

The use of Value Added Tax files  
and of supplementary direct surveys on firms  
for calculating short and medium term indicators  
for sales and investments  
in service industry

**Nelly ACTIF, Raoul DEPOUTOT, Marie-Line HONNIBALL**

**INSEE**

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## INTRODUCTION

During the meeting of the Voorburg group of 1988 in Wiesbaden, somebody, obviously from an European Community country, expressed the view that the declaration filled by the firms for the payment of the Value Added Tax (VAT) could be an interesting source of data for examining the movements of the sales and of the investment expenditures of the service firms on the short and medium term. This source has been used in France since 1976. The field of activities covered was small at the beginning but has been extended later to most of the "tertiary activities" in the scope of preoccupations of the authors; these service activities do not cover Transports (the processing of VAT files is made in an other Department of the Statistical Office), intermediaries of commerce, medical care services, banking and insurance activities.

Of course, when a question on the feasibility of a statistical operation is raised, to give, as sole answer, that it is feasible does not bring much information to the reader or potential applier of a similar method. One should also describe the difficulties encountered, how they have been solved or why they have been overlooked. The difficulty, in achieving this aim, is to avoid too much details or to be too technical. It is hoped that some medium term has been found in this paper, which, however, goes beyond a simple description or collection of facts.

One of the main difficulties is that not all firms are liable to monthly declaration and payment of VAT. This becomes clear in part I where the French legislation on VAT is briefly described. In some sectors of service industries, as shown in part II, it is therefore necessary to supplement the VAT files data by information collected directly from firms not filling a monthly declaration for VAT.

Such supplementary surveys were not carried out from the very beginning of the use of the VAT files, but starting from January 1989, the first sampling survey was launched. Such direct survey, not burdensome for respondents since only three questions easy to answer are asked, is also used to treat the case of newly created firms. The outcome from the 1989 reform is that, soon, INSEE will be able to provide not only monthly data for firms existing at least during two consecutive years (an information provided since the beginning), but also data for all firms existing at least in one of two consecutive years.

Part III describes what is done from the creation of administrative files to the calculation of sales indexes, for firms filling VAT forms each month: the VAT forms, the sampling procedure, the check and the eventual

imputation for basic data, and the indexes calculation. This part ends with the reference to some comparisons with external data and to the conclusion drawn for improving the general system.

Part IV starts with some preliminary studies on the use of investment data in the VAT forms (no investment index has been, so far, published regularly). The conclusions of this study make it clear that it is necessary to take into account all newly created firms within the scope of the direct survey. The following paragraphs in part IV are devoted to the same topics as those presented in part III (how the direct survey is carried out, ...).

At last, part V provides some information on how the results of the two surveys are combined to obtain indexes for each kind of business activity or by regroupment of kinds of business, for firms which are present in two following years (resp. two corresponding months of two following years) as well as for total sales (or investment) during one year (resp. one month of a year) on the basis of the previous year (resp. of the corresponding month of the previous year).

NOTE. adjustments for seasonal variations and conversions of value indexes to volume indexes will not be treated in this paper.

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## 1 - Rapid overview of the fiscal rules on Value Added Tax

Firms liable to value added tax (VAT) include all incorporated natural persons and corporate bodies acting independently. Taxable transactions consist of all deliveries of tangible goods, and of all service performances which are made onerously.

Above transactions are taxable in France as long as they are achieved in France. This localization is the source of many interpretative rules as to service providers.

There are specific exonerations linked either to the activity of firms or to the nature of transactions. For example, exonerations exist on certain transactions dealing with airplanes and boats.

From the fiscal rules presented above, it follows that imports are taxable if the transfer of property is done in France, while exports are not taxable at all.

Various rates are applicable according to the type of goods or services in a transaction. When several commodities and/or transactions are billed together, the rate corresponding to each concerned good or service is applicable individually.

One of the following taxation systems is applicable:

- real system: sales are totalized by rate of VAT (including the 0% or tax-free transactions); the VAT is calculated according to each rate; adding up for all rates provides the amount due before deductions are made (see below); the VAT is declared and paid monthly or trimestrially;
- simplified system: the VAT (before deductions) is calculated directly from the global sales, using the average rate, obtained from the repartition by VAT rates of the sales during the previous financial year; the VAT is declared and paid monthly or trimestrially; a regularization, based on the actual rate-

distribution of sales, is made at the end of the current financial year;

- estimation system (*régime du forfait*): the Tax Administration makes an evaluation of the VAT due according to the declarations provided on the firm sales for the previous financial year; the VAT is therefore paid once a year.

The estimation system can only be applicable to those firms the annual sales of which (all taxes included) do not exceed 500,000 Francs in industrial and commercial sectors and 150,000 Francs for service providers. The simplified system is applicable to firms with annual sales (all taxes included) inferior to 3,000,000 Francs in the industrial and commercial sectors and to 900,000 Francs in the other services sector. All other firms are liable to the real system. At last, in the real and simplified systems, firms may choose trimestrial (in state of monthly) declaration and payment, if the monthly tax does not exceed 1,000 Francs. In any case, a firm may choose a more constraining system than the one it is liable to.

Of course, the VAT being paid on the value added by the firm, it is necessary to deduct from the tax billed to the firm the amounts of taxes paid to suppliers on purchases of goods and services for intermediate consumption, for resale or for investment: the Tax Administration requires that VAT already paid on purchases be broken down into amounts paid on investment goods and services and on other goods and services.

## II - Fiscal rules and calculation of a monthly index

Obviously, the only firms for which monthly data on sales, expenditures and material investment are available are those which are liable to or have chosen the monthly real system of taxation.

The following table provides an estimate of the shares, in the total sales of the firms of a given sector, of those firms which are liable to the real system. The estimates have been calculated using the Annual Survey on Service Industries on year 1985, and by strictly applying the fiscal rules presented above.

