



Statistics Norway
Statistisk sentralbyrå

29th VOORBURG GROUP Meeting

Dublin, Ireland

22-26 September 2014

**TURNOVER AND OUTPUT MEASUREMENT FOR LEASING
INTELLECTUAL PROPERTY IN NORWAY**

Jakob Kalko

Jakob.Kalko@ssb.no

+47 62 88 54 95

1. Definition of the service being measured

The industry Leasing of intellectual property is classified in NACE 77.4. According to the statistical classification of products by activity (CPA 2008) 77.4 is divided into four 6-digit sub-categories:

- **77.40.11 Licensing services for the right to use research and development products**

This subcategory includes:

Licensing services for the right to use the outcome of research and development activities, i.e. inventions, such as constitutions of matter, processes, mechanisms, electrical and electrical circuits and devices, pharmaceutical formulations and new varieties of living things produced by artifice.

- **77.40.12 Licensing services for the right to use trademarks and franchises**

This subcategory includes:

Licensing services for the right to use trademarks and to operate franchises in respect of other non-produced assets.

- **77.40.13 Licensing services for the right to use mineral exploration and evaluation**

This subcategory includes:

Licensing services for the right to use mineral and evaluation information, such as mineral exploration for petroleum, natural gas and no-petroleum deposits.

- **77.40.19 Licensing services for the right to use other intellectual property and similar products, except copyrighted works.**

This subcategory includes:

Licensing services for the right to use other kinds of intellectual property products such as architectural and engineering plans, industrial designs etc.

Licensing services for the right to use compilations of facts/information (databases) are not part of 77.4 (belongs to NACE 58).

In Norway it has been discovered some misclassifications, where chain-offices have had NACE code 77.4, but where no leasing or franchising activities are involved but other service activities (e.g. purchase of goods for all members, to get cost advantages). These units have been moved to NACE 82.99 for the reference year 2012.

2. Unit of measure to be collected

Statistics Norway (SSB) is obliged to provide Eurostat with yearly data at enterprise level concerning turnover through the SBS-regulation, from 1 to 4. Digit level. NACE group 77.4 is included.

Turnover is defined as the sum of remuneration of services to customers and sales of merchandise and gross income from other activities. Rental income, commissions and special taxes are included, while subsidies and profits from sales of business assets are not. VAT is not included.

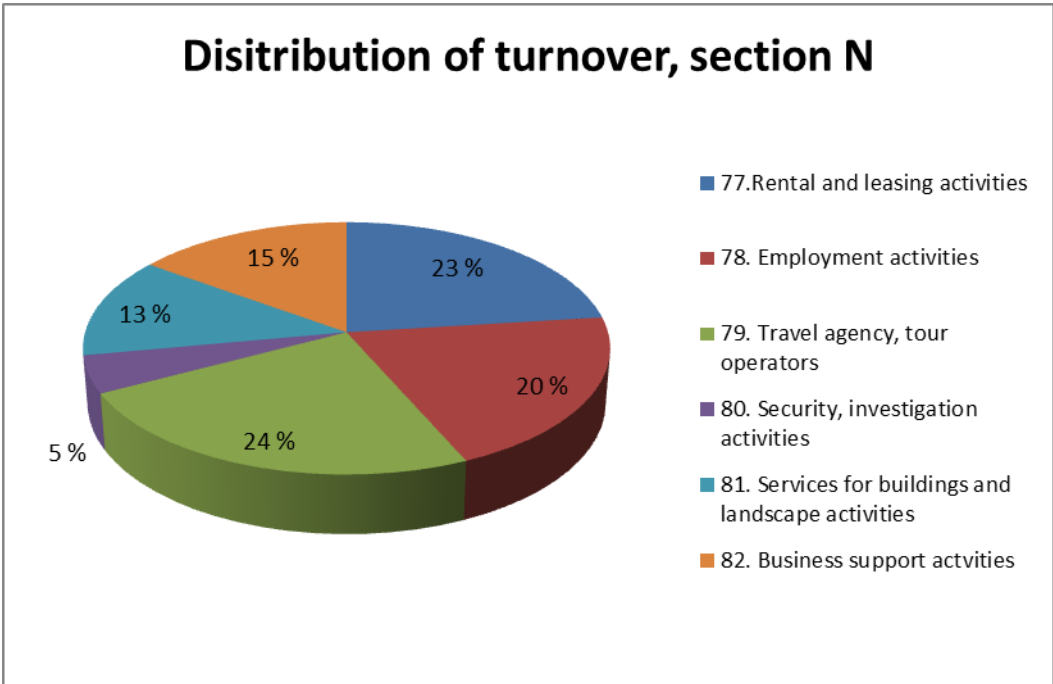
SSB collects bimonthly turnover data through the VAT register. These data are published on a quarterly basis at two digit level. Data at 3. digit level is edited and available for internal use. Turnover data at CPA-level are not collected.

