). Thus a lower portion of the income is attributable as tax revenue during the land reclamation, infrastructure development land lease stage. Further, value added tax was not considered on the lease of land as Port City is exempted through the Strategic Development Project Act.

However, GoSL will receive a substantial amount of income following the lease out of its land plots (35% of the marketable land area) resulting a positive overall impact of c. USD 1.8bn based on the parameters assumed.

During the construction stage, GoSL could collect c. USD 2.7bn in revenue from custom duties, indirect taxes, taxes on earnings, and other sources. This is based on the existing policies and the amended tax provisions. Additional concessions given for real estate developers may result in lower government revenue in the form of taxes.

In each operational year, government could receive c. USD 800mn worth of revenue from income taxes, import duties, license fees, etc. Taken together, the Port City will be a good source of revenue generation for the Government and would certainly support GoSL in increasing its expenditure on development and welfare activities elsewhere, along with reducing the dependency on borrowing (tax and non-tax revenue of GoSL amounted to c. USD 11.8bn in 2018). However, it should be noted, that the estimates were based on the prevailing/proposed tax rates and any exemptions or concessions provided for the operators within Port City may lead to a reduction in tax revenue.

## Government revenue

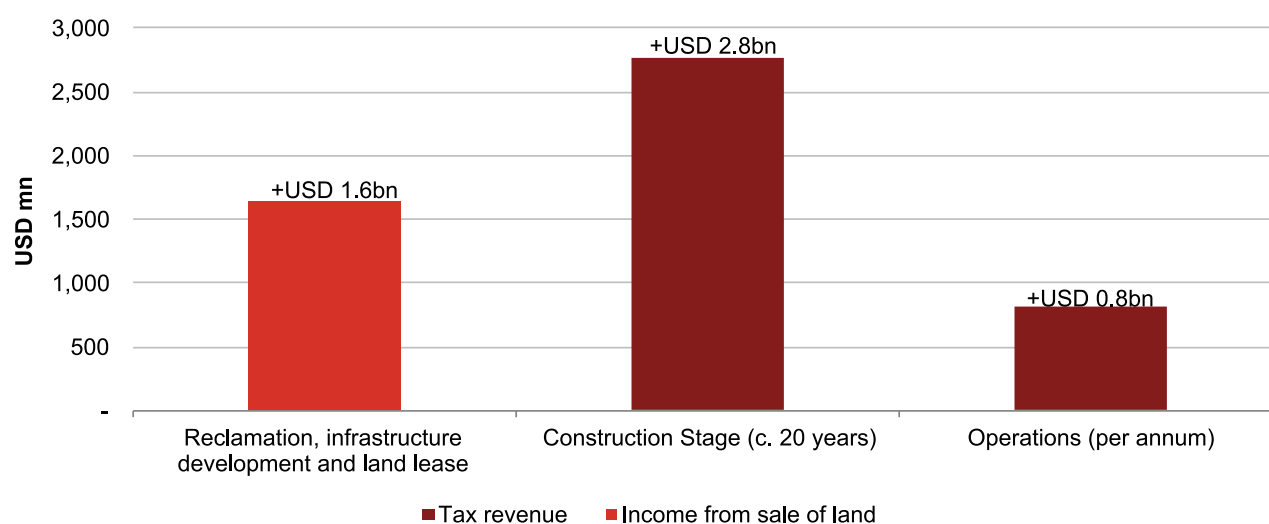


Figure 15: Contribution to government revenue during each stage

Source: PwC analysis, Ministry of Finance, CBSL



# The economic impact of Port City (cont.)

## Overall Assessment

The economic impact assessment undertaken, which captures both direct and indirect effect clearly indicates that the Port City would have a significant impact on the national economy, in terms of employment generation, attracting FDIs, GDP contribution, BOP, and government revenue when it progress as envisaged.

The Port City could therefore be classified as a strategic investment project and a potential source and driver of economic growth and development for Sri Lanka. Such investment projects, elsewhere in the world, have historically played a significant role in transforming developing economies into more advanced ones.

