FUNCTIONAL ANALYSIS OF CAPITAL CALCULATIONS IN VALUATION AND DAMAGES DISPUTES (CHECKLIST)



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restructuring and reorganization analyses, tangible property/intangible property intercompany transfer price analyses, and lost profits/reasonable royalty/cost to cure economic damages analyses.

Legal counsel often retain specialized analysts to perform valuation, damages, or transfer price analyses. These analyses may relate to disputes involving taxation, shareholder rights, condemnation and eminent domain, bankruptcy, all types of breach of contract, and all types of torts. Legal counsel may retain these analysts as either consulting experts or testifying experts.

In these dispute-related valuation, damages, or transfer price analyses, the analyst typically performs some type of income-related analysis. That income-related analysis typically involves a discount rate or a capitalization rate. This article summarizes what legal counsel need to know about one important component of the analyst's discount rate/capitalization rate measurement process.

Estimating the discount rate/capitalization rate is one component of just about every dispute-related private company valuation, damages, or transfer price analysis. And, this measurement can have a material impact on the analyst's valuation, damages

measurement, or transfer price determination opinion.

THE COMPANY-SPECIFIC RISK PREMIUM (CSRP) AND A FUNCTIONAL ANALYSIS

Typically, in the process of identifying and estimating any CSRP, analysts perform a functional analysis of the subject company. This functional analysis is discussed next.

Description of a functional analysis

A functional analysis is one component of the CSRP identification and estimation process.

A functional analysis is often applied for purposes of assessing the comparability of the subject company to selected guideline or benchmark entities. These selected guideline or benchmark entities could be comparable companies, securities, or properties (including tangible property and intangible property). The development of a functional analysis is relevant in that context.

As will be described, the regulations related to Internal Revenue Code ("Code") section 482 explain the application of a functional analysis for purposes of determining reliability within the context of a transfer price analysis. And, the Organisation for Economic Cooperation and Development (OECD) regulations describe the application of a functional analysis within the context of an intercompany transfer of tangible property, intangible property, or services between two OECD countries.

A functional analysis is certainly relevant to such an intercompany transfer price determination made for purposes of Code section 482 compliance (or of OECD regulations compliance). In addition to applicability to a transfer price analysis, a functional analysis is also relevant within the context of a discount rate or capitalization rate development as part of any dispute-related valuation, damages, or transfer price analysis.

Counsel may initially think of a functional analysis within the context of an intercompany transfer price determination between the controlled entities of a taxpayer (often a multinational taxpayer) for Code section 482 (or for OECD) compliance purposes. While there are broader applications of a functional analysis, the Code section 482 (and the corresponding OECD) regulations do provide a definition of a functional analysis that is generally applicable for this discount rate and capitalization rate development discussion.

Treasury Regulation section 1.482-1(d)(3)(i) relates to comparability issues related to the allocation of income and deductions among taxpayers. Specifically, this regulation section deals with the factors for determining comparability of transactions and companies. This regulation section describes a functional analysis as follows:

(i) Functional analysis. Determining the degree of comparability between controlled and uncontrolled transactions requires a comparison of the functions performed, and associated resources employed, by the taxpayers in each transaction. This comparison is based on a functional analysis that identifies and compares the economically significant activities undertaken, or to be undertaken, by the taxpayers in both controlled and uncontrolled transactions. A functional analysis should also include consideration of the resources that are employed, or to be employed, in conjunction with the activities undertaken, including consideration of the type of assets used, such as plant and equipment, or the use of valuable intangibles. A functional analysis is not a pricing method and does not itself determine the arm's length result for the controlled transaction under review. Functions that may need to be accounted for in determining the comparability of two transactions include:

- Research and development;
- Product design and engineering;
- Manufacturing, production, process engineering;
- Product fabrication, extraction, and assembly;
- · Purchasing and materials management;
- · Marketing and distribution functions, including inventory management, warranty administration, and advertising activities;
- Transportation and warehousing; and
- Managerial, legal, accounting and finance, credit and collection, training and personal management services.

