



The 36th Voorburg Group Meeting

**Sector paper**

Mini-Presentation on  
**ISIC 77.30 Renting and leasing of other machinery, equipment and tangible goods  
(SPPI)**

Stéphanie Depil

INSEE, France

The aim of this article is to give an overview of how the French statistical institute (INSEE) measures the activity of « Renting and leasing of other machinery, equipment and tangible goods » (ISIC 7730).

## 1. Descriptions and characteristics of the industry

### 1.1 Definition of the industry

According to the international Standard Industrial Classification of All Economic Activities (ISIC Rev 4), class 77.30 Renting and leasing of other machinery, equipment and tangible goods includes :

—renting and operational leasing, without operator, of other machinery and equipment that are generally used as capital goods by industries:

- . engines and turbines
- . machine tools
- . mining and oilfield equipment
- . professional radio, television and communication equipment
- . motion picture production equipment
- . measuring and controlling equipment

other scientific, commercial and industrial machinery

—renting and operational leasing of land-transport equipment (other than motor vehicles) without drivers:

- . motorcycles, caravans and campers etc.
- . railroad vehicles

—renting and operational leasing of water-transport equipment without operator:

- . commercial boats and ships

—renting and operational leasing of air transport equipment without operator:

- . airplanes
- . hot-air balloons

—renting and operational leasing of agricultural and forestry machinery and equipment without operator:

- . renting of products produced by class 2821, such as agricultural tractors etc.

—renting and operational leasing of construction and civil-engineering machinery and equipment without operator:

- . crane lorries
- . scaffolds and work platforms, without erection and dismantling

—renting and operational leasing of office machinery and equipment without operator:

- . computers and computer peripheral equipment
- . duplicating machines, typewriters and word-processing machines
- . accounting machinery and equipment: cash registers, electronic calculators etc.
- . office furniture

This class also includes:

- renting of accommodation or office containers
- renting of containers
- renting of pallets
- renting of animals (e.g. herds, race horses)

*This class excludes:*

- renting of agricultural and forestry machinery or equipment with operator, see 0161, 0240
- renting of construction and civil engineering machinery or equipment with operator, see division 43
- renting of water-transport equipment with operator, see division 50
- renting of air-transport equipment with operator, see division 51
- financial leasing, see 6491
- renting of pleasure boats, see 7721
- renting of bicycles, see 7721

In relation to the classification of products, in the French SPPI, we use the Classification of Products France CPF rév. 2.1, 2015, which is the French version of the European Classification of Products by Activity (CPA 2.1NACE REV 2).

In the Central Product Classification (CPC), renting and leasing services of other machinery, equipment and tangible goods (ISIC 7730) are classified in a part of the class 7311 (Leasing or rental services concerning transport equipment without operator) and in the class 7312 (Leasing and rental services concerning other machinery and equipment with operator). The activity corresponds to the subclass 73113 to 73129 and excludes the renting of motor vehicles (73111, 73112).

With regards to the statistical classification of Products by Activity (CPA2015), the products are classified as follows in the class 7731 to 7739.

**Table 1 : Equivalence between CPA et CPC for ISIC 77.30**

CPA			CPC		
Class	Description of the class	Subclass	Class	Subclass	Description
7731	Rental and leasing services of agricultural machinery and equipment	7731.10	7312	73121	Leasing or rental services concerning agricultural machinery and equipment without operator
7732	Rental and leasing services of construction and civil engineering machinery and equipment	7732.10		73122	Leasing or rental services concerning construction machinery and equipment without operator
7733	Rental and leasing services of office machinery and equipment (including computers)	7733.11		73123	Leasing or rental services concerning office machinery and equipment (except computers) without operator
		7733.12		73124	Leasing or rental services concerning computers without operator
7734	Rental and leasing services of water transport equipment	7734.10	7311	73115	Leasing or rental services concerning vessels without operator
7735	Rental and leasing services of air transport equipment	7735.10		73116	Leasing or rental services concerning aircraft without operator
7739	Rental and leasing services of other machinery, equipment and tangible goods n.e.c.	7739.11		73113	Leasing or rental services concerning railroad vehicles without operator
		7739.12		73117	Leasing or rental services concerning containers
		7739.13		73114	Leasing or rental services concerning other land transport equipment without operator
		7739.14	7312	73125	Leasing or rental services concerning telecommunications equipment without operator
		7739.19		73129	Leasing or rental services concerning other machinery and equipment without operator n.e.c.

