Inter-American Development Bank Document

**Trinidad and Tobago**

**Support to Strengthen Trinidad and Tobago’s Public Financial Management System**

**(TT-L1042)**

**Financial Analysis**

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1. **Executive Summary**
	1. The present study was prepared to estimate the financial benefits to be generated by strengthening Public Financial Management in Trinidad and Tobago. In this context, through a Financial Appraisal methodology, one of the expected results of the Project is evaluated (Decrease from TT$ 6.241 billion to TT$ 0.0 billion - average balance in constant prices of the Suspense Account[[1]](#footnote-1)). The Program aims to improve the efficiency and effectiveness of the Government of the Republic of Trinidad and Tobago (GoRTT) to allocate public resources for public service delivery.
	2. ***Assumption. On a conservative basis, it is estimated that the implementation of the Integrated Financial Management System (IFMIS) cashiering module at revenue collection offices will generate a financial benefit of US$ 4.78 million, to be accrued in 2018. This financial benefit is a result of calculating the opportunity cost[[2]](#footnote-2) of promptly releasing the funds from the Treasury Suspense Account.[[3]](#footnote-3)*** ***The project benefit is estimated by calculating (i) the 30-day investment return of depositing the annual average amount held idle in the Treasury Suspense Account in a commercial bank account and (ii) the benefit from the use of such return investment to amortize the public debt.***
	3. To calculate the benefit over the 20-year period, the project team assumed a constant interest rate over that period. This assumption is more conservative than interest rate estimations from the IMF, which projects an ascendant trajectory of interest rates for years 2014-2019 (8.6% to 10.4%) when estimating the effective interest rates to be paid by the Government on the public debt.



Source: International Monetary Fund, Article IV for Trinidad and Tobago, Country Report No. 14/271, September 2014, Washington, DC, USA.

* 1. The project’s financial analysis presents an Internal Rate of Return (IRR) of 5% with a Net Present Value of US$ 21.57 million in 2035 (20 years). This justifies the US$40 million investment by the Inter-American Development Bank (IDB). Additional costs associated with IT infrastructure were also taken into consideration. From 2018 onwards, a maintenance cost will be included (licenses, upgrades, and program management). It is estimated that those costs are a 5% of the total cost of component 2 (representing approximately US$1.2 million).
	2. Based on this financial appraisal, it is recommended to continue with the financial and technical support from the Bank, through the implementation of the Performance Monitoring and Public Financial Management Reform under the operation TT-L1042.
1. **Introduction**
	1. This document presents the ex-ante financial analysis of the Support to Strengthen Trinidad and Tobago’s Public Financial Management System (TT-L1042, “the Project”), which will be implemented over the 2015-2019 period. The study calculates the financial benefit generated by the reduction of government amounts inactive in a temporary Treasury account denominated Treasury Suspense Account, waiting for the identification of their income sources, and then transferred to the Exchequer Treasury account (consolidated Treasury account) for payment purposes.
	2. The general objective of this project is to improve the efficiency and effectiveness of the Government of the Republic of Trinidad and Tobago to allocate public resources for public service delivery. The project’s specific objectives are improved: (i) strategic allocation of public resources; (ii) independence in the control and stewardship of public resources; and (iii) information management. The Project will finance the following activities, grouped in two components:
	3. **Component 1: Support for PFM Modernization (US$8,506,000).** This component seeks to contribute to the modernization of PFM procedural and legal frameworks for budget preparation and execution. To do so, the component will finance the following products:

a. Development and implementation of a new budget classification based on a GFS-compliant Chart of Accounts. This will include: (i) support for the implementation of the new Chart of Accounts and budget classification system, including training MoFE staff on its use; and (ii) preparation of an IPSAS‑compliant Treasury accounting framework to operate with the new concepts introduced by the new Chart of Accounts, including update of accounting manuals as well as delivery of training courses on the new accounting framework and bookkeeping.

