CMA Students Newsletter (For Final Students)

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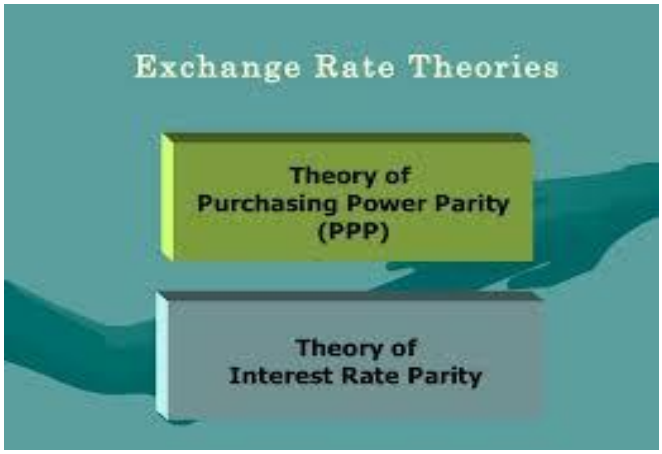
Interest Rate Parity Theorem & Purchasing Power Parity Theory (PPP)



Interest Rate Parity Theorem

The high interest rates on one currency are offset by forward discounts, and the low rates on the other currency are offset by forward premiums.

The formula is :

$$\frac{F_1}{S_0} = \frac{1 + r_h}{1 + r_f}$$

Where, r_h = home country interest rate

r_f = foreign country interest rate

S_0 = spot rate (home currency value of one unit of foreign currency)

F_1 = forward rate (in other words, 'Future Spot rate')

If Interest Rate Parity holds arbitrage is not possible.

If home country interest rate is less than foreign country interest rate, foreign currency will trade at a forward discount to offset any benefit of higher interest rate in foreign country to prevent arbitrage.

If home country interest rate is more than foreign country interest rate, foreign currency will trade at a forward premium to offset any benefit of higher interest rate in home country to prevent arbitrage.

Interest rate parity plays a fundamental role in foreign exchange markets, enforcing an essential link between short-term interest rates, spot exchange rates and forward exchange rates.

Interest Rate Parity Illustrated

It is given that dollar 6-month T-bills =7% ,Risk-free 6-month Japanese bonds = 5.5%, Spot exchange rate is 1 YEN = $0.009. What is the 6-month forward exchange rate?

Solution

We have r_h = 7%, r_f = 5.5% and ¥ 1 = $ 0.009 (Home and foreign currency identified from spot rate) from Interest Rate Parity theorem we have

$$\frac{\text{Forward exchange rate}}{\text{Spot exchange rate}} = \frac{1+r_h}{1+r_f}$$

r_f = 5.5%/2 = 2.75%, r_h = 7%/2 = 3.5%, Spot exchange rate = $0.009

$$\frac{\text{Forward exchange rate}}{\$0.009} = \frac{1.035}{1.0275}$$

1.0275 × Forward exchange rate = $0.00932

Forward exchange rate = $0.00907

Therefore, the 6-month forward exchange rate is 1 yen = $0.00907.

Interest Rate Parity Illustrated

The United States dollar is selling in India at ₹ 46. If the interest rate for a 6 months borrowing in India is 8% per annum and the corresponding rate in USA is 2%

(a) Do you expect United States Dollar to be at a premium or at a discount t in the Indian forward market?

(b) What is the expected 6-months forward rate for United States dollar in India?

Solution

(a) Under the given circumstances USD is expected to quote at a premium in India as the interest rate is higher in India.

(b) Calculation of Forward Rate:

Interest Rate Parity equation of $\frac{\text{Forward exchange rate}}{\text{Spot exchange rate}} = \frac{1+r_h}{1+r_f}$

Where r_h is the home currency (₹) , r_f is the foreign currency ($)

Therefore $F = \frac{1+r_h}{1+r_f} \times S = \frac{1+(0.08/2)}{1+(0.02/2)} \times 46 = ₹47.37.$

Purchasing Power Parity Theory (PPP)

- Purchasing power of a currency is impinged by the inflation rate prevalent in the economic environment
- The inflation rates prevailing in the two countries affect the exchange rate between the two currencies
- For example, if the inflation rate in India is higher than that of US, INR will depreciate against the USD
- The 'Law of one price' states that the price of a product should be the same in two markets – or else, arbitrage opportunity opens up

Purchase Power Parity relationship is very similar to IRP and is given by :-

$$\frac{F_1}{S_0} = \frac{1+i_h}{1+i_f}$$

Where i_h = home country inflation rate

i_f = foreign country interest

S_0 = spot rate (home currency value of one unit of foreign currency)

F_1 = forward rate (in other words, 'Future Spot rate')

PPP Illustrated

- You are told that the spot rate is $ 1.95 / GBP
- The expected inflation rates in UK and USA for the next three years are given below.

