



CASH MANAGEMENT AND FORECASTING: Experience of Armenia

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POLICY APPROACH

WHY

The goal is

- to ensure that there are always sufficient funds to meet the government's financial obligations, and that cash surpluses are managed in a safe and cost-effective manner.

WHAT

we do

- **Cash flow forecasting** - Effectiveness of forecasting the aggregate level of cash balances in the Treasury Single Account (TSA).
- **Cash balance management** - Decision of a proper cash balance (liquidity buffer) and effectiveness of managing this cash balance in TSA.

WHO

is in charge

- The function of forecasting and managing the cash flows of TSA is vested in the **Public Debt Management Department** (PDMD) of the RA MoF.

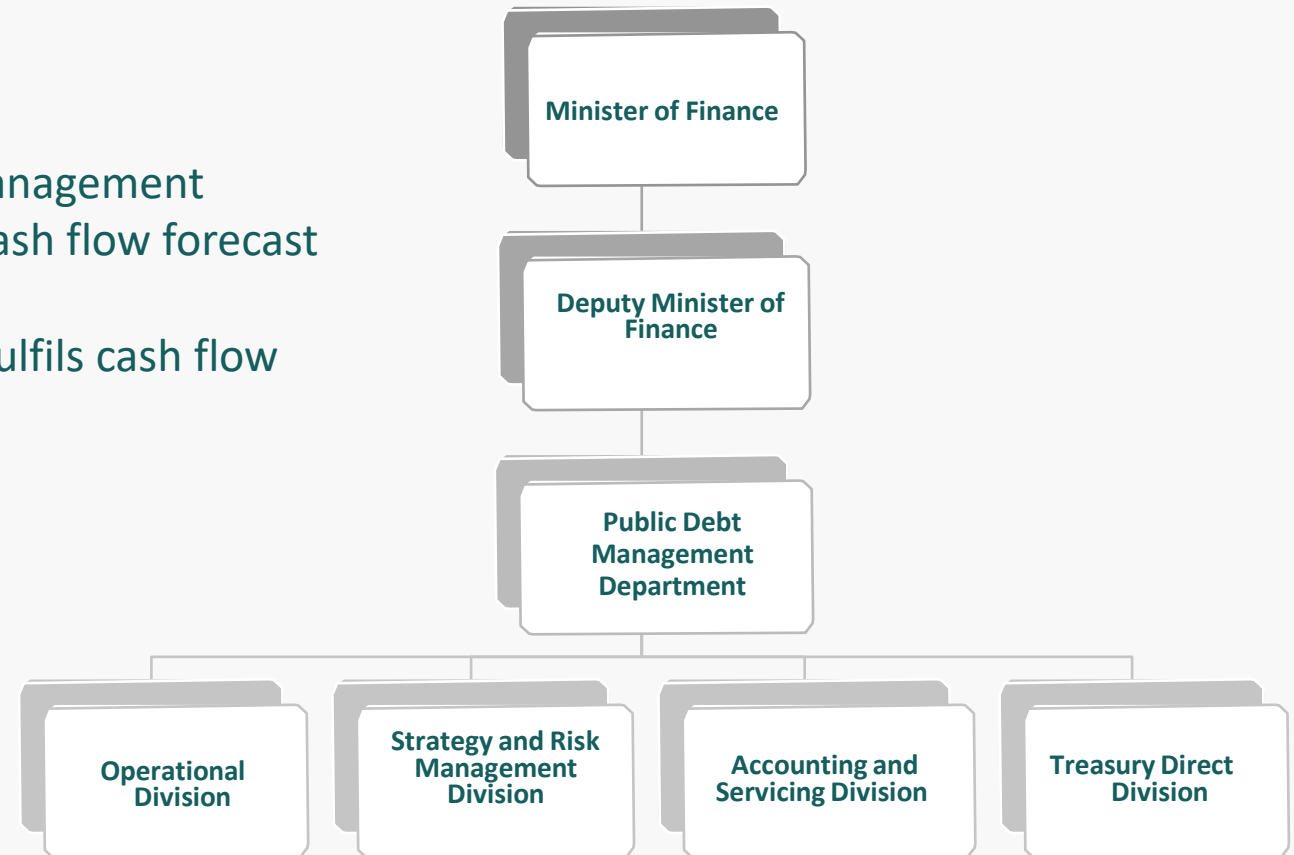
THE STRUCTURE OF PDMD

Since 2011 PDMD has been reorganized into the front, middle and back office principle.

Main responsibilities: Central Government Debt Management; Forecast and Management of TSA cash flows; Retail sell of Government Securities.

- **Middle Office** (Strategy and Risk Management Division) prepares and updates the cash flow forecast

- **Front office** (Operational Division) fulfils cash flow management function



TSA STRUCTURE

State Budget - funds provided by the RA law on the RA state budget

Project **Implementation Units (PIUs)** - can be used exclusively for the implementation of the goals stipulated by the project contracts.

