PGBA (S4) 04

INTERNATIONAL FINANCE

SEMESTER - 4

BUSINESS ADMINISTRATION
(Finance Specialisation)

BLOCK - 2

KRISHNA KANTA HANDIQUI STATE OPEN UNIVERSITY

Subject Experts

Prof. Nripendra Narayan Sarma, Maniram Dewan School of Management, KKHSOU.
Prof. U. R Dhar, Retd. Professor, Dept of Business Administration, GU.
Prof. Mukulesh Baruah,Director, Assam Institute of Management.

Course Co-ordinator : Dr. Chayanika Senapati, Asst. Prof., KKHSOU
Dr. Smritishikha Choudhury, Asst. Prof., KKHSOU

SLM Preparation Team

UNITS	**CONTRIBUTORS**
8, 9,13 & 14	Suman Sarmah,Gauhati Commerce College
10,11 &12	Sanjib Ghimire,KKHSOU

Editorial Team

Content :
8, 9,10,11,12,13 & 14 — Sweta Jalan,NERIM

Structure, Format & Graphics: Dr. Chayanika Senapati, KKHSOU
Dr. Smritishikha Choudhury,KKHSOU

June , 2018

ISBN :

 This Self Learning Material (SLM) of the Krishna Kanta Handiqui State Open University is made available under a Creative Commons Attribution-Non Commercial-Share Alike 4.0 License (international): http://creativecommons.org/licenses/by-nc-sa/4.0/

Printed and published by Registrar on behalf of the Krishna Kanta Handiqui State Open University.

Headquarters: Patgaon, Rani Gate, Guwahati-781017
City Office: Housefed Complex, Dispur, Guwahati-781006; Web: www.kkhsou.in

The University acknowledges with thanks the financial support provided by the Distance Education Bureau, UGC for preparation of this material.

MASTER IN BUSINESS ADMINISTRATION

INTERNAIONAL FINANCE
(Finance Specialisation)

Block 2

DETAILED SYLLABUS

UNIT 8: Foreign Trade Finance **Page No. : 191 – 217**

Concept of Foreign Trade Finance, Types of Export Credit,Pre-shipment Export Credit, Post-shipment Export Credit,Types of Letters of Credit, Export Credit in Foreign Currencies, Refinance from Reserve Bank of India, Role of Export Import Bank of India and Role of Export Credit Guarantee Corporation

UNIT 9: Nature and Measurement of Foreign Exchange Exposure **Page No. : 218 – 239**

Concept of Foreign Exchange Exposure,Types of Foreign Exchange Exposure,Transaction Exposure,Translation Exposure, Economic exposure

UNIT 10: International Capital Structure **Page No. : 240 – 250**

Overview of International Capital Structure,Cost of Capital of a Multinational Company,Capital Structure of Multinational Companies and Cost of Capital in Segmented Vs Integrated Markets

UNIT 11: International Capital Budgeting **Page No. : 251 – 259**

Overview of International Capital Budgeting,Adjusted Present Value Model,Capital Budgeting From Parent Firm's Perspective,Significance of Foreign Exchange Rates in International Capital Budgeting and Issues in International Capital Budgeting

UNIT 12: International Taxation **Page No. : 260 – 277**

International Tax System,Principles of Taxation,Double Taxation,DTAAs and Model Tax Conventions,Tax Havens,Transfer Pricing and International Tax Management Strategy and Indian Tax Environment

UNIT 13: International Portfolio Investment **Page No. : 278 – 296**

Benefits of International Investing, International Diversification, Barriers to International Diversification,Vehicles for Overcoming Capital Flow Barriers, Asset Allocation Policy and Management Style and Portfolio Hedging Strategies

UNIT 14: Global Financial Instrument **Page No. : 297 – 307**

Global Depository Receipt (GDR),Need for GDR issues by Indian Companies,Requirements for Issuing GDRs,Parties to GDRs,Steps in Issue of GDRs and American Depositary Receipt (ADR)

BLOCK INTRODUCTION:

This is the second block of the course 'International Finance'. The Block is divided into 7 units which are related to the differnt concepts of International Finance.

This block comprises of the following seven units:

The eight unit introduces us to Concept of Foreign Trade Finance, Types of Export Credit,Pre-shipment Export Credit, Post-shipment Export Credit,Types of Letters of Credit, Export Credit in Foreign Currencies, Refinance from Reserve Bank of India, Role of Export Import Bank of India and Role of Export Credit Guarantee Corporation

The ninth unit introduces us to concept of Foreign Exchange Exposure,Types of Foreign Exchange Exposure,Transaction Exposure,Translation Exposure, Economic exposure

The tenth unit gives us a broad idea on the overview of International Capital Structure,Cost of Capital of a Multinational Company,Capital Structure of Multinational Companies and Cost of Capital in Segmented Vs Integrated Markets

The eleventh unit gives us an idea on the overview of International Capital Budgeting,Adjusted Present Value Model,Capital Budgeting From Parent Firm's Perspective,Significance of Foreign Exchange Rates in International Capital Budgeting and Issues in International Capital Budgeting

The twelvlth unit will help us in knowing International Tax System,Principles of Taxation,Double Taxation,DTAAs and Model Tax Conventions,Tax Havens,Transfer Pricing and International Tax Management Strategy and Indian Tax Environment.

The thirteenth unit gives us a broad idea on benefits of International Investing, International Diversification,Barriers to International Diversification,Vehicles for Overcoming Capital Flow Barriers, Asset Allocation Policy and Management Style and Portfolio Hedging Strategies

The forteenth unit will help us in understanding the Global Depository Receipt (GDR),Need for GDR issues by Indian Companies,Requirements for Issuing GDRs,Parties to GDRs,Steps in Issue of GDRs and American Depositary Receipt (ADR).

The Block is devided into seven units:

UNIT 8: Foreign Trade Finance

UNIT 9: Nature and Measurement of Foreign Exchange Exposure

UNIT 10: International Capital Structure

UNIT 11: International Capital Budgeting

UNIT 12: International Taxation

UNIT 13: International Portfolio Investment

UNIT 14: Global Financial Instrument

UNIT 8: FOREIGN TRADE FINANCE

UNIT STRUCTURE

8.1 Learning Objectives

8.2 Introduction

8.3 Concept of Foreign Trade Finance

8.4 Types of Export Credit

8.5 Pre-shipment Credit

8.6 Post-shipment Credit

8.7 Types of Letters of Credit

8.8 Export Credit in Foreign Currencies

8.9 Refinance from Reserve Bank of India

8.10 Role of Export Import Bank of India

8.11 Role of Export Credit Guarantee Corporation (ECGC)

8.12 Let Us Sum Up

8.13 Further Reading

8.14 Answers to Check Your Progress

8.15 Model Questions

8.1 LEARNING OBJECTIVES

After going through this unit, you will be able to:

- difine the complexities of Financing Foreign Trade
- Identify different types of Export Credit
- discuss the practices adopted in granting Pre-shipment Export Credit
- explain the method of extending Post-shipment Export Credit
- explain the role of various types of Letters of Credit
- dicuss the system of providing Export Credit in Foreign Currencies
- analyse the role of Reserve Bank of India as a Refinancing Institution
- discuss the role of Export Import Bank of India
- appreciate the policies and guarantees issued by ECGC.

10.2 INTRODUCTION

In the previous unit we have discussed about exchange rate

determination.Now in this unit we will discuss about the different types of Export Credit, Types of Letters of Credit, Export Credit in Foreign Currencies, Refinance from Reserve Bank of India, Role of Export Import Bank of India and Role of Export Credit Guarantee Corporation.

8.3 CONCEPT OF FOREIGN TRADE FINANCE

Foreign Trade implies a trade transaction between two parties, each one of whom is located in a different country. In other words, trading between two different countries is referred to as foreign trade. It is to be distinguished from the home trade, which takes place within the frontiers of the same country.

The basic task of financing the foreign trade is similar to that of the home trade i.e. to receive payments from the buyers and to make payments to the sellers. This task is largely performed through the instrument of bills of exchange, which are called foreign bills of exchange. Banks play an important role in facilitating the process of receipt of payments in case of foreign trade. But the international character of foreign trade gives rise to a number of problems which render the task of financing complicated. These complexities are as follows:

(i) Lack of uniformity in the currencies of the two countries;

(ii) Lack of personal contacts between the buyers and the sellers;

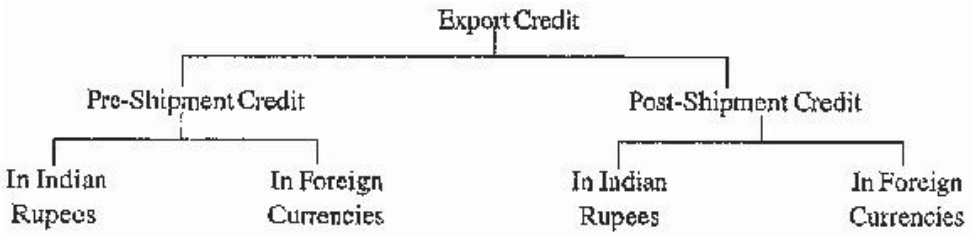
(iii) Variations in the trade practices and usages in the two countries; and

(iv) Different legal and regulatory systems in the two countries.

Hence banks adopt their practices and techniques to suit the needs of financing the foreign trade. Letters of credit play an important role in financing the foreign trade. Reserve Bank of India provides refinance to the banks at concessional rate. Export Import Bank also provides refinance in respect of medium term export credit and directly extends export credit. Guarantees issued by Export Credit Guarantee Corporation of India facilitate the task of financing the foreign trade. First we shall study the procedure adopted by banks in this regard.

8.4 TYPES OF EXPORT CREDIT

The credit required by an exporter from a banker is broadly divided into two categories, viz (i) Pre-shipment credit, and (ii) Post-shipment credit. Both of these may be acquired either in Indian Rupees or in Foreign Currencies. Hence, export credit may be further sub-categorized as follows:-



Pre-shipment Credit means any loan or advance or any other credit provided by a bank to an exporter for financing the purchase, processing, manufacturing or packing of goods prior to shipment. On the other hand ***Post- shipment Credit*** means any loan or advance granted or any other credit provided by a bank to an exporter of goods from India after the shipment of goods to the realization of the export proceeds. Thus the dividing line between the two types of export credits is the date of shipment. Generally, the pre-shipment credit is extinguished by the submission of export bills and connected documents. Thereafter, it is called post-shipment credit.
Let us now discuss the above types of credit in the following sections.

8.5 PRE-SHIPMENT CREDIT

As noted above, the pre-shipment credit meets the working capital needs of an exporter at the pre-shipment stage. When an exporter receives an export order, the goods to be exported may not be readily available with him for shipment. He has to purchase the raw materials/semi-finished goods, process/manufacture the same, or may procure the goods from their suppliers, pack them and dispatch them to the port town. The funds required for all these purposes are called pre-shipment credit.

Banks provide pre- shipment credit after taking into consideration all factors relevant for granting credit. But the basis of granting such credit is:

(i) A letter of credit opened by the importer in favour of the exporter, or

(ii) A confirmed and irrevocable order for the export of goods from India, or any other evidence of such an order.

The following points are taken into account while granting pre-shipment credit:

(i) Pre-shipment credit is to be granted for the period which is sufficient to meet the needs of the exporter. But if the period of credit exceeds 180 days, no refinance will be granted by the Reserve Bank of India. If the pre-shipment advance is not adjusted by submission of export documents within 360 days, the advance will not remain eligible for concessional rate of interest.

(ii) Packing credit may be released in one lump sum or in installments as required by the exporter. Banks must monitor the end-use of the funds and ensure their utilization for genuine requirement of exports.

(iii) Pre-shipment credit must be liquidated out of the proceeds of the export bill on its purchase, discount etc by the banker. Thus the pre-shipment credit must be converted into post-shipment credit.

(iv) In case of agro-based products, the non-exportable products are to be sold within the country. Banks must charge interest at commercial rate, as applicable to domestic advance, on packing credit covering non-exportable portion.

(v) In some cases, exporters need packing credit **in** anticipation of receipt of letters of credit/firm export order from importers. This happens when the raw materials are seasonal in nature or when the manufacturing time is greater than the delivery schedule.

In such cases, banks may extend *Pre-Shipment Credit Running Account facility* and grant credit taking into account the exporter's needs and without insisting on firm export order or letter of credit.

8.6 POST-SHIPMENT CREDIT

Need for post-shipment credit arises after the exporter has shipped the goods and has secured the shipping documents, such as bill of lading, etc. Now, the concern of the exporter is to realize his dues from the foreign importer. This is invariably done by drawing a bill of exchange on the importer.

The bill may be drawn either on *Documents Against Acceptance* (D/A) basis or on *Documents against Payment* (D/P) basis. In the former case, the importer takes delivery of the documents by giving his acceptance on the bill, sent to him through the exporter's banker. Thereafter he takes delivery of the goods from the shipping company and makes payment of the accepted bill on its due date. In case the bill is drawn on DIP basis the documents are released to the importer at the time he makes payment of the bill to the exporter's bank, on its presentation.

Exporter's bank provides post-shipment advance to the exporter in either of the two ways, viz,

(i) By purchasing, discounting or negotiating the export bills,

(ii) By granting advance against bills for collections.

Thus, post-shipment credit is liquidated by the proceeds of the export bills when received from the importer by the exporter's bank.

Banks also grant advances to the exporters against duty drawback *which* he has to receive from the government. Such advance is liquidated when the amount of duty drawback is received by the exporter.

Export bills are of two types. **Demand Bills,** which are payable on demand or on presentation before the importer. In case of demand bills, the banker grants an advance to the exporter, but the period of advance should not exceed the normal transit period i.e. the average period normally involved from the date of purchase/ discount of the bill till the receipt of the proceeds of the bill by the bank. Such advance is thus automatically liquidated with the realization of the export bills.

Usance Bills which mature after a period of time. In case of usance bills banks grant credit for a maximum period of 180 days from the date of shipment inclusive of normal transit period and the grace period. Such bills are presented for acceptance before the importer and thereafter it is retained by the bank concerned. On its due date it is presented again before the acceptor for its payment.

There are two methods of dealing with such bills-(a) purchase or discounting of the bills and (b) collection of the bills.

a) **Purchase/Discounting of Bills:** In case of purchase of documentary bills by the exporter's banker, it is usual for the latter to give immediate credit for the bills. An amount by way of discount, fee, interest, etc, is charged by the banker from the amount of the bill and the remaining amount is immediately made available to the exporter (drawer of the bill). This facility is generally granted in case where the standing of the exporter is good and he is considered credit-worthy for the amount of the bill, because in case the drawee of the bill refuses to honour the bill, the banker shall be entitled to recover its amount from the drawer exporter.

If the banker is unable to recover the amount of the bill from the exporter also his ultimate remedy would be to realize it by disposing off the goods exported. Therefore while purchasing/discounting the export bills, the banker takes into consideration the nature of the goods covered by the bills, the nature of its demand and the possibilities of variations in its price. Moreover, the exporter is required to take a suitable guarantee issued by the Export Credit Guarantee Corporation. We shall study about these guarantees later in this unit.

In addition to the above, the banker also takes into account the foreign exchange regulations in the importer's country and purchases the export bill if the importer's country has not imposed any restrictions on making such payments. The banker also examines the documents enclosed with the bill and ensures that they are genuine and are in order.

b) **Collection of Bills:** The banker collects the foreign bills on behalf of the customer in the same way as in the case of home trade: In case the exporter sends to his banker export bills for collection, the latter proceeds according to the instructions given by the exporter drawer and makes its payment to him as and when the proceeds of the bill are realized from the importer. Obviously, in case of collection of bills, the banker does not grant any advance to the exporter immediately on receipt of the bills *for* collection. Such practice is usually adopted when the exporter does not enjoy reputation which is required in case the bill is purchased/discounted by the banker.

Negotiation of Bills under Letters of Credit

The above mentioned methods of realizing the export bills is prevalent in cases where the foreign buyer is well known to the exporter and the latter feels no risk or hesitation in sending the documents on D/A or DIP basis. But in circumstances where the exporter has no previous experience of dealing with the importer or has no reliable information on the financial standing and credit-worthiness of the importer, he might not like to adopt the above procedure for realizing his dues. This risk of uncertainty about receiving payment is largely mitigated by securing a letter of undertaking from the banker of the importer. Such letter is called, Letter of Credit (L/C) which plays a very important role in financing the foreign trade.

A Letter of Credit is defined as a letter issued by the banker of the buyer, at the latter's request, in favour of the seller (exporter) informing him that the issuing banker undertakes to accept the bills drawn in respect of exports made to the buyer specified therein. It is thus, a written intimation from the banker issuing it, that they have been instructed to open a credit for a certain amount of goods to be exported under certain terms and conditions. The importer at whose request the L/C is issued is called the *applicant,* the exporter is called the *beneficiary* and the banker issuing it is called the *issuing banker.*

The greatest benefit of securing a L/C by the exporter from the importer is the certainty of payment of the export bills, as the importer's bank gives an undertaking to this effect. This enhances the value of the export bills drawn under L/C. The bill may be easily negotiated by the exporter with his banker. Moreover, it also provides security against exchange restrictions in the importer's country.



CHECK YOUR PROGRESS

Q1: What is Foreign Trade

.....

Q2: Name the types of Export credit

.....

8.7 TYPES OF LETTERS OF CREDIT

Letters of Credit are of various types as described below:

1) Documentary Letter of Credit and Clean Letter of Credit:

When the L/C contains a clause that documents of title to goods, such as bill of lading, insurance policy, invoice, consular invoice, certificate of origin, etc, must be attached with the bill of exchange drawn under L/C, it is called a documentary L/C. In the absence of such a clause, it is called a clean letter of credit.

2) Fixed Credit and Revolving Credit:

In case of fixed credit, the L/C specifies the amount upto which one or more bills may be drawn by the beneficiary within the specified period of time. But in case of revolving credit, the L/C specifies the total amount upto which bills drawn *may* remain outstanding at a time. As soon as a bill is paid by the importer, another bill may be drawn by the exporter on the importer under the same L/C.

3) Revocable and Irrevocable Letter of Credit:

When the opening banker reserves to itself the right to cancel or modify the credit at any time without prior notice to the beneficiary, it is called revocable L/C. When a L/C cannot be revoked or cancelled as above it is an irrevocable L/C and provides unconditional undertaking to the exporter.

4) Confirmed and Unconfirmed L/C:

When the issuing banker requests the advising bank (i.e. the banker in exporter's country), to add its own confirmation, also to an irrevocable credit and the latter does so, it is called irrevocable and Confirmed L/C. After confirmation the advising banker is called ***confirming banker*** and takes upon itself the task of negotiating the export bills without recourse to the drawer.

5) With and without Recourse Credits:

In case of 'With Recourse' bills the banker, as the holder of the bill, can recover obligation. The negotiating banker should, therefore, take the following precautions the amount of the bill from its drawer, in case the drawee of the bill fails to honour it. On the other hand, in case of Without

Recourse credit the issuing banker will have recourse to the drawee only. If he fails to pay, banker can realize by disposing off the goods.

Negotiation

When a bill of exchange is drawn under a letter of credit, it may be negotiated with any banker in the exporter's country. But if the L/C mentions the name of any . particular bank for the purpose of negotiation, it must be negotiated only with that banker.

By negotiation we mean that the negotiating banker (i.e. the banker through whom the.export bills are sent to the importer), pays to the drawer the value of the bill on the basis of the undertaking given by the opening banker. But it is very important that the terms and conditions specified in the L/C are duly complied with, because if any condition is not complied with, the opening banker shall not remain liable to meet its obligation .The negotiating banker should, therefore, take the following precautions at the time of negotiating the export bills.

The last date within which the bill must be negotiated has not expired because L/C becomes ineffective after the expiry of such date.

The documents required to be attached with the bill must be in order. If the banker finds any irregularity or deficiency therein, he must get it rectified; otherwise refuse to negotiate the bill.

The following documents are usually enclosed with the Bill of Exchange:

a) Invoice
b) Bill of lading
c) Marine Insurance Policy
d) Certificate of Origin

The invoice and other documents must have the same description of the goods as is given in the letter of credit

8.8 EXPORT CREDIT IN FOREIGN CURRENCIES

Reserve Bank of India has permitted the authorized dealers in foreign exchange to extend export credit, both pre-shipment and post-shipment, in foreign currencies viz U.S dollars, pound sterling, Japanese Yen, Euro, etc.

a) Pre-shipment Export Credit in Foreign Currencies:

Pre-shipment Credit in foreign currency is granted to exporters for purchasing domestic and imported inputs for goods to be exported. Rate of interest is related to LIBOR/EURO. It is applicable to only cash exports.

Banks are permitted to extend pre-shipment credit in one convertible currency in respect of an export order while invoice is prepared in another convertible currency. The risk and cost of cross-currency transaction will be borne by the exporter.

Sources of Funds for Banks: Banks may grant pre-shipment credit in foreign currency from the funds raised from the following sources:

(i) ***Foreign Currency Balances*** available with the banks in different types of accounts, viz. Exchange Earners Foreign Currency Accounts, Resident Foreign Currency Accounts, Foreign Currency (Non-Resident) Accounts, Exporters Foreign Currency Accounts.

(ii) ***Foreign Currency lines of Credit:*** Banks may arrange lines of credit with overseas banks for this purpose, provided the rate of interest on such borrowings does not exceed 0.75% over six months LIBOR/ EURO. If it exceeds this limit, approval from Reserve Bank of India is required.