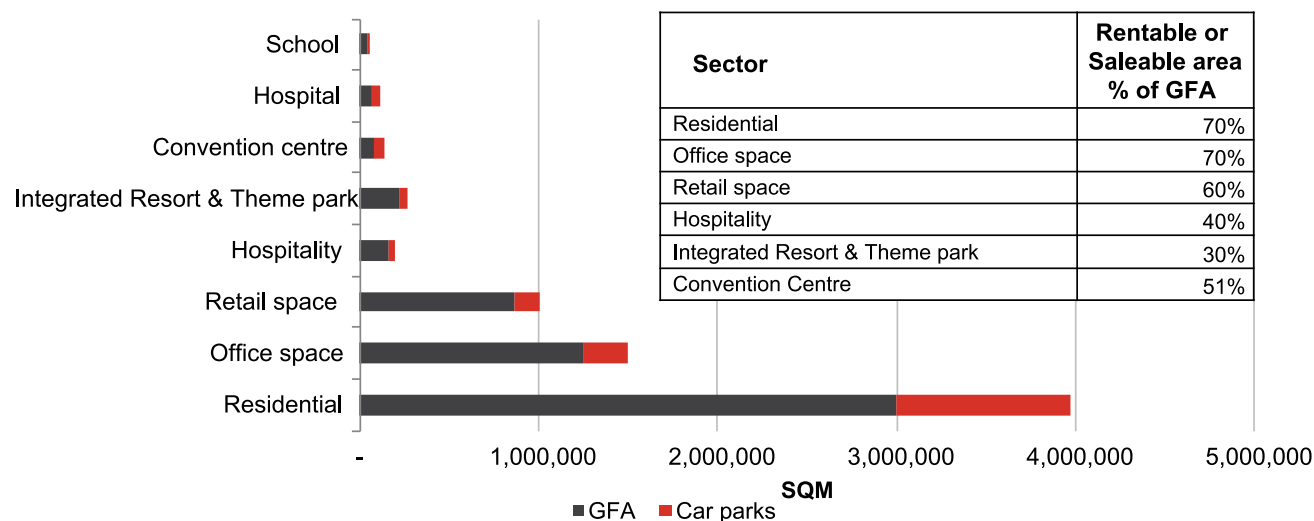
One of the key determining factors in achieving the expected results would be the pace of the city development process and the enablement of its smooth functioning. Delays in construction as well as the 'red-tapes' to functioning could significantly lower the economic potential. In this context, it would be beneficial to have a clearly defined regulatory policy framework for Port City, as this would support the achievement of the aforementioned economic targets. It is important to highlight that in addition to the impact to economic growth, any negative developments and barriers could affect the attraction of FDIs to the Port City Project and other investment projects in Sri Lanka.



# The economic impact of Port City (cont.)

Summary – Estimated constructed area and construction cost

## Total constructed area including car parks



## Proceeds from lease of land

Investment for the lease of land and assumptions (USD mn )*	
Foreign investment share - 70%	3,662
- Equity and foreign debt - 75%	2,746
- Foreign - local borrowing - 25%	915
Local investment share - 30%	1,569
<b>Total investment on land</b>	<b>5,231</b>

Table 34: Investments breakdown for the lease of land

## Estimated construction cost and investment

Construction cost (USD mn)**	FDI	Local Investment	Total cost
Hotel	219	73	292
Integrated resort & Theme park	257	86	342
Hospital	72	24	96
Residential	2,374	1,424	3,798
Retail	686	229	915
Commercial	1,188	396	1,585
International school & Boarding	18	6	24
Convention & Exhibition centre	110	37	146
Car parks	674	225	899
<b>Total estimated construction cost - in USD mn</b>			<b>8,097</b>

Table 35: Estimated segment wise construction cost

**Total investment on land and construction (excluding CPCC's initial investment) – USD 13.5bn**

\*Assumptions used in consultation with CPCC for the purpose of the assessment.

\*\*high level adjustments were made to remove the impact of NBT from the estimated construction cost.

Source: PwC analysis

# The economic impact of Port City (cont.)

Summary estimation

## Land reclamation, infrastructure development and land lease

Total employment - (No. of jobs)	6,400
Direct	1,500
Indirect	4,700
FDI - USD mn	4,096
Value added - USD mn	4,555
Balance of payment - USD mn	1,328
Government revenue - USD mn	1,619

Table 36: Summary of the economic impact during stage 1

## Construction stage

	Hotel	Hospital	Residential	Car Park	Commercial	Integrated Resort	Convention	School	Retail	total
Total employment - (man hours)	5,785	1,892	75,138	17,781	31,347	6,767	2,897	471	18,095	160,172
Direct	3,661	1,197	47,555	11,254	19,840	4,283	1,833	298	11,453	101,375
Indirect	2,124	695	27,582	6,527	11,507	2,484	1,063	173	6,643	58,797
FDI - USD mn	219	72	2,374	674	1,188	257	110	18	686	5,598
Value added - USD mn	220	72	9,802	676	1,192	257	110	18	688	13,034
Direct	117	38	5,214	360	634	137	59	10	366	6,933
Indirect	103	34	4,588	316	558	120	52	8	322	6,101
Balance of payment - USD mn	(16)	19	4,297	(48)	(84)	(18)	(8)	(0)	17	4,160
Government revenue - USD mn	36	12	2,236	112	197	43	18	3	114	2,770

Table 37: Summary of the economic impact during stage 2

## Operational stage

	Hotel	Hospital	Residential	Commercial	Integrated Resort	Convention	School	Retail	Infrastructure maintenance	total
Total employment - (No. of jobs)	5,046	2,281	1,029	162,267	3,572	432	255	34,427	1,045	210,355
Direct	3,364	2,059	605	94,069	2,261	273	162	27,990	1,045	131,827
Indirect	1,682	222	424	68,199	1,311	158	94	6,438	-	78,528
FDI - USD mn	13	11	40	632	12.9	7	2	21	-	739
Value added - USD mn	182	52	1,789	8,707	126	15	34	846	8	11,752
Direct	106	49	768	3,787	76	9	20	689	8	5,505
Indirect	76	3	1,021	4,919	50	6	14	156	-	6,247
Balance of payment - USD mn	69	41	300	4,100	52	13	11	12	-	4,598
Government revenue - USD mn	20	15	40	438	19	1	3	275	-	811

