# FINANCING INFRASTRUCTURE:

## THE (NON) CONCESSIONALITY OF CONCESSIONAL LOANS

June 2020

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# I
# INTRODUCTION

Sri Lanka is highly dependent on international loans from multilateral and bilateral sources to finance infrastructure development. During 2005-2018, the Government of Sri Lanka has taken loans worth USD 24,582 million from bilateral and multilateral lenders to finance its infrastructure.[1] Five sources accounted for 82% of the value of those loans: China (33%), the Asian Development Bank (ADB) (17%), Japan (18%), the World Bank (7%) and India (7%).

Multilateral and bilateral borrowing is often favoured by governments such as Sri Lanka because such financing tends to have 'concessional' elements, relative to the international financial markets. Such concessional financing of infrastructure development, however, is not without controversy; and there is a significant body of literature engaging with the consequential concerns of such financing.

This paper aims to contribute to that literature by analysing the concessionality of 50 high-value loans to Sri Lanka from multilateral and bilateral sources to finance infrastructure, taken between 2005-2018.

These 50 loans are worth USD 13,068 million and accounted for 53% of the total value of foreign loans taken to finance infrastructure during that period (refer Exhibit 1).[2]

## 1.1    Methodology

This paper investigates the financial and procurement terms and conditions attached to the 50 high value loans set out in Exhibit 1. The investigation is limited to two primary elements that undergird each loan: (1) the grant element and (2) the tied element.

### Defining the grant element of a loan

The grant element or the 'gift portion' of a loan has a standard definition: it is the difference between the nominal loan value and the present value of the future loan repayments anticipated under the terms of the loan.

**Exhibit 1:** Value, number and source of 50 high-value loans taken during 2005-2018[3]

| Funder | Lending agency | Value of loans analysed USD Mn | Value as a % of total loans taken from the lender | No. of loans analysed | No. as a % of total No. of loans taken from lender |
|---|---|---|---|---|---|
| Asian Development Bank (ADB) | Asian Development Bank (ADB) | 1,791 | 43% | 11 | 18% |
| World Bank | International Bank for Recon-struction & Development (IBRD) | 213 | 36% | 1 | 17% |
| | International Development Association (IDA) | 434 | | 3 | |
| China | Export Import Bank of China | 5,069 | 76% | 14 | 41% |
| | China Development Bank Corporation | 1,167 | | 4 | |
| India | Government of India | 799 | 64% | 2 | 30% |
| | Export Import Bank of India | 318 | | 1 | |
| Japan | Government of Japan | 2,360 | 72% | 11 | 41% |
| | Japan International Corpora-tion Agency | 781 | | 2 | |
| France | Calyon Credit Agricole CIB of France | 137 | 18% | 1 | 7% |
| **Total** | | **13,068** | **53%** | **50** | **17%** |

*Source*: Information provided by the External Resources Department of the Ministry of Finance.

The critical element of this calculation is the discount rate that is attached to the present value estimation (refer Annex 1 for the methodology).[4] This paper has adopted Sri Lanka's cost of borrowing in international financial markets as the discount rate. This means that the loan is evaluated as having a grant element, if the effective interest rate on the loan is lower than the counterfactual rate available for Sri Lanka through borrowing from international financial markets.[5]

This method allows for a generous estimation of the grant element, in comparison to other estima-tion methods that would use lower discount rates. The International Monetary Fund (IMF) method, for instance, uses a unified discount rate of 5% across all loan assessments, and the Organisation for Economic Co-operation and Development (OECD) method of calculating the grant element for export credits uses discount rates that are based on the generally lower counterfactual interest rates available to the lender.[6]

When the grant element is positive, the loan is deemed to be 'concessional'. This means that the cost of servicing that loan is less than the cost of servicing a commercial loan for the same amount. The higher the calculated grant element, the more concessional the loan.

The grant element of loans reported in this paper is calculated using 6.5% as the alternative commercial rate of borrowing for Sri Lanka. The basis of the rate is the average weighted interest rates of 10-year Inter-national Sovereign Bonds (ISBs) issued by Sri Lanka during 2005-2018.[7] ISBs remained the key alternative

instrument for raising external financing by the government during that period.

## Defining the tied element of a loan

The tied element of the loan refers to the portion of the loan that is, in effect, (in law or in fact) tied to the procurement of goods/services from contractors connected to the lender. Bilateral loans are often tied to contractors from the lending country.

This practice of 'tying' loans to procurement from contractors in the lending country is known to lead to cost escalation, in implementing the projects for which the loan is granted. (DIIS, 2009)[8] This is because, by introducing a tied element to the loan, the lending country prevents the borrowing country from engaging in full competitive bidding, and thereby prevents procurement from potentially lower-cost suppliers. There are significant concerns, widely discussed, about aid effectiveness being reduced through the practice of tying a loan; so much so that, in 2001, the OECD's Development Assistance Committee (DAC) adopted a recommendation to 'untie' much of its Official Development Assistance (ODA) to Least Developed Countries (LDCs). The 2001 DAC recommendation was reiterated in the 2005 Paris Declaration on Aid Effectiveness. (Clay, Geddes, Natali, Willem te Velde, 2008, p.1)[9]

A study by the OECD finds that such 'tied' loans can increase the costs of a development project by 15 to 30%. (Jepma, 1991, p.15)[10] Estimates of the costs to the recipient, of loans being tied are approximations, because attempts to quantify the costs of tying are constrained by several practical and data limitations. (Clay, Geddes, Natali, Willem te Velde, 2008, p. 36)[11] While this OECD estimate is the most widely cited estimation of cost escalation due to tying, there are many other studies which report substantially higher costs (Clay, Geddes, Natali, Willem te Velde, 2008, p.

36).[12] Therefore, this range could be regarded as a conservative estimate of the costs of tying.

In the present study, the tied elements of each loan evaluated is identified through the terms and conditions attached to the loans in order to derive the percentage of the loan that is thereby tied.

## Defining when a grant element is offset by a tied element

When loans have a tied element, the resulting cost escalations can lead to significant erosion of the grant element of the loan. This paper develops and deploys a methodology for analysing the trade-off between the grant element and tied element of a loan, when the tied element can result in cost escalation (refer Annex 2 for details of the methodology).

The first step of this analysis is to calculate the grant element inherent in the loan portfolio (set out in Exhibit 1) received by Sri Lanka from bilateral and multilateral lenders. The second step is to calculate the tied element of each of these loans. The third step is to evaluate when the grant element is effectively offset by the cost-escalation on the tied element. In this step, we calculate a *threshold level* of cost escalation on the tied element for each loan. At this calculated threshold level, the grant element of the loan will be fully negated. This means that when the cost escalation is greater than the threshold level, the loan can be seen as 'adverse', rather than concessional.

Such an analysis has not been previously attempted for Sri Lanka. The available literature engages with the generalised concern regarding the grant elements of loans being eroded through tied elements that are subject to cost-escalation. This paper evaluates this trade-off in a country-specific manner and applies the analysis to Sri Lanka.

## 1.2 Summary of the findings

▪ *Loans from multilateral and bilateral sources are considerably cheaper relative to international financial markets.*

Of the 50 loans, 33 loans had a grant element of above 35%, a benchmark level used by international agencies such as the International Monetary Fund (IMF), to classify a loan as concessional. These 33 loans account for 72% of the value of the 50 loans analysed in this paper. These 33 loans comprise of four loans from multilateral institutions (of a total of 15 loans) and 29 loans from bilateral institutions (of a total of 35 loans).

▪ *The concessionality of bilateral loans are significantly impaired by the tied elements included.*

Of the 35 loans taken from bilateral financial institutions, 28 had a tied element. These loans accounted for 71% of the total value of the 50 loans. All loans from China and India were tied, and six of the 13 loans taken from Japan were tied.

For six loans of the 28 loans which had a tied element, adequate information about the tied element was not available. Of the remaining 22 loans, six had a tied element between 60%-100%; 14 loans had a tied element of 100%.[13] The remaining two loans had a tied element of a minimum of 30%.