Banks may also arrange lines of credit from other banks in India, if they are not able to raise loans abroad.

Pre- shipment credit in Foreign Currency is initially granted for a maximum period of 180 days which may be extended further but an additional interest of 2% is charged.

Such credit is required to be liquidated out of the proceeds of export bills, when they are submitted for discounting/re-discounting. Export bills are not to be accepted by banks for collection.

Banks are permitted to extend Running Account facility under PCFC Scheme also, just as is provided in case of Rupee credit. Such facility should be provided to exporters with good track record, who should produce L/C or firm orders within a reasonable period of time.

Reserve Bank of India does not provide any refinance against export credit under PCFC scheme.

b) Post-shipment Export Credit in Foreign Currency:

Exporters are permitted to avail of pre- shipment credit and post-shipment credit either in rupees or in foreign currency. But if they have taken pre- shipment credit in foreign currency, the post -shipment credit has to be necessarily in foreign currency because foreign currency pre-shipment credit has to be liquidated in foreign currency.

Banks, having discounted the export bills drawn in foreign currencies, are allowed to re-discount such bills abroad at rates linked to international interest rates at post-shipment stage. For this purpose, they may arrange a Bankers Acceptance Facility (BAF) for rediscounting the export bills without any margin and duly covered by collateralized documents.

Each bank can have its own BAF limit fixed with an overseas bank or a re-discounting agency.

The exporters can also arrange themselves a line of credit with an overseas bank or any other agency for discounting their export bills directly. Bills are to be rediscounted through the bank from whom pre-shipment credit facility has been availed of.

The above scheme covers mainly export bills with usance period upto 180 days from the date of shipment including normal transit period and grace period. Demand bills may also be included if overseas institution has no objection. Reserve Bank's prior approval is required for bills having usance of more than 180 days.

Sources of funds for post -shipment export credit are the same as are in case of pre-shipment export credit in foreign currency. Banks should re-discount export bills with recourse terms. If they can arrange such facility on competitive terms on without recourse basis, they are permitted to do so. Reserve Bank of India does not grant refinance facilities against export bills discounted/rediscounted under the scheme.

8.9 REFINANCE FROM RESERVE BANK OF INDIA

In order to promote exports from the country and to increase the competitiveness of Indian exporters, Reserve Bank of India provides refinance to the commercial banks at concessional rates, in respect of the

export credit provided by them. Section 17 (3A) of the Reserve Bank of India Act, 1934 empowers the Reserve Bank of India to make advances to any scheduled bank against its promissory notes repayable on demand or on the expiry of fixed periods not exceeding 180 days, provided a declaration in writing is furnished by the scheduled bank that :

(i) It holds eligible export bills of a value not less than the amount of such loan and advance, such bills should have usance not exceeding 180 days; or

(ii) It has granted a pre-shipment loan or advance to an exporter in India to enable him to export from India. The amount of such pre-shipment loan drawn and outstanding at any time should not be less than the advance obtained by the borrowing bank from the Reserve Bank. The period of pre-shipment credit should not exceed 180 days, which may be extended, for reasons beyond the control of the exporter.

Thus Reserve Bank of India provides refinance both in respect of pre-shipment credit and post-shipment credit. The essential pre-requisite is the submission of a promissory note, supported by a declaration about having granted export credit.

Section 17(4) enables the Reserve Bank of India to grant advances repayable on demand on the expiry of fixed period not exceeding 90 days against the security of bills arising out of export transaction repayable on demand or on the expiry of fixed periods not exceeding 180 days.

Extent of Refinance

Reserve Bank of India provides refinance which is linked with the export credit extended by a bank. With effect from May 5, 2001, scheduled commercial banks are provided export credit refinance to the extent of 15% of the outstanding export credit eligible for refinance as at the end of the second preceding fortnight. Thus with the increase in the value of export credit extended by a bank, the refinance facility also correspondingly increases.

Gold Card Scheme for Exporters

Reserve Bank of India has formulated a Gold Card Scheme for creditworthy exporters with good track record for easy availability of export

credit on best terms. Salient features of the scheme are as follows:

(i) All creditworthy exporters including those in small and medium sectors with good track record would be eligible as per the criteria laid down by the banks.

(ii) Banks would clearly specify the benefits they would be offering to gold card holders.

(iii) Request from card holders would be processed quickly within a prescribed time frame.

(iv) 'In-principle' limits would be set for a period of 3 years with a provision for stand-by limit of 20% to meet urgent credit needs

(v) Card holders would be given preference in the matter of granting packing credit in foreign currency.

(vi) Banks would consider waiver of collateral and exemption from ECGC guarantee schemes on the basis of card-holders credit-worthiness and track record.

Interest Rates on Export Credit

In order to reduce the cost of export credit to the exporters, so as to increase their competitiveness in the international markets, Reserve Bank of India has prescribed ceiling rates for different categories of export credit. Banks are free to charge any rate below the ceiling rates. Present rates, effective from May 1, 2004, are as follows:

Types of Advances	Rate of Interest (P.C., PA)
1. Pre-shipment Credit	
(a) (i) Upto 180 days	Not exceeding BPLR minus 2.5 percentage points
(ii) Beyond 180 days and upto 270 days	Banks are free to determine rates of interest subject to BPLR and spread guidelines
(b) Against incentives receivable from Govt. covered by ECGC Guarantee (upto 90 days)	Not exceeding BPLR minus 2.5 percentage points
2. Post - Shipment Credit	

(a) On demand bills for transit period	Not exceeding BPLR minus 2.5 percentage points
(b) Usance bills (for total period)	Not exceeding BPLR minus 2.5 percentage points
(i) Upto 90 days (maybe extended upto 365 days for eligible exporters under Gold Card Scheme)	Not exceeding BPLR minus 2.5 percentage points
(ii) Beyond 90 days and upto 6 months from the date of shipment.	Banks are free to determine interest rates subject to BPLR and spread guidelines
(c) Against incentives from Govt.	Not exceeding BPLR minus 2.5%
(d) Against undrawn balance (upto 90 days)	Not exceeding BPLR minus 2.5%
(e) Against retention money payable within one year from the date of shipment	Not exceeding BPLR minus 2.5%
3. Deferred Credit	
For period beyond 180 days	Banks are free to determine rate of interest subject to BPLR and spread guidelines.



CHECK YOUR PROGRESS

Q3: Write any three types of letters of credit

.....

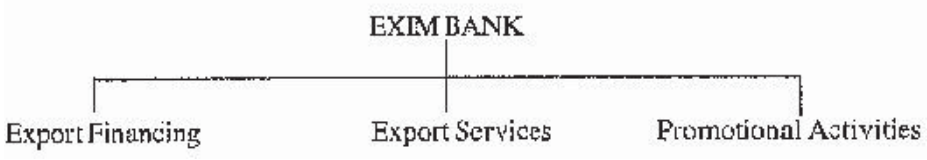
Q4: What are the documents are usually enclosed with the Bill of Exchange?

.....

8.10 ROLE OF EXPORT IMPORT BANK OF INDIA

Export-Import Bank of India (EXIM BANK) was set up by an Act of Parliament on January 1, 1982 for the purpose of financing, facilitating and

promoting the foreign trade of India. It is the principal financial institution for coordinating the working of institutions engaged in financing exports and imports. It is also allowed to finance export of consultancy and related services, assist joint venture in third world countries, and finance export-oriented industries. Besides the finance function, EXIM Bank also renders a diverse range of information, advisory and support services to exporters. The functions of the EXIM bank thus broadly fall in the following three categories:



Export Financing by EXIM Bank:

Though the EXIM Bank performs all the above three functions, the focus of the Bank is on export financing, for which it has introduced a number of lending programmes which are meant for:

a) Indian Exporters

b) Commercial Banks

c) Overseas Entities

We shall discuss these Programmes meant for financing of exports from India.

a) Lending Programmes for Exporters:

EXIM Bank provides finance to exporters directly through the following schemes:

1) Pre-Shipment Credit: Pre-shipment credit is provided to Indian exporters to enable there to buy raw materials and other inputs for export contracts involving. production time exceeding six months.

2) Foreign Currency Pre-shipment Credit: Under this scheme, credit is provided in foreign currency to the exporters to enable them to import raw materials and other inputs needed for export production.

3) Export (Supplier's) Credit: Under this scheme, EXIM Bank

extends medium term credit for periods exceeding six months to exporters to enable them to extend term credit to overseas importers of eligible Indian goods. Such credit is called Supplier's Credit. Indian exporters of plants, equipments, machinery and related services are eligible for assistance under this scheme.

4) **Finance for consultancy and Technology Services:** EXIM Bank offers a special credit facility to Indian exporters of consultancy and technology services, so that they can, in turn, extend term credit to overseas importers. The services covered include providing personnel for rendering technical services, transfer of technology/know-how preparations of project feasibility reports etc.,

5) **Finance for Project Export Contracts:** Indian project exporters incur rupee expenditure while executing overseas project export contracts. EXIM Bank helps them in meeting these expenses.

Services to Exporters:

EXIM Bank renders the following important services to the exporters:

1) **Guarantee Facilities:** EXIM Bank enables Indian companies to provide requisite guarantees to facilitate execution of export contracts and import transactions.

2) **Forfaiting:** Forfaiting is a financing mechanism that enables a company to convert credit sale to cash sale on without recourse basis. In other words, the exporter transfers his receivables for exported goods to a third party (i.e. forfaitor) who pays immediately their value to the exporter after deducting his commission and realizes afterwards from the debtors. EXIM Bank acts as a facilitator for the Indian exporter in availing the services of an overseas forfaiting agency.

b) **Facilities for Commercial Banks in India:**

EXIM Bank provides the following refinance/re-discounting facilities to commercial banks in India:

1) **Export Bills Re-discounting Facility:Under** this facility the commercial banks may re -discount the export bills of their small scale industry customers with the EXIM Bank. The usance of such export bills should not exceed 90 days.

2) **Refinance of Export (Supplier's) Credit: This** facility enables the commercial banks to avail refinance from EXIM Bank in respect of the credit granted to Indian exporters of eligible goods, who, in turn, extend term credit for more than 180 days to importers overseas.

c) Facilities for Overseas Entities:

The following facilities are offered by EXIM Bank to overseas buyers and financial institutions, etc.

1. **Buyer's Credit:** Overseas buyers can avail of Buyer's Credit from EXIM Bank to import eligible goods from India on deferred payment terms.
2. **Lines of Credit:** Under Lines of credit EXIM Bank grants credit to Overseas Financial Institutions, Foreign Governments and their Agencies to enable them to on lend term loans to finance import of eligible goods from India.

8.11 ROLE OF EXPORT CREDIT GUARANTEE CORPORATION (ECGC)

Export Credit Guarantee Corporation (ECGC), a company wholly owned by the Government of India, is not a lending institution. Its objective is mainly to help exporters to obtain finance from commercial banks. This objective is achieved by

a) Issuing insurance policies to the exporters to cover their commercial and political risks in respect of the goods exported by them, and

b) Issuing financial guarantees to banks to cover the risks involved in providing credit to exporters.

It charges premium for issuing such policies which are as low as possible. The ECGC, thus, plays a very important role in the financing of exports from India. We shall study in detail about these policies.

The products and services offered by ECGC are broadly classified as under:

1) Credit Insurance Policies
2) Maturity Factoring
3) Guarantees to Banks

4) Special Schemes

Credit Insurance Policies:

Some of the important credit insurance policies are discussed below:

i) Standard Policy:

The Shipments (Comprehensive Risks) Policy is the most important policy issued by ECGC. It covers the risks in respect of goods exported on short term credit i.e. credit not exceeding 180 days. This policy covers both *commercial* and *political risks* from the date of shipment. It is issued to those exporters whose estimated export turnover is more than Rs.50 lakh during the next 12 months. The policy covers the following commercial and political risks:

(a) Commercial Risks:

(i) Insolvency of the buyer

(ii) Default by the buyer to make payment for the goods accepted by them within a specified period

(iii) Buyer's failure to accept the goods (when such non-acceptance is not due to exporter's actions.

(b) Political Risks:

(i) Imposition of restriction on remittance by the government of the buyer's country or any Government action blocking or delaying transfer of funds by the buyer;

(ii) War, civil war, revolution or civil disturbances in the buyer's country;

(iii) New import restrictions or cancellation of a valid import licence;

(iv) Additional handling, transport or insurance charges due to interruption or diversion of voyage, which cannot be recovered from the buyer;

(v) Any other cause of loss occurring outside India not normally insured by general insurers and beyond the control of both the exporter and the buyer.

(c) Risks Not Covered:

The following risks are not covered by the Standard Policies of ECGC:

(i) Commercial disputes including quality disputes raised by the

buyer, unless the Exporter obtains a decree from a competent court of law in the buyer's country in his favour;

(ii) Causes inherent in the nature of the goods;

(iii) Buyer's failure to obtain necessary import or exchange authorization from authorities in his country;

(iv) Insolvency or default of any agent of the exporter or of the collecting bank;

(v) Loss or damage to goods which can be covered by general insurers;

(vi) Exchange rate fluctuations;

(vii) Failure of the exporter to fulfil the terms of the export contracts or negligence on his part.

Standard policy covers all shipments made by an exporter on credit terms during a period of 24 months. Shipments made against advance payments or those supported by irrevocable letters of credit with confirmation by an Indian Bank may be excluded.

ECGC fixes its maximum liability under each policy. It is the limit upto which ECGC accepts liability for shipments made in each year.

Commercial risks are covered subject to a credit limit approved by the corporation on each buyer to whom goods are sold on credit terms.

The ECGC normally pays 90% of the loss whether it arises due to commercial risks or political risks. The remaining 10% of the loss is borne by the exporter himself.

ii) Small Exporter's Policy: In order to encourage small exporters, such policies are issued with improved terms over the standard policies. Small exporters are those whose anticipated export turnover during the next 12 months does not exceed Rs.50 lakhs. These policies are issued for a period of 12 months (as against 24 months in case of standard policies). In case of these policies ECGC pays the claims to the extent of 95 per cent in case of commercial risks and upto 100 per

cent in case of political risks.

iii) **Specific Shipment Policy (Short term) :** To cover risks in respect of a specific shipment or shipments against a specific contract.

iv) **Buyerwise Policy** To cover risks in respect of all shipments to one or a few buyers.

v) **Consignment Exports Policy** To cover risks in respect of export of goods on consignment basis.

vi) **Buyer Exposure Policies** To cover risks in respect of shipments to a single buyer or multi-buyers based on the expected exposure.

vii) **Software Projects Policy** To cover risk of non-payment to the Indian exporters who provide software services,

viii) **IT - Enabled Services (Specific Customer) Policies** To cover risk of non-payment to the Indian exporters who provide IT - enabled services,

ix) **Services Policy** To cover risk of non-payment to Indian companies entering into contract with foreign principals for providing them with technical or professional services.

x) **Construction Works Policy** To provide cover to an Indian Contractor who executes a civil construction job abroad,

xi) **Specific Policy for Supply Contract** To cover risks in respect of export of capital goods or turnkey projects involving medium/long term credit

xii) **Insurance cover for Buyer's Credit and Line of Credit**

To cover risks in respect of credit extended by a bank in India to an overseas buyer for paying for machinery and equipments to be imported from India or credit extended by a bank in India to an overseas institution for facilitating imports from India

2. Maturity Factoring:

The Maturity Factoring scheme, as designed by ECGC has certain unique features and does not exactly fit into the conventional mould of maturity factoring. The changes devised are intended to give the clients the benefits of full factoring services through the Maturity Factoring scheme, thus effectively addressing the needs of exporters to avail of pre-finance (advance)

on the receivables, for their working capital requirements. One important feature is the very important role and special benefits envisaged for banks under the scheme.

Specific Services provided under this scheme are:

- 100 per cent credit guarantee protection against bad debts;
- Sales register maintenance in respect of factored transactions;
- Regular monitoring of outstanding credits, facilitating collection of receivables on due date, recovery, at its own cost, of all recoverable bad debts.

Payments would be received by the exporter, in his account, through normal banking channels. In the event of non-realisation of dues on factored export receivables. ECGC will promptly make the payment in Indian Rupees, of an equivalent amount, immediately upon the crystallisation of dues by the bank (exchange rate as on the date of crystallisation will apply).

Process of Getting Finance Under This Scheme:

ECGC would facilitate easier availability of bank finance to its factoring clients, by rendering such advances to be an attractive proposition to banks. The Factoring Agreement that would be concluded by ECGC with its clients has an in-built provision incorporating an on-demand guarantee in favour of the bank without any additional payment or compliance or other requirements to be satisfied by the bank.

Specific benefits to the exporters under this scheme:

- Option to give easier credit terms to overseas customers - Better protection than an irrevocable letter of credit, without the need to insist on establishing one.
- Enables to offer more friendly delivery terms, like direct delivery to the customer (as against DP/DA) without any risk.
- Reduced foreign bank handling charges on documents.
- Substantial cost savings relating to monitoring and follow up (telephones, faxes, follow-up visits) of receivables, overdue bank interest on delayed collections and recovery expenses relating to bad debts.
- Increase in export sales, due to more competitive terms offered to

customers.

- Better security than even Letters of Credit (as there is a possibility of refusal of payment in the latter on account of even minor discrepancies).
- Elimination of uncertainties relating to realisation of accounts receivables resulting in better cash management to meet working capital requirements.
- Full attention to procurement/production, marketing and sales and growth of business, due to freedom from chasing receivables

3. Guarantees to Banks:

As we have already noted, exporters obtain pre- shipment and post-shipment credit from the banks. By granting such export credit, banks bear the risks of non-recovery of the amount advanced for various reasons. ECGC issues financial guarantees to the banks, assuring them that in the event of an exporter failing to discharge his liability to the bank, the ECGC would make good a major portion of the loss thus caused to the bank.

ECGC issues the following types of financial guarantees to the banks:

i) **Packing Credit Guarantee:** Packing Credit guarantee is issued for a period of 12 months and covers all advances made by the bank to an exporter within an approved limit during the period. The bank has to submit monthly declaration of the advances and repayments.. Premium is charged at the rate of 10 paise per Rs. 100 per month on the highest amount of advance outstanding on any day during the months. ECGC reimburses the bank to the extent of 66.6% of its loss, if the entire amount due from the exporter is not recovered within a period of 4 months from the due date of repayment. If any amount is recovered by the bank subsequently, it is to be shared between ECGC and the bank in the same ratio; in which the loss was borne by them.

ii) **Export Production Finance Guarantee:** This guarantee is also issued in respect of packing credit granted by banks. It enables the banks to sanction advances to the full extent of cost of production if it exceeds the F.O.B value of the export order. The difference represents the incentive receivable by the exporter. The extent of cover and

premium rates are the same as in case of Packing Credit Guarantee.

iii) **Post-shipment Export Credit Guarantee:** Post-shipment finance given to exporters by way of purchase, negotiation or discount of export bills or advances against such bills is eligible for this guarantee. The exporter is required to hold a suitable policy of ECGC to cover the overseas credit risks.

ECGC charges premium @ 7 paise per Rs.100 per month and reimburses the loss to the extent of 75%. This guarantee is also issued on whole turnover basis. In such cases the loss is covered to the extent of 85%, in case the advance is granted to exporters holding ECGC policy. Advances granted to non-policy-holders are also covered but the percentage of cover is 60%. The premium rate is 5 paise per Rs.100 per month, if advances granted under Letters of Credit bills are also covered under this guarantee. Otherwise the premium rate is 6 paise,

Individual Post -Shipment Export Credit Guarantee can also be obtained in case of non-policy holder, provided the exporter makes shipments solely against letters of credit.

iv) **Export Finance Guarantee:** This guarantee is issued to cover post-shipment advances granted by banks to exporters against export incentives receivable in the form of cash assistance, duty drawbacks, etc. Thus this guarantee is issued when bank provides finance equal to the difference between the export value and the domestic price; such difference is receivable by the exporter from the Government.
ECGC charges premium of such policies @ 10 paise per Rs.100 per month and covers loss to the extent of 75%. Banks having whole turnover packing credit guarantees are eligible for concession *in* premium rate and higher cover,

v) **Export Performance Guarantee:** In the course of export business, exporters are often required to provide guarantees by an Indian bank. For example, bank guarantee is required in case of Bid bonds, performance bonds, against advance payments or their export obligations. ECGC issues Export Performance Guarantees to the

banks to provide protection against losses that may be suffered by them on account of guarantees given by them on behalf of their customers. These guarantees act as counter guarantees and aim at encouraging the banks to give guarantees liberally for export business.

Normally the guarantee covers upto 75% of the loss. But in case of guarantees issued in connection with bid bonds, performance bonds, advance payment and local finance guarantees and guarantees in lieu of retention money, the cover may be increased to 90% premium rate ranges from 90 paise p.a. to Rs.1.08 per annum for 90% guarantee cover.

vi) **Export Finance (Overseas Lending) Guarantee:** This guarantee is issued if a bank finances an overseas project and provides a foreign currency loan to the contractor. It covers the risk of non-payment by the contractor. The premium rates are similar to those prescribed for the performance guarantee. Premium is payable in Indian rupees and so is the case with the claims.

4. Special Schemes:

Transfer Guarantee: Transfer guarantees are issued to an Indian bank which adds its confirmation to a foreign Letter of Credit in favour of Indian exporter. Such banker, called confirming banker, may suffer loss due to the insolvency or default of the opening banker or due to certain political risks or transfer delays or moratorium on payments. Transfer guarantees may cover either political risks alone or both political and commercial risks. Loss from political risks is covered upto 90% and losses due to commercial risks are covered upto 75%.

