

**PROGRAMME FOR RESEARCH AND ACTIONS ON
THE DEVELOPMENT OF THE LABOUR MARKET**

**NEW FORMS AND NEW AREAS
OF EMPLOYMENT GROWTH**

FINAL REPORT FOR FRANCE



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**Programme for Research and Actions on the Development
of the Labour Market**

NEW FORMS AND NEW AREAS OF EMPLOYMENT GROWTH

Final Report for France

**By
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Document

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Chapter 1

SUMMARY

The purpose of this study is to present and analyse the main transformations of the employment structure and the work pattern that have taken place in France during the last decades and particularly since the mid-seventies crisis.

In chapter 2, after a brief look at the major trends concerning global employment and unemployment, we deal with the structural transformations of the different economic activities. The remodelling of employment is then analysed through the consideration of size of firms. Afterwards, we present the future prospects of evolution of employment in the medium term.

Since the post war period the structure of occupation has undergone some important changes : decrease of the number of farmers, progress of salarization and enlargement of some social categories. These tendencies are presented at a broad level.

Meanwhile, whereas wage earning was becoming the dominant form of employment, some differentiations took place between workers : emergence of precarious forms of jobs or of intermediary status between employment and inactivity.

In chapter 3, we enter upon the structure and job content evolutions. Their analysis is particularly intricate because it must be developed at two main levels. From a general point of view, we can make come out heavy trends, concerning the main occupational categories which structure total employment. This approach, although necessary does not inform enough about the factors of the evolution that has occurred until now. It must be completed by a more detailed examination of the job content evolution for some categories at least (workers in manufacturing industries, jobs in service activities).

In chapter 4, we concentrate upon changes in contractual arrangements. The emergence of particular forms of employment refers to such a complex set of factors that it cannot be explained by a unique model. The main causes and features of the development of new forms of employment are then described : temporary work, short term labour contracts, part time employment and so on.

In chapter 5, the transformation of the industrial structure is analyzed, with special emphasis on the service sector. The development of service activities does not only result of a shift from functions, previously assured by manufacturing activities, but also from an autonomous development. However, the total increase of employment in services reflect some very heterogeneous forms, if it is considered at a detailed level. Particularly, it does not seem possible to consider that the fast creation of jobs in services could be explained by a lower labour productivity.

In the future, if there is a trend to tertiarization of activities - improvement of maintenance, administrative or management functions - it does not imply that service industries will be able to balance the job losses from primary and secondary sectors. As a matter of fact, job creations may be restricted by the budgetary constraints in the non-marketed sectors, or by the improvement of labour productivity, resulting from technological innovations (office automation for instance).

In the recent period, different measures have been taken to reduce the gap between employment and active population. In the beginning, they were supposed to be solely conjunctural but they tended to become permanent (early retirements, public programmes for the young people).

They have induced the development of intermediary categories, between employment and unemployment or inactivity.

It seems hardly conceivable that they could represent the nucleus of employment in the post industrial society.

In the middle run, even though the present forecasts show an improvement for the growth of output, it does not seem likely to reduce significantly the unemployment level. The main reasons for this are the fast increase of labour productivity which are expected, as well as the remaining gap between the available and requested skills.

These considerations lead to many implications for government policy, and for firm strategies concerning manpower. A new approach of the management of professional mobility between functions, firms or industries, seems to play a key-role in that matter. This point is developed in chapter 6 with the methodological issues that have arisen from the study. They deal mainly with the possibility of harmonizing national data concerning the occupational and status data.

Chapter 2

RECENT DEVELOPMENTS IN WORK PATTERNS

The purpose of this chapter is to present the main tendencies affecting the evolution of employment in France during the last decade.

After a brief look at the major trends concerning global employment and unemployment (21), we deal with the structural transformations of the different economic activities (22). The remodeling of employment is then analysed through the consideration of the size of firms (23). Afterwards, we present the future prospects of evolution of employment in the medium term (24).

Since the post war period the structure of occupation has undergone some important changes: decrease of the number of farmers, progress of salarization and enlargement of some social categories. These tendencies are presented at a broad level (24).

Meanwhile, whereas the wage earning was becoming the dominant form of employment, some differentiations took place between workers : emergence of precarious forms of jobs or of intermediary status between employment and inactivity (25).

2.1. EVOLUTION OF LABOUR FORCE AND GLOBAL EMPLOYMENT

As many other advanced countries, France has experienced some major changes in the evolution of growth and employment during the last decades. The growth of the active population remained strong between 1975 and 1982, the labour force supply approaching 250 000 workers per year or a total of 1,7 million people. Since this progression was not accompanied by an equivalent increase in employment, the number of unemployed people doubled.

The reasons for the insufficient growth of employment are the following:

- the rate of growth of the output has been divided by two (see Table 1 below);

- even though it was reduced, the increase of the hourly labour productivity remained high;

- consequently, the total activity has taken a decrease trend with two different effects: until 1979, the reduction of working time has allowed an increase of the employment level whereas, after 1980, the further reduction of the growth of output, while the productivity kept increasing, induced a reduction of global employment.

Between 1974 and 1979, global employment has risen from 21.2 millions people to 21.6 millions but afterwards, it has fallen to 21.1 millions in 1984.

TABLE 2.1. GROWTH AND EMPLOYMENT IN NON-AGRICULTURAL NON-FINANCIAL ACTIVITIES - 1979-1984

	(%)		
	1970-1973	1974-1979	1980-1984
Added value (real terms)	+ 6.2	+ 3.3	+ 1.3
Hourly labour productivity	+ 5.4	+ 3.7	+ 2.9
Global activity	+ 0.8	- 0.5	- 1.6
Hours of work (weekly)	- 1.0	- 0.9	- 0.9
Employment	+ 1.8	+ 0.5	- 0.7

Source: INSEE, Rapport sur les Comptes de la Nation de l'année 1984, Tome 1.

