TECHNICAL ASSISTANCE REPORT

ZAMBIA

Strengthening Cash Forecasting

January 2025

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Fiscal Affairs Department

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Acronyms and Abbreviations

BO	Budget Office
BoZ	Bank of Zambia
CDF	Constituency Development Fund
CFAT	Cash Flow Forecasting and Analysis Tool
CMC	Cash Management Committee
CMU	Cash Management Unit
FY	Fiscal Year
DMO	Debt Management Office
IFMIS	Integrated Financial Management Information System
MoFNP	Ministry of Finance and National Planning
MPSA	Ministry, Provinces and other Spending Agency
OAG	Office of the Accountant General
PFM	Public Financial Management
SLA	Service Level Agreement
ST	Secretary to the Treasury
TA	Technical Assistance
TSA	Treasury Single Account
ZMW	Zambian Kwacha
ZRA	Zambia Revenue Authority

Preface

In response to a request from the Ministry of Finance and National Planning (MoFNP) in Zambia, the Fiscal Affairs Department (FAD), through an STX, fielded a capacity development technical assistance mission to Lusaka from January 13 to 24, 2025. The purpose of the mission was to assist the Zambian authorities in strengthening cash flow forecasting processes and preparing the cash flow forecast for Fiscal Year (FY) 2025. The mission was conducted by Mr. Davit Gamkrelidze, an FAD expert and involved close collaboration with officials from the Office of the Accountant General (OAG) and the Budget Office (BO) within MoFNP.

During the mission, meetings were held with Ms. Nsandi Manza, Accountant General and other key officials from the OAG, including Ms. Emmy S. Chenguluka, Director of Treasury Services; and Mr. Brighton Simutowe, Acting Chief Accountant for Treasury Services. In the BO, the mission engaged with Mr. Willis Chipango, Director of the BO, Mr. Patrick Hara, Senior Budget Analyst, Mr. Robbie Kasuba, Senior Budget Analyst; Mr. Mukoba Mbulakulima, Senior Budget Analyst Mr. Chilombo Mulima, Economist and Mr. Zakeyo Nyirenda Budget Analyst. The mission also had discussions with representatives from the Debt Management Office (DMO), including Ms. Masitala Mushinga, Director of DMO and her team. Furthermore, the mission worked closely with members of the ICT Department, such as Ms. Mundia M. Kayamba and Ms. Dimuna Hamweemba, both Senior ICT Officers in the OAG.

Special attention was given to working with the Cash Management Unit (CMU), which included Ms. Vestina B. Sinkamba (BO,Revenue), Mr. Hillary Mwansa (BO, Expenditure), Ms. Jacqueline M. Lunga (OAG, FRIS), Mr. Harry Mutale (OAG, Revenue Management) and Mr. Lewis Samamba (DMO).

Beyond MoFNP, the mission met with representatives from other institutions, in the Zambia Revenue Authority (ZRA): Mr. Saviour Lusaya, Economist; Mr. Kennedy Njobvu, Revenue Accountant; and Mr. Kangwa Musole, Senior Economist; in the Ministry of Infrastructure: Mr. Victor M. Mwambazi and Ms. Gloria C. Mwamba; in the Ministry of Lands: Ms. Brenda Daura; and the Ministry of Agriculture: Mr. Mweemba Hachiboya

The mission also met with the officials from the Bank of Zambia (BoZ), including Ms. Angela N. Chileshe, Director of Banking; Ms. Waza Munkombwe, Assistant Director of Banking; Mr. Philippe C. Masengo, Assistant Director; Ms. Wezi Sikabanga, Assistant Manager; Mr. Kamwi Mulele, Senior Economist; Ms. Patricia Funjika, Senior Economist; Ms. Astridah M. Mwandia, Senior Economist; and Mr. Chilumbia Simumba, Senior Economist. Representatives from Zanaco Bank also participated in the discussions. These included Ms. Mukwandi Chibesakunda, Chief Executive Officer; Mr. Kalaluka Itwi, Chief Financial Officer; and Ms. Sophia Chongo Mudenda, who leads Public Sector Banking.

The mission expresses its deep appreciation to the Zambian authorities for their excellent cooperation throughout this assignment. In particular, the mission is grateful to Ms. Emmy S. Chenguluka, Mr. Brighton Simutowe and Ms. Vestina B. Sinkamba for their valuable support in coordinating the mission agenda and ensuring productive engagements during the meetings.

Special thanks are also extended to Mr. Eric Lautier, IMF Resident Representative for his guidance and support to the mission.

Finally, the mission would like to thank GIZ for providing the venue for meetings, which greatly facilitated the smooth conduct of this engagement.

Executive Summary

Effective cash management is critical for ensuring liquidity availability and improving fiscal discipline in Zambia. Building on recent progress in some areas, difficult challenges in cash flow forecasting, banking arrangements and TSA operations require further targeted reforms. Timing mismatches between revenues and expenditures, along with deviations between planned and actual numbers, highlight the need to strengthen budget formulation and execution processes to underpin the strong cash management practices and reliable cash flow forecasts.

The establishment of a CMU with multidisciplinary representation marks a positive development, but significant challenges remain. Its effectiveness is constrained by part-time staffing and weak institutional frameworks. Additionally, the CMU lacks the necessary technical tools and analytical capabilities to produce reliable, data-driven forecasts. Strengthening coordination, formalizing its mandate, ensuring dedicated staffing and enhancing technical capacity will be essential for improving its role in cash management.

