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External Sector: Balance of Payments, Other Related Statistics and Issues

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Outline

I. Understanding the technicality of compilation of macroeconomic accounts

II. Exploring external sector accounts: BOP and IIP

III. Linking statistical tables with foreign exchange management issues

IV. Theoretical issues of exchange rate regime and monetary policy

I. Understanding the technicality of compilation of macroeconomic accounts

- Macroeconomic accounts and macro-policy perspective
- Statistical framework of these accounts
- NRB and macroeconomic accounts

Macroeconomic accounts and macro-policy perspective

What is the basis of macroeconomic policies ?

- Understanding macroeconomic accounts (statistics) is key for developing macroeconomic policy perspective and addressing macroeconomic issues.
- The beauty of macroeconomic accounts is that they provide the structure and links of various sectors of the economy at the aggregate level.
- Therefore, macroeconomic statistics act as the bases of economic analysis and policy formulation.
- The basic macroeconomic accounts are:
  - National income accounts
  - Monetary and financial accounts
  - Government finance accounts and
  - External sector accounts

- These four macroeconomic accounts give the macro as well as sector specific picture of the economy.
- For example, the national income accounts capture the real economy of the country, giving the overall size and the growth rate of the economy.
- The preparation of national income accounts involves the identification and classification of numerous economic activities into :
    - Primary economic activities
    - Secondary economic activities and
    - Tertiary economic activities

- The SNA 2008 has reclassified NI accounts into 21 sectors by industrial origin.
- National Statistics Office (NSO) has adopted the SNA 2008 and started publishing NI accounts into 18 sectors by industrial origin.
- This classification gives the structure (the sectoral shares) of the economy.
- From expenditure side the popular NI identity is:

  AD = GDP = C+I+G+X – M ……..(1)
- Inclusive of income redistribution, the popular NI identity is:

  GNDI = GDP + Yf + CF …………(2)

  Where, GNDI = gross national disposable income, GDP= gross domestic product, Yf = income earned from abroad, Cf = current transfers.
- NI account also includes price statistics including producer and consumer price indices

- Monetary and financial accounts provide overall size of the financial sector, liquidity, bank credit and money supply.
- Some monetary identities are:

M_2 = NFA + NDA …….(3)

$M_2 = M_1$ + TD …………(4)

M_1= CiC + DD …………(5)

Where, M_2 =broad money, M_1 =narrow money, CiC=currency in circulation, DD=demand deposits, TD= time deposits including savings and call

- M_2 measures overall monetary liquidity.

The Government Finance Statistics

- The government finance statistics capture the economic role of the government and consequences of government borrowing.
- Three indicators are important.
- Fist, fiscal balance = Total revenue and grants – Total expenditure and net lending.

$$T - (Cg + Ig + Tr) = CB \text{ ......(6)}$$

Where CB is the conventional balance and T is tax and non-tax revenue and grants. Cg + Ig is absorption, Tr = government transfer payments (interest, subsidies, and social insurance benefits).

- Second, the public debt ratio,
- Third, sources of government borrowing

Statistical framework of these accounts

How are these accounts compiled?

- Statistical frameworks are used to identify, classify and compile these macroeconomic statistics.
  - Currently, Nepal is using the system of national accounts (SNA) 2008 to compile and publish national income accounts of Nepal.
  - The SNA is the mother for all other macroeconomic accounts.
  - The SNA is an international standard system of national accounts developed and updated by the United Nations, among others.
  - The first standard was published in 1953 and updated subsequently in 1968, 1993, 2008.

- Like wise the monetary and financial statistics manual (MFSM) and Compilation Guide 2016 is used for compiling monetary accounts.
- The government finance statistics manual (GFSM) 2014 is used for compiling general government statistics.
- NRB is making transition to the balance of payment (BOP) manual sixth (edition) 2008 for compiling BOP statistics.
- The IMF develops and updates the other macroeconomic accounts and makes sure that member economies adopt them for compiling these statistics.