Year	UK Inflation (%)	US Inflation (%)
1	3.0	2.0
2	3.5	2.5
3	3.0	2.0

Calculate the expected $ / GBP spot rate after three years.

Solution

- Today, GBP1 and $ 1.95 can both buy the same basket of goods if we apply PPP.
- The same basket of goods will have the following price after three years.
- In UK, (1) (1.03) (1.035) (1.030) = GBP 1.098
- In USA, (1.95) (1.02) (1. 025) (1.020) = $ 2.0795
- If we apply PPP again, GBP 1.098 = $ 2.0795
- So, GBP 1 = $ 1.8939
- Hence, the expected spot rate after three years is $ 1.8939 / GBP
- This is quite expected because UK's inflation rate is higher than US.

PPP Illustrated

The inflation rate in Great Britain is 4% and the United States it is 5%. The current spot rate of the pound is $1.65. According to purchasing power parity, what will be the expected value of the pound at the end of the year?

Solution

Given, inflation in Great Britain = 4% and inflation in US = 5%

1£ = $1.65

According to purchasing power parity theorem:

$$\frac{F_1}{S_0} = \frac{1+i_h}{1+i_f}$$

Substituting we get, $\frac{F_1}{1.65} = \frac{1+0.05}{1+0.04}$

F_1 = $1.67 .

PPP Illustrated

An exchange forecaster expects the dollar to trade at 125 yen, one year from now. If the spot rate is yen 121/$ and US inflation rate is 2%, what is the expected Inflation rate in Japan?

Solution

We use the Purchasing Power Parity,

Let the inflation rate in Japan be i.

Then $\frac{1+i}{1+0.02} \times 121 = 125$

Solving we get i= 0.0537

Expecte4d Inflation rate in Japan = 5.37%.

JIT [Just-in-Time]

Just-in-time production system was developed in Japan. It was mainly developed to help the manufacturing firms to increase the quality of their products by reducing the product costs.

JIT is defined as an approach which helps in eliminating the waste that takes place in the production activities by offering the **Right item at the Right place and at the Right time.**

The main aim of JIT system is to eliminate the waste and improve the productivity contentiously.

Right Item at the Right place and at the Right time

The Concept of the JIT System

- People Involvement
- Total Quality Control

Characteristics of JIT Systems

- Uniform Workstation Loads
- Small Lot Sizes
- Closer Supplier Ties
- Maintaining High Quality
- Quick and Economic Setups
- Flexible Facilities and Multi-skilled Workforce
- Preventive Maintenance
- Continuous Improvement

Disadvantages of JIT System

- Just-in-time manufacturing provides zero tolerance for mistakes, as it makes re-working very difficult in practice, as inventory is kept to a bare minimum
- There is a high reliance on suppliers, whose performance is generally outside the purview of the manufacture.
- As there will be no buffers for delay, production downtime and line idling can occur, which would bear a detrimental effect on finances and on the equilibrium of the production process.

Case Study:

Motorola manufactures wireless telephones. Motorola is deciding whether to implement a JIT production system, which would require annual tooling costs of ₹15,00,000. Motorola estimates that the following annual benefits would arise from JIT production:

- Average inventory would decline by ₹ 70,00,000, from ₹ 90,00,000 to ₹ 20,00,000.
- Insurance, space, materials-handling, and setup costs, which currently total ₹ 20,00,000, would decline by 30%.
- The emphasis on quality inherent in JIT systems would reduce rework costs by 20%. Motorola currently incurs ₹35,00,000 on rework.
- Better quality would enable Motorola to raise the selling prices of its products by ₹ 30 per unit. Motorola sells 30,000 units each year.

Motorola's required rate of return on inventory investment is 12% per year.

(i) Calculate the net benefit or cost to the Motorola from implementing a JIT production system.

(ii) What other nonfinancial and qualitative factors should Motorola consider before deciding whether it should implement a JIT system?

(iii) Suppose Motorola implements JIT production, (I) Give examples of performance measures Motorola could use to evaluate and control JIT production, (II) What is the benefit to Motorola of implementing an enterprise resource planning (ERP) system?

Solution:

(i) Annual Relevant Costs of Current Production System and JIT Production System for Motorola:

Relevant Items	Relevant Costs under Current Production System	Relevant costs under JIT Production system
Annual tooling costs	-	₹15,00,000
Required return on investment: 12% per year × ₹.90,00,000 of average inventory per year	₹10,80,000	
12% per year × ₹20,00,000 of average inventory per year		2,40,000
Insurance, space, materials handling, and setup costs	20,00,000	14,00,000 [a]
Rework costs	35,00,000	28,00,000[b]
Incremental revenues from higher selling prices	-	(9,00,000)[c]
Total net incremental costs	₹65,80,000	₹50,40,000
Annual difference in favour of JIT production	₹15,40,000	

[a] ₹20,00,000 (1 – 0.30) = ₹14,00,000

[b] ₹35,00,000 (1 – 0.20) = ₹28,00,000

[c] ₹30 × 30,000 units = ₹9,00,000

The annual net benefit of ₹15,40,000 to Motorola of implementing a JIT production system.

