- to identify and understand the intra-group transactions,
- to have a basis for comparability
- to determine any necessary adjustments to the comparables,
- to check the accuracy of the method selected and
- over time, to consider adaptation of the policy if the functions, risks or assets have been modified.

As such the functional analysis is a major part of the documentation.

The major components of a functional analysis are:

Functions performed: It describes the activities performed such as design, purchasing, inbound logistics, manufacturing, R&D, assembling, inventory management, outbound logistics, marketing and sales activities, after-sale services, supporting activities, services, advertising, financing and management, etc. It must be specified which party performs each activity and in case both parties are involved in performing an activity it should provide for the relevant differences; for example both have inventories but Company A holds inventories for a period of up to 2 years whereas company B only holds inventories for a period of 1 month. The activities that add most value must be identified and be discussed more in detail.

Risks undertaken: The functional analysis should identify risk undertaken. Examples are: financial risk (currency, commodity, interest rate, funding risks etc…), credit and collection risk (trading credit risk, commercial credit risk), operational risk (systems failure risk, reliability of customers, inventory risk and carrying costs, R&D risk, environmental and other regulatory risks), market risk (country political risk, reliability of customers, fluctuation in demand and prices), product risk (product liability risk, warranty risk and costs, contract enforceability). A risk-bearing party should have a chance of higher earnings than a non-risk bearing party, and will incur the expenses and perhaps related loss if and when risk materializes.

Assets used or contributed: the functional analysis must identify and

Africa, a search for comparables could be carried out in Asia or Eastern-Europe).

- Use of industry analysis (publicly-available or internally conducted by the company) to identify profit levels that can reasonably be expected for various routine functions (e.g., production, services, distribution, etc.).
- Undertake an analysis that demonstrates the general applicability of a company's transfer pricing policy given the specific economic environment in which the company conducts its

have significant related party dealings and that the industries can be considered comparable Once a method is chosen and applied, taxpayers are generally expected to use and apply a method in a consistent fashion. Assuming an appropriate transfer pricing method is being applied, only if facts or functionalities change and those changes require a change in methods, is a change in methods envisaged or alternatively when the available comparable data change such that a method change is required.

2. Traditional Transaction Methods

2.1.1 Comparable Uncontrolled Price

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. It should be observed that the CUP method is also used in practice with respect to royalties. The CUP method applies to controlled transactions of property and services. C3/TT131Tf1.36050TD0Tc0.0037Tj/TT161Tf

The controlled transaction in this figure concern the transfer of cars between Associated Enterprise 1, a car producer in country 1, and Associated Enterprise 2, a car

Comparable uncontrolled transactions similar to transaction #1 or #2 can be referred to as internal comparables. Comparable uncontrolled transactions similar to transaction #3 are called external comparables, because the uncontrolled transaction involves two parties, neither of which is one of the associated enterprises.

The application of the CUP method based on internal comparables involves a detailed transactional comparison, whereby the controlled and uncontrolled transactions are compared based on the five comparability

terms,

circumstances relating to the controlled and uncontrolled transactions are similar. The only material difference that could be identified between the transactions is that the price relating to the controlled transaction is a delivered price (i.e. including transportation and insurance), while the uncontrolled transaction # 1 is made ex warehouse. Associated Enterprise 1's factory (i.e. ex works – with the buyer taking responsibility from named place of delivery, which is Associated Enterprise 1's factory). It is possible to perform reliable adjustments for this difference. The uncontrolled price should then be adjusted for the difference in delivery terms to eliminate the effect of this difference on the price;

- volume discounts: for example, Associated Enterprise 1 sells 5000 cars to Associated Enterprise 2 for $20,000 per car, while it sells 1000 similar cars to an Unrelated Party. It should be analyzed whether differences in volume have a material effect on price, and if so, how to perform adjustments by examining volume discounts in similar markets;

- product modifications: for example, the uncontrolled transactions to an Unrelated Party in Figure 3 involve cars on which product modifications have been made. However, the cars sold in the controlled transactions do not include these product modifications. If the product modifications have a material effect on price, then the uncontrolled price should be adjusted to take into account this difference in price.