NRB and macroeconomic accounts

Who compiles macroeconomic accounts in Nepal?

- Of these four accounts, while the NSO compiles national income accounts, the Ministry of Finance prepares annual government finance.
- NRB compiles and publishes the government finance, monetary, BOP and price statistics on a monthly basis.
- On the basis of these macroeconomic accounts, NRB prepares and publishes a macroeconomic update called Macroeconomic and Financial Situation of Nepal every month.

II. Exploring external sector accounts: BOP and IIP

- What are the core external sector statistics?
- BOP and its structure
- International reserve position
- International investment position (IIP)
- Does BOP always balance?

External Sector Accounts: BOP and IIP

What are the core external sector statistics?

- Three core external sector statistics are used to evaluate the performance of the external sector.
  i. BOP and its structure
  ii. International reserve position (gross foreign assets of the banking sector) of the country and
  iii. International investment position (IIP)
- While BOP is the flow of transactions, IIP is the position (stock) of transactions with nonresidents.
- International reserve position. which measures the accumulation of foreign exchange especially by the central bank, is also closely linked with the BOP of the country.
- Hence, both international reserve position and IIP complement the BOP.

BOP and its structure

- BOP refers to the summary of transactions of one country (residents) with non-residents (the rest of world (ROW)).
- Broadly speaking, BOP has the three major accounts:
  - Current account
  - Capital and financial account, and
  - Reserve account
- When all components of the BOP are included they must sum to zero.

  BOP =current A/C+ capital A/C+ financial A/C+ reserve account=0

Current account

- Current account includes, merchandise, services, income and transfers accounts.

- Services refer mostly to the transportation and insurance of merchandise shipments, transport fares paid by travelers, tourist services, royalties and license fees, communications, expenditures of foreign contractors such as wages, house rentals, government purchase, embassy and consulate services (visa fee).
- Income may be derived from labor (wages paid to employees living in foreign countries) and from financial assets or liabilities.
- Financial income (investment income) represents receipts and payments of interest on financial assets and liabilities and dividends on corporate stocks.
- Transfers which includes, grants, workers' remittances, pensions, gifts, donations, INGOs.

- Current account transactions do not give rise to future claims.
- The current account balance is identical ex-post to the economy's resource gap as measured by the difference between economy-wide saving and investment.

$$S\text{-}I = CAB = X\text{-}M + Yf + Tr \quad \ldots\ldots\ldots(7)$$

- Alternatively, the current account reflects the gap between income and absorption in the economy,

$$GNDI - A + CAB \quad \ldots\ldots\ldots\ldots\ldots\ldots(8)$$

- The S-I gap can be rewritten as

$$(Sp + Sg) - (Ip + Ig) = CAB \quad \ldots\ldots\ldots(9)$$

$$(Sp - Ip) + (Sg - Ig) = CAB \quad \ldots\ldots(10)$$

where, S=savings, I= investment, CAB=current account balance, X=export of G/S, M=imports of G/S, Yf=foreign income, Tr=current transfers, GNDI=gross national disposable income, Sp=private sector savings, Ip=private sector investment, Sg=government savings, Ig=government investment.

- Equation (10) is used to discuss the concept of twin deficits – a situation when a country suffers from both the fiscal deficit and the external current account deficit.

Capital and financial account

Capital account

- Capital accounts lead to change in ownership of foreign assets. It includes:
  i. Acquisition or disposal of non-produced non-financial assets such as trademarks, patents, copyrights, leasing agreements and mineral rights, land sold to embassies, among other items.
  ii. Capital transfer including debt forgiveness, conditional grants for capital projects such as foreign aid to build roads, dam and schools. And also transfer of goods and financial assets by migrants leaving the country, transfer of fixed assets.