Overseas Investment Insurance: Under this scheme protection is granted to investment made abroad by way of equity capital or untied loans for the purpose of setting up or expansion of overseas projects. It covers both investments made in cash or by way of export of capital goods and services from India. This scheme covers not only original investment but also annual dividends or interest receivable. Risks arising out of war, expropriation or restriction on remittances are covered under the scheme but no cover is provided for commercial risks. The period of insurance cover

does not normally exceed 15 years in case of projects involving the construction period.

Exchange Fluctuation Risk Cover:

This cover is available for payments scheduled over a period of 12 months or more and upto 15 years. Cover can be obtained from the date of bidding and right upto the final instalment. Under this cover, ECGC covers the risks to the exporters on account of fluctuations in the exchange rate. Cover is available for all amounts receivable under the contract. Contracts under Buyer's credit and lines of credit are also eligible for cover under this scheme.

The basis for cover is a reference rate which is agreed upon i.e. the rate prevailing at the time of bidding or the date of the contract at the option of the contractor/exporter. Loss or gain within a range of 2% of the reference rate will go to the exporter's account. If the loss exceeds 2% ECGC will make good the loss in excess of 2% but not exceeding 35% of the reference rate. In other words the loss or gain upto 2% and beyond 35% of reference rate will be borne by the exporter. Within these limits the loss/ gain will accrue to ECGC. The rate of premium is 40 paise per Rs. 100 per annum.



CHECK YOUR PROGRESS

Q5: What are the products and services offered by ECGC?

.....

Q6: What is Export Finance Guarantee

.....



8.12 LET US SUM UP

i) The problems that arise in case of financing foreign trade of a country;

ii) The distinguishing features of pre-shipment credit and the methods adopted by banks.

iii) The methods of providing post-shipment credit by purchase, discounting collection of export bills.

iv) The meaning and kinds of letters of credit and their significant role in financing foreign trade.

v) The facilities provided by Reserve Bank of India to refinance export credit

vi) Role of EXIM Bank.

vii) The role of ECGC in providing cover of insurance and guarantees.



8.13 FURTHER READING

1) K.R. Gupta, *Banking Law and Practice,* Modern Law Publishers.

2) P.N. Varshney (Ed.), 2005, *Banking Law and Practice;* Sultan Chand & Sons.

3) P.K. Khurana, *Export Management* (IV Ed.), Galgotia Publishing Co.

4) P.N. Varshney & D.K. Mittal, *Indian Financial System (6*th Edn), Sultan Chand & Sons.

5) Annual Report of Export Import Bank of India, Mumbai.

6) Annual Report of Export Credit Guarantee Corporation, Mumbai.

8.13 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q1: Foreign Trade implies a trade transaction between two parties, each one of whom is located in a different country. In other words, trading between two different countries is referred to as foreign trade.

Ans to Q2:The credit required by an exporter from a banker is broadly divided into two categories, viz (i) Pre-shipment credit, and (ii) Post-shipment credit.

Ans to Q3: The three types of letters of Credit are: 1) Documentary Letter of Credit and Clean Letter of Credit 2) Fixed Credit and Revolving Credit and 3) Revocable and Irrevocable Letter of Credit

Ans to Q4: The documents that are usually enclosed with the Bill of Exchange

are Invoice, Bill of lading, Marine Insurance Policy and Certificate of Origin.

Ans to Q5: The products and services offered by ECGC are broadly classified as under:

1) Credit Insurance Policies
2) Maturity Factoring
3) Guarantees to Banks
4) Special Schemes

Ans to Q6: Export Finance Guarantee is the guarantee is issued to cover post-shipment advances granted by banks to exporters against export incentives receivable in the form of cash assistance, duty drawbacks,



8.14 MODEL QUESTIONS

1) What do you understand by Pre-shipment credit? On what basis banks grant pre-shipment credit and for what duration? Discuss
2) What is a letter of credit? What is its importance in financing export trade of a country?
3) *Distinguish* between :
   a) Revocable and Irrevocable Letter of Credit
   b) Confirmed and unconfirmed letter of credit
   c) D/A Bills and D/P Bills
   d) Supplier's credit and Buyer's credit
4) Discuss the sources of funds for the banks for granting export credit in foreign currencies.
5) How does the Reserve Bank of India refinance the export credit granted by banks and to what extent? Discuss.
6) What do you understand by standard policies issued by ECGC? What risks are covered under these policies?
7) Explain briefly the financial guarantees issued by ECGC.

*** ***** ***

UNIT 9: NATURE AND MEASUREMENT OF FOREIGN EXCHANGE EXPOSURE

UNIT STRUCTURE

9.1 Learning Objectives

9.2 Introduction

9.3 Concept of Foreign Exchange Exposure

9.4 Types of Foreign Exchange Exposure

9.5 Transaction Exposure

- 9.5.1 Financial Techniques of Managing Transaction Exposure
- 9.5.2 Transaction Hedging Under Uncertainty
- 9.5.3 Operational Techniques for Managing Transaction Exposure
- 9.5.4 Information System for Exposure Management

9.6 Translation Exposure

- 9.6.1 Measurement of Translation Exposure

9.7 Economic exposure

- 9.7.1 Managing Economic Exposure
- 9.7.2 Financial Hedging

9.8 Let Us Sum Up

9.9 Further Reading

9.10 Answers to Check Your Progress

9.11 Model Questions

9.1 LEARNING OBJECTIVES

After reading this unit, you will be able to:

- describe meaning of Foreign Exchange Exposure
- recognise types of Foreign Exchange Exposure
- explain concept and Measurement of transition exposure
- discuss the techniques and methods transaction exposure management

- explain concept and Measurement of translation exposure
- discuss the techniques and methods transaction exposure management
- differentiate transaction exposure and Translation exposure
- evaluate the Exchange Risk Management
- define operating exposure and its measurement.

9.2 INTRODUCTION

In this unit we are going to discuss the nature and measurement of exposure and risk. *Foreign exchange exposure* is the risk associated with activities that involve a global firm in *currencies* other than its home *currency.* All *currencies* can experience periods of high volatility which can adversely affect profit margins if suitable strategies are not in place to protect cash flow from sudden *currency* fluctuations. We will discuss the types of Foreign Exchange Exposure.

9.3 CONCEPT OF FOREIGN EXCHANGE EXPOSURE

Foreign Exchange Exposure is also known as Currency risk. Foreign Exchange Exposure is a form of risk that originates from changes in the relative valuation of currencies. These changes can result in unpredictable gains and losses when the profits or dividends from an investment are converted from the foreign currency into U.S. dollars. Investors can reduce currency risk by using hedges and other techniques designed to offset any currency-related gains or losses.

For example, suppose that a U.S.-based investor purchases a German stock for 100 euros. While holding this bond, the euro exchange rate falls from 1.5 to 1.3 euros per U.S. dollar. When the investor sells the bonds, he or she will realize a 13% loss upon conversion of the profits from Euros to U.S. dollars.

However, if that investor hedged his or her position by simultaneously short-selling the euro, then the profit from the euro's decline would offset the 13% loss upon conversion.

9.4 TYPES OF FOREIGN EXCHANGE EXPOSURE

The following are the types of Foreign Exchange Exposure

- Transaction Exposure
- Translation Exposure
- Economic Exposure

Let us now discuss these exposures in detail in the following sections.

9.5 TRANSACTION EXPOSURE

Transaction Exposure is the risk of gains or losses that occurs when a firm engages in commercial transactions in which the currency of the transaction is foreign to the firm; i.e., it is denominated in a foreign currency. This is the type of exchange rate risk that we have looked at the various ways of managing via futures, forward contracts, options and money market hedges.

9.5.1 Financial Techniques of Managing Transaction Exposure

We will briefly go over the standard financial methods available for hedging this exposure. The main distinction between transaction exposure and operating exposure is the ease with which one can identify the size of a transaction exposure. This, combined with the fact that it has a well-defined time interval associated with it makes it extremely suitable for hedging with financial instruments. Among the more standard methods for hedging transaction exposure are:

i) *Forward Contracts:* When a firm has an agreement to pay (receive) a fixed amount of foreign currency at some date in the future, in most currencies it can obtain a contract today that specifies a price at which it can buy (sell) the foreign currency at the specified date in the future. This essentially converts the uncertain future home currency value of this liability (asset) into a certain home currency value to be

received on the specified date, independent of the change in the exchange rate over the remaining life of the contract.

ii) *Futures Contracts:* These are equivalent to forward contracts in function, although they differ in several important features. Futures contracts are exchange traded and therefore have standardized and limited contract sizes, maturity dates, initial collateral, and several other features. Given that futures contracts are available in only certain sizes, maturities and currencies, it is generally not possible to get an exactly offsetting position to totally eliminate the exposure. The futures contracts, unlike forward contracts, are traded on an exchange and have a liquid secondary market that make them easier to unwind or close out in case the contract timing does not match the exposure timing. In addition, the exchange requires position taker to post s bond (margins) based upon the value of their positions. This virtually eliminates the credit risk involved in trading in futures.

iii) *Money Market Hedge:* Also known as a synthetic forward contract, this method utilizes the fact from covered interest parity, that the forward price must be exactly equal to the current spot exchange rate times the ratio of the two currencies' riskless returns. It can also be thought of as a form of financing for the foreign currency transaction. A firm that has an agreement to pay foreign currency at a specified date in the future can determine the present value of the foreign currency obligation at the foreign currency lending rate and convert the appropriate amount of home currency given the current spot exchange rate. This converts the obligation into a home currency payable and eliminates all exchange risk. Similarly a firmthat has an agreement to receive foreign currency at a specified date in the future can determine the present value of the foreign currency receipt at the foreign currency borrowing rate and borrow this amount of foreign currency and convert it into home

currency at the current spot exchange rate. Since as a pure hedging need, this transaction replicates a forward, except with an additional transaction, it will usually be dominated by a forward (or futures) for such purposes; however, if the firm needs to hedge and also needs some short term debt financing, wants to pay off some previously higher rate borrowing early, or has the home currency cash sitting around, this route may be more attractive that a forward contract.

iv) *Options:* Foreign currency options are contracts that have an up front fee, and give the owner the right, but not the obligation to trade domestic currency for foreign currency (or vice versa) in a specified quantity at a specified price over a specified time period. There are many different variations on options: puts and calls, European style, American style, and future-style etc. The key difference between an option and the three hedging techniques above is that an option has a nonlinear payoff profile. They allow the removal of downside risk without cutting off the benefit form upside risk.

There are different kinds of options depending on the exercise time the determination of the payoff price or the possibility of a payoff. While many different varieties exist, there are a few that corporations have found useful for the purposes of hedging transaction exposures.

One of these is the average rate (or Asian or Look back) option. This option has as its payoff price, not the spot price but the average spot price over the life of the contract. Thus these options can be useful to a firm that has a steady stream on inflows or outflows in a particular currency over time. One large average rate option will basically act as a hedge for the entire stream of transaction. Moreover, the firms will lock in an average exchange rate over the period no worse than that of the strike price of this option. Finally, because the average rate is less volatile than the end of period rate (remember the average smoothes volatility this option will be cheaper than equivalent standard options. Thus the firms obtains in a single

instrument hedging for a stream of transaction so reduces transaction costs plus benefits from the "hedging" over time of the averaging effect.

Another popular exotic option for corporations is the basket rate option. Rather than buy options on a bunch of currencies individually, the firms can buy an option based upon some weighted average of currencies that match its transaction pattern. Here again since currencies are not perfectly correlated the average exchange rate will be less volatile and this option will therefore be less expensive. There firm can take advantage of its own natural diversification of currency risk and hedge only the remaining risk.

9.5.2 Transaction Hedging Under Uncertainty

Uncertainty about either the timing or the existence of an exposure does not provide valid arguments against hedging.

1. ***Uncertainty about Transaction Date:*** Many corporate treasurers loath to commit themselves to the early protection of foreign currency cash flow.

   Often the reason is that, although they are sure a foreign currency transaction will occur, they are unsure as of the exact date that the transaction will occur. These fears arising from a possible mismatch of maturities of transaction and hedge are unfounded. Through the mechanism of rolling or early unwinding, financial contracts leave open the possibility of adjusting the maturity at a later date, when more precise information is available. The resulting risk borne from the maturity mismatch is usually quite small relative to the total risk of leaving a transaction exposed until better information becomes available. Consider the example of a French exporter who had been expecting to receive, from a foreign purchaser, a payment of $1 million at a future date t. Early on, he had hedged himself by selling forward the $1m at a forward price of $1 = FF6.200. Come date t, he is informed that his foreign

customer will pay one month later at date t+1. Thus, at date t the French producer must roll over his forward contract on the basis of the then prevailing rates: Spot rate at t (FF/$): 5.9375 / 405

One-Month Franc Discount 74 / 100 (Outright Forward 5.9449 / 5.9505)

2. ***Uncertainty about Existence of Exposure:*** Another form of uncertainty that arises regarding transaction exposure is in submitting bids with prices fixed in foreign currency for future contracts. If and when a bid is accepted, the firm will either pay or receive foreign currency denominated cash flows. This is a special source of exchange rate risk as it is a contingent transaction exposure. In such cases, an option is ideally suited. As mentioned above, the firm is really interested in insurance against adverse exchange rate movements between the time the bid is submitted and the time it may be accepted. Thus an option can be used to protect the value of the foreign currency cash flows associated with the bid against adverse currency movements. The cost of the option, which can be included in the bid, protects the value of the expected cash flows from falling below a predetermined level and represents the most the firm can lose due to currency risk. Under such a situation there are four possible outcomes: the bid is either accepted or rejected and the option is either exercised or let to expire.

9.5.3 Operational techniques for managing transaction exposure

Transaction exposures can also be managed by adopting operational strategies that have the virtue of offsetting existing foreign currency exposure. These techniques are especially important when well functioning forward and derivative market do not exist for the contracted foreign currencies.

These strategies include:

i) Risk Shifting- The most obvious way to reduce the exposure is to not have an exposure. By invoicing all transactions in the home currency a firm can avoid transaction exposure all together. However, this technique can not work for every one since someone must bear transaction exposure for a foreign currency transaction. Generally the firm that will bear the risk is the one that can do so at the lowest cost. Of course, the decision on who bears the currency risk may also impact the final price at which the contract is set.

ii) Currency risk sharing - An alternative to trying to avoid the currency risk is to have the two parties to the transaction share the risk. Since short terms transaction exposure is roughly a zero sum game, one party's loss is the other party's gain. Thus, the contract may be written in such a way that any change in the exchange rate from an agreed upon rate for the date for the transaction will be split between the two parties.

iii) Leading and Lagging - Another operating strategy to reduce transaction gains and losses involves playing with the timing of foreign currency cash flows. When the foreign currency in which an existing nominal contract is denominated is appreciating, you would like to pay off the liabilities early and take the receivables later. The former is known as leading and the latter is known as lagging. Of course when an foreign currency in which a nominal contract is denominated is depreciating, you would like to take the receivables early and pay off the liabilities later.

iv) Re invoicing Centers - A re invoicing center is a separate corporate subsidiary that manages in one location all transaction exposure from intra company trade. The manufacturing affiliate sells the goods to the foreign distribution affiliates only by selling to the re invoicing center. The re invoicing center then sells the good to the foreign distribution affiliate. The importance of the re invoicing center is that the transactions

with each affiliate are carried out in the affiliates local currency, and the re invoicing center absorbs all the transaction exposure. Three main advantages exist to re invoicing centers: the gains associated with centralized management of transaction exposures from within company sales, the ability to set foreign currency prices in advance to assist foreign affiliates budgeting processes, and an improved ability to manage intra affiliate cash flows as all affiliates settle their intra company accounts in their local currency. Re invoicing centers are usually an offshore (third country) affiliate in order to qualify for local non resident status and gain from the potential tax and currency market access benefits that arise with that distinction.

9.5.4 Information System for Exposure Management

Effective exposure management requires a well designed management information system (MIS). Exposure above a certain minimum size must be immediately reported to the executive or department responsible for exposure management. The three types of exposure transactions, translation and operating must be clearly separated. In the case of cash flow exposures, the report must state the timing and amount of foreign currency cash flows, whether either or both are known with certainty or, if uncertain the degree of uncertainty associated with the timing or amount. The exposure management team must evolve a procedure of assessing the risk associated with theses exposures by adopting a clearly articulated forecasting method scenario approach. The benchmark for comparing the alternative scenarios must be clearly stated. As argued above, the appropriate benchmark for short term transactions exposures is the relevant forward rate.

If a discretionary hedging posture is to be adopted, stop less guidelines must be clearly articulated. These can take the form of specified levels of forward rate or specified changes in the spot rate which when crossed would automatically trigger appropriate hedging

actions.

All exposed positions including their hedges if any should be monitored at frequent intervals to estimate mark-to-market value of the entire portfolio consisting of the underlying exposures and their corresponding hedges.

When a particular exposure is extinguished, a performance assessment must be carried out by comparing the actual all in rate achieved with the benchmark. This should be done at regular intervals with the frequency of assessment being determined by the size of exposures and their time profiles. Periodic reviews must be carried out to ensure that the risk scenarios being considered are not far removed far actual developments in exchange rates due to large forecasting errors.

Effective management of operating exposures requires far more information and judgmental inputs from operating managers. Pricing and sourcing decisions must involve the exchange rate dimension and its likely impact on future operating cash flows. A strategic review of the entire business model must incorporate realistic assessment of the impact of exchange rate fluctuations on the firm's entire operations in the medium to long term



CHECK YOUR PROGRESS

Q1: What are the types of Foreign Exchange Exposure

.....

Q2: Define Transaction Exposure

.....

Q3: What is Money Market Hedge

.....

9.6 TRANSLATION EXPOSURE

Translation exposure is also referred to as accounting exposure or balance sheet exposure. The restatement of foreign currency financial

statements in terms of a reporting currency is termed translation. The exposure arises from the periodic need to report consolidated worldwide operations of a group in one reporting currency and to give some indication of the financial position of that group at those times in that currency.

Translation exposure is measured at the time of translating foreign financial statements for reporting purposes and indicates or exposes the possibility that the foreign currency denominated financial statement elements can change and give rise to further translation gains or losses, depending on the movement that takes place in the currencies concerned after the reporting date. Such translation gains and losses may well reverse in future accounting periods but do not, in themselves, represent realized cash flows unless, and until, the assets and liabilities are settled or liquidated in whole or in part.

This type of exposure does not, therefore, require management action unless there are particular covenants, e.g., regarding gearing profiles in a loan agreement, that may be breached by the translated domestic currency position, or if management believes that translation gains or losses will materially affect the value of the business. International Accounting Standards set out best practice.

A firm which has subsidiaries and assets in another country is subject to translation exposure. Translation exposure results as a consequence of the fact that a parent company must consolidate all of the operations of its subsidiaries into its own financial statements. Since a foreign subsidiary's assets are carried on its books in a foreign currency, it is necessary to convert the foreign values into domestic currency for combining with the parent's assets.

Fluctuating exchange rates, results in gains and losses occurring during the translation process. Since this type of exposure is related to balance sheet assets and liabilities, it is often referred to as accounting exposure.

The primary issue related to the translation of foreign asset values has to do with whether the proper exchange rate to use is the current rate of exchange or the historic rate of exchange that existed at the time that an

asset was acquired. In order to see the possible gains and losses that can occur, let's consider the following:

A U.S. company has a Mexican subsidiary that buys an asset for 12 million pesos in 20x1 when the exchange rate is 12 pesos per USD. Over the following year, inflation in Mexico is 50% while in the U.S. it is 0%. Of course, if purchasing power parity holds, then the exchange rate in one year should be 18 pesos per dollar.

If we use historical cost accounting, the asset will have a value of 12 million pesos on the Mexican subsidiary's books. Translating this at the current exchange rate of 18 pesos/ USD yields a US dollar value of

$$= \frac{12{,}000{,}000 \text{ pesos}}{18 \text{ pesos} / \text{USD}} = \text{USD } 666{,}667$$

If we translate the historical cost of 12 million pesos at the historical exchange rate at the time of acquisition of 12 pesos/USD we get a US dollar value of

$$= \frac{12{,}000{,}000 \text{ pesos}}{12 \text{ pesos} / \text{USD}} = \text{USD } 1{,}000{,}000$$

Thus, the correct value would be to use the historical exchange rate when the books are kept on an historical cost basis.

On the other hand, Mexico is a country that utilizes an inflation-adjusted (or current) accounting system where assets are indexed for inflation. Thus, the Mexican subsidiary would carry the asset on the books at 18 million pesos (12 million pesos * (1+50%) = 18 million pesos). Translating this using the current exchange rate of 18 pesos/USD yields

$$= \frac{18{,}000{,}000 \text{ pesos}}{18 \text{ pesos} / \text{USD}} = \text{USD } 1{,}000{,}000$$

If the historical exchange rate were used, we would obtain the following value:

$$= \frac{18{,}000{,}000 \text{ pesos}}{12 \text{ pesos} / \text{USD}} = \text{USD } 1{,}500{,}000$$

For the proper translation of value, we should either use the historic exchange rate with historical cost accounting or the current exchange rate with current accounting practices. For a foreign currency that has

depreciated, we get the following general results (an appreciating currency would yield the opposite results)

In 1981, FASB 52 set the rules for U.S. GAAP accounting in which it stated that all asset and liability accounts must be translated at the *current* rate of exchange. Equity accounts are translated at *historical* rates of exchange. A separate account, "Equity Adjustment from Translation", is used to reflect translation gains and losses. The only exception to this is for assets in countries experiencing *hyperinflation* which is defined as cumulative inflation greater than 100% over a three-year period. In that case, historical exchange rates are allowed for *non-monetary* items (inventory/cost of goods sold, plant & equipment/depreciation).