(ii) Other nonfinancial and qualitative factors that Motorola should consider in deciding whether it should implement a JIT system include:

- The possibility of developing and implementing a detailed system for integrating the sequential operations of the manufacturing process. Direct materials must arrive when needed for each sub assembly so that the production process functions smoothly.
- The ability to design products that use standardized parts and reduce manufacturing time.
- The ease of obtaining reliable vendors who can deliver quality direct materials on time with minimum lead time.
- Willingness of suppliers to deliver smaller and more frequent orders.

- The confidence of being able to deliver quality products on time. Failure to do so would result in customer dissatisfaction.
- The skill levels of workers to perform multiple tasks such as minor repairs, maintenance, quality testing and inspection.

(iii)

(I) Personal observation by production line workers and managers is more effective in JIT plants than in traditional plants. A JIT plant's production process layout is streamlined. Operations are not obscured by piles of inventory or rework. As a result, such plants are easier to evaluate by personal observation than cluttered plants where the flow of production is not logically laid out.

Besides personal observation, nonfinancial performance measures are the dominant methods of control. Nonfinancial performance measures provide most timely and easy to understand measures of plant performance. Examples of nonfinancial performance measures of time, inventory, and quality include:

- Manufacturing lead time
- Units produced per hour
- Machine setup time ÷ manufacturing time
- Number of defective units ÷ number of units completed

In addition to personal observation and nonfinancial performance measures, financial performance measures are also used. Examples of financial performance measures include:

- Cost of rework
- Ordering costs
- Stock out costs
- Inventory turnover

(II) The success of a JIT system depends on the speed of information flows from customers to manufacturers to suppliers. The Enterprise Resource Planning (ERP) system has a single database, and gives lower-level managers, workers, customers, and suppliers access to operating information. This benefit, accompanied by tight coordination across business functions, enables the ERP system to rapidly transmit information in response to changes in supply and demand so that manufacturing and distribution plans may be revised accordingly.

TRANSFER OF ASSETS BETWEEN HOLDING AND SUBSIDIARY COMPANIES

The following special provisions are applicable—

When a capital asset (other than block of asset) is transferred [Expln. 6 to sec. 43(1)] -Where a parent company transfers a capital asset to its 100 per cent subsidiary company or vice versa, the actual cost of the asset transferred to the transferee-company will be taken to be the same as it would have been if the transferor-company had continued to hold the capital asset for the purpose of its business provided that the transferee-company is an Indian company.

When a block of asset is transferred [Expln. 2 to sec. 43(6)] - The aforesaid rule is not applicable if a block of asset is transferred. Where in any previous year, any block of assets is transferred by a holding company to its wholly owned subsidiary company or vice versa, then actual cost of block of assets in the case of transferee-company shall be written down value of block of assets of the transferor-company for the immediately preceding previous year as reduced by the depreciation actually allowed in relation to the said preceding previous year. This rule is, however, applicable only if the transferee-company is an Indian company.

Exemption under section 47 - The following are not treated as transfer—

a. any transfer of a capital asset by a company to its wholly owned Indian subsidiary company **[sec. 47(iv)]**; and

b. any transfer of a capital asset by a wholly owned subsidiary company to its Indian holding company **[sec. 47(v)]**.

The following points should be noted—

1. Provisions under section 47(iv)/(v) are not applicable in the case of transfer of a capital asset made after February 29, 1988 as stock-in-trade.

2. Section 47(iv) and (v) covers only the immediate subsidiary company of the holding company. There is no justification for transplanting the definition of 'holding company' under the Companies Act into the provisions of section 47 automatically—**Kalindi Investment (P.) Ltd. v. CIT [2002] 120 Taxman 896 (Guj.)**.

Withdrawal of exemption given by section 47(iv)/(v) [Sees. 47A, 49(3) and proviso to sec. 47(iv), (v)] - Any transfer of capital asset by a company to its wholly owned Indian subsidiary company or by a wholly owned subsidiary company to its Indian holding company is not treated as transfer by virtue of section 47(iv)/(v).

CASES WHEN EXEMPTION IS TAKEN BACK - In the following two cases (i.e. 1 and 2), the above exemption shall be withdrawn and in the last case (i.e., 3) the exemption is not available —

1. If at any time before the expiry of eight years from the date of transfer of a capital asset between holding company and its wholly owned subsidiary company, such capital asset is converted by the transferee-company into (or is treated by it as) stock-in-trade of its business.

2. The holding company ceases to hold the whole of the share capital of the subsidiary company before the expiry of the period of eight years aforesaid.