Beyond institutional constraints, operational challenges also hinder the effectiveness of cash forecasting. Domestic borrowing decisions continue to be misaligned with cash flow forecasts, leading to inefficiencies. Additionally, limited use of historical trend analysis and infrequent updates to projections throughout the fiscal year reduce the accuracy of forecasts, making it harder to anticipate and manage liquidity needs. Strengthening forecasting methodologies, improving data reliability and leveraging better forecasting tools will be necessary to address these gaps.

Efforts to consolidate government bank accounts at the BoZ face challenges despite some progress. Over 21,800 accounts remain operational in commercial banks, undermining efficient cash management and increasing risks. While a one-time mop-up of Zambia Kwacha (ZMW) 3.9 billion demonstrated a step toward liquidity consolidation, these accounts continue to function as before. The phased transition plan, beginning with the analysis of account necessity and prioritization of high-impact accounts, is a positive development. However, accelerating this process and coordinating effectively with BoZ and commercial banks is critical to minimizing disruptions, addressing liquidity challenges and achieving the intended benefits of consolidation.

Persistent challenges in the structure and operation of TSA undermine effectiveness of cash management. Core accounts, such as the Control 99 account and TSA Payment account, while technically part of the TSA framework, continue to operate as distinct accounts, requiring separate procedures for fund transfers. Substantial balances outside the TSA, including proceeds from domestic securities, further exacerbate inefficiencies. This fragmentation leads to mismatches between balances recorded in IFMIS and actual cash availability, particularly when securities issuance falls short, resulting in delays and payment denials for MPSAs (Ministry, Provinces and other Spending Agencies). Addressing these challenges requires prioritizing the full integration of all TSA-related accounts, including the Proceeds Account. As an interim measure to improve coordination and cash flow visibility during this transition, authorities may consider consolidating data from key accounts into a centralized format, such as a simple Excel file or a Power BI dashboard, to improve visibility and facilitate better coordination among the BO, Treasury and DMO. Additionally, improved information exchange with the BoZ and

integrating all accounts within the TSA, including Proceeds Account, would streamline cash management, enhance reconciliation and support more efficient operations while maintaining necessary oversight.

Comprehensive cash flow forecast for 2025 was developed, incorporating revenue, expenditure and financing projections. The mission facilitated adoption of the CFAT to strengthen cash flow forecasting capabilities. Training sessions were conducted to equip the CMU with the skills necessary to maintain and utilize the tool effectively. The forecast results offer actionable insights for borrowing decisions, debt management and investment planning. Going forward, it will be critical to update the CFAT regularly and leverage the tool's outputs for informed planning and enhanced cash management efficiency.

The updating of the CFAT should include a systematic analysis of deviations to identify patterns and improve forecasting accuracy. Additionally, leveraging the ZRA detailed daily forecasts, based on historical trends and taxpayer insights, can refine revenue projections, reducing variability and enhancing cash management reliability. Assessing the quality of data in the commitment module is also important to determine its reliability for future cash flow projections, with a focus on addressing discrepancies at their source to improve overall data quality.

Table 1: Summary of Key Recommendations

	Recommendation	Time frame
1	**Enhancing the CMU: Institutionalization, Coordination and Analytical Capabilities**	
1.1	Formalize the organizational placement of the CMU team and transition it into a fully dedicated unit.	Short term
1.2	Structure future securities issuances through coordination between the DMO, OAG and BO to ensure maturity dates that contribute to smoothing cash flows.	Short term
1.3	Maintain and update the CFAT at least monthly to support data-driven decision-making.	Short term
1.4	Assess the quality and reliability of data in the commitment module to evaluate its potential for enhancing discussions on CFAT adjustments.	Short term
1.5	Leverage ZRA's detailed daily forecasts, based on historical trends and large taxpayer communication, to refine and adjust tax forecasts.	Short term
2	**Transitioning Government Funds to the Central Bank**	
2.1	Finalize the transfer of funds from key GRZ bank accounts holding significant balances in commercial banks to the BoZ.	Short term
3	**Enhancing Cash Management Efficiency Through TSA Integration**	
3.1	Improve reconciliation across key accounts by centralizing account balance data into a unified format, such as a Power BI dashboard, to enhance coordination and visibility.	Short term
3.2	Prioritize integrating accounts within the TSA to simplify cash management processes, eliminate unnecessary complexity and maintain oversight through sub-accounts for better reconciliation.	Medium term

Note: “Short term” is 0 to 6 months, and “Medium Term” is 6 months to 2 years.

I. Introduction

1. **Strengthening cash management remains a critical priority for Zambia amid persistent fiscal pressures.** Enhancing cash flow forecasting and operationalizing the Treasury Single Account (TSA) are vital for improving liquidity planning, fiscal discipline and overall public financial management (PFM). Despite ongoing efforts, significant challenges persist in aligning revenues with expenditures, addressing fragmented processes and ensuring timely payments. The MoFNP has reiterated its commitment to advancing these essential reforms.

2. **This mission was undertaken to assist the authorities in preparing the 2025 cash plan.**[1] The mission also reviewed the progress of recommendations from previous technical assistance engagements.[2] Particular emphasis was placed on addressing critical areas such as cash management, cash flow forecasting and banking arrangements. Additionally, the mission reviewed the structure of the TSA, existing gaps in TSA and IMFIS flows and proposed measures to address these inefficiencies. These efforts aim to strengthen institutional frameworks, improve oversight and support the implementation of more effective cash management practices.

3. **The mission adopted a collaborative approach, engaging with key stakeholders across government institutions.** Meetings were held with representatives from the OAG, the BO, the DMO, ZRA, the BoZ and selected line ministries. Discussions centered on refining cash management processes, integrating data sources and strengthening coordination between stakeholders. Special emphasis was placed on capacity-building, including practical training sessions on the IMF's CFAT to equip the CMU with the skills required for sustainable forecasting.

