

Appendix I
[Chapter 5 – Comparability]

Part 1: Example related to Functional Analysis (Manufacturing Entity)

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Part 1: Example related to Functional Analysis (Manufacturing Entity)

AI.1.1. Facts of the case

ABC & Co is incorporated and registered under the laws of country A. ABC & Co owns technology related to engines used for manufacturing of cars. It also has a share in the market for supply of spare parts and tyres. It is a 100% wholly holding company of XYZ & Co. XYZ & Co is incorporated and registered under the laws of country B. It is engaged in the manufacturing of cars. XYZ & Co has entered into an agreement to use the core technology related to engines with ABC & Co. It also purchases spare parts and tyres from ABC & Co. XYZ & Co thus uses this technology and material purchased from ABC & Co in the manufacturing of cars and in turns sells it to third party on behalf of ABC & Co. It has also its own R&D to absorb the technology and improve upon the same which is best suited to local conditions.

With the above background the international transaction between ABC & Co and XYZ & Co is that of purchase of technology from ABC & Co. For the purpose of FUNCTIONAL ANALYSIS explained below, analysis can be indicated by the symbols mentioned below:-

Symbol	Comparative functional level standards	Comparative risk level standards	Comparative assets employed
-	No functions	No risk exposure	No assets employed
®	Least functions	Lowest exposure	Least assets employed
®®	Lesser Functions	Medium Exposure	Medium assets employed
®®®	Highest Functions	Highest exposure	Highest assets employed

The summary of the Functional Analysis follows.

AI.1.2. Functions performed

Some of the typical business functions that are generally performed in a business transaction are as follows:-

1. Product research, design and development
2. Purchasing material and inventory management
3. Production planning and scheduling
4. Quality control
5. Establishing and controlling pricing policies
6. Sales and distribution
7. Marketing and Advertising
8. Administrative services
9. After sales and support services

Above list is purely indicative and shall apply to the extent possible depending upon the industry and taxpayers specific circumstances.

Several functions are particularly important while conducting functions performed by a manufacturing concern. For instance does the parent corporation purchase raw material on behalf of its manufacturing subsidiary or does it directs it subsidiary on purchasing or does the manufacturing concern purchase the raw material on its own? The selection of materials shall have an impact on the pricing policy of the final product and quality of the finished goods and other areas of business process.

A summary of functions performed by ABC & Co and XYZ & Co. follows:

Description of function	ABC & Co	XYZ & Co	Comments
Research and development	®	®®	<p><u>ABC & Co</u> It is assumed that it has own R & D centre for development of engine which forms the integral part of the car. It has technology which is given by XYZ & Co.</p> <p><u>XYZ & Co</u> It is assumed that XYZ Co. is dependant on ABC & Co for technology of engines to be used for manufacturing of cars. It has its own R&D centre to absorb the technology and to customize it to suit local conditions.</p>

Product development	®	®®	<p><u>ABC & Co</u> It is assumed that it supervises the product development activities undertaken by XYZ & Co.</p> <p><u>XYZ & Co</u> It is assumed that it undertakes the activities related to product development which includes designing, product specifications, understanding market trend, focusing on competitors and studying product life cycle.</p>
Procurement of materials and production scheduling	®	®®®	<p><u>ABC & Co</u> It is assumed that ABC & Co. supplies spare parts and tyres used for manufacturing of the car.</p> <p><u>XYZ & Co</u> It is assumed that other raw materials required are purchased directly by XYZ & Co. Production scheduling is undertaken by XYZ & Co depending upon the demand for the product in the market.</p>

Quality Control	°	°°°	<p><u>ABC & Co</u> It is assumed that quality control policy and procedures and monitor them time to time are laid down from time to time by ABC & Co in technology agreement and nothing further is being done by them.</p> <p><u>XYZ & Co</u> It is assumed that XYZ & Co. does not have any hold to alter these policies and procedures. Quality control is an important function since it helps the product to maintain the desired market standard in order to survive in the market.</p>
Inventory Management	-	°°°	<p><u>XYZ & Co.</u> It is assumed that XYZ & Co. follows Just-in-Time policy to manage inventory which in turn helps in balanced production and maintenance of required stock level.</p>
Pricing Policy	-	°°°	<p><u>XYZ & Co.</u> It is assumed that XYZ & Co. is to decide pricing policy keeping in mind the local conditions and market acceptability and responsible prices raw materials procured from open market.</p>
Market development	-	°°°	<p><u>XYZ Co.</u> It is assumed that research on various geographical areas (domestic) where market can be developed is done by XYZ & Co. Market development would include focus on existing customers and also on potential customers.</p>

Sales and Distribution		®®	<p><u>ABC & Co.</u> It shall supervise and direct the selling and distribution of the product to the customers.</p> <p><u>XYZ & Co.</u> It shall follow the directions and undertake the selling and distribution activities.</p>
After Sales Services	-	®®®	<p><u>ABC & Co</u> It is assumed that ABC & Co. will not be responsible for any after sales services except for services to be rendered for defects in engine due to technology owned by ABC & Co.</p> <p><u>XYZ & Co</u> It shall provide after sales and support services to all customers in the event of grievances faced by them.</p>
Administration	®®	®®	<p>It is assumed that ABC & Co and XYZ & Co will perform administration functions independently for their respective organisations based on policies framed.</p>

AI.1.3. Assets employed:

In the course of an international controlled transaction all the significant assets both tangible and intangible employed in the transaction need to be identified and analysed. Following is a typical list of tangible and intangible assets employed in the business.

Tangibles:

- Land & Building
- Plant & machinery
- R &D equipment
- Office Equipment
- Computers

Intangibles:

- Patents
- Trademarks & Brand name
- Licensed
- Copyrights
- Customer list

Following is the summary of assets employed by ABC & Co and XYZ & Co

Description of Assets	ABC & Co	XYZ & Co	Comment
Tangibles	-	®®®	It is assumed that XYZ & Co has employed its tangible assets in the manufacturing of the final product. XYZ &Co is also the legal owner of such tangible assets.
Intangibles			
Technology	®®®	®®-	It is assumed that XYZ & Co is dependent on ABC & Co for technology related to engines used for manufacturing of cars which forms the integral part of the finished goods. However XYZ & Co. also has its own R&D facilities and keeps customers requirement while developing and using products and further improves through its own technology.
Brand	®	®®	It is assumed that XYZ & Co uses brand name developed by ABC & Co over the years in order to reach the target customers. Since XYZ & Co spends to develop the said brand in the local market, it may share in the return to the brand intangible (i.e. the economic ownership of the brand in the local market belongs to XYZ &Co.)

AI.1.4. Risks assumed:-

A significant portion of rate of return (ROR) earned by a company reflects the fact that business is exposed to risks of various kinds. Risks analysis involves the identification of economically significant risks that are assumed by each of the parties to the transaction. Some of the risks that are generally a part of business are as follows:-

- Market Risks
- Inventory Risks

- Credit Risks
- Defective products and warranty
- Foreign Exchange Risks
- Environmental Risks

Risk Category	ABC & Co	XYZ & Co	Comment
Market Risk	-	③③③	<p><u>ABC & Co</u> It is assumed that it does not have significant exposure to risks. It is primarily involved in the development of technology related to engines.</p> <p><u>XYZ & Co</u> It is assumed that XYZ & Co. has a significant exposure to market risks since it is responsible for the development of market in order to meet consumer needs.</p>
Technology risk	③③③	③③	<p><u>ABC & Co</u> It is assumed that ABC & Co. bears a significant exposure to technology risks as it is the technology owner of the main part of the finished goods. Due to the chances of the technology becoming obsolete it is a challenge for the company to keep up with the developments in technology in order to face market competition.</p> <p><u>XYZ & Co</u> It is assumed that XYZ & Co. is exposed to significantly less technological risk than ABC & Co. it faces the risk of the manufacturing process becoming obsolete.</p>
Inventory Risk	-	③③③	<p><u>ABC & Co</u> It is assumed that ABC & Co. is not exposed to Inventory risk since it is not involved in inventory maintenance and management. It is involved in technology development.</p>