The scope of the 77.3 industry excludes the financial leasing. It is considered as a financial transaction, and not a commercial service transaction.

Financial leasing is a fixed-term rental contract for goods or equipment between a bank or a financial institution and a company (industrial or commercial). Therefore, the finance company acquires, at the request of its client, an equipment to be rented for a fixed period. At the end of this period, the customer can choose to return the asset to the financial institution, or to buy the asset or even to renew the rental for a new period. It is a form of financing for the use of a good; this operation should not be confused with a simple rental that the tenant can interrupt with prior notice. In the case of financial leasing, if the customer breaks his contract, he is liable for the rest of the rents due. The financial leasing activity is classified in 64.91Z.

In an operating lease, the lessee does not have the option of having the ownership of the property transferred to him at the end of the lease term.

## 1.2 Market conditions and constraints

In France, in 2018, there were about 24 000 enterprises with their main activity classified into 77.30 Renting and leasing of other machinery, equipment and tangible goods. In the same year they employed 50 000 persons. They represented about 0.4 % of total market economy turnover.

**Table 2 : Characteristics of enterprises with main activity in 77.3**

Size of enterprise	Number of enterprises	Number of employees	Turnover (€ million)
Micro enterprises	23 374	5 279	1 891
Medium enterprises	501	15 286	4 458
Large enterprises	43	29 192	11 071
Total	23 918	49 757	17 419

Source : INSEE - Structural Business Statistics 2018

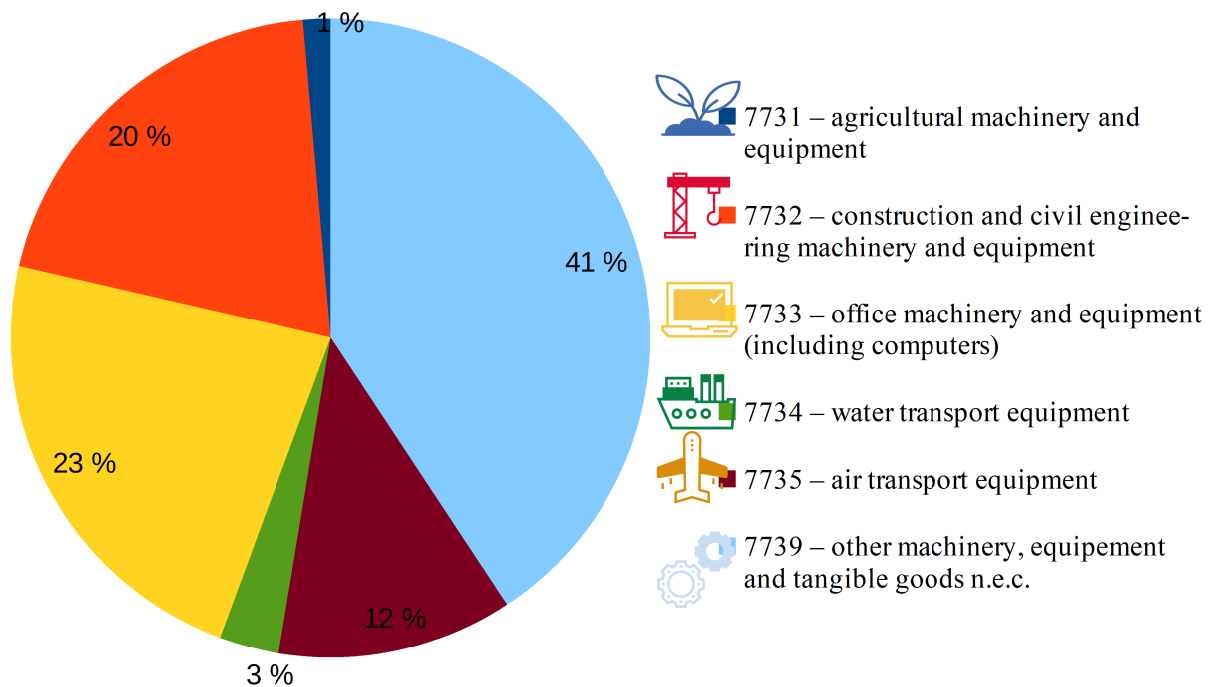
The turnover of rental and leasing production amounted to approximately 20.7 million euros. The production comes from enterprises with their main activity in 77.30, but also from enterprises in the sector of construction or transportation or in another specialized industry like computer group.

