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# **THAILAND**

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# TECHNICAL ASSISTANCE REPORT—GOVERNMENT FINANCE STATISTICS

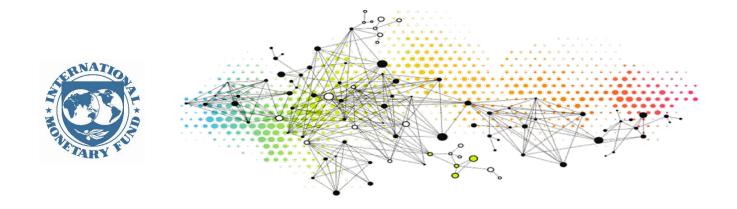
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# **THAILAND**

**SEPTEMBER 2018** 

REPORT ON GOVERNMENT FINANCE STATISTICS MISSION (JULY 2–11, 2018)

### **Prepared by Tobias Wickens**

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### **Glossary**

**BMTA** Bangkok Mass Transit Authority

**Electricity Generating Authority of Thailand EGAT** 

FPO Fiscal Policy Office

GFS **Government Finance Statistics** 

MRTA Mass Rapid Transit Authority of Thailand

**NFPCs** Nonfinancial public corporations

NHA **National Housing Authority** PEA **Provincial Electricity Authority PDMO** Public Debt Management Office

PSDS Public sector debt statistics PTT Petroleum Authority of Thailand SEPO State Enterprise Policy Office SOE State-owned enterprise

TΑ Technical assistance

Thai Airways International THAI

# **SUMMARY OF MISSION OUTCOMES AND PRIORITY** RECOMMENDATIONS

- 1. The main purpose of this mission—undertaken with the support of the Government of Japan's government finance statistics (GFS) project for selected Asian countries—was to improve the quality of the GFS for nonfinancial public corporations (NFPCs) in Thailand by designing a simpler, but more complete, compilation system for the GFS compilers in the Fiscal Policy Office (FPO) of the Ministry of Finance. The mission also discussed some specific general government GFS data compilation issues with the compilers and recommended some actions that would lead to further improvements in data quality as well as consistency with other macroeconomic statistics. In addition, the mission commended the recent momentum gained by the Public Debt Management Office (PDMO) on the reporting of timely, quarterly public sector debt statistics and encouraged them to continue with the regular, quarterly reporting.
- 2. While Thailand's general government GFS is generally of sound quality, the significance of NFPCs calls for a broader coverage of its GFS. When general government GFS data are supplemented with timely GFS covering the activities of NPFCs, policymakers and analysts would have a more complete picture of the nonfinancial public sector's effects on the economy, because it would capture all fiscal and quasi-fiscal activities carried out by these entities. This is of key relevance to formulate, execute, and monitor fiscal policies and manage fiscal risks in Thailand's nonfinancial public sector. To achieve the improvements in the accuracy, timeliness, and coverage of NPFCs' GFS in Thailand, as well as improvements in intersectoral data consistency, the mission's priority recommendations are:

**Table 1. Priority Recommendations** 

Target Date	Priority Recommendation	Responsible Institutions
April 2019	Institutional coverage: Start compiling actual, annual GFS data for eight macro-fiscally important NFPCs (Petroleum Authority of Thailand (PTT); Electricity Generating Authority of Thailand (EGAT); Provincial Electricity Authority (PEA); Mass Rapid Transit Authority of Thailand (MRTA); Thai Airways International (THAI); Expressway Authority of Thailand; National Housing Authority (NHA); and Bangkok Mass Transit Authority (BMTA)), using the simplified data derivation and compilation system designed in Excel during the mission. Then, compile a timeseries of 8-10 years of GFS for the total universe of NFPCs in Thailand, based on the actual data from these eight NFPCs.	Fiscal Policy Office, Ministry of Finance

Target Date	Priority Recommendation	Responsible Institutions
December 2018	Consistency: Review and revise, as necessary, the list of public entities (i.e., general government and state-owned enterprises) in Thailand to ensure consistency among the various sets of macroeconomic statistics (national accounts, external sector statistics, government finance statistics, and monetary and financial statistics). Furthermore, analyze the operations and nature of the Thailand Future Fund—established to fund public investment projects—to ensure its proper and consistent sectorization and treatment in the various sets of macroeconomic statistics.	Bank of Thailand, National Economic and Social Development Board, Ministry of Finance (Fiscal Policy Office, Public Debt Management Office, and State-Enterprise and Policy Office), with the Fiscal Policy Office taking the lead, as Chair of the GFS Committee
August 2018	Start using the bridge table template provided by the mission to compile and report public sector debt statistics to the World Bank / IMF public sector debt database.	Public Debt Management Office

3. Future GFS technical assistance (TA) would focus on producing GFS balance sheets for the consolidated nonfinancial public sector, and for public financial corporations, using a consistent set of public sector debt statistics (PSDS). In due course, higher-frequency fiscal data with such broad coverage could also be produced by the FPO in the Ministry of Finance.