3. Market conditions and constraints

3.1 Size of industry

NACE group 77.4 belongs to division 77. Rental and leasing activities, which is a part of section N, Administrative and support service activities. This section had a total turnover in 2012 of NOK 165 billion or approximately 20 billion Euros. The turnover within section N was in 2012 divided between the divisions 77-82 as shown in figure 3.1.1.

Figure 3.1.1 Distribution of turnover, section N. Enterprises. 2012.

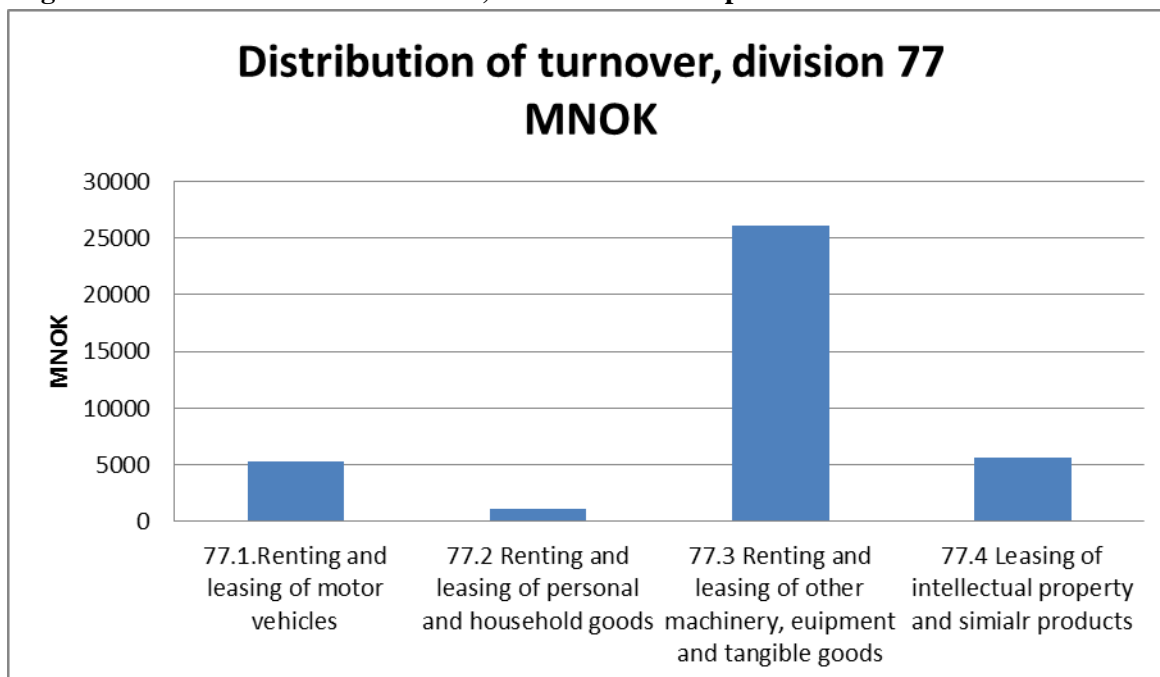


Source: SBS 2012 Statistics Norway

Division 77 is second largest within section N, with a turnover of NOK 38 billion in 2012, equal to a share of 23 %. Division 79, Travel agencies and tour operators, is the largest one, having a total turnover of NOK 39.4 billion. Division 77 is divided into 4 groups.

NACE is divided into 4 groups.

Figure 3.1.2. Distribution of turnover, division 77. Enterprises. MNOK. 2012



Source: SBS 2012. Statistics Norway

NACE group 77.4 had a turnover in 2012 of NOK 5.6 billion (or approximately 0.7 billion Euro), equal to a 15 percent share of the turnover in NACE 77. Compared to section N as a whole, NACE 77.4 accounts for 3.4 per cent of the total. For the reference year 2012, the industry group included 144 enterprises, employing 882 persons.

3.2 Business structure

Table 3.2.1 shows how activity is structured, by size groups.