Kinds of business studied in the VAT files	Rate of real syst. firm	Also direct survey
Wholesale of agric.prod.and material, and of alimentation	97.0	
Wholesale of non agricultural.products exclud.interm.products	96.6	
Wholesale of non agric.intermed.prod.	97.5	
Retail of aliment.in large surfaces or concentrated commerce	99.9	
Exploitation of independent small self-service shops	88.5	
Retail sale of alimentation by independent small outlets	68.5	Y
Retail sale of alimentation in specialized outlets	34.7	Y
Retail sale of non alimentation in non specialized outlets	97.6	
Retail sale of non aliment. in specialized outlets excluding ...	64.9	Y
... Retail sale of coal and other fuels	94.1	
... Retail sale and repair of automobiles	82.9	Y
Hotels, cafés and restaurants (excluding canteens)	64.8	Y
Canteens	86.4	
Study activities for firms	91.4	
Construct. promotion, administration, sale and renting	89.5	
Other rental activities	94.8	
Wholesale laundry and dyeing	94.1	
Cleaning and sanitary activities	92.7	
Recreation, cultural and sport services	96.0	
Other services provided principally to households	40.0	Y

Using only the files of the Tax Administration for estimating the monthly changes in the firm sales, expenditures and material investment would generally ensure a good coverage of the scope, but for small independant retail shops and market services to households. It was decided that, for certain kinds of business, the VAT files would be supplemented by a direct survey on firms. Kinds of business for which data are collected in the VAT files are presented in the table above, an Y indicating kinds of business where data are supplemented using a direct survey.

It should be added that bakeries and pastry shops where home made products are sold are also included in both surveys although they are normally classified, in France, within the agricultural and alimentary industries.

In the following paragraphs, the main features of the two types of data collections will be presented followed by the description of the index calculations (sometimes one will refer to the VAT survey and to the direct survey).

### III - Using the VAT files

The presentation is, of course, limited to the firms which are liable to or have opted for the monthly real system of taxation.

#### III-1 The CA3 form

Each month, the firm must fill a form, called CA3, a copy of which is provided in annex. What is interesting for the purpose of the statistical work is on page 3 of the form.

On page 2, frame A is used for breakdowns the sales of the month by accounting entries and by taxable and tax-free sales. Frame B is used for VAT regularizations (see below).

Page 3 is punched on tape. Transactions are broken down according to fiscal categories:

- in frame E, transactions are broken down into three groups:
  - tax-free transactions;
  - taxable transactions broken down according to VAT rate;
  - goods and services allowing for deductions, broken down into capital expenditures and other goods and services.
- frame F serves for various taxes regularizations: other taxes, over- or under- payments of VAT for the previous months, payments of accounts during the vacation periods.

The use of frame F results from the fact that there are two exceptions to the obligation of preparing monthly declarations: the

vacation periods (during which it might be impossible for the accounting services to value the amount of all the transactions) and special events, specific to the firm (a special form is used). In both cases, firms must pay an account.

In general, CA3 forms for a given month are to be forwarded to the relevant local Tax Center before the 20th of the following month (the amount due, if any, as obtained on line "*Total à payer*" in page 3 of the CA3 form, is to be sent along with the corresponding form).

However, during the vacation period, if the accounts could not be closed on time, a more complicated procedure is used: on the corresponding CA3 form, only the account is written down (it must be equal to 80% either of the amount actually due or of the amount paid for the previous month).

This rapid presentation of the CA3 form and of the rules for filling it up makes it clear that two problems exist for the statistician:

- the non taxable sales are of but small interest for the Tax Administration as well as for firms (no tax reduction, no effective penalty if it is not declared); it is therefore not very cautiously checked by the Tax Administration, if checked at all, and sometimes not mentioned at all on page 3 of the CA3 form;
- the account procedure which implies a specific treatment during the statistical processing.

### III-2 From the Tax Administration to the Statistical Office

For its own purpose, the Tax Administration puts the data of page 3 on computer readable tapes. This is used for establishing global tables, to create a file of permanently liable firms, ... The forms themselves are used for controls by the local Fiscal Units.

For obvious cost and rapidity reasons, only a sample of the CA3 forms can be processed by the Statistical Office (about one million firms



declare VAT each month, half of them being commercial or service industry firms); each year, a sample of 15,000 firms in the commerce and service businesses is drawn by the Statistical Office from a sampling frame of firms provided by the Tax Administration (the sampling is made altogether with the one concerning firms in the other industries).

The tapes containing the data from the CA3 forms, for all firms belonging to the samples in all kinds of business are sent, each month, to the Statistical Office. For the time being, there is a two month lag for receiving the almost complete set of data for a given month, but it is expected that one month can be gained when the new processing system of the Tax Administration is used in all local Fiscal Units.

### III-3 Notes on the sampling procedure

In fact, the sample of firms is only partly renewed each year. As it is not possible to trace back to the previous year the data for a given firm in a given year sample, a reserve of firms is constituted each year for which data are stocked month by month. It is among these "reserved" firms that the following year sampling procedure is carried out in priority.

A one-year period may seem to be short for renewing the sample. This relates to the "VAT files mortality of firms" implied by their actual mortality but higher than it, since, when a firm changes of local Fiscal Unit, it receives a new codification from the Tax Administration which makes it temporarily impossible to carry over its follow up.

At last, it should be pointed out that the sampling procedure uses a stratification by kind of business and bracket of sales and that the sampling rate in each stratum is proportional to the previous annual sales of the firms in the stratum (the sampling rate is 1 for the stratum of firms with the highest sales). In each stratum, firms are drawn out with equal probabilities, but also the sample stability, especially for firms which provide declarations of good quality, is taken into account.