#### **OVERVIEW**

- 4. Consistent with the surveillance needs identified by the IMF's Asia and Pacific Department, and in response to a request by the authorities for technical assistance (TA) on improving government finance statistics (GFS) covering nonfinancial public corporations (NFPCs), this mission focused on compiling accurate, annual GFS data for eight macro-fiscally important NFPCs, which will form the basis for estimating the GFS for the total universe of NFPCs in Thailand. In this context, the main purpose of the mission undertaken with the support of the Government of Japan's GFS project for selected Asian countries—was to improve the accuracy, timelines, and coverage of GFS data for NFPCs in Thailand. Such improvements would be of key relevance to formulate, execute, and monitor fiscal policies and manage fiscal risks in Thailand's nonfinancial public sector. The mission also reiterated the importance of intersectoral consistency of macroeconomic statistics by ensuring that the definitions of the general government and public corporations sectors are the same in all these datasets.
- Using a simpler, but more complete, compilation system than currently applied in the Fiscal Policy Office (FPO) of the Ministry of Finance, will improve the overall accuracy,

timeliness, and coverage of the GFS for NFPCs. For policymakers and analysts alike, this system will produce data on the total revenue and expense of NFPCs, their overall operating balance (the effect of transactions on their net worth), their overall net lending/net borrowing balance (the net effect of financing transactions on the rest of the economy), all the flows in their assets and liabilities (distinguishing transactions from other economic flows because they have different economic effects), as well as their total stock positions in assets, liabilities, and net worth.

The GFS Committee, chaired by the FPO, will take the lead in convening all the 6. relevant agencies compiling macroeconomic statistics in Thailand to review and revise, as necessary, the list of entities included in the general government sector, nonfinancial public corporations sector, and financial public corporations sector. Consistent definitions of the general government and public sector will not only lead to more consistent macroeconomic statistics, but also improve their accuracy and reliability.

#### A. Findings

- 7. Given the significance of NFPCs in Thailand, the authorities have started in 2010 to compile and disseminate annual GFS for a sub-group of four of these NFPCs (representing almost 80 percent of total NFPCs' assets), but there is room for improvement in the overall accuracy, timeliness, and coverage of these data. A February 2017 GFS TA mission found that the compilers apply a cumbersome, manual compilation method that leads to unintended errors. That mission recommended that a follow-up TA mission focuses on simplifying the compilation method (including to explore the availability and usefulness of source data other than published financial statements) and expanding the number of NFPCs covered in GFS to include additional macro-fiscally important NFPCs which receive large subsidies and/or guarantees from government.
- 8. Therefore, this mission worked closely with the GFS compilers to design a simpler GFS compilation system using the accounting financial statements of NFPCs as source data.

This system can be applied to accounting financial statements in any data frequency (i.e., quarterly or annual), but the FPO will start applying it with annual data. These annual data may also be useful to benchmark and improve quarterly GFS estimates for NFPCs. The mission learned that the State Enterprise Policy Office (SEPO) plans to implement an Excel-based, quarterly financial data collection system for all state-owned enterprises (SOEs) in late 2018/early 2019. The National Economic and Social Development Board has worked closely with SEPO in the design of the data collection questionnaire. The mission is of the view that this planned data collection system of SEPO could be a promising supplementary data source for the compilation of NFPCs' GFS starting later in 2019. The system developed during this mission can also be

applied to these SEPO source data—once available—to compile improved quarterly GFS for NFPCs.