3. The holding/subsidiary company transfers a capital asset as stock-in-trade after February 29, 1988. In such a case the transfer shall be regarded as "transfer" and will be taxed according to normal provisions of capital gains.

CONSEQUENCES - In the above noted two cases (i.e., 1 and 2), transfer of capital asset between holding and subsidiary company is chargeable to tax by virtue of section 47A. In such case cost of acquisition in the hands of the transferee-company will be the cost for which the asset was acquired by it.

H Ltd. is 100 per cent holding company of S Ltd., an Indian company. S Ltd. acquires a depreciable asset from H Ltd. on April 1, 2008 at market value of ₹120 crore. Written down value of the block of assets in the hands of H Ltd. on March 31, 2009 is ₹80 crore. As this is transfer between holding company and its 100 per cent subsidiary company, capital gain is not taxable in the hands of H Ltd. by virtue of section 47(iv). When capital gain is exempt under section 47(iv), written down value in the hands of S Ltd. for claiming depreciation will be ₹80 crore.

On May 10, 2013, H Ltd. transfers 10 per cent of its holding in S Ltd. for a specified consideration to an outsider. As the relationship 100 per cent holding company and subsidiary company is discontinued within 8 years from April 1, 2009, by virtue of section 47A, exemption provided to H Ltd. shall be withdrawn and short term capital gain will be taxable in the hands of H Ltd. When exemption is withdrawn, depreciation can be claimed by S Ltd. on purchase price of ₹120 crore with effect from date of acquisition, i.e., April 1, 2009, although the event which is responsible for withdrawal of exemption (i.e., transfer of shareholding in S Ltd. by H Ltd. to an outsider) takes place in the next year—**Essar Oil Ltd. v. CIT [2007] 13 SOT 691 (Mum.)** and depreciation (in the case of block of assets) will be available to the transferee-company at the cost for which the assets were acquired.

Illustration 1:

S Ltd. is a wholly owned subsidiary of A Ltd. (both are Indian companies and maintain books of account on the basis of financial year). On April 10, 1984 (relevant to the assessment year 1985-86), S Ltd. transfers a capital

asset (i.e., shares) to A Ltd. (acquired on April 6, 1981 for ₹50,000) for ₹1,50,000. A Ltd. Sells the asset on May 10, 2013 for ₹3,40,000. Determine the assessable profits of A Ltd. and S Ltd. under the following situations:

1. Before the sale of asset, A Ltd. has not converted it into stock-in-trade and it does not cease to hold entire share capital of S Ltd.

2. A Ltd. has converted the capital asset into stock-in-trade before its sale on May 10, 2013 (date of conversion: June 10, 1987, fair market value : ₹3,10,000).

3. Though A Ltd. does not convert capital asset into stock-in-trade, it ceases to hold entire share capital of S Ltd. on June 10, 1988 when 5 per cent shareholding in S Ltd. is transferred by way of sale to the public.

SOLUTION:

Under situation (1), transfer between A Ltd. and S Ltd. will not be treated as transfer under section 47(v). Consequently, nothing will be taxable in the hands of S Ltd. A Ltd. will, however, be taxable in respect of capital gain computed as under:

	₹
Sale consideration	3,40,000
Less: Indexed cost of acquisition [i.e., ₹ 50,000 x 939÷100*)	4,69,500
	(-) 1,29,500

*Cost inflation index for the year (1981-82) in which the asset was first held by S Ltd.

Under situation (2), the chargeable profit will be determined as under :

□ **S Ltd.:** Since A Ltd. has converted the capital asset into stock-in-trade within eight years from April 10, 1984, exemption granted by section 47(v) will not be available and, consequently, ₹1,00,000 (i.e., ₹1,50,000 — ₹50,000) will be treated as long-term capital gain (by virtue of section 47A) of S Ltd. forthe assessment year 1 985-86.

If the assessment of S Ltd. is completed, the Assessing Officer has power to reopen the assessment for this purpose under section 1 55(7B) at any time before 4 years from the end of the previous year in which the capital asset is converted into stock-in trade (i.e., up to March 31,1 992).

□ **A Ltd.:** ₹30,000 (i.e., ₹3,40,000 — ₹3,10,000) will be chargeable to tax under section 28(i) as business profits for the assessment year 2014-15. Besides, capital gain will be determined as under:

	₹
Full value of consideration received [fair market value on the date of conversion of capital stock into stock-in-trade under section 45(2)]	3,10,000
Less: Indexed cost of acquisition (₹1,50,000 x 150 ÷ 125)	1,80,000
Long-term capital gain for the assessment year 2014-15	1,30,000

Under situation (3), the chargeable profit will be determined as under:

□ **S Ltd.:** Since A Ltd. has transferred shareholding in S Ltd. before the expiry of 8 years from April 10, 1984, the exemption granted by section 47(v) will not be available and, consequently, ₹1,00,000 (i.e., ₹1,50,000 minus ₹50,000) will be treated as long-term capital gain by virtue of section 47A for the assessment year 1985-86. If assessment of S Ltd. is completed, the Assessing Officer has power to reopen the assessment under section 155(7B)
at any time up to March 31, 1993 (i.e., up to 4 years from the end of the previous year in which shareholding is transferred).