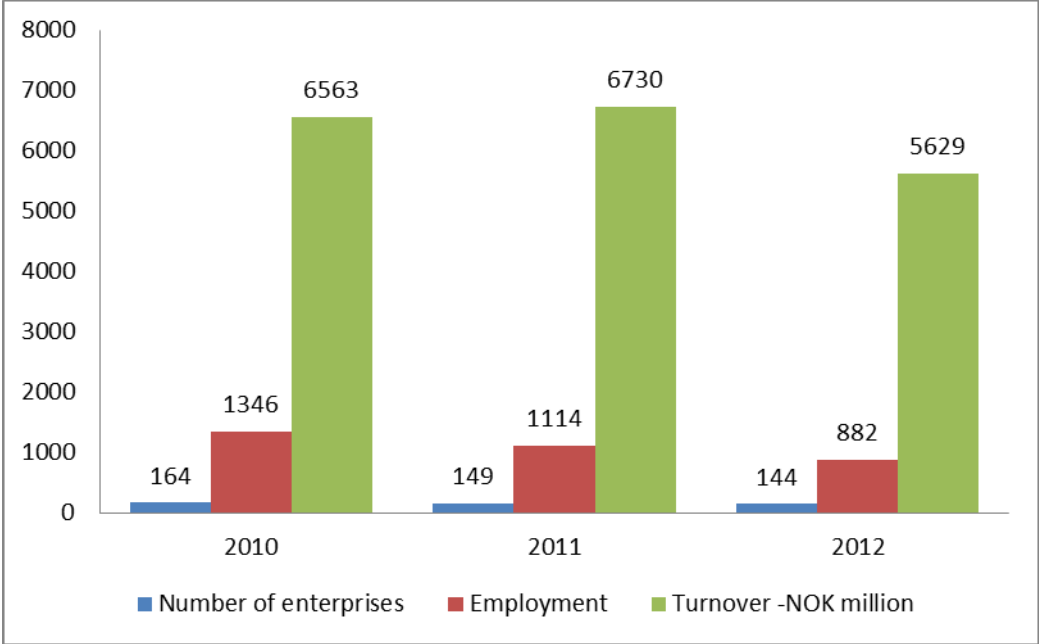
Table 3.2.1 Share of number of enterprises, employment and turnover in size groups. NACE 77.4. 2012.

Employment groups	No. Enterprises	Employment	Turnover
0-1	69 %	3 %	4 %
2-9	25 %	15 %	10 %
10-49	3 %	11 %	11 %
50+	3 %	71 %	74 %
Total	100 %	100 %	100 %

Source: SBS 2012. Statistics Norway

The industry consists of many small players and a few large ones. 6 per cent of the enterprises have more than 9 persons employed, but cover 82 per cent of the total employment and 86 per cent of the turnover. The development for the industry group from 2010-2012 is shown in figure 3.2.1:

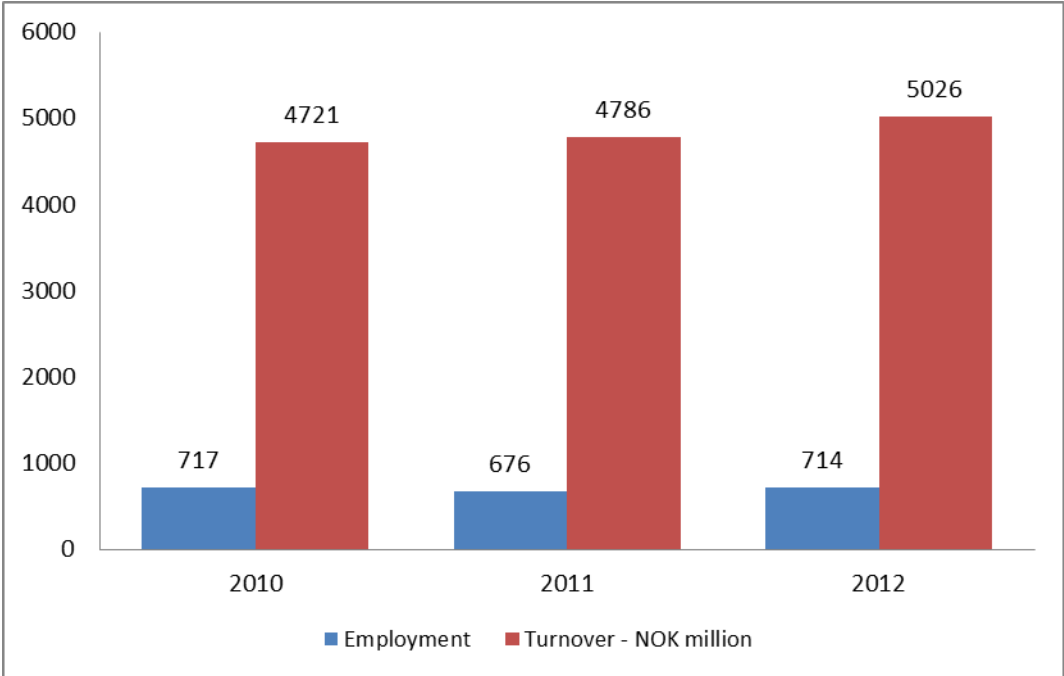
Figure 3.2.1. Number of enterprises, employment and turnover. NACE 77.4. 2010-2012