Financial account

- The financial account has five functional categories:
  - **Direct investment** (equity capital and reinvested earnings),
  - **Portfolio investment** (long term debt and equity securities, money market instruments) and
  - **Borrowing** by general government, the private sector (ECB), multilateral forms from their parent countries.
  - **Trade credit** includes export and import trade credit.
  - **Tradable financial derivatives** including currency and interest rate swaps.
- There could be cases of **exceptional financing** of rescheduling of existing debt, arrears on debt servicing, bond issued for BOP support, transfers

Reserve account

- Reserve account is classified as ‘below the line’ and acts as a balancing item.
- The reserve account records the activity of the nation’s central bank.

  CA + Capital account + FA + Balancing item =0

- A BOP surplus is accompanied by an accumulation of foreign exchange by the central bank.
- When a BOP is in surplus, the balancing item will carry a negative sign.
- When a BOP is in deficit, the balancing item, i.e. reserve account will carry a positive sign.

International reserve position

- NRB in its macro update calls it gross foreign exchange assets of the banking sector.
- The sign of the balancing item (reserve account) will indicate a surplus or a deficit in BOP at any given period of time.
- BOP and country's international reserves are closely interlinked.
- When BOP is in surplus, country will accumulate (add to its) international reserves.
- On the other hand, when BOP is in deficit, country will lose its international reserves.
- Hence, accumulation and depletion of country's international reserves are closely linked with its BOP position.

International Investment Position (IIP)

- The financial crises of 1990s underscored the importance of stock data for assessing country's external vulnerability.
- IIP is the balance sheet of financial assets and liabilities of an economy with respect to the ROW.
- IIP consists of external debt statistics, direct investment, portfolio investment and international reserves.
- The net IIP constitutes the net worth of the economy.
- The statistical framework used for the compilation of external sector accounts is the BOP manual Sixth edition (BPM6) 2008.
- However, NRB is compiling and publishing BOP statistics using both the BPM5 (1993) as well as BPM6 (2008) on a parallel run basis.

Table 1: BOP and its structure

S.No	Account	2022 July	2023 May	Remarks
A	**Current**	**-623**	**-55**	• Current A/C convertibility status on May 30, 1994 • FERA, 1962, • Foreign Investment and Loan Management By-Law, 2021 • Net wealth • Ist generation reforms • OGL system • De-licensing • Deregulation • Opening up for oversees employment
i	Merchandise trade balance	-1662	-1157	
	Exports inc. electricity	212	154	
	Imports inc. electricity	-1873	-1311	
ii	Services, net	-108	-57	
	Travel			
	Government n.i.e. embassy, consulate services (R/E)			
	Others (maintenance, construction (exp. of foreign contractors, all other services)			
iii	Income, net	29	50	
Iv	Transfers, net (G, R, P, gifts, INGOs)	1118	1110	

Table 1: BOP and its structure Continued

S. No.	Account	2022 July	2023 May	Remarks
B	Capital account	10.0	6.4	• **Act Restricting Investment Abroad (ARIA) 1964 governs the financial account.** • **Related to financial globalization** • **Capital account convertibility** • **Capital market reforms** • **Banking/financial sector reforms** • **2nd generation reforms** • **Twin crises of banking and financial** • **De-licensing FDI inflows**
i	**Capital transfer**	**10.0**	**6.4**	
	Debt forgiveness			
	Transfer of goods by migrants			
	Conditional grants to build roads, dams, schools			
ii	**Acquisition/disposal of non-produced, non-financial assets**			
	Brand names, copy rights, trade marks			
	Right to use land, water for mining and fishing			
C	Financial account	313.0	202.4	
i	**FDI, net**	**18.6**	**4.4**	
ii	**Portfolio investment**	**0.0**	**0.0**	
iii	**Other investment, assets**	**-14.1**	**- 3.1**	

