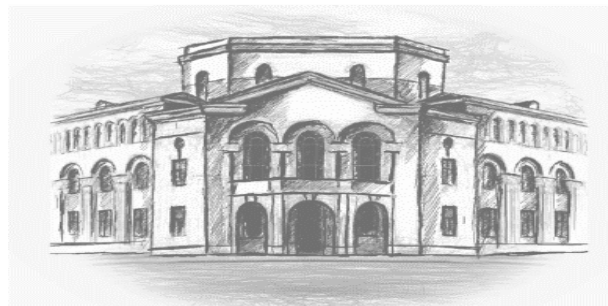


CASH MANAGEMENT AND FORECASTING IN ARMENIA





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.



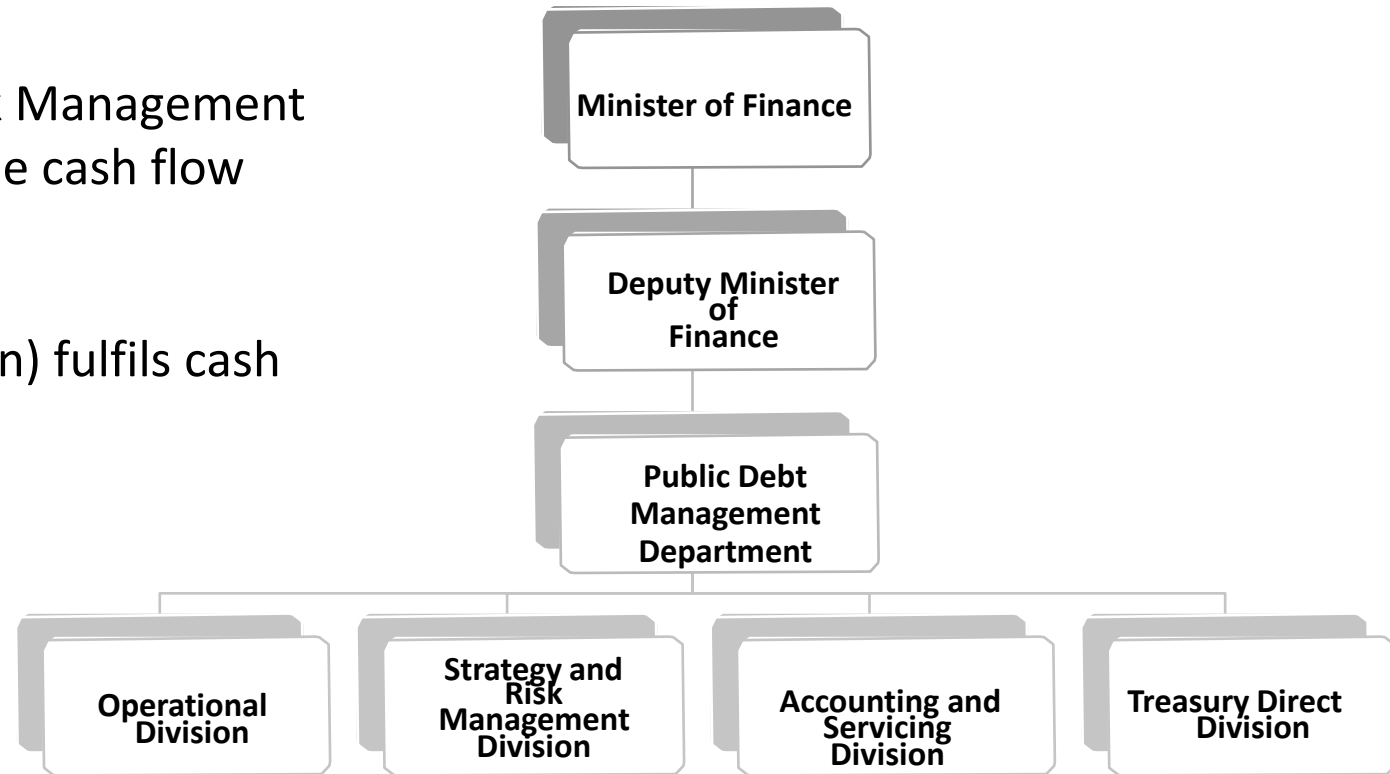
THE STRUCTURE OF PDMD

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

Deposit (Extrabudgetary) Accounts , including

Stabilization Account – as cash flow management tool

Other Accounts

- MoF manages only undistributed funds of State Budget balance and the Stabilization Account (opened in the name of MoF).
- Stabilization account is a subaccount of TSA aimed at (1) supporting the implementation of fiscal and debt management policies and (2) smoothing the flows of the state budget.
- MoF is able to use funds from other balances without interest for cash management purposes.



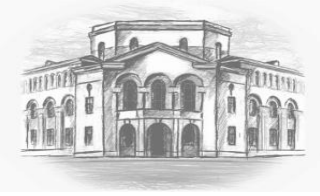
CASH FLOW FORECASTS OF THE STATE BUDGET

- 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).
- 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.