While this regulation section lists eight functions, it does not imply that the eight-item list is exhaustive. Rather, the regulation section indicates that the factors to consider "include" the eight listed functions. In addition, the regulation does not imply that the eight listed factors cannot be disaggregated or rearranged.

Within the context of developing the CSRP estimate for a litigant company, a functional analysis may consider the following risk and expected return topics:

- What products and services are offered to customers or clients (and how those products and services are designed or developed);
- What is the source of supply of the materials, labor, and overhead that is needed to produce those products and services (including sourcing dependence and sourcing logistics issues);
- How the products and services are manufactured or otherwise produced;
- How the products and services are differentiated, promoted, priced, and sold (including advertising and branding issues);
- How the inventory of products and services (including raw materials, work in process, and finished goods/services) are created, packaged, and stored;
- How the products and services are delivered (including shipping, transportation, and other delivery logistics issues);
- What assets are utilized to perform the functions within the business entity (including working capital assets, tangible assets, and intangible assets);
- How profits are earned in the business entity (including the cost/volume/profit relationships with regard to both production/service creation cost of sales and production/service delivery revenue recognition);
- How the accounting, finance, human resources, management information, marketing, sales, and other administrative activities operate within the subject company; and
- How the subject entity is organized, managed, and capitalized (legally and administratively), including both the relationship between the company owners and the company operators/ managers and the relationship between the company and its sources of capital.
- There are various financial, competitive, and operational analyses that are components of the functional analysis.
- Components of the functional analysis

Table 1 lists of the typical considerations in the analyst's development of a functional analysis. This table serves as a checklist of considerations for any analyst who is estimating the CSRP component of a discount rate or capitalization rate for purposes of a dispute-related valuation, damages, or transfer price analysis.

TABLE 1

Functional analysis considerations

Application to the CSRP estimate in the discount rate or capitalization rate development

I. ORGANIZATION CONSIDERATIONS

A. Type of subject entity

- Description of whether the subject is a business entity or other type of business ownership interest
- 2. Description and documentation of ownership of the subject entity
- 3. Description of legal structure of the subject entity
- 4. Description of tax structure of the subject entity
- Description of any ownership relationships with related parties, applicable parties, or other common ownership
- 6. Description of corporate governance (e.g., board of directors)
- 7. Description of operational executive or management structure (e.g., management organization chart)
- 8. Description of operational functions structure (e.g., departmental organization chart)
- Description and locations of owned tangible property
- 10. Description and locations of leased tangible property
- 11. Description of owned or licensed patents
- 12. Description of owned or licensed trademarks

- 13. Description of owned or licensed copyrights
- 14. Description of owned or licensed trade secrets
- 15. Description of owned or licensed other types of intangible property
- 16. Description of owned or licensed intangible value in the nature of goodwill

B. Owner/operator entity documents

- 1. Organization documents (e.g., articles of the corporation)
- 2. Operational documents (e.g., partnership agreements, member agreements)
- 3. Entity ownership documents (e.g., shareholder agreements, buy/sell agreements)
- 4. Asset ownership documents (e.g., deeds, legal descriptions, licenses, leases)
- 5. Entity transferability documents (e.g., franchise agreement restrictions, regulated industry considerations)
- 6. Ownership interest transferability considerations (e.g., security puts and calls)
- 7. Recent board of directors or executive/management committee minutes
- 8. Copies of any business or operating permits or certificates
- 9. Copies of any inbound or outbound intellectual property licenses
- 10. Copies of any joint venture, joint development, joint commercialization, etc., agreements
- 11. List of registrations of all intellectual property, including domestic and international patents, copyrights, and trademarks
- 12. Copies of documents that illustrate the entity's use of domestic and international patents, copyrights, trademarks, and trade names
- 13. Copies of documents that illustrate the entity's use of other types of intangible property
- 14. Copies of documents that illustrate the entity's use of intangible value in the nature of goodwill