Table 1: BOP and its structure Continued

S. No.	Account	2022 July	2023 May	Remarks
a	Trade credits: export receivables	-14.3	-3.2	• ARIA 1964 governs the financial account. • Related to financial globalization. • Capital account convertibility • Capital market reforms • Banking/financial sector reforms • 2nd generation reforms • Twin crises of banking and currency • De-licensing FDI inflows
b	Other: nonlife insurance claim	.02	0.08	
iv	Other investment, liabilities	308.5	201.1	
a	Trade credit, M payables	118.5	110.3	
b	Loans	116.0	69.6	
	General government	92.6	43.0	
	Other sectors, ECB, loans from parent country	23.4	26.6	
c	Currency and deposits	37.5	19.2	
	NRB	-0.0437	0.019	
	DMBs	37.5	19.2	
d	Other liabilities	36.6	2.1	
	Total group A through C	-300.3	154.1	

Table 1: BOP and its structure Continued

S. No.	Account	2022 July	2023 May	Remarks
D	**Miscellaneous items, net**	**119.1**	**81.9**	• ARIA 1964 governs • Related to financial globalization • Capital account convertibility • Capital market reforms • Banking/financial sector reforms • 2nd generation reforms • Twin crises of banking and currency • De-licensing FDI inflows
	Total group A through D	-181.2	236.0	
E	Reserve and related items	181.2	-236.0	
i	Reserve assets	181.2	-236.0	
	NRB	186.0	-235.9	
	DMBs	-4.8	-0.0464	
ii	Use of Fund Credit and loans	0	0	
F	Change in reserve, net I-increase)	255.3	-214.7	

Does BOP always balance?

- In an accounting sense it is true as it is based on the system of double-entry book keeping.
- BOP has the settlement account which balances the whole system of BOP.
- However, it is not fully true that BOP is always balanced. It can be in deficit or in surplus. For that we will have to look at the structure of BOP.
- There could be cases of trade, current account, capital and financial account deficits/surpluses.
- Most importantly, we will have to see how these deficits are financed?
- Is it through the foreign exchange reserves, borrowing or exceptional financing?

III. Linking statistical tables with foreign exchange management issues

- Summary comments on tables 23, 24, 25, 26, 27 and annual 33
- Comment on Tables 32, 33, 34 and 35
- Statistical tables for foreign exchange management
  - First, Indian currency reserve management
  - Second, the composition of foreign exchange
  - Third, overall reserve management
  - Fourth, concepts of SDR, reserve position in the Fund and SDR allocation

Linking statistical tables with foreign exchange management issues

- NRB publishes a number of external sector statistics other than core through its monthly macro update, **“ Current Macroeconomic and Financial Situation of Nepal,”.**
- Some of core and other statistical tables of the external sector are given below.

Table 2: External sector related statistics

S. No.	Table	Table title	S. No.	Table	Table title
1	19	Imports from India against $ payment	8	27	Exchange rate of US$
2	23 A	Summary BOP (BPM5)	9	32	Monetary survey
3	23 B	Summary BOP (BPM6	10	33	Monetary survey (y/Y)
4	24 A	Summary BOP (BPM5) $	11	34	Central bank survey
5	24 B	Summary BOP (BPM6)$	12	35	Central bank survey (y/Y)
6	25	G foreign assets of BS	13	49	Purchase/sale of FC
7	26	G foreign assets of BS $	14	An 33	IIP (Annual macro update

Summary comments on tables 23, 24, 25, 26, 27 and annual 33

- These are core statistical tables of external sector.
- Tables 23-24 are summary BOP tables.
- Tables 23 A and 24 A are as per BPM5 and Tables 23 B and 24 B are as per BPM6.
- Tables 23A and 23 B are in Nepali rupee and tables 24 A and 24 B are in US dollar.
- Table 27 is used to convert BOP table in Nepali rupee to US dollar.
- As indicated in the relevant table, monthly average exchange rate is used for converting BOP data into US dollar terms.