- 9. There is a need for a thorough, joint review by the relevant macroeconomic statistics compiling agencies of Thailand's list of public entities (i.e., government entities and SOEs) to properly classify them in macroeconomic statistics into the general government sector, nonfinancial public corporations sector, and financial public corporations sector. The last such review was around 2009. Because changes do occur over time, the definitions of the general government and public corporations sectors used by each agency may now differ. In addition, the Government of Thailand's planned infrastructure investment may possibly bring new public entities that need to be classified in-or outside the public sector, including those established through public-private partnerships or other arrangements, such as joint ventures. One such entity, the Thailand Future Fund—established to fund public investment projects with financing securitized against future revenue flows from expressway tolls—is an entity which sectoral classification would be of utmost importance in macroeconomic statistics because the size of its financing and investment and, thus, the effect on Thailand's economy and, possibly, its public finances.
- 10. Thailand's annual and sub-annual GFS for the general government sector are of sound quality and continued refinements in the general government GFS are aimed at improving the estimates of local governments' operations, the proper economic classification of complex government operations and schemes, and ensuring consistency with other macroeconomic statistics. The mission found that there are differences between the grants data at central and local government levels, which causes difficulties with the consolidation process. Also, the GFS for the various components of general government show a statistical discrepancy between above- and below-the-line data. For many years, the FPO has used transactions in "currency and deposits" to eliminate this discrepancy. The mission explained that such treatment would lead to inconsistencies with the GFS balance sheet data on "currency and deposits" assets, as well as with other macroeconomic statistics, especially monetary and financial statistics.
- 11. The mission commended the Public Debt Management Office (PDMO) in the Ministry of Finance for the progress achieved during the past year in compiling and disseminating quarterly public sector debt statistics (PSDS) according to the international standard to the Fund, as well as to the World Bank/IMF public debt database. This is a significant achievement that makes Thailand's public debt statistics internationally comparable and analytically useful for macroeconomic and financial market analyses and for policymaking.

#### **B.** Main Recommendations

12. To support progress in the above work areas, the mission recommended a nine-month action plan, with recommendations as listed below. If these recommendations are implemented, the resulting GFS would provide the authorities (and the IMF's Asia and Pacific Department team) with new and better information to discuss fiscal policy and fiscal risks because the institutional coverage has been expanded, and data accuracy, timeliness, and intersectoral consistency have been improved.

#### **Priority recommended actions:**

- Start compiling actual, annual GFS data for eight macro-fiscally important NFPCs, using the simplified data derivation and compilation system designed in Excel during the mission. Then compile a timeseries of 8-10 years of GFS for the total universe of NFPCs in Thailand, based on the actual data from these eight NFPCs. Supplement these GFS estimates for NFPCs with actual data on the debt (D1 = debt securities and loans) of the total universe of NFPCs, as provided by the Public Debt Management Office (PDMO) of the Ministry of Finance and explain any differences in data coverage in the metadata.
- Review and revise, as necessary, the list of public entities (i.e., general government and SOEs) in Thailand to ensure consistency among the various sets of macroeconomic statistics (national accounts, external sector statistics, government finance statistics, and monetary and financial statistics). Furthermore, analyze the operations and nature of the Thailand Future Fund to ensure its proper and consistent sectorization, and treatment of all its activities, in the various sets of macroeconomic statistics.
- Start using the bridge table template provided by the mission to compile and report PSDS to the World Bank / IMF public sector debt database.
- Start using the actual transactions in currency and deposits (GFS codes 3202, 3212, 3222), as reflected in the bank accounts, and showing any statistical discrepancies between above- and below-the-line transactions data in the "statistical discrepancy" line (GFS code NLBz) rather than subsuming it in "currency and deposits".
- Start making the local government grants revenue data consistent with the central government grants expense data and recording any difference in the local governments' GFS as grants receivable (if local government grants revenue is less than central government grants expense) or grants payable (if local government grants revenue is more than central government grants expense).

<sup>&</sup>lt;sup>1</sup> Care should be taken to ensure that the total universe of NFPCs is consistent among all macroeconomic statistics.

