

The 30th Meeting of the Voorburg Group on Service Statistics

ISIC 7410, Specialized design activities

Sector paper

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1. Introduction

The measurement of specialized design activities represents a great challenge, mainly because they are activities that involve a prior process of mental configuration, which applied in the search for solutions in any field, for example, in engineering, architecture, industry, communication and other creative disciplines, where human talent is the main asset.

This document is a summary of contributions and experience in the collection and processing of turnover/output and Service Producer Price Index (SPPI) presented and discussed by Canada; Turkey; Hungary; Australia and Sweden, during the 29th Meeting of the Voorburg Group (VG).

The paper addresses issues on economic classification and the challenges in data collection as well as prices (volume and price). Some recommendations regarding these issues are delineated and that should provide practical guidance to compilers in the development of various indicators.

However, compilers should take into account the availability of data, resources and constraints and current market conditions, to allow them to make better decisions in statistical projects.

The document is organized in six sections, the second deals with the issues of classification, both, for the industry and for products; the third section discusses the availability and collection of data (turnover), as well as some recommendations, the fourth section is about Service Producer Price Index and the fifth and sixth sections, addressing the treatment in the National Accounts System and the main conclusions, respectively.

2. - Classification

The specialized design encompasses a large number of activities, ranging from the creation, planning and development of processes for industrial design, graphic design, interior design, etc. The activities, depending on the classification system may be different, however, have as common denominator: creativity and development of ideas, or the continuous improvement of products and processes.

2.1 Industry Classification

Four industry classification systems were analyzed as part of the mini-presentations:

- *International Standard Industrial Classification for all economic activities (ISIC), Rev. 4*
- *North American Industry Classification System (NAICS 2012)*
- *Statistical Classification of Economic Activities in the European Community (NACE), Rev. 2*
- *Australian and New Zealand Standard Industrial Classification (ANZSIC 2006)*

While there are some differences between the classifications, mainly at the levels of disaggregation, there is equivalence in the specialized design activities:

Comparison between industry classifiers

ISIC, Rev. 4	NAICS 2012	NACE, Rev. 2	ANZSIC 2006
Division 74 Other professional, scientific and technical activities	5414 Specialized Design Services	74.1 Specialized design activities	6924, Other specialized design services

2.2. - Product classification

With regard to the classification of products, three classifiers were presented:

- *Central Product Classification, CPC ver. 2.0*
- *Classification of Products by Activity (CPA 2008)*
- *North American Product Classification System, NAPCS*

CPC Ver. 2.0

Group	Class	Subclass	Description
839	8391	83911	Other professional, technical and business service
	8392	83912	Specialty design services
		83919	Interior design services
		83920	Industrial design services Other specialty design services Original design

CPA 2008

Statistical Classification of Products by Activity in the European Economic Community, 2008 version

-> M: PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES
 -> 74: Other professional, scientific and technical services
 -> 74.1: Specialised design services
 -> 74.10: Specialised design services
 -> 74.10.1: Interior, industrial and other specialised design services

CODE: 74.10.11
 DESCRIPTION: Interior design services

THIS ITEM INCLUDES: This subcategory includes:
 - interior design services such as the planning and designing of interior spaces to meet the physical, aesthetic and functional needs of people
 - drawing up of designs for interior decorating
 - interior decorating

THIS ITEM EXCLUDES: This subcategory excludes:
 - architectural design services, see 71.11

NAPCS

Industry Subject area	Title
5414	Interior design services Full-service interior design services Full-service interior design services for residential buildings, except historical restoration Full-service interior design services for non-residential buildings, except historical restoration

As well as industry classification, products classification is different between each classifier, mainly at product-level detail.

3. - Turnover statistics

Canada, Turkey and Hungary, presented their experience on turnover data compilation and processing for specialized design activities.

3.1. - Data availability

In accordance with the 2014 Country progress report¹, from 28 countries polled, 20 countries reported the compilation and processing of statistics on turnover for specialized design activities, we can say that there is a good coverage and data availability.

In Canada, since 2009, the Specialized Design Services industry has seen steady growth, increasing from \$2.6 billion in 2009 to \$2.9 billion in 2012. Likewise, the operating profit margin has increased steadily over this period, up from 12.8% to 15.3% for the same period².

For its part, Turkey annual indicators for specialized design activities, shows that in 2011, this sector employs about 3,140 people, in 1,537 enterprises.

In Hungary, this market is dominated by micro-enterprises that focus their activity on business customers. Services are provided for domestic as well as for non-domestic clients, thus globalization also affects the firms³.