The use of tied loans to fund projects that originated as unsolicited proposals further limits benefits of these loans to the recipient country. In Sri Lanka's case, 13 of the 28 projects funded by tied loans originated as unsolicited proposals; 12 of these were loans from China.

▪ *For 82% of the loans, a less than 50% cost escalation, on the tied element, would negate the grant element and make the loan terms adverse.*

The key factor that makes bilateral loans attractive to the borrowing country is the concessionality, or what can be calculated as the grant element of the loan. However, when there is a cost escalation on the tied element of a loan, this grant element can be negated.

Because every loan has a different grant element and tied element, the cost-escalation threshold calculated in this paper is a simple metric to evaluate the potential of the loan being concessional or adverse. The cost-escalation threshold is the percentage by which the costs on the tied element of the loan could escalate before the grant element is fully negated.

Therefore, when the cost-escalation threshold is high, the loan is likely to remain significantly concessional even after accounting for the cost escalation on the tied element. When the cost-escalation threshold is low, the loan could end up being adverse, that is, less favourable than borrowing from international financial markets.

Information was available to calculate the cost-escalation threshold for 22 of the tied loans received by Sri Lanka. Recognising that a low cost-escalation threshold increases the probability of the loan being adverse, we note that 18 of these loans had a cost-escalation threshold of less than 50%. Four of the 18 loans had cost-escalation thresholds of less than 15%. At 33%, the weighted average cost escalation is the lowest for loans from China. The highest weighted average cost-escalation threshold is for loans from Japan at 215%. The weighted average cost escalation for all 22 loans is 42%.[14]

## 1.3    Implications for decision makers

- *Recognise that loan concessionality can be reversed through procurement terms.*

  The findings of this research suggest that Sri Lanka maybe overestimating the benefits of loans that are concessional. Indeed, some of the loans that Sri Lanka has been sourcing through bilateral partners could be significantly adverse in terms of financial costs. Decision makers would do well to be more cautious in acceding to bilateral loans where there are risks of higher costs associated with tied loans and unsolicited proposals.

- *Require analysis of cost impact from tied procurement conditions.*

  When acceding to bilateral and multilateral loans that may embed tied elements and/or result from unsolicited proposals, there is a need for better evaluation of the loan terms. It would be advantageous for Sri Lanka to explicitly evaluate whether loans are concessional or adverse considering the combined consequence of the grant element and cost escalation on the tied element/unsolicited proposal. By contrast, at present only the grant element is evaluated.

- *Strengthen regulation to reduce unsolicited procurement proposals.*

  As much of the adverse borrowing can be linked to the acceptance of unsolicited proposals, Sri Lanka will benefit from strengthening the regulatory framework governing the management of unsolicited proposals, making the process more transparent, and less open to abuse.

- *Withdraw existing discretion for 'secret' accession to adverse loan terms.*

  Improving Sri Lanka's procurement framework can also reduce the adverse consequences resulting from tied procurement terms embedded in infrastructure loans. Limiting existing political and bureaucratic discretion to grant exceptions to competitive bidding, through signing loan agreements, can help to contain adverse borrowing practices. An example of such a limiting mode would be mandating parliamentary approval for a loan that suspended competitive bidding in high value public procurements.

# 2

# KEY FINDINGS

## 2.1  Loans from multilateral and bilateral sources are considerably more concessional than international financial markets

International agencies such as the IMF and the OECD (for Export Credits) classify a loan as concessional only when the grant element of the loan exceeds the benchmark rate of 35%.[15] Of the 50 loans analysed in this paper, 33 had a grant element above 35%, and these accounted for 72% of the total value of the analysed loans. These 33 loans comprise of four loans from multilateral institutions and 29 loans from bilateral financial institutions. This finding indicates that loans to Sri Lanka from multilateral and bilateral sources is considerably more concessional compared to the alternative of borrowing from international financial markets.

Overall, loans from Japan have the highest average grant element. All loans from Japan exceed the 35% benchmark for the grant element. Loans from ADB and China have the lowest weighted average grant element. Most of the loans from ADB fall below the 35% benchmark for the grant element. However, most of the loans from China just exceed this 35% benchmark (refer Exhibit 2).

**Exhibit 2:**  Spread of the grant element across loans taken by lender (as a share of total value of loans)

| Lender | Value USD Mn | No. of loans | Average grant element (%) | The spread (range between the highest and the lowest grant element) | Share of the loans with a grant element > 35% | |
| --- | --- | --- | --- | --- | --- | --- |
| | | | | | Value (%) | No. of loans |
| ADB | 1,791 | 11 | 33 | 28% - 42% | 16 | 2 |
| World Bank | 647 | 4 | 36 | 30% - 42% | 48 | 2 |
| China | 6,236 | 18 | 31 | 3% - 44% | 76 | 13 |
| Japan | 3,140 | 13 | 68 | 50% - 75% | 100 | 13 |
| India | 1,117 | 3 | 37 | 32% - 41% | 66 | 2 |
| France | 137 | 1 | 35 | Not applicable | 100 | 1 |
| **Total** | **13,068** | **50** | **41** | **3% - 75%** | **72** | **33** |

*Source:* Calculated using information provided by the External Resources Department of the Ministry of Finance and the responses received to requests for information filed under the Right to Information Act No. 12 of 2016 with the respective implementing agencies of the projects in the Government.

## 2.2 The concessionality of bilateral loans are significantly impaired by their tied elements, in contrast to loans from multilateral institutions

29 out of the 35 bilateral loans (which account for 83% of the total value of bilateral loans) had a grant element above the benchmark of 35%. In comparison, only four out of the 15 loans from multilateral institutions exceed the 35% benchmark (accounting for 24% of the total value of loans taken from multilateral institutions). However, this analysis finds that 28 of the 35 bilateral loans had tied elements, where a part or the entire value of the loan was tied to procurement of goods/services from contractors in the lending country. In contrast, the 15 loans taken from the multilateral institutions did not have any tied elements. The projects funded through these loans went through international competitive bidding processes to select contractors (see Exhibit 3).

Loans with embedded tied elements restrict procurement to contractors from the lender's country. As a result, the tied element prevents the recipient country from using the tied funds to procure goods and services of the expected quality at the lowest cost through a process of competitive bidding. Of these 28 tied loans, 14 had a tied element of 100%, six loans had a tied element between 60%-100% and two had a tied element of a minimum of 30%. For six loans, information was not available to assess the precise extent of the tied element.

The value of these 28 loans is USD 9,249 million. These loans accounted for 71% of the value of all 50 loans analysed and 38% of the value of all foreign loans taken to fund infrastructure during 2005-2018. All the loans taken from China and India had a tied element, and six of the 13 loans taken from Japan also had a tied element.

According to the World Bank 'an unsolicited proposal (USP) is a proposal made by a private party to undertake a public-private partnership (PPP) project, submitted at the initiative of the firm, rather than in response to a request from the government.' (World Bank, 2019)[16] Of the projects funded by loans with a tied element, 13 projects (worth USD 3,504 million) were implemented through unsolicited proposals. Of these, 12 were funded by loans from China: nine from EXIM Bank of China and three from China Development Bank. The remaining project was funded by a loan was from Calyon Credit Agricole CIB of France.

Of the remaining 15 loans, six indicate that the contractor from the lender's country had been pre-selected prior to signing of the loan agreement. The information available for these six loans is not sufficient to verify whether the contractor had been selected through a competitive bid or through some other non-competitive process.