### III-4 The calculation formulae

For the time being, only estimates of indexes of monthly and annual sales are calculated.

**Calculation of an annual sales index** for firms in a given kind of business:

If CAHTA(n) represents the annual sales of all firms in the studied kind of business during year n and if  $n_0$  is the base year, then the index is:

$$IA(n) = \frac{CAHTA(n)}{CAHTA(n_0)} = \prod_{n_0+1}^n \frac{CAHTA(n)}{CAHTA(n-1)}$$

The sample being modified each year, the last expression, a chain-index with annual links, is preferable. An annual link is calculated using the firms common to years n and n-1. The year n sample is representative of firms in year n-1, furthermore it is constituted of firms for which data are also available in n-1 (either in the main or in the reserve sample in n-1); therefore, the index calculated from one year to the following one and then chained up to the base year is effectively representative of the actual movements of annual sales.

**Calculation of an index for global monthly sales** of firms in a given kind of business:

If now (n,m) is month m of year n and if CAHT(n,m) represents the global sales for this month for all firms of the given kind of business, such that:

$$CAHTA(n) = \sum_{i=1}^{12} CAHT(n,i)$$

Then, the monthly sales index,  $I(n,m)$ , can be written:

$$I(n,m) = \frac{CAHT(n,m)}{1/12 \sum_{i=1}^{12} CAHT(n_0,i)}$$

In fact, always because of the annual sample modification, the formula is to be changed to a chain of indexes in which years  $n$  and  $n-1$  should be compared. Two modified formulae could be used:

$$I(n,m) = \frac{CAHT(n,m)}{1/12 CAHTA(n-1)} \times IA(n-1)$$

or

$$I(n,m) = \frac{CAHT(n,m)}{1/12 CAHTA(n)} \times IA(n)$$

For the time being, technical reasons, which should be overcome in the future, do not make it possible to apply the first formula. If one notes that the monthly sales index can also be written as follows:

$$I(n,m) = \frac{CAHT(n,m)}{CAHT(n-1,m)} \times I(n-1,m)$$

then, all elements will be available for a first estimate of the monthly sales index. One can only speak of provisional estimate because there are always late arrivals of the CA3 forms (firms late to report, postal delays,...). The Tax Administration complete the tapes only with forms received prior to the 26th of the month (forms received after the 25th are introduced during the following month); thus, as to the statistical processing, some imputations have to be made for missing data, while actual figures can be used only after the monthly publication.

After the end of the year, one waits some time before calculating the annual and the revised monthly indexes in order to incorporate as much

late information as possible. Once the annual Index is calculated, it is possible to obtain the so-called "monthly profiles",  $P(n,m)$  such that:

$$P(n,m) = \frac{CAHT(n,m)}{1/12 CAHTA(n)}$$

The final revised monthly Indexes are:

$$I(n,m) = IA(n) \times P(n,m)$$

These Indexes will, in particular, serve for estimating the monthly indexes for year  $n+1$ .

**The indexes for detailed kinds of business are aggregated into sub-groups, groups, ... , all services sales indexes using a weighted arithmetic average of the monthly or annual indexes. The weights are proportional to the global sales of firms in each kind of business in the base-year as it is obtained through the National Accounts data for this period.**

### III-5 A brief outline of the processing

It should be noted that the kind of business code used by the Tax Administration may be incorrect and therefore has to be modified in the sampling frame.

Although the survey is made from administrative files, there are possibilities to check with the firms when dubious or erronate data are detected. However, because of lack of time (the monthly index must be available as soon as possible), these possibilities are not used for preliminary Indexes, but only for revised and final estimates. Therefore, the statistician him- or her- self must decide on what to do and on eventual correction, when automatic corrections are not included in the computer control programmes. Even if automatic corrections exist, they must be checked *a posteriori* for their relevance to the firm they apply to.

As to the monthly processing, the following features should be pointed out:

1) A file containing the data over a 24 month period (or less for newly sampled firms) is updated each month when the new data are received. This file is used, in particular, for estimating the "normal" level of sales in order to check the newly reported one.

2) Firms for which data lack since more than 3 months either during the first twelve or during the second twelve months in the above file are rejected and it is assumed that they are comparable, as to changes over time, with the firms of the same kind of business.

3) Some data are modified manually, using the good sense of the statistician, in particular when obvious (or supposed obvious) punching errors are detected.

4) A computer programme checks for either too low or too high levels of sales (when compared to the average monthly sales of the firm, and taking into account the seasonal variations in the firm kind of business).

Too low declarations are corrected along three lines:

(a) nothing is done (when it is considered not to be too low enough; but the firm is pointed out for eventual correction);

(b) if the following month is detected to be too high, it is assumed that one has to deal with an account followed by a regularization: each of the two months receives half of the total of the two declarations (after multiplication by an ad-hoc coefficient in order to take the seasonal variations into account);

(c) if the following month is "within the norm", the firm monthly sales is put to the average of the previous twelve months, after multiplication by the seasonal coefficient.

5) Structural changes and cessations of activity are carefully checked for and treated manually.

6) Firms which have a special influence on their detailed kind of business index, because of their size, of their "weight" linked to the

sampling procedure or of the atypical year-to-year or month-to-month sales change, are listed and checked individually.

### III-6 Some comparisons with external sources

The **annual sales indexes** have been checked from 1977 to 1984 against the National Accounts data concerning the sales in the firm accounts by kind of business.

As to wholesale trade, the discrepancies between the time-to-time movements were generally reasonable, and when they were large, they could be explained through the omission (because of lack of declaration) of some important firms.