# **DETAILED TECHNICAL ASSESSMENT AND RECOMMENDATIONS**

### A. A Simpler, More Complete GFS Compilation System for Nonfinancial **Public Corporations**

- 13. In close cooperation with the GFS compilers in the FPO, the mission designed a simpler system to derive GFS aggregates and balances from accounting financial statements of NFPCs than what is currently applied by the FPO.<sup>2</sup> This system is based on the following main principles (more detailed steps are outlined in Box 1):
- Calculate the total flows in assets and liabilities as the closing balance sheet values minus the opening balance sheet values.
- Identify the GFS other economic flows in assets and liabilities (i.e., revaluations and other changes in the volume of assets and liabilities), which may appear in the income/profit and loss statement, statement of changes in equity, and the statement of comprehensive income.
- Calculate GFS revenue and expense transactions which appear in the income/profit and loss statement, statement of changes in equity, and—possibly—the statement of comprehensive income.
- Calculate GFS transactions in nonfinancial assets, financial assets, and liabilities as the residual of total flows in assets and liabilities and other economic flows in assets and liabilities. Note: Because transactions in nonfinancial assets represent the acquisitions minus disposals minus consumption of fixed capital (depreciation), they do not provide an accurate picture of gross fixed investment by NFPCs. For gross fixed investment, use the acquisitions of fixed assets (or total nonfinancial assets, as a proxy, if fixed assets are not available separately) in the notes to the financial statements.
- Classify the balance sheet items in the accounting financial statements to their GFS categories.
- The broad interlinkages between accounting financial statements and the GFS 14. stocks and flows are shown in Table 2. As indicated, transactions and other economic flows

<sup>&</sup>lt;sup>2</sup> Accounting financial statements typically consists of an income or profit and loss statement, a cash flow statement, a statement of changes in equity, and a balance sheet. In addition, it may be supplemented with a statement of comprehensive income. GFS are summarized in a statement of operations, a statement of other economic flows, a balance sheet, and a statement of source and uses of cash (cash flow statement).

may appear in the income statement, statement of changes inequity and statement of other comprehensive income.

**Table 2. Interlinkages between Accounting Financial Statements and GFS ACCOUNTING FINANCIAL STATEMENTS** GFS Opening Total flows in Other & closing assets & economic stock liabilities | Transactions flows positions **Income Statement** Revenue Expense X Х Profit/loss **Statement of Changes in Equity** Opening balance of equity > Profit/loss Other transactions Х Other comprehensive income (OEFs) х х Changes in accounting policy (T + OEFs) X X Closing balance of equity **Balance sheet** Assets Х Х Liabilities 🕨 Equity Statement of Comprehensive Income > Profit and Loss Other comprehensive income (OEFs) Total comprehensive income

#### **Box 1. Detailed Steps for Compiling GFS from Accounting Financial Statements**

- 1. Verify consistency of accounting financial statements by (a) checking if the net profit/loss in income (profit and loss) statement is equal to the net profit/loss in the statement of changes in equity; and (2) checking if the total change in equity in the statement of changes in equity is equal to the total change in equity as reflected in the opening and closing balance sheets.
- 2. Calculate total flows in assets and liabilities as the difference between the closing balance sheet and opening balance sheet values.
- 3. Analyze the accounting financial statements (profit and loss statement, statement of other changes in equity, balance sheet, and, if available, statement of other comprehensive income) and map all the items (stocks and flows) in these statements to "top level" and "detailed level" GFS codes. The top-level GFS codes are for the "GFS Dashboard" (see below) while the detailed codes are for the GFS output tables.
- 4. Compile a summary of other economic flows table in the same source data sheet in order to get the signs of the amounts correct. Because accounting sign conventions differ from GFS, it is important to get the signs of the other economic flows right, as well as whether they are increases/decreases in assets or increases/decreases in liabilities. The other economic flows top level and detailed coding is done in this summary table not in their original accounting statements (where the signs are not appropriate for GFS purposes).
- 5. In a separate sheet, compile a derivation table that derives the net operating balance (transactions changing net worth) and other economic flows changing net worth. The sum of the two should equal the total change in equity in the accounting balance sheet and statement of changes in equity.
- 6. In a separate sheet, compile a "GFS Dashboard" which is based on the top-level GFS codes in the source data sheet. The GFS Dashboard serves as a "check" to ensure internal consistency of the GFS data compiled, both at an aggregated level as well as at a detailed level. Ideally, there should be no discrepancies in the GFS Dashboard data.
- 7. In a separate sheet, compile the detailed GFS statements, as shown in Appendix I: statement of operations (transactions), statement of other economic flows, and balance sheet. A "total flows" statement is also compiled but only for the purpose of deriving transactions as total flows in assets and liabilities minus other economic flows (in assets and liabilities). The data in the detailed GFS statements should be verified against the aggregates and balances in the GFS Dashboard to ensure accuracy at all times (built-in formulas serve this purpose).

#### 15. The mission recommended that the FPO compiles the following GFS tables covering the activities of NFPCs in Thailand:

- Statement of operations, showing total revenue, total expense, the net operating balance, and the main categories of transactions in nonfinancial assets, financial assets, and liabilities.
- Statement of other economic flows, showing the main categories of nonfinancial assets, financial assets, and liabilities.
- Balance sheet, showing the main categories of nonfinancial assets, financial assets, and liabilities.