- risk incurred, for example, Associated Enterprise 1 carries inventory risk related to sales by Associated Enterprise 2 and bad debt risk as regards customers of Associated Enterprise 2, whereas as between Associated Enterprise 1 and Unrelated Party, the Unrelated Party carries inventory risk and bad debt risk as

regards its customers. It should now be analyzed and quantified what the

Difficulties resulting from performing reasonably accurate adjustments

The weaknesses of the CUP method include:

- it will very often be hard to find closely comparable uncontrolled transactions as strict comparability standard is required particularly with respect to product comparibility; and
- internal comparables frequently don't exist and external comparables are difficult to find in practice.

2.1.4 When to use the CUP Method?

In cases where comparable uncontrolled transactions can be found, the CUP method is a direct and sound method to determine whether the conditions of commercial and financial relations between associated enterprises are at arm's length. This implies that when examining a transfer pricing issue the analysis could start with the application of the CUP method. That is, one should probably always consider starting with locating possible internal comparables and external comparables. A standard question that should be asked in any analysis is whether one of the associated enterprises

- one of the associated enterprises involved is engaged in comparable uncontrolled transactions with an independent enterprise (i.e. an internal comparable is available). In such a case, all relevant information on the uncontrolled transactions is available and it is therefore

2.2.2 Mechanism of Resale

- RSP = the Resale Price at which a product is sold by a sales company to unrelated customers; and
- GPM = the Gross Profit Margin that a specific sales company should earn, defined as the ratio of gross profit to net sales. Gross profit is defined as Net Sales minus

related manufacturer. For a distribution company, cost of goods sold represents the cost of purchasing the goods sold.

Accounting consistency is important in applying the resale price method. Gross profit margins will not be comparable if accounting principles and/or practices differ between the controlled transaction and the uncontrolled transaction. For example, the comparable distributors may differ from the related sales company in reporting certain costs (e.g., discounts, transportation costs, insurance and costs of performing the warranty

Associated Enterprise 2. Functional comparison thus involves a search for comparable distribution companies.

In practice the application of the resale price method is often based on a functional comparison. The benchmarking analysis under functional comparison is performed usingcomparable data. Those date may be available via publicly available databases.*

Based on the benchmarking and financial analyses, an arm's length range of gross margins earned by comparable independent distributors is established and fall between x% and y%. If the gross margin earned by Associated Enterprise 2 is within this range, then its transfer price will be considered arm's length.

2.2.5 Comparability

In applying the resale price method, an uncontrolled transaction is considered comparable to a controlled transaction if:

- there are no differences between the transactions being compared that materially affect the gross margin; or
- reasonably accurate adjustments can be performed to eliminate the effect of such differences.

Under the resale price method, functional comparability is important, while product comparability is less important. Product differences are less critical for the resale price method than for the CUP method, because it is less probable that product differences have a material

* Working Draft Editorial note: As noted above, one possibility would be that taxpayers need not benchmark their transfer pricing with a formal benchmark search in cases where functions and transactions subject to the benchmark do not exceed a stated volume or amount on a fiscal year basis. The industry margins referred to should be: based on objective criteria, regularly updated and readily available at no cost. A possible example

effect on profit margins than on price. One would expect a similar level of compensation for performing similar functions across different activities.

The OECD Guidelines present an example where the compensation for a distribution company should be the same whether it sells toasters or blenders, because the functions performed (including risks incurred and assets used) are similar for the two activities. The price of a toaster will, however, differ from the price of a blender, as the two products are not close substitutes. Although product comparability is less important under the resale price method, it still applies that closer product similarity will lead to better results of the transfer pricing analysis. In this respect, product comparability will become more important when the applieone470TDa-0012Tc(on)T3Tj/T1Tf1.ael019Tc[(se)5.2(llsD.0003Tc(the)Tj7[(ap02816TD.00071Tf22.8(l)8.4(e)]

- The reliability of the resale price method can be influenced by factors that have less effect on price. These factors include cost structures (e.g., the

- it can be used without forcing distributors to make unrealistic profits. The distributor should earn an arm's length gross profit margin, however, it can make operating losses due to high selling expenses caused by strategies such as a market penetration strategy;
- the application of the transactional net margin method, which analyses a financial ratio based on operating profits, will generally result in an arm's length range of positive operating profits. The tested party in the analysis should then probably also earn a positive operating profit within the range. However, the resale price method does not necessarily result in positive operating profits to be earned by the tested party.