			<p><u>XYZ Co</u></p> <p>It is assumed that XYZ Co. is responsible for procurement and maintenance of requisite stock level however the risk is mitigated due to the just in time policy being followed by XYZ Co.</p>
Foreign Currency Risk	®®	®®	<p><u>ABC & Co:</u></p> <p>It is assumed that ABC & Co exports technology to XYZ & Co they are subject to appreciation/depreciation of local currency against the foreign currency. Hence ABC & Co is subject to this risk.</p> <p><u>XYZ & Co:</u></p> <p>It is assumed that XYZ & Co imports technology and components from ABC & Co the imports are subject to subject to appreciation/depreciation of local currency against the foreign currency. Hence, XYZ & Co is subject to this risk.</p>

Part 2: Example related to Functional Analysis (Distributor)

B Co is a manufacturer of machine tools worldwide. It has a single manufacturing facility in country B. A Co, a limited liability company incorporated in country A, is setup to develop market and provide support in Country A.

A Co acts as a distributor of products manufactured by B Co. A Co performs the function of providing marketing and local sales promotion support to B Co and its dealers to increase the sale of products manufactured by B Co. A Co also provides technical support services in respect of the products sold to customers for resolving technical issues faced by them.

Accordingly, A Co is assumed to be engaged in the following intra-group transactions with its associated enterprise B Co:

- To act as a distributor of products manufactured by B Co. These products purchased from B Co will in turn be sold to customers in country A.
- To provide marketing support services to B Co to increase the sale of products manufactured by B Co by establishing awareness about the features of the products in the market of country A.
- A Co will provide technical support in respect of technical issues that cannot be resolved by customers.

AI.2.1. FUNCTIONS PERFORMED

AI.2.1.1. Description of functions performed by B Co

a. Market development

It is assumed that B Co undertakes the market development activities with respect to sale of products to third party customers. Hence, it needs to keep itself abreast of market trends and development. Such activities include, gathering relevant information on market, trends, availability of product substitutes, actions of competitors, development of product variations for additional applications, etc. But this is restricted to all countries other than country A.

b. Product development

It is assumed that product development is undertaken by the B Co. Product development involves product engineering, designs, research for product improvements, observance of international standards and national standards for the product etc.

c. Product Procurement / Production Scheduling

It is assumed that B Co manufactures the products using its own manufacturing facilities. Procurement process for the raw material for manufacture of the product is based on prudently prepared sales forecasts. The procurement function and the ordering processes are undertaken by B Co under which factors like lead time, availability, negotiations, etc. are taken into consideration while deciding the party from which raw material / input is to be purchased.

d. **Quality control**

It is assumed that B Co undertakes quality control processes in order to ensure that the products sold to end customer matches with the contractual specifications, international and national quality standards. This is a critical activity because failure to ensure quality control may invite reputation risk and product liability risk.

e. **Post sales activities**

It is assumed that contractual and non-contractual product warranties are provided to customers by B Co.

AI.2.1.2. Description of functions performed by A Co

a. **Procurement of products**

It is assumed that A Co places purchase orders for the products on B Co based on estimated demand calculated on the basis of the number and type of products having demand in country A. The procurement process for products is also based on purchase orders placed by customers on A Co for products which are not in stock in country A. Thus, procurement and the ordering processes are to be performed by A Co.

b. **Inventory management**

It is assumed that A Co is responsible to manage the procurement of products as well as maintain the requisite inventory levels of the products as per the orders of customers.

c. **Quality controls**

It is assumed that A Co shall undertake limited quality control function for the products traded by it in order to ensure that the products match with the contractual specification of the end customers.

d. **Post Sales Activities**

A Co is responsible for post sales activities involving collection of payments from customers, liaison with customers, addressing technical issues if any, etc. In case of defects, A Co shall take steps to remove any defects or replace defective products.

e. **Selling & Marketing**

A Co involves itself in promotion of products in country A and carries on all functions of marketing, selling and developing a customer base in country A creating marketing brand in country A. A Co is to co-ordinate the marketing activities in country A.

f. **Technical activities**

Service problems in respect of the products may be referred to A Co who will provide technical support accordingly.

AI.2.2. Summary of functions performed

AI.2.2.1. Assets Employed

Description of functions	B Co	A Co
Market Development		③③③
Product Development	③③③	-
Product Procurement / Production Scheduling	-	③③③
Inventory Management	-	③③③
Manufacturing	③③③	-
Quality Controls	③③③	③
Selling & Marketing	-	③③③
Post Sales Activities	-	③③③
General management functions		
o Corporate strategy determination	③③	③③
o Finance, accounting, treasury & legal	③③	③③
o Human resource management	③	③③③
Technical Support Activities	③	③③

Any business requires assets (tangible or intangible) without which it cannot carry out its activities. An understanding of the assets employed and owned by associated enterprises to the transaction provides an insight into the resources deployed by them and their contribution to the relevant business processes / economic activities.

i) Transaction specific tangible and intangible assets

a) The following routine tangible assets are expected to be employed by A Co:

Product distribution activity

- Warehouse facilities
- Inventory management systems
- Man power

Provision of marketing and sales support

- Man power
- Computer system
- General office facilities

Provision of technical support

- Man power
 - Tools and ancillary equipments
 - Computer system
 - General office facilities
- b) B Co being manufacturer and global supplier employs larger and expanded levels of tangible assets and human resources in relation to its business. However A Ltd being distributor in country A, all man power required for distribution is employed by them; though may not have sizable tangible assets but will have assets like network of offices, showrooms and warehouses in the said country.

Apart from above assets the following are the general intangible assets employed:

ii) *Generally employed intangible assets*

- a) It is assumed that all research and development efforts are carried out by B Co. A Co would endeavour to provide B Co with information specific to their market, customers, competitors and external environment which could contribute to meaningful adaptations or enhancements in the manufacture of the products.
- b) It is further assumed that A Co will use the trademarks, process, know-how, operating / quality standards etc. developed / owned by B Co free of cost. A Co will leverage from these intangibles for continued growth in revenues and profits.
- c) Apart from the above intangibles, B Co due to its long standing in the business has developed / built goodwill, marketing expertise, skill and experience, network, customer database, and local marketing intangibles, etc.

AI.2.2.2. Summary of assets employed

Assets Employed	B Co	A Co
Tangibles	@@@	@@
Intangibles	@@@	@@

AI.2.2.3. Risk Analysis

1) Market Risk

A Co: It is assumed that the ultimate sale of products to end customers is done by A Co and therefore it bears substantial market risk.

B Co: A share of the market risk with respect to the products including supply, customer service and acceptance are also borne by B Co since they are the manufacturers of the products. However, risk is limited because major responsibility of market development in country A of A Co.

2) Product liability risk

A Co: A Co. is merely a distributor of product and therefore, it does face product liability risk to some extent for sale of products.

B Co: B Co. is responsible for technology relating to manufacture and also manufacturing of products and thus, it faces the product liability risk arising from defect in manufacturing.

3) Credit Risk

A Co: It is assumed that all the major credit risks associated with sales to end users are borne by A Co.

B Co: A share of the credit risk is borne by B Co also as they are the manufacturers of the products.

4) Inventory Obsolescence Risk

A Co: It is responsible for the procurement of products and to maintain the requisite inventory levels. It faces the risk of slow moving / obsolete inventory.

B Co: It bears the risks associated with carrying inventory for the finished products including risk of obsolescence.

5) Foreign Currency Risk

A Co: It is exposed to foreign exchange fluctuation risk in the course of import of products from the manufacturer.