When projects funded through loans with tied elements are initiated through unsolicited proposals, the risk and extent of costs escalation can be especially high. The documented experience across countries is that, unless strictly regulated and controlled, unsolicited proposals result in financial loss/disadvantage. (World Bank, 2017)[17] Moreover projects that originate as unsolicited proposals also often face widespread allegation of corruption and fraud. (PPIAF, 2014, p. 6)[18] Such risks are likely to be prevalent in Sri Lanka as well where the regulatory regime governing USPs has been found to be weak. A diagnostic note prepared by the World Bank state that 'the country's public procurement guidelines require review and revision, particularly with respect to managing unsolicited proposals.' (Rajapaksa , 2017, p. 2)[19] The same note states that the mechanisms and procedures for handling unsolicited proposals need to be clarified and strengthened to ensure more effective adherence to the principles of competitive tendering and value for money. (Rajapaksa , 2017, p. 2)[20]

**Exhibit 3:** Procurement methods followed in implementing projects funded by the selected 50 loans

| Lender | Value (USD Mn) | Number of loans | | | | | Value of loans (% of the total) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | International competitive bidding (Untied) | Bidding restricted to suppliers from lender's origin[21] (Tied) | Unsolicited proposals (Tied) | Contractor pre-selected[22] (Tied) | International competitive bidding (Untied) | Bidding restricted to suppliers from lender's origin (Tied) | Unsolicited proposals (Tied) | Contractor pre-selected (Tied) |
| ADB | 1,791 | 11 | 11 | - | - | | 100 | - | - | |
| World Bank | 647 | 4 | 4 | - | - | | 100 | - | - | |
| China | 6,236 | 18 | - | 1 | 12 | 5 | - | 8 | 54 | 38 |
| India | 1,117 | 3 | - | 2 | - | 1 | - | 63 | | 37 |
| Japan | 3,140 | 13 | 7* | 6* | - | | 44 | 56 | - | |
| Calyon Credit Agricole CIB (France) | 137 | 1 | - | - | 1 | | - | - | 100 | |
| **Total** | **13,068** | **50** | **22** | **9** | **13** | **6** | **29** | **23** | **27** | **21** |

*Source*: Information provided by the External Resources Department of the Ministry of Finance and the responses received to requests for information filed under the Right to Information Act No. 12 of 2016 with respective implementing agencies of the projects in the Government.

*For some of the Japanese projects there were instances where conflicting information was available on the procurement methods for the projects in the information made available by the project implementing agencies when compared to that of the respective websites of the lending agencies. In such instances the information from the lending agencies has been taken.

## 2.3 For 82% of the loans, a less than 50% cost escalation, on the tied element, would negate the grant element and make the loan terms adverse

The key factor that makes bilateral loans attractive to the borrowing country is their concessionality, or what can be calculated as the grant element of the loan. As mentioned above, the OECD and IMF usually set a benchmark of 35% on the grant element, to classify a loan as concessional. This is a 'rule of thumb' benchmark, based on the recognition that the classification of a loan as concessional should require a substantial level of benefit in terms of the grant element.

However, the tied elements of loans tend to erode the benefit of the grant element. The grant element of the loan is negated when cost escalation on the tied element exceeds a threshold level, which can be calculated for each loan.

Because every loan has different levels of grant elements and tied elements, the cost-escalation threshold calculated in this paper is a simple metric to evaluate the potential of the loan being concessional or adverse. The cost-escalation threshold is the percentage by which the costs on the tied element of the loan could escalate before the grant element is fully negated.

To illustrate an example, even when the grant element of a loan achieves the 35% benchmark criteria, if 70% of the loan is tied, a cost escalation of 50% on that tied

element can lead to a complete negation of that 35% grant element for the recipient country. Therefore, in this illustration, 50% is the cost-escalation threshold.

In the absence of data to calculate actual cost escalations, the calculated cost-escalation threshold is a useful indicator to assess the extent to which the government can accommodate higher project costs without completely negating the financial benefit of borrowing at a lower cost (refer Annex 2 for the methodology). When the calculated cost-escalation threshold is high, it means that the loan is likely to remain significantly concessional even after accounting for the cost escalation on the tied

element. When the cost-escalation threshold is low, it means that the loan could end up being adverse, that is, less favourable than borrowing on international financial markets.

Information was available to calculate the cost-escalation threshold for 22 of the 28 tied loans. For 13 of these loans (worth USD 5,274 million), the cost-escalation threshold was between 35% to 45%. That is, if the costs on the tied elements escalated by 35% to 45% (over the possible costs through a procurement process that was not tied), the grant element of the loan would be completely negated.

**Exhibit 4:** Maximum cost escalation threshold and grant element of 22 loans
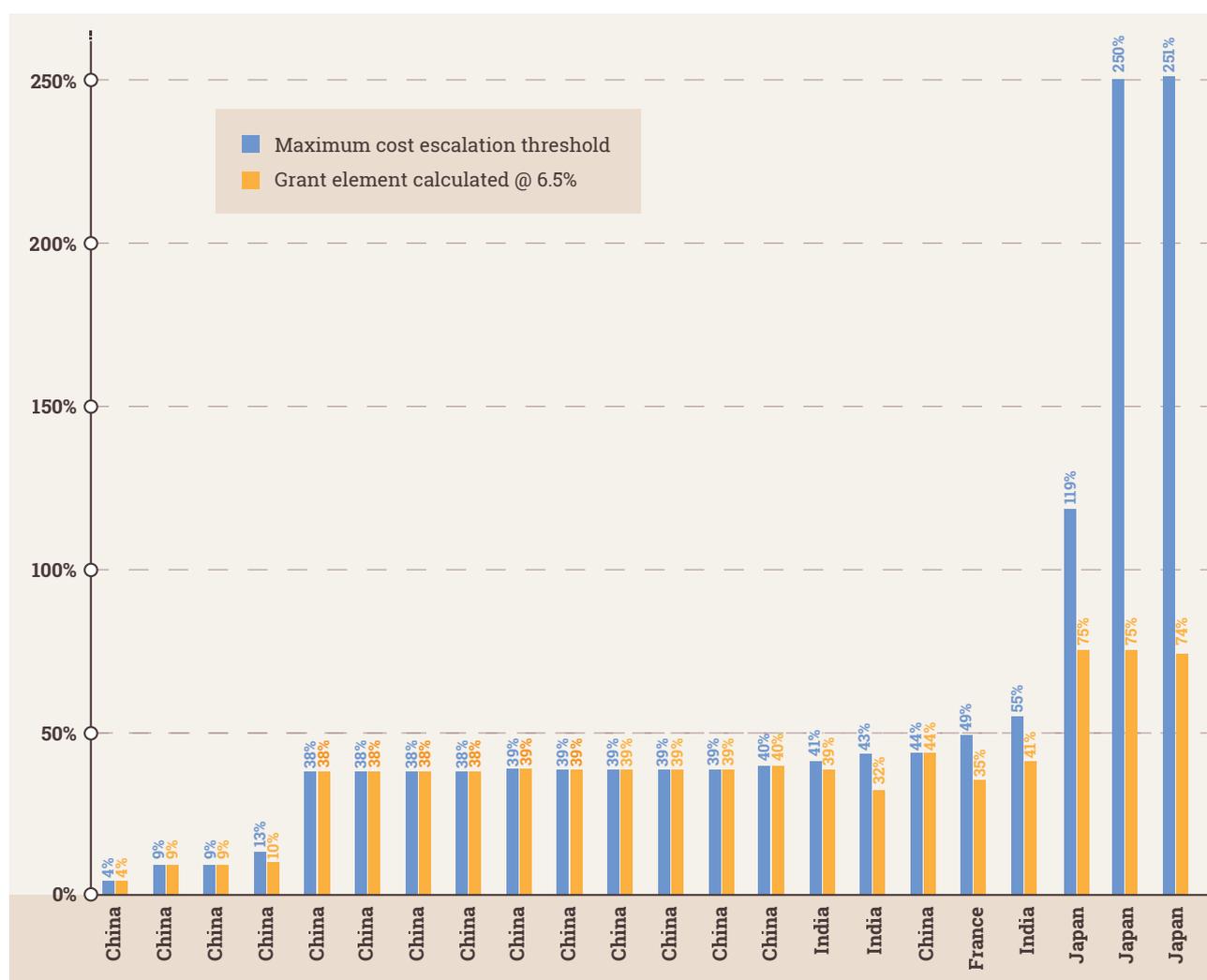


*Source:* Information provided by the External Resources Department of the Ministry of Finance and the responses received to RTIs filed with respective implementing agencies of the projects in the Government.