Source: SBS 2010-2012. Statistics Norway

The figure shows a decrease for all variables from 2010-2012. One main reason for this decrease – especially from 2011-2012 – was mentioned in chapter 1. Misclassification of units has contributed significant to this. The largest enterprises covered in 2012 nearly 90 % of the total turnover. Only looking at these units 2010-2012, the picture is somehow different.

Figure 3.2.2 Employment and turnover. 10 largest enterprises. NACE 77.4. 2010-2012



Source: SBS 2010-2012. Statistics Norway

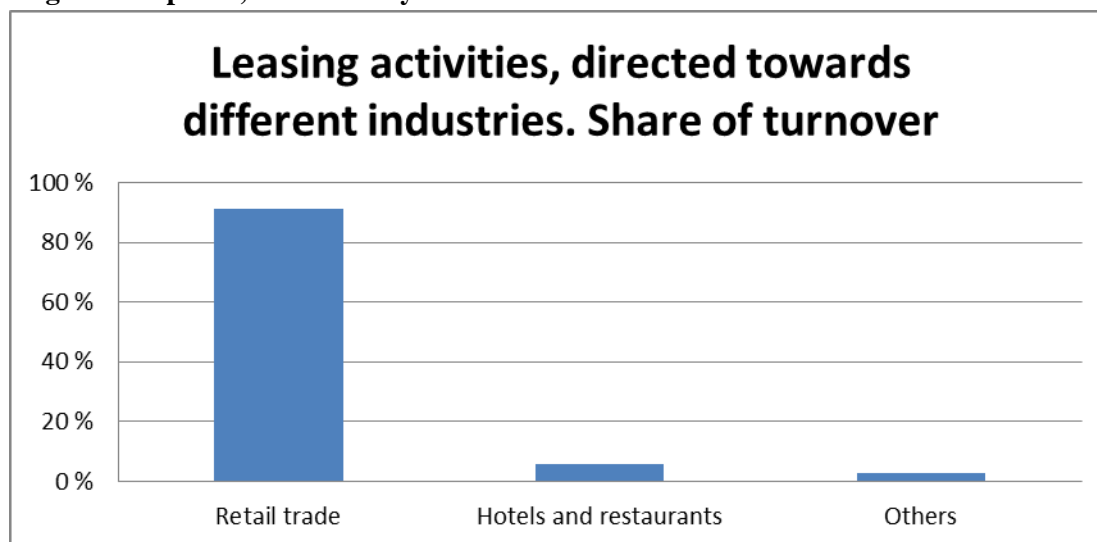
Turnover increased by 6.5 % and employment has remained unchanged comparing 2010 and 2012. Nearly all increase in turnover took place from 2011-2012.

The activity within the enterprises is homogenous, having no significant secondary production.

3.3 Special conditions or restrictions

Among the largest enterprises (covering 90 per cent of the turnover), the majority part of leasing intellectual property is directed against retail trade, measured by turnover. This is based on information from the annual accounts.

Figure 3.3.1 Leasing of intellectual property. To which industries leasing takes place for the largest enterprises, measured by turnover. 2012



Within retail trade most of the activity is directed towards enterprises operating within non-specialized stores.

SSB have no official statistic concerning type of transactions in the market – but only B2B transactions are localized within the largest enterprises (franchising activities).

Degree of export is very limited, although some expansion of franchise activities outside the Norwegian market has occurred during the previous years within retail trade.