B Co: It is exposed to risk of foreign exchange fluctuation due to imports made by it from suppliers of raw materials and also export of products to A Co.

6) Technology Risk

A Co: It does not face any technology risk, since all technologies are owned by B Co.

B Co: Since the technology for manufacture of machines is owned by B Co, it assumes substantial technology risk.

7) R & D Risk

A Co: It is assumed that A Co is merely a distributor of product and therefore, it does not face any R&D risk.

B Co: B Co. is responsible for technology relating to manufacture and also manufacturing of products and thus, it faces R & D risk arising from defect in manufacturing and technology obsolescence.

8) Financing Risk

A Co: It is assumed that A Co being merely a distributor of product, therefore it does not carry substantial risk.

B Co: It is assumed that B Co is responsible for method of funding, fluctuation of interest rates, funding of losses, etc., thus it faces substantial financing risk

9) Collection Risk

A Co: Being a distributor, A Co faces credit risk and bad debt risk, thus it assumes substantial collection risk.

B Co: It is assumed that B Co does not face the collection risk (i.e. credit risk and bad debt risk).

10) Entrepreneurial Risk

A Co: It is assumed that A Co is merely a distributor; it does not face any entrepreneurial risk.

B Co: It is assumed that B Co is responsible for risk of loss associated with capital investment, single customer risk and risk of losing human capital intangible, thus B Co carries substantial entrepreneurial risk.

11) General Business Risk

A Co: It is assumed that A Co is merely a distributor; it does not carry any substantial general risk.

B Co: It is assumed that B Co is responsible for risk related to ownership of property, risk associated with exploitation of a business, inflation risk, etc. Thus, it bears major general risk.

12) Country/Regional Risk

A Co: Since A Co operates only in country A, it faces substantial country / regional risk (i.e. political risk, security risk, regulatory risk, risk related to government policies).

B Co: B Co operates in several countries other than country A, thus it does not assume any country / regional risk.

AI.2.2.4. Summary of risks

Risk Assumed	B Co	A Co
Market Risk	-	④④④
Product Liability Risk	④④④	-
Credit Risk	-	④④④
Inventory Obsolescence Risk	④④	④④
Foreign Currency Risk	④④④	④④④
Technology Risk	④④④	-
R & D Risk	④④④	-
Financing Risk	④④	-④
Collection Risk	-	④④④
Entrepreneurial Risk	④④④	-
General Risk	④④	-④④
Country/Regional Risk	-④④	④④

Part 3: Functional Analysis Checklists

AI.3.1. Functions

Sr. No	Type of Function	Particulars	Points to be considered
1.	Purchase Function	<ul style="list-style-type: none"> • Selection of supplier • Negotiation of prices • Determination of prices • Placing order of goods • Receiving goods and inspection of the same • Quality check • Payment of invoices and maintenance of records 	
2.	Manufacturing Function	<ul style="list-style-type: none"> • Research and development • Production , planning and scheduling • Setting up quality standards • Implementation of quality standards 	
3.	Distribution Functions	<ul style="list-style-type: none"> • Maintenance of distribution network • Warehousing of finish goods inventory • Perform inventory control • Providing after sales services 	
4.	Sales Function	<ul style="list-style-type: none"> • Market development including reaching target customers, studying competitors • Brand development • Trademark awareness • Advertisement activity • Selling goods to end users or distributors • Determining sale personnel needs • Setting remuneration of sales personnel • Providing after sales services 	
5.	After Sales services	<ul style="list-style-type: none"> • Warranty on normal service obligations • Warranty on manufacturing faults 	

		<ul style="list-style-type: none"> • Handling customer complaints • Handling billing and collection • Providing technical support to customers • Perform product repairs 	
6.	Marketing Function	<ul style="list-style-type: none"> • Developing marketing strategy • Conducting market research • Undertaking market surveys • Control/ co-ordinate marketing activities 	
7.	Product Strategy Function	<ul style="list-style-type: none"> • Develop promotional activities • Co-ordinate market strategy implementation • Design packaging material • Identification of needs for goods modification • Introduction of new goods in the market place. 	
8.	Accounting Function	<ul style="list-style-type: none"> • Preparation of financial statements • Collection of receivables • Payment of liabilities 	

AI.3.2. Assets

Sr. No	Assets employed	Particulars	Points to be considered
	Intangibles		
1.	Patents	The term <i>patent</i> usually refers to the right granted to anyone who invents any new, useful, and non-obvious process, machine, article of manufacture, or composition of matter.	<ul style="list-style-type: none"> • Do you own any patents? • How significant is their existence to your business
2.	Trademarks	Trademarks serve to identify a particular business as the source of goods or services.	<ul style="list-style-type: none"> • Do you own any patents? • How significant are their existence to your business? • Which party has created trademark awareness and has enhanced its value in the market.
3.	Brand name	Brand name is one of the brand elements which help the customers to identify and differentiate one product from another.	<ul style="list-style-type: none"> • Do you own brand • How important is brand name for your business. • Which party has created brand awareness and has enhanced its value in a market.
4.	Licenses	Official or legal permission to do or own a specified thing.	
5.	Copyrights	Copyright owners have the right to control the reproduction of their work, including the right to receive payment for that reproduction.	
6.	Unpatented technical know how		
	Tangibles <ul style="list-style-type: none"> • Land & building • Furniture & Fixtures • Computers • Plant & Machinery 		

AI.3.3. Risks

Sr. No	Type of Risk	Particulars	Points to be considered
1.	Market Risk	Market risk arises when a company is subject to adverse sales conditions due to increased competition, inability to develop market, inability to reach target customers etc	<ul style="list-style-type: none"> • What are the market risks? • Who bears the market risk? • How significant are the market risk?
2.	Inventory Risk	Inventory risk relates to the potential losses that are associated with carrying finished product inventory	<ul style="list-style-type: none"> • Does inventory become obsolete? • Who bears the cost of obsolete inventory? • Who provides warranties in relation to finished goods? • Who bears the cost of returns/repairs under warranty?
3.	Customer Credit Risk	When a company supplies products or services to a customer in advance of customer payment, the company runs a risk that the customer will fail to make payment. This risk is known as customer credit risk.	<ul style="list-style-type: none"> • What credit terms are given and received? • Who bears the cost of bad debts? • Is this is a significant risk?
4.	Product Technology Risk	Product technology risks relate to the implications of changes in the particular market. The risk of obsolescence or stranded assets in response to behavioural or technological change is a form of product risk.	
5.	Foreign Exchange Risk	Exchange rate risk relates to the potential variability of profits that can arise because of changes in foreign exchange rates.	
6.	Warranty product Liability Risk	Product liability arises when a product fails to perform at accepted or advertised standards,	

7.	Scheduling / Production risk	Scheduling /production risk relates to uncertainty involved scheduling production in response to unpredictable fluctuations in demand or production flow.	
8.	Operational Risks	It relates to the physical performance of the assets operated and managed by the business, and the scope for them to be affected by events beyond a business control.	
9.	Financial Risks	It relates to the relationship between the firm's revenue and its financing costs.	
10.	Volume Risk	Volume risk is a function of the way in which the companies derive their revenue. To the extent the comparable companies are exposed to volume risk, forecasting risk which relates to the forecasts of costs and revenues becomes an issue. It is not possible to form a definitive view of the expected costs associated with this risk for inclusion in the cash flows.	
11.	Asset Redundancy Risk	A firm's assets might become obsolete or redundant in response to a shift in customer demand.	
12.	Infrastructure Failure Risk	It can be in relation to its own assets that might not be covered by insurance. It might be possible to form a view of the expected costs associated with infrastructure failure risk for inclusion in the cash flows.	