- 16. Using the example of the Electricity Generating Authority of Thailand (EGAT), the recommended GFS tables for NFPCs stocks and flows are included in Appendix I. The same tables, but excluding revenue and expense, can be compiled for the nonfinancial public sector (i.e., general government plus NFPCs). Revenue and expense of the nonfinancial public sector is arguably not of much analytical value; the revenue and expense of general government and NPFCs are analytically more useful for macroeconomic analysis. Stocks and flows in assets and liabilities for the total nonfinancial public sector are analytically useful, provided that appropriate consolidation was applied (i.e., the intra-sectoral stocks and flows are eliminated to avoid double-counting).
- **17**. A consolidated nonfinancial public sector balance sheet would be a next step in the Thailand's GFS with a broad coverage. Future TA missions can assist in the compilation of these, using the GFS for NFPCs but with major intra- and intersectoral stock positions identified to allow proper consolidation, as well as using a consistent sent of PSDS. In due course, higher-frequency fiscal data with such broad coverage could also be produced.

#### B. The Total Universe of Nonfinancial Public Corporations in Thailand

- 18. The total universe (i.e., the complete list) of NPFCs in Thailand is unclear at this stage. One source is the list of 32 NPFCs which SEPO provided the 2017 GFS mission (see Appendix II). Based on this list, eight macro-fiscally important NFPCs represent just under 80 percent of those 32 NPFCs, if measured by size of their assets. These eight NFPCs are: Petroleum Authority of Thailand Public Co. Ltd.; Electricity Generating Authority of Thailand (EGAT); Provincial Electricity Authority (PEA); Mass Rapid Transit Authority of Thailand (MRTA); Thai Airways International (THAI); Expressway Authority of Thailand; National Housing Authority (NHA); and Bangkok Mass Transit Authority (BMTA). If the Metropolitan Electricity Authority (MEA), Airports Authorities of Thailand (AOT), CAT Telecom Public Co. Ltd., and TOT Public Co. Ltd. are added to this sample, these twelve NFPCs represent just over 90 percent of the total SEPO list of 32 NFPCs (measured by size of assets). Based on the 2009 total universe of NFPCs, it is estimated that the current SEPO list of 32 NFPCs excludes 13 small NPFCs. It is estimated that each of these NFPCs' assets are less than THB 0.5 billion, which means that their overall effect on the total estimated activities of NFPCs is insignificant. Omitting these 13 SOEs (with total assets less than THB 5 billion) would thus not have a significant effect on the overall estimates for NFPCs (the total assets of the 32 NPFCs in the SEPO list is about THB 5.4 trillion, as show in Appendix II). Care should, however, be taken to ensure that the current list of SEPO NFPCs does not exclude significant entities which should have been classified as NFPCs according to the macroeconomic statistics principles of institutional units, control, and market/nonmarket activity.
- 19. There is a need for a thorough, joint review by the relevant macroeconomic statistics compiling agencies of Thailand's list of public entities (i.e., government entities and SOEs) to properly classify them in macroeconomic statistics into the general government sector, NFPCs sector, and financial public corporations sector. Such a review

will determine the total universe of NFPCs in Thailand and, in turn, allow for estimating the stocks and flows for NFPCs based on the actual data compiled for the sample. To ensure consistency among macroeconomic statistics, the same lists of general government units, nonfinancial public corporations, and financial public corporations should be used by all compiling agencies. This list indicating the sectorization of the Thailand public sector should be disseminated as a statistical metadata reference document. Statistical sectorization of public entities in line with macroeconomic statistical principles may not always follow the accounting and/or a country's own groupings.