For four of the loans (worth USD 1,167 million), the cost-escalation thresholds were 4%, 9%, 9% and 13% (refer Exhibit 4). All four of these loans were from China. Furthermore, three of these loans were utilised to fund projects that originated as unsolicited proposals.

Loans from Japan had the highest cost-escalation thresholds. For two of the loans from Japan, costs had to escalate beyond 250%, for its grant element to be totally wiped off. These two loans had the lowest tied element (only 30% of the loan was tied to procurement from Japan) and the highest grant element (an average of 75%) compared to other tied loans.

The weighted average cost escalation is the lowest for loans from China at 33%, followed by loans from India at 45%, and the loan from France (Calyon Credit Agricole CIB) at 49%. The weighted average cost escalation for all 22 loans is 42% (refer Annex 3 for detailed information about the 22 tied loans).[23]

# 3

# CONCLUSION

For countries with a low credit rating, such as Sri Lanka, foreign loans from international and bilateral financial institutions can have a considerably lower interest cost. They can appear therefore to be a cheaper financing option to fund infrastructure projects, compared to the alternative financing options on the international financial market through ISBs.

Of the 50 bilateral and multilateral loans analysed in this paper, 33 loans accounting for 72% of the value of the loans have a grant element above 35%. In addition to this, the loans also have longer repayment periods compared to ISBs. For example, the longest tenure of ISBs issued by Sri Lanka was 10 years and the average maturity period of the 50 loans analysed in this paper was 24.8 years.

Sri Lanka has a legal framework and guidelines governing its procurement, including for procurement in the case of unsolicited proposals.[24] However, in the case of foreign-funded projects, the legal framework governing procurement permits the government to deviate from national procurement guidelines in favour of the procurement guidelines of the funding agency. (National Procurement Agency, 2006, p. 1)[25] This means that, even if the national procurement guidelines require the contractor to be selected through a process of international competitive bidding, the government is not legally prevented from agreeing to less competitive procurement methods mandated by the lending agency. This practice is then justified on the basis that the loans are secured on financial terms that are favourable.

This paper's analysis reveals, however, that the benefits of favourable financial terms offered by bilateral loans can be significantly eroded by the unfavourable procurement methods used to implement the projects funded through these loans. The majority of the bilateral loans (28 of 35 loans) are tied loans, where only companies from the lender's country are eligible to supply goods and services procured using these funds. By tying loans, the lending country prevents the recipient country from procuring goods/services of acceptable quality at a lower cost through a process of competitive bidding. In the case of Sri Lanka, a considerable number of projects funded by tied loans (12 from China and one from France) have also been implemented in the form of unsolicited proposals received from contractors of the country of the lender.

The cost escalations that result from such unfavourable procurement practices can significantly erode the benefits of securing loans at a lower cost. The

potential maximum cost escalation calculations indicate that for most of the tied loans, if costs on the tied element escalate by 35%-45%, the entire grant element of the loan will be wiped out. For four of the loans, if costs escalate by even 4%-13%, that alone is sufficient to completely erode the grant element of the loan.

The findings and conclusions of this study are supported by a diagnostic note prepared by the World Bank in 2017, which finds the mechanisms and procedures for handling unsolicited proposals in Sri Lanka to be weak. The note specifically states that the guidelines on the management of 'unsolicited proposals need to be clarified and strengthened to ensure more effective adherence to the principles of competitive tendering and value for money'. (Rajapaksa, 2017, p. 2)[26]

The findings of this research indicate that especially in the case of unsolicited proposals, where the procurement process can be particularly non-competitive, failing to properly evaluate the overall financial consequences of the loan can result in poor financing decisions that are not favourable to Sri Lanka.

Overall, even in the case of solicited proposals that are accepted through a semi-competitive process, the analysis suggests that decisions on any financing proposal with a tied element should be supported by an explicit analysis of the favourable interest rates and financing terms offered on the loan, against the unfavourable cost escalation consequences on the tied aspects.

Improving Sri Lanka's procurement framework can also reduce the adverse consequences that result from tied procurement terms embedded in infrastructure loans. Limiting existing political and bureaucratic discretion to grant exceptions to competitive bidding, through signing loan agreements, can help to contain adverse borrowing practices. An example, of such a limiting mode, would be parliamentary approval for any loan that suspended competitive bidding in high value public procurements.

# ANNEX 1
## Grant element calculation - methodology and assumptions

The External Resources Department (ERD) of the Ministry of Finance and the Ministry of Finance Annual Reports have been the primary source of information on the characteristics of the loans (the values, interest rates, and repayment periods). The information sources from the ERD has taken precedence wherever there are conflicts in the information with other sources such as the Ministry of Finance Annual Reports. In cases where there are conflicts in the information available with the ERD and the official information made available by the lending agency, the information from the lending agency takes precedence.

Amongst the 50 selected loans there are 23 loans denominated in currencies other than the USD.

There are 27 loans denominated in USD; 13 loans in Japanese yen (JPY); 1 loan in Euros (EUR); six loans in Chinese Yuan (CNY) and three loans in Special Drawing Rights (SDR). For the purposes of this study, the values of these non-USD-denominated loans have been converted to USD using the annual average exchange rate of the year the respective loan was signed.

The degree of concessionality of a loan is measured by its 'grant element.' The grant element is defined as the difference between the loan's nominal value (face value) and the sum of the discounted future debt-service payments to be made by the borrower (present value), expressed as a percentage of the loan's nominal value.

$$\text{Grant element of a loan} = \frac{\text{Nominal value of the loan - Present value of the loan}}{\text{Nominal value of the loan}}$$

The grant elements of the 50 selected loans have been calculated using the Present Value Monitoring Tool developed by the IMF.[27]

The discount rate used in calculations is 6.5% on the USD, which was identified as an alternative commercial rate of borrowing of Sri Lanka during the period under consideration (refer Section 1.1 for how this rate was determined).

To ensure commensurability of the interest rates, the effective interest rates applied for non-USD-denominated loans have been adjusted to account for exchange rate changes that non-USD currency would experience against the USD which may impact the cost of the loan. The USD equivalent interest rate was selected as most of Sri Lanka's Central Bank reserves are denominated in USD.

The interest rates adjusted for exchange rate for the non-USD denominated loans have been calculated as follows:

**Step 1.** The semi-annualised exchange rate change for the non-USD currency against the USD for the period 2005-2019 was calculated for each respective non-USD currency featured amongst the selected loans as follows[28] (Refer to formula 1 below).

A positive value for the calculated semi-annualised exchange rate change between 2005-2019 for a specific currency suggests an appreciation of the USD against the respective currency. Similarly, a negative value suggests a deprecation of the USD against the respective currency. Some of the instalments (interest and principal payments) for certain loans are to be paid in future periods owing to their respective maturity periods. These repayments would therefore be subject to exchange rate changes that arise in the future period as well. To account for this, the historical semi-annualised exchange rate change calculated for the 30 periods from 2005-2019 has been assumed to be the best estimate of the representative rate for future periods as well.

**Step 2.** The exchange rate impact on the interest payments was calculated as follows (Refer to formula 2 below).

**Step 3.** The exchange rate impact on the principal payments was calculated as follows (Refer to formula 3 below).

**Step 4.** The interest rate adjusted for exchange rate changes was calculated as follows (Refer to formula 4 below):

**Formula 1**

$$\text{Semi-annualised exchange rate change (2005-2019) for currency } x \text{ against the USD} = \left( \frac{x \text{ to 1 USD as at begining of January 2005}}{x \text{ to 1 USD as at end of December 2019}} \right)^{\frac{1}{30}} - 1$$

**Formula 2**

$$\text{Exchange rate impact on interest rate} = \left( \frac{\text{Interest rate}}{2} \right) * \text{Semi-annualised exchange rate change for currency } x \text{ against the USD}$$

**Formula 3**

$$\text{Exchange rate impact on loan principle payments} = \left( \frac{1}{((\text{Maturity period - Grace period}) * 2)} \right) * \text{Semi-annualised exchange rate change for currency } x \text{ against the USD}$$

**Formula 4**

$$\text{Interest rate adjusted for exchange rate} = \left( \text{Interest rate} - \text{Exchange rate impact on interest rate} - \text{Exchange rate impact on loan principle payments} \right) * 2$$

In addition to the above, the following assumptions have been made in the calculating the grant element through the aforementioned IMF Present Value Monitoring Tool for the selected loans:

- Loans with interest rates which have any variable elements at any period have been classified as loans with 'variable interest rates'.