4. Standard classification structure

The Norwegian Industrial Classification (SN2007) is identical to NACE Rev 2. at 4. Digit level. ISIC Rev.4 is identical to NACE Rev.2 for this industry. Statistics Norway has national 5.digit subclasses within different divisions, but not for NACE 77.

5. Evaluation of standard vs. definition and market conditions

SSB does not collect CPA data for NACE 77.4. Examining the activities of the largest enterprises, covering 90 per cent of the total turnover (but only 18 percent of the total number), through annual reports, gave anyway an indication of turnover is divided:

Most of the large enterprises operate with:

- **77.40.12 Licensing services for the right to use trademarks and franchises**

This subcategory includes:

Licensing services for the right to use trademarks and to operate franchises in respect of other non-produced assets

Franchises are the dominating activity and takes especially place within retail trade, Franchise is cooperation between two parts where the franchisor leases the right to use a trademark to a franchisee. Typically, the agreement includes other parts than just the use of the trademark, like how the business should be run, the use franchisors knowledge of the area, how to marketing the business and conditions related to the purchase of goods for resale. The agreement can also be limited just to the use of the trademark.

Activity was also localized within:

- **77.40.11 Licensing services for the right to use research and development products**

This subcategory includes:

Licensing services for the right to use the outcome of research and development activities, i.e. inventions, such as constitutions of matter, processes, mechanisms, electrical and electrical circuits and devices, pharmaceutical formulations and new varieties of living things produced by artifice.

This activity was found in connection with industrial activities – licensing rights to use technology.

No activity among the largest enterprises was found within:

- **77.40.13 Licensing services for the right to use mineral exploration and evaluation**
- **77.40.19 Licensing services for the right to use other intellectual property and similar products, except copyrighted works**

Turnover from these products might be found within units not examined, but will only cover a small part of the total turnover.

No activity beyond the 4 products was observed among the units examined. This could take place among the units not examined, but will in that case only covers a small part of the total turnover

The conclusion is that the CPA-standard seems to suits the Norwegian market and can be used to describe the activities within NACE 77.4 at product level.

6. National accounts concepts and measurement issues for the area

The NA uses the same classification as SN2007.

NA uses the SBS at establishment level as a source for calculating the final yearly national account and the STS to estimate quarterly national account. For both SBS and STS, Statistics Norway collects turnover data for NACE 77.4. Turnover is only published at yearly basis, but are used at quarterly basis by NA

The NA defines **output** as *the value of goods and services from domestic production activities, i.e. from market activities, i.e. from market production, production for own final use and non-market production in general government and in NPSIHS. Output is not the same as sale of goods and services. Output is published in basic prices, i.e. subsidies on products are included, but not VAT or other taxes on products.*

Source: [Concepts and definitions in national accounts - SSB](#)

In the SBS **turnover** is defined as *the sum of remuneration for rendering of services to customers and sales of merchandise, and gross income from other activities. Rental income, commissions and special taxes are included, while subsidies and profits from sales of business assets are not. VAT is not included in the statistics.*

Source: [Business activities, structural business statistics - annually - SSB](#)

Within NACE 77.4 subsidies and taxes on products/services are almost zero (influences output < 0, 1 % based on SBS 2012). The same accounts for cost of products/services for resale. Output and turnover is therefore in practice identical terms in this industry group.

7. Turnover methods and criteria for choosing various output methods

7.1 Annual data

7.1.1. Sources and data collection

SSB produces yearly data for (absolute) turnover, gross value added and other economic variables. A sample is drafted (PPS), statistical unit is enterprise. From these units SSB receives annual accounts and a questionnaire. The questionnaire includes questions concerning data, we cannot estimate from the yearly account.

The questionnaire also includes a breakdown of turnover, wages and salaries, total operational costs and gross investments at establishment level.

From the tax authorities SSB receives all other annual accounts which have been reported electronically. All detailed information concerning operational income and costs are used. If information is still missing for any units in the population, turnover data are collected from the VAT-register or Brønøysundregisteret. In practice, the turnover variable has a coverage rate of 100 % in the population.

For NACE 77.4 the distribution of turnover between the different sources in the SBS 2012 can be viewed in the table below:

Table 7.1.1. Distribution of turnover in NACE 77.4, by sources. SBS 2012.