4. **The mission outputs include this report and cash flow forecast for 2025 prepared using CFAT.** This report summarizes the mission's findings, recommendations and outputs and is structured as follows:

- Section II: Reviews the existing arrangement, highlights the issues and challenges
- Section III:
  - A - Provides recommendations for improving cash management practices
  - B - Details the introduction of the CFAT.

5. **CFAT is populated with real data and provides a forecast for the entire FY 2025 period, broken down by month**. It also includes hypothetical policy options, which are subject to adjustments based on the development of real outturns and the evolving priorities of the authorities.

[1] Structural benchmark under the ECF program.

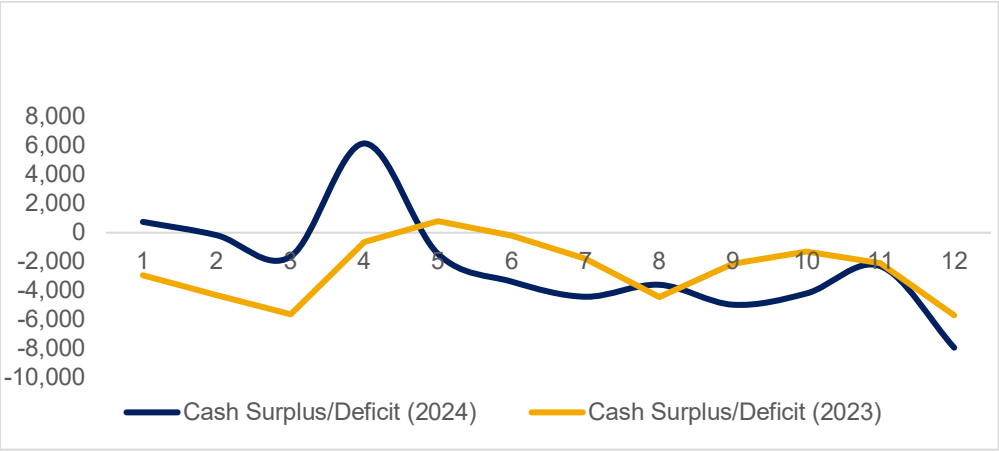
[2] "Cash Forecasting and Management" conducted by Per-Olof Jonsson and Davit Gamkrelidze, April 2024

II. Current situation

A. BUDGET CREDIBILITY

6. Effective government cash flow forecasting in Zambia remains critical, as significant timing mismatches between revenues and expenses continue in 2024. While the first half of the year exhibits higher average balances compared to 2023, the second half follows a similar trend pattern, with cash balances declining sharply and reaching their minimum in December, a month typically marked by heightened expenditures. As depicted in Figure 1 below these fluctuations highlight the ongoing need to enhance cash flow forecasting and strengthen banking arrangements to manage imbalances effectively and ensure liquidity availability during critical periods.

Figure 1. Cash Surplus/Deficit, 2023-2024 (in ZMW million)



Source: IMF Mission, based on MoFNP data

7. Budget credibility, which can significantly influence cash flow projections, remains weak, although there have been improvements compared to previous years. The improved execution rate is largely attributed to increased revenues from both Grants (Bilateral and Multilateral) and Multilateral External Borrowings, which have outperformed projections. However, despite this over performance in revenues, expenditure execution has continued to underperform against the original budget, highlighting ongoing issues in aligning planned and actual spending. These discrepancies, as shown in Table 1, underline the importance of strengthening budget formulation and execution processes to support more reliable cash flow forecasting.

Table 2. Budget Execution - Statement of Comparison: Budget and Actual Amounts (in ZMW Million)

		2018	2019	2020	2021	2022	2023
Total Receipts	Original Budget	71,662	86,808	106,008	119,616	172,987	167,322
	Final Budget	59,471	60,100	106,008	119,616	172,987	167,322
	Actual Amounts	79,085	84,990	114,150	130,772	163,942	176,259
	Deviation Nominal (Act. minus Final dudget)	19,614	24,890	8,143	11,156	-9,045	8,938
	Deviation %	33%	41%	8%	9%	-5%	5%
Total Payments	Original Budget	71,663	86,808	106,008	119,616	172,987	167,322
	Final Budget	77,787	97,284	127,783	158,597	175,243	178,450
	Actual Amounts	59,536	66,504	87,989	119,914	133,758	156,549
	Deviation Nominal (Act. minus Final dudget)	18,251	30,781	39,795	38,683	41,485	21,901
	Deviation %	23.5%	31.6%	31.1%	24.4%	23.7%	12.3%

Source: IMF Mission and MOFNP Consolidated Annual Financial Reports 2018-2023

B. CASH FORECASTING

8. **Steps have been taken to make the cash forecasting function operational, addressing previous gaps caused by the absence of a dedicated team**. A designated CMU team has now been assigned to this function, which marks an improvement compared to earlier years. However, the team currently operates on a part-time basis, with members balancing forecasting responsibilities alongside their primary roles. The team comprises five members: one from Revenue Management (AG's Office), one from Financial Reporting Information Systems (AG's Office), one from the DMO and two from the BO - one specializing in revenue and the other in expenditure issues. The presence of such diversified expertise within the team is expected to positively contribute to the development of the cash forecasting and management function. This function demands a high level of analytical capabilities and a strong understanding of various aspects of public finance, making the inclusion of specialists from these key areas particularly valuable.

9. **Cash forecasting processes remain unchanged, following established practices.** Under current arrangements, the BO plays a primary role in cash planning, focusing on annual budget structuring to guide quarterly budget releases, with less emphasis on forecasting future cash inflows and outflows. The BO collects monthly financial projections from spending agencies post-budget approval to set quarterly release limits, forming a "Gameplan." These projections are rarely updated during the year. Revenue forecasting continues as before, with the MoFNP setting annual tax revenue targets. ZRA, as the administrator of taxes, then breaks these targets down into monthly forecasts based on historical trends and taxpayer insights.