FORECASTING APPROACH

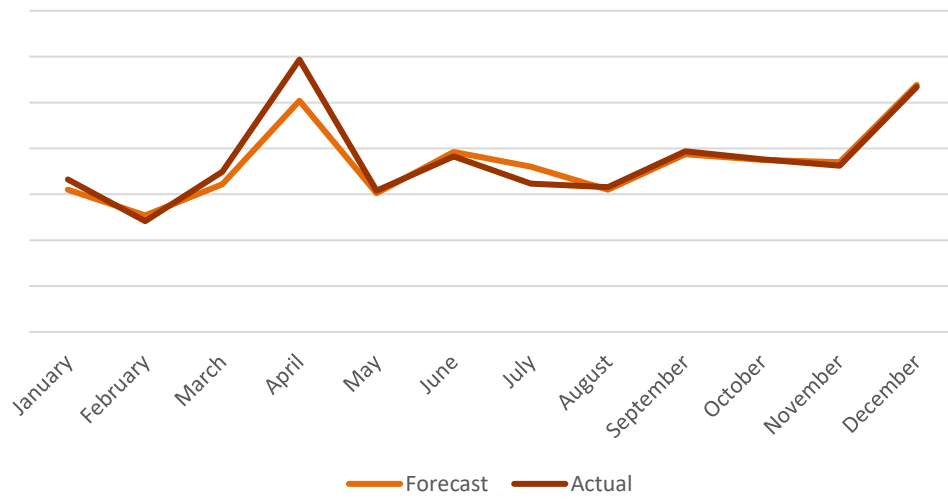
- **PDMD prepares monthly and quarterly forecasts of state budget receipts and expenditures using the following approaches:**
 - ❖ Forecasts are based on historical data series of cash flows with 3-5 years averages, taking into account the past and current recorded patterns.
 - ❖ Some income and expense 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.**



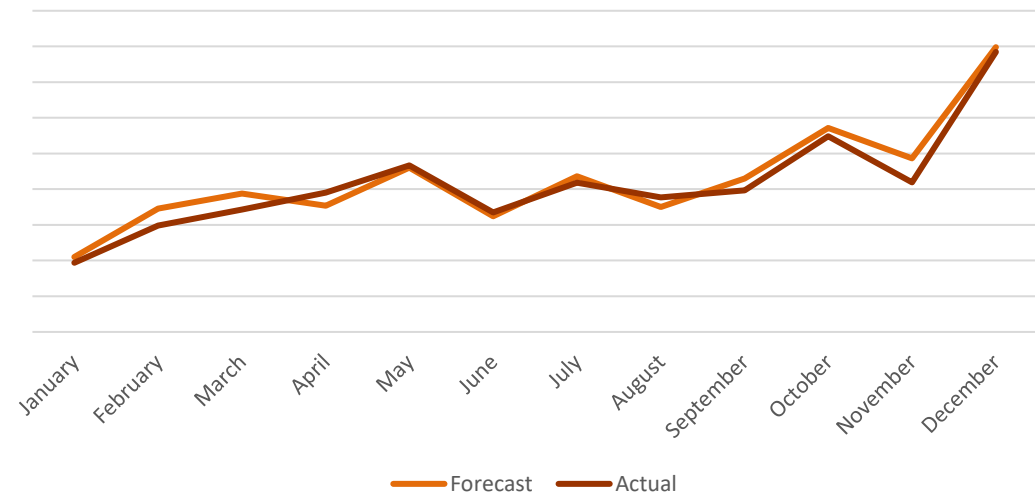
FORECASTING MODEL

- 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

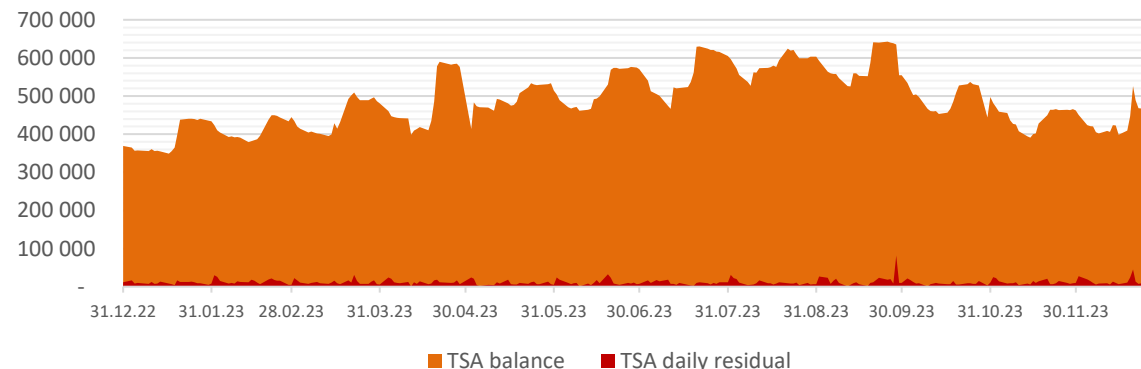


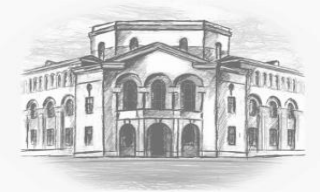


CASH MANAGEMENT

- 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.

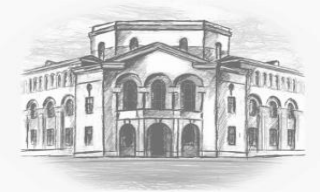
Dynamics of TSA daily residual (without deposits) and total balance in 2023 (AMD million)





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