The closeness of the results obtained from the two sources (VAT and National Accounts) was also noted for most of the retail firms. The only remark dealt with the retail trade in food in large shops or concentrated commerces: in this case, one should note that the CA3 index has a constant scope of firms or takes the business cessations into account, but not the creations of new firms, while National Accounts do take the three situations into accounts; the mentioned discrepancy is due to the fact that the CA3 index does not therefore take into account the creations of new independant super- and hyper- markets.

As to the other services, the discrepancies are greater, the main reasons being the following ones:

- the coverage rate is smaller;
- the creations of firms are very numerous;
- the share of exports (not VAT-taxable) is particularly important (this makes the VAT indexes more sensitive to omissions of tax-free sales);

The **monthly sales indexes** for firms in the retail trade businesses have been checked against various indexes calculated by Professional Associations. The conclusions were similar to those obtained from the comparison of CA3 and National Accounts annual indexes. No

external source was (and still is) available for the other sectors of activity.

#### IV- The monthly direct survey on firm sales

The bad CA3 coverage of small firms in some kinds of business has already been mentioned as being a reason for launching a direct survey on firms which are not liable to or have not opted for the monthly real system of VAT-taxation. Furthermore, a preliminary study on "goods and services constituting capital investment" (see IV-1) has shown that questioning the small firms was of major importance.

At last, the improvement of the sales index, as the comparison study has shown it, necessitates that creations should be taken into accounts for all kinds of business and for all sizes of firms ... but this not possible, for the time being, through the VAT files and may, as for now, only be achieved using a direct survey on newly created firms. To the "newly born" firms correspond some important material investments: the need for a specific survey is re-enforced.

It should be noted that most of deaths (cessations) of firms are automatically recorded in both sample surveys, whether directed to firms or using the VAT files. However, the major problem is to make it clear whether a non-response corresponds to an actual death.

#### IV-1 The preliminary study on material investment in CA3 forms

The calculation of annual and monthly investment indexes has not been studied until 1986 because of lack of personnel. In 1986-87, a preliminary study was carried out on the data on line "goods constituting capital investment" (*biens constituant des immobilisations*) from 1981 to 1986. The study being preliminary, many of the computer programmes used for sales indexes were also used, after small adaptation, for investment although they were not always exactly fit for the purpose.

Difficulties were encountered with the basic information and some imputations were made. For example:

- only the VAT amount is indicated and not the corresponding expenditure (assumption made: the normal VAT rate has been applied);
- investments and other expenditures (amount and/or VAT) are written altogether on the same line;
- interversions between the two lines (investment and other expenditures) are made.

The resulting annual indexes were compared with National Accounts data. The discrepancies were sometimes important but generally could be explained, principally by differences of coverage, as already indicated and by time lags since expenditures in National Accounts are registered at the date they are paid, while VAT deduction is only applicable to the total invoice, after delivery has been made.

However, it was concluded that the variable "goods constituting capital investment" in CA3 forms could be used for index calculations, provided that, in certain kinds of business, a supplementation be made by direct firm surveys and that similar surveys be carried out, in all sectors on newly created firms. Furthermore, in order to improve the results on investment variations over time, it was proposed to modify the CA3 sampling procedure so as to take into account both year  $n-1$  data on sales and on investments. This has not yet been applied, but the sample size has already been modified so as to improve the measurements of investment changes.

#### IV-2 Outlines on the monthly direct survey on firms

It should be noted that the survey has been initiated as of february 1989 (at that date, data were collected monthly back to january 1988), but at the time this paper is written, because of computer programming problems, no result has been obtained. It is hoped that the results will be available before the Ottawa meeting. It can however be pointed out that the rate of response and the quality of the data is considered to be good.



This might be due to the fact that the survey is obligatory which means that, after two recalls, firms may be penalized for refusing to answer or for providing voluntarily incorrect answers.

The firms covered by the survey are of two kinds:

- (i) firms not liable to or which did not opt for the monthly real system, and which have not been created during the current year;
- (ii) newly created firms, whatever their taxation system and their service kind of business might be.

The survey is carried out by mail. However, when an firm enters for the first time into the sample, an enquêteur is sent for presenting the survey and for collecting some permanent characteristics.

As to firms of the first type, a sample of around 5,400 of them have been drawn from the general register of firms (SIRENE), from which those firms which were liable to the monthly real taxation system were deleted. The drawing was made using a stratified procedure characterized by kind of business and brackets of persons occupied (a proxy for the sales). This sample will be re-drawn every five years.

A special file of newly created firms is established after they have been registred. A sample of 600 firms is drawn from this file, according to the kind of business and the number of persons occupied. The firms of the sample are kept within the direct survey for two years after which those liable to or which have opted for the monthly real system of taxation will be eligible, with a higher probability, for inclusion in the CA3 sample of year  $n+2$ . The other firms will be included in the sample of firms of type (i) until a new sample is drawn for the direct survey.

A new sample of newly created firms is (in fact, will be) drawn every year and, later on, if possible, every quarter.

As mentioned above, all firms in the direct survey are questioned by mail after the first visit of an enquêteur (the cost of this visit explains why the panel of type (i) firms is not renewed every year). The questionnaire is given in annex. Only three questions are asked (this does

not put an important burden on respondents): the previous month sales, if new investment goods were purchased during that period and, in case of a positive answer, for what amount.

The checks of sales, as to firms of type (1) of the permanent panel, are very similar to the ones achieved for firms in the CA3 sample. The imputations are based on the fact that within a kind of business, firms are very homogeneous: this implies that the changes for non respondents can be imputed using a simple relation with the changes for firms which have responded. As to investments, only the consistency between the indication of their existence and the declaration or not of a relevant amount can be checked; the imputation, if necessary, is made using a hot-deck procedure.

Specific controls and imputations are made for newly created firms. Those controls and imputations are presently being programmed and thus, are not completely finalized; they will not be presented here.