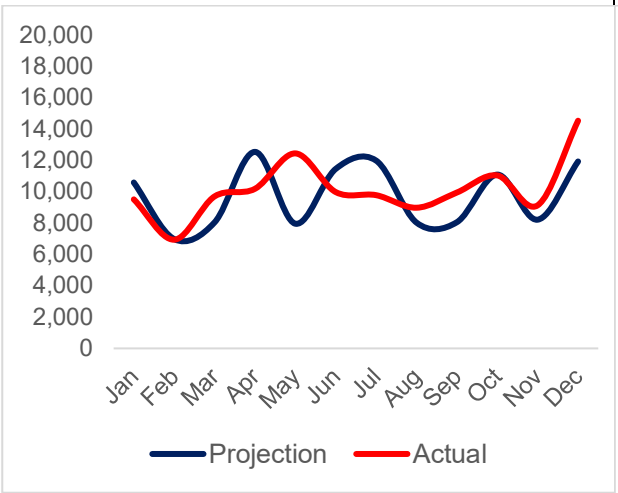
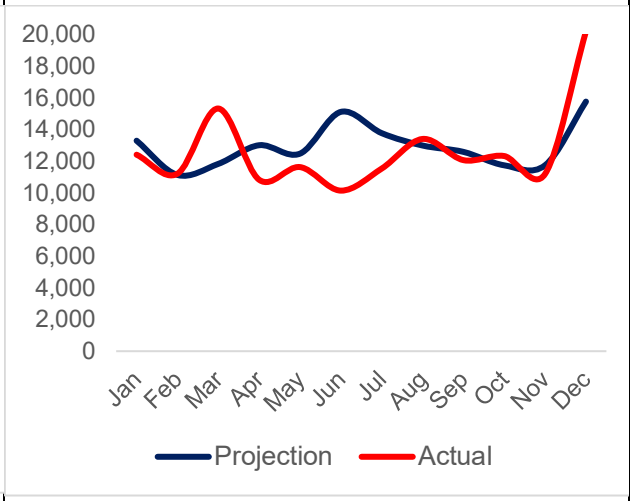
10. **No systematic analysis of past trends is conducted by the CMU yet.** As before, discrepancies between the Gameplan projections and actual outturns are not being systematically analyzed. Such analysis could be instrumental in identifying areas for improvement and refining forecasting techniques over time, ultimately fostering a deeper understanding of forecasting errors and enhancing accuracy.

11. Domestic borrowing remains disconnected from cash flow forecasting. Quarterly borrowing schedules for government securities, including T-bills and T-bonds, are prepared without alignment to anticipated cash requirements. Borrowing decisions, often based on market conditions such as interest rates and absorption capacity rather than government's demands for cash and the profile of cash flows, underscore the lack of a strategic approach to linking debt issuance with cash flow forecasting. This disconnect leads to instances of borrowing despite sufficient funds being available in government accounts, unnecessarily increasing the cost of debt.

12. Institutional arrangements for cash forecasting lack formalization and institutionalization. The Committee chaired by the Secretary to the Treasury (ST) approves the quarterly Gameplan, as before, but its meetings are irregular, often conducted virtually and decisions are typically made informally. In practice, the BO submits recommendations for approval by the ST, with spending priorities adjusted during fiscal constraints to focus on salaries, debt interest and statutory transfers. Weekly technical meetings involving representatives from the BO and occasionally other departments such as IDM, OAG and ZRA, are supposed to review cash forecasts for the week ahead, focusing on payment schedules and cash availability. However, the lack of a formal mandate for information sharing, as well as the absence of detailed procedures for cash forecasting, continues to hinder the process. Without established methodologies, deadlines, or clearly defined information sources, the system remains vulnerable to disruptions, including those caused by staff turnover.

13. Under these circumstances, actual outturn deviates from projected cash Revenue/expenditure. Figures 2 and 3 provide a detailed comparison of projected versus actual figures for 2024 revenues and expenditures, respectively. These Figures show frequent discrepancies throughout the year, and variability and unpredictability in income and spending patterns. This fluctuation underscores the importance of closely examining the factors driving these deviations to improve the accuracy of future planning.

14. Good progress has been made with the development of a Cash Management Manual. An 87-page draft manual has been prepared and is currently undergoing the approval process, with the authorities aiming for its formal adoption in the coming months. The manual provides comprehensive guidance on various aspects of cash management, including cash forecasting processes, information exchanges and policies and procedures for committee meetings. If successfully implemented and adhered to, the manual has the potential to address many of the weaknesses in cash forecasting highlighted by this and previous missions. It offers a structured framework to strengthen institutional arrangements and enhance overall cash management practices.

Figure 2. Comparison of Revenue Projections with Actuals, 2024 (in ZMW Mn)	Figure 3. Comparison of Expenditure Projections with Actuals, 2024 (in ZMW Mn)
	
Source: IMF Mission, based on MoFNP data	Source: IMF Mission, based on MoFNP data.

C. BANKING ARRANGEMENTS AND IFMIS ROLLOUT

15. Moving government bank accounts from commercial banks to the central bank, which could enable a more efficient cash management and reduced risks, remains a challenge in Zambia. The benefits of consolidating government accounts at the central bank are well-recognized, including improved oversight of government balances, minimized credit risk and increased central bank profits that can either be transferred as dividends to the government or used to strengthen the central bank's balance sheet. However, the progress has been limited, with 21,800 bank accounts[3] still held at commercial banks as of November 2024. Authorities conducted a one-time mop-up of ZMW 3.9 billion in account balances from commercial banks to the central bank. While this demonstrates an effort to consolidate liquidity more effectively, these accounts remain operational and continue to function as before. Authorities have indicated their intention to address this challenge by transitioning balances to the central bank in a phased manner.