The weaknesses of the resale price method include:

- it is a one-sided analysis, as its

the resale price method will establish an arm's length commission to be earned by the commissionaires / commission agents.

2.2.8 Case Examples

[ ]

2.3.1 Cost Plus Method

In a controlled transaction involving tangible property, the cost plus method focuses on the related manufacturing company as the tested party in the transfer pricing analysis. The cost plus method may also be used in the case of services rendered.

The cost plus method 'begins with the costs incurred by the supplier of property (or services) in a controlled transaction for property transferred or services provided to a related purchaser.

Figure 3 explains this further. Associated Enterprise 1, an electrical goods manufacturer in country 1, manufactures Associated Enterprise 2. Associated Enterprise 2 will instruct Associated Enterprise 1 about the quantity and quality of the goods to be manufactured. Associated Enterprise 1 will be guaranteed sales to Associated Enterprise 2 and will face little risk. If the CUP method cannot be applied, then the resale price method and the cost plus method are the next methods to be considered. Because Associated Enterprise 1 is less complex in terms of functions and risks in comparison with Associated Enterprise 2, the analysis would focus on Associated Enterprise 1 as the tested party.

of gross profit to cost of goods sold (excluding operating expenses) for a comparable uncontrolled transaction.

The formula for the transfer price in intercompany transactions of products is as follows:
TP = COGS x (1 + cost plus mark-up), where:

- TP = the Transfer Price of a product sold between a manufacturing company and a related

therefore be calculated uniformly between the tested party and the comparable companies. For example,

2.3.4 Transactional comparison versus functional comparison

The arm's length (range of) gross profit mark-ups can be established by the following two ways:

- transactional comparison: the gross profit mark-up earned by the related party manufacturer when selling goods to an independent enterprise in a comparable uncontrolled transaction, which previously has been rejected as an internal comparable; and
- functional comparison: the gross profit mark-ups earned by independent companies performing functions and incurring risks comparable to the functions performed and risks incurred by the related party manufacturer. Functional comparison involves a search for comparable manufacturing companies.

In practice, the comparability standard of transactional comparison will be much higher that that of functional comparison. In a transactional comparison, much more information about the controlled and uncontrolled transactions is available (e.g., contractual terms). In a functional comparison that is based on information provided in publicly available databases and the annual reports of comparable companies and the tested party, much less specific information is available with respect to the functions performed and risks incurred by the companies.

However, functional comparison is used most often in practice. The search for comparable companies under functional comparison will be performed using publicly available databases. Based on this benchmarking and financial analyses, an arm's length range of gross profit mark-ups earned by comparable independent manufacturers will be determined (e.g., between 30% and 45%). If the gross profit mark-up earned by the related party manufacturer falls within this range (e.g., 40%), then its transfer price will be considered arm's length.

2.3.5 Comparability

In applying the cost plus method, an uncontrolled transaction is considered comparable to a controlled transaction if:

- there are no differences between the transactions being compared that materially affect the gross profit mark-up; or
- reasonably accurate adjustments can be performed to adjust for the effect of such differences.

Similar to the resale price method, close similarity of products between the controlled and uncontrolled transactions is less important under the cost plus method than under the CUP method, while functional comparability (including risks assumed and assets used) is crucial. However, because significant product differences may point out significant functional differences, the controlled and uncontrolled transactions should ideally involve the manufacturing of products within the same product family.

As the gross profit mark-up remunerates a manufacturing company for performing manufacturing function, the cost plus method especially relies on functional comparability (taking into account the functions performed, the risks assumed and assets used). If there are material differences that affect the gross profit mark-ups achieved on the controlled and the uncontrolled transactions, adjustments should be made to account for such differences. The adjustments should be made on the gross profit mark-ups of the uncontrolled transactions. The operating expenses in connection with the functions performed and risks incurred should be taken into account in this respect as differences in functions performed may very well be conveyed in operating expenses.