#### IV-3 The calculation formulae

As to the "constant sample", i.e. the firms in the panel sample which have not ceased business in year  $n-1$  or in year  $n$ , the calculation of the annual and monthly indexes for sales and investments are similar to those presented in paragraph III-4 for indexes of sales for "constant sample" in CA3 firms.

#### V- The general results using both surveys

Aggregating the CA3 and the non CA3 firms will result in the calculation of two types of monthly and annual indexes for sales (as well as for investments; actually, investments will be treated at a later date):

- indexes for the total "constant scope" i.e. for all firms, in a given kind of business or in a regroupment of kinds of business, which are in business during the complete year, both in year  $n$  and in year  $n-1$ ; these indexes provide information about the movement of sales (and of investments) for an "average permanent" firm;

- indexes for the total "variable scope" i.e. for all firms, in a given kind of business or in a regroupment of kinds of business, which are in business at least during a certain period of time in year  $n$  and/or in year  $n-1$ ; these indexes indicate the changes of the global sales of all firms in a kind of business or in a regroupment of kinds of business.

#### V-1 Indexes for the total constant scope

As to the **annual index**, it can easily be shown that the total index is the weighted average of indexes for the CA3 and non-CA3 (or "directly surveyed") firms (of course common to both years). The weights are proportional to the total annual sales (or investment) of the relevant CA3 and non CA3 firms in year  $n-1$ .

As to the **monthly indexes**, similar indicators can be obtained:

- the "monthly profiles" (see paragraph III-4) are the weighted average of "monthly profiles" for the CA3 and non-CA3 (or "directly surveyed") firms (of course common to both years). The weights are proportional to the total annual sales (or investment) of the relevant firms in year  $n$ ;
- the monthly indexes of month  $m$  of year  $n$  on the basis of month  $m$  of year  $n-1$  (see paragraph III-4) are the weighted average of corresponding indexes for the CA3 and non-CA3 (or "directly surveyed") firms (of course common to both years). The weights are proportional to the total monthly sales (or investment) of the relevant firms in month  $m$  of year  $n-1$ .

In reality, all the weights referred to in the three cases presented above (annual indexes, monthly profiles, month  $m$  of year  $n$  over month  $m$  of year  $n-1$ ) are difficult to obtain rapidly and accurately because, in particular, of the fact that sales (or investments) would have been estimated, for CA3 and non-CA3 firms, on the basis of two separate surveys, not following the same logic, and, above all, the sample design and size of which were decided in the purpose of estimating time-to-time

changes and not the absolute level of sales (or investment). As structural data, such as shares between CA3 and non-CA3 firms do not change rapidly over time, these shares can be obtained from a file including data for all firms four years before year  $n$  (or less if the basic data are available earlier than they are now).

Of course, all indexes are re-based to the base year using a chain-index procedure with annual links.

#### V-2 Annual indexes for the total "variable scope"

As to the **annual indexes**, it can be shown that a very close approximation of  $TA_n$ , the rate of variation of the total "variable scope" index (i.e. the value of the index minus 1), is made of three terms:

$$TA_n = TACC_n + TAV_n + TAW_n$$

Where:

- $TA_n$  is the rate of variation for the "variable scope";
- $TACC_n$  is the rate of variation for the "constant scope";
- $TAV_n$  is the share, in the "constant scope" sales (or investment) of year  $n-1$ , of the difference in sales (or investments) between years  $n$  and  $n-1$ , for firms newly created in year  $n-1$  going out of business in year  $n$ ;
- $TAW_n$  is the share, in the "constant scope" sales (or investment) of year  $n-1$ , of the difference of sales (or investments) between firms newly created in year  $n$  (even if they go out of business this year) and all firms which went out of business in year  $n-1$  (even if they were created that same year).

A similar formula can be used for the calculation of **monthly indexes**, for comparing months  $m$  of years  $n$  and  $n-1$ . Of course, annual data have to be replaced by monthly data.

In using the approximation in this paragraph, one has to estimate the absolute level of various sales (or investments). As said in the

previous paragraph, using together the CA3 and direct surveys provides results with a margin of error, but nothing else is available for obtaining the relevant figures, and it seems that the final aggregated results are not greatly affected by rather important variations in these in the estimated levels (well-known second order errors).

### Conclusion

It is hoped that this paper has made it clear that it is possible to use VAT files to estimate some short term indicators on the movement of sales and investment in the service field. Of course, some supplementations are necessary to improve the quality of the results in certain kinds of business. This requires some budget for a Statistical Office, but the data collection process itself does not cost much and is really not very burdensome for firms.

Improvements are still necessary within the procedure described. Many have been pointed out in the text. At least one is to be added which concerns the absorptions (mergers), and the creation of several firms from a unique one (splitters). Some research in this field has already started.



N° 30-1943  
MODELE OBLIGATOIRE  
(ARTICLE 257 du C.G.I.)

# TAXE SUR LA VALEUR AJOUTÉE ET TAXES ASSIMILÉES

DIRECTION GÉNÉRALE  
DES IMPÔTS

N° 3310 M  
CA 3

## DÉCLARATION MENSUELLE OU TRIMESTRIELLE

### CONSEILS POUR L'ÉTABLISSEMENT DE LA DÉCLARATION

2 Cette déclaration vous permet de déterminer les montants de la taxe sur la valeur ajoutée et des taxes assimilées à acquitter au titre du mois ou du trimestre. Elle est destinée à être exploitée par les services informatiques. Afin d'éviter des erreurs ou omissions susceptibles d'entraîner son irrégularité, vous êtes invité à respecter les règles suivantes :