For a while it was possible to consider that this evolution of employment was merely conjonctural, reflecting the adaptation of the economy to the changes in international context and the slowdown of growth. However, it is obvious now that we are facing some structural changes, in the evolution of the economic activities, as well as in the social status or in the occupational structure.

2.2 EVOLUTION OF EMPLOYMENT IN THE MAIN ECONOMIC SECTORS

The decrease of labour force employed in agricultural activities is a first major trend of the last decades. In 1954 self-employment in agriculture reached 3.9 millions of persons and 26.5% of the labour force, whereas in 1984 it averaged 1.7 millions and 7.8% of the labour force.

From 1969 to 1974, employment in manufacturing industries has risen at an average rate of 1.2% per year but since, it has been decreasing: from 5.7 millions in 1984 to 5.2 millions in 1979, reflecting the deep restructuration of the sector. However, we shall see below that this general tendency covers some various evolutions at a more detailed level.

Until 1979, the decrease of employment in agriculture, manufacturing and construction was balanced by an increase in private and public service activities; but since that year, the rate of growth of employment in these sectors has been slowing down: it was about 2% per year from 1974 to 1979 and fell to 1% between 1979 and 1984. This evolution may be seen as one factor of the decrease of total employment.

With the remodeling of the economic structure, some new activities appear and develop. The activities related to communication, which include audio-visual, press, printing and publishing, telecommunications, services related to data-processing registered a growth

-rate of employment of 2.6% between 1976 and 1984. Nevertheless, the total number of persons employed in these sectors are fairly low if referred to the active population: 5.7% in 1976 (1.2 million) and 7% in 1984 (1.5 million). Furthermore, in the next years, employment should not grow much because of opposite evolution between different activities: decrease in printing and publishing, slow down in post and telecommunication, increase in services related to computers for instance.

Beside communications, some other new activities may be considered: new energy, electronics, space and new materials. The people employed in these sectors were estimated at 584000 in 1984 (less than 3% of the total employment). Even though employment has increased in these sectors during the last five years, it is not possible to extend directly this tendency to the future because of the uncertainty affecting most of these activities and of their fast growth of the labour productivity.

Finally, if these new activities have some positive indirect impacts on the economy as a whole, their impact on employment should remain rather limited at least in the short run.

- Closely linked to the evolution of employment in service activities, the increase in the number of women workers has been very strong. In 1968, the female salaried workers were 5.3 millions and accounted for 34.4% of the salaried work force whereas in 1980, they had reached 7 millions, and 39.4 % of the salaried work force. At the present time, in service activities, one job out of two is taken by a woman.

- For a long time, self-employment has been decreasing, both in absolute and relative terms, following the sharp fall of agricultural employment. However, during the last years, this tendency seems to have reached its limits: in 1974 the share of non farm self-employed workers

among total employment was 9.6%. It fell to 9.4% in 1979 and stabilized at 9.3% in 1984. In some activities such as construction, this ratio has even risen from 18.3% in 1979 to 21.2% in 1984. From a general point of view it seems that since 1982, the share of wage earners in the active population has reached a maximum.

2.3. TRENDS IN EMPLOYMENT ACCORDING TO SIZE OF FIRMS

Looking at the evolution of employment in various size of firms on the long run, it appears that the small firms have greatly contributed to the whole progression of employment. For instance, between 1973 and 1982, the number of salaried workers has increased by 22 000 persons but in small firms (less than 20 employees), it has increased by 672000 (see Table 2.2.). Between 1980 and 1984, whereas the total of salaried workers decreased by 540 000, employment in small firms kept increasing by 177 000. This evolution reflects the decrease of employment in big and medium firms.

TABLE 2.2. EVOLUTION OF SALARIED EMPLOYMENT ACCORDING TO SIZE OF PLANTS

Unit: 1 thousand	1968	1973	1980	1982	1984	Average rate of growth (%)		
						68-80	80-84	82-84
Small size plants (less than 19)	3 294	3 460	4 015	4 132	4 192	1.7	1.1	0.7
Medium size plants (less than 200)	4 274	4 986	5 136	5 109	4 941	1.5	- 1.0	- 1.7
Big size plants (more than 200)	3 848	4 711	4 154	3 938	3 632	0.6	- 3.3	- 4.0
TOTAL	11 416	13 157	13 305	13 179	12 765	1.3	- 1.0	- 1.6

*/ Ensemble des activités industrielles et commerciales (Champ de l'UNEDIC).
31 décembre de l'année. Source: UNEDIC.

As a consequence, the share of small firms in private sector salaried employment rose from 26.9% in 1973 to 32.8% in 1984 while the share of big firms fell from 35.8% to 28.4%. This phenomenon has no simple explanation. It may be considered that the small firms are more adaptable to the changes in the economic environment than the big ones. It reflects also the industrial restructuration and the development of some service activities. Meanwhile the evolution of employment does not follow the same ways, depending on the size of firms. For big firms, the decrease of employment is the result of reductions in the labour force : dismissals, retirements, etc... In medium firms, 50% of job losses are due to bankruptcies. In that sense, the improvement of employment in small size firms may be double-edged: it may be a factor of a higher sensitivity of the reaction of employment to economic and market changes. As an example, it may be recalled that in 1983, 80 % of dismissals were made by small firms (less than 200 salaried workers) whereas their share of salaried employment is only 70 %.

2.4. FUTURE PROSPECTS OF THE EVOLUTION OF EMPLOYMENT

As any forecast, the evolution of employment in the medium run is dependent on the macroeconomic model which is used and of the various exogeneous hypothesis which are incorporated in the forecast.