- For loans which feature variable interest rates, the reference rate was determined by the IMF Present Value Monitoring Tool which generates a reference rate based on an 'average projected rate' for the six-month USD LIBOR over the following 10 years (2020-2029).

- The full amount of all the selected loans have been assumed to be disbursed up front.

- All selected loans have been assumed to have 'equal principal payments' throughout their terms.

- All selected loans have been assumed to have semi-annual payments.

- The commitment fees and service charges, which are charged on the undisbursed and disbursed amounts respectively, has been omitted when calculating the grant element as the IMF Present Value Monitoring Tool assumes the full amount of the loan is disbursed upfront.

- Front-end fees, guarantee charges, handling fees, appraisal, arrangement fees, legal fees, insurance premiums and management fees of the selected loans have been incorporated into the costs of the loan for the grant value calculation and classified as 'upfront commissions' as described in the IMF Present Value Monitoring Tool.

- Service fees on disbursed amounts on the World Bank loans have been incorporated into the costs of the loan and classified as 'Management Fees' as described in the IMF Present Value Monitoring Tool.

- For Japanese loans which feature one interest rate for the major infrastructure spending component of a loan and much lower interest rate of 0.01% on the smaller consultancy component of the same loan, the larger interest rate applicable for the infrastructure spending portion has been taken as the interest rate applicable for the grant element calculations of the loan.

# ANNEX 2
## Maximum potential cost escalation calculations: methodology and assumptions

The maximum cost-escalation threshold was calculated using the formula detailed below.

$$\text{Maximum Cost Escalation Threshold (CE):} \quad = \quad \frac{GE}{TE}$$

**Legend**

GE = Grant Element of the loan (refer Annex 1)

TE = Tied Element or the amount paid to the tied contractor of lender country's origin. Tied element of loans were determined using the following two methods.

**1.** *The limits specified in the loan agreement: For loans for which the loan agreement was available, the minimum percentage of the loan that is tied to procurement of goods/services from the country of the lender specified in the agreement was taken as the tied element of the loan.*

**2.** *The actual value paid to the contractor from the country of the lender: For loans where the loan agreement was not available, but the contract agreement was available, the actual value paid to the contractor as a percentage of the total value of the loan was taken as the tied element of the loan.*

*Note: In the second approach, if the value paid to the contractor from the lending country was higher than the total value of the loan, the tied element is taken as 100%.*

*Of the 28 loans, the information was available to determine tied element for only 22 loans. Of these, the tied element of 11 loans was determined using the first approach. For the balance 11 loans, the tied element was determined using the second approach. In the second approach, the total contract value paid to a contractor originating from the lender country (stated in the contract agreement) was assumed to be the tied element of that loan.*

# ANNEX 3

## Tied element and cost escalation threshold for 22 tied loans

| Country | Value USD Mn | Grant element @ 6.5% | Tied element | Max. cost escalation threshold | Procurement type |
|---|---|---|---|---|---|
| China | 214 | 4% | 100% | 4% | Unsolicited proposal |
| China | 300 | 9% | 100% | 9% | Unsolicited proposal |
| China | 500 | 9% | 100% | 9% | Restrictive competitive bidding* |
| China | 153 | 10% | 76% | 13% | Unsolicited proposal |
| China | 494 | 38% | 100% | 38% | Unsolicited proposal |
| China | 600 | 38% | 100% | 38% | Unsolicited proposal |
| China | 360 | 38% | 100% | 38% | Contractor pre-selected** |
| China | 200 | 38% | 100% | 38% | Unsolicited proposal |
| China | 891 | 39% | 100% | 39% | Contractor pre-selected** |
| China | 412 | 39% | 100% | 39% | Unsolicited proposal |
| China | 253 | 39% | 100% | 39% | Contractor pre-selected** |
| China | 242 | 39% | 100% | 39% | Unsolicited proposal |
| China | 181 | 39% | 100% | 39% | Contractor pre-selected** |
| China | 683 | 40% | 100% | 40% | Contractor pre-selected** |
| India | 416 | 39% | 97% | 41% | Contractor pre-selected** |
| India | 382 | 32% | 75% | 43% | Restrictive competitive bidding* |
| China | 158 | 44% | 100% | 44% | Unsolicited proposal |
| France | 137 | 35% | 73% | 49% | Unsolicited proposal |

| Country | Value USD Mn | Grant element @ 6.5% | Tied element | Max. cost escalation threshold | Procurement type |
|---------|-------------|---------------------|--------------|-------------------------------|------------------|
| India | 318 | 41% | 75% | 55% | Restrictive competitive bidding* |
| Japan | 127 | 75% | 63% | 119% | Restrictive competitive bidding* |
| Japan | 331 | 75% | 30% | 250% | Restrictive competitive bidding* |
| Japan | 397 | 74% | 30% | 251% | Restrictive competitive bidding* |

*Loans which have been classified as restricted bidding can be mixed in some instances and have elements of international competitive bidding and bidding restricted to suppliers from the country of the lender. For example, certain loans from Japan condition that the total cost of goods and services procured from Japan shall not be less than 30% of the total amount of contracts to be financed, which suggests that up to 70% of the loan maybe procured through international competitive bidding.

**These are loans where the contracting companies have been selected prior to the loan agreement. Information available is not sufficient to determine the procurement method (i.e. whether the contractors were selected through solicited or unsolicited proposals). For example, for three loans from China, the contract with the Chinese company and the Sri Lankan Government was entered into before the loan agreement with the China EXIM Bank was signed. For one loan from India worth USD 416 million, the loan agreement states that USD 335 million of the loan would be used to pay the main contractor IRCON International while the remaining USD 81 million should be used for financing purchase of other goods, 85% of which should be eligible goods from India.

# ANNEX 4
## Detailed information about 50 loans

| No. | Description | Funder* | Country | Currency of loan denomination* | Value in denominated currency (in Mn) | Value in USD Mn (based on annual average exchange rate – year loan signed) | Interest rate | Interest rate (non-USD denominated loans adjusted for exchange rate changes) | Loan agreement signed date | Grace period | Maturity period | Procurement type | Grant element @ 6.5% | Tied element | Max. cost escalation threshold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Colombo Port Expansion Project | ADB | - | USD | 300 | 300 | Libor 06 for USD - 0.60% | Libor 06 for USD -0.60% | 25-Apr-07 | 5 | 25 | Untied - International competitive bidding | 32% | N/A | N/A |
| 2 | Wind Power Generation Project (49345-002) | ADB | - | USD | 200 | 200 | Libor 06 for USD -0.50% | Libor 06 for USD -0.50% | 22-Nov-17 | 5 | 20 | Untied - International competitive bidding | 30% | N/A | N/A |
| 3 | Mahaweli Water Security Investment Program - Tranche 2 | ADB | - | USD | 179 | 179 | Libor 06 for USD -0.70% | Libor 06 for USD -0.70% | 18-May-18 | 5 | 20 | Untied - International competitive bidding | 28% | N/A | N/A |
| 4 | Integrated Road Investment Program - Tranche 3 | ADB | - | USD | 175 | 175 | Libor 06 for USD -0.50% | Libor 06 for USD -0.50% | 11-Dec-15 | 5 | 26 | Untied - International competitive bidding | 34% | N/A | N/A |
| 5 | Conflict-Affected Region Emergency Project | ADB | - | USD | 150 | 150 | Libor 06 for USD -0.20% | Libor 06 for USD -0.20% | 7-Jun-10 | 8 | 31 | Untied - International competitive bidding | 42% | N/A | N/A |
| 6 | Intergrated Road Investment Program - Tranche 4 | ADB | - | USD | 150 | 150 | Libor 06 for USD -0.70% | Libor 06 for USD -0.70% | 15-Dec-17 | 7 | 30 | Untied - International competitive bidding | 35% | N/A | N/A |
| 7 | National Highways Sector Project | ADB | - | USD | 150 | 150 | Libor 06 for USD -0.60% | Libor 06 for USD -0.60% | 14-Dec-06 | 4 | 24 | Untied - International competitive bidding | 31% | N/A | N/A |
| 8 | Northern Road Connectivity Project (OCR) | ADB | - | USD | 128 | 128 | Libor 06 for USD -0.20% | Libor 06 for USD -0.20% | 27-Aug-10 | 5 | 25 | Untied - International competitive bidding | 36% | N/A | N/A |