13.	Service Incentive Scheme Risk	It is associated with the operation of service incentive schemes (e.g. reliability and service performance), to the extent that their actual performance might be a function of factors outside their control.	
14.	Foreign Investment risk	It is the risk associated with investing in one country, but with shareholders in another country. It is not accounted for in estimates of the cost of capital using the CAPM. It might be possible to develop some indication of the likely costs associated with this risk for inclusion in the cash flows because of the size of the foreign exchange market.	
15.	Inflation risk	It is the risk that expected inflation might differ from actual inflation. It is possible to provide an indication of the expected loss of managing this risk. Alternatively, it would be possible to develop an approach to regulation that directly compensates the business for bearing this risk	
16.	Real Interest Rate Risk	It is associated with locking in the interest free rate assumed. It is unlikely to be possible to form a definitive view of the expected costs associated with this risk for inclusion in the cash flows although there is market evidence that might assist in this process.	
17.	Manpower risk	This risk is associated with the attrition of skilled/ trained manpower which involves time and cost overruns to replace.	

18.	Capacity Utilisation Risk	This risk arises when the installed capacity for a manufacturer or service provider is not optimally utilized and the companies have to bear fixed costs associated with excess capacity.	
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Part 4: Case Study based on a hypothetical Example

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AI.4.1. Background

XYZ & Co is a manufacturer of cement and mortar in Country A. XYZ & Co has a state-of-the-art cement and mortar manufacturing complex in the country A. XYZ & Co manufactures a wide range of high-quality and competitively priced different types of cement and mortar and is marketed under its own brands. XYZ & Co's products and production processes are benchmarked with the best of global touchstones, and meet the most rigorous international specifications. XYZ & Co's products go into end-use applications in building and construction industry and exports to a variety of world markets.

XYZ & Co procures the raw material i.e. crushed limestone and gravel from ABC & Co, an associated enterprise ('AE'), situated in Country B for manufacturing cement and mortar. ABC & Co is incorporated in Country B and is engaged in the business of quarrying of limestone and crushing the quarried limestone rocks into crushed limestone, gravel, etc.

Product Profile of XYZ & Co & AE:

a) Limestone

Limestone is a sedimentary rock composed primarily of calcium carbonate with the occasional presence of magnesium. Most limestone is biochemical in origin meaning the calcium carbonate in the stone originated from shelled oceanic creatures. Limestone can also be chemical in origin as is the case with travertine. Chemical limestone forms when calcium and carbonate ions suspended in water chemically bond and precipitate from their aquatic sources.

Because of its high calcium content, limestone is usually light in colour, although many variations exist. Commercially, the term limestone includes dolomite, dolomitic limestone, oolitic limestone, and travertine, a porous calcitic rock that is commonly formed near hot springs. Limestone is most commonly employed as rough block for building and construction. Additionally, it is used as dressed stone in various applications including curbing, panelling, veneer, and tile. Two general phases of limestone production exist i.e. quarrying and processing.

b) Gravel & Crushed Stone

Gravel is composed of unconsolidated rock fragments that have a general particle size range and include size classes from granule- to boulder-sized fragments. Large gravel deposits are a common geological feature, being formed as a result of the weathering and erosion of rocks. The action of rivers and waves tends to pile up gravel in large accumulations. **Crushed Stone** is generally limestone or dolomite that has been crushed and graded by screens to certain size classes. It is widely used in concrete and as a surfacing for roads and driveways, sometimes with tar applied over it. Crushed stone may also be made from granite and other rocks. A special type of limestone crushed stone is dense grade aggregate, also known as crusher run, or colloquially as "crush and run". This is a mixed grade of mostly small crushed stone in a matrix of crushed limestone powder.

c) Cement

Crushed limestone which is purchased from AE by XYZ & Co is used in the manufacture of cement. Cement is made by heating limestone (calcium carbonate) with small quantities of other materials (such as clay) to 1450 °C in a kiln, in a process known as calcination, whereby a molecule of carbon dioxide is liberated from the calcium carbonate to form calcium oxide, or quicklime, which is then blended with the other materials that have been included in the mix. The resulting hard substance, called 'clinker', is then ground with a small amount

of gypsum into a powder to make 'Ordinary Portland Cement', the most commonly used type of cement (often referred to as OPC). Portland cement is a basic ingredient of concrete, mortar and most non-specialty grout. The most common use for Portland cement is in the production of concrete. Concrete is a composite material consisting of aggregate (gravel and sand), cement, and water. As a construction material, concrete can be cast in almost any shape desired, and once hardened, can become a structural (load bearing) element. Portland cement may be grey or white.

d) Mortar

Lime mortar is a type of mortar composed of lime and an aggregate such as sand, mixed with water. A pozzolanic material such as calcined clay or brick dust may be added to the mortar mix. This has a similar effect of making the mortar set reasonably quickly by reaction with the water in the mortar. Using Portland cement mortars in repairs to older buildings originally constructed using lime mortar can be problematic. This is because lime mortar is softer than cement mortar, allowing brickwork a certain degree of flexibility to move to adapt to shifting ground or other changing conditions. Cement mortar is harder and allows less flexibility. The contrast can cause brickwork to crack where the two mortars are present in a single wall.

Lime mortar is considered breathable in that it will allow moisture to freely move through it and evaporate from its surface. In old buildings with walls that shift over time, there are often cracks which allow rain water into the structure. The lime mortar allows this moisture to escape through evaporation and keeps the wall dry. Repainting or rendering an old wall with cement mortar stops this evaporation and can cause problems associated with moisture behind the cement.

AI.4.2. Functions, Assets and Risk Analysis

AI.4.2.1. Objective

Every person who has entered into an intra group transaction shall keep and maintain, inter alia, a description of the functions performed, risks assumed and assets employed or to be employed by the taxpayer and by the associated enterprises involved in the intra group transaction.

A functional analysis enables mapping of the economically relevant facts and characteristics of transactions between associated enterprises with regard to their functions, assets and risks. A functional analysis facilitates characterization of the associated enterprises and assists in establishing degree of comparability with similar transactions in uncontrolled conditions.

In dealings between two independent enterprises, compensation usually will reflect the functions that each enterprise performs (taking into account assets used and risks assumed). Therefore, in determining whether controlled and uncontrolled transactions or entities are comparable, comparison of the functions taken on by the parties is necessary. This comparison is based on a functional analysis, which seeks to identify and compare economically significant activities and responsibilities undertaken or to be undertaken in the uncontrolled transaction and controlled transaction between associated enterprises and their contribution to the overall economic value created.