The following tendencies are the result of the INSEE macroeconomic models, DMS and PROPAGE, working with hypothesis provided by BIPE. They are based on the drop in oil prices and in the exchange rate in Europe with the fall in the price of oil and in the exchange rate in the dollar. France would moderately take advantage of this change of the international economic context, the financial situation of firms still needing to be improved.

Consequently, the average rate of growth of GDP would be around 3% between 1987 and 1991 (see Table 3 below). Even though this rate is higher than what was obtained during the last six years, it is not high enough to improve significantly the situation of employment. Indeed, the recovery has a strong impact on labour productivity; its rate of increase is 3.4% for the non agricultural, non financial marketed activities. With the working time remaining almost unchanged, French economy would lose about 52 000 jobs per year (0.1% of employment).

TABLE 2.3. GROWTH, PRODUCTIVITY AND EMPLOYMENT

	1985/1979	1987/1985	1991/1987
GDP	1.1	2.3	3.2
Imports	- 1.0	- 1.9	- 1.9
Public consumption	0.2	0.1	0.1
Private consumption	1.3	1.9	2.2
Private investment	0.0	0.6	0.9
Public investment	0.0	0.0	0.0
Households investment	- 0.2	0.1	0.2
Exports	0.9	1.2	1.6
Added value	1.0	2.2	3.2
Hourly labor productivity	2.6	2.8	3.4
Activity	- 1.6	- 0.6	- 0.2
Hours of work (weekly)	- 0.8	- 0.3	- 0.3
Employment	- 0.7	- 0.3	- 0.1
Labor productivity per person	1.7	2.5	3.1

Source: PGD (BIPE/INSEE Forecasts).

This forecast may seem rather pessimistic as far as employment is concerned but it should be noted that it relies strongly on the assumption concerning productivity, which extends its past tendency evolution. If labour productivity growth averaged only 2.5% instead of 3.2%, in 1991 the level of employment would be higher by 450 000 and the rate of unemployment would fall to 12.3% instead of 13.3%.

This shows that the evolution of employment does not only depend on the rhythm of output growth. Meanwhile, the rhythm of the productivity increase is very difficult to forecast correctly because of the structural transformation of the economy, with the increasing share of services among other activities.

Beside this, as we have pointed out previously, the forecast is an extension of the past tendencies, and the macroeconomic model is not very appropriate to describe correctly the qualitative transformation of employment such as changes in work organization, increase of part timers or of temporary workers which may affect the evolution of productivity and of employment.

Also, the information provided by the prospect of employment in various activities is useful but sometimes insufficient to get an accurate view of the evolution of occupation because the relation between activity and occupation is not as tight as it used to be: a lot of workers are employed in service activities, manufacturing industries hire more white collars than before and so on. Consequently, most of the available forecasts concerning occupations are only qualitative. (See chap. III).

2.5. MAIN TENDANCIES CONCERNING OCCUPATIONS

At a very broad level, the evolution of occupation may be characterized by the following trends:

- a decline of farmers and salaried workers in agriculture: their share of global employment was 14.2% in 1968 and fell to 8% in 1981;

- a decline of non agricultural self employment ~~until 1982~~.

- the share of workers remained constant between 1968 and 1975 around 36.6% of the active population but it has dropped afterwards down to 34.8% in 1981, partly because of the industrial restructuring.

- other socio professional categories registered an increase, both in absolute and relative terms : employees first who account now for 26.5% of the active population but also intermediary occupation (primary school teachers, technicians, social service employees) (16.8%) and management and higher intellectual professions (8%).

TABLE 2.4. THE SOCIO-PROFESSIONAL CATEGORIES IN 1982

Unit: 1 000		% of women among employed labor force
. Farmers	1 475	37
. Craftsmen, shopkeepers, selfemployed	1 835	33
. Management and higher intellectual professions	1 895	25
. Intermediary occupations	3 971	40
. Employees	6 247	72
. Workers	7 749	19
. Unemployed without any previous job	353	-
. Labor force	23 525	39

Source: 1982 population census. Note: the figures include unemployed persons belonging to each socio professional category.

These professions have registered the highest rhythm of growth both in relative and absolute terms.

We may also notice that the share of women increases in each salaried category with the exception of workers, but this general evolution covers some various tendencies when looking at a more detailed level. For instance, the increase of women in management and higher intellectual professions is the result of an increase in teachers category but not in engineers. In the same way, if considering intermediary occupations, the growth of women takes place mainly in health and social services and explain in a large extent the very rapid growth of this category: +7.7% per year between 1975 and 1981.

There are a lot of factors determining the evolution of the different professions and occupations and it is not easy to identify the most important ones.

Concerning workers, for instance, in the sixties, there was a general tendency to consider that one of the major effects of industrialization was the de-qualification of labour and the decrease of skill work. The evolution which took place between 1975 and 1982 is more complex (see Table 5).

TABLE 2.5. EVOLUTION OF THE NUMBER OF WORKERS BY INDUSTRY 1975-1982

U= 1 thousand	Workers	Skilled workers	Unskilled workers
Manufacturing industries	- 660	- 30	- 630
Construction	- 200	- 4	- 196
Services	+ 143	+ 82	+ 61
TOTAL	- 717	+ 48	- 765

Source: INSEE Population Census 1975-1982.

First, according to the results of the last two census, it appears that if the category of workers as a whole is decreasing, the fall is much bigger for unskilled workers, whereas the effective of skilled workers is increasing. Inside this tendency, we find also that there is a shift between activities: while manufacturing industries and construction loose jobs, services create some, not enough of course to ensure a balance, but 57% of the jobs created in service activities are skilled ones. In fact, one may consider that among manufacturing, the decrease of unskilled workers reflects both effects of technological changes and the level of demand, including the impact of foreign competition on some less advanced activities such as textile, for instance.