- Tables 25 and 26 are foreign exchange (assets) accumulation related tables.
- A surplus in BOP would lead to an in increase in foreign exchange holdings of the country and a deficit would cause a depletion in it.
- Foreign exchange valuation gain/loss amounts (calculations) explain the difference in the change in reserve position in table 26 and the BOP position in table 23 A.
- Table 25 shows the calculations and tallies the BOP position and the change in net foreign assets.

Comment on Tables 32, 33, 34 and 35

- These tables are of monetary survey and central bank survey.
- Tables 32 and 34 are used to show changes during the particular year.
- Tables 33 and 35 are used to show year –on- year changes in the monetary items (variables).
- These tables are important for compilation of BOP and gross foreign assets.
- The change in NFA in table 32 (monetary survey) is exactly same with the changes in reserve net (-increase) line of BOP table 23 A.
- In fact, the figure of the change in NFA of monetary survey table 32 is exactly copied for the last line of BOP table 23 A.
- Monetary survey and central bank survey are used for compiling the Gross Foreign Assets of the Banking Sector of table 25.
- Statistical tables 19, 25 and 49 are important from foreign exchange management standpoint which are discussed below.

Statistical tables for foreign exchange management

- There are some statistical tables used for managing IC and overall reserve and defending the peg (table 49).

First, **Indian currency reserve management**

- **Table 19: Imports from India against payment in convertible currency** and **table 49: Purchase/sale of foreign currency** are associated for IC reserve management following two adverse policy developments initiated by India with respect to Nepal:

  i. **Unfavorable trade and transit treaty with India signed in 2002**

- This treaty imposed quantitative restrictions on the export of vegetable ghee (100000MT), acrylic yarn (10000MT), copper based products (7500MT) and zinc oxide (2500MT) and also the value addition clause of 30% for export to India.

  ii. **India banning the use of IC of denomination above 100 in Nepal through FEMA on May 3, 2000**

- These two policy developments initiated by India created adverse impact on Nepali tourism and manufacturing sectors.
- It made challenging of IC reserve management for Nepal, given the Nepal's excessive reliance on imports from India.

- In order to finance trade deficit with India, Nepal has introduced 3 policy measures.
  a) Started selling US dollar and buying IC since 2003/04 (2061/62). Please refer to table 49: Purchase and sale of foreign currency.
  b) Allowed Nepali business people to import (182 items) from India against the US dollar payments.
  c) Started buying IC cash from RBI and importing into the country since February 2004 (Fagun 2061).
- RBI fixes limit (currently IC 6 billion) for IC cash every year.
- However, Nepal has not utilized it fully in recent times.
- Lately, export cash subsidy is in place to reduce trade deficit with India.
- Before 2002, Nepal did not face problem in IC reserve management because of liberal trade and transit treaty of 1996, stand by loan agreement with RBI (Nepal has not used since 1994) and constant flow of Indian tourists as there was no banning of IC of denomination above 100.

Nepal's monetary policy is directed towards defending the peg, which currently acts as the nominal anchor of monetary (table 49).

Second, the composition of foreign exchange

- Statistical tables, 25, and 34 are used to show the composition of foreign exchange, which consists of:
  - Monetary gold,
  - SDR holdings,
  - Reserve (tranche) position in the Fund and
  - foreign exchange (currencies).
- Monetary gold is used for the issuance of bank notes.
- SDRs and reserve (tranche) position in the Fund are associated with the IMF

Third, overall reserve management

- The statistical tables used for overall reserve management are monthly table 25: gross foreign assets of banking sector and the annual statistical table 33: IIP.