16. The first phase of this transition focuses on studying the nature of existing bank accounts. As part of this effort, the authorities are analyzing data received from commercial banks to identify accounts that can be closed immediately. For accounts where the available information is insufficient to clarify their necessity, authorities are engaging with the respective institutions to gather additional details. The study focuses on the bank accounts being considered for transfer to the central bank, ensuring that the fund transfer is adequately analyzed beforehand in terms of the prevailing legal and regulatory framework.

[3] This number includes both Central and Local Government accounts but does not cover State-Owned Enterprises. As of November 2024, the total balance held in these commercial bank accounts was ZMW 11,577 million.

17. In the next phase, the authorities plan to submit a proposal to the ST outlining the transfer or closure of government bank accounts. This proposal will prioritize the largest accounts for transfer to the BoZ, ensuring that high-impact accounts are addressed first.

18. No progress has been made with Service Level Agreements (SLAs) with the BoZ or commercial banks. The absence of an SLA with BoZ regarding the remuneration of government cash balances means that these funds remain idle. Additionally, the existing SLAs with commercial banks have not been updated to incorporate mechanisms for fund sweeping or remuneration, leaving opportunities for more effective cash management unaddressed.

19. BoZ has advanced in developing functional specifications for its planned payment processing hub, to replace manual payment procedures for transactions outside IFMIS. This initiative aims to provide entities with real-time access to their BoZ account balances and enable electronic payment capabilities. The completion of the actual development is targeted for August 2025. Once operational, this digital payment platform is expected to facilitate the movement of government bank accounts from commercial banks to BoZ and support more efficient and transparent cash management.

20. Progress has been made in the rollout of the IFMIS. The system is now live in all 61 MPSAs head-offices, an increase from the previously covered 59, completing the rollout at the headquarters level[4]. In 2024, a total of 23 sub-institutions were brought online. Notably, under the Ministry of Education, all 10 District Education Boards (DEBS) in each provincial town were integrated into the system, while 10 Provincial Agriculture Coordinating Offices (PACO) associated with the Ministry of Agriculture were also onboarded. Additionally, three hospitals under the Ministry of Health[5] were successfully brought onto IFMIS.

21. The rollout of IFMIS to sub-institutions improves time efficiency in fund disbursement. Previously, funds flowed first to headquarters, then to provinces and only after that to districts, resulting in delays. With the inclusion of institutions under IFMIS, funds now flow from the TSA directly to respective beneficiaries, streamlining the process and enhancing the overall efficiency of cash management operations.

22. In 2025, the rollout of IFMIS is planned to cover the 10 provincial offices and district offices under the Ministry of Health. These rollouts will be accompanied by training programs for the end users, to ensure effective utilization of the IFMIS system.

D. TSA STRUCTURE AND LIQUIDITY CHALLENGES

23. The TSA structure remains fragmented, restricting the MoFNP's ability to optimize liquidity and increases the complexity of daily cash management. MoFNP manages two[6] core bank accounts at the BoZ: the Control 99 account and the TSA Payment account (often misinterpreted as the TSA). While these accounts are technically part of the TSA framework, they continue to operate as distinct

[4] Annex 1 provides a list of head-offices currently covered by IFMIS.

[5] Eye, Heart and Chainama Hospitals

[6] There is also a third account called the “suspense account,” but the balances in this account are typically small.

accounts, requiring separate procedures for fund transfers. In addition to these core accounts, the MoFNP operates other accounts, including:

- Sub-Revenue Control 99 Account: This account collects taxes and some non-tax revenues from commercial banks. Customs duties paid in USD are converted into ZMW and automatically transferred to the ZMW Control 99 account.
- Non-Tax Revenue Account (USD): Used for non-tax collections by specific MPSAs (not ZRA). Funds are transferred to the USD Control 99 account.

24. The flow of funds within the TSA is facilitated through the Integrated Financial Management Information System (IFMIS). The Treasury is responsible for releasing cash for expenditure payments, guided by the BO's notifications of daily cash releases based on available funds. Funds are moved electronically from the Control 99 account at the BoZ to the TSA Payment Account, based on instructions from the BO. MPSAs commit resources in IFMIS based on these cash releases. Payments from the TSA Payment Account to the accounts of MPSAs or beneficiaries are processed by the AG office.

25. An important issue in reconciliation of TSA balances arises from holding a separate account for the domestic securities proceeds. A dedicated Proceeds Account is opened at the BoZ outside the TSA framework. Funds from issuances of T-bills and T-bonds are accumulate in this account and are used for principal repayments, being transferred to the TSA only when due. This separation creates mismatches between the balances recorded in IFMIS and the actual cash available in the TSA. This issue is particularly evident when domestic securities issuance falls short of the planned amount needed to cover upcoming maturities. In such cases, the shortfall is automatically financed from TSA balances, as principal repayments take priority. Consequently, while IFMIS may show that funds have been allocated to MPSAs based on BO authorizations and transfers from Control 99, the actual cash available in the TSA is reduced by the amount needed to cover the repayment gap. This misalignment highlights the inefficiencies caused by the current fragmented structure and its impact on reconciliation of balances.