| No. | Description | Funder* | Country | Currency of loan denomination* | Value in denominated currency (in Mn) | Value in USD Mn (based on annual average exchange rate – year loan signed) | Interest rate | Interest rate (non-USD denominated loans adjusted for exchange rate changes) | Loan agreement signed date | Grace period | Maturity period | Procurement type | Grant element @ 6.5% | Tied element | Max. cost escalation threshold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9 | Grater Colombo Water and Waste-water Management Improvement Investment Pro-gramme - Project 3 (OCR) | ADB | - | USD | 123 | 123 | Libor 06 for USD -0.50% | Libor 06 for USD -0.50% | 11-Aug-16 | 5 | 25 | Untied - International competitive bidding | 33% | N/A | N/A |
| 10 | Green Power devel-opment & Energy Efficiency Improve-ment Pro. | ADB | - | USD | 121 | 121 | Libor 06 for USD -0.50% | Libor 06 for USD -0.50% | 20-Nov-14 | 5 | 20 | Untied - International competitive bidding | 31% | N/A | N/A |
| 11 | Supprting Electric-ity Supply Reliability Improvement (49216-002) | ADB | - | USD | 115 | 115 | Libor 06 for USD -0.50% | Libor 06 for USD -0.50% | 19-Dec-16 | 5 | 24 | Untied - International competitive bidding | 32% | N/A | N/A |
| 12 | Improvement and Rehabilitation of Priority Roads Phase II | CDB | China | USD | 500 | 500 | Libor 06 for USD -2.90% | Libor 06 for USD -2.90% | 31-Mar-11 | 3 | 15 | Tied - Restrictive competitive bidding** | 9% | 100% | 9% |
| 13 | Improvement and Rehabilitation of Priority Road Proj-ect 3 (Phase I) | CDB | China | USD | 300 | 300 | Libor 06 for USD -2.95% | Libor 06 for USD -2.95% | 11-Mar-14 | 3 | 15 | Tied - Unsolicited proposal | 9% | 100% | 9% |
| 14 | Moragahakanda Development Project | CDB | China | USD | 214 | 214 | Libor 06 for USD -2.90% | 2.90% | 28-Jun-12 | 4 | 15 | Tied - Unsolicited proposal | 4% | 100% | 4% |
| 15 | Rehabilitation and Improvement of Priority Road Proj-ect Phase I | CDB | China | USD | 153 | 153 | Libor 06 for USD -2.90% | Libor 06 for USD -2.90% | 16-Dec-10 | 3 | 15 | Tied - Unsolicited proposal | 10% | 76% | 13% |
| 16 | Puttalam Coal Power Project - Phase II | EXIM China | China | USD | 891 | 891 | 2.00% | 2.00% | 25-Dec-09 | 5 | 20 | Tied - Contractor pre-se-lected*** | 39% | 100% | 39% |
| 17 | Construction of Extension of South-ern Expressway Section 1 from Matara to Beliatta | EXIM China | China | USD | 683 | 683 | 2.00% | 2.00% | 23-Dec-14 | 6 | 21 | Tied - Contractor pre-se-lected*** | 40% | 100% | 40% |
| 18 | Hambantota Port Development Proj-ect - Phase II | EXIM China | China | USD | 600 | 600 | 2.00% | 2.00% | 17-Sep-12 | 6 | 19 | Tied - Unsolicited proposal | 38% | 100% | 38% |

| No. | Description | Funder* | Country | Currency of loan denomination* | Value in denominated currency (in Mn) | Value in USD Mn (based on annual average exchange rate – year loan signed) | Interest rate | Interest rate (non-USD denominated loans adjusted for exchange rate changes) | Loan agreement signed date | Grace period | Maturity period | Procurement type | Grant element @ 6.5% | Tied element | Max. cost escalation threshold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19 | Construction of Outer Circular Highway Project Phase III from Kerawalapitiya to Kadawatha | EXIM China | China | USD | 494 | 494 | 2.00% | 2.00% | 16-Sep-14 | 5 | 20 | Tied - Unsolicited proposal | 38% | 100% | 38% |
| 20 | Construction of Extension of Southern Expressway, Section 4 from Mattala to Hambantota via Andarawewa Project | EXIM China | China | CNY | 2,528 | 412 | 2.00% | 2.05% | 16-Sep-14 | 6 | 20 | Tied - Unsolicited proposal | 39% | 100% | 39% |
| 21 | Construction of Extension of Southern Expressway, Section 2 from Beliatta to Wetiya Project | EXIM China | China | USD | 360 | 360 | 2.00% | 2.00% | 7-Apr-16 | 5 | 20 | Tied - Contractor pre-selected*** | 38% | 100% | 38% |
| 22 | Hambantota port development project | EXIM China | China | USD | 307 | 307 | 6.30% | 6.30% | 30-Oct-07 | 6 | 17 | Tied - Unsolicited proposal | 3% | N/A | N/A |
| 23 | Hambantota Hub Development Project | EXIM China | China | CNY | 1,556 | 253 | 2.00% | 2.05% | 16-Sep-14 | 6 | 20 | Tied - Contractor pre-selected*** | 39% | 100% | 39% |
| 24 | Kandy North Pathadumbara Integrated Water Supply Project | EXIM China | China | CNY | 1,637 | 242 | 2.00% | 2.05% | 22-Dec-17 | 6 | 21 | Tied - Unsolicited proposal | 39% | 100% | 39% |
| 25 | Matara Beliatta Section of Matara Kataragama Railway Extension Project | EXIM China | China | USD | 200 | 200 | 2.00% | 2.00% | 19-Feb-13 | 7 | 19 | Tied - Unsolicited proposal | 38% | 100% | 38% |
| 26 | Mattala Hambantota International Airport Project | EXIM China | China | CNY | 1,226 | 181 | 2.00% | 2.05% | 5-Mar-10 | 6 | 20 | Tied - Contractor pre-selected*** | 39% | 100% | 39% |
| 27 | Hambantota Port Development Project Phase II | EXIM China | China | CNY | 1,000 | 158 | 2.00% | 2.06% | 17-Sep-12 | 10 | 22 | Tied - Unsolicited proposal | 44% | 100% | 44% |
| 28 | Thalpitigala Reservoir Project | EXIM China | China | USD | 148 | 148 | 2.00% | 2.00% | 22-Dec-17 | 6 | 16 | Tied - Unsolicited proposal | 36% | N/A | N/A |