In any event, translation exposure is not a **real** gain or loss in terms of making or losing money. The ***value*** of the asset is the value of the asset. The gain or loss results simply from translating from one currency to another. In that sense, one should not really worry about translation exposure (except to the extent that there is a *perceived* gain or loss from unsophisticated users of the financial statements).

This is also referred to as conversion exposure or cash flow exposure. It concerns the actual cash flows involved in setting transactions denominated in a foreign currency. These could include, for example:

- Sales receipts
- Payments for goods and services
- Receipt and/or payment of dividends
- Servicing loan arrangements as regards interest and capital

The existence of an exposure alerts one to the fact that any change in currency rates, between the time the transaction is initiated and the time it is settled, will most likely alter the originally perceived financial result of the transaction.

It is, for example, important to commence monitoring the exposure from the time a foreign currency commitment becomes a possibility, not merely when an order is initiated or when delivery takes place.

The financial or conversion gain or loss is the difference between the actual cash flow in the domestic currency and the cash flow as calculated

at the time the transaction was initiated, i.e., the date when the transaction clearly transferred the risks and rewards of ownership. Where financing of a transaction takes place, such as a loan obligation, there are also gains/ losses which may result.

9.6.1 Measurement of Translation Exposure

Translation exposure measures the effect of an exchange rate change on published financial statements of a firm.

- Assets & liabilities that are translated at the current exchange rate are considered to be exposed (uncovered) as the balance sheet will be affected by fluctuations in currency values over time.
- Assets & liabilities that are translated at a historical exchange rate will be regarded as not exposed as they will not be affected by exchange rate fluctuations.
- So, the difference between exposed assets & exposed liabilities is called translation exposure.

Translation Exposure = Exposed Assets- Exposed Liabilities (Change in the Exchange Rate)

Under the generally accepted US accounting principles, the net monetary asset position of a subsidiary is used to measure its parent's foreign exchange exposure. The net monetary asset position is monetary assets such as cash & accounts receivable minus monetary liabilities such as accounts payable & long-term debt.

The translation of gains & losses does not involve actual cash flows – these gains or losses are purely on paper i.e. they are of an accounting nature.

Steps for Measuring Translation Exposure are:

1. Determine functional currency.
2. Translate using temporal method recording gains/losses in the income statement as realized
3. Translate using current method recording gains/losses in the balance sheet & as realized

4. Consolidate into parent company financial statements.

9.7 ECONOMIC EXPOSURE

Economic exposure or operational exposure moves outside of the accounting context and has to do with the strategic evaluation of foreign transactions and relationships. It concerns the implications of any changes in future cash flows which may arise on particular transactions of an enterprise because of changes in exchange rates, or on its operating position within its chosen markets. Its determination requires an understanding of the structure of the markets in which an enterprise and its competitors obtain capital, labour, materials, services and customers. Identification of this exposure focuses attention on that component of an enterprise's value that is dependent on or vulnerable to future exchange rate movements. This has bearing on a corporation's commitment, competitiveness and viability in its involvement in both foreign and domestic markets.

Thus, economic exposure refers to the possibility that the value of the enterprise, defined as the net present value of future after tax cash flows, will change when exchange rates change.

Economic exposure will almost certainly be many times more significant than either transaction or translation exposure for the long term well-being of the enterprise. By its very nature, it is subjective and variable, due *in part* to the need to estimate future cash flows in foreign currencies. The enterprise needs to plan its strategy, and to make operational decisions in the best way possible, to optimize its position in anticipation of changes in economic conditions.

Economic exposure is known as Operating exposure. The extent to which the value of the firm changes when the exchange rate changes (value is measured as the present value of expected future cash flows)
Suppose:

PV = present value of the firm

ÄPV = change in present value of the firm

ÄS = change in exchange rate

If ÄPV/ÄS $\neq$ = 0 then the firm is exposed to currency risk (i.e.,

economic exposure)

Economic exposure arises because currency fluctuations can alter a firm's future revenues and costs (i.e., its operating cash flows).

9.7.1 Managing Economic Exposure

Marketing Management

a. **Market Selection:** To examine which markets to sell products (strong currency market vs. weak currency market). Sell in multiple markets to take advantage of economies of scale and diversification of exchange rate risk.

b. **Pricing Strategy**: Emphasize on market share or profit margin. Exporters will benefit from a weak home currency and can either increase price or increase market share.

c. **Product Strategy:** New products, product line decisions, and product innovation (through R & D), VW sold very inexpensive vehicles in the early 1970s, but the appreciation of the DM caused VW to keep lowering prices to maintain market share. VW lost over $300 million in 1974. VW altered their strategy to sell more expensive cars with higher quality. Successful R & D allows for cost cutting, enhanced productivity, and product differentiation

Production Management

a. **Product Sourcing:** purchase components overseas (outsource components)

b. **Plant Location:** shift production to lower cost sites. Increase production in a country with a weaker currency, and decrease production in a country with a stronger currency (e.g., Honda built North American factories in response to strong yen, but later Honda imported the cars from Japan because of a weak yen).

c. **Increase Productivity**: close inefficient plants, high automation

9.7.2 Financial Hedging

It involves the use of currency swaps, currency futures, currency forwards, and currency options.

Proactive Management: Six of the most commonly employed proactive policies are

- Matching currency cash flows
- Risk-sharing agreements
- Back-to-back loans
- Currency swaps
- Leads and lags (pay early and pay late)
- Re invoicing centers

Let us discuss the above six employed proactive policies.

1. **Matching Currency Cash Flows:** One way to offset an anticipated continuous exposure to a particular currency is to acquire debt denominated in that currency.This policy results in a continuous receipt of payment and a continuous outflow in the same currency. This can sometimes occur through the conduct of regular operations and is referred to as a natural hedge.
2. **Risk-Sharing Agreements:** Risk-sharing is a contractual arrangement in which the buyer and seller agree to share or split currency movement impacts on payments
3. **Back-to-back :** Back-to-back loan occurs when two firms in different countries arrange to borrow each other's currency for a specific period of time.

- The operation is conducted outside the FOREX markets, although spot rates may be used to decide the equivalent amount
- This swap creates a covered hedge against exchange loss, since each company, on its own books, borrows the same currency it repays.

4. ***Currency Swaps:*** *Currency swaps* resemble back-to-back

loans except that it does not appear on a firm's balance sheet.In a currency swap, a dealer and a firm agree to exchange an equivalent amount of two different currencies for a specified period of time. Currency swaps can be negotiated for a wide range of maturities. A typical currency swap requires two firms to borrow funds in the markets and currencies in which they are best known or get the best rates.

5. **Leads and Lags: Re-Timing the Transfer of Funds:**Firms can reduce both operating and transaction exposure by accelerating or decelerating the timing of payments that must be made or received in foreign currencies

   - To *lead* is to pay early
   - To *lag* is to pay late

   Leading and lagging can be done between related firms (intra company) or with independent firms (intercompany). Leading and lagging **between related firms** is more feasible because they presumably share a common set of goals for the consolidated group. In the case of financing cash flows with foreign subsidiaries, there is an additional motivation for early or late payments to position funds for liquidity reasons. For example, a subsidiary which is allowed to lag payments to the parent company is in reality "borrowing" from the parent company. Leading or lagging **between independent firms** requires the time preference of one firm to be imposed to the detriment of the other firm. For example, Trident Europe may wish to lead in collecting its Brazilian accounts receivable (A/R) that are denominated in real because it expects the real to drop in value compared with the euro. However, the only way the Brazilians would be willing to pay their accounts payable early would be for the German creditor to **offer a discount** about equal to the forward discount on the real (or the difference between Brazilian and German interest rates for the period of prepayment)

6. ***Re-Invoicing Centers:***A re-invoicing center is a separate corporate subsidiary that serves as a type of "middle-man" between the parent or related unit in one location and all foreign subsidiaries in a geographic region. For example, the U.S. manufacturing unit of Trident Corporation invoices the firm's re-invoicing center – located within the corporate HQ in Los Angeles – in U.S. dollars. However, the physical goods are shipped directly to Trident Brazil. The re-invoicing center in turn re-sells to Trident Brazil in Brazilian real. Consequently, all operating units deal only in their own currency, and all transaction exposure lies with the re-invoicing center

There are three basic benefits arising from the creation of a re-invoicing center:

- Manage foreign exchange exposures (specialization; economies of scale)
- Guarantee the exchange rate for future orders (marketing focus)
- Manage intra-subsidiary cash flows (hedge residual cash flows)

The main disadvantage: an additional corporate unit must be created (setup cost) and a separate set of books must be kept.

CHECK YOUR PROGRESS

Q4: Define Translation exposure

.....

.....

Q5: Define Economic exposure

.....

.....



9.8 LET US SUM UP

- Foreign Exchange Exposure is also known as Currency risk. Foreign Exchange Exposure is a form of risk that originates from changes in the relative valuation of currencies.
- There three types of Foreign Exchange Exposure.They are: Transaction Exposure, Translation Exposure and Economic Exposure
- Transaction Exposure is the risk of gains or losses that occurs when a firm engages in commercial transactions in which the currency of the transaction is foreign to the firm; i.e., it is denominated in a foreign currency.
- Translation exposure is measured at the time of translating foreign financial statements for reporting purposes and indicates or exposes the possibility that the foreign currency denominated financial statement elements can change and give rise to further translation gains or losses, depending on the movement that takes place in the currencies concerned after the reporting date.
- Economic exposure or operational exposure moves outside of the accounting context and has to do with the strategic evaluation of foreign transactions and relationships.
- Economic exposure refers to the possibility that the value of the enterprise, defined as the net present value of future after tax cash flows, will change when exchange rates change.



9.9 FURTHER READING

1) Paul R.R. (1998). *Money, Banking and International Trade*. Kalyani Publishers, New Delhi.

2) Dewett K.K. (1998). *Modern Economic Theory*. S. Chand & Company Ltd., New Delhi.

9.10 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q1: The types of Foreign Exchange Exposure are Transaction Exposure, Translation Exposure and Economic Exposure.

Ans to Q2: Transaction Exposure is the risk of gains or losses that occurs when a firm engages in commercial transactions in which the currency of the transaction is foreign to the firm

Ans to Q3: Money Market Hedge is the contract, this method utilizes the fact from covered interest parity, that the forward price must be exactly equal to the current spot exchange rate times the ratio of the two currencies' riskless returns.

Ans to Q4: Translation exposure is also referred to as accounting exposure or balance sheet exposure. The restatement of foreign currency financial statements in terms of a reporting currency is termed translation. The exposure arises from the periodic need to report consolidated worldwide operations of a group in one reporting currency and to give some indication of the financial position of that group at those times in that currency.

Ans to Q5: Economic exposure or operational exposure moves outside of the accounting context and has to do with the strategic evaluation of foreign transactions and relationships.



9.11 MODEL QUESTIONS

Q 1: What is currency risk? State the causes of currency risk.

Q 2: Explain different types of currency risk.

Q 3: What is transaction exposure? Explain the financial techniques of managing transaction exposure.

Q 4: What is operating exposure? How do you measure the operating exposure?

Q 5: What are 'Leads' and 'Lags'?

Q 6: What is translation exposure?

Q 7: Distinguish between transaction and translation exposure?

Q 8: How do you measure translation exposure?

Q 9: The 6 month interest rate (annualized) in Italy and France are 13 percent and 11 percent, respectively. The current exchange rate is Lira 296.10/FF and the 6 month forward rate is Lira 326.50/FF.

(a) Where should a French investor invest?

(b) Where should be borrow from?

(c) Is there any arbitrage opportunity for the investor?

*** ***** ***

UNIT 10: INTERNATIONAL CAPITAL STRUCTURE

UNIT STRUCTURE

10.1 Learning Objectives
10.2 Introduction
10.3 Overview of International Capital Structure
10.4 Cost of Capital of a Multinational Company
10.5 Capital Structure of Multinational Companies
10.6 Cost of Capital in Segmented Vs Integrated Markets
10.7 Let Us Sum Up
10.8 Further Reading
10.9 Answer to Check Your Progress
10.10 Model Questions

10.1 LEARNING OBJECTIVES

After going through this unit, you will able to:

- discuss International Capital Structure
- describe Cost of Capital of a Multinational Company
- discuss the Capital Structure of MNCs
- describe the cost of Capital in Segmented Vs Integrated Markets

16.2 INTRODUCTION

We learned that the capital structure of companies differ from one another due to various important factors that affect the same. The finance manager should decide an optimal capital structure which seeks to lower the cost of capital and maximise the value of the firm.

In this particular unit, we shall discuss on capital structure of multinational companies. We shall also learn about the cost of capital of an MNC.

10.3 OVERVIEW OF INTERNATIONAL CAPITAL STRUCTURE

Prior to 1970, there was no international capital market for raising funds for the business enterprises. Companies generally sourced their capital from domestic markets itself.But after 1970, when USA allowed its currency i.e. US Dollar to be freely determined by market forces, the international capital market developed. The USA also deregulated its interest rates, exchange rates and allowed the domestic company to migrate to different countries. Soon after that many other developed nations liberalised their financial markets too and allowed their domestic companies to source their funds from different markets. This process gradually led to the development of international capital market . Initially the major sources of funds from the international capital market was confined to debt capital from international banks and bond issues. This international debt continued to be a significant part of international capital source for many MNCs till 1980. But after 1980, when the number of MNCs increased rapidly and kept spreading to different countries across the globe, they started sourcing fundsfrom those countries. The predomance of US dollar as a source of international debt gradually reduced. This brought about a major shift in the international capital structure which was initially confined to debt capital was transformed into equity fund oriented capital structure. This change of capital structure from domestic oriented debt to international oriented debt and again from domestic equity to international equity changed the entire capital structure of the companies.

Since the last few decades, many major firms throughout the world have begun to raise funds from foreign as well as domestic source. Although these MNCs move to other markets for cheaper labour, availability of raw materials, for increasing market share, higher revenue/profits etc. and gain competitive advantage over small domestic operators, but these corporations are becoming multinational not only in the scope of their business activities but also in their capital structure. This trend reflects the impact ofthe ongoing liberalization and deregulation of international financial markets besides a cognizant effort on the part of firms to lower the cost of capital by international sourcing of funds accessible for many firms.

The Capital Structure of a company implies the composition of finance from various sources of funds for its overall operations, purchase of assets and growth. It is usually composed of long term debt, preference share capital and Shareholder's funds. When a company arranges funds from global markets or attracts investors from across the globe, its capital structure is a mixture of debt and share capital from both international and domestic sources.Debt and equityare the two forms of capital that multinationals have to choose from, and each form has its advantages and disadvantages. The cost of raising capital isan important component of financing decisions.

10.4 COST OF CAPITAL OF AN MULTINATIONAL COMPANY

We have already learned about cost of capital for a firm in our previous semester. It is the minimum acceptable rate of return for capital investments. The cost of capital has a major impact on the firm's value. If there are two firms with the same returns on their investments, the firm with the lower cost of capital will be valued higher as the residual value to shareholders will be greater.

After determining the relevant cash flows from an international project, an MNCneeds to determine the minimum acceptable rate it intends to maintain for foreign projects. Many international projects are irreversible and hence it is critical that firms assisted by financial managers separate projects worthy of implementation from those that are not and to this end the cost of capital can be used as a yardstick. But the determination of the cost of capital for international projects is a complex issuein international finance because of the difficulties associated with estimating the risks posed by each foreign project.

Since countries possess different economic characteristics and business environments, an MNC's required rate of return cannot be the same for all its international projects across the world. This implies that there are differences in inherent risks for the firm for each country and as such the required return is calculated for specific projects being undertaken

by an MNC.

The cost of capital of a Multinational Company may differ from a Domestic Company because of the following characteristics.

1. **Size of the firm:** Firms that operate internationally are usually much bigger in size than firms which operate only in the domestic market. Firms that operate internationally generally borrow substantial amounts of funds and by virtue of their size, they are generally in a position to reduce the various transaction and brokerage costs and also get preferential treatment from creditors. This helps them to reduce their cost of capital compared to domestic firms.
2. **Access to international capital markets:** An MNC operating in the international capital market can attract funds at a lower cost than the domestic firms. In a global context, since the funds are not completely mobile, the cost of funds varies among markets. Also, the subsidiary can obtain local funds at a lower rate than the parent if the prevailing interest rates in the host country are relatively low. This form of financing helps to lower the cost of capital and will generally not increase the MNCs exposure to exchange rate risk.
3. **Exposure to foreign exchange risk:** An exceptionally volatile exchange rate, or one that always depreciates, is not conducive to attracting long-term foreign investors. As such, MNCs cash flow would have wide fluctuations and the capability of the corporation to make various fixed term commitments like interest would get reduced. This may force the shareholders and creditors to demand a higher return which, in turn, increases the MNCs cost of capital. A firm more exposed to exchange rate fluctuations would have a wider spread of possible cash flows in future periods. Thus, exposure to exchange rate fluctuations could lead to a higher cost of capital.
4. **International diversification effect:** If a firm's cash inflows come from sources all over the world, there might be more stability in them. It helps MNCs to diversify their operations and reduce their cost of capital compared to domestic firms for two reasons. First, diversification contributes to the stability of the overall cash flows. As

the variability in cash flows is less, this helps the firm in lowering its weighted average cost of capital. Second, international diversification helps to lower the systematic risk of the firm by lowering its beta coefficient and thus the cost of equity.

5. **Political risk:** Political risk can be accounted for in the cost of capital calculations by adding an arbitrary risk premium to the domestic cost of capital for a project of comparable risk. As political risk is likely to be higher in the later years of a project, cash flows in later years tend to get reduced. Thus political risk impacts the cost of capital of the MNC by moving it upwards as compared to a domestic firm.
6. **Country risk:** Country risk represents the potentially adverse impact of a country's environment on the MNCs cash flows. If the country risk level of a particular country begins to increase, the MNc may consider divesting its subsidiaries located there. Several risk characteristics of a country may significantly affect the cash flows of the MNC and the MNC should be concerned about the degree of impact likely for each. If the country risk is high and it has invested a high percentage of its assets in such a country, then its probability of bankruptcy is higher. In a sitauation of high country risk, the cost of capital will also tend to be high. However, other less critical types of country risk will not necessary affect the cash flows and will need no upward revision to the cost of capital calculated for a domestic firm. Hence, country risk analysis should access the special forms of risk for a proposed capital budgeting project considered for a foreign country.
7. **Tax concessions:** MNCs prefer nations where the tax laws are favourable for them as their net income is substantially influenced by the tax laws in the locations where they operate. In some cases, the MNC may be able to lower its cost of capital by availing of the various tax advantages not available to a purely domestic firm.



CHECK YOUR PROGRESS

Q 1: State any two characteristics of an MNC that may casuse difference in cost of capital than t h a t of a Domestic Company.

.....

.....

10.5 CAPITAL STRUCTURE OF MULTINATIONAL COMPANIES

The capital structure of an MNC also consists of debt and equity as in the case of domestic companies. But an MNC can tap both the sources available at home and also the sources in the foreign currencies where it operates. An MNC can have more debt in its capital structure if its cash flows are more stable and it has a low credit risk. An MNC that has subsidiaries spread over many countries can also afford to have a higher debt in its capital structure as the risk gets spread and no single country's cash flow exercises a major impact on its profitability. In fact the overall capital structure of a parent company is a combination of the capital structures of all its subsidiaries. Some of the important factors that help the MNC in its choice of capital structure decisions are discussed below:

1. **Stability of Cash Flows:** An MNC with stable cash flows that can meet the interest charges will be in a better position to handle more debt. Correspondingly, if the cash flows of the MNC are irregular they may prefer less debt as they are not sure of generating enough cash flows to meet the required interest charges. Further, any single country and its conditions will not have a major impact on MNC's overall cash flows.
2. **Risk Facing an MNC:** If the MNC has a high credit standing and is percieved by investors to have a low credit risk, it may be in a relatively better position to access debt than a company with high credit risk. Thus, if a well known multinational company is percieved to have a strong and committed management, it will generally be percieved to

have a lower credit risk. This will help the company to borrow debt easily from the market.

3. **Extent of Profitability:** Successful and profitable MNC are able to use a more equity intensive capital structure as they can transfer substantial amounts from profits to retained earnings. This ensures that the MNCs have a higher reserve of retained earnings and thus are better equiped to use an equity intensive capital structure. Conversely, if the profitability and reserves available with the MNC are low then it may have to rely on debt financing.
4. **Country Characteristics and its influence:** Capital structure decision of the parent MNC is also influenced by the country characteristics of each host country where the foreign subsidiary is operating. Factors unique to each country can influence the MNC's choice of debt versus equity financing and hence its capital structure. For example, interest rates are known to vary significantly across countries. As such, the MNCs choice of debt versus equity financing will be influenced by the cost of debt prevailing in the country where the subsidiary is operating. If the cost of debt is high in the country where the subsidiary is operating, the MNC might prefer to use its own equity to support the expansion programme of the subsidiary.Another factor that can influence the capital structure choice of the MNC is the problem of blocked funds. Subsidiaries that face a problem of blocked fund and are temporarily unable to remit funds to the parent due to various restrictions in the host country, generally prefer to use local debt financing.
5. **Tax Laws in Host Country:** Capital structure decisions are also influenced by the tax laws prevailing in the country where the foerign subsidiary is operating. In some countries subsidiaries may be subject to withholding tax on the earnings remitted by them to the parent. Withholding taxes can be reduced by the subsidiary by using more of local debt financing. Also, if the corporate tax rate is high on foreign earnings, subsidiaries may prefer to use local debt so as to reduce their tax liability.Thus, in arriving at its capital structure decision, an

MNC is influenced by the capital structure choices of its subsidiaries. It is also influenced by the local norms regarding capital structure in the host city and the political risk and country risk of the country under consideration.