In each country there are different levels of aggregation, size of market and participation in the economy, etc., the specialized design activities are sufficiently represented and have information about the number of units, employment and turnover, among other variables.

¹ Source: John Murphy/U.S. Census Bureau/29th Voorburg Group Meeting/ Country Progress Report: 2014.

² Source: Fred Barzyk/29th Voorburg Group Meeting Mini Paper on Turnover/Output for Specialized Design Activities in Canada.

³ Source: Ildikó Hamvainé Holocsy/29th Voorburg Group Meeting/Turnover for Specialized design activities (ISIC/NACE 7410)/Hungary.

3.2. - Collection of data

Different methods of data collection have been documented, mainly through sample surveys (annual and quarterly), as well as the availability of administrative records, and even a combination of these methods. Applied questionnaires offer a variety of chapters and variables, segmentation by customer type, international transactions, rights of copyright and royalties, among other topics.

Canada leads for example, an annual survey: *Turnover for the specialized design services industry is collected annually as through the Annual Survey of Industries: Specialized Design, sent to establishments. This survey collects data for several sub-industries: Interior Design Services, Industrial Design Services, Graphic Design Services and Other Specialized Design Services. Data collected from businesses are aggregated with information from administrative sources to produce official estimates of national and provincial economic production for these industries*⁴.

Turkey has two sample surveys, quarterly and annual bases. *Data on turnover for specialized design activities are obtained from the structural business statistics (SBS) and short-term statistics (STS). STS data is disseminated at two-digit level of NACE Rev.2*⁵.

And in the same way, Hungary has a system of sample surveys and a combination with administrative records. *In Hungary, the data collection is based on a compulsory statistical survey. Combination of survey data and administrative data is used as well*⁶.

⁴ Source: Fred Barzyk/29th Voorburg Group Meeting Mini Paper on Turnover/Output for Specialized Design Activities in Canada.

⁵ Source: Abdullah YUKSEL/29th Voorburg Group Meeting/Mini-presentations on Turnover/Output Specialized Design Activities in Turkey.

⁶ Source: Ildikó Hamvainé Holocsy/29th Voorburg Group Meeting/Turnover for Specialized design activities (ISIC/NACE 7410)/Hungary.

3.3. - Recommended approaches

Specialized design activities observed different characteristics depending on the country, but the common denominator is that establishments or enterprises are small or medium-sized, not very intensive in employment, although in talent, are very specialized activities.

In Canada, the industrial, graphic and interior design product is produced by more industries than just the specialized design. For example, the manufacturing and engineering industry in Canada produces a certain amount of industrial design even though design is not their primary activity. The architectural industry produces a fair amount of interior design product, and publishing and advertising industries produce some graphic design product.

There are some large companies engaging in Specialized Design industry, but they do not drive the industry estimates. The major impact on the estimates comes from the small and medium size businesses⁷.

In Turkey each year almost 9.000 students start studying interior architecture, industrial product design, fashion design and graphic design divisions of universities in Turkey. However the number of employees working for specialized design companies is too low. Most probable reason for this is large companies mostly prefer to employ designers in their own structure. Therefore it is not easy to measure the design activities. Another challenge for measuring the output of this activity is some interior design companies not only do the design but also do some kind of interior construction and furnishing⁸.

For its part, in Hungary, this market is dominated by activities of micro-level business enterprises. Industry operators are usually small design firms or independent designers that specialize in one of the four segments. Products related to this market could be characterized by unique and heterogeneous nature and for this reason hardly comparable. Work of a designer is difficult to account for in the traditional framework. Reputation of a particular agency or a designer could be evaluated as one of the most important price determining factors⁹.

⁷ Source: Fred Barzyk/29th Voorburg Group Meeting Mini Paper on Turnover/Output for Specialized Design Activities in Canada.

⁸ Source: Abdullah YUKSEL/29th Voorburg Group Meeting/Mini-presentations on Turnover/Output Specialized Design Activities in Turkey.

⁹ Source: Ildikó Hamvainé Holocsy/29th Voorburg Group Meeting/Turnover for Specialized design activities (ISIC/NACE 7410)/Hungary.

3.4 Recommended approaches

Following table provides an overview of the options for developing or re-developing turnover statistics for the sector. They are ranked according to best, good and minimum approaches.