| No. | Description | Funder* | Country | Currency of loan denomination* | Value in denominated currency (in Mn) | Value in USD Mn (based on annual average exchange rate – year loan signed) | Interest rate | Interest rate (non-USD denominated loans adjusted for exchange rate changes) | Loan agreement signed date | Grace period | Maturity period | Procurement type | Grant element @ 6.5% | Tied element | Max. cost escalation threshold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29 | Hambantota Port Development Phase I for Ancillary Work and Supply of Equipment Project | EXIM China | China | CNY | 863 | 139 | 2.00% | 2.05% | 24-Apr-13 | 5 | 20 | Tied - Unsolicited proposal | 37% | N/A | N/A |
| 30 | Implementation of Greater Matale Water Supply Project (Syndicated loan with Natixis, BNP Paribas and Unicredit Bank Austria) | Calyon Credit Agricole CIB | France | EUR | 124 | 137 | Euribor 06 - 1.7% | Euribor 06 – 1.64% | 25-Apr-16 | 3 | 15 | Tied - Unsolicited proposal | 35% | 73% | 49% |
| 31 | Doller credit line 318Mn for the Development of Railway Sector | EXIM India | India | USD | 318 | 318 | 1.75% | 1.75% | 6-Jun-17 | 5 | 20 | Tied - Restrictive competitive bidding** | 41% | 75% | 55% |
| 32 | Railway Line Omanthai-pallai, Madhu-Tallaimannar & Medawachchiya | Government of India | India | USD | 416 | 416 | Libor 06 for USD -0.50% | Libor 06 for USD -0.50% | 26-Nov-10 | 5 | 40 | Tied - Contractor pre-selected*** | 39% | 97% | 41% |
| 33 | Restoration of Northern Railway Services | Government of India | India | USD | 382 | 382 | Libor 06 for USD -0.50% | Libor 06 for USD -0.50% | 17-Jan-12 | 6 | 23 | Tied - Restrictive competitive bidding** | 32% | 75% | 43% |
| 34 | Greater Colombo Urban Transport Development Project Phase 2 | Government of Japan | Japan | JPY | 31,688 | 397 | 0.20% | 0.19% | 22-Mar-11 | 10 | 40 | Tied - Restrictive competitive bidding** | 74% | 30% | 251% |
| 35 | New Bridge Construction Project over the Kelani River | Government of Japan | Japan | JPY | 35,020 | 331 | 0.10% | 0.09% | 28-Mar-14 | 10 | 40 | Tied - Restrictive competitive bidding** | 75% | 30% | 250% |
| 36 | Kalu Ganga Water Supply Expansion Project (I) | Government of Japan | Japan | JPY | 31,810 | 284 | 1.40% | 1.39% | 7-Jul-17 | 7 | 25 | Untied - International competitive bidding | 50% | N/A | N/A |
| 37 | Anuradhapura North Water Supply Project (Phase 2) | Government of Japan | Japan | JPY | 23,137 | 213 | 1.40% | 1.39% | 17-Nov-16 | 7 | 25 | Untied - International competitive bidding | 50% | N/A | N/A |

| No. | Description | Funder* | Country | Currency of loan denomination* | Value in denominated currency (in Mn) | Value in USD Mn (based on annual average exchange rate – year loan signed) | Interest rate | Interest rate (non-USD denominated loans adjusted for exchange rate changes) | Loan agreement signed date | Grace period | Maturity period | Procurement type | Grant element @ 6.5% | Tied element | Max. cost escalation threshold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 38 | National Transmission and Distribution Network Development and Efficiency Improvement Project | Government of Japan | Japan | JPY | 24,930 | 206 | 0.30% | 0.29% | 11-Aug-15 | 10 | 40 | Untied - International competitive bidding | 74% | N/A | N/A |
| 39 | Greater Colombo Transport Development Project. | Government of Japan | Japan | JPY | 21,913 | 186 | 1.50% | 1.49% | 28-Mar-07 | 10 | 30 | Untied - International competitive bidding | 54% | N/A | N/A |
| 40 | Southern Highway Construction Project (II) | Government of Japan | Japan | JPY | 17,412 | 168 | 1.40% | 1.39% | 29-Jul-08 | 10 | 30 | Untied - International competitive bidding | 55% | N/A | N/A |
| 41 | Greater Colombo Transmission and Distribution Loss Reduction Project | Government of Japan | Japan | JPY | 15,941 | 163 | 0.30% | 0.29% | 14-Mar-13 | 10 | 40 | Untied - International competitive bidding | 74% | N/A | N/A |
| 42 | Kandy City Wastewater Management Project | Government of Japan | Japan | JPY | 14,087 | 160 | 0.65% | 0.64% | 26-Mar-10 | 10 | 40 | Untied - International competitive bidding | 69% | N/A | N/A |
| 43 | Major Bridges Construction Project of the National Road Network | Government of Japan | Japan | JPY | 12,381 | 127 | 0.20% | 0.19% | 14-Mar-13 | 10 | 40 | Tied - Restrictive competitive bidding** | 75% | 63% | 119% |
| 44 | The Galle Port Development Project (I) | Government of Japan | Japan | JPY | 14,495 | 125 | 0.30% | 0.29% | 28-Mar-06 | 10 | 30 | Tied - Restrictive competitive bidding** | 67% | N/A | N/A |
| 45 | Bandaranaike International Airport Expansion Terminal 2 | JICA | Japan | JPY | 45,428 | 418 | 0.10% | 0.09% | 24-Mar-16 | 10 | 40 | Tied - Restrictive competitive bidding** | 75% | N/A | N/A |
| 46 | Bandaranaike International Airport Expansion Terminal 2 | JICA | Japan | JPY | 28,969 | 363 | 0.20% | 0.19% | 28-Mar-12 | 10 | 40 | Tied - Restrictive competitive bidding** | 74% | N/A | N/A |
| 47 | Metro Colombo Urban Development Project [MCUDP] | IBRD - WB | - | USD | 213 | 213 | 0.70% | 0.70% | 18-May-12 | 5 | 24 | Untied - International competitive bidding | 30% | N/A | N/A |

| No. | Description | Funder* | Country | Currency of loan denomination* | Value in denominated currency (in Mn) | Value in USD Mn (based on annual average exchange rate – year loan signed) | Interest rate | Interest rate (non-USD denominated loans adjusted for exchange rate changes) | Loan agreement signed date | Grace period | Maturity period | Procurement type | Grant element @ 6.5% | Tied element | Max. cost escalation threshold |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 48 | Water Supply and Sanitation Improvement Project | IDA - WB | - | SDR | 117 | 164 | 1.26% | 1.24% | 6-Nov-15 | 5 | 25 | Untied - International competitive bidding | 42% | N/A | N/A |
| 49 | Strategic Cities Development Project | IDA - WB | - | SDR | 95 | 144 | 1.25% | 1.23% | 12-Sep-14 | 5 | 25 | Untied - International competitive bidding | 41% | N/A | N/A |
| 50 | Transport Connectivity and Asset Management Project | IDA - WB | - | SDR | 91 | 125 | 1.25% | 1.21% | 29-Sep-17 | 4 | 15 | Untied - International competitive bidding | 34% | N/A | N/A |

\*      ADB – Asian Development Bank; CDB – China Development Bank Corporation; EXIM China – The Export Import Bank of China; EXIM India – The Export Import Bank of India; JICA - Japan International Corporation Agency; IBRD - International Bank for Reconstruction & Development; IDA - International Development Association; WB - World Bank. USD – United States Dollar; CNY - Chinese Yuan; EUR – Euro; JPY – Japanese Yen; SDR - Special Drawing Rights.

\*\*    Loans which have been classified as restricted bidding can be mixed in some instances and have elements of international competitive bidding and bidding restricted to suppliers from the country of the lender. For example, certain loans from Japan condition that the total cost of goods and services procured from Japan shall not be less than 30% of the total amount of contracts to be financed, which suggests that up to 70% of the loan maybe procured through international competitive bidding.

\*\*\*   These are loans where the contracting companies have been selected prior to the loan agreement. Information available is not sufficient to determine the procurement method (i.e. whether the contractors were selected through solicited or unsolicited proposals). For example, for three loans from China, the contract with the Chinese company and the Sri Lankan Government was entered into before the loan agreement with the China EXIM Bank was signed. For one loan from India worth USD 416 million, the loan agreement states that USD 335 million of the loan would be used to pay the main contractor IRCON International while the remaining USD 81 million should be used for financing purchase of other goods, 85% of which should be eligible goods from India.