II. OPERATIONS CONSIDERATIONS

A. Operational functions

- 1. Description of products produced and services provided
- 2. Description of how products and services are designed, developed, or engineered
- 3. Description of raw materials inputs (sources, costs, and logistics of supply and supply chain risks)
- 4. Description of labor inputs (sources, costs, and logistics of supply and supply chain risks)
- 5. Description of overhead (operating expense inputs) (sources, costs, and logistics of supply and supply chain risks)
- 6. Description of product manufacturing or services production process
- 7. Description of production scheduling and quality control procedures
- 8. Description of product warehousing and in-process services storage
- 9. Description of product warranty and product return risk elements
- 10. Description of products and services shipping and delivery logistics
- 11. Description of how intellectual property (patents, copyrights, trademarks, and trade secrets) are developed, documented, and registered
- 12. Description of how intellectual property (patents, copyrights, trademarks, and trade secrets) are commercialized and protected
- 13. Description of how other types of intangible property are commercialized and protected
- 14. Description of how intangible value in the nature of goodwill is commercialized and protected

B. Administrative functions

1. Description of accounting functions

- 2. Description of receivables/cash collection function and payables/cash disbursement functions
- 3. Description of treasury (cash management and banking relationship) function
- 4. Description of capitalization, capital structure, and financing functions
- 5. Description of products/services design and engineering function
- 6. Description of production engineering/services delivery efficiency function
- 7. Description of advertising and market research function
- 8. Description of packaging and branding function
- 9. Description of human resources, recruiting, training, and benefits function
- 10. Description of general counsel function
- Description of information technology, management information, and data processing function
- 12. Description of regulatory compliance and other compliance functions

C. Competition and competitive position functions

- 1. Listing and description of principal competitors
- 2. Approximate size of principal competitors
- 3. Ranking of principal competitors by market share and by relative market share
- 4. Products/services features differentiation with competitors
- Products/services pricing differentiation with competitors
- 6. Products/services distribution differentiation with competitors
- 7. Products/services intellectual property differentiation with competitors
- 8. Description of total market size
- 9. Description of total market growth rate

10. Description of how customers use the subject entity's products/services

D. Risk/expected return considerations

- 1. Description of materials source of supply risk
- 2. Description of labor source and supply risk
- Description of operating leverage (fixed costs coverage) risk
- 4. Description of financing leverage (debt service coverage) risk
- 5. Description of tangible property risk
- 6. Description of environmental risk
- 7. Description of litigation risk
- 8. Description of intellectual property risk
- 9. Description of customer concentration risk
- 10. Description of executive concentration risk
- 11. Description of regulatory change risk
- 12. Description of products/services liability risk

III. FINANCIAL CONSIDERATIONS

A. Accounting principles and financial statements

- Descriptions of current accounting principles applied
- Comparison of owner/operator entity accounting principles to competitor accounting principles
- 3. Description of recent changes in accounting principles applied
- 4. Discussion of revenue recognition principles
- 5. Discussion of expense recognition principles
- 6. Discussion of taxation accrual and deferred tax principles
- 7. Discussion of tangible asset capitalization and depreciation principles
- 8. Discussion of intangible asset recognition principles

- 9. Discussion of liability recognition principles
- 10. Discussion of any adjustments to capital accounts
- 11. Discussion of cash flow statement working capital adjustments
- 12. Discussion of cash flow statement noncash revenue and expense account
- 13. Discussion of cash flow statement investment adjustments
- 14. Discussion of cash flow statement financing adjustments

B. Financial statement projection considerations

- 1. Description of the term (time period) of any financial projections
- 2. Description of the level of detail included in any financial projections
- 3. Description of financial projections internal development procedures
- 4. Description of financial projections internal review procedures
- 5. Comparison of financial projections to historical financial statements
- 6. Comparison of financial projections to guideline company financial projections
- 7. Comparison of financial projections to industry financial projections
- 8. Comparison of historical financial projections to historical financial statements for prior projection periods
- 9. Copies of any strategic plans or competitive analyses
- 10. Copies of any debt service payment projections (including any considerations of liquidity or solvency)

