

# INDUSTRY DATA SOURCES AND INDUSTRY ANALYSES

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For any given industry it is possible to acquire basic data, aggregate data, indicators calculated from them, or more extensive industry and sectoral analyses on the position of enterprises, including commentary on their development.

## Aggregation – the basis of industry analysis

Aggregation may be defined as the selecting of a set of entities in accordance with predetermined criteria. Aggregation helps us gain a comprehensive overview of the analysed group, the main benefits of which are as follows:

- to provide additional information about the character of the aggregated group, and about relations to its development; using this information, we can infer potential long-term opportunities in terms of the expected gains or risks pertaining to inclusion in the group;
- to enable comparative analysis, the purpose of which is to ascertain whether the behaviour and results of individual entities deviate from the aggregated behaviour and results, and to find the causes of any such deviations;
- to enable comparative analyses of aggregated groups, by means of which it is possible to infer a group's typical attributes (asset and capital structure, average capital costs, economic cycle) and make adjustment for them;

Among the most significant types of aggregation is an industry. Users seeking industry analyses work on the assumption that the enterprises within an industry behave to a certain extent identically or similarly.

A sector represents a higher type of aggregation. It consists of industries which work on the same principle, in the same field of activity, but which have their own specialisation – they produce various goods and services; (for example, the primary, secondary, and tertiary sectors, the financial sector, etc.).

Another type of aggregation is a segment. We divide customer potential into segments since we expect that segments behave similarly, have similar needs, are subject to the same legislation etc.; that is why we can employ a similar type of service for each segment and offer it a similar range of products. In this respect, corporate clients are most frequently segmented according to revenues – data which is also among the most difficult to access if we are seeking potential customers in a segment defined on this basis. The segment is typically a less detailed aggregation compa-

red to the industry or the sector, although the municipal sector, for example, is an independent segment and more detailed aggregations are created according to other criteria (population, territory, etc.).

In banking, we come across the need for various types of analyses, which require the defining of various aggregations. All types of aggregations and their analyses are dependent on our capacity to acquire current and reliable information. Sectoral analyses of the financial market are interesting from the view of the bank and its membership of a financial group. Segment analyses are important for determining market share and for identifying customer potential. Industry and sectoral (production sector) analyses are aimed at understanding and defining the structure of an industry, its components relations and the characteristics of its behaviour. A key outcome is the forecast for future development, especially in terms of growth trends and profitability resulting from competition. The forecast for future development serves as a basis for investment recommendations.

## Defining an industry

In practice, there is no such pure industry in which firms operate and behave identically. How then can we best define an industry with regard to the similarity of the behaviour of its entities?

One simplifying criterion is the main field of business in terms of incomes (revenues) as a share of total incomes (revenues), the so-called predominant economic activity. An industry<sup>1</sup> is typically assigned a code on the basis of a selected classification – ISIC, NACE, CPC, and, in Slovakia and the Czech Republic, OKEČ (Industry Classification of Economic Activities). An industry is divided into sub-industries and specialisation on the basis of an ever more precise definition of the operational activity, products made, or services provided. The OKEČ for the so-called main activity is stated for every entity that has been assig-

<sup>1</sup> An industry is a set of entities characterised by the fact that these are engaged in the same or similar economic activity, make the same or similar (interchangeable) products, or provide corresponding services. These entities have a similar circle of suppliers and buyers. Consultancies may differentiate industries using the OKEČ code, but only into other groups (not according to OKEČ) in which the importance of divisions or subdivisions within the categories (industries) is stressed or suppressed (for example, divisions for the classification of individual construction materials within the construction industry).

ned an identification number (IČO) in the statistical Register of Economic Entities (RES). A practical problem with using the code is the fact that enterprises often operate in other industries besides the one in which they started out, but their diversification is not recorded in the RES because it was not notified to the respective body. Even if we leave aside this problem, there is yet another. Analysts are able to define completely (precisely) an industry on the basis of entities sharing the main activity code, but they do not necessarily have access to the other data on the categorised entities (for example, financial data) which is needed to quantify the basic attributes of the aggregation. A third problem is the variable quality of data available for individual entities, although there is not so much data as when we perform a detailed analysis of a particular enterprise. The fact that industry analyses have drawbacks cannot detract from their importance, since without them we would not be able to discover the potential limits to the behaviour of entrepreneurial entities, nor even the potential risks and opportunities pertaining to the conduct of business in a given industry.