10.6 COST OF CAPITAL IN SEGMENTED VERSUS INTEGRATED MARKETS

There is severe impact of segmentation on cost of capital. If international financial markets were completely integrated, the cost of capital for both domestic and multinational companies would have been similar. If, on the other hand, these markets are less than fully integrated, firms may be able to create value for their shareholders by issuing securities in foreign as well as domestic markets.

Markets are said to be integrated when assets having same level of risk bearing and same expected return irrespective of their domicile. The government interference with free capital market in developing market restricts integration of markets and separates the capital market of country from world capital market. If non-resident are taxed and restricted from holding equity of a country then country's assets cannot be part of international capital market and the country is also segmented from international capital markets.

A segmented capital market will have the required rate of return that is independent of the required return on assets of equivalent risk in other markets. Even though complete segmentation is not found in the real world, there are invariably some cross-border price leakages. The law of one price is a powerful force, and individuals will find a way to profit from price disparities.

Some important factors contributing to capital market segmentation in countries include transactions cost, informational controls, different legal and political systems, regulatory interference/controls, differential taxes. The extent of national market segmentation depends on the importance of each of these imperfections to cross-border capital flows.

Capital market segmentation can sometimes lead to financial

opportunities for the MNC. This is possible if investors in some countries are willing to pay a higher price than domestic investors for securities that provide them with additional investment opportunities or diversification benefits. Such a scenario helps the MNCs with an established reputation in the foreign in foreign markets, to gain access to debt or equity fiancing at real rates of return that are below those available elsewhere. This helps the MNC with access to these markets to obtain a cost of capital advantage,



CHECK YOUR PROGRESS

Q 2: State any two factors that help the MNC in its choice of capital structure decisions.

.....

.....

Q 3: State two factors contributing to capital market segmentation in countries.

.....

.....



10.7 LET US SUM UP

- Although MNCs move to other markets for cheaper labour, availability of raw materials, for increasing market share, higher revenue/profits etc. and gain competitive advantage over small domestic operators, but these corporations are becoming multinational not only in the scope of their business activities but also in their capital structure.
- The Capital Structure of a company implies the composition of finance from various sources of funds for its overall operations, purchase of assets and growth. It is usually composed of long term debt, preference share capital and Shareholder's funds.
- The determination of the cost of capital for international projects is a complex issue in international finance because of the difficulties associated with estimating the risks posed by each foreign project.

- The cost of capital of a Multinational Company may differ from a Domestic Company because of the following characteristics.
  1. Size of the firm
  2. Access to international capital markets
  3. Exposure to foreign exchange risk
  4. International diversification effect
  5. Political risk
  6. Country risk
  7. Tax concessions
- Important factors that help the MNC in its choice of capital structure decisions are:
  1. Stability of Cash Flows
  2. Risk Facing an MNC
  3. Extent of Profitability
  4. Country Characteristics and its influence
  5. Tax Laws in Host Country
- If international financial markets were completely integrated, it would not matter whether firms raised capital from domestic or foreign sources because the cost of capital would be similar across countries.



10.8 FURTHER READING

1) Click & Coval (2007), *The theory and practice of international financial management*, Dorling Kindersley (India) Pvt. Ltd., New Delhi.

2) Vij (2001), *International Financial Management,* Excel Books, New Delhi.

3) Sharan (2012), *International Financial Management,* PHI Learning Pvt. Ltd., New Delhi.

10.9 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: The cost of capital of a Multinational Company may differ from a Domestic Company because of the following characteristics.

1. Size of the firm
2. Access to international capital markets

Ans to Q No 2: Two factors that help the MNC in its choice of capital structure decisions are:

1. Stability of Cash Flows
2. Risk Facing an MNC

Ans to Q No 3: Two factors contributing to capital market segmentation in countries include transactions cost and informational controls.



10.10 MODEL QUESTIONS

Q 1: Give an overview of the international capital structure of MNCs.

Q 2: Discuss the various characteristics of a Multinational Company that may cause difference in Cost of Capital of a Domestic Company.

Q 3: Discuss the important factors that help the MNC in its choice of capital structure decisions.

Q 4: Write a note on Cost of Capital in Segmented versus Integrated markets.

*** ***** ***

UNIT 11: INTERNATIONAL CAPITAL BUDGETING

UNIT STRUCTURE

11.1 Learning Objectives

11.2 Introduction

11.3 Overview of International Capital Budgeting

11.4 Adjusted Present Value Model

11.5 Capital Budgeting From Parent Firm's Perspective

11.6 Significance of Foreign Exchange Rates in International Capital Budgeting

11.7 Issues in International Capital Budgeting

11.8 Let Us Sum Up

11.9 Further Reading

11.10 Answer to Check Your Progress

11.11 Model Questions

11.1 LEARNING OBJECTIVES

After going through this unit, you will be able to:

- discuss the various aspects of international capital budgeting
- explain the adjusted present value model
- explain capital budgeting from parent firm's perspective
- discuss the issues in international capital budgeting.

11.2 INTRODUCTION

We have already learned about Capital Budgeting in our Financial Management Course. In that earlier topic on capital budgeting, we thoroughly discussed the meaning, importance, methods etc. of Capital Budgeting. But, all our earlier discussions on capital budgeting decisions were confined to domestic companies. Continuing with our previous learning on capital budgeting, in this unit we shall discuss about some of the important aspects of international capital budgeting.

11.3 OVERVIEW OF INTERNATIONAL CAPITAL BUDGETING

International Capital Budgeting is an increasingly vital area in the foreign operations of Multinational Companies. Big corporations throughout the world have begun to internationalize their capital structure by raising funds from both domestic as well as foreign market. International Capital Budgeting needs to take into consideration various factors and variables which influence the acceptance or non acceptance of international projects and are complex in nature than capital budgeting of domestic projects. International Capital Budgeting helps MNC in identifying international projects worthy of implementation.

There are certain complex factors unique to international projects and their capital budgeting decisions. They are:

(i) Cash flows from international projects need to be converted into parent company's currency.

(ii) Parent cash flows and project cash flows differ.

(iii) Foreign exchange risk affects the cash flow of parent company.

(iv) Profits remitted from subsidiaries to the parent company are often taxed in both host and home country.

(v) Changed political or economic scenario in host country may reduce the possibility of expected cash flows from international projects.

The various project appraisal techniques that we have learned in our earlier topic on capital budgeting holds good for domestic projects but may not be the same when it comes to evaluation of foreign projects of MNCs demanding the adjustment for complex factors discussed above. The need to develop such techniques to evaluate foreign projects initially started with the modification of the most popular method of capital budgeting i.e. Net Present Value Method. Currently, the Adjusted Present Value Model is the most popular technique for evaluating foreign projects of an MNC.

11.4 ADJUSTED PRESENT VALUE MODEL

International capital budgeting encounter a number of complexities

which are not found in domestic capital budgeting, for example, the issue of remittance, foreign exchange regulation, lost exports, restriction on transfer of cash flows, blocked funds, etc. The Net Present Value (NPV) technique of capital budgeting lacks the required mechanism to address those complexities. As such, the NPV technique has been accordingly adapted into the Adjusted Present Value (APV) model to address such complexities involved in international projects. The APV model is used for evaluating foreign projects. It is a value additive approach to capital budgeting process i.e. each cash flow as a source of value is considered individually and discounted at a rate consistent with risk involved in that cash flow. It allows different components of the project's cash flow to be discounted separately. For tax adjustment, the APV technique takes into account the higher of the home-country and host-country tax rates. The cash flow on account of sales and other such revenue is discounted at the all-equity cost of capital; depreciation allowances are discounted at the nominal rate; the contribution of the project to borrowing capacity is discounted at the riskless rate, and the repayment of loans in host-country currency is discounted at nominal interest rate prevalent in the host country. Again, the rate used for discounting the savings on account of taxes and of transfer pricing and illegal repatriation includes the risk premium.

The APV technique helps to test the basic viability of the foreign project before accounting for all complexities. If the project is acceptable, then no further evaluation based on accounting for other cash flows is done, or else additional evaluation shall be done taking into consideration the other complexities. Capital investments with positive APV contribute to shareholders wealth.

The APV model is represented in equation form as follows

$$APV = -I_0 + \sum_{t=1}^{n} \frac{X_t}{(1+k^*)^t} + \sum_{i=1}^{n} \frac{T_t}{(1+i_d)^t} + \sum_{i=1}^{n} \frac{S_t}{(1+i_d)^t}$$

Where the term I_0 = Present value of investment outlay

$\frac{X_t}{(1+k^*)^t}$ = Present value of operating cash flows

$\frac{T_t}{(1+i_d)^t}$ = Present value of interest tax shields

$\frac{S_t}{(1+i_d)^t}$ = Present value of interest subsidies

The various symbols denote

T_t = Tax savings in year t due to the financial mix adopted

S_t = Before-tax value of interest subsidies (on the home currency) in year t due to project specific

financing.

i_d = Before-tax cost of dollar debt (home currency)

The last two terms in the APV equation are discounted at the before-tax cost of dollar debt to reflect the relative certain value of the cash flows due to tax savings and interest savings.

The APV technique evaluates project as if it is totally equity financed. This makes APV flexible enough to cover many different types of real-world financing arrangements such as: changes in tax rates every year, changes in amounts of debt every year, subsidy in interest payments for a certain number of years, floatation costs, etc. In each of these cases the NPV of the project if it were 100% equity financed would remain the same, and the value of the specific financing arrangement would simply be calculated separately.



CHECK YOUR PROGRESS

Q 1: State two factors unique to international capital budgeting decisions.

.....

Q 2: Which is the most popular technique of international capital budgeting?

.....

.....

11.5 CAPITAL BUDGETING FROM PARENT FIRM'S PERSPECTIVE

A foreign project of an MNC can be evaluated from both parent firm's perspective as well as subsidiary firm's perspective. The need to evaluate a foreign project from both parent and subsidiary firm's perspective arises from the fact that a foreign project may have a positive NPV (or APV) from subsidiary's perspective, while it may have a negative NPV (or APV) from the parent's perspective. Generally, a parent's perspective is considered appropriate for evaluating a foreign project because any positive NPV (or APV) from a foreign project to the parent firm shall definitely increase firm's value. The differences in after-tax cash inflows to the subsidiary firm and to the parent firm from a foreign project may be due reasons such as:

(i) A higher tax rate in the home country may cause the project to be unprofitable from the parent's perspective.

(ii) A percentage of subsidiary's earnings cannot be repatriated to the parent because of remittance restrictions by the host country.

(iii) The home currency is expected to appreciate substantially over the life of the project, yielding unattractive cash flows when converted into the home currency of the parent.

(iv) The parent company may charge its subsidiary high administrative fees which the latter treats it as an expense and the cash inflows from the subsidiary may appear low from that of parent's perspective.

From the above discussion, it can be understood how the cash flows of the subsidiary may get reduced by the time it reaches parent firm. Thus, we can conclude that the feasibility of the project from the parent's firm perspective is not dependent on the cash flows from the subsidiary but on the cash flows that the parent ultimately receives from the project. A foreign project should be able to generate sufficient cash flows to the parent firm to enhance shareholder's fund.

However, one exception to the conclusion that a parent firm's perspective is appropriate when evaluating a foreign project occurs when the foreign subsidiary is not wholly owned by the parent.

11.6 SIGNIFICANCE OF FOREIGN EXCHANGE RATES IN INTERNATIONAL CAPITAL BUDGETING

Foreign-exchange rates affect multinational companies (MNCs) and their markets. Changes in foreign exchange rates originates from several sources, such as economic conditions, government policies, monetary systems, and political risks. It affects areas such as policy decisions, strategic planning, profit planning, and budget control. However, they are particularly useful when evaluating international capital budgeting alternatives. It has the most significant effect on the capital budgeting process. A foreign investment project will be affected by exchange rate fluctuations during the life of the project, but these fluctuations are difficult to forecast. The financial manager needs to estimate the future expected exchange rates to implement the APV technique of Capital Budgeting.

11.7 ISSUES IN INTERNATIONAL CAPITAL BUDGETING

An MNC's financial decisions are basically influenced by three types of economic environments: (i) Host country's economic environment, (ii) Parent country's economic environment, and (iii) International economic environment. The influence of these three environments makes the decision of the MNC a complex issue. Some of the problems are as follows:

- **Complexities of regulatory environment:** A difference exists between the parent's cash flow and the project's cash flow because of tax laws and other regulatory environment. For the parent, cash flows are relevant because shareholders expect higher rate of returns. Therefore, it is necessary to make a distinction between parent's cash flow from that of the project.
- **Complexities due to type of financing:** Parent's cash flows depends on the form of financing that the parent adopts to finance the project. Thus the parent's cash flows cannot be separated from financing decisions.

- **Difficulty in recognizing the exact remittances:** Remittances to the parent must be recognized. Due to different tax laws, political systems and differences in the functioning of financial markets and institutions, cash flows of the parent tend to vary.
- **Difficulty in anticipating inflation rates:** Different rate of inflation must be anticipated for forecasting the real return and exchange rates. Inflation also changes the competitive position of the launched product.
- **Difficulty in anticipating changes in exchange rates:** Possibility of unanticipated changes in exchange rate changes must be considered because of direct effects on the value of local cash flows as well as on the parent's cash flows. This unanticipated change will also have an indirect effect on the competitive position of the firm.
- **Segmented capital markets:** Since the project is being implemented in a different country, the capital markets are segmented to provide an opportunity and may involve higher costs.
- **Subsidized loans and cost of capital:** Use of subsidized loans complicates both the capital structure and the ability to calculate the weighted average cost of capital for discounting purposes.
- **Evaluation of political risk:** For each project, political risk may be evaluated. This is so because cash flows may be affected by changes in the political environment. Changes in the government would change the political philosophy, thus causing a new economic environment.



CHECK YOUR PROGRESS

Q 3: State two reasons for difference in cash inflows to the subsidiary firm and to the parent firm from a foreign project.

.....

.....

Q 4: State two issues in international capital budgeting decisions.

.....

.....



11.8 LET US SUM UP

- International Capital Budgeting helps MNC in identifying international projects worthy of implementation.
- The Adjusted Present Value Model is the most popular technique for evaluating foreign projects of an MNC.
- The APV model, used for evaluating foreign projects, is a value additive approach to capital budgeting process i.e. each cash flow as a source of value is considered individually and discounted at a rate consistent with risk involved in that cash flow. It allows different components of the project's cash flow to be discounted separately.
- Generally, a parent's perspective is considered appropriate for evaluating a foreign project because any positive NPV (or APV) from a foreign project to the parent firm shall definitely increase firm's value.
- The differences in after-tax cash inflows to the subsidiary firm and to the parent firm from a foreign project may be due reasons such as:
  - higher tax rate in the home country
  - remittance restrictions.
  - home currency is expected to appreciate
  - high administrative fees
- The feasibility of the project from the parent's firm perspective is not dependent on the cash flows from the subsidiary but on the cash flows that the parent ultimately receives from the project.
- A foreign project should be able to generate sufficient cash flows to the parent firm to enhance shareholder's fund.
- A foreign investment project will be affected by exchange rate fluctuations during the life of the project, but these fluctuations are difficult to forecast.



11.9 FURTHER READING

1) Click & Coval (2007), *The theory and practice of international financial management*, Dorling Kindersley (India) Pvt. Ltd., New Delhi.

2) Vij (2001), *International Financial Management*, Excel Books, New Delhi.

3) Sharan (2012), *International Financial Management*, PHI Learning Pvt. Ltd., New Delhi.

11.10 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: (i) Cash flows from international projects need to be converted into parent company's currency.

(ii) Parent cash flows and project cash flows differ.

Ans to Q No 2: Adjusted Present Value.

Ans to Q No 3: (i) A higher tax rate in the home country may cause the project to be unprofitable from the parent's perspective.

(ii) A percentage of subsidiary's earnings cannot be repatriated to the parent because of remittance restrictions by the host country.

Ans to Q No 4: (i) Complexities of regulatory environment

(ii) Complexities due to type of financing



11.11 MODEL QUESTIONS

Q 1: Discuss the factors unique to international projects and their capital budgeting decisions.

Q 2: Discuss the Adjusted Value Model of international capital budgeting.

Q 3: Discuss the issues affecting international capital budgeting.

Q 4: Discuss the significance of foreign exchange rates in international capital budgeting.

Q 5: Why international projects need to be evaluated from parent firm's perspective?

*** ***** ***

UNIT 12: INTERNATIONAL TAXATION

UNIT STRUCTURE

12.1 Learning Objectives

12.2 Introduction

12.3 International Tax System

12.4 Principles of Taxation

12.5 Double Taxation

12.6 DTAAs and Model Tax Conventions

12.7 Tax Havens

12.8 Transfer Pricing

12.9 International Tax Management Strategy and Indian Tax Environment

12.10 Let Us Sum Up

12.11 Further Reading

12.12 Answer to Check Your Progress

12.13 Model Questions

12.1 LEARNING OBJECTIVES

After going through this unit, you will be able to:

- define the meaning and concept of international taxation
- discuss the principles of international taxation
- explain concept of double taxation, DTAAs and Model Tax Conventions
- describe the meaning of tax havens and transfer pricing.

12.2 INTRODUCTION

Taxes are a major source of revenue for many developing nations. Every country has their own domestic tax laws to tax the returns from trade and investment within national borders. The domestic tax rates vary from nation to nation making some countries tax havens while some nations charge a very high rate of tax. Until the expansion of business from one

nation to another and a limited number of international business transactions, the domestic tax law of any nation did not have any significant influence on the domestic tax law of another nation. But the rapid advancement in information technology, better transport facilities, economic ties with increasing number of nations, increased production of goods and services etc. has made business houses reach a number countries with ease. Domestic business enterprises have turned multinational corporations with rapid expansion of facilities and assets across different nations. Many business houses shifted their business transactions or economic activities to tax haven nations, significantly influencing the tax collection of the home country of parent company. Many developing nations relying on tax collections as a major source of revenue to run their economy have been significantly affected. As such, there is need for monitoring the tax regimes of different countries continuously and bringing about necessary reforms. These reforms in the domestic tax law to tax transactions and economic events that occur across its borders are based on some underlying policy rationale, which can collectively be termed as “international tax policy”.

12.3 INTERNATIONAL TAX SYSTEM

Before we proceed to discuss the international tax system, we can need to have a clear understanding of the concept international tax.

According to Kevin Holmes, “International Tax is best regarded as the body of legal provisions of different countries that covers the tax aspects of cross-border transactions”.

ICMAI has defined International taxation as the study or determination of tax on a person or business subject to the tax laws of different countries or the international aspects of an individual country’s tax laws.

According to Roy Rohatgi, “International taxation refers to the global tax rules that apply to transactions between two or more countries (also called States) in the world. It encompasses all tax issues arising under a country’s income tax laws that include some foreign element”.

According to Dipti Bajaj, “International Taxation refers to an independent branch of law that has been roughly defined as a body of legal

provisions embedded in the tax laws of each country to cover the tax aspects of cross border transactions".

From the above definitions, we can make it out that there is no separate global tax law that governs cross border transactions. Moreover, there is no international tax court or administrative body for international tax issues. All taxes are levied under their domestic law by federal, national or local governments. These tax laws have an impact on cross-border transactions. International taxation governs these domestic tax rules under customary international law and treaties. Thus, we can say that the provisions, rules, treaties, agreements etc. that a nation introduces in its domestic tax law to cover the tax aspects of cross-border transactions are collectively known as international tax system. So each country shall have its own international tax system.

12.4 PRINCIPLES OF TAXATION

The Organisation for Economic Co-operation and Development (OECD) has formulated a number of overarching principles of tax policy. And these tax policies has been a guidance to many nations to develop their taxation system. These well recognized fundamental principles of taxation are:

- **Neutrality:** Taxation should seek to be neutral and equitable between forms of business activities. A neutral tax will contribute to efficiency by ensuring that optimal allocation of the means of production is achieved. A distortion, and the corresponding deadweight loss, will occur when changes in price trigger different changes in supply and demand than would occur in the absence of tax. In this sense, neutrality also entails that the tax system raises revenue while minimising discrimination in favour of, or against, any particular economic choice. This implies that the same principles of taxation should apply to all forms of business, while addressing specific features that may otherwise undermine an equal and neutral application of those principles.

- **Efficiency:** Compliance costs to business and administration costs for governments should be minimised as far as possible.
- **Certainty and simplicity:** Tax rules should be clear and simple to understand, so that taxpayers know where they stand. A simple tax system makes it easier for individuals and businesses to understand their obligations and entitlements. As a result, businesses are more likely to make optimal decisions and respond to intended policy choices. Complexity also favours aggressive tax planning, which may trigger deadweight losses for the economy.
- **Effectiveness and fairness:** Taxation should produce the right amount of tax at the right time, while avoiding both double taxation and unintentional non-taxation. In addition, the potential for evasion and avoidance should be minimised. Prior discussions in the Technical Advisory Groups (TAGs) considered that if there is a class of taxpayers that are technically subject to a tax, but are never required to pay the tax due to inability to enforce it, then the taxpaying public may view the tax as unfair and ineffective. As a result, the practical enforceability of tax rules is an important consideration for policy makers. In addition, because it influences the collectability and the administerability of taxes, enforceability is crucial to ensure efficiency of the tax system.
- **Flexibility:** Taxation systems should be flexible and dynamic enough to ensure they keep pace with technological and commercial developments. It is important that a tax system is dynamic and flexible enough to meet the current revenue needs of governments while adapting to changing needs on an ongoing basis. This means that the structural features of the system should be durable in a changing policy context, yet flexible and dynamic enough to allow governments to respond as required to keep pace with technological and commercial developments, taking into account that future developments will often be difficult to predict.