□ **A Ltd.:** Capital gain will be determined as under:

	₹
Sale consideration	3,40,000
Less: Indexed cost of acquisition (i.e., ₹1,50,000 ×939÷125*)	11,26,800
Long-term capital gain	(-) 7,86,800

*Cost inflation index for the year (1984-85) in which the asset was first held by A Ltd. In other words, indexation will be started only from 1984-85 in this case.

Illustrated 2:

S Ltd. is a wholly-owned subsidiary of H Ltd. On April 22, 1987, it transfers the following assets to H Ltd.

Block of assets	Rate of depreciation from the assessment year 1988-89	Written down value for the assessment year 1987-88 ₹	Depreciation for assessment year 1987-88 ₹	Agreed consideration ₹
Plant	50%	9,50,000	1,42,500	6,30,000
Building	10%	20,00,000	1,00,000	27,10,000

What is the actual cost of assets to H Ltd.?

SOLUTION:

In the case of H Ltd. actual cost of block of assets would be as follows:

	Plant ₹	Building ₹
Written down value for the assessment year 1987-88	9,50,000	20,00,000
Less: Depreciation for the assessment year 1987-88	1,42,500	1,00,000
Actual cost of asset to H Ltd.		
□ if it is an Indian company	8,07,500	19,00,000
□ if it is a foreign company	6,30,000	27,10,000

Illustrated 3:

H Ltd. owns the following asset on April 1, 2013:

Block of asset	Rate of depreciation	Written down value on April 1, 2013
Plant (consisting of Plants A, B and C)	15%	20,50,000

On June 30, 2013, it sells Plant A for ₹6,00,000. It, however, acquires Plant D for ₹15,00,000 on March 10, 2014. On April 16, 2014, Plants B, C and D are transferred by it to S Ltd. (a wholly-owned subsidiary of H Ltd.) for ₹3,50,000 or for ₹60,00,000. S Ltd. owns Plant P whose written down value on April 1, 2014 is ₹2,00,000; besides it purchases plant Q on May 10,2014 for ₹1,00,000, in either case the rate of depreciation is 15 percent and new acquisition are not eligible for additional depreciation. Find out the tax consequences if S Ltd. is an Indian company or foreign company. Additional depreciation is not available.

SOLUTION:

H Ltd.	**Block 1 (Plant)**
	₹
Depreciated value of the block on April 1, 2013	20,50,000
Add: Actual cost of Plant D acquired on March 10, 2014	15,00,000
Less: Money payable in respect of Plant A sold during 2013-14	(-) 6,00,000
Written down value on March 31, 2014	29,50,000
Less: Depreciation for the previous year 2013-14	3,30,000
Depreciated value of the block on April 1, 2014	26,20,000

(₹ in lakh)

	If S Ltd. is an Indian company		If S Ltd. is a foreign company	
	If the block is transferred for		If the block is transferred for	
	₹ 3.50 lakh	₹ 60 lakh	₹ 3.50 lakh	₹ 60 lakh
Depreciated value of the block consisting of Plants B, C and D on April 1, 2014	26.20	26.20	26.20	26.20
Less: Sale proceeds of Plants B, C and D transferred to S Ltd. (*cannot exceed the opening balance)	3.50	26.20*	3.50	26.20
Written down value on March 31, 2015	20.70	Nil	22.70	Nil
Depreciation for the previous year 2014-15 (no depreciation is available as the block ceases to exist)	Nil	Nil	Nil	Nil
Capital gains				
Sale proceeds	3.50	60	3.50	60
Less: Cost of acquisition as per section 50	26.20	26.20	26.20	26.20
Short-term capital gain [*by virtue of section 47(iv), it is exempt from tax]	Nil*	Nil*	(-) 22.70	33.80
Depreciated value of the block consisting of Plant P on April 1, 2014	2	2	2	2
Add: Actual cost of Q acquired during 2014-15	1	1	1	1
Add: Actual cost of Plants B, C and D acquired from H Ltd.	26.20	26.20	3.50	60
Written down value of the block consisting of Plants B, C, D, P and Q on March 31, 2015	29.20	29.20	6.5	63
Depreciation for 2014-15	4.38	4.38	0.975	9.45

The following points should be noted—

1. The rule given by the fifth proviso to section 32(1) is not applicable in the case of a transfer between holding company and its hundred per cent subsidiary company.
2. In the above problem if Plant B, C, D or Q is put to use for less than 180 days, then S Ltd. will be entitled for one half of the normal depreciation.