b. Development and implementation of institutional instruments to sustain PFM modernization efforts. This will include: (i) development and implementation of a Sustainability Strategy for PFM continual improvement; (ii) development and implementation of a Change Management Strategy, including stakeholder coordination and communication; (iii) train-the-Trainer programs within core PFM areas including PPRD and the MoFE’s Budget and Treasury Divisions, as well as establishment of an e-Learning platform; and (iv) hiring of a Chief Technical Advisor to the Public Financial Management Modernization Unit to direct and coordinate Project activities.

c. Design and implementation of an internal audit framework to improve PFM control, transparency, and reporting. This will include support for the implementation of recommendations of the Internal Audit report, and the corresponding training.

d. Review and preparation of recommendations to strengthen the PFM legal framework. This will include the review of the Exchequer and Audit Act, existing PFM regulation, and recommendations on legislative and regulatory amendments to strengthen internal audit, budget classification, automation, and reporting standards.

e. Business process reengineering for budget preparation and execution processes. This will include the revision of existing business processes in view of automation and to prepare procedures manuals for Budget and Treasury Divisions personnel; with the aim of streamlining procedures including payment processing times.

* 1. **Component 2: Support for IFMIS implementation (US$28,251,803).** This component seeks to improve information management for PFM through implementation of an IFMIS. To do so, the component will finance the following:

a. Establishment of a centralized IT governance framework within MoFE. This will include: (i) the development of the documentation of IT governance practices and procedures for PFM IT management; and (ii) the establishment of a training program for MoFE IT staff, including training for development and implementation of an IT Strategic Plan.

b. Implementation of a commercial, off-the-shelf (COTS) IFMIS solution, including customization, data migration, and integration services. This will include: (i) the operationalization of the COTS IFMIS solution comprising the IFMIS software package; training for users and IT staff in the operation of the IFMIS solution including a train-the-trainers program; purchase of Data Center Hardware, and training of business analysts to analyze IFMIS-aggregated data; (ii) laptops and printers to operate the IFMIS; and (iii) implementation and roll out of a cash receipting system. The Project’s Program Management and contingency are estimated at $1,180,000 and $1,692,697, respectively.

**Table 1 - Expected Outcomes**

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| **Indicator** | **Baseline** | **Target** |
| **Outcomes** |
| PEFA Performance Indicator 5 Classification of the budget | C |  B |
|  PEFA Performance Indicator 12Multiyear Perspective in fiscal planning, expenditure policy, and budgeting |  C+ | B+ |
|  PEFA Performance Indicator 21Effectiveness of Internal Audit. | C | B |
|  PEFA Performance Indicator 22Timeliness and Regularity of Bank reconciliation. | C | B |
| Annual balance of the Suspense Account in constant prices | TT$ 6.241 billion[[4]](#footnote-4) | TT$ 0.0 |
| **Intermediate Outcomes** |
| LM using the Integrated Financial Management System (IFMIS) | 0% | 100% |

1. **Assumption**

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| ***Assumption. On a conservative basis, it is estimated that the implementation of the Integrated Financial Management System (IFMIS) cashiering module at revenue collection offices will generate a financial benefit of US$ 4.78 million, to be accrued in 2018. This financial benefit is a result of calculating the opportunity cost[[5]](#footnote-5) of promptly releasing the funds from the Treasury Suspense Account.*** ***The project benefit is estimated by calculating (i) the 30-day investment return of depositing the annual average amount held idle in the Treasury Suspense Account in a commercial bank account and (ii) the benefit from the use of such return investment to amortize the public debt.*** |