Besides, the above stated principles of taxation as stated by OECD, *principle of equality* is seen to be adopted by many nations while formulating their tax laws. According to the principle of equality, every person should

pay to the Government according to his ability to pay, that is, in proportion of the income or revenue.



CHECK YOUR PROGRESS

Q 1: Define International Taxation.

.....

.....

Q 2: Define Principle of Equality.

.....

.....

12.5 DOUBLE TAXATION

When the same income is taxed twice in the hands of an assessee, it results into double taxation. The situation of double taxation arises due to the two basic taxing rules that each country generally exercises under its domestic tax law. They are

(i) the source rule and

(ii) the residence rule.

According to the source rule, income is to be taxed in the country in which it originates irrespective of whether the income accrues to a resident or a non-resident whereas the residence rule stipulates that the power to tax should rest with the country in which the tax payer resides. If both rules apply simultaneously to an assessee, then there is a possibility of same income being taxed twice resulting in double taxation. Double taxation has been a significant setback in the process of globalization. In times when economies are going global and borders fading, double taxation is still one of the major obstacles to the development of inter-country economic relations. As such, there is a necessity that such double taxation is eliminated for smooth conduct of international trade. Countries need to enter into an agreement with one another to mitigate the effects of double taxation. Such an agreement between two countries to eliminate the impact of double taxation are known as Double Tax Avoidance Agreement (DTAA) (also known

as Tax Treaty or Double Taxation Convention-DTC). DTAAs lay down the rules for taxation of the income by the source country and the residence country. The types of income that are basically covered by the DTAAs are business income, capital gains, interest, dividend, royalties etc. India has signed more than 90 DTAAs with various countries till date. Although DTAAs do not always succeed in eliminating double taxation, but it has significantly reduced its impact.

12.6 DTAAs AND MODEL TAX CONVENTIONS

With the rapid expansion of foreign trade, different economies started interacting with each other which led to consequences of Double Taxation i.e. tax is levied in country of source as well as country of residence without relief of any kind. Domestic tax laws being unable to resolve issue of double taxation, a need was felt to determine the basis on which a country should exercise its right to tax. This eventually led to evolution of double taxation avoidance agreement (DTAA) which to a certain extent, limited or modified the right under domestic tax law of a country in order to respect the right of other country.

The prime objective of a DTAA is to promote and foster economic trade and investments between two nations by avoiding double taxation. DTAA is a bilateral economic agreement, also referred as Tax Treaty between two nations. DTAAs lay down the rules of taxation for various categories of income such as interest, dividend, royalties etc. Each such category is dealt with by separate article in the DTAA.

In order to assist nations to enter into Tax Treaties, the Organisation for Economic Cooperation and Development (OECD) and the United Nations (UN) has developed certain Model Tax Conventions, which various countries can adopt to frame their Tax Treaties with different nations. These model conventions have been briefly discussed below:-

OECD Model: The OECD Model Convention finds its genesis in the formal draft of a treaty prepared by the League of Nations in 1927. The formal draft was accepted as a model convention applicable to all countries. When OECD was established in 1961, it pursued the draft and revised it

several times to bring it to the present form of a Model Tax Treaty. The OECD Model is essentially a model treaty between two developed nations. It advocates the “residence rule” of taxing income.

UN Model: The UN Model of a tax treaty was first published in 1980 by the United Nations in 1980. In divergence to the OECD Model, the UN Model generally favours “source rule” of taxing income. This model is designed to favour the developing nations unlike the OECD Model. It encourages better flow of funds from developed nations to the developing countries.

US Model: The United States of America has developed its own model convention known as US Model. The US uses its own model convention while entering into tax treaties with various countries.

India has signed DTAAs with more than 90 nations till date. India pursues a mixture of both source taxation and residence taxation in framing its tax treaties primarily focusing on the right to tax the income between the countries.

12.7 TAX HAVENS

Every country has its own tax laws, where some nations opt to charge very high rates of taxes and many other nations impose no or only nominal taxes. Again globalization facilitated cross-border transactions and even expansion of business houses to different nations. As such, the countries with low tax rates or no taxes tend to attract business houses to set up the businesses in their nations or to transact business activities from their nations. These territories and countries also offer the foreign investor a reduction in regulatory or administrative constraints. Such nations are known as tax havens. In other words, any country which modifies its tax laws to attract foreign capital could be considered a tax haven. The central feature of a haven is that its laws and other measures can be used to evade or avoid the tax laws or regulations of other jurisdictions.

Factors that determine whether a nation is a tax haven or not:

- **Taxing policy:** Tax havens impose nil or only nominal taxes (generally or in special circumstances). They further lure non-residents to use

their place for business activities to escape high taxes in their country of residence.

- **Lack of transparency:** A lack of transparency in the operation of the legislative, legal or administrative provisions is another factor used to identify tax havens. Lack of transparency in one country can make it difficult, if not impossible, for other tax authorities to apply their laws effectively. 'Secret rulings', negotiated tax rates, or other practices that fail to apply the law openly and consistently are examples of a lack of transparency.
- **Lack of effective exchange of tax information with foreign tax authorities:** Tax havens typically have laws or administrative practices under which businesses and individuals can benefit from strict rules and other protections against scrutiny by foreign tax authorities. This prevents the transmittance of information about taxpayers who are benefiting from the low tax jurisdiction.

According to modern studies, a few of the highly preferred tax havens include Switzerland, Singapore, Hong Kong, Netherlands, Caribbean Islands etc.



CHECK YOUR PROGRESS

Q 3: State the prime objective of DTAA

.....

.....

Q 4: Mention a four highly preferred tax havens

.....

.....

12.8 TRANSFER PRICING

The increasing participation of multinational groups in economic activities in the country has given rise to new and complex issues emerging from transactions entered into between two or more enterprises belonging to the same multinational group. The profits derived by such enterprises carrying on business in India can be controlled by the multinational group,

by manipulating the prices charged and paid in such intra-group transactions, thereby, leading to erosion of tax revenues. In other words, the course of business between a resident person and an associated non- resident or not ordinarily resident person, is so arranged that the resident makes either no profit or less than the ordinary profit in that business. Such an arrangement would deprive that Indian revenue of the tax which would otherwise be payable by the resident. With a view to provide a statutory framework which can lead to computation of reasonable, fair and equitable profits and tax in India, in case of such multinational enterprise, new set of special provisions relating to avoidance of tax have been introduced under chapter X in the Income tax Act, 1961. These provisions relate to computation of income from international transaction having regard to arm's length price, meaning of associated enterprises, meaning of international transaction, determination of arm's length price, keeping and maintaining of information and documents by persons entering into international transaction, furnishing of a report from an accountant by persons entering into such transactions.

The term "transfer pricing" is believed to have evolved from the term "transfer price" which is used to mean the amount charged by one department/segment of an enterprise for products or services supplied to another department/segments of the same enterprise. And with the evolution of MNC concept, the departments/segments of an enterprise grew as an independent entities operating in various parts of the world. Accordingly, the term "transfer price" meant for departmental transfer of a business enterprise has evolved to mean price which is charged between two or more entities of an MNC or associated enterprises operating in different countries. The MNCs can manipulate the transfer price charged to their associated enterprises intentionally or unintentionally in such a way that their tax liability in India gets reduced. Suppose, ABC Ltd of India has an associated enterprise named XYZ Ltd in Mauritius. ABC Ltd purchased goods having a market value of Rs. 5,00,000 from XYZ Ltd at a higher value of Rs. 8,00,000. Since profits can be reduced by showing increased purchases, ABC Ltd could reduce its tax burden by showing reduced profits. On the other hand, XYZ Ltd.'s profit increased proportionately due to increase in sales value.

But, due to the very low tax rates in Mauritius, XYZ Ltd.'s tax burden is increased by a very nominal amount. As such, ABC Ltd could ultimately lower its tax burden by shifting its business transactions to Mauritius and manipulating its transfer price.

The differences in tax rates among different countries has lured many MNCs and domestic business houses to shift their business or business activities to nations with no tax or to nations having a very low rate of tax to earn more profit by reducing the tax amount. With the advent of globalization, more and more domestic companies are transformed into MNCs or forming associated or subsidiary enterprises in nations where tax rates are below the tax rates of the home country. Due to stringent tax laws and comparatively higher tax rates in India, many domestic companies are executing there business transactions through their associated enterprises, subsidiaries or other related entities in foreign nations having no or low tax rates to avoid or evade tax causing a huge loss of tax revenue for the Government. Further, such an arrangement also provided privileges of doing business with related parties to those companies. Therefore, in order to ensure fair and competitive dealings among all companies and markets and to reduce the loss of revenue due to such arrangements, the need to introduce regulations for transfer pricing was felt.

The Government of India introduced Transfer Pricing Regulations through the Finance Act, 2001. Accordingly, Sec 92 to 92F had been included in Chapter X of the Income Tax Act, 1961, providing for a transfer pricing mechanism based on computation of income from cross-border transactions. The provisions of transfer pricing shall be applicable only if following conditions are satisfied:

(i) There must be an international transaction;

(ii) Transaction should be between two or more associated enterprises either or both of whom are non-residents;

(iii) Such international transaction should be in the nature of

  (a) Purchase, sale or lease of tangible or intangible property; or

  (b) Provision of service; or

  (c) Lending or borrowing money; or

(d) Any other transaction having a bearing on the profits, income, losses or assets of such enterprise.

(iv) Further, such transaction may also involve allocation or apportionment of, or any contribution to any cost or expenses incurred or to be incurred in connection with a benefit, service or facility provided or to be provided to any one or more of the associated enterprises on the basis of mutual agreement or arrangement between such associated enterprises.

(v) Such transaction should be done at arm's length price and if it has been done at a lesser price, than it require determination of income or apportionment of cost or expenses on the basis of arm's length price.

(vi) The above adjustment should not result in decrease of income chargeable to tax or increase in losses to be reported by the assesse.

Associated Enterprises:

Associated enterprise are those which are owned or controlled by the same or common entity/person. As per Section 92A(1) of the Act, associated enterprise refers to an enterprise:

(a) which participates, directly or indirectly, or through one or more intermediaries, in the **management** or **control** or **capital** of the other enterprise; or

(b) in respect of which one or more persons who participate, directly or indirectly, or through one or more intermediaries, in its management or control or capital, are the same persons who participate, directly or indirectly, or through one or more intermediaries, in the management or control or capital of the other enterprise.

Arm's Length Price:

According to Sec 92F(ii), "Arm's length price" means price which is applied or proposed to be applied in a transaction between persons other than associated enterprises in uncontrolled conditions. Sec 92C deals with the methods for determining arm's length price and the factors which are to be considered for applicability or non-applicability of a particular method to a given situation. The factors as well as methods incorporated in this section are not exhaustive and the CBDT may prescribe further factors and methods.

12.9 INTERNATIONAL TAX MANAGEMENT STRATEGY AND INDIAN TAX ENVIRONMENT

Tax management has evolved as an important domain for business enterprises due to persistent strengthening of tax authorities eliminating tax avoidance and evasion with constant update in tax regulations and provisions. Tax payers are finding it ever difficult to avoid or evade taxes due to reduced loopholes in the current tax laws and regulations. As such, the business enterprises are establishing tax management departments, hiring professional services etc. to formulate strategies to reduce their taxes through proper planning without breaching the tax laws of the land. E-Governance and digitisation have compelled tax authorities and taxpayers for persistent innovation in tax management. Business needs tax management strategies to manage risk and create a competitive advantage for businesses. They need to have an ongoing system for adapting to and staying on top of these complex changes.

The Indian taxation system has undergone tremendous reforms during the last few years. The Indian Government have undertaken various policy reforms and process simplification in tax laws ensuring greater predictability, fairness and automation. Currently, India is the top destination for foreign direct investment. Foreign companies are investing directly in private business enterprises in India to reap the benefits of cheaper wages and changing business environment of India. India's investment incentives are designed to channel investments to specific industries, promote the development of economically lagging regions and encourage exports of goods and services. India offers both tax and non tax incentives for business activities in specified industries, specified regions, SEZs etc.

A few of the tax incentives offered to business enterprises in India include:

- Industry and region specific Tax Holidays
- Weighted Deduction at 150%/100% for in-house research and development expenses
- Accelerated depreciation for energy saving, environment friendly and pollution control equipments

- Additional depreciation for new investment in plant and machinery.

A few state governments in India provide additional incentives for initiating new business enterprises in their specified regions. Further, a number of tax and other incentives are granted on exports of goods and services, as well as on imports of inputs and capital goods for use in exports of goods and services.

Some of the recent developments in Indian taxation regime include alignment with proposals under the Base Erosion and Profit Shifting (BEPS) project, introduction of the General Anti-Avoidance Rules (GAAR), applicability of tax on gains arising out of indirect transfers of Indian assets, re-negotiation of tax treaties, Income Computation and Disclosure Standards (ICDS), change in tax residency conditions by introduction of the Place of Effective Management (PoEM) concept, etc. The latest among all this is signing of Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting (MLI).

Further, due to mandatory application of the new Indian Accounting Standards (Ind-AS) which are a set of standards converged with International Financial Reporting Standards (IFRS), there may be some impact on the tax liability of the Corporate assesses.

The emphasis is now shifting towards enforcing compliance and expanding the tax base with e-governance and digitisation gaining importance. Taxation is also used as a tool to promote investments in identified industry sectors, thereby spurring overall economic growth. As such, it is becoming increasingly important for business enterprises in India to understanding the impact of developments in tax and regulatory aspects and strategically using them to their benefit.



CHECK YOUR PROGRESS

Q 5: Define Associated Enterprises/

.....

.....

Q 6: Define Arm's Length Price.

.....

.....



12.10 LET US SUM UP

- The reforms in the domestic tax law to tax transactions and economic events that occur across its borders are based on some underlying policy rationale, which can collectively be termed as “international tax policy”.
- There is no separate global tax law that governs cross border transactions. Moreover, there is no international tax court or administrative body for international tax issues. All taxes are levied under their domestic law by federal, national or local governments. These tax laws have an impact on cross-border transactions.
- The provisions, rules, treaties, agreements etc. that a nation introduces in its domestic tax law to cover the tax aspects of cross-border transactions are collectively known as international tax system. So each country shall have its own international tax system.
- The Organisation for Economic Co-operation and Development (OECD) has formulated a number of overarching principles of tax policy. And these tax policies has been a guidance to many nations to develop their taxation system. These well recognized fundamental principles of taxation are:
  1) Neutrality,
  2) Efficiency,
  3) Certainty and simplicity,
  4) Effectiveness and fairness,
  5) Flexibility
- Besides, the above stated principles of taxation as stated by OECD, *principle of equality* is seen to be adopted by many nations while formulating their tax laws.
- Any country which modifies its tax laws to attract foreign capital could be considered a tax haven. The central feature of a haven is that its laws and other measures can be used to evade or avoid the tax laws or regulations of other jurisdictions.

- Factors that determine whether a nation is a tax haven or not:
  1) Taxing policy
  2) Lack of transparency
  3) Lack of effective exchange of tax information with foreign tax authorities
- According to modern studies, a few of the highly preferred tax havens include Switzerland, Singapore, Hong Kong, Netherlands, Caribbean Islands etc.
- The term "transfer price" meant for departmental transfer of a business enterprise has evolved to mean price which is charged between two or more entities of an MNC or associated enterprises operating in different countries.
- The Government of India introduced Transfer Pricing Regulations through the Finance Act, 2001. Accordingly, Sec 92 to 92F had been included in Chapter X of the Income Tax Act, 1961, providing for a transfer pricing mechanism based on computation of income from cross-border transactions.
- Associated enterprise are those which are owned or controlled by the same or common entity/person. As per Section 92A(1) of the Act, associated enterprise refers to an enterprise:
  (a) which participates, directly or indirectly, or through one or more intermediaries, in the **management** or **control** or **capital** of the other enterprise; or
  (b) in respect of which one or more persons who participate, directly or indirectly, or through one or more intermediaries, in its management or control or capital, are the same persons who participate, directly or indirectly, or through one or more intermediaries, in the management or control or capital of the other enterprise.
- According to Sec 92F(ii), "Arm's length price" means price which is applied or proposed to be applied in a transaction between persons other than associated enterprises in uncontrolled conditions.
- Tax management has evolved as an important domain for business

enterprises due to persistent strengthening of tax authorities eliminating tax avoidance and evasion with constant update in tax regulations and provisions.

- Business needs tax management strategies to manage risk and create a competitive advantage for businesses.
- India offers both tax and non-tax incentives for business activities in specified industries, specified regions, SEZs etc. A few of the tax incentives offered to business enterprises in India include:
  - Industry and region specific Tax Holidays
  - Weighted Deduction at 150%/100% for in-house research and development expenses
  - Accelerated depreciation for energy saving, environment friendly and pollution control equipments
  - Additional depreciation for new investment in plant and machinery.



12.11 FURTHER READING

1) Roy Rohatgi (2005), *Basic International Taxation*, 2nd Edition, Vol-1, Richmond Law and Tax Ltd, UK.
2) ICAI (2016), *Aspects of International Taxation- A Study, ICAI,* New Delhi.
3) ICAI (2018), D*irect Tax Laws and International Taxation,* ICAI, CMA Bhawan, Kolkata.
4) Sol Picciotto (2013), *International Business Taxation,* Cambridge University Press, UK.

12.12 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: According to Dipti Bajaj, "International Taxation refers to an independent branch of law that has been roughly defined as a body of legal provisions embedded in the tax laws of each country to cover the tax aspects of cross border transactions".

Ans to Q No 2: According to the principle of equality, every person should pay to the Government according to his ability to pay, that is, in proportion of the income or revenue.

Ans to Q No 3: The prime objective of a DTAA is to promote and foster economic trade and investments between two nations by avoiding double taxation.

Ans to Q No 4: Four highly preferred tax havens are Switzerland, Singapore, Hong Kong, Netherlands.

Ans to Q No 5: Associated enterprise are those which are owned or controlled by the same or common entity/person. As per Section 92A(1) of the Act, associated enterprise refers to an enterprise:

(a) which participates, directly or indirectly, or through one or more intermediaries, in the **management** or **control** or **capital** of the other enterprise; or

(b) in respect of which one or more persons who participate, directly or indirectly, or through one or more intermediaries, in its management or control or capital, are the same persons who participate, directly or indirectly, or through one or more intermediaries, in the management or control or capital of the other enterprise.

Ans to Q No 6: According to Sec 92F(ii), "Arm's length price" means price which is applied or proposed to be applied in a transaction between persons other than associated enterprises in uncontrolled conditions. Sec 92C deals with the methods for determining arm's length price and the factors which are to be considered for applicability or non-applicability of a particular method to a given situation.



12.13 MODEL QUESTIONS

Q 1: Discuss the Principles of Taxation.

Q 2: What do you mean by DTAA? Discuss the various model tax conventions.

Q 3: Discuss the factors that determine a tax haven.

Q 4: Discuss the various conditions for applicability of transfer pricing provisions.

Q 5: Discuss the Indian Tax Environment.

*** ***** ***

UNIT 13: INTERNATIONAL PORTFOLIO INVESTMENT

UNIT STRUCTURE

13.1 Learning Objectives

13.2 Introduction

13.3 Benefits of International Investing

13.4 International Diversification

13.5 Barriers to International Diversification

13.6 Vehicles for Overcoming Capital Flow Barriers

13.7 Asset Allocation Policy and Management Style

13.8 Portfolio Hedging Strategies

13.9 Let Us Sum Up

13.10 Further Reading

13.11 Answers To Check Your Progress

13.12 Model Questions

13.1 LEARNING OBJECTIVES

After going through this unit, you will be able to:

- discuss the utility of investing across the globe
- discuss how foreign investment risk can be reduced through investment in various investment outlets
- identify the barriers to international diversification
- discuissvehicles for overcoming Capital Flow barriers; and
- describe how efficiency of an internationally diversified investment portfolio can be improved through hedging strategies.

15.2 INTRODUCTION

In the previous unit we discussed about the international taxation and its various concepts.Now, in this unit we shall discuss about benefits of International Investing,International Diversification, Barriers to International Diversification.There has been remarkable growth in recent years in portfolio

investments both by individual and institutional investors in foreign securities. This is ostensibly owing to globalization and liberalization of financial markets following the strategic initiatives by the governments of major countries including India and China giving freedom to their citizens to invest freely in foreign securities. Pathbreaking advancements witnessed in recent years in the Information and Communication technologies have also contributed to spurt in international investments by facilitating cross-border transactions and rapid dissemination of information across national borders. The introduction of investment vehicles, such as international mutual funds, country funds and internationally listed stocks, which allow investors to achieve international diversification without incurring excessive costs, has also contributed to buoyancy in portfolio investments. The questions then arise as to why investors should invest their funds overseas and how much they can gain from international diversification, what problems the investors are confronted with while investing in foreign countries and how these problems can be overcome.