## **Appendix I. Proposed GFS Tables for Thailand's Nonfinancial Public Corporations (continued)**

(For illustration, data for the Electricity Generating Authority of Thailand (EGAT) are used)

tement of o	In millions of Thai Baht	2010	2011	2012	2013	2014	2015	2016	201
	Revenue								502,107.
	Expense								492,095.
	Net operating balance								10,011.
	Net investment in nonfinancial assets								-2,793.
311	Fixed assets								-6,358.
312	Inventories								-333.
313	Valuables								-333.
314	Nonproduced assets								3,898.
	Expenditure								489,302.
	Net lending/net borrowing								12,805.
	Statistical discrepancy								0.
	Net acquisition of financial assets								7,207.
3201	Monetary gold and SDRs								0.
3201	Currency and deposits								6,932.
3202	Debt securities								0,932.
3203	Loans								-4.
3204	Equity and investment fund shares								-4. -790.
3206 3207	Insurance, pension, and std. guarantee schemes								0.
	Financial derivatives and employee stock options								1.070
3208	Other accounts receivable								1,070.
	Net incurrence of liabilities								-5,597.
3301	SDRs								0.
3302	Currency and deposits								0.
3303	Debt securities								0.
3304	Loans								-17,907.
3305	Equity and investment fund shares								0.
3306	Insurance, pension, and std. guarantee schemes								1,068.
3307	Financial derivatives and employee stock options								0.
3308	Other accounts payable								11,242.
	Memorandum item(s):								
311.1	Gross fixed investment								
	ther Economic Flows								
	Change in net worth: OEFs								-10,011.
	Nonfinancial assets								17,534.
911	Fixed assets								17,534. 17,534.
912	Fixed assets Inventories								
912 913	Fixed assets								17,534. 0. 0.
912	Fixed assets Inventories								17,534. 0.
912 913 914	Fixed assets Inventories Valuables								17,534. 0. 0.
912 913 914 FNW_OEF 0	Fixed assets Inventories Valuables Nonproduced assets								17,534. 0. 0. 0.
912 913 914 FNW_OEF 0	Fixed assets Inventories Valuables Nonproduced assets Change in financial net worth: OEFs								17,534. 0. 0. 0. -27,545.
912 913 914 FNW_OEF (	Fixed assets Inventories Valuables Nonproduced assets Change in financial net worth: OEFs Financial assets								17,534. 0. 0. 0. -27,545. 1,338.
912 913 914 FNW_OEF 0 92 F	Fixed assets Inventories Valuables Nonproduced assets Change in financial net worth: OEFs Financial assets Monetary gold and SDRs								17,534. 0. 0. 0. -27,545. 1,338. 0.
912 913 914 FNW_OEF 0 92 F 9201 9202	Fixed assets Inventories Valuables Nonproduced assets Change in financial net worth: OEFs Financial assets Monetary gold and SDRs Currency and deposits								17,534. 0. 0. 0. -27,545. 1,338. 0.
912 913 914 FNW_OEF 0 92 F 9201 9202 9203	Fixed assets Inventories Valuables Nonproduced assets Change in financial net worth: OEFs Financial assets Monetary gold and SDRs Currency and deposits Debt securities								17,534. 0. 0. 0. -27,545. 1,338. 0. 0.
912 913 914 FNW_OEF 0 92 F 9201 9202 9203 9204	Fixed assets Inventories Valuables Nonproduced assets Change in financial net worth: OEFs Financial assets Monetary gold and SDRs Currency and deposits Debt securities Loans								17,534. 0. 027,545. 1,338. 0. 0. 0. 1,337.
912 913 914 FNW_OEF 0 92 F 9201 9202 9203 9204 9205	Fixed assets Inventories Valuables Nonproduced assets Change in financial net worth: OEFs Financial assets Monetary gold and SDRs Currency and deposits Debt securities Loans Equity and investment fund shares								17,534. 0. 0. -27,545. 1,338. 0. 0. 0.
912 913 914 FNW_OEF 0 92 F 9201 9202 9203 9204 9205 9206	Fixed assets Inventories Valuables Nonproduced assets hange in financial net worth: OEFs inancial assets Monetary gold and SDRs Currency and deposits Debt securities Loans Equity and investment fund shares Insurance, pension, and std. guarantee schemes								17,534. 0. 027,545. 1,338. 0. 0. 1,337.
912 913 914 FNW_OEF ( 92 F 9201 9202 9203 9204 9205 9206 9206 9207	Fixed assets Inventories Valuables Nonproduced assets Change in financial net worth: OEFs Financial assets Monetary gold and SDRs Currency and deposits Debt securities Loans Equity and investment fund shares Insurance, pension, and std. guarantee schemes Financial derivatives and employee stock options								17,534.  0. 0. 027,545. 1,338. 0. 0. 1,337. 0. 0. 0. 0. 0.
912 913 914 FNW_OEF ( 92 F 9201 9202 9203 9204 9205 9206 9206 9207	Fixed assets Inventories Valuables Nonproduced assets Change in financial net worth: OEFs Financial assets Monetary gold and SDRs Currency and deposits Debt securities Loans Equity and investment fund shares Insurance, pension, and std. guarantee schemes Financial derivatives and employee stock options Other accounts receivable								17,534.  0. 0. 027,545. 1,338. 0. 0. 0. 1,337. 0. 28,883.