Options for developing Turnover Statistics for Specialized Design Activities

Category	Data source	Level of detail collected	Frequency	Cost	Comments
Best	Survey	Industry turnover	Annual and/or sub-annual collection (monthly or quarterly)	Most expensive Largest response burden	Due to the variety of services provided, what is to be collected in this sector must be considered carefully. Timely data
Good	Survey/Census	Industry detail only	Annual and/or sub-annual (monthly or quarterly)	Expensive High response burden	Industry detail may not be sufficient to identify important products. Timely data
Minimum	Administrative data (tax data, industry association data etc.)	Industry detail only	Annual	Least expensive Little or no response burden	Suitability for turnover measurement must be checked carefully Least timely

4. - Service Producer Price Index (SPPI)

4.1. - Data availability

For the calculation of price indices data availability is limited, according to the 2014, Country progress report¹⁰, just few countries calculated price index for the specialized design activities; two countries, Australia and Sweden, shared its experience about the compilation and processing of these indicators.

4.2. - Source of SPPI data

Given the complexity and the diversity of services (products), information sources are limited, the Australian Bureau of Statistics (ABS) for example, carried out a consultation with the Design Institute of Australia (DIA), to corroborate the use of an hourly rate. *Information obtained from DIA surveys suggests that collecting hourly consulting fees might not necessarily be a second best option. In the December 2013 survey, 61.4% of interior designers who responded to the survey reported the use of an hourly rate (up from 34.6% in the previous survey in 2011)*¹¹.

Sweden has tended meetings with associations and companies and has conducted a pilot survey. *Price indices for 74.1 are under development in Sweden during 2013 and 2014. The results presented in this paper have come from meetings with trade associations and enterprises. A pilot survey for two quarters has been conducted. More information will probably become available over time when this industry will be included with the rest of the SPPI's and regular price collection will begin*¹².

¹⁰ Source: John Murphy/U.S. Census Bureau/29th Voorburg Group Meeting/ Country Progress Report: 2014.

¹¹ Source: Terry Bradley/Australian Bureau of Statistics (ABS)/SPPI on Specialized Design Activities/29th Voorburg Group Meeting.

¹² Source: Marcus Fridén/Price Unit, Statistics Sweden/29th Voorburg Group Meeting/NACE 74.1 Specialized Design Activities in Sweden

4.3. - Pricing method used

Services (or products) produced by the specialized design activities are varied, the price method can be based on contracts, hours worked by project, fees or rates per consulting, percentages of advancement in the project (long term project), etc., there is no a standard method, making it difficult to a homogeneous prices collection.

In Australia the pricing method is a time based approach – hourly charge-out rates for applicable graphic design services based on staff level and/or type of service provided. This method is representative of a charging mechanism which is widely used in the industry and is more straightforward than methods based on contract pricing and percentage fees¹³

In the case of Sweden, the pricing method varies depending on the type of design that are concerned, for example, for graphic design activities, where the product is integrated by design printing, the price is based on the number of copies; in the case of Interior design, the price is fixed on the basis of the project.

“...Enterprises mainly conducts projects, where the total price is based on the estimated number of hours worked and the hourly rate. After meeting with companies and trade associations the most suitable pricing method was considered to be hourly charge out rates. Although not ideal, this reflects a large part of what is the dominant factor for the price of a Project”.¹⁴

¹³ Source: Terry Bradley/Australian Bureau of Statistics (ABS)/SPPI on Specialized Design Activities/29th Voorburg Group Meeting.

¹⁴ Source: Marcus Fridén/Price Unit, Statistics Sweden/29th Voorburg Group Meeting/NACE 74.1 Specialized Design Activities in Sweden

4.4. – Recommended approaches

1. - By now few countries calculated Service Producer Price Indexes for Specialized Design Activities, in some cases as in Sweden, are conducted experimental surveys for the collection of prices, however, a common denominator in the industry seems to be the price by:

Hourly charge out rates

Contract

Projects

2. - The development of an experimental or pilot survey is desirable to identify the type of products provided and pricing methods.

5. - Treatment in the National Accounts

There seems to be consistency between the basic data generated by annual and sub-annual surveys and the System of National Accounts, however, in Canada by example, *one of the common challenges to this and service industries in general is providing a “clean” estimate of the cost of goods sold. The reported estimates of the cost of goods sold (the survey question attempts to estimate the cost of goods purchased for resale) is often contaminated with direct labour costs and other operating expenses¹⁵.*

6. - Main conclusions

Specialized design activities are characterized by small and medium-sized enterprises, the demographics of business is another factor that influences their treatment and that implies having updated frames and directories; in addition to this, services (products) generated by the industry are very varied, however, a system of surveys and experimental studies as well as researching pricing methods, will result in better statistics on this industry.

¹⁵ Source: Fred Barzyk/29th Voorburg Group Meeting Mini Paper on Turnover/Output for Specialized Design Activities in Canada.