Many companies rent at the same time different products of location, especially construction and civil engineering machinery and equipment (77.32) and other machinery, equipment and tangible good (77.39).

The rental business is highly diversified, with a wide range of products rented. The group of rental and leasing services of other machinery, equipment and tangible goods represents the first largest group in terms of turnover of the industry of 77.30. (about 41 % of total).

The rental of office machinery (7733) and construction equipment (7732) each represent more than 20 % of turnover of group 77.3.

**Chart 1 : Turnover of the different classes**



Source : INSEE - Structural Business Statistics 2018

The consumers of renting and leasing of other machinery, equipment and tangible goods are almost exclusively French companies. This is due to the fact that renting and leasing of personal and household goods is classified in the group 772. The BtoB market represents 96 % of the industry turnover. The rest of it is estimated as export, mainly in 7735 (air transport equipment).

In the class 7732 of rental of construction machinery, the first 3 enterprises make more than half of the production. In the other class, the level of concentration is lower, because of the diversity of the rental products.

### 1.3 Specific characteristics of the industry





Companies are increasingly renting machines and equipment.

#### **Renting rather than buying? What are the benefits ?**

- ◆ Enjoy the good immediately, less pleasure in buying
- ◆ Save time, the right product at the right time;
- ◆ Save money, a better operating cycle of the machines by the renter. Allows to defer the most important investments.
- ◆ Gain in quality, a machine adapted to each good use;
- ◆ Gain in security, the lessor takes care of maintenance, repair and regulatory constraints for specialized equipment (eg cranes on construction sites).

The rental business is directly linked to the economic situation. On one hand, user companies are experiencing a drop in activity, such as construction or transportation. On the other hand, rental is also less affected by the crisis because it acts as a cost adjustment variable for companies. The purchase of equipment implies a heavier investment and a long term amortization. In a period of uncertainty about future, leasing is preferred to investment so as to adjust production capacities.

**Table 3 :Key factors in the evolution of professional equipment rental**

Activity	Main factors of evolution
Agricultural equipment 	<ul style="list-style-type: none"> <li>- decline in agricultural activity in France</li> <li>- reconfiguration of the market around cooperatives</li> </ul>
Construction equipment 	<ul style="list-style-type: none"> <li>- technological evolutions, not very favorable to the purchase</li> <li>- dynamism of the construction sector</li> <li>- state allocations to communities for public works</li> </ul>
Computer equipment 	<ul style="list-style-type: none"> <li>- rapid technological evolutions, having recent equipment</li> <li>- cloud computing services</li> </ul>
Air transport 	<ul style="list-style-type: none"> <li>- linked to the business tourism activity</li> </ul>

Professional equipment leasing offers new formulas for the deployment of leased equipment, integrated services (consulting, hot-line) and financing solutions. These services are excluded from branch 773.

The changes expected for this sector in the near future are a specialization of rental companies and greater competition.