Generally speaking, it is possible to consider that jobs with a low skill will be weaker and more precarious in the future, particularly in the most traditional industries.

Meanwhile, most of the present studies show that new technologies and new activities will generate needs for higher skills, but even in these field the evolution may be ambiguous. If we consider for instance categories of persons involved in computer activities a recent survey of the National Agency for Employment (ANPE) estimates the active population involved in their field averaged 269 000 persons in September 1985. At the same time, unemployed workers looking for a job related with computer and registered at the ANPE were 22 479 which gives a rate of unemployment of 8% to be compared with the average rate of 10%. 35% of these unemployed were computer programmers, 42% were data entry operators, 12% were computer operators. The main reasons for this situation are related to the course of the technological evolution in this very field. In the beginning, data processing was rather centralized, using big computers and needing an important staff for the data entry process. Since there was no specific training delivered by the educative system, most of the skills were produced through internal vocational training.

Therefore, with the decentralization of computers, the improvement of software generators, and the computer languages becoming more simple, the need for these skills decreased, whilst some competition took place with the youth. Nowadays, it seems that skill cannot be limited any longer to the data processing itself but should include a wider view, including the various functions of the firm such as administrative, management, marketing and so on. Through this particular example, we find that even though new activities provide some opportunities for the emergence of new occupations, they may induce some very fast changes in the required skills and eventually generate a de-qualification tendency.

Similarly, it may be said that, among traditional or even declining activities, there may be a need for higher skills, being provided either by schools, universities or by vocational training. In automobile industry for instance, unskilled workers account for two third of the workers and 40% of total employment in this sector. In the next future, it is estimated that whereas such categories as skilled workers, employees, executives and managers should remain stable, the unskilled effective should decrease dramatically, in order to improve labor productivity and competitiveness.

Finally, it is not possible to refer directly the rise of some occupation or the improvement of skills to the development of new activities.

2.6. NEW FORMS OF EMPLOYMENT AND EVOLUTION OF CONTRACTUAL ARRANGEMENTS

Since the mid sixties, there has been in France, as well as in other countries, a tendency to underline the emergence of new forms of labour contracts such as temporary work or short term labour contracts. These phenomena have been considered as some symptoms of the increasing precariousness.

In fact, defining the new forms of jobs and analyzing their social and economic functions raises many questions. Before considering them in a more detailed way, we would like to point out some of the major ones.

*/ Are "new forms of jobs"...new ?

If we define as "new form of jobs" any kind of employment which differs from the classical full time regular labour contract, we find immediately that non typical jobs have always existed: home work, multiple jobs holding in agriculture, seasonal work in agro industry, self employment and so on. If there is an innovation, it has to be found in the fact that whereas in the past the differences were associated with differences in activities, skills of jobs content, during the last decade, some differentiations began to appear among wages earners even though they belonged to the same activity and sometimes had the same job. Thus, some forms of contractual arrangements may be considered as new or non-typical, because they take place in some activities in which they differ obviously from the dominating pattern of labour contract: temporary work in some manufacturing industries such as intermediary goods, non permanent workers in the public sector in the beginning of seventies and so on.

*/ New forms of jobs and status, internal labor market policies and precariousness.

Some non typical forms of jobs are not only to be found in connection with the external labor market regulation. Internal labor market policies of firms may also induce such forms as shift work, special working schedules or part time in order to adjust their activity to the variation of demand.

These non typical forms of jobs may be associated to a rather stable labour contract. On the other hand, the use of temporary work or short term labour contract means some frequent passages through the external labour market. Thus some intermediary situations may appear, between

regular jobs, between employment and unemployment or between inactivity and employment (see the case of public training schemes for youth for instance).

*/ The extent of new forms of jobs.

As mentioned before, there is no obvious definition of non typical forms of jobs. If we limitate ourselves to temporary work*and short term labour contracts, they have registered a sharp growth since the mid sixties in absolute terms but represent a fairly small share of the active population (see Table 6 below).

TABLE 2.6. TEMPORARY WORKERS AND SHORT TERM LABOUR CONTRACTS 1982-1985

	1982	1985
- Salaried workers on temporary work U= 1 thousand	124.6	112.514
- As % of private sector salaried workers	0.9	0.8
- Salaried workers on short term labour contracts U= 1 thousand	298.4	314.9
- As % of private sector salaried workers	2.2	2.4
- Total salaried workers of private sector U= 1 thousand	13 335.6	12 883.9

Source: Enquête Emploi - INSEE.

Nevertheless, this small share must not induce to underestimate the role and functions of these forms of jobs. They are first very concentrated on the youth (44% of temporary workers are under 24 years old).

* This includes part-time work and employment agency work.

Secondly, they play an important role in the flows of the labour market: among all enterings at the unemployment agency, losses of jobs following temporary or short term labour contracts accounted for 31 % in 1976 and reached 55 % in 1983. As we shall see later on, these forms of contracts are becoming the usual way to get a first professional experience for the youth or women willing to work.

Meanwhile, part time has been increasing slowly during the seventies: 977 thousand in 1970 or 5% of the labor force, 6.2% in 1981. During the last five years, it has registered a sharp increase: in 1985 they were about 2.3 millions and 10.5% of labour force, most of them being women (85%).

Last but not least, various public schemes for the youth have been implemented since the mid-seventies, added to the system of apprenticeship. The last measure has been the Public Utility Work Programme (Travaux d'Utilité Collective) concerning the unemployed youth from the age of 16 to 25; At the end of october 1985 about 170 000 persons were employed on such a job.