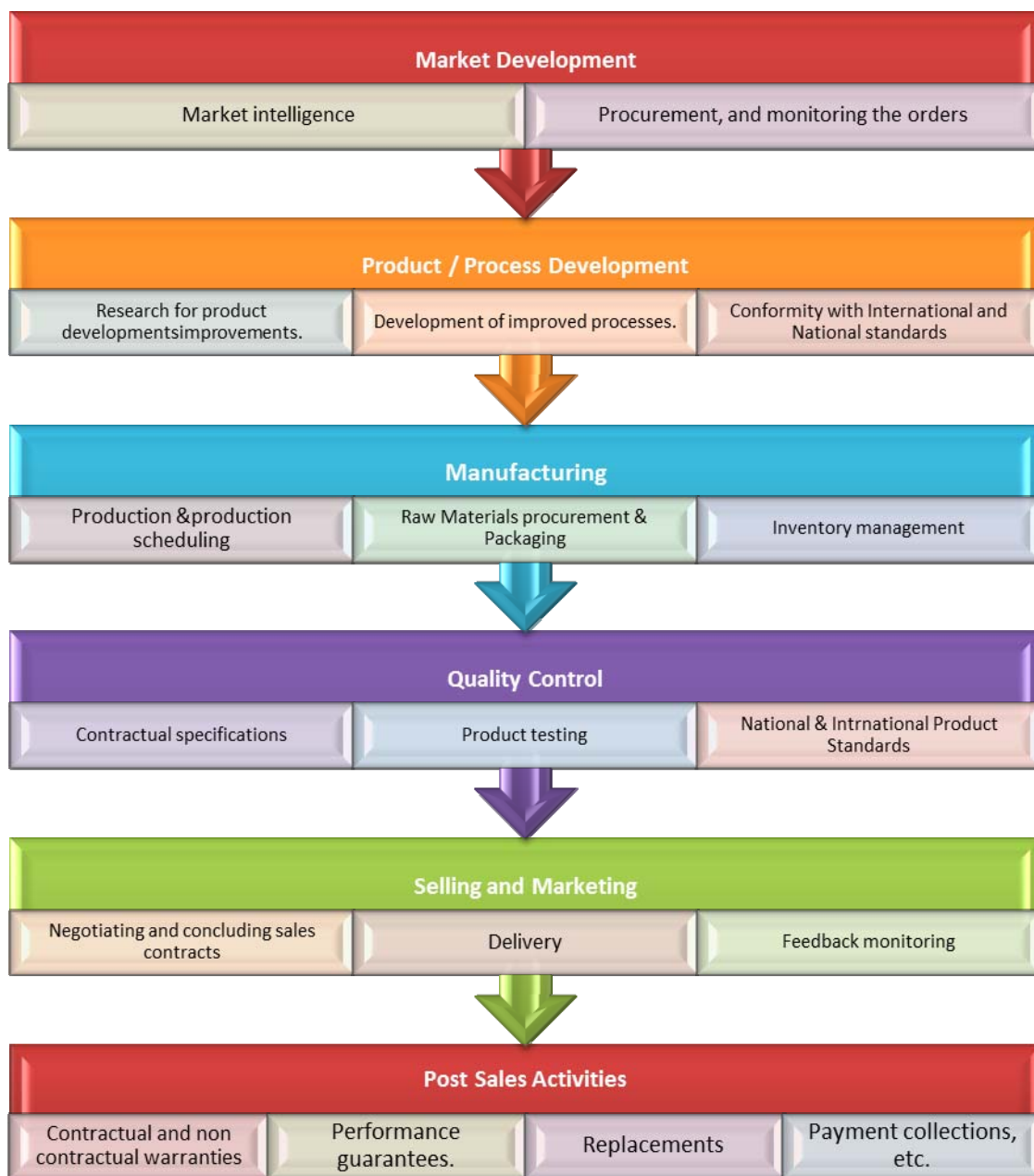
Typically, an enterprise could be said to be performing one or all of the following broad economic functions viz. manufacturing, trading / distribution and providing services. The nature and extent to which these broad functions are performed by enterprises would vary. Within these broad economic functions of enterprises, the functions that one need to identify and compare include e.g. design, manufacturing, assembling, research and development, servicing, purchasing, distribution, marketing, advertising, transportation, financing and management. Economically significant functions performed by an enterprise under examination are identified. Adjustments are made for any material differences in the significant economic functions undertaken in comparable uncontrolled transaction and in controlled transaction.

This analysis also considers the type and nature of assets used i.e. tangibles, such as plant and equipment, and intangibles, such as patents and trademarks. It will also be relevant to consider the risks assumed by the respective parties. In the open market, the assumption of increased risk will also be compensated by an increase in the expected return.

In subsequent paragraphs, FAR analysis of intra group transactions of purchase of raw materials by XYZ & Co from its associated enterprise is reflected.

AI.4.2.2. Functions Performed

As mentioned earlier, XYZ & Co and its associated enterprises operate in quarrying and crushing of limestone and gravel, manufacture of cement and mortar. The business broadly involves following significant economic activities:



Functions performed by XYZ & Co in intra group transactions of import / purchase of raw material:

i. Overview of business process:

The business process related to intra group transaction of import of raw material from associated enterprise and its use by XYZ & Co for manufacture of the ultimate final product involves certain economically significant activities.

XYZ & Co uses these raw materials (crushed limestone and gravel) for the manufacture of ultimate final products (cement and mortar) and subsequent sale thereof. Economically significant functions, in this respect, performed by XYZ & Co, are as follows –

a) Market Development

XYZ & Co, being entity manufacturing and selling final products, needs to abreast itself with market trends and development. Such activities include gathering relevant information on market, trends, availability of product substitutes, actions of competitors, development of product variations for additional applications, etc.

b) Research and development

R&D is of significant importance in the manufacture of cement and mortar products. The ultimate final product being cement and mortar, in which these raw materials are used, requires continuous manufacturing process improvements to reduce cost and application development to boost demand.

c) Production Scheduling

Procurement process for the raw material is based on prudently prepared sales forecasts. The procurement function and the ordering processes are looked after by the 'materials department' of XYZ & Co. Factors like lead time, availability, negotiations, etc. are taken into consideration.

d) Manufacturing

XYZ & Co manufactures ultimate final products at its manufacturing locations in Country A, using its own process and product know-how and resources.

e) Inventory management

XYZ & Co is responsible to manage the procurement of raw material and maintain the requisite stock levels for the production of ultimate final product. XYZ & Co is also responsible for maintenance of inventory of ultimate final product based on its assessment of demand-supply position in the market and forecast for the same.

f) Testing and quality control

Testing and quality controls are critical processes in the manufacture and marketing of cement and mortar products in general so is the case for the raw materials used for manufacturing of these products. XYZ & Co performs testing and quality control measures both for raw materials used as well

as for ultimate final products manufactured. Testing activity involves testing of raw materials and manufactured products against specified national and international quality standards and customer's specifications.

g) Selling and Distribution activities

The ultimate final products manufactured by XYZ & Co are sold by XYZ & Co directly to large customers and through distribution channels, mostly consisting of stockists and dealers spread all over Country A and globally.

h) Post sales activities

XYZ & Co handles post sales activities related to final products manufactured by it, using the raw materials sourced from its associated enterprises. The post sales activities includes customer invoicing, meeting the performance guarantees and warranties, settling the claims for damages, collection of customer payments, monitoring customer credit limits, follow up for payments, taking appropriate measures and actions in the event of customer defaults.

ii. Description of functions performed by AE - ABC & Co

Business process for quarrying and crushing of limestone and gravel



In the context of intra group transaction of purchase of raw material (crushed limestone and gravel) from AE ABC & Co, the economically significant functions performed by ABC & Co can be summarized as follows:

a) Market Development

ABC & Co, engaged in quarrying, crushing and selling of crushed stone and gravel, needs to abreast itself with market trends and development. Such activities include, gathering relevant information on market, trends, availability of product substitutes, actions of competitors, development of product variations for additional applications, etc.

However, in the context of intra-group transaction with XYZ & Co, there are no substantial market development activities because limestone and gravels supplied to XYZ & Co are of specified standard quality.

b) Process improvement

ABC & Co. undertakes R & D activities to improve the processes related to the quarrying and crushing to reduce the cost and improve operating margins.

c) Quarrying and Crushing

The quarrying and crushing process is done by ABC & Co at its mining locations in country B.

d) Inventory management

ABC & Co is responsible to manage the quarrying and crushing of raw materials for the production of crushed limestone and gravel and maintain the requisite stock levels.

e) Testing and quality controls

Testing and quality controls are critical processes in the quarrying and crushing of limestone and gravel. ABC & Co performs testing and quality control measures. Testing activity involves temperature variation testing, testing of crushed limestone and gravel against standard crushed limestone and gravel, conformity with international product standards and technical specification of customers, etc.

f) Sales and marketing

ABC & Co has a sales and marketing team for the sale of crushed limestone and gravel.