- Utilisez uniquement l'imprimé qui vous est adressé automatiquement chaque mois (ou trimestre). Le second exemplaire est destiné à vous permettre de conserver le double de votre déclaration et ne doit pas être adressé au service des impôts. Ne l'utilisez pas pour établir la déclaration relative à une autre période, les codifications informatiques ne correspondraient plus.
- Dans l'hypothèse où vous ne disposeriez pas de l'imprimé préidentifié indiquant la période pour laquelle est établie la déclaration vous avez la possibilité, à titre exceptionnel, d'utiliser les formulaires non préidentifiés fournis par les centres des impôts. N'oubliez pas, dans ce cas, de remplir complètement les cadres d'identification en bas des pages 2 et 3 et de préciser, en haut de ces pages, la période faisant l'objet de la déclaration.
- Rayez les indications imprimées par l'ordinateur qui ne seraient plus exactes et indiquez au cadre C les modifications intervenues (changement définitif d'adresse, nouvelle activité, raison sociale modifiée, changement de régime...).
- Ne cumulez, en aucun cas, plusieurs mois (ou trimestres) sur une même déclaration. Lorsqu'aucune opération n'a été réalisée au cours d'une période, une déclaration signée et portant la mention "Néant" doit être déposée.
- Lorsque vous déposez une demande de remboursement de crédit de taxe non imputable, il est recommandé de joindre à votre dossier une photocopie de cette déclaration ainsi que, le cas échéant, de celles des deux mois précédents.

2 Pour établir la déclaration, utilisez le ou les cadres correspondant à votre situation.

	Redevables	
	de la T.V.A.	de taxes assimilées
	Cadres à remplir	
<ul style="list-style-type: none"> <li>Entreprises placées sous le régime du chiffre d'affaires réel normal (y compris celles bénéficiant du régime des acomptes provisionnels).</li> <li>Entreprises placées sous le régime simplifié d'imposition et ayant choisi de déclarer selon les modalités du régime réel normal.</li> <li>Exploitants agricoles ayant opté pour le régime des déclarations trimestrielles.</li> </ul>	A et E (éventuellement B, F et G)	F et H
<ul style="list-style-type: none"> <li>Entreprises placées sous le régime simplifié d'imposition et n'ayant pas choisi de déclarer selon les modalités du régime réel normal.</li> </ul>	D (éventuellement F)	
<ul style="list-style-type: none"> <li>Entreprises nouvelles placées sous le régime du forfait (pendant la période précédant la fixation du premier forfait).</li> </ul>	D ou A et E (éventuellement B, F et G)	

**IMPORTANT :** La présente déclaration ne doit pas comporter de centimes aussi bien au niveau du décompte de chaque taxe que de la somme à payer.

A titre de règle pratique :

- le calcul de la T.V.A. due au titre de chaque taux (ou du reversement) est arrondi au franc inférieur,
- la T.V.A. déductible est arrondie au franc supérieur.

2 Opérations imposables à un taux particulier.

Il s'agit des opérations qui bénéficiaient avant le 1<sup>er</sup> juillet 1986 de règles particulières d'assiette (réfaction, abattement...) et qui sont désormais soumises au taux réel de la taxe sur la valeur ajoutée qui résulte de l'application de ces règles particulières.

2 Entreprises placées sous le régime du chiffre d'affaires réel, réalisant à la fois des opérations en Métropole et dans les départements d'Outre Mer.

Vous pouvez déclarer l'ensemble de ces opérations sur la présente déclaration :

- les opérations réalisées dans l'ensemble des départements d'Outre-Mer, éventuellement imposables à différents taux de T.V.A. sont déclarées globalement sur la déclaration CA 3 à la ligne 42 pour la T.V.A. et aux lignes 93 à 95 pour les taxes parafiscales
- les opérations réalisées en Métropole sont déclarées dans les conditions habituelles (lignes 36 à 41).

Dans ce cas, n'omettez pas de joindre à votre envoi, une autre déclaration CA 3 surchargée de la mention D.O.M. contenant uniquement les encaissements ou livraisons réalisés dans les D.O.M. (aucun renseignement chiffré n'est à mentionner en matière de taxe déductible ou de somme à verser).

Si les indications qui vous sont données ne vous paraissent pas suffisantes pour vous permettre de régler les difficultés que vous pourriez éprouver pour remplir votre déclaration, n'hésitez pas à prendre contact avec le centre des impôts compétent.

La loi n° 73-17 du 6 janvier 1978 relative à l'informatique, aux fichiers et aux libertés s'applique aux réponses faites à ce formulaire par les entreprises individuelles. Elle leur garantit un droit d'accès et de rectification pour les données les concernant auprès du centre des impôts dont elles relèvent.

- LA PRÉSENTE DÉCLARATION DOIT ÊTRE DÉPOSÉE EN DROITE DE LA PÉRIODE (mois ou trimestre de réalisation des opérations)
- UTILISER UNIQUEMENT LES CADRES CORRESPONDANT A VOTRE RÉGIME

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ENTREPRISES DEVANT REMPLIR LE CADRE D (Voir page 1)

Les mentions obligatoires sont signalées par des pointillés rouges.

