

### IMPACT OF EXCHANGE RATE ON BANK'S BALANCE SHEET

#### RANJAN KUMAR HUI

RATNA CHATTOPADHYAY

Research Scholars, Shri JJT University, Rajasthan.

Research Scholars, Shri JJT University, Rajasthan.

#### ABSTRACT

Foreign Exchange risk arises when a bank holds assets or liabilities in foreign currencies and impacts the earnings and capital of bank due to the fluctuations in the exchange rates. No one can predict what the exchange rate will be in the next period, it can move in either upward or downward direction regardless of what the estimates and predictions were. This uncertain movement poses a threat to the earnings and capital of bank, if such a movement is in undesired and unanticipated direction. This study captures various needs why does banks hold foreign currency assets, the impact of exchange rate movement and various risk mitigation measures. Author of this paper acknowledges the help taken from the write up on the subject spread over various web pages. A few of which has been has been referred in the webliography

#### INTRODUCTION

Since the 1990s the amount of banking assets and liabilities denominated in foreign currency has become more substantial in commercial banks in India. Banks in emerging countries as in India hold a sizable amount of fund in foreign currency. Liberalization of financial markets has given more latitude for the banks in these countries to obtain funds and extend credits denominated in foreign currency. As a result, holding assets and liabilities denominated in foreign currency has become prevalent in the banking sector. In this liberalized economic world, foreign exchange risk management has become an integral part of banking operations.

As on March 21, 2014, Net Foreign Currency Assets of commercial banks in India was **C**(-) 1977.86 Billion.

	<b>T</b> Billion
Foreign Currency Assets	1495.32
Non-resident Foreign Currency Repatriable Fixed Deposits	2541.47
Overseas Foreign Currency Borrowings	931.70
Net Foreign Currency Assets of Commercial banks	1977.85

(Data Source: http://dbie.rbi.org.in

## PURPOSE HOLDING ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCY, MAINLY DOLLAR:

The possible reasons for holding assets and liabilities denominated in foreign currency, mainly dollar, are:

• High variance of domestic inflation

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN REGIONAL STUDIES, LAW, SOCIAL SCIENCES, JOURNALISM AND MANAGEMENT PRACTICES EMAIL ID: <u>anveshanaindia@gmail.com</u>, WEBSITE: <u>www.anveshanaindia.com</u>

### AIJRRLSJM VOLUME 1, ISSUE 10 (2016, NOV) (ISSN-2455-6602) ONLINE ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN REGIONAL STUDIES, LAW, SOCIAL SCIENCES, JOURNALISM AND MANAGEMENT PRACTICES

- High domestic interest rates
- A low variance of exchange rate

Equal treatment on the dollar and domestic currency deposits in the case of bank default leads the bank to choose a greater share of dollar deposit than is socially desirable. (Broda and Yeyati - 2003).

# RISKS OF HOLDING ASSETS AND LIABILITIES DENOMINATED IN FOREIGN CURRENCY:

The banks may face the risk from exchange rate change. When assets and liabilities are invoiced in foreign currency, exchange rate depreciation directly increases the values of the assets and the liabilities in terms of domestic currency. If the amount of foreign currency assets and liabilities are the same then there is no direct effect of the exchange rate depreciation on the bank's balance sheet. It directly affects the banks through the structure of assets and liabilities denominated in foreign currency, off-balance sheet exposure, and non-asset based services (Martin and Mauer, 2003). The indirect effects of the exchange rate depreciation on the banks can be channeled through its effect on the demand for loans, the extent of competition, and other aspects of banking conditions. Exchange rate depreciation can also adversely affect domestic borrowers and in turn lead to the deterioration of the asset quality of the bank. Even when a bank does not have foreign currency assets and liabilities mismatch, it may face credit risk and liquidity risk that can lead to insolvency. The exchange rate depreciation had an adverse effect on the banks' balance sheets and can lead a bank to fail.

### MANAGEMENT OF FOREIGN EXCHANGE EXPOSURE:

#### A. INTERNAL TECHNIQUES

Internal techniques of exposure management are part of bank's own foreign currency management. Following are the internal techniques that are normally adopted by banks:

#### Netting Leads and Lags Netting is a method adopted where in Leads and Lags: Leads & Lags refer to the asset in a foreign currency is used payments or of covering timing of to pay up a liability in foreign arrangements connected with foreign trade currency so that there is no need for transactions, adjusted for the purpose of conversion. Hence, netting avoiding losses or securing profits through presupposes a simultaneous an anticipated change in exchange rate. occurrence

### **B. EXTERNAL TECHNIQUES:**

Under these techniques bank dealing in foreign exchange undertakes a transaction consequent to which a part or whole of the exchange risk is transferred to others. There are many tools available that can be used, either independently or in combination, for affecting such a transfer.

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN REGIONAL STUDIES, LAW, SOCIAL SCIENCES, JOURNALISM AND MANAGEMENT PRACTICES EMAIL ID: <u>anveshanaindia@gmail.com</u>, WEBSITE: <u>www.anveshanaindia.com</u>



**VOLUME 1, ISSUE 10 (2016, NOV)** 

#### ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN REGIONAL STUDIES, LAW, SOCIAL SCIENCES, JOURNALISM AND MANAGEMENT PRACTICES

Forward contract:	<b>Currency futures:</b>	Currency options:	Currency swaps:
A forward		A currency option is	A currency swap (or
contract is a private	Currency futures are a	a contract that grants	a cross currency
agreement between	transferable futures contract	the holder the right,	swap) is a foreign
two parties giving	that specifies the price at	but not the	exchange derivative
the buyer an	which a currency can be	obligation, to buy or	between two
obligation to	bought or sold at	sell currency at a	institutions to
purchase an asset	a future date. Currency	specified exchange	exchange the
(and the seller an	future contracts allow	rate during a	principal and/or
obligation to sell an	investors to hedge against	specified period of	interest payments of
asset) at a set price	foreign exchange risk.	time.	a loan in
at a future point in			one currency for
time.			equivalent amounts,
			in net present value
			terms, in
			another currency.

#### CONCLUSION:

Whenever a commercial bank deals in foreign currency, it is exposed to risk of exchange rate. When these transactions are done on the behalf of customers, the risk is also transferred to them and the bank has no exposure. Bank's assets & liabilities in foreign currencies or assets and liabilities in other countries give rise to Foreign exchange risk which has to be managed by the bank. Mitigation of foreign exchange risk has become more crucial after economic liberalization since 1991.

#### Webliography:

www.frbsf.org/economic-research/...letter/.../banks-and-foreign-exchange-exposure/

https://ideas.repec.org/a/blg/journl/v11y2016i1p124-139.html

www.investopedia.com/articles/forex/.../effects-currency-fluctuations-economy.asp

www.tandfonline.com/doi/full/10.1080/23322039.2015.1125332

https://www.degruyter.com/view/j/sbe.2016.11.issue-1/sbe.../sbe-2016-0011.xml

www.bis.org/publ/bppdf/bispap73d\_rh.pdf

www.investopedia.com/.../how-do-interest-rate-changes-affect-profitability-banking-s...

ANVESHANA'S INTERNATIONAL JOURNAL OF RESEARCH IN REGIONAL STUDIES, LAW, SOCIAL SCIENCES, JOURNALISM AND MANAGEMENT PRACTICES EMAIL ID: <u>anveshanaindia@gmail.com</u>, WEBSITE: <u>www.anveshanaindia.com</u>