However, selling and marketing efforts of ABC & Co are mainly focussed on third party customers and least on business with XYZ & Co due to ownership affiliation which ABC & Co enjoys with XYZ & Co.

i) Post sales activities

ABC & Co handles post sales activities related to its products. The post sales activities includes customer delivery, arranging for shipments, invoicing, settling the claims for damages, collection of customer payments, monitoring customer credit limits, follow up for payments, etc.

iii. General Management Functions

The functions addressed below are common functions that are carried out by any business

irrespective of their size and type. These functions are drivers of every business and are indispensable in the economic environment.

a) Corporate Strategy Determination:

Generally, all policies within the group are determined by the management of respective entity, which continuously monitors the economic environment surrounding the respective entity, assesses its strategic position within the industry and targets to achieve its corporate objectives.

b) Finance, Accounting, Treasury and Legal Function:

The management of respective entity is responsible for managing the finance, treasury, legal and accounting functions. Respective entities are also responsible for all local statutory compliance.

c) Human Resource Management Function:

The HR function of respective entity is co-ordinated by its management, which is responsible for recruitment, development and training of the personnel including the emolument structure.

AI.4.2.3. Assets Employed:

Every business requires assets (tangible or intangible) without which it cannot carry out its activities. Intangibles play a significant role in the functioning of a business and are accordingly more important. An understanding of the assets employed and owned by associated enterprises to the transaction provides an insight into the resources deployed by them and their contribution to the relevant business processes / economic activities.

i. Tangible Assets

a) The following routine tangible assets are employed by XYZ & Co at its manufacturing locations at which ultimate final products are manufactured using crushed limestone and gravel sourced from its associated enterprise:

- Land and Buildings
- Plant and Machinery
- Traction Lines and Railway Sidings
- Water Works
- Furniture, Fitting and Office Equipment
- Vehicles
- Skilled, Semi-skilled and labour work force.

In addition to aforesaid manufacturing related tangible assets, human resources and other tangible assets are deployed for market development, sales and marketing and corporate affairs related to ultimate final products.

The following routine tangibles assets are owned by ABC & Co for its business as a whole:

- b) ABC & Co, being mining entity, employs tangible assets and human resources similar to that employed by XYZ & CO, in relation to its business of quarrying and sale of limestone and gravel. In addition, it owns large scale mines.

ii. Intangibles

- a) XYZ & Co is in the business of manufacture of cement and mortar since XXXX. Due to these long years of experience, it has developed / acquired / built many intangibles like know-how, brand name, goodwill, marketing expertise, skill and experience, network, customer database, etc. Although these intangibles cannot be measured monetarily but they indirectly impact the business segment relevant to intra-group transaction under review.
- b) AE does not possess any non-routine intangible assets. Routine intangible asset possessed by it primarily includes quarrying and crushing process know-how. AE is dependant on XYZ & Co for its major sales.

AI.4.2.4. Risk Analysis:

Risk profiling of XYZ & Co and AE in relation to the intra-group transactions of purchase and sale of products is provided below -

Risk Profile

Risk Category and Description	Exposure to XYZ & Co	Exposure to AE
<ul style="list-style-type: none"> • Market Risk: Market risk arises for a business due to the uncertainty in the structure of the market, demand patterns and needs of customers, costs, pricing pressures etc. Market risk represents standard risk borne by any enterprise in market driven transactions 	<p>XYZ & Co is exposed to this risk in respect of ultimate final products.</p>	<p>AE is exposed to this risk in respect of its products and has a proportionate impact of exposure of XYZ & Co.</p>
<ul style="list-style-type: none"> • Product liability risk: Risks associated with product failures including non-performance to generally accepted or regulatory standards. This could result in product recalls and possible injuries to end-users. 	<p>XYZ & Co is exposed to this risk in respect of ultimate final products. However, this risk is mitigated due to the excellent quality, safety standards and processes used.</p>	<p>AE is exposed to this risk in respect of its products. However, this risk is mitigated due to the excellent quality, safety standards and processes used.</p>
<ul style="list-style-type: none"> • Technology Risk: This risk arises if the market in which an entity operates is sensitive to introduction of new products and technologies. Hence, in that case, business units may face loss of potential revenues due to inefficiencies arising from obsolete infrastructure and tools as well as obsolescence of production processes. 	<p>XYZ & Co is exposed to this risk in respect of ultimate final products.</p>	<p>AE is exposed to lesser risk as compared to XYZ & Co since limestone and gravels are natural minerals and quarrying processes does not require use of much sophisticated technology.</p>
<ul style="list-style-type: none"> • Research & Development risk: Represents risk that R&D activities performed by an enterprise may not be successful and investment in R&D activity may be lost. 	<p>XYZ & Co is exposed to this risk in respect of ultimate final products.</p>	<p>AE does not require much R&D, except those related to improvement in quarrying and crushing process. Therefore, R&D risk exposure is to a lesser degree.</p>
<ul style="list-style-type: none"> • Credit Risk: This is the risk arising from 	<p>XYZ & Co faces credit risk</p>	<p>AE is less exposed to this</p>

Risk Category and Description	Exposure to XYZ & Co	Exposure to AE
non-payment of dues by customers.	with respect to its sales of ultimate final products to third party customers.	risk in respect of its transaction with XYZ & Co, on account of associated enterprises relationship.
<ul style="list-style-type: none"> Inventory Risk: This risk is associated with management of inventory in case of overstocking or slow / non-moving inventory resulting from a rapidly changing technology / price sensitive market. As a result, the enterprise may be forced to bear a loss of margin on the inventory, or incur other additional costs to dispose the same. 	XYZ & Co is exposed to this risk in respect of ultimate final products.	AE bears the risks associated with carrying inventory of mineral products including risk of quality deterioration.
<ul style="list-style-type: none"> Foreign Currency Risk: The risk arises from any adverse revaluation of assets and liabilities due to fluctuation in exchange rates, which would eventually have a negative impact on the profitability of the enterprise. 	Since XYZ & Co has to make payments to AE in foreign currencies (mainly US\$), it is subject to appreciation / depreciation of the domestic currency against the US\$.	Since AE exports its products to XYZ & Co, and invoices in USD, it face foreign exchange risk because US\$ is not its functional currency.
<ul style="list-style-type: none"> Sourcing Risk: This risk arises from demand supply mismatch in critical inputs. 	XYZ & Co is less exposed to this risk due to its special relationship with ABC & Co who is a source of strategic supplies of raw materials.	AE's products being natural minerals, are subject to depletion and are non reproducible. AE is exposed to sourcing risk substantially.

AI.4.2.5. Characterization

The FAR analysis for the intra-group transaction of purchase of products between XYZ & CO and its AE can be broadly summarised as follows:

Level of risks:

Symbol	Comparative risk level standards	Comparative functional level standards
?	Lowest Exposure	Least Functions
??	Medium Exposure	Lesser Functions
????	Highest Exposure	Highest Functions

Summary of FAR Analysis

Category	Level of Intensity	
	XYZ & Co	AE
Functions Performed <ul style="list-style-type: none"> • Market Development • Product/Process development and improvement • Production planning and procurement • Inventory Management • Manufacturing/Quarrying • Testing and Quality control • Sales and Marketing • Post sales activities General management functions <ul style="list-style-type: none"> • Corporate strategy determination • Finance, accounting, treasury & legal • Human resource management 	<p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p>	<p style="text-align: center;">?</p> <p style="text-align: center;">??</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">?</p> <p style="text-align: center;">??</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p>
Assets Employed <ul style="list-style-type: none"> • Tangibles • Intangibles 	<p style="text-align: center;">???</p> <p style="text-align: center;">???</p>	<p style="text-align: center;">???</p> <p style="text-align: center;">?</p>
Risks Assumed <ul style="list-style-type: none"> • Market risk • Product liability risk • Technology risk • Research & Development risk • Credit risk • Inventory risk • Foreign currency risk • Sourcing Risk 	<p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">?</p>	<p style="text-align: center;">??</p> <p style="text-align: center;">???</p> <p style="text-align: center;">?</p> <p style="text-align: center;">?</p> <p style="text-align: center;">?</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">???</p> <p style="text-align: center;">-</p>

Based on above FAR Analysis, following conclusions can be deduced:

- a) Both AE and XYZ & Co are employing more or less similar assets (except intangibles) and carrying on similar functions related to products dealt with by them in the intra-group transaction under review.
- b) XYZ & Co is exposed a higher risk in relation to its business than its AE ABC & Co.