A MONTANT DES OPÉRATIONS RÉALISÉES		F	
Inscrire aux lignes correspondantes le montant, hors taxe, des opérations réalisées au cours de la période : lorsqu'elles ne sont que partiellement imposables, inscrire la partie imposable dans la colonne de gauche et la partie non imposable ligne 12 de la colonne de droite.			
● OPÉRATIONS IMPOSABLES A LA T.V.A.		● OPÉRATIONS NON IMPOSABLES A LA T.V.A.	
01	Ventes, fourniture de logement, prestations de services, travaux immobiliers, etc.	10	Exportations
02		11	Autres opérations relevant du commerce extérieur, ventes en suspension de taxe
03	Ventes d'immeubles	12	Autres opérations non imposables
04		13	TOTAL des opérations non imposables (à reporter ligne 35 du cadre E)
05	TOTAL lignes 01 à 04		
06	Livraisons à soi-même	14	
07	Achats à des non-assujettis	15	CHIFFRE D'AFFAIRES TOTAL
08		16	
09	TOTAL des opérations imposables (lignes 05 à 08) (à ventiler par taux au cadre E et/ou au cadre G)		

S'IL Y A LIEU SEULEMENT, REMPLIR ÉGALEMENT LE CADRE B CI-DESSOUS

B AUTRES DÉDUCTIONS - UTILISATION DES CRÉDITS DE T.V.A.		%	
Indiquer le pourcentage de déduction applicable pour la période			
Déterminer éventuellement les autres déductions auxquelles peut prétendre l'entreprise :			
20	● Report du crédit apparaissant à la ligne 28 du cadre B de la précédente déclaration		
21	● T.V.A. déductible sur investissements dont la mention a été omise sur les déclarations précédentes		
22	● T.V.A. déductible sur autres biens et services dont la mention a été omise sur les déclarations précédentes		
23	● Complément de T.V.A. à déduire		
24	● Transfert de droits à déduction reçus		
25	TOTAL DE LA T.V.A. déductible supplémentaire (à reporter ligne 47 du cadre E)		
Préciser l'utilisation du crédit de T.V.A. déductible non imputée sur la présente déclaration :			
26	● Report du crédit apparaissant ligne 50 du cadre E		
27	● Remoursement demandé (sur imprimé 3519 à joindre à la présente déclaration)		
28	● Crédit à reporter ligne 20 du cadre B de la prochaine déclaration (ligne 26 - ligne 27)		
29	● T.V.A. déductible transférée à d'autres entreprises et non comprise dans les déductions au cadre E		

C CADRE RÉSERVÉ A LA CORRESPONDANCE	
Rayer les indications imprimées par ordinateur qui ne correspondent plus à la situation exacte de l'entreprise (raison sociale, activité, adresse, régime d'imposition...) et signaler ci-contre le changement intervenu.	
<div style="border: 1px solid black; padding: 5px; width: 150px; height: 100px; margin: 10px auto;"> <p>La présente déclaration doit obligatoirement être renvoyée au service désigné ci-contre, au plus tard le</p> </div>	
Date de Réception	
Recette	Numéro de dossier
Clé	Période
C.D.I.	Insp.
Régime	

ADRESSE DE L'ÉTABLISSEMENT  
(Quand celle-ci est différente de l'adresse du destinataire)

N° 3310 M CA 3 - IN 647875 C 77 (40) Mai 1996

NE PAS UTILISER CETTE DÉCLARATION POUR UNE AUTRE PÉRIODE.  
NE REMPLIR QUE LES CADRES CORRESPONDANT AU RÉGIME INDiqué.

D RÉGIME SIMPLIFIÉ		CALCUL DU VERSEMENT PROVISIONNEL		SOMME A VERSER	
30	● Appliquer au chiffre d'affaires global le coefficient de l'entorse	F	×	(a)	F
31	● Déduire : - la T.V.A. déductible relative aux investissements	F		TOTAL A DEDUIRE (b)	F
32	éventuellement - le crédit (c) dérogé sur la déclaration précédente	F			F
33	SOMME A VERSER ((a) - (b))				0027 (c)
34	ou CREDIT A REPORTER sur la prochaine déclaration ((b) - (c))			(d)	F

  

E RÉGIME DU REBOUTRENT SIMPLIFIÉ (tolérance réglementaire)		DÉCOMPTÉ DE LA T.V.A. DUE	
35	● OPÉRATIONS NON IMPOSABLES (valeur globale)	0030	F
36	● OPÉRATIONS IMPOSABLES (ventilées par taux) :		
		CHIFFRE HORS TAXE	TAXE DUE
37	● Taux super-réduit 5,5 %	0100	F
38	● Taux réduit 7 %	0110	F
39	● Taux intermédiaire et normal 18,6 %	0200	F
40	● Taux majoré 33 1/3 %	0400	F
41	● Anciens taux	0800	F
42	● Opérations imposables à un taux particulier : (Report de la ligne 72 du cadre G1)	0950	F
43	● Opérations réalisées dans les D.O.M.	0920	F
44	● T.V.A. antérieurement déduite à reverse		0600
45	TOTAL (lignes 36 à 43)		
46	● BIENS ET SERVICES OUVRANT DROIT A DEDUCTION		
		VALEUR HORS TAXE	TAXE DEDUCTIBLE
47	● Biens constituant des immobilisations	0703	F
48	● Autres biens et services	0702	F
49	● Report ou complément de T.V.A. déductible (dérogé ligne 25 du cadre B)		0701
50	TOTAL (ligne 45 à 47)		
51	T.V.A. NETTE DUE (taxe due, ligne 44 - taxe déductible, ligne 48)		F
52	ou CREDIT DE T.V.A. (taxe déductible - taxe due)		0705

  

F AUTRES TAXES - RÉGULARISATIONS DIVERSES		
53	● Reporter le montant des autres taxes dues calculé au verso cadre H	
54	● Congés payés : versement de l'acompte / Régime des acomptes : montant positif g dérogé sur le bulletin n° 3515	0210
55	● Congés payés : imputation de l'acompte / Régime des acomptes : montant négatif h dérogé sur le bulletin n° 3515	0220
56	● Sommes à imputer	9989
57	● Sommes à ajouter	9999

  