Finally, we may say that eventhough the regular full time permanent jobs has never been an absolute pattern, the last two decades have been characterized by a simultaneous trend of restructuration of occupation and emergence of intermediary status which tends to change deeply the global framework of employment.

Chapter 3

JOB CONTENT

INTRODUCTION

In this chapter, we will enter upon the evolutions having touched the structure and the content of jobs. They largely result from the disruptions known by the french productive and social system with the economic crisis and the technological shifts.

Their analysis is particularly intricate because it must be seen at two main levels. On either a macroeconomic or a macro-social level, we can discover heavy trends, concerning the main occupational categories which structure the total employment : decrease of the number of farmers, rise of "intermediary professions" or of executives. This approach, although necessary, does not give enough information about the factors of the evolution which occurred until now. So it must be completed by a more detailed examination of the job content evolution, for some categories at least.

This chapter gives indications of deep trends for the main occupational categories and throws a particular light on some of them.

3.1. THE EMPLOYMENT STRUCTURE DISTORTION - ACTIVITIES AND PROFESSIONS

The two following tables illustrate the aggregate evolution of the employment according to professions and activities.

With this movement into the labour force which will include more and more wage-earners, appears an important rise of service activities, a small decrease of the proportion of production jobs, finally a strong decline of agricultural jobs.

Table 3.1. Evolution of the employment by economic sectors

	1954 % labor force	1982 % labor force	A.A.G.R.* 1954/1982
Agriculture	36,7	7,4	- 4
Industry	36,6	34,9	+ 0,3
Service	26,7	57,7	+ 2,1

* Annual average growth rate

Source : Population census

Table 3.2. Employment distortion by activities and by professions
1954-1982

Activities Professions	1954	1982*	A.A.G.R.	In 1982*		
				Agricult.	Industry	Service
Manufacture employees production	39,4	34,8	0	3,7	65,5	30,7
Service employees .	26,4	48,8	+ 2,7		17,4	83,6
Non wage eaners	34,2	16,4	- 2,1	37,8	22,0	40,2
	100	100				

Source : census

If we cross the data about employment by professions and by activities, the following characteristics come out :

- The service and production professions become more and more tertiary jobs (we should use the concept of "tertiarization") ;

- The wage-earning professions of the service industry represent the main part of jobs in 1982 : 48.8 % ;

- The services activities become industrialized service;we observe the raise of production professions or the recession of the part of non-wage-earners ;

Table 3.3.

DISTORTIONS OF JOB STRUCTURE FROM 1954 TO 1982

Professions		Non wage earners	Service employees	Production employees
		34.2	26.4	39.4
Activities		(- 2.1)	(+ 2.7)	(+ 0.0)
		16.4	48.8	34.8
<p>Services</p> <p>36.7 + 2.1 57.7</p> <p>↗↗</p>		<p>6.6</p> <p>↘ (-0.7)</p>	<p>40.3</p> <p>↗↗ (+ 2.8)</p>	<p>10.7</p> <p>↗↗ (+ 2.6)</p>
<p>Industries</p> <p>36.6 + 0.3 34.9</p> <p>↗</p>		<p>3.6</p> <p>↘ (- 0.1)</p>	<p>8.5</p> <p>↗↗ (+ 2.5)</p>	<p>22.8</p> <p>↘ (- 0.2)</p>
<p>Agriculture</p> <p>26.7 -4.0 7.4</p> <p>↘↘↘</p>		<p>6.2</p> <p>↘↘↘ (- 3.8)</p>		<p>1.3</p> <p>↘↘↘ (- 4.9)</p>

Legend : Solid lines for 1982
 Dotted lines for 1954

Units : in % and in annual growth

Source : BIPE.

Agriculture, the biggest loser of jobs, went through such an evolution that wage-earners have almost disappeared.

In parallel, we attended the emergence and the gradual raise of social categories and professions, mainly salaried, particularly in marketable service and non-marketable service sectors.

To define these professions, the INSEE introduced a new category to its occupational categories classification, recasted in 1982 : the "intermediary occupations".

The following table indicates the major features of this category.

For the first time, the number of women is high. Women are :

- in a minority in professions, mainly secondary ones, of foremen-supervisors (6 %) and technicians (9 %) ;
- a large majority are in services related to individuals : health (74 %) and primary education (63 %) :
- they are on a par in the civil service ;
- but they are in a minority in intermediary occupations of the private sector.

We finally observe that, with an equal job and an equal position, women are much less payed than men, while we know that according to this criterion, they are often better qualified.

3.2. JOB QUALIFICATION AND JOB CONTENT - DEFINITIONS AND PROBLEMS OF MEASURE

In France, the debate about the work qualification preceeded the crisis and the emergence of new technologies ; it developed during the taylorism boom and it is presently continuing.

The definition of the qualification is always problematic. As we know, it mixes objective and subjective aspects which involve ambiguity in the measure of the competences and in the statutory classification of the wage-earners : the measure of the qualification then

Table 3.4.