* 1. **Context.** The law requires that "all revenue" must be "identified by "source of origin" before it can be process as "received revenue" and deposited into the Treasury Exchequer Account (consolidated Treasury account). This is the reason why all receipts go first to the "Treasury Suspense Account" (temporary account where all revenues are deposited). At the end of any fiscal period, the balance in the Treasury Suspense Account reflects two things: a stock of "unclassified revenue" from previous years plus unclassified revenue in the current fiscal year.
	2. All the systems were manual up to a few years ago, with errors with respect to "unclassified revenue" taking place from all sources. Now that both Inland Revenue and Customs have automated accounts for their tax receipts, the majority of current "unclassified revenue" is due to errors that emerge in the manual systems at the District Revenue Offices. In some cases, a mixture of taxes may be collected then bundled into one single deposit with little or no explanation of the components of the deposit. In other cases, deposits turn up with handwritten explanations which are unreadable, and believe it or not there are cases where there are simply deposits with no explanation of source or purpose. These remain "unclassified" and are kept in the Treasury Suspense Account. In principle, the cashiering system will require all collections to be categorized at source and according to the Chart of Accounts, and then submitted electronically. The result, in theory, is the elimination of unclassified revenue.
	3. **The problem**: At the moment, the GoRTT’s operational use of funds involves a two-step process. All revenue received by the GoRTT is deposited into the Treasury Suspense Account until such time as the revenue source and specific GoRTT receiver are identified. Once Treasury officials are able to identify the revenue source and intended GoRTT receiver and post them under the appropriate revenue headings, the revenue is transferred to (or swept into) the “Treasury Exchequer Account”. All GoRTT expenditure takes place through the Treasury Exchequer Account. In theory, the Treasury Suspense Account is supposed to be a temporary “way-station” of revenue destined for the Treasury Exchequer Account. Over time, however, large levels of revenue without an identified source or GoRTT receiver have accumulated in the Treasury Suspense Account. In essence, this means that the GoRTT is in receipt of revenue to which it has no access because the source and receiver of funds cannot be validated and, as such, the funds cannot be transferred to the Treasury Exchequer Fund. In effect, the Treasury Exchequer Account is underfunded by the amounts “on hold” in the Treasury Suspense Account. This results in the GoRTT overdrawing the Treasury Exchequer Account in the Central Bank, and making monthly interest payments on the overdraft amounts.
	4. Treasury reconciles its bank accounts every three months, on average. This process reconciles Central Bank data with revenue sources and allows for the identification of most, but not all, revenue in the Treasury Suspense Account. The bank reconciliation process at the Treasury is manual and uses multiple individuals to verify accuracy. However, even after reconciliation, there remain outstanding revenue amounts with unidentified sources and receivers, which remain in the Treasury Suspense Account, in some instances up to several years.
	5. Table 1 provides a 14-year overview on GoRTT fiscal performance, including the consolidate balances of the Treasury suspense:

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| **Table II - Central Government Suspense Account****Constant Values** |
| **Date** | **Central Gov't Suspense AccountsTT$**  | **Central Gov't Suspense AccountsUS$** |
| 2001 | 6,495,568,480 | 1,014,932,575 |
| 2002 | 6,522,121,430 | 1,019,081,473 |
| 2003 | 6,244,875,090 | 975,761,733 |
| 2004 | 6,432,177,550 | 1,005,027,742 |
| 2005 | 6,377,176,080 | 996,433,763 |
| 2006 | 5,866,766,740 | 916,682,303 |
| 2007 | 6,158,947,180 | 962,335,497 |
| 2008 | 5,755,778,180 | 899,340,341 |
| 2009 | 6,453,756,520 | 1,008,399,456 |
| 2010 | 6,391,943,370 | 998,741,152 |
| 2011 | 6,050,006,230 | 945,313,473 |
| 2012 | 6,371,155,240 | 995,493,006 |
| 2013 | 6,047,888,940 | 944,982,647 |
| 2014 | 6,206,222,910 | 969,722,330 |
| **Average** | **6,241,027,424** | **975,160,535** |

* 1. **The Solution:** The impact of the introduction of an IFMIS on the Treasury Suspense Account, would be the following:
* Revenue data (source and receiver) will be coded at the point of payment using the IFMIS cashiering module. This will result in either the elimination of the balances in the Treasury Suspense Account; Real-time bank reconciliation data will exist to facilitate better cash management.
* The availability of the funds promptly released will generate important financial returns to the GoTT.
* Fiscal deficit could be mitigated.