MODE DE PAIEMENT, DATE, SIGNATURE		TOTAL A PAYER	
<div style="display: flex; justify-content: space-between;"> <div> <p>3 NUMÉRIQUE</p> <p>4 CHÈQUE BANCAIRE</p> <p>5 MANDAT V.P. POSTAL</p> <p>6 OBLIGATION CAUTIONNÉE</p> </div> <div> <p>N° d'identification de l'établissement</p> <p>0001</p> </div> <div> <p>Code activité</p> </div> </div>	<p>Incidence de l'entorse</p> <p>Taux % 3000</p> <p>Incidence de l'entorse</p> <p>Taux % 5000</p> <p>SOMME</p> <p>dont O.C.</p> <p>Date</p> <p>N° R</p> <p>N° R. 30</p> <p>N° d'opération Mieux</p>	<p>Marquer d'une croix la case correspondant au mode de paiement utilisé.</p> <p>Indiquer le numéro d'identification de l'établissement déclarant.</p> <p>Dater et signer</p> <p>Signature</p> <p>Recevoir à l'Administration</p>	<p>Recevoir à l'Administration</p>

  

RÉCAPITULATIF		Date de réception	
Recevoir	N° de dossier	Clé	Période
		C.D.I.	Insp.
		Régime	



# G RÉGIME DU REEL OU REEL SIMPLIFIÉ (tolérance réglementaire) DÉCOMPTÉ DE LA T.V.A. DUE A UN TAUX PARTICULIER

● OPERATIONS IMPOSABLES en France continentale à un taux particulier de :		BASE HORS TAXE	TAXE DUE
		F	F
60	● Taux 2,10 %	1010	
61	● Taux 4 %	1020	
62	● Taux 13 %	1030	
63	Total A		
● OPERATIONS IMPOSABLES en Corse à un taux particulier de :			
64	● Taux 0,90 %	1040	
65	● Taux 2,10 %	1050	
66	● Taux 3,15 %	1060	
67	● Taux 5,5 %	1070	
68	● Taux 8 %	1080	
69	● Taux 13 %	1090	
70	● Taux 25 %	1100	
71	Total B		
72	Total A + B (à reporter ligne 41 du cadre E)		

## H DÉCOMPTÉ DES AUTRES TAXES

- Si vous êtes placé sous le régime simplifié, appliquer à la base imposable le coefficient particulier calculé sur votre déclaration annuelle.
- Pour les taxes nécessitant un décompte particulier, joindre un relevé annexe.

Nature des taxes		Base d'imposition	Taux ou coefficient	Impôt brut	Impôt déductible	Net à payer	Credit à reporter
1		2	3	4	5	6	7
		F		F	F	F	F
79							
80	● Taxe Fonds forestier national	3100					
81	● Taxe produits forestiers B.A.P.S.A.	3210					
82							
83	● Taxe de l'habillement et de la maille	3410					
84	● Taxe du secteur textile	4000					
85	● Taxe sur l'horlogerie	3910					
86	● Redevance sur ouvrages de librairie édités	3510					
87	● Redevance sur l'emploi de la reprographie	3520					
88	● Taxe sur les betteraves	3220					
89	● Taxe sur l'ameublement	4100					
90	● Taxe sur les huiles			report de l'impôt décompté en annexe	3540		
91	● Taxe sur la publicité radiodiffusée et télévisée			report de l'impôt décompté en annexe	4200		
92	● Surtaxe sur les eaux minérales			report de l'impôt décompté en annexe			
93		F		F	F		
94							
95							
Total des lignes 79 à 95 (col. 6)							F

TOTAL DES AUTRES TAXES (à reporter à la ligne 51 du cadre F)



Division "COMMERCE"  
18, boulevard Adolphe Pinard  
75014 PARIS  
Téléphone : (1) 45 40 12 12

## ENQUÊTE MENSUELLE DANS LE COMMERCE ET LES SERVICES

Enquête statistique obligatoire

Visa ministériel n°

valable pour l'année

Siren :

Votre correspondant(e) :

Tél. : (1) 45 40

Madame, Monsieur,

Comme vous le savez, l'INSEE s'efforce de suivre mensuellement l'activité du commerce et des services. Aussi, je vous serais reconnaissant de me faire parvenir le présent questionnaire, rempli par vos soins, dans les meilleurs délais.

Veuillez agréer, Madame, Monsieur, l'expression de ma considération distinguée.

*Le Chef du département entreprises.*

A. MOTHE

### QUESTIONNAIRE

Quel est le montant de votre chiffre d'affaires toutes taxes  
comprises de ?

francs

Avez-vous effectué, au cours de ce mois, des investissements dans votre entreprise en achat de machines neuves, véhicules neufs, matériel neuf, bâtiments neufs ou en travaux importants ... ?

1 ☐ OUI

2 ☐ NON

Si oui, indiquer leur montant toutes taxes comprises  
(ne pas tenir compte des achats d'occasion)

francs

### CORRESPONDANCE

### POUR VOTRE INFORMATION

Variation du chiffre d'affaires dans votre secteur en

par rapport à

:

%

Indiquez ici vos remarques ou commentaires si vous le jugez nécessaire :

Cette enquête statistique est obligatoire, conformément à la loi n° 51-711 du 7 juin 1951 modifiée sur l'obligation, la coordination et le secret en matière statistique. Les renseignements transmis ne sauraient en aucun cas être utilisés à des fins de contrôle fiscal ou de répression économique; l'article 22 du décret n° 84-628 du 17 juillet 1984 précise les conditions dans lesquelles les données peuvent éventuellement être communiquées. L'article 7 de la loi précitée stipule d'autre part que tout défaut de réponse ou une réponse sciemment inexacte peut entraîner l'application d'une amende administrative. La loi n° 78-17 du 6 janvier 1978, relative à l'informatique, aux fichiers et aux libertés, s'applique aux réponses faites à la présente enquête par les entreprises individuelles. Elle leur garantit un droit d'accès et de rectification pour les données les concernant. Ce droit peut être exercé auprès de l'INSEE.