Intermediary professions

Categories	In thousands	In % of the total	Feminization rate (% of women in the category)	Average wage indicator = 100 (1)	
				Man	Woman
Foremen-supervisors	550	14.4	6	128	101
Technicians	656	17.2	9	125	108
Administrative and commercial intermediary occupations of the firms	923	24.2	39	131	111
IP* of the civil service	277	7.2	47	126	102
IP* of health and social work	590	15.4	74	112	104
Primary school masters and equivalent	759	20.0	63	119	110
Clergy	59	1,5	44	125	107
Total	3 814	100	40	125	107

(1) Full time employees not including apprentices

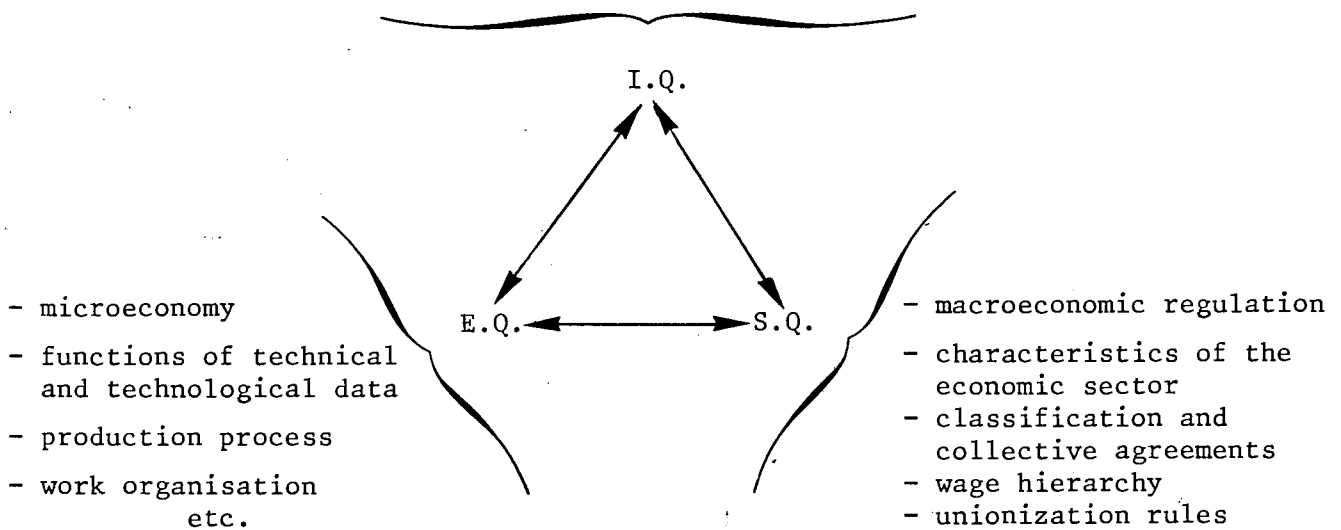
Source : Census 1982 and Employment Survey Enquiry

* Intermediary professions

Scheme 3.1.

THE RIGHT MAN AT THE RIGHT PLACE : HOW TO MEASURE
THE QUALIFICATION ?

- the training
- the profession
- the skill, workmanship
- the experience
- the individual adaptibility
- the social representation of the individual
 (men, women, foreigner ...) etc.



becomes a social and institutional debate.

At the risk of being schematic, we can see the present state of the conceptions developed by the french economic institutions in this way.

The word qualification should regroupe three characteristics, three dimensions :

- the individual qualification (IQ) which is the one related to the person, the employed individual ;
- the employment qualification (EQ) which is the one required for a position, a precise function in a firm ;
- the wage or statutory qualification (SQ) which involve the regulation by wages, the statutory framework, and more generally the contractual framework.

These three forms of qualification remain ambiguous : they assimilate objective and subjective variables, and it is a major difficulty.

Moreover, the changes revealed by the measure of qualification data interact in most local or institutionalized conflicts.

The changes in the qualification structure are due to a reciprocal transformation of IQ and EQ, and also to slides of classifications or internal promotions.

It is difficult to separate their respective effect.

3.3. CHANGES OF QUALIFICATIONS AND PROFESSIONS IN THE INDUSTRY

The principle of qualifications in the industry changes on the influence of the automation and of the electronics diffusion

Electronics today, like electricity yesterday, introduces new products while it changes at the same time the modes of production of the former ones. The increasing integration of the productive systems today is such that it develops a new field of transverse competences linked to the conception and the management of systems using programmable electronics. However this evolution does not make obsolete the old knowledges, on the contrary : the automation progresses always suppose the resolution of complicated mechanical and electronic sets (N.C.M.T. (1), robots, transfer-handling systems, inventories, specific machines, etc). The setting up and the maintenance of these equipments multiply the needs in skilled employees.

The integration of production methods also reduces the specific part of professions related to the product and increase the transverse competences.

The machinery industry uses less mechanics while all the other sectors see their needs of people qualified in mechanics increase with the development of automation. In that meaning, we can talk about a new deal of qualifications, since, beside new professions which can emerge thanks to either new products or new functions, we also observe a redistribution of the needs of pre-existent qualifications.

The result is an important difficulty in the perception of the needs of qualification ; the approach by industrial branch loses

(1) Numerical control machine tool

its relevance in favor of an approach by "function".

The development of transversal functions accompanies the continuing growth of survey and research functions.

Knowing better and conceiving better the products, constantly reconsidering the process, conceiving hardwares and softwares able to control them, warranting the maintenance of the systems, all this involves the increasing needs of highly qualified people and highly specialized people. However these people have the basic training and cultural inclinations which made them able to maintain a permanent dialogue with colleagues with diversified competences. It is on this condition that the contradictory demand of a very high specialization of knowleges and of a capacity to assume transverse tasks will be satisfied.

The increasing demand for structures joining polyvalent competences is besides illustrated by the strong rise of engineering services in spite of the stagnation of the investment level ; these sectors employed 210 000 people in 1982, against 158 700 in 1975.

The trend to the creation of transverse functions will probably not create many jobs but should have an important qualitative effect. While today most executives of production and of production management fall out, which is not true for their colleagues from the survey and research departments, it is likely that the revalorization and the complexification of the first ones' functions will increase the part of graduate engineers. It can result from this an important change in the running of firms internal labour markets, one of the privileged ways for internal promotion being closed.

