

## A MEASUREMENT OF DOLLARIZATION

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### ABSTRACT

**Purpose-** Dollarization refers to the use of foreign currency instead of domestic currency by citizens as a result of macroeconomic instabilities. Generally, due to the instability caused by inflation, the local currency loses its functions as a unit of account, a store of value, and in the last stage, a medium of exchange. Partial dollarization is the fulfillment of any of the three functions of money by a foreign currency. The purpose of this study is to measure the dollarization level of the Turkish economy between 2000 and 2022 (a 23-year period). This study employs the most comprehensive definition of portfolios of Turkish Lira and foreign currency to measure the degree of asset and liability dollarization. This study measures the dollarization degree of the Turkish economy by using the composite dollarization index developed by Reinhart et al., (2003).

**Methodology-** The composite dollarization index based on the definition by Reinhart et al., 2003, has two components; asset dollarization and liability dollarization. This study measures the level of dollarization by using Reinhart's definition of the Turkish economy between 2000 and 2022. We construct the asset dollarization as a ratio of the foreign currency portfolio to the total portfolio. Liability dollarization is defined as the sum of the ratio of foreign currency credit to the total credit, the ratio of the domestic debt in foreign currency to the total domestic debt, and the ratio of total external debt to the GDP. The composite dollarization index is the sum of asset dollarization and liability dollarization.

**Findings-** The dollarization in bank deposits rose to 57% in 2001 and then dropped to 27% in 2010. The dollarization in bank deposits has started to rise again since 2013. The increase in dollarization in bank deposits has accelerated since 2021. It reached 70% by the middle of 2022. Asset dollarization has a similar path to the dollarization in bank deposits. The level of the asset dollarization is generally lower than the level of the deposit dollarization for all years examined. The liability dollarization also follows a similar path. As the degree of asset dollarization increases, the degree of liability dollarization also increases. Finally, the composite dollarization index has been rapidly increasing since 2010.

**Conclusion-** As discussed extensively in the literature, the degree of dollarization is an important indicator of a healthy economy. The literature supports that there is a strong link between the degree of dollarization and macroeconomic indicators. When economic instabilities are on the screen, the use of a stable foreign currency instead of domestic currency increases. Some previous studies measured the dollarization by considering only asset dollarization or only liability dollarization may have deficiencies in the comprehensive definition of dollarization. Therefore, a comprehensive measurement of dollarization should better consider both the assets and liabilities of the balance sheets. The empirical findings of this study indicate that the degree of dollarization has been increasing since 2013 and the rate of increase accelerated especially after 2021 based on the comprehensive dollarization index constructed.

**Keywords:** Dollarization, Turkish economy, composite dollarization index, inflation, macroeconomic instabilities

**JEL Codes:** E31, F31, G01

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