2.3.6 Determination of Costs

Next to accounting consistency, the application of the cost plus method entails a number of potential difficulties associated with the determination of the costs:

- costs may not be relevant in determining the profit for a particular year. The link between costs incurred and the market price can be very weak (e.g., a company has incurred few R&D expenses in developing a very valuable technology);

- it is important to apply a comparable mark up to a comparable cost basis. On this point, the following can be noted:

  - differences between the parties being compared, which may influence the mark-up level, should be examined. In this respect, it is crucial to consider differences in the level and types of expenses in connection with the functions performed and risks assumed between the controlled and uncontrolled transactions. If differences represent inefficiencies or efficiencies of the parties being compared, no adjustment to the gross profit mark-up should be made. If differences represent additional functions that are different from the activities being analysed, it may be required to establish a separate remuneration for these additional functions. If differences reflect functional difference, an adjustment to the gross profit mark-up should be made, although it is acknowledged that publicly available data often do not provide sufficient information to make adjustments .

  - some costs should be excluded from the cost basis and other costs should include a mark-up. A third category include disbursements incurred in the provision of services, which should simply be reimbursed by the service recipients, and not included in the cost basis on which a mark-up is applied. For example, in the process of rendering marketing services to a related subsidiary, a service provider incurs advertisement expenses paid to an

unrelated advertisement agency. These expenses should be reimbursed by the related subsidiary and should not include a mark-up. However, the cost incurred by the service provider in rendering these services should include a mark-up.

- the cost plus method is typically applied on controlled transactions involving a contract manufacturer which does not own product intangibles and obtains instructions from a related customer about the quantity and quality to produce.

A distinction can be made between a contract manufacturer in which the related customer puts raw materials in consignment with the manufacturer ('consignment manufacturer') and a contract manufacturer which purchases the raw materials itself ('turnkey manufacturer'). The raw materials are used to perform manufacturing functions. The consignment manufacturer does not incur inventory risk relating to the raw materials, while the turnkey manufacturer does take title to the raw materials an therefore incurs this risk. The cost plus method is applicable in both cases if the CUP method cannot be applied. However, the cost basis and the mark-up will be different. The cost basis of the consignment case will include the value added cost of the contract manufacturer. Hence, the mark-up is applied only to these value added cost.

The arm's length mark-up will be equal to:
(RMC/TC) * mark-up on RMC + (VAC/TC)* mark-up on VAC

The mark-up on VAC will generally be higher than the mark-up on RMC. The arm's length mark-up for the consignment manufacturer is equal to the mark-up on value added cost.

In searching for comparable contract manufacturers when applying the cost plus method, it is important to distinguish among the two types of contract manufacturers as discussed above, because of the difference in cost basis and hence the level of the mark-up. The mark-up on total cost of the turnkey manufacturer will generally be lower than the mark-up of a consignment manufacturer, because the cost basis of the turnkey manufacturer include raw material cost, which generally generate a lower mark-up than the value added cost.

As comparable data may not disclose the preferred level of detail, one could also check the proportion of material cost to value added cost.

If the determination of the gross profit mark-up is based on internal comparison, however, which means that Associated Enterprise 1 is engaged in comparable transactions with independent enterprises, then much more information is available to perform the adjustments on the gross profit mark-ups earned by Associated Enterprise 1 on the uncontrolled transactions.

- accounting consistency is important. Gross profit mark-ups should be calculated uniformly by the associated enterprise and the independent enterprises.

- historical costs should in principle be ascribed to individual units of production. If costs differ over a period, average costs over the period may be used.

- One discussion regards whether budgeted cost or actual cost should be used in applying the cost plus method. On the one hand using actual costs will better reflect the few risks faced by the contract manufacturer.[4] On the other hand, third parties will usually used budgeted costs in selling products to the market. That is, you will not charge the customer an additional amount at the end of the year if actual costs are higher than budgeted costs. Disbursements on which no mark-up is applied will often be based on actual costs.