Table 3.5. Part of higher education graduated people	in %
Surveys, research, tests engineers	71.0
Production engineers	46.0
Maintenance, purchasing, planning engineers	40.0

Source : INSEE - Population census 1982

On the opposite, the research for innovation in the shape of either new products or new definition of present products in their forms as well as in their modes of production will involve a continuing raise of needs for survey engineers and technicians; that is to say including traditional functions of "surveys" and "process". Although it highly increases, the number of production computerization experts - systems engineers - will remain relatively low in absolute value.

The development of the N.S.W. (1) is one form of the extension of externalization and of subcontracting that we will see soon by studying the service dynamics in chapter V.

. Evolution of unqualified jobs

Between 1962 and 1975, specialized workers which regroup the categories of workers without qualification, had increased by 20 %. This trend was completely reversed between 1975 and 1982 owing to the questioning about the taylorist processes of production, the reduction of activities and the introduction of new technologies.

However, though difficult to measure, this reduction can also be explained by slides on classifications.

While the N.S.W. represented in 1975 one in four employee and two in three worker, in 1982 they only are 17 % of the employees and one in two worker. Decreasing from 4 313 000 to 3 531 000, the N.S.W. diminished by 110 000 a year, movement mainly affecting the foreign workers.

The following tables show these trends in detail by economic sectors and by category of N.S.W.

(1) Non skilled workers

Table 3.6.

Evolution by sector of specialized and unskilled workers (NAP 40)

Sectors	Employees		Evolution rate 1975/1982	Evolution rate of wage earners 1975/1980
	1975	1982		
1. Agriculture	39 620	20 940	- 47	- 33
2. Meat and milk	81 800	87 700	+ 7.2	+ 16
3. Other food industries	152 300	125 240	- 17.8	- 0.7
4. Fuel, minerals	9 300	6 820	- 26.7	- 31.7
5. Petroleum, natural gas	6 240	4 240	- 32.1	- 6
6. Electricity, gas and water	22 620	20 880	- 7.7	+ 16.6
7. Iron, ores and metals	95 180	52 400	- 44	- 29
8. Non-iron, ores and metals	27 120	24 020	- 11	+ 15.4
9. Building materials	119 060	83 540	- 29.8	- 19
10. Glass	36 360	29 620	- 18.5	- 13.9
11. Basic chemistry	64 660	39 400	- 39.1	- 22.8
12. Pharmacy	51 640	45 640	- 11.6	+ 11
13. Foundry, metalwork	232 400	164 920	- 29	- 15.6
14. Machinery industry	176 700	117 920	- 33.3	- 14.8
15. Electrical and electronics industries	219 080	156 520	- 28.6	- 5
16. Auto transport equipments	237 040	183 980	- 22.4	- 6
17. Naval, aeronautic, defense	40 080	29 940	- 25.3	- 5
18. Textile, clothing	341 960	223 960	- 34.5	- 26
19. Leather, shoe	86 800	57 200	- 34.1	- 27
20. Wood, furniture	185 340	152 300	- 27.8	0.05
21. Paper, cardboard	70 180	48 020	- 31.6	- 21
22. Printing, press, publishing	41 820	41 640	- 0.4	- 0.3
23. Rubber, plastics	118 440	107 500	- 9.2	- 2
24. Building, public works	588 560	389 320	- 34	- 13.4
25. Food wholetrade	96 040	99 160	+ 3	+ 10.4
26. Non-food wholetrade	98 220	105 860	+ 7.8	+ 17.4
27. Food retailtrade	39 800	38 880	- 2.3	+ 30
28. Non-food retailtrade	79 220	68 060	- 14	- 6
29. Repairing and automobile trade	57 360	51 760	- 9.8	+ 12.4
30. Hotels, "cafés", restaurants	55 760	59 040	+ 5.9	+ 16
31. Transport	306 000	308 980	+ 1	+ 1.5
32. Telecommunications, mail	17 120	14 960	- 12.6	+ 16.8
33. Marketable services related to firms	60 640	81 620	+ 34.6	+ 37.3
34. Marketable services related to individuals	161 700	190 380	+ 17.7	+ 37.4
35. Renting, leasing	9 880	11 220	+ 13.6	+ 27.9
36. Insurances	1 760	2 500	+ 42	+ 15.8
37. Financial institutions	7 560	9 100	+ 20	+ 14
38. Non marketable services	278 100	275 860	- 0.8	+ 14
Total	4 313 460	3 530 040	- 18.2	+ 3.5

Source : Population Census 1975 and 1982 (INSEE)

Table 3.7.

Occupied population of specialized and unskilled workers

	Number (in thousands)		Annual variation rate
	1975	1982	
Specialized workers (S.W.)	2 848	2 390	- 2.5
Unskilled workers (U.W.)	1 465	1 141	- 3.5
Total S.W. and U.W.	4 313	3 531	- 2.8
Total skilled workers	2 819	2 860	+ 0.2
Foreign specialized workers	408	315	- 3.7
Foreign unskilled workers	330	229	- 5.1
Total foreign S.W. and U.W.	738	544	- 4.3
Men S.W.	2 204	1 785	- 2.3
Men U.W.	920	665	- 4.5
Total men S.W. and U.W.	3 024	2 450	- 3
Women S.W.	744	605	- 2.9
Women U.W.	545	467	- 1.9
Total women S.W. and U.W.	1 289	1 081	- 2.5
Source : Population census 1975 and 1982 (INSEE)			

The most affected sectors are the important users of manpower : machinery, electrical industry, automobile, clothing-textile, wood-working, building and public works ; but everyone is concerned.

It comes out that beyond the declining movement, the N.S.W. seem to be a very heterogeneous category, grouping three typical features :

- A first subset in "transition", young male workers, waiting for an entry into working life, filling often deprived posts in comparison with their education. An effect of classification slide would make appear, for an equal qualification, a raise of statutory qualification.