C. Valuation considerations

1. Description of the process for selecting guideline public companies

- 2. Procedures for assessing the subject entity's comparability to selected guideline public companies
- 3. Procedures for adjusting the financial data of guideline public companies
- 4. Description of the process for selecting guideline M&A transactions
- 5. Procedures for assessing the subject entity's comparability to selected guideline M&A transactions
- 6. Procedures for adjusting the financial data of selected guideline M&A transactions
- 7. Description of any recent offers to buy the subject entity or the entity's securities
- 8. Description of any recent sales (or other exchanges) of the subject entity or the entity's securities
- 9. Descriptions of any value indications (including historical development costs) of tangible real property and tangible personal property
- 10. Descriptions of any value indications (including historical development costs) of intellectual property or associated intangible property

IV. ASSETS EMPLOYED AND SWOT/ RISKS ASSUMED CONSIDERATIONS

A. Assets employed

- 1. Description of—and use of—cash and marketable securities
- 2. Description of—and use of—accounts receivable
- Description of—and use of—prepaid expenses
- 4. Description of—and use of—inventory accounts
- 5. Description of—and use of—other current asset accounts
- 6. Description of—and use of—land and buildings
- 7. Description of—and use of—tangible personal property

- 8. Description of—and use of—other tangible assets
- Description of—and use of—intellectual property assets
- 10. Description of—and use of—other identifiable intangible assets
- 11. Description of—and use of—intangible value in the nature of goodwill
- 12. Description of—and use of—non-operating or investment assets
- 13. Description of—and use of—current liabilities
- 14. Description of—and use of—long-term interest-bearing debt
- 15. Description of—and use of—other long-term liabilities
- 16. Description of—and use of—contingent liabilities

B. SWOT and risks assumed considerations

- 1. List of the principal competitive strengths
- 2. Description of how competitive strengths affect the subject entity's operating results
- 3. Description of how competitive strengths affect the subject entity's risks
- 4. List of the principal competitive weaknesses
- 5. Description of how competitive weaknesses affect the subject entity's operating results
- 6. Description of how competitive weaknesses affect the subject entity's risks
- 7. List of the principal competitive opportunities
- 8. Description of how competitive opportunities affect the subject entity's operating results
- 9. Description of how competitive opportunities affect the subject entity's risks
- 10. List of the principal competitive threats
- 11. Description of how the principal competitive threats affect the subject entity's operating results

12. Description of how the principal competitive threats affect the subject entity's risks

The functional analysis considerations listed in Table 1 may be used to develop an understanding of the subject litigant company. The analyst may apply this understanding in developing the CSRP estimate component of the discount rate or capitalization rate.

Risk Considerations in a functional analysis

One reason to conduct a functional analysis is to allow the analyst to identify the risks that are being assumed by the subject litigant company. A significant portion of the return earned by the litigant company's operations is due to the risks assumed by the subject litigant company.

The functional analysis allows analysts to compare these risks: (i) within the company; (ii) between the company and the selected comparable companies, transactions, and licenses; and (iii) between related party (or associated) entities in a controlled transaction.

The analyst applies these risk considerations in developing the CSRP estimate component of the discount rate and capitalization rate.

The 12 Steps of the functional analysis

In the CSRP estimate, analysts typically group all of the above-listed functional analysis considerations into 12 steps—or categories of analyst procedures and investigations. The analyst performs these 12 steps in the estimate—and documentation—of the CSRP component of the discount rate or capitalization rate.

These 12 steps—or categories or groupings of analyst procedures—are listed in Table 2.

The first 10 steps in Table 2 primarily relate to the functions performed at the subject litigant company. Step 11 in Table 2 primarily relates to the assets employed by the litigant company. And, step 12 in Table 2 primarily relates to the risks assumed by the litigant company.

Application of the functional analysis to measure the company-specific risk premium of the litigant company

Based on the discussion above, the analyst considers the functional analysis procedures presented in Table 2. Considering these functional analysis procedures, the analyst considers this functional analysis when developing the CSRP estimate for the discount rate and capitalization rate.