912 913 914 FNW_OEF 0 9201 9202 9203 9204 9205 9206 9207 9208 93 1	Fixed assets Inventories Valuables Nonproduced assets Change in financial net worth: OEFs Financial assets Monetary gold and SDRs Currency and deposits Debt securities Loans Equity and investment fund shares Insurance, pension, and std. guarantee schemes Financial derivatives and employee stock options Other accounts receivable Liabilities								17,534.  0. 0. 027,545. 1,338. 0. 0. 0. 1,337. 0. 28,883.
912 913 914 FNW_OEF ( 92 F 9201 9202 9203 9204 9205 9206 9207 9208 93 I 9301 9302	Fixed assets Inventories Valuables Nonproduced assets Change in financial net worth: OEFs Constancial assets Monetary gold and SDRs Currency and deposits Debt securities Loans Equity and investment fund shares Insurance, pension, and std. guarantee schemes Financial derivatives and employee stock options Other accounts receivable Liabilities SDRs Currency and deposits								17,534.  0. 0. 027,545. 1,338. 0. 0. 0. 1,337. 0. 0. 28,883. 0. 0. 0.
912 913 914 FNW_OEF ( 9201 9202 9203 9204 9205 9206 9207 9208 9301 9301 9302 9303	Fixed assets Inventories Valuables Nonproduced assets change in financial net worth: OEFs inancial assets Monetary gold and SDRs Currency and deposits Debt securities Loans Equity and investment fund shares Insurance, pension, and std. guarantee schemes Financial derivatives and employee stock options Other accounts receivable Liabilities SDRs Currency and deposits Debt securities								17,534.  0. 0. 027,545. 1,338. 0. 0. 0. 0. 0. 0. 28,883. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
912 913 914 FNW_OEF ( 9201 9202 9203 9204 9205 9206 9207 9208 93 1 9301 9302 9303 9304	Fixed assets Inventories Valuables Nonproduced assets Change in financial net worth: OEFs Financial assets Monetary gold and SDRs Currency and deposits Debt securities Loans Equity and investment fund shares Insurance, pension, and std. guarantee schemes Financial derivatives and employee stock options Other accounts receivable Liabilities SDRs Currency and deposits Debt securities								17,534. 0. 027,545. 1,338. 0. 0. 0. 1,337. 0. 28,883. 0. 0. 28,983.
912 913 914 FNW_OEF 6 9201 9202 9203 9204 9205 9206 9207 9208 9301 9301 9302 9303 9304	Fixed assets Inventories Valuables Nonproduced assets Change in financial net worth: OEFs Courrency and deposits Debt securities Loans Equity and investment fund shares Insurance, pension, and std. guarantee schemes Financial derivatives and employee stock options Other accounts receivable Liabilities SDRS Currency and deposits Debt securities Loans Equity and investment fund shares Insurance, pension, and std. guarantee schemes Financial derivatives and employee stock options Other accounts receivable Loans Debt securities Loans Equity and investment fund shares								17,534.  0. 027,545. 1,338. 0. 0. 0. 1,337. 0. 28,883. 0. 0. 28,924. 27,959.
912 913 914 FNW_OEF ( 9201 9202 9203 9204 9205 9206 9207 9208 9301 9301 9302 9303 9304 9305	Fixed assets Inventories Valuables Nonproduced assets Change in financial net worth: OEFs Financial assets Monetary gold and SDRs Currency and deposits Debt securities Loans Equity and investment fund shares Insurance, pension, and std. guarantee schemes Financial derivatives and employee stock options Other accounts receivable Liabilities SDRs Currency and deposits Debt securities Loans Equity and investment fund shares Insurance, pension, and std. guarantee schemes Financial derivatives and employee stock options Other accounts receivable Labilities SDRs Currency and deposits Debt securities Loans Equity and investment fund shares Insurance, pension, and std. guarantee schemes								17,534. 0. 0. 027,545. 1,338. 0. 0. 0. 1,337. 0. 0. 0. 28,883. 0. 0. 0. 28,883. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
912 913 914 FNW_OEF 6 9201 9202 9203 9204 9205 9206 9207 9208 9301 9301 9302 9303 9304	Fixed assets Inventories Valuables Nonproduced assets Change in financial net worth: OEFs Courrency and deposits Debt securities Loans Equity and investment fund shares Insurance, pension, and std. guarantee schemes Financial derivatives and employee stock options Other accounts receivable Liabilities SDRS Currency and deposits Debt securities Loans Equity and investment fund shares Insurance, pension, and std. guarantee schemes Financial derivatives and employee stock options Other accounts receivable Loans Debt securities Loans Equity and investment fund shares								17,534.  0. 027,545. 1,338. 0. 0. 0. 1,337. 0.