Annual accounts, sample	72 %
Annual accounts, outside sample	23 %
VAT-register	5 %
Joint-stock company register	0 %

Source: SBS survey 2012, Statistics Norway

Annual accounts cover 95 per cent of the total turnover in the population. SSB has therefore almost a census survey for detailed income and cost components in the annual account. Only 5 per cent of the turnover is collected through the VAT register. For these units income and cost components must be estimated based on keys from the units having annual accounts.

As mentioned in chapter 6, output and turnover do not differ significant from each other in NACE 77.4. A few comments concerning the methodological changes which have been made within the SBS-survey in Norway and have influenced the quality of the output variable will anyway be added in the next section. It has not influenced the quality of the output variable for NACE 77.4 explicitly, but other industries.

7.1.2. Methodological changes in the SBS, influencing output

One methodological challenge, which influences the level of output at industry and establishment level has been how to treat multi establishment enterprises (MEEs), having a heterogeneous production including distributive trade. For estimation of output it is important to distinguish between sale and cost of *goods for resale* – and *other sale and cost of goods* at establishment level. In the SBS questionnaire all enterprises give information concerning:

1. Turnover from goods for resale
2. Cost of goods for resale.

The annual account includes information concerning the total turnover and the total costs of goods. Total turnover is broken down at establishment level by the enterprises (but not costs of goods).

Through the estimation procedures, *turnover and costs of goods for resale in MEEs are now primarily directed towards the establishments in the MEE, having distributive trade as their activity (with a few exceptions)*. Earlier, these data were distributed from enterprise to establishments, not taking into account the activity of these units. Consequences were that e.g. that an establishment within distributive trade could have only a small share of its total turnover from resale. The same could be the case for cost of goods for resale. . On the other hand, establishments within service activities could have a relatively large share of its turnover within resale of goods. In addition they were given a part of the costs of goods for resale, although in practice, the sum should be zero.

The changes in methodology have increased the quality of the output data, giving a better consistency between output components and activity at establishment level. The largest improvement is found within distributive trade, but has also influenced other areas as well.

7.1.3. Formalized cooperation between NA and SBS producers

Another more general factor which has increased quality of data from SBS to NA is formalizing of the cooperation between the units through written internal contract:

The contract includes:

- A description of which data should be included in the delivery and in which format
- Deadline of delivery
- Required controls of dataset before delivery
- Documentation of dataset (description of data, challenges during the production process, significant changes in the population (fictive, non-fictive))
- Communication between the divisions – at least 3 annual meetings.

NA gets access to all data at macro and micro level. The macro level data includes all detailed data at 5.digit level. This includes e.g. information of every single variable, contributing to the total output/turnover/operational income and total operational costs. From this dataset the NA can estimate the aggregated variables needed for the yearly national account.

NA is obliged to provide the producers of the SBS with written feed-back on how data are used in the NA and other general comments concerning the dataset.

NA is not to use the micro files for any purposes than explaining development at macro level, if this explanation is not found in the documentation.

7.2 Quarterly data

SSB produces a quarterly turnover index. Source of data is the VAT register. Data are collected and edited at 3-5 digit level, but are only published at Section and 2.digit level. The NA uses this information for the quarterly national account and uses (among other sources) keys from the latest SBS survey to calculate other variables.

8. Evaluation and comparability with price measures.

SSB has not developed a SPPI for NACE 77.4 and there is no plan for this at short-term. The industry is small and it is outside the scope of the STS-regulation. As the market only consists of B2B transactions, we cannot use data from CPI as proxy. A SPPI within car rental (77.1.) is published, but the two NACE groups are quite heterogeneous, Car rental has turnover within both the business and the Household sector – and some export. The activities itself are also quite different (leasing and franchising), and have different price mechanisms. Using SPPI for 77.1 as a proxy for 77.4 is therefore not a solution, which could be published.

9. Summary

- SSB collects yearly data about absolute turnover, using annual accounts and VAT register as the sources. Bimonthly data from the VAT register are collected, and are used as source for the quarterly NA and for the Quarterly turnover index.
- The industry is characterized by a few large and many players. The majority of the turnover is a result of franchising activities, directed towards the retail market. Only B2B transaction within the largest units. Degree of export is limited.
- Output in basic prices and turnover are in practice equal within this industry. Subsidies, taxes on services and resale are almost zero.
- SSB have no price index for NACE 77.4. CPI information is not considered as the industries activities are directed towards the business market. Using the price index within 77.1, car rental is not recommended as a proxy, to be published. The industries have heterogeneous activities, directed towards different sectors (car rental has also activities within the household sector and export sector).