Table 2: Adequacy of reserves

S. No.	Indicators	Threshold	Nepal: mid-May 2023
1	Import cover, months		
	Goods		11.2 months
	Goods and services		
	Advanced	3-4 months	
	Developing	6 months	
	NRB target	7 months	9.7 months
2	Reserve/GDP	10%	27.3%
3	Reserve/imports	30-50%	80.7%
4	Reserve/M2	20%	25%

- NRB takes the following factors to decide the level of reserves:
  i. Import requirement: benchmark for reserve-to-import ratio
  ii. External exposure: the level of foreign debt and debt servicing
  iii. Exchange rate regime
- Nepal does not have short term capital. The benchmark for this is 1:1.
- This indicates that Nepal needs adequate level of international reserves for import financing, debt servicing and FDI servicing.
- Table 49: Purchase and sale of foreign currency is reflective of foreign exchange intervention and the policy measure that NRB is active in defending the currency.
- This is key to avoid large cross rates and a situation of financial/currency arbitrage.

Fourth, concepts of SDR, reserve position in the Fund and SDR allocation

- SDRs were introduced in 1969 to supplement international liquidity by the IMF.
- SDRs are assets, units of account for the IMF, used to settle obligation and can be exchanged for hard currencies.
- The value of SDR is linked with the basket of five currencies: US dollar, Euro, Pound Sterling, Japanese Yen and Chinese Yuan

- **Allocation (creation) of SDR** to IMF member countries is done in proportion to their quotas in the IMF.
- IMF, so far, has allocated SDR 660.7 billion ($935.7 billion) from 4 general and a one time special allocation.
- **IMF Quotas** are membership fee (share capital).
- The total IMF quotas currently stand at SDR 476.2 billion.
- Every five year, IMF quotas are reviewed to reflect the change in the global economy.
- The structure of quota underlies the governance structure of the IMF, the voting power and borrowing by membership.
- Associated with the composition of foreign exchange and SDR is the **reserve position in the Fund**.
- It is normally 25% of quota kept in hard currencies.
- It is a difference between the country's IMF designated quota and the IMF's holding of that country's currency .

- Nepal is currently under IMF’s 42 –month ECF program with the borrowing arrangement of SDR 282.42 million (US$ 384.8 million) during the program period.
- It is 180% of Nepal’s Quota (SDR 156.90 million).
- Nepal has already availed SDR 117.7 million (US$ 156.6.million).
- IMF has designed RCF, SCF and ECF for LICs.

IV. Theoretical issues of exchange rate regime and monetary policy

- Exchange rate regime and exchange rate determination mechanism
- Current and capital account convertibility
- Exchange rate regime and monetary policy

Exchange rate regime and exchange rate determination mechanism

- Nepal has adopted dual exchange rate regime: it is fixed but adjustable currency peg system with the Indian currency (IC) and flexible with others.

Table 3: Devaluation and Revaluation of NC with IC

Sr. No.	Date	NC/IC	Revaluation/devaluation
1	April 13, 1960	1.60	
2	June 6, 1966	1.01	Revaluation by 58.4%
3	November 8, 1967	1.35	Devaluation by 25.2%
4	December 22, 1971	1.39	Devaluation by 2.9%
5	March 22, 1078	1.45	Devaluation by 4.1%
6	November 30, 1985	1.70	Devaluation by 14.7%
7	May 31, 1986	1.68	Revaluation by 1.2%
8	July 1, 1991	1.65	Revaluation by 1.8%
9	February 12, 1993	1.60	Revaluation by 3.1%

- As the exchange rate regime is fixed, the exchange rate of NC with US $ is computed on the basis of cross rate between IC and US$ in the international market on a daily basis.
- The exchange rates of NC with other 20 currencies are determined on the basis of individual currencies‘ cross rates with US$ and NC-US$ rate.

Current and capital account convertibility

- Nepal since February 12, 1993 adopted full convertibility for current account transactions and removed foreign exchange controls for current account transactions.
- Nepal obtained the Article VIII status of IMF on May 30, 1994.
- Nepal has yet to go for capital account convertibility.

Exchange rate regime and monetary policy

- It is said that a country with free capital mobility and a fixed exchange rate can not have an independent monetary policy.
- With capital controls, Nepal is using monetary policy to achieve some macro goals.