### **Appendix I. Proposed GFS Tables for Thailand's Nonfinancial Public Corporations**

	In millions of Thai Baht	2010	2011	2012	2013	2014	2015	2016	2017
Balance sheet									
6 N	Net worth								0.0
61 N	Nonfinancial assets								733,401.7
611	Fixed assets								680,614.6
612	Inventories								11,653.9
613	Valuables								0.0
614	Nonproduced assets								41,133.2
FNW F	Financial net worth								-733,401.7
62 F	Financial assets								252,904.5
6201	Monetary gold and SDRs								0.0
6202	Currency and deposits								108,836.7
6203	Debt securities								0.0
6204	Loans								42.8
6205	Equity and investment fund shares								69,145.6
6206	Insurance, pension, and std. guarantee schemes								0.0
6207	Financial derivatives and employee stock options								0.0
6208	Other accounts receivable								74,879.4
63 L	iabilities								986,306.2
6301	SDRs								0.0
6302	Currency and deposits								0.0
6303	Debt securities								0.0
6304	Loans								396,693.3
6305	Equity and investment fund shares								431,014.3
6306	Insurance, pension, and std. guarantee schemes								16,661.5
6307	Financial derivatives and employee stock options								0.0
6308	Other accounts payable								141,937.2
٨	Memorandum item(s):								
	NFPCs gross debt (D4) as per balance sheets								
	NFPCs gross debt (D1) as per PDMO								

Note: Total net worth in this GFS balance sheet is zero. This is because all assets and liabilities are valued at historic cost / face value and because equity and investment fund shares appear in the GFS balance sheet as part of liabilities and not, as in accounting financial statements, as a separate item from liabilities. If market valuation is used, net worth will be non-zero.

# **Appendix II. State-Enterprise Policy Office List of State-Owned Enterprises**

		Assets in Billions of Thai Baht	% of total
1	Petroleum Authority of Thailand (PTT Public Co. Ltd.)	2,114.5	39%
2	Electricity Generating Authority of Thailand (EGAT)	867.7	16%
3	Provincial Electricity Authority (PEA)	381.1	7%
4	Mass Rapic Transit Authority of Thailand (MRTA)	326.7	6%
5	Thai Airways International Public Co. Ltd.	287.4	5%
6	Expressway Authority of Thailand	198.9	4%
7	Metropolitan Electricity Authority	196.5	4%
8	Airports of Thailand Public Co. Ltd.	171.9	3%
9	CAT Telecom Public Co. Ltd.	160.8	3%
10	TOT Public Co. Ltd.	147.4	3%
11	Provincial Waterworks Authority	108.0	2%
12	Marketing Organization for Farmers	77.5	1%
13	Metropolitan Waterworks Authority	68.0	1%
14	National Housing Authority	53.4	1%
15	Port Authority of Thailand	47.2	1%
16	Thailand Post Company Limited	25.3	0%
17	Thailand Tobacco Monopoly	24.0	0%
18	The Government Lottery Office	23.7	0%
19	Industrial Estate Authority of Thailand	23.5	0%
20	Dhanarak Asset Development Co. Ltd.	20.5	0%
21	Government Pharmaceutial Organization	19.3	0%
22	Areonautical Radio of Thailand Ltd.	13.4	0%
23	Bangkok Mass Transit Authority (BMTA)	7.9	0%
24	MCOT	7.2	0%
25	Forest Industry Organization	4.8	0%
26	The Transport Co. Ltd.	4.8	0%
27	Public Warehouse Organization	4.5	0%
28	Dairy Farming Promotion Organization of Thailand	2.4	0%
29	Market Organization	1.7	0%
30	Liquor Distillery Organization Excise Department	1.3	0%
31	Fish Market Organization	1.0	0%
32	Police Printing House	0.4	0%
		5,392.7	100%