26. This fragmentation and lack of alignment also create challenges for MPSAs, as they might believe funds are available for spending based on BO releases and the balances reflected in IFMIS. Once funding is authorized, MPSAs may initiate payments, assuming sufficient cash is available in the TSA. However, if the actual cash in the TSA has been reduced to cover unanticipated gaps caused by shortfalls in securities issuance, the Treasury (AG's office) may delay or deny the payment due to insufficient funds. This process wastes time for MPSAs (who go through the payment initiation process only to face rejection or delays) and contributes to the accumulation of arrears and pending transactions, some of which may remain unresolved for weeks[7].

27. The liquidity challenges became particularly evident in 2024, driven largely by the BoZ's contractionary monetary policy. In February 2024, the BoZ increased the statutory reserve ratio, requiring banks to hold a larger proportion of their funds with the central bank. This policy tightened

[7] Notably, arrears are a costly form of borrowing, as they undermine the credibility of government institutions.

market liquidity, leading to undersubscriptions in Treasury Bill and Treasury Bond issuance auctions and exacerbating the challenges of aligning cash availability with expenditure needs.

III. Options for Improvement

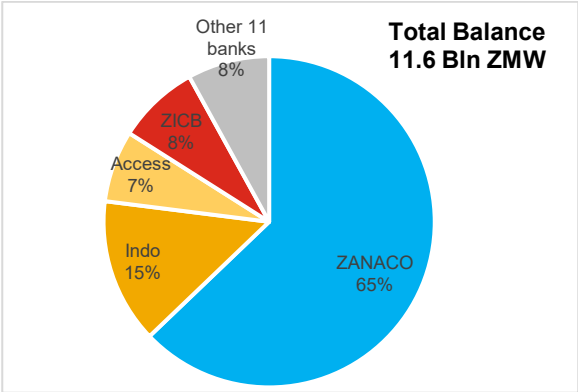
A. Addressing Weaknesses for Effective Operationalization of the CMU

28. The part-time staffing of the CMU team presents a challenge to fully operationalizing this important function. Currently, team members balance their cash forecasting responsibilities with their existing day-to-day roles, limiting the time and focus they can dedicate to improving cash management processes. While authorities have acknowledged the need for a fully dedicated CMU, no formal transition plan or timeline has been established. Going forward, as new cash forecasting tools and processes are implemented and the new Cash Management Manual is enacted, it would be beneficial to transition this team into a fully dedicated unit. A team focused exclusively on cash forecasting and management issues will ensure greater efficiency and consistency in addressing the complexities of this important function.

29. While the CMU is officially intended to operate under the AG's Office, this arrangement has not yet been formalized. The absence of a documented organizational placement creates ambiguity in its operations. Properly defining it in the forthcoming guidelines presents an opportunity to establish its placement within the AG's Office with formal institutional backing. Additionally, the team's physical location remains unresolved, as no dedicated office space has been allocated to them yet. However, the AG's Office has expressed intentions to address this issue and identify suitable accommodations soon, which will further support the team's functionality.

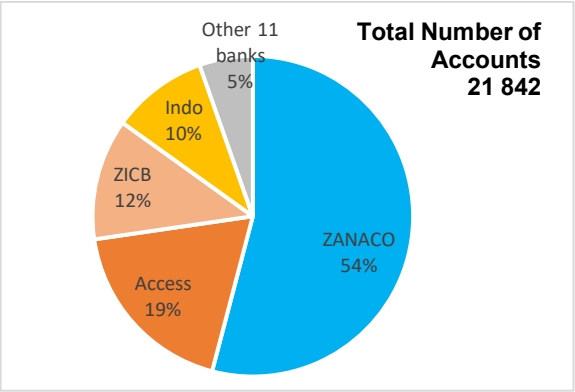
30. The first phase of the commercial bank accounts transition should be expedited to quickly progress to the second phase, which involves the actual optimization of government bank accounts. This process requires careful coordination with the central bank and the commercial banking sector to minimize disruptions. Particular attention should be given to banks, which hold a significant portion of government deposits and may face liquidity challenges as a result of this transition. Figures 4 and 5 below provide an overview of the current banking arrangements landscape summarizing the distribution of accounts and balances across commercial banks.

Figure 4. Summary of Commercial Bank Account Balances as of November 2024



Source: IMF Mission

Figure 5. Summary of Number of Bank Accounts, as of November 2024



Source: IMF Mission

31. Further steps are necessary to build on the progress made in strengthening the debt management function. Notably, the DMO's new structure[8] includes a unit specifically tasked with coordinating with the CMU and its representative participates as a member of the CMU. While this represents an improvement, additional efforts are needed to enhance coordination. This should involve the DMO playing an active role in the cash management process. Debt managers must balance a range of instruments, aligning with the objectives of the debt management strategy, market demands and the yield curve, while also addressing the government's cash flow needs. Concurrently, the CMU should share its forecast results with the DMO to ensure alignment. Such collaboration would enable the DMO to refine its borrowing calendar based on actual cash requirements, fostering a more efficient and responsive approach to debt issuance.

32. The data accumulated in the commitment module[9] has the potential to serve as a valuable resource for cash flow forecasting. However, the quality and reliability of this data need to be thoroughly assessed. Specifically, it is important to analyze the entries made by MPSAs to determine whether the "date" and "amount" fields are accurately followed in practice and align with actual spending. An analysis is necessary to evaluate the reliability of entries for forecasting purposes and to identify any error margins. Such errors, if present, should be accounted for in future cash flow forecasts. Additionally, steps should be taken to address these inconsistencies by engaging with MPSAs to understand the underlying reasons and improve the accuracy of the data.

33. ZRA's contributions to the CMU's work in building credible forecasts can be enhanced. Although currently not utilized, ZRA possesses the capability to provide detailed forecasts broken down into daily data, complementing the monthly forecasts already shared with MoFNP. Beyond the shared data, ZRA also maintains its own internal forecasts: daily forecasts for the upcoming month based on historical trends and daily forecasts informed by direct communication with large taxpayers. Sharing these detailed internal insights with the CMU would strengthen its ability to refine tax forecasts and facilitate more frequent updates, ultimately improving the accuracy and reliability of the forecasting process.