## 2. Measurement of SPPI

### 2.1 General Framework

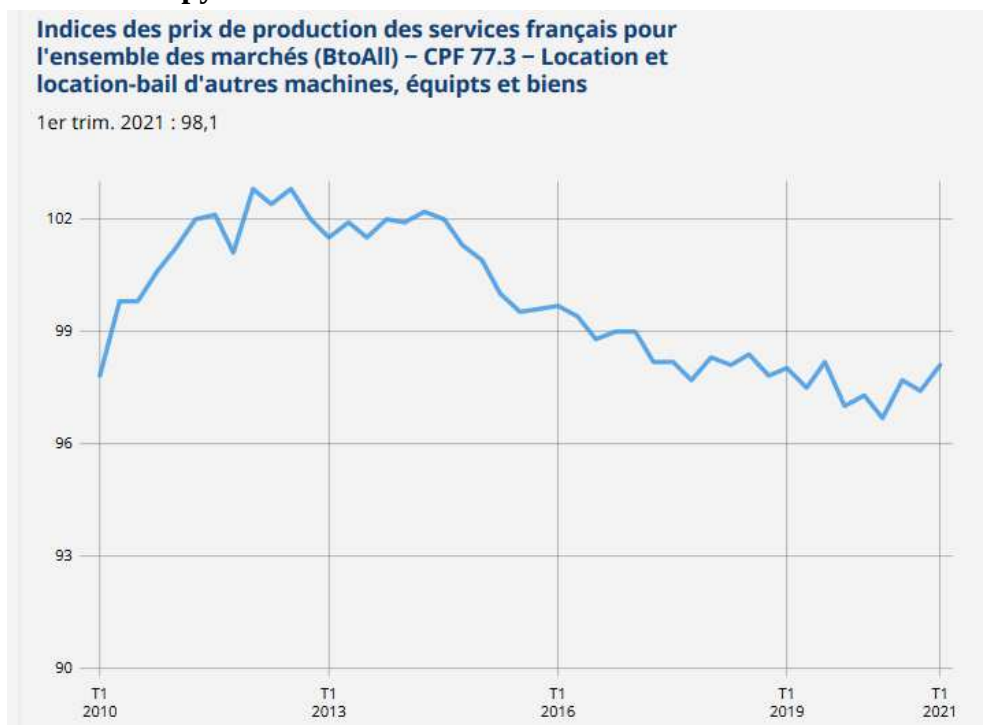
The INSEE's survey for services' price indices (Observation of Prices in Industry and Services: Opise) monitors the evolution of production prices for services from French services companies. The Producer Price Index for Services (SPPI) is one of the variables compiled in the system of short-term statistics. Data on SPPI are released quarterly within 60 days after ending the reference quarter.

These price indices allow economists to analyze trends in the economy. They are used as economic indicators as such and as leading indicators of inflation. SPPIs are also used as deflators for many indicators such as Gross Domestic Product (GDP) in the national accounts and the Service Production Indices (SPI).

In terms of precision, we release price indices with a lower level of granularity than the one required by STS and the FRIBS regulations. Indeed, because our indices are used for volume indices calculation, as deflators for National Accounting (resources-use balance) and for Service Production Indices (SPI), INSEE disseminates SPPI until the NACE at 4 digits level (classes) instead of the 2 digits level (divisions) required by the FRIBS regulation. The SPPI are compiled for all markets (BtoAll) and, if possible, disseminated for the different markets (BtB, BtoC, BtoX). The definitions of SPPIs must respect National Accounts concepts. Thus, SPPIs are expected at basic prices (including intra-group transactions, subsidies and excluding taxes). For the purpose of indexing contracts, market prices are also released.

In the present case of level 77.30, INSEE has been publishing a quarterly price index since 2010. The classes 7731, 7732, 7733 et 7739 are released, for the BtoB et BtoAll markets. The classes 7734 and 7735, more fragile, are calculated but not published on the Internet. However, they are used by the Service Production Indices (SPI). The index of 7732 is used for the production of another index BTP (building public works).

