Annexure A: Data Explanatory Notes

1) **GDP:** In case of an ongoing year, for which the actual GDP data for full fiscal year is yet not available, SBP uses the GDP target given in the Annual Plan by the Planning Commission in order to calculate the ratios of different variables with GDP, e.g., fiscal deficit, public debt, current account balance, trade balance, etc. SBP uses its own projections in outlook section of the Chapter 1 of the report.

2) **Inflation:** There are three numbers that are usually used for measuring inflation: (i) period average inflation; (ii) YoY or *yearly* inflation; and (iii) MoM or *monthly* inflation. Period average inflation refers to the percent change of the *average* CPI (national, urban, or rural) from July to a given month of the year over the corresponding period last year. YoY inflation is percent change in the CPI of a given month over the same month last year; and monthly inflation is percent change of CPI of a given month over the previous month. The formulae for these definitions of inflation are given below:

$$\text{Period average inflation} = \left(\frac{\sum_{i=0}^{t-1} I_{t-i}}{\sum_{i=0}^{t-1} I_{t-12-i}} - 1 \right) \times 100$$

$$\text{YoY inflation} = \left(\frac{I_t}{I_{t-12}} - 1 \right) \times 100$$

$$\text{Monthly inflation} = \left(\frac{I_t}{I_{t-1}} - 1 \right) \times 100$$

Where I_t is consumer price index in t^{th} month of a year. The CPI can be national, urban or rural.

For detailed information on the methodology, please see:
www.pbs.gov.pk/sites/default/files/price_statistics/methodology_price.pdf

3) **Change in debt stock vs financing of fiscal deficit:** The change in stock of gross public debt does not correspond with the fiscal financing data provided by the Ministry of Finance. This is because of multiple factors, including: (i) the stock of debt takes into account the gross value of government borrowing, whereas financing is calculated by adjusting the government borrowing with its deposits held with the banking system; (ii) changes in the stock of debt also occur due to movements in exchange rates, both PKR and other currencies against US Dollar.

4) **Government borrowing:** Government borrowing from the banking system has different forms and every form has its own features and implications, as discussed here:

   (a) Government borrowing for budgetary support:

   Borrowing from State Bank: According to Section 9C (1) of the SBP Act (as amended up to 28 January, 2022), the SBP "shall not extend any direct credits to or guarantee any

obligations of the Government, or any government owned entity or any other public entity." According to this amendment, borrowing from State Bank shows the stock of government securities held by SBP, after the re-profiling of stock of Market Related Treasury Bills (MRTBs) into PIBs since June 2019. The change in net borrowings from SBP mainly reflects change in stock of government securities, changes in government (central and provincial) deposits with the SBP, and accrued profits on government securities, etc.

Borrowing from scheduled banks: This is mainly through (i) fortnightly auction of 3, 6 and 12-month Market Treasury Bills (MTBs); (ii) monthly auction of 2, 3, 5, 10, 15, 20 and 30 year fixed rate Pakistan Investment Bonds (PIBs); (iii) fortnightly auctions of 2, 3, 5, 10 year floating rate PIBs; (iv) Sukuk and (v) Bai Muajjal of Sukuk (on deferred payment basis). However, provincial governments are not allowed to borrow directly from scheduled banks for deficit financing.

(b) *Commodity finance:* Both federal and provincial governments borrow from scheduled banks through respective institutions to finance their purchases of commodities e.g., wheat, sugar, etc.

5) Differences in different data sources: SBP data for a number of variables, such as government borrowing, foreign trade, etc. – often do not match with the information provided by MoF and PBS. This is because of differences in data definitions, coverage, etc. Some of the typical cases are discussed below.

(a) **Financing of budget deficit (numbers reported by MoF vs SBP):** There is often a discrepancy in the financing numbers provided by MoF in its quarterly tables of fiscal operations and those reported by the SBP in its monetary survey. This is because MoF reports government bank borrowing on a cash basis, while SBP's monetary survey is compiled on an accrual basis, i.e., by taking into account accrued interest payments on T-bills.

(b) **Foreign trade (SBP vs PBS):** The trade figures reported by SBP in the *balance of payments* do not match with the data published by Pakistan Bureau of Statistics. This is because the trade statistics compiled by the SBP are based on actual receipts and payments of foreign exchange by banks, whereas the PBS records data on the physical movement of goods (customs record).