Local Budgets - managed by the local government bodies

Deposit (Extrabudgetary) Accounts , including

Stabilization Account – as cash flow management tool

Other Accounts

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- MoF manages only undistributed funds of State Budget balance and the Stabilization Account (opened in the name of MoF).
 - Stabilization account is subaccount of TSA, one of the goals of the stabilization account is to smooth out the flows of the state budget. Also stabilization account is used to implement fiscal policy.
 - MoF is able to use funds from other balances without interest for cash management purposes.

CASH FLOW FORECASTS OF THE STATE BUDGET

- Monthly, quarterly and annual forecasts, including the flows.
- Forecasts are updated monthly (after the end of each month).
- Cash flow forecasts are carried out according to the “TSA cash flow forecasting and management methodology” (approved by the order of the RA Minister of Finance No 433-A dated December 30, 2020).
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- Forecasts are used only within the MoF and are intended to:
 - ❖ observe the implementation of the State Budget and flows of available resources,
 - ❖ notify in advance in case of insufficient funds for budget execution during the year,
 - ❖ smooth cash flows and ensure the timely implementation of planned results,
 - ❖ identify and manage temporary available funds.

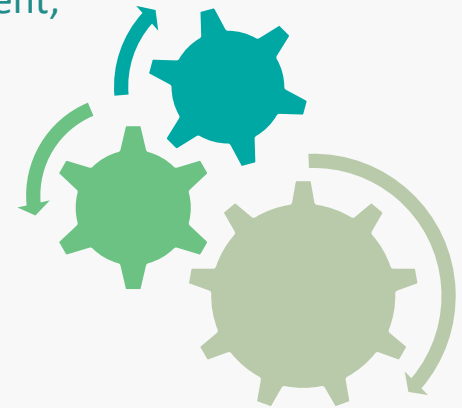
CASH FLOW FORECASTS OF TSA

- Forecasts include the cash flows of the RA state budget and other sub-accounts of TSA.
- The forecasts are broken down on a daily basis for the current month and on a weekly basis for the next two months.
- The forecasts are updated weekly and provided to the Central Bank of Armenia (every Monday).
- MoF shares with the CBA the previous day’s cash flow on a daily basis.
- Other stakeholders receive cash flow forecasts upon request.

	CURRENT MONTH																MONTH 2				MONTH 3																							
	First Week				Second Week				Third Week				Forth Week						I	II	III	IV			I	II	III	IV																
	T S A I T E M S																																											

FORECASTING APPROACH

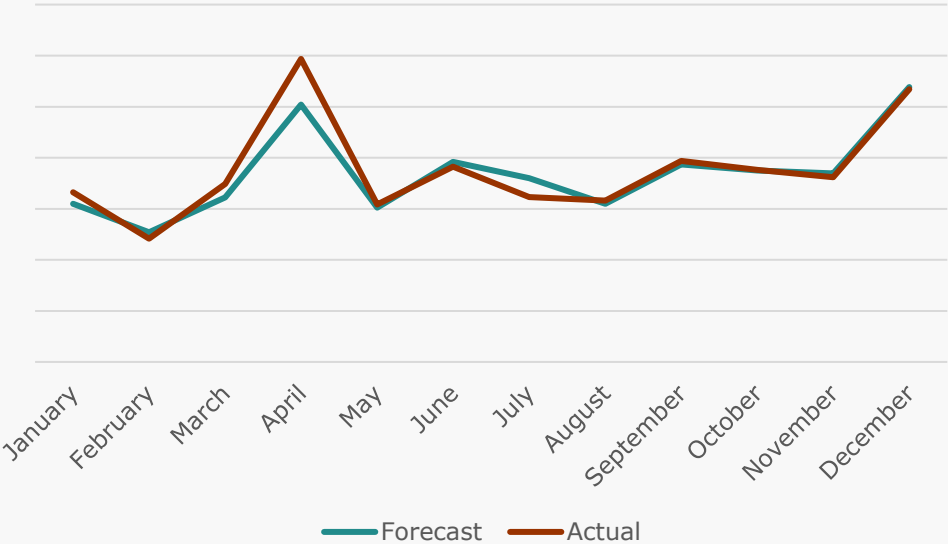
- **PDMD prepares monthly and quarterly forecasts of state budget receipts and expenditures using the following approaches:**
 - ❖ Forecasts are based on historical data series of cash flows with 3-5 years averages, taking into account the past and current recorded patterns.
 - ❖ Some income and expense items have almost fixed schedules (e.g. salaries, debt service, debt issuance, income from loan repayments).
- **PDMD cooperates in the preparation of cash forecasts:**
 - ❖ With other divisions of MoF: Operational Department, Expenditures Financing Department, International Cooperation Department, Macroeconomic Policy Department, Legal Department),
 - ❖ With the Central Bank of RA,
 - ❖ With the State Revenue Committee.
- **PDMD uses Treasury information system (called Treasury operation day) for data gathering and building database for actual data.**