# ENDNOTES

1    These include foreign loans taken by the Central Government and by the state-owned enterprises (SOEs).

2    The research initially aimed at investigating the financial and procurement terms and conditions attached to 56 loans. These included the 50 highest value loans taken by the Central Government of Sri Lanka and 6 loans, each exceeding USD 100 million, taken by the state owned enterprises (SOEs). However, Verité Research was able to access the requisite information for only 50 loans: 46 loans to the Central Government (accounting for USD 11,972 million), and 4 loans to the state-owned enterprises (accounting for USD 1,096 million).

3    Refer Annex 4 for the detailed information on all 50 loans.

4    International Monetary Fund(IMF), 'Calculation of Grant Element', 1 July 2015, at https://www.imf.org/external/np/pdr/conc/calculator/, [last accessed 20 May 2020]

5    The effective interest rate is reduced by favourable repayment terms, such as a grace period before loan repayments are initiated.

6    The IMF and the OECD employ different methods to calculate the grant element of a loan using different discount rates. The IMF uses a unified discount rate of 5% per annum for all loans regardless of the currency the loan is denominated in. The OECD uses a method to calculate the grant element of export credits and tied loans whereby a differentiated discount rate is applied based on the Commercial Interest Reference Rates (CIRRs) (the official lending rates of Export Credit Agencies) and a margin specific to the repayment term of the specific loan.
Source: International Monetary Fund(IMF), 'Calculation of Grant Element', 1 July 2015, at https://www.imf.org/external/np/pdr/conc/calculator/, [last accessed 20 May 2020] and Simon Scott, OECD, 'Working Paper No. 339: The grant element method of measuring the concessionality of loans and debt relief', 18 May 2017, page: 17, at http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DEV/DOC/WKP(2017)5&docLanguage=En, [last accessed 24 July 2020]

7    The weighted average of all of Sri Lanka's 5-year International Sovereign Bonds (ISBs) issued between 2007-2018 is 6.22% and that for 10-year ISBs issued between 2010-2018 is 6.43%. The higher rate of 6.5% was considered factoring in other benefits of these loans such as having a longer maturity period (an average of 24.8 years on the 50 selected loans) compared to ISBs, where the longest tenor was 10 years.

8    Danish Institute for International Studies, DIIS, 'Untying aid: Is it working? - Evaluation of the Paris Declaration', 2009, at https://www.oecd.org/dac/evaluation/dcdndep/44375975.pdf, [last accessed 22 June 2020]; Bodo Ellmers – Eurodad 'How to spend it Smart procurement for more effective aid', September 2011, at https://www.un.org/en/ecosoc/newfunct/pdf/luxembourg_eurodad-how_to_spend_it.pdf, [last accessed 22 June 2020]

9    Clay, Edward J., Matthew Geddes, Luisa Natali and Dirk Willem te Velde - Ministry of foreign affairs Denmark, 'Thematic Study, The Developmental Effectiveness of Untied Aid: Evaluation of the Implementation of the Paris Declaration and of the 2001 DAC Recommendation on Untying ODA To The LDCs', December 2008, page 1, at https://www.oecd.org/development/evaluation/dcdndep/41537529.pdf, [last accessed 22 June 2020].

10   Catrinus J. Jepma - OECD 'The tying of aid', 1991, page: 15, athttps://www.oecd.org/dev/pgd/29412505.pdf, [last accessed 22 June 2020].

11   Clay, Edward J., Matthew Geddes, Luisa Natali and Dirk Willem te Velde - Ministry of foreign affairs Denmark, 'Thematic Study, The Developmental Effectiveness of Untied Aid: Evaluation of the Implementation of the Paris Declaration and of the 2001 DAC Recommendation on Untying ODA To The LDCs', December 2008, pages: 36-37, at https://www.oecd.org/development/evaluation/dcdndep/41537529.pdf, [last accessed 22 June 2020].

12   Ibid.

13   In the case of tied loans, where the tied element was determined using the contract value, if the total contracted value was higher than the loan value, the tied element was assumed to be 100%.

14   Weights are based on the tied element of each of the loans.

15   For more details on the IMF method, refer: International Monetary Fund, 'Public Debt Limits in IMF-Supported Programs', July 2015, at https://www.imf.org/external/np/spr/2015/conc/index.htm, [last accessed 24 July 2020]. For more details on the OECD method for Export Credits, refer: Organisation for Economic Co-operation and Development, 'Arrangement on Officially Supported Export Credits', January 2020, page: 27, at http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?doclanguage=en&cote=tad/pg(2020)1, [last accessed 24 July 2020].

16   World Bank, 'How to Manage Unsolicited Proposals', 23 April 2019, at https://ppp.worldbank.org/public-private-partnership/ppp-overview/ppp-procurement-bidding/unsolicited-proposals/unsolicited-proposals, [last accessed 24 July 2020].

17   International Bank for Reconstruction and Development/The World Bank and International Finance Corporation, 'Policy guidelines for managing unsolicited proposals in infrastructure projects' July 2017, at https://ppiaf.org/documents/5368/download [last accessed 08 June 2020]

18  Public-Private Infrastructure Advisory Facility (PPIAF), 'Unsolicited Proposals – An Exception to Public Initiation of Infrastructure PPPs: An Analysis of Global Trends and Lessons Learned', August 2014, page: 6, at https://ppp.worldbank.org/public-private-partner-ship/sites/ppp.worldbank.org/files/documents/UnsolicitedProposals_PPIAF.pdf, [last accessed 08 June 2020]

19  Rajapaksa, Amali, 'Sri Lanka PPP diagnostic note : accelerating infrastructure investment through PPPs (English)', Washington, DC : World Bank Group, 31 October 2017, page: 2, at http://documents.worldbank.org/curated/en/781621504159236870/Sri-Lan-ka-PPP-diagnostic-note-accelerating-infrastructure-investment-through-PPPs, [last accessed 08 June 2020]

20  Ibid

21  In some instances, these loans may have a component that is tied and a component that is untied. Refer Annex 4 for exact share of each loan that is tied.

22  These are loans where the contracting companies have been selected prior to the loan agreement. However, the information available is insufficient to determine the procurement method, i.e., whether or not they originated as unsolicited proposals. However as the contractor has been selected prior to the loan agreement, the loan could be considered to be tied.

23  Weights are based on the tied element of each of the loans.

24  Website of the Ministry of Finance, Procurement Guidelines and Manuals, 'Guidelines on Private Sector Infrastructure Projects', at, http://treasury.gov.lk/documents/57687/174939/Part+II+Private+Sector+Infrastructure+Projects.pdf/0ae4613e-8fd3-4639-b032-b8e9111bb71d, [last accessed 9 January 2020].

25  National Procurement Agency, 'Procurement Guidelines', 2006, page 1:Guideline 1.3.3, at http://www.treasury.gov.lk/docu-ments/57687/174939/ProcurementGuidelines2006_amded12June.pdf/4417f549-2a8d-45d1-b3a6-0560db79a87f, [last accessed 05 August 2020]

26  Rajapaksa, Amali, 'Sri Lanka PPP diagnostic note : accelerating infrastructure investment through PPPs (English)', Washington, DC : World Bank Group, 31 October 2017, page: 2, at http://documents.worldbank.org/curated/en/781621504159236870/Sri-Lan-ka-PPP-diagnostic-note-accelerating-infrastructure-investment-through-PPPs, [last accessed 08 June 2020]

27  The Present Value (PV) Monitoring Tool 'is an Excel based file that has been developed by the IMF to set and monitor debt targets under the Fund's new (2014) debt limit policy. It allows users to calculate the present value and grant element for multiple loans at the same time.' (International Monetary Fund, July 2015). This tool can be accessible through: https://www.imf.org/external/np/spr/2015/conc/PVtool.xlsm.

28  Semi-annualised exchange rate change has been taken as the loans require semi-annual payments.

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Strategic Analysis for Asia