At the end of this unit we will discuss the vehicles for Overcoming Capital Flow Barriers, Asset Allocation Policy and Management Style and Portfolio Hedging Strategies.

13.3 BENEFITS OF INTERNATIONAL INVESTING

Investors, both individual as well as institutional, are tempted to invest more in foreign securities than in domestic securities because international investment offers a much broader range of opportunities than a domestic investment; enabling the investors to make relatively higher returns.

Another appeal of foreign investments is the potential for lowering portfolio risk. National economies do not move in unison, security prices in different countries do not move uniformly and stock and bond returns on securities differ widely across national markets. As a result, investors may be able to achieve higher returns with reduced risk by diversifying their investible resources internationally. Further, many national economies are dominated by only a few industries, on account of which many foreign stock markets are only loosely linked to other national stock markets. It is easy to

find examples of national stock markets with firms concentrated in a few key industries. For example, the economies of Gulf countries are dominated by oil and construction companies. Likewise, the economies of Brazil and Indonesia are dependent on their abundant natural resources. Many institutional investors are lured to invest in securities of these companies to derive the advantage of fortunes of the local economy.

Sometimes, influence of foreign exchange rates may improve earnings from foreign investments. From a domestic investor's perspective, the return on a foreign investment derives partly from the foreign market return in the local currency and partly from the change in the spot rate of exchange. In view of very low correlation between exchange rates and national market returns, local currency returns on foreign investments are further isolated from returns in domestic markets.

13.4 INTERNATIONAL DIVERSIFICATION

Prudent investors usually follow the principle of diversification to ensure a reasonable and steady return alongwith safety of funds and benefits of capital appreciation. Diversification is not just a defensive policy to protect against the financial risk represented by the investment portfolio but is also a means of increasing average return from a fund that might, otherwise, for the sake of safety be confined to low-yielding securities. Diversification, thus, attempts to combine high return with low risk by distributing investible funds over variable and fixed income-bearing securities of a number of corporate enterprises belonging to different industrial categories and groups located across different regions and countries. The broader the diversification, the more stable the returns and the more diffused the risks. Diversification of investible resources and building of investment portfolio comprising securities of different companies across national markets offers the opportunity of achieving a better risk -return trade-offs than by investing solely in domestic securities. This implies that expanding the universe of assets available for investment should lead to higher returns for the same level of risk or less risk for the same level of expected return.

In the case of global investment diversification, security returns are

much less correlated across national markets than within a country because of slew of economic, political, institutional and psychological factors that vary differently across countries. For instance, political developments in Norway could very well affect Finish stock returns due to the geographical proximity and economic ties between the two countries but Hong Kong stock returns remain affected insignificantly.

Further, business cycles are often highly asynchronous among countries, further contributing to low international correlations.

- **Diversifying with International Equity Investments:**

Although it is possible to reduce risk substantially through portfolio diversification, it may be too difficult to eliminate it totally because the total risk of equity investment portfolio comprises systematic risk and unsystematic risk. Systematic risk refers to the risk that remains even after investors fully diversify their portfolio. Systematic risk is also known as non-diversifiable risk. Increasing the number of securities in the portfolio reduces the unsystematic risk component leaving the systematic risk component unchanged.

Solnik was the first to formally quantify the risk reduction benefits of international diversification. According 1oSoluik, systematic rink accounts for about 27 percent of total risk (variance) for a typical stock in the U.S. market. This means that 73 percent of the total risk of an individual U.S. stock can be eliminated through diversification within a large U.S. portfolio. The systematic risk that remains (27%) cannot be eliminated through diversification within the U.S. stock market.

Solnik's estimate of the gain from international diversification in stocks for a U.S. resident is depicted in figure 13. 1. This figure exhibits that with addition of assets to a portfolio, portfolio variance is reduced. As additional stocks were added to a portfolio of stocks, portfolio variance falls to just 27 percent of the average variance of an individual U.S. stock. With expansion of investment opportunity from domestic U.S. stocks to a globally diversified equity portfolio, systematic risk falls to 11.7 percent of the average variance individual stock. This is less than half of the systematic risk in a fully diversified

domestic U.S. equity stock portfolio. The benefits of international diversification tend to be even greater for residents of countries with less diversified economies.

Precisely speaking, an international investment portfolio when fully diversified can be less than half as risky un purely domestic portfolio. The more rely explanation for the low degree of international return correlation is that local monetary and fiscal policies, differences in international and legal regimes, and regional economic stocks induce large country-specific variation in returns.

The foreign exchange risks of an equity investment portfolio can also be reduced through international diversification. The construction of internationally diversified portfolio is different from creating a traditional domestic portfolio because the investor is attempting to combine assets that are less than perfectly correlated, reducing the total risk of the portfolio. Further, by adding assets outside the home market, assets that were not earlier available to be averaged into the portfolio's expected returns and risks, the investor can now tap into a large pool of potential investments.

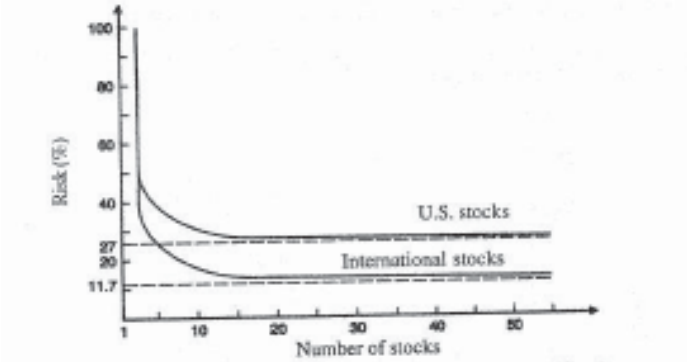


Fig 13.1: Risk Reduction through International Deversification

Source: Bruno H. Solnik, "Why Not Diversify Internationally Rather Than Domestically?" *Financial Analysts Journal*, July–August 1974.

- **Diversifying with International Bond Investments:**

The benefits of international diversification extend to bond portfolios also. Diversification into foreign bond markets can substantially reduce the risk of a bond portfolio. Indeed, the potential for risk reduction through international bond portfolio diversification is often even greater than with stocks.

The prices of fixed rate bonds are the function of level of nominal interest rates in the local economy. Changes in nominal interest rates are, in turn, determined to a great extent by changes in anticipated inflation and to a small extent by changes in real required returns. Although values of stock also vary with expected inflation and with bigger asset-specific component to stock returns than to bond returns.

Further, currency risk in a much larger percentage of total variance for bonds because of the variability of foreign bond returns. As a result, the risk reduction benefits of hedging foreign bonds against currency risk are even greater than for hedging foreign stocks.

The conclusions made by Barnett and Rosenberg, who started with a portfolio comprising U.S. bonds only and subsequently replaced then, in increments of 10 percent, with a mixture of foreign bonds from seven markets, were as follows:

i) As the proportion of U.S.bonds fell, the portfolio return rose. This result reflects the fact that foreign bonds outperformed U.S.bonds over the 10-year period;

ii) As the proportion of U.S. bonds fell from 100% to 70%, the volatility of the portfolio fell. This fact reflects the low correlation between U.S. and foreign bond returns;

iii) By investing upto 60% of their funds in foreign bonds, U.S. investors could have raised their investments substantially while not increasing risk above the level associated with holding only U.S.bonds.

- **Diversifying with International Stocks and Bonds:**

Investment of funds in foreign bonds along with equity stocks can further improve the return-risk efficiency of a globally diversified portfolio. In view of low correlations of returns on (foreign and domestic) stocks and bonds, further gains can be derived by combining stocks and bonds in an internationally diversified portfolio.

Figure 13.2 presents Jorion's estimate of the gains from international stock and bond diversification from the perspective of a U.S. investor..



Fig 13.2: Efficiency Gain Through International Stock and Bond Diversification



CHECK YOUR PROGRESS

Q1: Explain Global Investment Diversification.

.....

Q2: What is Systematic Risk.

.....

Q3: Write the importance of diversification into foreign bond markets

.....

13.5 BARRIERS TO INTERNATIONAL DIVERSIFICATION

Although international investment diversification enables invertors to avail benefits of higher returns with reduced risks, there are number of impediments that come in the process of overseas investment and impede cross-border capital flows. These impediments in terms of market frictions, unequal access to market prices, investor irrationality and unequal access to information stem out of financial market imperfections.

Let us discuss the barriers to international diversification in the following paragraphs:

1. Market Frictions: Governments of different countries across the globe intervene to impose price controls with a view to achieve their fiscal and monetary policy objectives. They, very often, try to stabilize to cross-border financial flows through foreign exchange controls including prohibiting the conversion of their local currencies into foreign currencies, and/or

mandating the conversion of currencies at an official rate. Such type of restrictions can have significant impact on foreign trade, economic and wealth within the country

More often than not Governments pursue the policy of selectively controlling capital inflows and outflows by mandating that specific category of cross-border transactions would be conducts at official rates that may differ from market rates. The selective controls can be used to discourage particular transactions and to encourage some type of foreign transactions in the interest of economic growth of the home country.

Governments may clamp restriction on foreign investment by domestic residents or on domestic investment by foreign residents. Foreign investors may also be prohibited from owning domestic shares. For instance, in Finland, foreigners can own at most 30 percent of the shares of any Finnish firm. In Korea, foreigner's ownership is restricted to 20 percent. Foreigners' investment in Indian firms has also been restricted between 26% and 74% depending on nature of activity.

National tax policies play crucial role in influencing decisions regarding cross-border investments. Tax implications of foreign investments have already been discussed. Income may be taxed twice -once in the country from which income is paid and once in the country in which it is received. In most countries levy of with holding tax has become norm, with the most dividend withholding tax rate being 15 percent.

Overseas financial transactions are also subject to tax in the proportion of the amount of the transaction. The tax rate on financial transactions varies from country to country.

Diversity of tax regimes and tax rates in different countries may attract or deter the foreign investors to invest their funds in overseas securities.

Transaction costs on international investments in the form of trading commissions, fees, and bid-ask spreads also affect foreign investments in a country because they are generally higher partly due to the fact that many foreign markets are relatively thin and illiquid and partly because investments in foreign securities often involve transactions in foreign exchange markets.

These cost are sometimes set by the government or by an agency representing brokers. Where transactions costs are negotiable, small investors will be put to disadvantageous position in international financial markets in comparison to large international banks, corporations and mutual funds. In such markets, small investors would have to put their funds into mutual funds to derive benefits of lower costs.

3. Unequal Access to Information: Another obstacle that impedes investment in foreign securities is the absence of a common language that supplies desired information about potential customers, suppliers or partners from foreign lands. Further, adequate and comparable information on securities is not readily available resulting in significant increase in the perceived riskiness of foreign securities, giving investors an added reason to invest funds at home. It is even possible that some investors may not be fully aware of the potential gains from international investments.

Possibility of inaccuracy and inadequate transparency in financial and accounting statements in companies of foreign countries is galore because of cross-cultural differences, substantial differences in national accounting disclosure practices and unrealistic conventions in developing countries. All these inhibit investors to put their money in foreign securities.

4. Irrationality of Investors: Another obstacle to foreign investment is that all investors are not always rational. Rational investors focus is always on maximization of earnings with minimum risk on their investments and they scan securities dispassionately. Unlike rational investors, irrational investors are influenced more by psychological factors, such as fear of the unknown events.

5. Other barriers: Above all, home bias in actual portfolio holdings acts as the biggest hurdle in overseas investments. Several explanations, such as the existence of political and currency risks and the natural tendency to invest in the familiar securities and avoid the unknown ones, have been put forth for the home bias. In addition, domestic securities may provide investors with certain services, such as hedging against domestic inflation, that foreign securities do not provide.

Some of the above barriers including home bias are getting gradually weakened in view of integration of international financial markets and emergence of new financial products.

13.6 VEHICLES FOR OVERCOMING CAPITAL FLOW BARRIERS

Investors can avail of benefits of international diversification of investment with least obstacles to foreign investments by taking recourse to various vehicles, important of which is outlined below:

1. Securities Home-Based Multinational Corporations*:* Hassle free benefits of international diversification may be derived by investors by investing their money in stock of MNCs who themselves engage in international business worldwide. The magnitude of the diversification benefits from such investments depends essentially on the nature and extent of their international involvement. MNCs in less diversified economies or in countries with controls on cross-border investment portfolio provide large benefits of diversification to their residents than U.S. multinationals provide to U.S. investors.

2. **Direct Purchase of Foreign Securities:** Investors can buy foreign debentures and equity shares directly in many financial markets. The cost and benefits of deployments of funds in foreign securities through this route will be dependent on the choice of the particular assets and the vehicles used to gain access to foreign markets and on barriers to capital flow in a particular market.

There are number of ways in which domestic investors can buy foreign stocks directly. Some of them are briefly discussed below:

i) *Direct Purchase of Foreign Securities:* The most direct route to diversify portfolio internationally is to purchase foreign securities straight away in foreign markets. However, this route may not be so useful to small investors because of several impediments, as stated earlier.

ii) *Direct Purchase in the Domestic Market*: This method of portfolio diversification is becoming popular in recent years because a large number of foreign companies are issuing equity stocks in developed

financial markets of Europe, North America, and South East Asia. Likewise, global bonds are being floated increasingly to satiate the borrowing needs of national governments, MNCs and transnational financial institutions such as IMF and IBRD.

There are two ways of listing shares by companies on foreign equity exchanges-Foreign shares and Depository receipts . Foreign shares represent shares of a foreign company sold to domestic investors through a transfer agent according to domestic regulations. Depository receipts are derivative securities which represent a claim on a block of foreign stock held by a domestic trustee. These receipts denominated in local currency are sold through a domestic broker and regulated by domestic authorities.

iii) *American Depository Receipts (ADRs):* ADRs represent certificates of ownership issued by a U.S.Bank as a convenience to investors in lieu of the underlying shares it holds in custody. These receipts are denominated in dollars and traded on a U.S.exchange. To issue an ADR a foreign company hires a U.S.investment banker to buy a block of shares in the foreign company. The banker then issues dollar-denominated stock certificates to the U.S.investors with foreign securities as collateral. Dividends are converted into dollars and distributed to investors directly by the Trustee. The investors in ADRs absorb the handling costs through transfer and handling charges.

3. **Internationally Diversified Mutual Fund:** The easiest way of investing abroad is to invest in shares of an internationally diversified mutual fund. The greater diversification of global and international funds reduces the risk for investors. In recent years several country funds have emerged In the United States as well as in other developed countries such as Germany, UK and Taiwan. There are three major categories of mutual fund that invest abroad:

a) Global funds which can invest anywhere in the world, including the U.S.;

b) Regional funds which are confined to specific geographical areas overseas such as Asia or Europe;

c) Single country funds which invest in individual countries, such as Germany or Taiwan

Thus, most investors would be better off buying an internationally diversified mutual fund. Investors can also construct their own internationally diversified portfolio by buying shares of a host of regional or country funds.

4. Other International Investment Vehicles: There are a number of other investment vehicles, having attractive options available in foreign markets such as equity-linked bonds, index futures, swaps or options.

Equity-linked bonds are sold in the form of a convertibility option or a warrant. Investment in foreign indices can be obtained with stock index futures. A host of index options are traded on national stock indices. These options having a symmetric pay offs can be gainfully used for hedging against, or speculating on, changes in a particular country market.

A stock index swap is also possible if a counterparty can be found who desires to swap into or out of a foreign market for a period of time. An investor aspiring to swap into a long position in the foreign market index also could build a debt -for swap with a short position in foreign bonds, a short position in domestic bonds or any

Other position acceptable to the counterparty

The utility of homemade international diversification was empirically examined by Errunza, Hogan and Hund. According to these authors, an U.S. investor can replicate the diversification benefits of foreign market retunrs by adding domestic portfolios with U.S.based MNCs, ADRs and internationally diversified funds. They also contend that U.S.investors need not trade abroad to achieve a portfolio that is internationally mean-variance efficient.

13.7 ASSET ALLOCATION POLICY AND MANAGEMENT STYLE

Efficiency of portfolio of foreign securities depends, mainly, on asset allocation policy of a fund and investment philosophy of its management portfolio decision-target weights given to various asset classes in an

investment portfolio. Asset allocation policy also influences how assets will be marketed to the public.

Management may pursue passive or active approach to manage the assets in the portfolio. In passive approach of fund management , based on the premise of portfolio diversification and improve return –risk performance within the parameter of the objectives the fund managers employ the low correlations between national markets to accomplish mean –variance efficient returns. Most of the passively managed funds are index funds which strive to hold the same proportion of stocks as a major market index

The passive approach to portfolio management has inbuilt benefits of being less risky than an actively managed portfolio invested in similar assets, at least for the investor having average acumen. However, returns on the portfolio constructed according to passive approach are not likely to be high.

In actively managed approach, manager decides about the average proportion of each asset class in the portfolio over the long run and funds are then invested in securities across countries. Very active funds often diverge from the earmarked proportion in their endeavour to maximize returns on the portfolio, keeping in view market developments. In contrast, passively managed funds adhere to their long-run targets.

Actively managed funds may adopt one or both of the following strategies for constructing their portfolios:

- Active Asset Allocation
- Active Security Selection

Strategy of active asset allocation involves periodic shifting of funds between asset classes in sync with the events likely to occur in both the short run and long run so as to improve returns and reduce portfolio risk. The focus of this strategy is, thus, on allocating money into the right kind of assets at the right time and successful market timing.

In active security selection strategy, the thrust is on identifying such individual securities as are superior in comparison to other securities in a market or industry. As such, this strategy calls for detailed company wise

specific information on investments and investment opportunities; new product development and likely changes in capital structure and corporate governance. However, this strategy may not be so helpful in real life in view of problems in obtaining the information from a distant market as also due to the inadequate familiarity with the cross-border differences in financial measurement and disclosure.

Active approach to funds management promises higher return with lower risk by avoiding the assets likely to fall in value.

Individual investors generally make choice between passive and active approach, depending on their beliefs about market efficiency or the lack thereof.

13.8 PORTFOLIO HEDGING STRATEGIES

Since changes in currency values are not related to changes in either the world stock market index or national stock market indices, it would be advisable to improve the return-risk efficiency of an internationally diversified portfolio of stocks and bonds by hedging the currency risk on foreign investments.

In the international asset pricing model (IAPM), each investor's optimal portfolio is a combination of the world market portfolio, risk less foreign and domestic currency bonds and a currency-specific hedge portfolio that strips foreign bonds of their currency risk . Generally, investors hold individual stocks in proportion to their market value weights in a globally diversified equity portfolio. The composition of the hedge portfolio depends mainly on the investors' functional currency.

According to interest rate parity, an investment in a riskless foreign bond is equivalent to a combination of a riskless domestic bond alongwith a long forward position in the foreign currency.

Mean-variance efficient portfolios in the IAPM are internationally diversified combinations of stock and bonds that have been hedged against currency risk.

There are a number of ways to construct a hedge portfolio. The

most important method is to hedge the entire amount of funds exposed to currency risk, as suggested by Michael Adler and Philippe Jorion. Figure 16.3 brings out Jorion's estimate of the additional benefit from hedging 100 percent of the currency risk of the world market portfolio. The extreme left sign represents the return-risk performance possible by hedging the currency risk of the combined stock-bond portfolio.

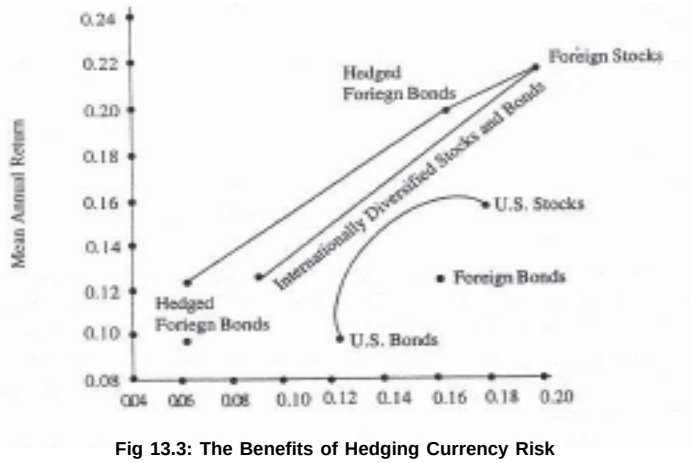


Fig 13.3: The Benefits of Hedging Currency Risk

For drawing Figure 13.3 Jorian uses a rolling one-month forward hedge of the full amount of the investment in each foreign currency. With one-month rolling foreign currency hedge, the amount invested in each foreign market is sold forward at the start of each month with a one-month forward contract. The potential gains in return - risk efficiency from hedging the currency risk in an internationally diversified portfolio, as the figure shows, can be substantial.



CHECK YOUR PROGRESS

Q1: Write the barriers to international diversification

.....

.....

Q2: What are the vehicles for overcoming capital flow barriers

.....

.....



13.9 LET US SUM UP

With declining barriers to international capital flows and improved communications and data processing technology facilitating low- cost information about foreign securities, investors are showing avid interest in international investing to realize its enormous potentials.

Internationally diversified portfolio promises higher returns with less risk than domestically diversified portfolio. The foreign exchange risks of a portfolio or the general portfolio of activities of the MNCs are reduced through international diversification.

The extent to which risk is reduced by portfolio diversification depends on how highly the individual assets in the portfolio are correlated. The risk of an individual asset when it is held in a portfolio with a large number of securities depends on its return covariance with other securities in the portfolio and not on its return variance.

There are several routes to international security investment such as investing in domestic MNCs, investing in foreign securities in the foreign market, investing in foreign securities in the domestic market, holding depository receipts, investing in mutual funds.