- c) However in terms of input sourcing risk and inventory risk, XYZ & Co is exposed to a lesser risk level on account of secured input supplies from AE.
- d) XYZ & Co is exposed to much higher risk in relation to technology, research and development and credit risk as compared to its AE ABC & Co which does not face such risk substantially.

AI.4.3. Economic Analysis

AI.4.3.1. Overview of inter-group transactions

XYZ & Co engaged in the following intra-group transactions with its associated enterprises:

Summary of Intra-group Transactions

Sr. No.	Description of the transactions	Amount
1	Purchase of raw material	
	- Crushed Limestone	XX
	- Gravel	XX

AI.4.3.2. Selection of the Tested Party

In order to select the most appropriate method for determining the arm's length price or operating results, it is first necessary to select the 'tested party'. The tested party is the participant in a related party transaction whose prices (charged or paid) or whose profit margins will be tested using the most appropriate method. The tested party is ordinarily the party whose prices or profits can be verified using the most reliable data and requiring the fewest and most reliable adjustments and for which reliable data regarding uncontrolled comparables can be located. Based on an analysis, XYZ & Co has been selected as the tested party for the analysis of all the intra-group transactions listed in table above

In selection of XYZ & Co as the 'tested party', we are guided by following factors:

- The information about the XYZ & Co is more easily and readily available and accessible.
- Similarly, the reliable information on comparable uncontrolled transactions can be obtained and verified in a relatively reliable manner in view of availability of internal comparable uncontrolled transactions. Therefore, the condition of reliability is achieved.
- The available information also enables carrying out of reliable adjustments for material differences, if any.

AI.4.3.3. Selection of the Most Appropriate Method

The Most Appropriate Method

The selection of the pricing method to be used to test the arm's length character of a controlled transaction must be made under the 'Most Appropriate Method'

The transfer pricing methods are analytical tools designed to test the arm's length character of transfer pricing results between controlled parties. No method is itself right or wrong for any given set of facts and circumstances. Rather, the selection of the most appropriate pricing method to be used to determine the arm's length character of a controlled transaction is based on a determination of the method which, under

the facts and circumstances of the transaction under review, provides the most reliable measure or best estimate of an arm's length result.

In determining the reliability of a method, the two most important factors to be taken into account are

(i) the degree of comparability between the controlled and uncontrolled transactions and

(ii) the coverage and reliability of the available data. Other factors such as nature and class of intra-group transactions, extent and reliability of adjustments that can be made, and extent and reliability of assumptions that may be required in applying the method, shall also be taken into account.

Because the selection of the most appropriate method involves a test of relative merit, a method that may not be perfect is not rejected unless some other method can be shown to be more reliable or provide a better estimate of an arm's length result.

AI.4.3.4. Evaluation of alternative pricing methods

The method selected to determine the arm's length operating results of the tested party must be best suited to the facts and circumstances of each particular intra-group transaction and which provides the most reliable measure of arm's length price.

In subsequent paragraphs, the determination of most appropriate transfer pricing method applicable for intra-group transactions of XYZ & Co and its application is being discussed.

Purchase of raw materials – Crushed Limestone and Gravel

Rejected Methods

For purposes of these intra-group transactions, the Resale Price (RSP) Method, Cost Plus Method (CP Method), the Profit Split Method (PSM) and Transactional Net Margin Method (TNMM) have been rejected.

[I] Resale Price Method:

The Resale Price Method (RPM) is primarily intended to measure the value of the services performed by a buyer / reseller of goods acting as a distributor. Under the RPM, comparability is primarily dependent upon the similarity of functions performed and the risks assumed by the controlled and uncontrolled distributors. In this context, similarity of the tangible goods bought and resold would also be quite relevant. Moreover, the RPM focuses on the gross profit margins, which are heavily influenced by the scope and intensity of the functions performed which may vary widely among uncontrolled parties.

Since these international transactions of XYZ & Co do not resemble in any way the functions that a distributor performs, the RPM is not an appropriate method to determine the arm's length results in these transactions.

[II] Cost Plus Method:

The Cost Plus (CP) Method is typically applied to test the price of goods that are manufactured using

materials purchased from unrelated parties and then sold to related parties or to measure the value of services performed by a service provider and is generally appropriate where the party being examined is engaged in significant value adding activities. The CP Method focuses on the gross profit margins, which are heavily influenced by the scope and intensity of the functions performed and accounting methods used and each of these may vary widely among enterprises. The computation of gross margin can be affected by the particular accounting conventions used by an enterprise to classify direct / indirect cost of goods produced or operating expenses, which might vary widely. Further, the application of CP Method requires a high level of comparability between the controlled transaction and the comparable uncontrolled transaction in terms of the intensity of functions performed and risks assumed, particularly in the level of operating expenses incurred. This again is subject to wide variation because the nature and mode of operations could be varied. For these reasons, the CP Method was not considered as an appropriate method for deriving an arm's length price.

[III] Profit Split Method:

The Profit Split Method (PSM) may be applicable when the various entities, involved in an inter-company transaction, have significant intangible assets and / or operations of the entities are highly integrated, sharing more or less proportionately in the risks associated with the design, production and sale of applicable product that cannot be evaluated on a separate basis. Also, in general, the PSM relies primarily on the internal data and assumptions pertaining to each party to the controlled transaction instead of relying on comparable uncontrolled transactions as market benchmarks, thus making the use of the PSM ordinarily less reliable than the other methods.

As the operations of XYZ & Co can be independently evaluated and there is availability of internal comparable uncontrolled transactions, the PSM is not considered to be an appropriate method to determine the arm's length results in these transactions.

[IV] Transactional Net Margin Method (TNMM)

The TNMM tests the arm's length character of transfer prices in a controlled transaction by comparing the operating profits earned by the tested party in the transactions under examination to the operating profits earned by uncontrolled parties engaged in similar business activities. The expression 'operating profit' means profit before interest, financial charges / losses and other non-operating expenses. Accordingly, the quantum of financial / non-operating expenses does not affect the Transfer Pricing analysis.

The TNMM measures the total return derived from the controlled taxpayer's most narrowly defined business activity for which reliable data incorporating the controlled transaction under review is available. Strength of the TNMM is that net margins (e.g. return on assets, operating income to sales and possibly other measures of net profit) are less affected by transactional differences. Also under TNMM, some functional diversity between the controlled and uncontrolled parties is acceptable.

However, TNMM is generally applied if no other method is directly applicable for the given transaction. It is mostly used as a residual method. Hence, for the above transactions TNMM is not applied since internal CUP is available.

Selected Method

CUP Method:

The Comparable Uncontrolled Price (CUP) Method compares the price charged for property or services transferred in a controlled transaction to the price charged for property or services transferred in a comparable uncontrolled transaction in comparable circumstances.

The CUP Method relies on comparability of actual per unit prices, while other methods rely on comparability of profit margins. Profit margins tend to adjust automatically for differences between controlled and uncontrolled transactions that relate to the type and intensity of functions performed; per unit prices do not. The CUP Method requires a high degree of comparability in the products sold or services provided in the controlled and uncontrolled transactions.

The arm's length per unit prices to, or by, uncontrolled enterprises is substantially dependent upon factors such as volume, contractual terms, locational differences, business strategies etc.