**Chart 2 :Screen copy of INSEE website**



## 2.2 Measurement issues

The structure at the CPA-4-digits levels comes from the structural business statistics. The details of products are issued of the renewal operation.






The renewal of the service industries is a continuous process, so that each industry is refreshed once every five years on average, although this interval may be adjusted to take into account technological, product or market swift changes. For French SPPIs, samples are determined at two different levels : first, firms and secondly, service products.

- For firms, samples are defined by cut-off at the CPA-4-digits levels from the last available Structural Business Statistics (Y-2). For every CPA-4-digits level, service companies are sorted by decreasing “product based” turnover. Then, thresholds of coverage define the size of each sample, in order to provide better coverage of one of the different markets

- For service products, INSEE engineers-surveyors, who are specialized in services, visit the selected firms to define or re-define services that will be followed in a customized quarterly questionnaire. The aim of these visits is to provide standard products whose prices are easy to follow through time, which guarantees a good index quality. Respondents are asked to select a number of service products representative of their total output.

Once the products have been defined, the prices of transactions are collected quarterly. They refer to a precise service sold on a market. 134 companies are questioned in the survey for the industry of 77.3.

**Table 4 : Survey for services price indices**

Class	Rental and leasing services of		Number of enterprises	Number of products
7731	Agricultural machinery and equipment		9	30
7732	Construction and civil engineering machinery and equipment		36	283
7733	Office machinery and equipment (including computers)		29	150
7734	Water transport equipment		4	10
7739	Other machinery, equipment and tangible goods n. e. c.		56	275

The weights of class level are obtained from the structural business statistics (y-2). They are updated once a year. The distribution of products does not change before the industry renewal.



## 2.3 Description of pricing methods and criteria for choosing the method

The price is determined with the intention of repaying the equipment initially purchased. Considering the investments for equipment acquisition, the depreciation and the estimated resale, a rental price will be fixed to be as profitable as possible in adequacy with the market of supply and demand.

The price depends on the equipment rented (with a precise description) and the duration of the rental. The rates are per day ; the price per day is lower when the rental is for a longer period. Although companies have a price list with unit prices by type of equipment and rental period, the final price is largely negotiated, depending on the client and the volume of business generated by this customer.

The most common pricing method is the direct use of prices of repeated services. An average price is collected per type of machine and equipment and per day for all customers combined (e.g. average price of a 5 ton mini excavator - 1500). We can try to detail the rental prices according to the duration.

The contract pricing method is also used for large customers who often rent one type of equipment. We follow the price of a machine for a given customer. It is important to make sure that the contract defined with the customer does not change from one period to another, especially in terms of volume (which can lead to different prices).

The price component generally distinguishes the rental service itself from associated services such as on-site transport of the equipment, supply of diesel fuel, maintenance, etc. It should be checked that the rental price includes these services. If the associated services cannot be distinguished, they will be considered as a quality option of the rental contract.

## 2.4 Evaluation of comparability of Price data with Output data

Prices measured via the OPISE survey are the reference for monitoring prices and deflation in the national accounts. We do not have other statistical sources that can be used for direct comparison.

Nevertheless, prices are linked to other variables such as the production price of the good or the activity of the industry. These factors make it possible to validate price changes, but not to estimate prices. Models were tested in 2020 as the response rate to the survey was low during the shutdown. However, the result was inconclusive for estimating prices.

Companies often provide additional explanations in the survey: increased cost of purchasing equipment, greater competition among rental companies, or higher demand.

### **3. Evaluation of measurement**

The rental sector is not the most difficult to track, because the products are tangible and easily identifiable. However, the characteristics of the rented equipment (including the rental period) must be clearly specified. It seems advisable to multiply the number of prices to be recorded.

The challenge is to adapt to technological changes in certain sectors, such as information technology. It is necessary to follow new trends in the services offered. In the traditional sectors, the only occasionally changing items are the product.

The weakness is to cover and estimate the small rental sectors, such as boats or agricultural equipment. The weight of these industries is too small to survey a large number of suppliers.