The gains in return-risk efficiency can be improved by hedging the currency risk of foreign investments. Reducing the currency risk of an internationally diversified portfolio can greatly reduce the variability of return without a corresponding decrease in expected return.



13.10 FURTHER READING

1) Harry C. Sauvain,(1953) *Investment Management*, Prentice-Hall, INC, New York.

2) David F. Jordan and Herbert E. Dougall, (1952),*Investments,* Prentice-Hall, INC, New York.

3) Bruno Solnik, “Why Not Diversify Internationally Rather Than Domestically”, Financial Analysts, Journal 30, July/August, 1974.

4) Haim Levy and Zvi Lermon, “The benefits of International Diversification in Bonds”, Financial Analysts Journal 44, (September/October 1988).

5) Philippe Jorion, “Asset Allocation with Hedged and Unhedged Foreign stocks and Bonds”, Journal of Portfolio Management, Summer 1989, pp 49-54.

6) Jun-Koo Kang and Rene M. Stulz, “Why is There a Home Bias? An analysis of Foreign Portfolio Equity Ownership in Japan”, Journal of Financial Economics, October, 1997, pp3-28.

7) Vihang Errunza, Ked Hogon, and Mao-Wei Hung, “Can the Gains from International Diversification be Achieved Without Trading Abroad?” Journal of Finance-54(1999)

8) William F. Sharpe, “Asset Allocation: Management Style and Performance Management”, Journal of Portfolio Management 18, No.2, 1992

9) Michael Adler and Philippe Jorian, “Universal Currency Hedges For Global Portfolios”, Journal of Portfolio Management 18, Summer 1992

10) Philippe Jorion, “Asset Allocation with Hedged and Unhedged Foreign Stocks and Bonds”, Journal Portfolio Management, 15 Summer 1989

13.11 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q1: Global investment diversification, security returns are much less correlated across national markets than within a country because of slew of economic, political, institutional and psychological factors that vary differently across countries.

Ans to Q2: Systematic risk refers to the risk that remains even after investors fully diversify their portfolio. Systematic risk is also known as non-diversifiable risk.

Ans to Q3: Diversification into foreign bond markets can substantially reduce

the risk of a bond portfolio. Indeed, the potential for risk reduction through international bond portfolio diversification is often even greater than with stocks.

Ans to Q4: The barriers to international diversification are Market Frictions, Unequal Access to Informationa and Irrationality of Investors

Ans to Q5: Vehicles for overcoming capital flow barriers are: Securities Home-Based Multinational Corporations,Direct Purchase of Foreign Securities and Internationally Diversified Mutual Fund



13.12 MODEL QUESTIONS

1. What are the factors responsible for the recent surge in international portfolio investment?
2. Security returns are found to be less correlated across countries than within a country. Explain
3. What types of risks are present in a portfolio? Which type of risk remains after the portfolio has been diversified?
4. Describe some of the barriers to international portfolio diversification.
5. What are the investment vehicles available to an investor to cope with obstacles to international investing?
6. Studies show that the correlations between domestic stocks are greater than the correlations between domestic and foreign stocks. Explain why this is likely to be the case. What implications does this fact have for international investing?
7. An alternative to investing in foreign stocks is to invest in the shares of domestic MNCs. Are MNCs likely to provide a reasonable. Substitute for international portfolio investment?
8. What is the difference between a passive and an active investment philosophy?
9. What alternatives does an MNC have when investors in a foreign currency demand accounting and financial information?
10. Why do investors invest the lion's share of their funds in domestic securities?

11. Which portfolio has most to gain from currency hedging-a portfolio of international stocks or a portfolio of international bonds? Why?
12. If the primary benefit of International portfolio diversification is risk reduction, is the investor always better off choosing the portfolio with the lowest expected risk?

*** ***** ***

UNIT 14: GLOBAL FINANCIAL INSTRUMENT

UNIT STRUCTURE

14.1 Learning Objectives

14.2 Introduction

14.3 Global Depository Receipt (GDR)

14.4 Need for GDR Issuess by Indian Companies

14.5 Requirement for issuing GDRs

14.6 Parties to GDRs

14.7 Steps in Issue of GDRs

14.8 American Depositary Receipt (ADR)

14.9 Let Us Sum Up

14.10 Further Reading

14.11 Answers To Check Your Progress

14.12 Model Questions

14.1 LEARNING OBJECTIVES

After going through this unit, you will be able to:

- define and describe security Market instrument of international financial markets
- discuss International equities, GDRs, ADRs, International Money Market and Bond Market Instruments, Eurobonds, Repos, Euro CPs, MTN, FRN, Loan Syn-dicates and Euro Deposits
- evaluate the Euro Issues in India.

14.2 INTRODUCTION

In this unit we will discuss various concepts related to glabal financial instruments. There are different types of equity investment instruments in international market. International equity offering generally takes any one of the two forms, viz, i) dual syndicate equity offering, where the equity offering is split into overseas and domestic trenches and each is handled by separate lead manager and ii) euro equity offering where one trenched is placed

overseas and managed by one lead manager GDRs, ADR AND IDRS (Global, American and internationals depository Receipts) are the prime modes of Euro-equity offerings.

Let us discuss the concepts like International equities, GDRs, ADRs, International Money Market and Bond Market Instruments, Eurobonds, Repos, Euro CPs, MTN, FRN, Loan Syn-dicates and Euro Deposits.

14.3 GLOBAL DEPOSITORY RECEIPT (GDR)

A Global Depository Receipt (GDR) is a dollar denominated instrument traded on a stock exchange in Europe or the US or both. It represents a certain number of underlying equity shares.

The shares are issued by the company to an intermediary called depository in whose name the shares are registered. It is the depository which subsequently issues the GDRs. The physical possession of the equity shares is with another intermediary called the custodian who is an agent of the depository. Thus while a GDR represents the issuing company's shares, it has a distinct identity and in fact does not figure in the books of issuer.

The concept of GDRs has been in use since 1927 in Western capital markets. Originally they were designed as an instrument to enable US investors to trade in securities that were not listed in US exchanged in the form of American depository receipts (ADRs). Issue traded outside the US were called International Depository Receipt (IDR) issues.

Thus, a global depository receipt or global depositary receipt (GDR) is a certificate issued by a depository bank, which purchases shares of foreign companies and deposits it on the account. GDRs represent ownership of an underlying number of shares. Global depository receipts facilitate trade of shares, and are commonly used to invest in companies from developing or emerging markets.

Prices of global depositary receipt are often close to values of related shares, but they are traded and settled independently of the underlying share.

Characteristics of GDRs

1. It is an unsecured security
2. A fixed rate of interest is paid on it
3. It may be converted into number of shares

4. Interest and redemption price is public in foreign agency
5. It is listed and traded in the share market

Until 1983, the market for depository receipts was largely investor driven and depository banks often issued them without the consent of the company concerned. In 1983, the securities and exchanged commission (SEC) of the US made it mandatory for certain amount of information to be provide by the companies.

Till 1990, the companies had to issue separate receipts in the United states (ADRs) and in Europe (IDRs). Its inherent weakness was that there was no cross border trading possible as ADRs had to be traded, settled and charged through DTC (an international settlement systems in the US) while the IDRs could only be traded and settled via Euro clear in Europe.

In 1990, changes in Rule 144A and regulation 5 of the SEC allowed companies to raise capital without having to register the securities within the SEC or changing financial statements to reflect US accounting principles. The GDR evolved out of these changes.

Depository Receipts (DRs) are offered for subscription as under:

a) Unsponsored: Issued by one or more depositories in response to market demand, and this is found obsolete today.
b) Sponsored: This is prominent today, thanks to flexibility which has listed it on a national exchange in the US and the ability to raise capital.

1) Private Placement DRs: A company can access the US and other markets through a private placement of sponsored DRs. In this a company can raise3 capital by pacing DRs with large institutional investors and avoid registering with the SEC. The National Association Of Securities Deal (NASD) of the US has established an Electronic Trading System similar to NASDAQ, called PORTAL within which Rule 144A eligible securities approved by NASD for deposit may traded by QIBs.

2) Sponsored Level DRs: This is the simplest method for companies to access the US and non-US capital markets. Level-I DRs trade on the OTC market and as a result the company does not have to comply with US generally accepted accounting principles (US GAAP) or full

Securities and Exchange Commission (SEC) disclosures. Under this, companies enjoy the benefits of a publicly traded security without changing the current reporting process.

3) **Sponsored Level II and III DRs:** Companies that wish to either list their securities on an exchange in the US or raise capital, use sponsored level II and III DRs respectively. Each level requires different SEC registration and reporting plus adherence to US GAAP. The companies must also meet the listing requirements of the National Exchange or NASDAQ whichever it chooses.



CHECK YOUR PROGRESS

Q1: Define Global Depository Receipt (GDR)

.....

.....

Q2: Write any three Characteristics of GDRs

.....

.....

Q3: What is Sponsored Level DRs

.....

.....

14.4 NEED FOR GDR ISSUES BY INDIAN COMPANIES

The specific needs of Indian companies to issue GDRs are as follows.

i) To raise valuable foreign exchange,

ii) To meet the expansion and diversification needs of these companies,

iii) To globalize the demand for the scripts of these companies,

iv) To leverage the corporate names of these companies in the global capital market,

v) To mitigate the rising cost of domestic capital due to stringent monetary conditions at home and

vi) To broad-base share holdings in these companies are the specific needs that were sought to be fulfilled by these GDR companies.

14.5 REQUIREMENTS FOR ISSUING GDRs

In a directive issued on November 12, 1993, the Government of India laid down certain provision governing issues of GDRs and foreign currency bonds. The key provisions are as follows:

- Prior permission from the deportment of Economic Affairs, ministry of Finance is mandatory.
- Company seeking such approval must have a consists track record of good performance.
- The custodian shall be a Domestic Custodian Bank.
- The aggregate of the foreign investment in the company, direct or indirect, shall not exceed 51% of the issued and subscribed capital of the issuing company (This is exclusive of general permission of offshore funds or FIIs to invest upto 24% or 30% as the case may be.

In addition the notification containing the details of taxation are mentioned in the text. Dividends are subject to a 10% withholding tax and capital gains (if the underlying shares are sold in India or to an India resident) at maximum marginal rate if short term (holding period less than 12 months) and 10% if long term are provided for.

Subsequently, in May 1994, the Government of India issued further guidelines intended to further regulate the access and the use of funds. The May 1994 guidelines specify inter alia:

1) A company can make a GDR issue only once in a period of 12 months. A group of companies can make no more than two issues.
2) The funds mobilized must be used within a year of the issue date for one or more of the following purposes:
    a. Import of capital equipment.
    b. Purchase of domestic plant, equipment and buildings.
    c. Prepayment or scheduled repayment of an existing foreign currency liability.
    d. Funds a joint venture or a project abroad provided the same has been approved by the Government.
    e. Up to 15% of the issue proceeds can be utilized for “general corporate restructuring purposes”.

3) On a case-by-case the Government may approve retention of the proceeds abroad to be used as prescribed. Otherwise the funds must be repatriated to India within two weeks of the issue.

4) In certain cases, GDR investment will be treated on par with foreign direct investment and hence will require prior clearance by the Foreign Investment Promotion Board (FIPB).

The guidelines are subject to review and revision every three months. GDR can be offered to US investors only if very stringent requirements of registration with the SEC are complied with. However, under an exemption granted by Rule 144A of the securities Act, securities can be offered to Qualified Institutional Buyers (QIBs) without going through the registration process.

14.6 PARTIES TO GDRs

The keys involved in a GDR issue apart from the issuing company are:

i) **The lead manager:** An investment bank which has the primary responsibility for assessing the market and successfully marketing the issue, It also helps the company at all stages from preparing the documentation, making investor presentation, selection of other manager (subscribers) and post-issue support. It also owes a responsibility to investors or presenting an accurate picture of the company's present status and future prospects, to the best of its knowledge. This means that it must exercise due diligence in collecting and evaluating all possible information which may have a bearing on the issue.

ii) **Others managers:** Others managers or subscribers to the issue agree to take and market parts of the issue as negotiated with the lead manager.

iii) **Depository:** A bank or financial institution, appointed by the issuing company which has certain duties and functions to be discharged vis-à-vis the GDR holders and the company. For this, it receives compensation both from the company as well as the GDR holders.

iv) **Custodian**: A bank appointed by the depository, generally in consultation with the issuing company which keeps custody of all deposited property

such as share certifi-cates, dividends, right and bonus shares etc, it receives its fees from the depository.

v) **Clearing systems**: EUROCLEAR (Brussels), CEDEL (London) are the registrars in Europe and Depository Trust Company (DTC) is the registrar in USA who keeps records of all particulars of GDRs and GDR holders.

14.7 STEPS IN ISSUE OF GDRs

The steps involved in the GDR mechanism can be summarized as follows:

i) The amount of issue is finalized in US dollars. The company considers factors such as gearing, dilution effect on future earnings per share etc and the lead manager assesses the market conditions.

ii) The lead manager and other managers agree to subscribe to the issue at a price to be determined on the issue date. These agreements are embodies in a subscription agreement signed on the issue date.

iii) Usually, the lead manager has an option to subscribe to specified additional quantity of GDRs. This option called green shoe has to be exercised within a certain number of days.

iv) Simultaneously, the Depository and the Custodian are appointed and the issuer is ready to launch the issue.

v) The company issues a share certificate equal to the number of GDRs to be sold. This certificate is in the name of the Depository, kept in custody of the custodian. Before receipts of the proceeds of the issue, the certificate is kept in escrow.

vi) Then the Investors pay money to the subscribers.

vii) The subscribers (i.e. the lead managers and other managers to the issue) deposit the funds with the Depository after deducting their commissions and expenses.

Viii) The company registers the depository or its nominee as holder of shares in its register of shareholders.

ix) The Depository delivers the European Master GDR to a common depository for CEDEL and EUROCLER and holds an American Master GDR registered in the name of DTC or its nominee.

x) CEDEL, EUROVLRAR and DTC allot GDRs to each ultimate investors based on the data provided by the managers through the depository.

xi) The GDR holders pick up their GDR certificates. Anytime after a specified “cooling off “ period after close of the issue they can convert their GDRs into the underlying shares by surrendering the GDR to the depository. The Custodian will issue the share certificates in exchange for the GDR.

xii) Once surrendered in exchange for shares, such shares can not be reconverted into GDRs. That is there is no fungiability.

xiii) The GDRs are listed on stock exchanges in Europe such as Luxembourg and London.

Xiv) Dividends paid will be collected by the custodian converted into local currency and distributed to GDR holders.

The costs of the issue consist of various fees, commission and expenses paid to the lead manager and other managers, fees and expenses paid to the depository, preparation of documents, legal fees, expenses involved in investor presentation (road shows etc.) listing fees for the stock exchanges, stamp duties etc.

Fees and commissions paid to managers vary but are generally in the neighborhood of 3-4% of the issue amount. This is for less than issue costs in India which ranges between 8% to 15% of the issue size. GDR holders have the right to dividends, the right to subscribe to new shares and the rights to bonus shares. All these rights are exercised through the depository. The depositories convert the dividends from rupees to foreign currency. GDR holders have no voting rights. The depository may vote if necessary as per the Depository Agreement.

14.8 AMERICAN DEPOSITARY RECEIPT (ADR)

ADRs are financial assets that are issued by U.S. banks and represent indirect ownership of a certain number of shares of a specific foreign firm that are held on deposit in a bank in the firm’s home country. The advantage of ADRs over direct ownership is that the investor need not worry about the delivery of the stock certificates or converting divided payments from a foreign currency into U.S. dollors. The depository bank

automatically does the converting for the investor and also forwards all financial reports from the firm. The investor pays the bank a relatively small fee for these services. Typically non-Canadian firms utilize ADRs. For example, Mexican firms are traded in this manner in the United States – at yearend 1993, all 13 Mexican firms with their stock listed on the NYSE utilised ADRs. In March 1999, the first ever ADR issue by an Indian firm took off. The Information Technology Ltd., floated ADRs which were received very well.

This is an excellent way to buy shares in a foreign company while realizing any dividends and capital gains in U.S. dollars. However, ADRs do not eliminate the currency and economic risks for the underlying shares in another country. For example, dividend payments in Euros would be converted to U.S. dollars, net of conversion expenses and foreign taxes and in accordance with the deposit agreement. ADRs are listed on NYSE, AMEX or Nasdaq as well as OTC.



CHECK YOUR PROGRESS

Q1: Define Global Depository Receipt (GDR)

.....

.....

Q2: Write any three Characteristics of GDRs

.....

.....

Q3: What is Sponsored Level DRs

.....

.....



14.9 LET US SUM UP

- A Global Depository Receipt (GDR) is a dollar denominated instrument traded on a stock exchange in Europe or the US or both. It represents a certain number of underlying equity shares.
- Characteristics of GDRs are:

1. It is an unsecured security
2. A fixed rate of interest is paid on it
3. It may be converted into number of shares
4. Interest and redemption price is public in foreign agency
5. It is listed and traded in the share market

- Depository Receipts (DRs) are offered for subscription as under:
  a) Unsponsored: Issued by one or more depositories in response to market demand, and this is found obsolete today.
  b) Sponsored: This is prominent today, thanks to flexibility which has listed it on a national exchange in the US and the ability to raise capital.
- The parties involved in a GDR issue apart from the issuing company are: i) The lead manager ii) Depository iii) Custodian and v) Clearing systems
- American Depositary Receipts (ADRs) are financial assets that are issued by U.S. banks and represent indirect ownership of a certain number of shares of a specific foreign firm that are held on deposit in a bank in the firm's home country. The advantage of ADRs over direct ownership is that the investor need not worry about the delivery of the stock certificates or converting divided payments from a foreign currency into U.S. dollors.



14.10 FURTHER READING

1) Roy Rohatgi (2005), *Basic International Taxation*, 2nd Edition, Vol-1, Richmond Law and Tax Ltd, UK.
2) ICAI (2016), *Aspects of International Taxation- A Study, ICAI,* New Delhi.
3) ICAI (2018), D*irect Tax Laws and International Taxation,* ICAI, CMA Bhawan, Kolkata.
4) Sol Picciotto (2013), *International Business Taxation,* Cambridge University Press, UK.

14.11 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: A Global Depository Receipt (GDR) is a dollar denominated instrument traded on a stock exchange in Europe or the US or both. It represents a certain number of underlying equity shares.

Ans to Q No 2: Characteristics of GDRs:

1. It is an unsecured security
2. A fixed rate of interest is paid on it
3. It may be converted into number of shares

Ans to Q No 3: Sponsored Level DRs is the simplest method for companies to access the US and non-US capital markets.

Ans to Q No 4: Four highly preferred tax havens are Switzerland, Singapore, Hong Kong, Netherlands.

Ans to Q No 5: One of the advantage of ADRs over direct ownership is that the investor need not worry about the delivery of the stock certificates or converting divided payments from a foreign currency into U.S. dollors.

Ans to Q No 6: The three Parties to GDRs are the lead Manager, Custodian and clearing systems.



14.12 MODEL QUESTIONS

1. What is GDR? State its characteristics and issue requirements.
2. Who are parties in GDR. Explain the steps in issue of GDR.
3. Write a short note about ADR.
4. What is the need for GDR issue by Indian Comapnies.

*** ***** ***



REFERENCES

1) Paul R.R. (1998). Money, Banking and International Trade. Kalyani Publishers, New Delhi.
2) Apte, P. G. (1995), "International Financial Management", Tata McGraw-Hill Publishing Company Ltd, New Delhi.
3) Bhalla, V. K., "International Financial Management {, Sultan Chand & Co., New Delhi.
4) Jain, P. K., Josette Peyrard and Surendra S. Yadav (1998), International Financial Management, Macmillan India Ltd., New Delhi.
5) Maurice D. Levi (1996), "International Finance", McGraw-Hill Inc.
6) Shapiro, Alan C. (1999), "Multinational Financial Management", John Wiley & Sons, Inc, New York.
7) Yadav, Surendra S., P. K. Jain and Max Peyrard (2001), Foreign Exchange Markets: Understanding Derivatives and Other Instruments, Macmillan India Ltd., New Delhi.
8) Dewett K.K. (1998). Modern Economic Theory. S. Chand & Company Ltd., New Delhi.
9) Apte, P. G. (1995), "International Financial Management", Tata McGraw-Hill Publishing Company Ltd, New Delhi,
10) Bhalla, V. K., "International Financial Management", Sultan Chand & Co., New Delhi.
11) Jain, P. K., Josette Peyrard and Surendra S. Yadav (1998), *International Financial Management,* Macmillan India Ltd., New Delhi.
12) Maurice D. Levi (1996), "*International Finance*", McGraw-Hill Inc.
13) Shapiro, Alan C. (1999), "*Multinational Financial Management*", John Wiley & Sons, Inc, New York.
14) Yadav, Surendra S., P. K. Jain and Max Peyrard (2001), Foreign Exchange Markets: Understanding Derivatives and Other Instruments, Macmillan India Ltd., New Delhi.
15) Roy Rohatgi (2005), *Basic International Taxation*, 2nd Edition, Vol-1, Richmond Law and Tax Ltd, UK.
16) ICAI (2016), *Aspects of International Taxation- A Study, ICAI,* New Delhi.
17) ICAI (2018), D*irect Tax Laws and International Taxation,* ICAI, CMA Bhawan, Kolkata.
18) Sol Picciotto (2013), *International Business Taxation,* Cambridge University Press, UK.