Duty liability on re-importation of Goods [Section 20]

If goods are -

- imported into India
- after exportation

therefrom, then, suchgoods shall be -

- liable to duty and
- subject to all the conditions and restrictions, if any,

to which goods of the like kind and value are liable or subject, on the importation thereof. Thus, re-import is treated just like a normal import.

Exemptions or concessions available in respect of re-import [Not. Nos. 94/96 and 158/95]:

Case of re-import	Time-limit for re-import	Duty payable (after exemption)
1. Goods exported claiming export incentive and re-imported without any re-manufacturing or re-processing	within 3 years from date of export	**Duty payable =** Export Incentive claimed on export (viz. duty drawback or excise duty exemption or duty rebate)
2. Goods exported for repairs and re-imported without any re-manufacturing or re-processing and also without change in ownership between export and re-import	within 3 years	**Value (for levy of duty) =** Fair cost of repairs + Cost of materials used in repairs (such costs includible even if not actually incurred) + Insurance and freight (to and fro)
3. Goods manufactured in India and re-imported in India for – **(i)** repairs or re-conditioning	within 3 years (10 years in case of Nepal and Bhutan)	**Duty is FULLY EXEMPT,** if - **(a)** such goods are re-exported within 6 months from date of re-import (extension upto 6 months allowed by Commissioner or Principal Commissioner); and **(b)** Assistant Commissioner is satisfied about identity of such goods.
(ii) reprocessing/refining/re-making or other similar process	within 1 year	

ILLUSTRATION 1: **(Re-importation of Goods)**

Mr. Kamal manufactured and exported goods worth ₹10,00,000 to Uma of UK on 1st January, 2015 and availed duty drawback of ₹15,000. Mr. Kamal imported the same goods on 8th February, 2015. What will be the customs duty payable by Mr. Kamal, if rate of basic customs duty is 10% and goods are exempt from CVD and special CVD?

SOLUTION:

Since the exported goods have been re-imported within 3 years from date of export (viz. Date of export is 1st Jan. while date of re-import is 8th Feb.), hence, as per exemption issued by the Central Government, the duty payable = Export Incentive viz. Duty drawback claimed at the time of export. Therefore, duty payable = ₹15,000.

It is assumed that the goods are re-imported without any re-manufacturing or re-processing.

ILLUSTRATION 2: (Re-import after repairs)

Mr. Pritam of Kanpur imported machinery on 1-1-2014 (value ₹1 lakh and duty ₹10,300) from Mr. Bidhur of US. Later, he found that machinery was defective and therefore, he sent back that machinery for repairs, etc. abroad. The cost of insurance and freight from Kanpur to US is ₹5,000. Repair work was carried out on machinery by Mr. Bidhur and materials worth ₹7,500 and labour, etc. worth ₹4,000 was borne by Mr. Bidhur. The cost of insurance and freight for repaired goods from US to Kanpur is ₹6,000. Determine the duty payable at the time of re-import on 1-1-2015, if rate of duty is 10.3%. Department claims that machinery will be liable to duty on full normal value of ₹1,10,000 (market price on 1-1-2015).

SOLUTION:

In view of section 20, re-import is also liable to duty. However, as per concession granted in this behalf, in case of re-import after repairs abroad, the duty payable would be that on value comprising of 'fair cost of repairs (even if not borne by importer)' plus Insurance/freight (both ways). Hence, the duty would be —

- Value = ₹5,000 + ₹7,500 + ₹4,000 + ₹6,000 = ₹22,500;
- Duty = ₹22,500 X 10.3% = ₹2,317.5 (rounded off to ₹2,318).

Advance Authorisation: A Scheme of EXIM Policy

Inputs which are used in the export products can be imported without payment of customs duty under Advance Authorisation scheme. In other words, it is issued to allow duty free import of inputs, which are physically incorporated in the export product. Since the raw materials can be imported before exports of final products, the Authorisation issued for this purpose is called 'Advance Authorisation'. The 'Advance Authorisation' was termed as 'Advance License' upto 01.04.2006.

The following duties are exempted under this scheme:

- basic customs duty,
- additional customs duty/ excise duty,
- education cess,
- anti-dumping duty &
- safeguard duty.

Authorisation granted to merchant exporter or manufacturer exporter to import inputs, fuel, oil, energy & catalysts. A normal allowance for wastage is permitted with duty free imports of inputs. Duty free import of mandatory spares upto 10% of CIF Value of Authorisation, which is required to be exported with resultant products, may also be allowed.

The following items cannot be imported duty-free under Advance Authorisation:

- Prohibited items mentioned in ITC (HS) [Indian Trade Classification (Harmonized System)]
- Energy
- Items reserved for imports by State Trading Enterprise (STEs). However, such items can be procured from STEs against Advance Release Order (ARO) / Invalidation letter. Goods can be procured from indigenous manufacturer against ARO which is to be issued by Regional Authority. This can be denominated in foreign exchange/ Indian rupees. Alternatively, exporter can obtain goods from indigenous sources on basis of back to back Inland Letter of Credit from bank.