**Methodology for the calculation of the opportunity cost of the funds promptly released from Treasury Suspense Account**

* 1. The methodology for the estimation of the financial benefits, generated by the implementation of the IFMIS cashiering module, takes into consideration the following aspects:
1. According to GoTT information, in one fiscal year, the average time for funds staying idle in the Treasury Suspense Account is approximately 30 days. It is considered that during this 30-day period, the resources could be generating savings in the commercial banking system in Trinidad and Tobago of approximately 0.015068% per day[[6]](#footnote-6) (5.5% / 365).
2. The savings generated by this daily investment, if used to pay public debt, could be producing a reduction in the interest paid on the public debt at the end of one year.
3. The total investment of the Program was US$40 million. The Program interest rate is expected to be 1.47%[[7]](#footnote-7). Additional costs associated with IT infrastructure were taken into consideration. From 2018 onwards, a maintenance cost will be included (licenses, upgrades, and program management). It is estimated that those costs are a 5% of the total cost of Component 2 (representing approximately US$1.2 million).
4. The Interest Rate of Return (IRR) was calculated using a period of 20 years (2015-2034) and a discount rate of 12%.
	1. **Calculation of the opportunity cost**

**Daily return**

1. FI – Financial Investment = TT$6.241billion
2. DIR – Daily Interest Rate = 0.015068 %
3. DR - Daily Return = FI \* DIR = TT$ 6.241 billion \* 0.015068 % = TT$ 940,393

**30 days return**

1. TR – Total Return = DR \* 30 = TT$ 940,393 \* 30 = TT$ 28.21 million
2. TR in US$ = US$ 4.40 million (1 USD$ = 6.4 $TT[[8]](#footnote-8))
	1. **Calculation of the financial return generated by decreasing the public debt principal**

**Considerations:**

1. The annual interest paid on the public debt is approximately 8.6%[[9]](#footnote-9).
2. In a simple conclusion, any decrease in the debt principal represents an impact of 8.6%, the same % paid on the interests.

**RPD - Return in Public Debt**

**PDI – Public Debt Interest = 8.6%** 4.40 million \* 8.6% = US$397,110

* 1. **Conclusion.** The return investment from 30 days of the TT$ 6.241 billion released from the Treasury Suspense Account will generate savings of approximately US$4.40 million. Additionally, using this savings to pay a parcel of the public debt principal will generate a decrease in US$ 397,110 on the interest paid on the public debt principal. Both benefit combined will generate a total financial benefit of US$4.78 million accrued in 2018.
	2. To calculate the benefit over the 20-year period, the project team assumed a constant interest rate over that period. This assumption is more conservative than interest rate estimations from the IMF, which projects an ascendant trajectory of interest rates for years 2014-2019 (8.6% to 10.4%) when estimating the effective interest rates to be paid by the Government on the public debt.
	3. **Base scenario.** The program’s financial analysis presents an Internal Rate of Return (IRR) of 5% with a Net Present Value of US$ 21.57 million in 2035. This justifies the US$40 million investment by the Inter-American Development Bank (IDB). Additional costs associated with IT infrastructure were taken into consideration. From 2016 onwards, a maintenance cost will be included (licenses, upgrades, and program management). It is estimated that those costs are a 5% of the total cost of Component 2 (representing approximately US$1.2 million).
	4. Based on this financial analysis, it is recommended to continue with the financial and technical support from the Bank, through the implementation of the Performance Monitoring and Public Financial Management Reform under the operation TT-L1042.

**Table III: Financial Analysis for Base Case Scenario**



Sensitivity analysis

* 1. For the sensitivity analysis, the following scenarios were considered:
		1. Only 80% of the funds in the Treasury Suspense Account are released.
		2. The interest rate paid on funds released decrease to 3.5%.

**Table 3 – Savings Calculation and Sensitivity Analysis**

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| **US$** |
| **Scenarios / Details** | **Treasury Suspense Account funds released** | **Interest Rate** | **Daily Savings** | **30 days savings** | **Public debt savings** | **Total Savings** |
| **1. Base Scenario 100% of the funds in the Treasury suspense account are released** | 975,160,535 | 5.5 | 146,942 | 4,408,260 | 379,110 | 4,787,370 |
| **2. Only 80% of the funds in the Treasury Suspense Account are released.** | 780,128,428 | 5.5 | 117,554 | 3,526,608 | 303,288 | 3,829,896 |
| **3. The interest rate paid on this funds released decrease to 3.5%** | 975,160,535 | 3.5 | 93,509 | 2,805,256 | 241,252 | 3,046,508 |
| **4. Combination of both scenarios** | 780,128,428 | 3.5 | 74,807 | 2,244,205 | 193,002 | 2,437,207 |