In practice, there are two types of comparable uncontrolled transactions. The first, known as an "internal comparable," is a transaction between one of the parties to the controlled transaction and an unrelated third party. The second, known as an "external comparable", is a transaction between two third parties, each unrelated to the parties engaged in the controlled transaction.

In view of the fact that CUP method is the most direct evidence of adherence to arm's length pricing and availability of internal comparable uncontrolled transactions in the context of these intra-group transactions of XYZ & Co, CUP method is selected as the most appropriate method for testing adherence to arm's length pricing for these international transactions.

AI.4.3.5. Application of Transfer Pricing Methods and Benchmarking

Application of CUP method for purchase of raw material (crushed limestone and gravel) from ABC & Co:

CUP method is the most direct method of testing arm's length pricing in the facts and circumstances of subject intra-group transactions of XYZ & Co. and is relatively preferred over the profit based methods. The intra-group transaction of purchase of raw material (crushed limestone and gravel) from associated enterprise ABC & Co is being benchmarked adopting CUP method for the following reasons:

- (a) The transactions with independent uncontrolled suppliers meet the comparability tests with the controlled transactions.
- (b) In addition to internal comparable uncontrolled transactions, external comparable price information is also available in the form of price published by IJK international group in its weekly magazines.

Accordingly, we selected the CUP method for confirming the arm's length nature of XYZ & Co.'s transactions of purchase of raw material (crushed limestone and gravel) from its associated enterprise ABC & Co.

The CUP benchmarking has been done as under -

i) External CUP:

External comparable prices have been derived from weekly report published by IJK group of country Z. IJK publications monitor world crushed limestone and gravel trade, markets and prices and has set the industry standard for providing timely, accurate and informative market intelligence. IJK uses a market appropriate methodology to assess prices in the markets it covers. IJK consults with the range of participants involved in different markets and publishes methodologies for each price report. Each methodology is reviewed regularly to ensure that it always meets the needs of market participants and is in line with industry practice. IJK seeks to reflect the way markets are traded, rather than impose its own view.

Sr. No	Product	Relevant date	Price charged by AE per MT (in USD)	Market rate per MT as per IJK Publication (in USD)	Deviation, if any (in USD).
1	Crushed Limestone	08/04/20XX	2.30	2.15-2.30	-
2	Crushed Limestone	21/04/20XX	2.30	2.30	-
3	Crushed Limestone	06/05/20XX	2.30	2.30	-
4	Crushed Limestone	17/05/20XX	2.30	2.30	-
5	Crushed Limestone	06/06/20XX	2.30	2.30	-
6	Crushed Limestone	07/06/20XX	2.30	2.30	-
7	Crushed Limestone	19/06/20XX	2.30	2.30	-
8	Crushed Limestone	26/06/20XX	2.30	2.30	-
9	Crushed Limestone	29/06/20XX	2.30	2.30	-
10	Crushed Limestone	25/07/20XX	2.45	2.45	-

i) **A comparative table of prices charged by AE ABC & Co. to XYZ & Co. for supply of gravel and market prices of gravel published in IJK international magazine is given below:**

Sr. No	Product	Relevant date	Price charged by AE per MT (in USD)	Market rate per MT as per IJK Publication (in USD)	Deviation, if any (in USD).
1	Gravel	08/04/20XX	1.30	1.15-1.30	-
2	Gravel	21/04/20XX	1.30	1.30	-
3	Gravel	06/05/20XX	1.30	1.30	-
4	Gravel	17/05/20XX	1.30	1.30	-
5	Gravel	06/06/20XX	1.30	1.30	-
6	Gravel	07/06/20XX	1.30	1.30	-
7	Gravel	19/06/20XX	1.30	1.30	-
8	Gravel	26/06/20XX	1.30	1.30	-
9	Gravel	29/06/20XX	1.30	1.30	-
10	Gravel	25/07/20XX	1.45	1.45	-

ii) Internal comparable:

(A) During the year, XYZ & Co also purchased crushed limestone from uncontrolled independent supplier namely, PQR & Co, under similar circumstances. The average price charged by PQR & Co to XYZ & CO for supply of crushed limestone is US\$ 2.50/MT FOB. The average FOB price per MT paid to / charged by associated enterprise ABC & Co is US\$ 2.315, which is lower than price charged in aforesaid international comparable uncontrolled transactions.

(B) During the year, XYZ & Co also purchased gravel from several uncontrolled independent suppliers under similar circumstances. The average price charged by them to XYZ & CO for supply of gravel is US\$ 1.40/MT FOB. The average FOB price per MT paid to / charged by associated enterprise ABC & Co is US\$ 1.315, which is lower than price charged in aforesaid international comparable uncontrolled transactions.

Having regard to comparable external uncontrolled price and comparable internal uncontrolled price, it is concluded that international transaction of purchase of raw material (crushed limestone & gravel) from associated enterprise ABC & Co meets with arm's length pricing condition.

AI.4.4. Documentation

Information and documents to be kept and maintained by the taxpayer who has entered into an intra-group transaction. A general list of information and documents is given below:-

Sr. No	Particulars
1	A description of the ownership structure of the taxpayer with details of shares or other ownership interest held therein by other enterprises.
2	A profile of the multinational group of which the taxpayer is a part along with the name, address, legal status and country of tax residence of each of the enterprises comprised in the group with whom intra-group transactions have been entered into by the taxpayer, and ownership linkages among them;
3	A broad description of the business of the taxpayer and the industry in which the taxpayer operates, and of the business of the associated enterprises with whom the taxpayer has transacted;
4	The nature and terms (including prices) of intra-group transactions entered into with each associated enterprise, details of property transferred or services provided and the quantum and the value of each such transaction or class of such transaction;
5	A description of the functions performed, risks assumed and assets employed or to be employed by the taxpayer and by the associated enterprises involved in the intra-group transaction;
6	A record of the economic and market analyses, forecasts, budgets or any other financial estimates prepared by the taxpayer for the business as a whole and for each division or product separately, which may have a bearing on the intra-group transactions entered into by the taxpayer;
7	A record of uncontrolled transactions taken into account for analyzing their comparability with the intra-group transactions entered into, including a record of the nature, terms and conditions relating to any uncontrolled transaction with third parties which may be of relevance to the pricing of the intra-group transactions;
8	A record of the analysis performed to evaluate comparability of uncontrolled transactions with the relevant intra-group transaction;
9	A description of the methods considered for determining the arm's length price in relation to each intra-group transaction or class of transaction, the method selected as the most appropriate method along with explanations as to why such method was so selected, and how such method was applied in each case;
10	A record of the actual working carried out for determining the arm's length price, including details of the comparable data and financial information used in applying the most appropriate method, and adjustments, if any, which were made to account for differences between the intra-group transaction and the comparable uncontrolled transactions, or between the enterprises entering into such transactions;
11	The assumptions, policies and price negotiations, if any, which have critically affected the determination of the arm's length price;

Sr. No	Particulars
12	Details of the adjustments, if any, made to transfer prices to align them with arm's length prices determined under these rules and consequent adjustment made to the taxable income for tax purposes;
13	Any other information, data or document, including information or data relating to the associated enterprise, which may be relevant for determination of the arm's length price.
14	Official publications, reports, studies and data bases from the Government of the country of residence of the associated enterprise, or of any other country;
15	Reports of market research studies carried out and technical publications brought out by institutions of national or international repute;
16	Price publications including stock exchange and commodity market quotations;
17	Published accounts and financial statements relating to the business affairs of the associated enterprises;
18	Agreements and contracts entered into with associated enterprises or with unrelated enterprises in respect of transactions similar to the intra-group transactions;
19	Letters and other correspondence documenting any terms negotiated between the taxpayer and the associated enterprise;
20	Documents normally issued in connection with various transactions under the accounting practices followed.