Advance Authorisation shall be issued for:

(i) physical exports (including exports to SEZ)
(ii) intermediate supplies
(iii) such supply of goods that are allowed in Chapter 8 of the Foreign Trade Policy [Deemed Export].
(iv) supply of stores on board of foreign going vessel/ aircraft subject to the conditions that there is specific SION in respect of item(s) supplied.

Such authorisation can also be issued for supplies made to United Nations Organisations or under Aid Programme of the United Nations or other multi-lateral agencies; such supplies need to be paid for in free foreign exchange.

Case Law: [Deemed exports must be counted for export obligations under Advance Authorisation]
Where, due to cancellation of export order, assessee made deemed exports by way of supply to foreign tourists against foreign exchange, such 'deemed export' were to be counted for purposes of export obligation under Advance Authorisation.

Advance Authorisation requires exports with a minimum positive value addition of 15%. In case of tea, value addition should be 50%. In case of spices, it should be for crushing, grinding, sterlisation and not for simple cleaning, grading or repacking. Advance Authorisation and/ or materials imported thereunder will be with actual user condition. It will not be transferable even after completion of the export obligation.

Illustration: A Ltd. has imported inputs without payment of duty under Advance Authorisation. The CIF value of such inputs is ₹ 5,00,000. The inputs are processed and the final product is exported. The exports made by the A Ltd. are subject to general rate of value addition prescribed under Advance Authorisation scheme. No other input is being used by A Ltd. in the processing. What should be the minimum FOB value of the exports made by the A Ltd. as per the provisions of Advance Authorisation?

Answer: As we know, Advance Authorisation requires exports with a minimum positive value addition (VA) of 15%, then to determine the FOB value of export realised, we need to take the help of the following formula:

$VA = [(A - B) / B \times 100]$

Here,
VA = Value addition = 15%
A = Minimum FOB value of export realised
B = CIF value of inputs covered by authorisation = ₹ 5,00,000

Therefore, the minimum FOB value of the exports made by the A Ltd. should be ₹ 5,75,000.

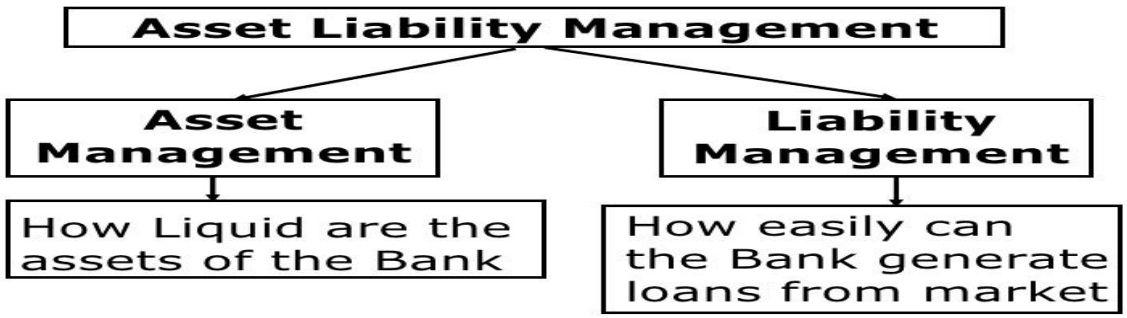
Advance Authorisation is issued for the imports of raw materials are on the basis of standard input-output norms or SION. Quantity allowed to be imported will be based on quantity exported. SION is fixed by 'Norms Committee' at DGFT (Director General of Foreign Trade). These are the technical norms set on the basis of data submitted to DGFT. These are reviewed/ revised from time to time. The norms cover different products, e.g. chemical & allied products, electronics, engineering products, leather & leather products, sports goods, textiles, readymade garments, hosiery & knitwear etc.

Advance Authorisation can also be issued for annual requirement. Status Certificate holder and all other categories of exporters having past export performance in preceding two years shall be entitled for Advance Authorisation for annual requirement. Annual Advance Authorisation will be granted upto 300% of FOB value of physical exports in preceding year and/ or FOR value of deemed exports in preceding year or ₹ 1 crore whichever is higher.

In case of Advance Authorisation, drawback shall be available for any duty-paid material, whether imported or indigenous, used in the goods exported, as per drawback rules fixed by the Directorate of Revenue, Ministry of Finance.

Asset Liability Management

The purpose of Asset – Liability Management is to control a Bank's sensitivity to changes in Market Interest rates and limits its loss in its Net Income or Equity. In banking, asset and liability management is the practice of managing risks that arise due to mismatch between the assets and liabilities (debts and assets) of the bank. This can also be seen in insurance. The concept of ALM is of recent origin in India. It has been introduced in Indian Banking industry w.e.f. 1st April, 1999.