Table 38: Summary of the economic impact during stage 3



# The economic impact of Port City (cont.)

Summary – Estimated constructed area and construction cost

## Scenario analysis

The assessment of economic impact was based on the existing market conditions and wherever possible benchmarked against comparable companies. As discussed previously, it was also assumed that the Port City project will progress as envisaged and will reach its full potential. However, due to the interference of internal and external factors, the project may face difficulties in progressing. Following scenarios were provided by Lakshman Kadirgamar Institute (LKI) to supplement the impact assessment with possible implications.

### Scenario 1: Benign Global Environment & Critical Domestic Reforms Implemented

This scenario is broadly positive for the development of the Port City. The achievement of major reforms in Sri Lanka would make it one of the fastest growing economies in the region and an attractive investment destination. Effective infrastructure investment and stronger environmental policies would also make Colombo an increasingly attractive place to live. While there are major shifts in the global political environment, these are peaceful and have a limited impact on the global economy. As such, the Port City receives significant investment and is around 85% operational by 2041.

### Scenario 2: Supportive Global Environment & Limited Domestic Reforms Implemented

This scenario is moderately positive for the development of the Port City. The achievement of greater domestic political and macroeconomic stability, as well as a supportive global environment, are consistent with reasonable levels of investment in the SEZ. However, the persistent underlying problems, particularly skills gaps in the local labour market and infrastructure issues, mean that a number of companies decide not to open regional offices in the Port City. As such, its development proceeds at a slower pace than expected and it is only around 60% operational by 2041.

### Scenario 3: Global Discord & Domestic Instability

This scenario presents major challenges for the development of the Port City. Domestic political instability and a volatile economy make Sri Lanka an unattractive investment location. Turmoil in the global economy and world politics also reduce demand for the Port City's facilities. As a result, most investments come from the local economy, but this is limited due to domestic economic problems and progress is much slower than expected. The project is only around 30% operational by 2041.

In order to assess the impact from partial completion and operation of the Project, the built up (GFA) area was amended to suit each scenario. The reduction in GFA was adjusted in Residential, Commercial and retail sectors to reflect the total GFA reducing to sqm 4.8mn (at 85%), sqm 3.4mn (at 60%) and 1.7mn sqm (at 30%).

Source: LKI



# The economic impact of Port City (cont.)

Summary – Estimated constructed area and construction cost

100% developed scenario portrays the completion and operation of Port City without any hinderance. This can be considered as the full potential of the project as discussed in the report. Other scenarios as shown in the tables below presents the impact if the said percentage of completion is achieved. The scenarios were adjusted based on the constructed area on the specified sectors. However, partial development may also affect the dynamics of the operations and the benefits that may arise through the linkage of sectors.

Reclamation stage	100% developed	85% developed	60% developed	30% developed
Total employment (no.of jobs)	6,400	-	-	-
Direct	1,500	-	-	-
Indirect	4,900	-	-	-
FDI – USD mn	4,096	3,684	2,998	2,174
Value added – USD mn	4,555	3,771	2,463	894
Balance of payment* – USD mn	1,328	1,359	1,411	1,472
Government revenue – USD mn	1,619	1,346	891	345

Table 39: Scenario analysis – Reclamation, infrastructure development and land lease

Construction stage	100% developed	85% developed	60% developed	30% developed
Total Employment (man hours)	160,172	136,657	97,489	50,459
Direct	101,375	86,492	61,702	31,936
Indirect	58,797	50,165	35,787	18,523
FDI – USD mn	5,598	4,786	3,433	1,809
Value added – USD mn	13,034	10,977	7,550	3,436
Direct	6,933	5,839	4,016	1,827
Indirect	6,101	5,138	3,534	1,608
Balance of payment – USD mn	4,160	3,459	2,290	887
Government revenue – USD mn	2,770	2,327	1,589	702

Table 40: Scenario analysis – Construction stage

Operational stage	100% developed	85% developed	60% developed	30% developed
Total Employment (no.of jobs)	210,355	177,097	121,698	55,181
Direct	131,827	111,141	76,685	35,312
Indirect	78,528	65,956	45,014	19,869
FDI – USD mn	739	623	429	197
Value added– USD mn	11,752	9,852	6,687	2,888
Direct	5,505	4,626	3,163	1,406
Indirect	6,247	5,225	3,524	1,482
Balance of payment– USD mn	4,598	3,859	2,628	1,150
Government revenue– USD mn	811	684	474	222

Table 41: Scenario analysis – Operational stage

\*foreign outflow may reduce as there will lower profits repatriated and less outflow in the form of debt repayment when land is partially leased



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