[4] Note that if the contract is based on actual costs, the contractual terms may include incentives or penalties depending on the performance of the contract manufacturer.

- as the costs that may be regarded in using the cost plus method are only those of the manufacturer of the goods or the service provider, a problem may arise with respect to the allocation of some costs between the manufacturer / service provider and the purchaser of goods/services.

2.3.7 Strengths and Weaknesses

The strengths of the cost plus method include:

- third parties are found that indeed use cost plus method to set prices; and
- it is based on internal costs, the information of which is available to the multinational enterprise.

The weaknesses of the cost plus method include:

- there may be no link between the level of costs and the market price;
- accounting consistency is required between the cont0131Trcy

involving a contract manufacturer, a toll manufacturer or a low risk assembler which does not own product intangibles and incurs little risks. The related customer involved in the controlled transaction will generally be much more complex than the contract manufacturer in terms of functions performed (e.g., conducting marketing and selling functions, coordination of production and sales, giving instructions to contract manufacturer about the quantity and quality of production, and purchasing

companies. As such, the TNMM is than the cost plus /

Associated Enterprise 1, a

adjustments cannot be made, the resale price method may be relatively unreliable. However, this type of accounting inconsistency will not affect the reliability of the TNMM, as this method examines net profit margins instead of gross profit margins.

Also, as further discussed in section 2.3.2 below, the ability to use profit level indicators to compare “functions” rather than “transactions” can be a significant practical benefit of

price) is known, while the arm's length

Assuming a resale price of $10,000, operating expenses of $2,000 and an arm's length net profit margin of 5%, the transfer price of $7,500 is determined by working backwards using the available information:

Table 2: Mechanism of TNMM applied on Related Party Distributor

	Initially	Benchmarking analysis
Resale price	$**10,000**	$**10,000**
Cost of goods sold	$?	$7,500
Gross profit	$?	$2,500
Operating expenses	$**2,000**	$**2,000**
Operating profit	$?	$500 (5% of resale price)

2.2.2 Related party manufacturer

In applying the cost plus method to

Table 3: Mechanism of Cost Plus Method

	Initially	Benchmarking analysis
Sales price	$?	$7,500
cost of goods sold	$**5,000**	$**5,000**
Gross profit	$?	$2,500 (50% of cost of goods sold)

In applying the TNMM to the tested party manufacturer instead of the cost plus method, the cost of goods sold and the operating expenses of the related party manufacturer are known. A benchmarking analysis will determine the arm's length net profit of the related party manufacturer using a profit level indicator such as the ratio of net profit to total cost. The sales price and the gross profit are the unknown variables.

Assuming cost of goods sold of $5,000, operating expenses of $1,000 and an arm's length net profit to total cost ratio of 25%, the transfer price amounts to $7,500 by Table 4 illustrates that working backwards using the available information leads to the determination that the sales price is $7,500.

Table 4: Mechanism of TNMM applied on Related Party Manufacturer

	Initially	Benchmarking analysis
Resale price	$?	$7,500
cost of goods sold	$5,000	$5,000
Gross profit	$?	$2,500

2.3 Arm's Length Net Profit Margin

2.3.1 Definition of Net Profit Margin

In comparison with the resale price and cost plus methods, several profit level indicators (PLIs) are allowed

Table 5: Overview of various profit level indicators:

return on assets (ROA)	operating profit divided by the operating assets (normally, only tangible assets)
return on capital employed (ROCE)	operating profit divided by capital employed which usually computes as the total assets minus cash and investments
operating margin (OM)	operating profit divided by sales
gross margin (GM)	gross profit divided by sales
return on total cost (ROTC)	operating profit divided by

In general, gross

Much more detailed information will exist with respect to the controlled and uncontrolled transactions if transactional comparison is possible, because the related parties involved have participated in these transactions. The degree of comparability can then be analysed more carefully than functional comparison in which only public information is available (e.g., business descriptions in database, annual reports, and internet data). This may imply that the reliability of transactional comparisons will be higher than that of functional comparisons in practice.