34. The fragmentation in account management and lack of comprehensive reconciliation among key accounts requires immediate attention. While the long-term objective must be full integration of these accounts within the TSA, an interim step should involve improving reconciliation and data-sharing processes to enhance visibility and coordination. More specifically, in the short term, the authorities should address the reconciliation process through the improvements in visibility and coordination across key accounts. Currently, the BO primarily monitors Control 99 balances, while the Treasury focuses on consolidating TSA Payment Account balances, reconciling them daily through the RTGS system. The Proceeds Account balances, however, are managed and accessed separately by the DMO. While each unit has access to its respective accounts, there is no single consolidated statement reconciling all these balances effectively, leaving the process fragmented. A practical short-term solution would involve extracting data from these channels and compiling it into a centralized format, such as a simple Excel file or a Power BI dashboard. This would enable better visualization and facilitate more effective coordination across the BO, Treasury and DMO.

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[8] In 2024, IDM transitioned into DMO

[9] Commitment module was incorporated into the IFMIS in July 2022

35. Proper information exchange with the BoZ will play an important role in improving balance reconciliation. Establishing a two-way information-sharing mechanism is essential to align cash management efforts effectively. The DMO should provide BoZ with comprehensive debt profiles to ensure alignment and clarity. In turn, BoZ should share their quarterly liquidity projections with the DMO, enabling the DMO to better anticipate and prepare for potential maturity challenges. Such collaboration would strengthen the reconciliation process.

36. Ultimately the MoFNP must prioritize integrating accounts within the TSA to streamline cash management processes and eliminate unnecessary bureaucratic layers. The current practice of transferring funds between Control 99 and the Payment Account adds unnecessary complexity and undermines the fungibility of cash resources. There is no compelling justification for maintaining this additional layer of control. Similarly, Proceeds Account, which currently sits outside the TSA framework, should be integrated into the TSA. To address concerns about oversight, specific sub-accounts can be established within the TSA to retain control and monitoring functionalities. This will ensure that integration does not compromise oversight while simplifying the structure and improving balance reconciliation.

37. Achieving full TSA integration requires a structured roadmap. First, the MoFNP should conduct a legal and operational review to determine any regulatory constraints that may hinder full integration. Second, a phased migration strategy should be developed, prioritizing high-impact accounts such as the Proceeds Account. Third, a consultation process with key stakeholders - including BoZ, DMO and commercial banks - should be initiated to ensure a smooth transition. The final stage will involve the full technical implementation of an integrated TSA framework, supported by real-time reporting tools to maintain transparency and oversight.

B. CFAT Implementation

38. To support the enhancement of the cash forecasting process, the mission facilitated the adoption of the CFAT, developed by the IMF's Fiscal Affairs Department (FAD). This tool is specifically designed for practitioners responsible for preparing cash flow forecasts. While its primary focus is on operational users, it also offers guidance on presenting forecasts and provides policy advice for high-level decision-makers, helping them understand its foundational principles and objectives. The CFAT utilizes historical data to identify trends in monthly revenue and expenditure patterns. Initially, users can apply basic assumptions to generate forecasts, gradually advancing to more sophisticated features as their analytical capabilities improve. Phases for the adoption of CFAT is described in the box 1 below:

Box 1: Phases of CFAT Adoption in Zambia

Phase 1: Data Compilation and Validation

The first phase involved identifying relevant data sources for the past five years' outturns (2020–2024) and validating them. The following key sources were used:

- **Fiscal Tables**: Annual budget figures broken down into monthly numbers, prepared by the BO in consultation with MPSAs.
- **Consolidated Financial Reports**: These include "direct payments" and were used to cross-check trends observed in the Fiscal Table data.
- **Debt Data**: Accessed from BoZ web-page (last visited on Jan 24, 2024) and validated with the DMO and BoZ.
- **TSA Data**: Retrieved from the AG's Office and validated against data from BoZ.

During data cleaning, numerous discrepancies were noted, such as missing months and titles, caused mainly by data fragmentation and limited access to the latest data versions. However, the significant effort dedicated to scrutiny and validation resulted in credible past outturn data.

Phase 2: Customization of Forecast Structure

The mission and CMU team customized the revenue and expenditure breakdown for projections. The agreed structure included:

- **Revenues:**
  - Tax Revenue: Income Taxes, VAT, Customs and Excise Duties, Other Tax Revenue.
  - Non-Tax Revenue: User Fees, Fines and Charges; Mineral Royalty; Other Non-Tax Revenue.
  - Grants.
- **Expenditures:**
  - Personal Emoluments (PEs); Use of Goods and Services; Interest Payments: Domestic and External Debt.
  - Transfers and Subsidies: Ordinary Grants, CDF, Farmer Input Support Programme, Other Transfers.
  - Social Benefits: Pension Fund Financing, Social Cash Transfer, Other Social Benefits.
  - All relevant formulas and Visual Basic for Applications (VBA) codes in the tool were adjusted to accommodate this new structure.

Phase 3: Preparation of the Original Forecast

The first forecast version was developed using 2025 budget figures obtained from the BO.

- The "Settings" section of the tool was updated with relevant dates and weights.
- Weights assigned to past outturns prioritized recent years, with the highest weight given to 2024, followed by 2023 and 2022. Lower weights were assigned to 2020 and 2021 due to the COVID crisis.

