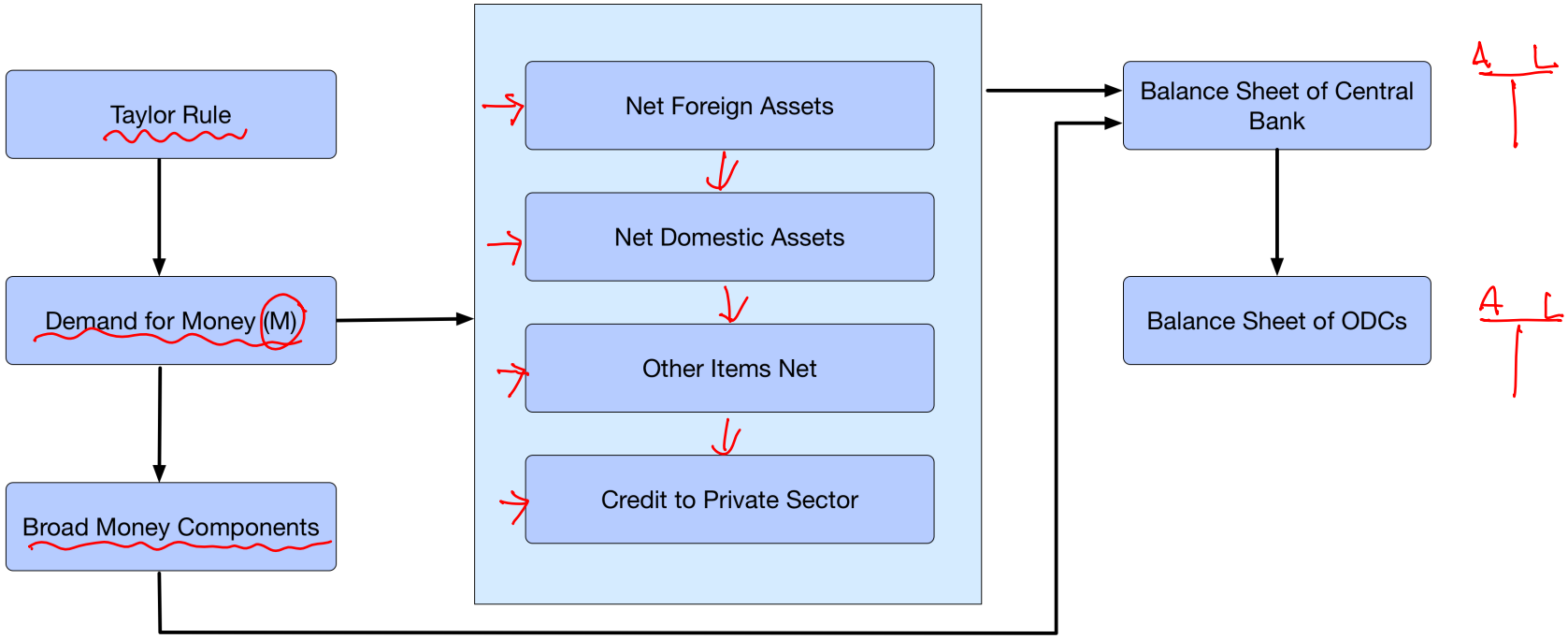
Forecasting the Monetary Survey

Step 1 - Forecasting the Liabilities Side of the Monetary Survey

Step 2 - Forecasting the Assets Side of the Monetary Survey

Step 3 - Forecasting the Balance Sheet of the Central Bank and ODCs



Finalizing the Asset Side of the Monetary Survey

$$\Delta M_t = \Delta NFA_t + \Delta NDA_t$$

$$\Delta NDA_t = \Delta NDC_t + \Delta OIN_t$$

$$\Delta NDC_t = \Delta NCG_t + \Delta CPS_t$$

Forecasting Net Foreign Assets (NFA)

$$NFA_t = e_t^{EOP}\left(\frac{NFA_{t-1}}{e_{t-1}^{EOP}} + \Delta RES_t + \Delta BNFA_t\right)$$

- e_t^{EOP} is the exchange rate (domestic currency per U.S. dollar) at the end of period *t*
- ΔRES is the change in reserves (in U.S. dollars) from the BOP
- $\Delta BNFA$ is the change in other net foreign assets of the banking system (not included in reserves) from BOP, financial account.

Forecasting Other Items, Net

Other Items, Net (OIN) affected by:

- Valuation changes in:
  - NFA of central bank and commercial banks
  - Residents' foreign currency deposits or loans
- Other
  - Changes in bank capital
  - Bank profits/losses deriving from FX currency transactions

Forecasting Other Items, Net

$$\text{OIN}_t = \text{OIN}_{t-1} - \text{Valuation adjustment}$$

$$\text{Valuation adjustment} = \left(NFA_t^{NC} - NFA_{t-1}^{NC} \right) - \text{Transaction flow}$$

$$\text{Transaction flow} = e_t^{AVG} \left(NFA_t^{\$} - NFA_{t-1}^{\$} \right)$$

where:

e_t^{AVG} is the average exchange rate (domestic currency units per USD)

$NFA_t^{NC}, NFA_t^{\$}$ are at the end of period t

Forecasting Net Domestic Credit and Private Sector Credit

$$\Delta NDC_t = \Delta M_t - \Delta NFA_t - \Delta OIN_t$$

$$\Delta CPS_t = \Delta NDC_t - \Delta NCG_t$$