Banks face several risks such as the liquidity risk, interest rate risk, credit risk and operational risk. Asset Liability Management (ALM) is a strategic management tool to manage interest rate risk and liquidity risk faced by banks, other financial services, companies and corporations.

Banks manage the risks of Asset liability mismatch by matching the assets and liabilities according to the maturity pattern or the matching the duration, by hedging and by securitization. Much of the techniques for hedging stem from the delta hedging concepts introduced in the **Black-Scholes model** and **in the work of Robert C. Merton and Robert A. Jarrow**. Modern risk management now takes place from an integrated approach to enterprise risk management that reflects the fact that interest rate risk, credit risk, market risk, and liquidity risk are all interrelated.

Techniques for assessing asset-liability risk came to include gap analysis and duration analysis. These facilitated techniques of gap management and duration matching of assets and liabilities. Both approaches worked well if assets and liabilities comprised fixed cash flows. Duration analysis could address these in theory, but implementing sufficiently sophisticated duration measures was problematic. Accordingly, banks and insurance companies also performed scenario analysis.

With scenario analysis, several interest rate scenarios would be specified for the next 5 or 10 years. These might specify declining rates, rising rates, a gradual decrease in rates followed by a sudden rise, etc. Scenarios might specify the behaviour of the entire yield curve, so there could be scenarios with flattening yield curves, inverted yield curves, etc. Ten or twenty scenarios might be specified in all. Next, assumptions would be made about the performance of assets and liabilities under each scenario. Assumptions might include prepayment rates on mortgages or surrender rates on insurance products. Assumptions might also be made about the firm's performance— the rates at which new business would be acquired for various products. Based upon these assumptions, the performance of the firm's balance sheet could be projected under each scenario. If projected performance was poor under specific scenarios, the ALM committee might adjust assets or liabilities to address the indicated exposure. A shortcoming of scenario analysis is the fact that it is highly dependent on the choice of scenarios. It also requires that many assumptions be made about how specific assets or liabilities will perform under specific scenarios.

The concept of ALM is of recent origin in India. It has been introduced in Indian Banking industry w.e.f. 1st April, 1999. ALM is concerned with risk management and provides a comprehensive and dynamic framework for measuring, monitoring and managing liquidity, interest rate, foreign exchange and equity and commodity price risks of a bank that needs to be closely integrated with the banks' business strategy.

Therefore, ALM is considered as an important tool for monitoring, measuring and managing the market risk of a bank. With the deregulation of interest regime in India, the Banking industry has been exposed to the market risks.

To manage such risks, ALM is used so that the management is able to assess the risks and cover some of these by taking appropriate decisions.

The assets and liabilities of the bank's balance sheet are nothing but future cash inflows or outflows. With a view to measure the liquidity and interest rate risk, banks use of maturity ladder and then calculate cumulative surplus or deficit of funds in different time slots on the basis of statutory reserve cycle, which are termed as time buckets.

As a measure of liquidity management, banks are required to monitor their cumulative mismatches across all time buckets in their Statement of Structural Liquidity by establishing internal prudential limits with the approval of the Board / Management Committee.

As per RBI guidelines, commercial banks are to distribute the outflows/ inflows in different residual maturity period known as time buckets. The Assets and Liabilities were earlier divided into 8 maturity buckets (1-14 days; 15-28 days; 29-90 days; 91-180 days; 181-365 days, 1-3 years, 3-5 years and above 5 years), based on the remaining period to their maturity (also called residual maturity). All the liability figures are outflows while the asset figures are inflows. In September, 2007, having regard to the international practices, the level of sophistication of banks in India, RBI revised these guidelines and it was provided that

(a) The banks may adopt a more granular approach to measurement of liquidity risk by splitting the first time bucket (1-14 days at present) in the Statement of Structural Liquidity into three time buckets *viz.*, next day, 2-7 days and 8-14 days. Thus, now we have 10 time buckets.

(b) The net cumulative negative mismatches during the Next day, 2-7 days, 8-14daysand 15-28 days buckets should not exceed 5%, 10%, 15% and 20% of the cumulative cash outflows in the respective time buckets in order to recognise the cumulative impact on liquidity.

The Board's of the Banks have been entrusted with the overall responsibility for the management of risks and is required to decide the risk management policy and set limits for liquidity, interest rate, foreign exchange and equity price risks.

Asset Liability Committee (ALCO) is the top most committee to oversee the implementation of ALM system and it is to be headed by CMD or ED. ALCO considers product pricing for deposits and advances, the desired maturity profile of the incremental assets and liabilities in addition to monitoring the risk levels of the bank. It will have to articulate current interest rates view of the bank and base its decisions for future business strategy on this view.