Phase 4: Adjustments and Finalization
Adjustments were made to refine the initial forecast:

- **Tax Revenues**: Adjusted based on ZRA inputs.
- **Non-Tax Revenues**: "Gameplans" data was used, as ZRA forecasts only cover revenues they directly collect.
- **Expenditures**: Adjustments relied on "Gameplans" data and consultations with major spending entities, though "Gameplans" data only covers one quarter and is conservatively planned.
- **Financing**: Net figures in the budget were analyzed as separate line items with DMO collaboration.
- **Debt Service** - Adjusted based on DMO inputs
- **Arrears**: based on the inputs of AGO and BO

Following adjustments, various TSA balance scenarios were developed, summarized and presented with potential policy options.

Phase 5: Visualization and Auxiliary Tables
Customized charts, graphs and auxiliary tables **Phase 5: Visualization and Auxiliary Tables**
Customized charts, graphs and auxiliary tables were created, focusing on key revenue and expenditure items as well as TSA balances.

Source: IMF Mission

39. **Ultimately, Zambia's comprehensive cash flow forecast for FY 2025 was developed using the CFAT tool**. The forecast integrates monthly projections of revenue, expenditure, and financing (adjusted to reflect forecasted TSA flows), providing a holistic view of cash movements. Additionally, the forecast includes hypothetical policy options aimed at smoothing these flows, which are flexible and subject to adjustments based on the development of real outturns and the evolving priorities of the authorities, ensuring alignment with Zambia's unique context.

40. **Each phase of the CFAT adoption was carried out collaboratively with the CMU team, ensuring members fully understand every detail of the process**. Additionally, comprehensive training sessions were conducted to equip the team with the skills to maintain the CFAT tool, as well as to enhance their knowledge of data cleaning, cash flow analysis techniques and related processes.

41. **Further support may be required in the event of team changes or the need for significant customizations**. These modifications, driven by evolving requirements, especially those impacting the core logic of the tool, would necessitate a strong understanding of its technical capabilities to ensure proper implementation and functionality.

42. **Going forward, the tool's results, along with a systematic analysis of deviations, should be presented to the Cash Management Committee (CMC)**. The creation of this committee, as envisioned in the new draft guidelines, will provide a suitable forum for discussing and evaluating the forecast outcomes.

43. **The forecasting results can contribute to various aspects of the decision-making process, including, but not limited to**:

- Determining the amount of borrowing, ensuring that borrowing is undertaken only when necessary to avoid unnecessary debt accumulation.
- Considering repurchase of outstanding debt when favorable conditions arise.
- Planning VAT refunds and addressing arrears effectively.
- Optimizing short-term surpluses through prudent investments.

Ultimately, the forecasting process aims to support data-driven and more informed decision-making, enhancing the overall efficiency of cash management.

Annex 1. List of MPSAs (head-offices) currently covered by IFMIS

LIST OF MINISTRIES, PROVINCES AND PROVINCES (MPAs)		
S/N	**HEAD**	**NAME OF HEAD**
1	**01**	Office of the President- State House
2	**02**	Office of the Vice President
3	**03**	National Assembly
4	**05**	Electoral Commission of Zambia
5	**06**	Civil Service Commission (Office of the President)
6	**07**	Office of the Auditor General
7	**08**	Cabinet office - Office of the President
8	**09**	Teaching Service Commission
9	**10**	Zambia Police service Commission
10	**11**	Zambia Police - Ministry of Home Affairs
11	**12**	Office of the Public Protector
12	**14**	Ministry of Mines & Minerals Development
13	**15**	Ministry of Home Affairs
14	**16**	Drug Enforcement Commission
15	**17**	Ministry of Foreign Affairs and International Corporation
16	**18**	Judiciary
17	**19**	Disaster Management and Mitigation Unit
18	**21**	Loans and Investments
19	**23**	National Immigration Services
20	**25**	Local Government Service Commission
21	**26**	Ministry of Information and Media
22	**27**	Public Service Management Division
23	**28**	Emoluments Commission

24	**29**	Ministry of Local Government and Rural Development
25	**30**	Zambia Correctional Service
26	**31**	Ministry of Justice
27	**33**	Ministry of Commerce, Trade and Industry
28	**34**	Human Rights Commission
29	**35**	Ministry of Small and Medium Enterprises
30	**36**	Zambia Correctional Service Commission
31	**37**	Ministry of Finance and National Planning
32	**39**	Smart Zambia Institute
33	**44**	Ministry of Labour and social security
34	**45**	Ministry of Community Development
35	**46**	Ministry of Health
36	**51**	Ministry of Transport $ Logistics
37	**52**	Ministry of Water Development, sanitation & Environmental protection
38	**53**	Ministry of Green Economy and Environment
39	**54**	Ministry of Infrastructure, Housing & Urban Development
40	**62**	Ministry of Energy
41	**66**	Ministry of Technology and Science
42	**68**	Ministry of Tourism
43	**76**	Ministry of Youth, Sport & Child Development
44	**77**	Ministry of Defence
45	**78**	Zambia Security Intelligence services
46	**80**	Ministry of General Education
47	**85**	Ministry of Lands and Natural resources
48	**86**	Ministry of Fisheries and Livestock
49	**87**	Anti- Corruption Commission
50	**88**	Office of the President- Muchinga Province
51	**89**	Ministry of Agriculture
52	**90**	Office of the President- Lusaka Province

53	**91**	Office of the President- Copperbelt Province
54	**92**	Office of the President- Central Province
55	**93**	Office of the President- Northern Province
56	**94**	Office of the President- Western Province
57	**95**	Office of the President- Eastern Province
58	**96**	Office of the President- Luapula
59	**97**	Office of the President- North - Western
60	**98**	Office of the President- Southern Province
61	**99**	Constitutional and Statutory Expenditure