TABLE 2

12 steps of the functional analysis considered in the CSRP estimate

1. Gather and review all relevant subject company legal documents

(This step includes documents regarding organization structure, legal firm, tax status, and owners—e.g., shareholder, partnership, LLC member—agreements.)

2. Gather and review all relevant subject company organization charts

(This step includes both personnel reporting charts and functional relationship clients and considers both entity governance procedures and quality, quantity, tenure, and experience of entity/function leaders.)

3. Understand and document the products/services design, R&D, and products/services differentiation functions

(This step includes the assessment of how the subject company's products or services are developed and how these products or services are intended to address their competition in the relevant marketplace.)

4. Understand and document the materials, labor, and overhead procurement function

(This step includes consideration of how and when the owner/operator entity procures all of its materials, labor, and overhead inputs—for companies in every type of industry or profession.)

5. Understand and document the products/services production function

(This step includes the assessment of how the subject company processes all of its material, labor, and overhead components to produce a product or a service—including the quality control of the product or service

6. Understand and document the inventory and products/services storage function

(This step includes both the in-process and finished inventory of goods and the in-process and finished inventory of services.)

7. Understand and document the sales and marketing function

(This step includes the assessment of the products or services pricing, packaging, advertising, promotional, trademark development and protection, and other branding—on a stand-alone basis and in response to

8. Understand and document the shipping and distribution logistics function

(This step includes consideration of how the products or services are delivered to the customer or the client—including freight, insurance, returns, warranty and repairs, and other expenses.)

9. Understand and document the accounting, finance, information systems, human resources, legal, and other administration functions

(This step includes the assessment of how: (i) information is generated and used throughout the organization; (ii) human resources are developed and administered; (ii) financial statements and operational documents are prepared and used; (iv) how cash management and treasury operations are performed; and (v) how the subject company is capitalized with debt and equity capital sources.)

10. Assess and document the subject company's strategic position in comparison to competitors in the relevant industry or profession

(This step includes: (i) measurement of the company's market share/selective market share, market size, and market growth rate; (ii) evaluation of the company's customer or client needs; and (iii) assessment of the company's competitive strengths, weaknesses, opportunities, and threats.)

11. Describe and document the assets used by the subject company to perform the functions

(This step includes a listing, description, and assessment of relative importance/contribution of: (i) all working capital accounts; (ii) all tangible property types and accounts—owned and leased; (iii) all general intangible property types and accounts—owned and licensed; and (iv) all intellectual property types and accounts—owned and licensed.)

12. Evaluate and document the risks assumed by the subject company to perform the functions

(This step includes a listing, description, and assessment of all products/services liability, operating language, financial leverage, environmental, supply dependence, customer dependence, technology dependence, employee dependence, intellectual property dependence, tax litigation, commercial litigation, credit and collection, inventory control, property and casualty, foreign exchange, market/competitor, and other risks.)

CONCLUSION

Legal counsel often retain forensic accountants, financial advisors, industry consultants, economists, or other analysts to perform valuation, damages, or transfer price analyses. These analysts may serve the legal counsel as consulting experts or testifying experts. These valuation, damages, or transfer price analyses may relate to taxation, financing, transaction, breach of contract, tort, or other disputes.

Most of these valuation, damages, or transfer price analyses involve some form of income-related analyses; and, these income-related analyses typically involve a discount rate or capitalization rate.

Therefore, most of these dispute-related analyses involve the analyst's measurement of the litigant company's cost of capital. This cost of capital becomes the basis for the analyst's development of the applicable discount rate or capitalization rate. For most dispute-related analyses, the discount rate and capitalization rate include the analyst's estimate of a company-specific risk premium. This article has described the procedures to develop the CSRP estimate.

Legal counsel have to work with, rely on, defend, or challenge the analyst's valuation, damages, or transfer price opinions. Therefore, this discussion summarizes what counsel need to know about this important component of the discount rate/capitalization rate measurement process.

Note: A more intricate discussion will appear in the November issue of The Practical Tax Lawyer, under the title "What Legal Counsel Need To Know about Cost of Capital Calculations in Valuation and Damages Disputes."