However, functional comparison will be more often used in practice as the data necessary for functional comparison may be available when the data needed for transactional comparison is not. Let us assume that a related party distributor is the tested party in the example presented in Table 6. The TNMM is applied and the profit level indicatoA1Tp̂E0neceTD-0.007008[Tx(mp)a3.2(3)(5)(6)]TJ13

2.4 Comparability standard

Measurement

2.6 Strengths and Weaknesses

The strengths of the TNMM include the following:

- net margins are less affected by transactional differences (than price) and functional differences (than gross margins). Product and functional comparability are thus less critical in applying the TNMM;
- less complex functional analysis needed, as TNMM is applied to only one of the related parties involved;
- because TNMM is applied to the less complex party, it can be used even though one of the related parties holds intangible assets for which comparable returns cannot be determined;
- it is applicable to both sides of the controlled transaction (i.e. either the related party manufacturer or distributor); and
- the results resemble the results of a modified resale price / cost plus method of analysis.

The weaknesses of the TNMM include the following:

- net margins are affected by factors (e.g. factors by

- where the available comparables differ significantly with respect to products and functions in order to reliably apply the cost plus or resale price method, it may be more appropriate to apply the TNMM, because net margins are less affected by such differences. For example, in performing a benchmarking analysis for the purposes of the resale price or cost plus method, it appears that exact product and functional comparables cannot be found. In fact, the comparables differ substantially regarding product and functional comparability. In such a case, the TNMM might be more appropriate using the same comparables than the resale price or cost plus method; and
- where the data is simply not available to perform a gross margin method of analysis. For example, the gross profits of comparable companies are not published and only their operating profits are known. The cost of goods sold by companies may also not be available, therefore only a net margin method of analysis can be applied using return on total costs as the profit level indicator.

Besides the three situations mentioned above, the TNMM is also used in practice by tax authorities to identify companies for an audit by analysing the net profit margins of companies. Furthermore, the TNMM is often applied to check and to confirm the results of traditional transaction methods. For example, the resale price method is used in combination with the TNMM to determine an arm's length compensation for a distribution company.

3 Profit Split Method

The profit split method is typically applied when both sides of the controlled transaction own significant intangible properties. The profit is to be divided such as , ů

3.1 Definition

The profit

The major difference with the contribution analysis is that the comparable profit split method depends on the availability of external market data to

a valuable intangible property and sells the components to a related company Y which uses the components to manufacture final products also using valuable intangible property and which sells the final products to customers. The first step of a residual analysis would allocate a basic return to company X for its manufacturing function and a basic return to company Y for its manufacturing and distribution functions. The residual profit remaining after this step is attributable to the intangible properties owned by the two companies. The allocation of the residual profit should be based on the relative value of each company's contributions of intangible property. The to ñ OECD.2764DTD.0001TTT161Tfl0TD99037Fj/TT112

- certain measurement problems exist in applying the profit split method. It may be difficult to calculate combined revenue and costs for all the associated enterprises taking part in the controlled transactions due

In this respect, the OECD Guidelines present a practical example[10] whereby company A designs and manufacturers an electronic component, and transfers the components to a related company B which uses the components to manufacturers an electronics product. Both company A and company B use innovative technological design to manufacture the components and electronics product, respectively. Company C, a related company, distributes the electronics products. Assuming that the transfer price between company B and company C is arm's length based on the resale price method, the residual profit split method is applied to determine the arm's length transfer price between company A and company B knowing that both companies own valuable intangible property.

In step 1 of the residual analysis, a basic return for the manufacturing function is determined for company A and company B. In this respect, a benchmarking analysis is performed to search for comparable independent manufacturers which do not own the valuable intangible property. The residual profit, which is the combined profits of company A and Company B deducting these companies' basic return for manufacturing function, is then divided between company A and company B, assuming that relative R&D expenses is a reliable key to measure the relative value of each company's contributions of intangible property. Subsequently, the net profits of company A and company B are calculated in order to work back to a transfer price.

The other The profit split method.
The use of the profit split method will be limited in most countries because it is relatively difficult

calculate a return and is not, in itself, more complicated than the typical application of TNMM. The second step is, however, an additional step and often raises difficult additional issues related to the valuation of intangibles.