Individual industries may be differentiated in terms of:

- seasonality,
- length and character of production cycle,
- accessibility of resources, dependence on import of raw materials,
- price policy, product lifespan, product tying,
- geographic structure of production, variability of product range,
- method of financing and invoicing,
- investment and capital demands, asset structure, depreciation policy,
- sensitivity of the industry to fluctuations in the economic cycle,
- sensitivity of the industry to interest rate fluctuations,
- national traditions in developing the industry, etc.

With regard to particular industries, it is necessary to interpret in particular the conclusions of the financial-economic analysis of the industry as well as the influence of the state in the industry. Without a complete understanding of them, it is not possible to make a forecast for the industry's future development.

The state may only create the institutional framework that ensures equal legal conditions for the development of individual industries, and thus also for the enterprises which make products or provide services within this industry. The state's interests, however, may also be expressed by giving preference to the development of a certain industry, for example, through state guarantees on loans extended to the industry or through efforts to safeguard the industry's minimum prosperity (or survival) by regulating prices, by intro-

ducing or cancelling an import surcharge, and so on. Analysts cannot know for how long the state will prefer (protect) the industry, and this factor may turn into a high risk, for example, if it is exposed to a change in the country's political relationships.

Analysts follow the phase and length of the life cycle<sup>2</sup> of an industry in which an enterprise operates in order to assess the enterprise's future prospects, changes in its market position, and, in this way, its earnings. A distinction needs to be drawn between industries which, according to the life cycle, are just emerging, are demonstrating fast growth, or are approaching a certain market saturation.

Regarding the life cycle, it is necessary to analyse the relationship between rate of GDP growth and the rate of revenue growth in order to discover one of the most important characteristics of the industry: reaction to the pace of GDP growth, i.e., whether the industry is cyclical, anti-cyclical or neutral. Competition threatens an enterprise's ability to survive. The source of competition within an industry are the five<sup>3</sup> basic competitive forces (according to the model of M. Porter). The action of these forces determines the potential profit in the industry and the return on invested capital, the rate of which varies between individual industries. The strength of competitive pressure within the industry determines the threshold for capital inflow. Strong competition brings down the rate of return on invested capital to the minimum level. A higher return rate stimulates capital inflow, which in turn strengthens competition in the industry and leads to reduction in the rate of return.

In order to determine the economic potential of an industry, it is necessary to aggregate the individual financial statements for all enterprises within the industry. From their absolute values, the aggregated financial statements are compiled into a standardised form with the individual asset components as a share of total assets. The standardised form serves as a basis for the creation of a mental (theoretical) picture<sup>4</sup>, which represents a typical (average<sup>5</sup>) enterprise

<sup>2</sup> Introduction, growth, maturation, maturity, decline.

<sup>3</sup> The potential regarding the entry of new enterprises, the threat of substitutes, the bargaining power of suppliers, the bargaining power of buyers, and rivalry among the existing players

<sup>4</sup> The designation "mental picture" is used by John Barrickman, president of the New Horizons Financial Group (US) and an instructor with Barents Group/KPMG and the US Development Agency, for the structure of the balance sheet, profit and loss account and selected indicators of the average enterprise in an industry.

<sup>5</sup> The characteristic of an industry is represented by the average which alone manages to affect the information on all enterprises in the industry, and which indicates a level. It is not the calculation of a simple arithmetic average of individual indicators; it is rather a weighted average which is based upon the aggregated balance sheets and profit and loss statements, and which gives a view of the enterprise's importance within the industry.

in the industry. It provides several possibilities: to compare individual enterprises within the sector with the "typical" representative of the sector; to make a mutual comparison of the asset and capital structures between industries within one country, as well as between countries, and to calculate financial ratios for the "typical" representative of the industry.

For an analysis of the financial situation in a sector, it is possible to use as a basis the ratios calculated from the aggregate values, or from the standardised form of the financial statements for individual industries. The ratios are used to assess the relative performance of an industry (financial situation as a growth factor), which enables analysts to predict future development more accurately.

The performance analysis for an industry includes an analysis of industry credit risk. The first task is to assess the capacity of the industry as a whole to increase the value of borrowed funds and to create sufficient financial potential to pay them back. The in-

dustry credit risk is closely connected to the specific and typical financial structure of the industry. With regard to the share of property and capital participations, it is important to establish whether the growth in returnable borrowed funds is not compensating for the own funds that the industry is not able to create in the most natural way – through revenue growth. It is also interesting to note the composition of industry credits – predominantly short-term or long-term funds – and to do so with regard to an analysis of assets (investment intensity of the industry).

The assessment of the industry credit risk factors is closely connected to the credit risk of the enterprise. The loan burden of enterprises included in the aggregated industry and the capacity of these enterprises to increase the value of acquired sources predicates, up to a point, the movement of loans to a specific enterprise.

***To be continued in issue 9/2005***