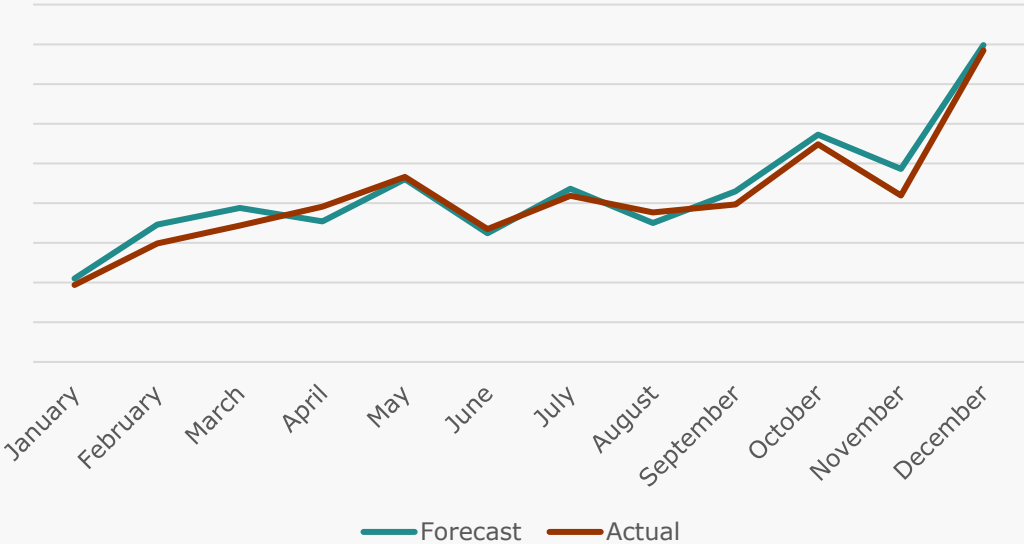
FORECASTING MODEL

- An Excel based cash flow forecasting model has been developed by PDMD.
- PDMD systematically analyses forecast errors, both to give more insights into current flows and in learning lessons for future forecasts.

2023 Tax Income Forecast

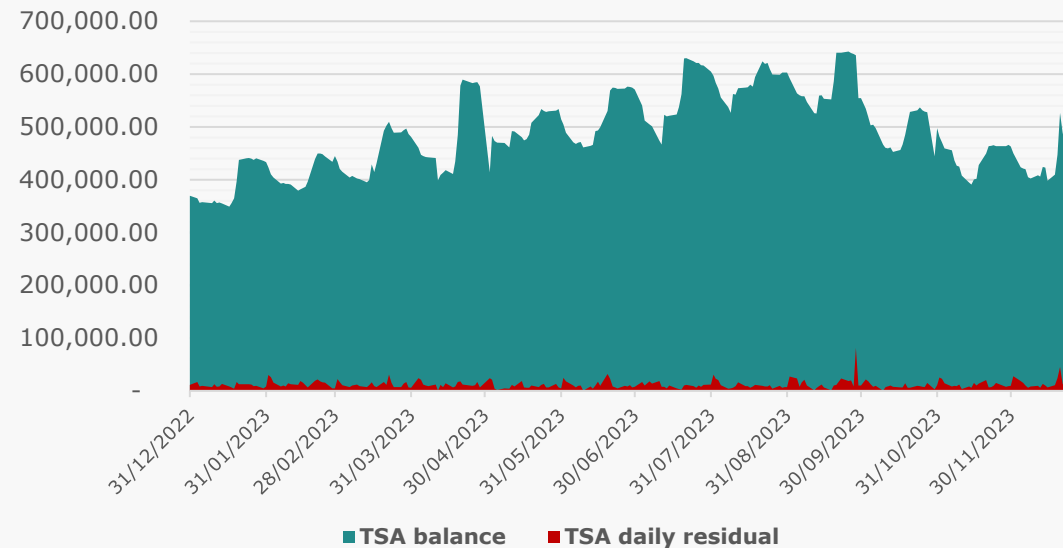


2023 Expenditure Forecast



CASH MANAGEMENT

- Formal **TSA cash buffer** target is established at the level of AMD 7-14 billion (about 0.1 percent of GDP) (USD 18-36 million) calculated as an average daily balance for working days on a monthly basis.
- **Short term deposits** are placed with the CBA, with maturities from 7 days to one year and with market-based interest rates (by 25 basis points below the yield curve level for the same tenor).
- There is **no interest rate remuneration** on the TSA balance.
- The **Stabilization Account** with the target average daily balance from one to two percent of GDP.
- Special cash management 1- or 2-weeks T-bills **could be** issued outside the borrowing plan.



WHAT CHALLENGES WE FACE

- Deposits placed with the CBA are **the only instruments** for investing temporary available funds (with a maturity of at least 7 days).
- Daily cash balances in TSA **are not remunerated** by CBA.
- **Irregular** submission of applications for funding by some government agencies within their programmed limits, without any **spending projections**.
- **Frequent changes** to the execution of state budget expenditures.



THANK YOU