**Table 4: Results and Sensitivity Analysis Summary**

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| --- | --- | --- | --- | --- |
| **Indicators** | **Base Scenario 100% of the funds in the Treasury Suspense Account are released** | **Sensitivity 1****Only 80% of the funds in the Treasury Suspense Account are released.** | **Sensitivity 2** **The interest rate paid on this funds released decrease to 3.5%** | **Sensitivity 3****Combination of both Scenarios** |
| **Net Benefit (Present Value) US$ million** | 21.57 | 14.39 | 9.56 | 5.36 |
| **Internal Rate of Return (%)** | 5% | 4% | 3% | 2% |

* 1. The results of the simulation do not modify the decision in relation to the viability of the Program, because the Net Benefit Accumulated in Present Value presents a positive result in each of the three different scenarios and the IRR also remains positive in the worst scenario, as shown in the following table:

**Table 5: Financial Analysis Sensitivity 1**



**Table 6: Financial Analysis Sensitivity 2**



**Table 7: Financial Analysis Sensitivity 3**



1. This amount is representative as indicated by the fact that the average balance of the Suspense Account from 2001 to 2014 has remained stable at this average level, as seen in Table II below. [↑](#footnote-ref-1)
2. Opportunity costs are fundamental costs in economics, and are used in computing cost-benefit analysis of a project. Such costs, however, are not recorded in the account books but are recognized in decision making by computing the cash outlays and their resulting profit or loss. (http://www.businessdictionary.com/definition/opportunity-cost.html) [↑](#footnote-ref-2)
3. Most of the revenues are received in the Treasury Suspense Account and transferred to the Treasury Exchequer account when their sources of collection is identified and classified. Some funds received in offices with lack of automation, despite being promptly deposited in the Treasury Suspense Account, results in the information about the sources of collection being delayed several days to be provided to the Treasury. During this period, the Treasury cannot transfer these funds to the Treasury Exchequer account. [↑](#footnote-ref-3)
4. This is an average in constant prices of the Suspense Account balance from 2001 to 2014, as indicated in the Annex II – Detailed Results Matrix. [↑](#footnote-ref-4)
5. Opportunity costs are fundamental costs in economics, and are used in computing cost-benefit analysis of a project. Such costs, however, are not recorded in the account books but are recognized in decision making by computing the cash outlays and their resulting profit or loss. (http://www.businessdictionary.com/definition/opportunity-cost.html) [↑](#footnote-ref-5)
6. The Treasury Division from the Ministry of Finance, informed the Project Team that the commercial banks in Trinidad and Tobago can provide special interest rates (5.5%) on deposits above TT$ 15 million in a fix-term basis, equal or superior to 30 days periods. [↑](#footnote-ref-6)
7. See IDB Current and Historic Loan Charges

HTTP://idbdocs.iadb.org/wsdocs/getdocument.asp?docnum=35769969. The interest rate applicable for the first semester of 2015, according to the FFF / SCF – LIBOR USD was 1.15%, we have considered a 1.17% lending rate for this analysis. Including Credit fee (0.25) and Inspection and Supervision Fee (0.05%) the total interest rate is approximately 1.47%. Although the Bank is not currently charging the Inspection and Supervision Fee, in a conservative basis this fee was also considered for the estimation of the benefits from the project. [↑](#footnote-ref-7)
8. See Central Bank of TT (exchange rates) http://www.central-bank.org.tt/content/exchange-rates-daily. The exchange rate in 01/08/2015 was 1 US$ = 6.3388 TT$. From 04/08/2010 to 01/08/2015 the average exchange rate was approximately 6.38. [↑](#footnote-ref-8)
9. <http://www.imf.org/external/pubs/ft/scr/2014/cr14271.pdf> page 38 Annex II. [↑](#footnote-ref-9)