- A second subassembly of "permanent people", would regroup quite old women and men, with no diploma, that we would mainly meet in mass production industries touched by the crisis : also victims of the modernization.

- A third "transversal" group would join N.S.W., not really concerned by production tasks : handling, packing, cleaning, guarding. If this people remain N.S.W., they are movable inside the firms and, particularly between industry and services.

The service industry, as the following table shows it, continues to create jobs for N.S.W. in such sectors as trade, repairing catering, marketable services related to firms and non-marketable services. Here, the employees status is a problem : does their importance result from an effect of classification, a phenomenon of externalization or a temporary work development ?

3.4. JOB CONTENT IN THE SERVICE ACTIVITIES

We cannot schematically oppose industry jobs to service jobs :

As well as the agriculture and the industry mutually developed by accelerating the exchanges of production factors and products, industries and services give birth to an hybrid economy of a new type.

Concerning job qualification, this new imbrication of sectors also appears.

In the industry, the manual part of work declines, while in the services, it does not homogeneously develop.

If the level of qualification seems to increase in this industry, it seems to decrease in the services, related to the growth of production wage-earning jobs : + 2.6 % between 1954 and 1982.

Table 3.8.

Evolution of the labour force employed in the services and in the industries from 1954 to 1982

(average annual growth rate)

	Non wage earners	Top management	Middle managet.	Employees	Staff on duty	Workers	Total
Sérvices ..	- 0.7	+ 4.4	+ 3.7	+ 2.6	+ 0.6	+ 2.6	+ 2.1
Industries	- 0.1	+ 4.9	+ 2.8	+ 1.4	+ 0.7	- 0.2	+ 0.3

Source : BIPE

The employment survey gives interesting information about the qualification and the education and training level in the marketable and non marketable services.

Table 3.9

Labourforce structure (average over the period 1978-1981) according to the Education-training level

(%)

Education-training levels	Marketable Services	Non marketable services	Labor force
VI	38	36	49
V	32	25	31
IV	10	18	10
III	12	8	5
II + I	8	13	5

(Source : Irina PEAUCELLE in "Consommation" n° 4, 1984. The levels of education-training raise from VI to I).

It comes out from this table that non-marketed services have higher graduated people than marketed services and all the other sectors. They indeed include the sectors of research and of education.

The structure by professions and occupations of marketed and non marketed services permits to go further in the analysis.

Table 3.10.

Labour force structure in marketed and non-marketed services by professions and occupations in 1975 and 1981

Groups of Professions	Occupations	1975			1981		
		Marketable service	Non marketable service	Whole labour force	Marketable service	Non marketable service	Whole labour service
Primary	Farmer	0.7	1.4	10.2	0.4	1.3	8.6
Secondary	Engineer	1.6	1.7	1.5	2.1	1.7	1.7
	Technician	2.9	3.0	4.2	2.9	2.6	4.2
	Skilled worker ..	13.4	6.2	22.2	12.7	6.2	22.4
	Non skilled worker	6.0	3.3	15.6	5.5	3.5	13.6
			23.9	14.2	43.5	23.2	14.0
Tertiary	Top executive	8.0	15.0	6.0	9.9	16.6	7.5
	Middle executive ..	18.3	25.0	11.6	21.2	24.2	12.9
	Qualified employee	32.7	17.0	17.4	30.8	18.0	18.2
	Non qualified employee	16.2	27.0	11.3	14.5	25.8	10.9
			75.2	84.0	46.3	76.4	84.7

Source :

This table shows :

- a decreasing part of non qualified occupations ;
- an increase of executives and engineers in marketed services

escorted by a reduction of employees ;

- a small raise of top executives and qualified employees in non-marketed services.

The evolution of the labour force by occupation is very different according to whether it concerns marketed or non-marketed services.

The growth rate of qualified people is higher in market services ; the following table emphasizes this point.

Table 3.11.		
Average annual growth rate of wage-earners by occupation in the services between 1975 and 1981		
	(%)	
	Marketed services	Non-marketed services
Farmer	- 6.5	0.2
Engineer	7.6	0.7
Technician	3.0	0.7
Skilled worker	1.9	1.7
Non skilled worker	1.5	2.6
Top executive	6.8	3.3
Middle executive	5.5	1.0
Qualified employee	1.9	2.6
Non qualified employee	1.1	0.7

Here also, we must be prudent concerning the anticipation of the trends of work qualification in the services : all the shifts mentioned are possible.

3.5. TRENDS TO POLARIZATION AND SOCIAL RELATION CRISIS

The transformation of the modes of production in the industrial sector and the development of non-qualified jobs in the service industry involve a polarization of the qualifications considered by some authors as structural, adequate to the capitalist mode of growth.

The productive system gains in efficiency by operating a joint movement of loss of qualification and overqualification. This movement, within all the people contributing to the production, would tend to disposses the operators from their practical knowleges and would concentrate the productive intelligence in the thinking head of collective workers : managers and engineers.

This polarization knew indeed a strong exacerbation during the taylorist period. It also involves intermediary functions more centred on authority and command.

If the present movement tends to reduce low qualified posts and jobs, without suppressing them, it does not contradict the polarization principle. Intermediary jobs however change their function moving towards animation and communication. This movement already started, ranks with the working organization reform, the settlement of quality circles etc.

The intermediary functions are today considered as having a strategic importance to improve the firms competitiveness. They also confirm the imperatives of transverses functions and of polyvalence.

The system of initial and continuing vocational training is interpreted here, it is essential that it anticipates the needs of new qualifications but also that it is able to generate intermediary trainings of a new type.

If, in the services as in the industry, the effects of the new technologies will depend on the rythm and the modes of their diffusion, their implications do not have a final meaning because there is no absolute determinism of the techniques over the social relations, the work organisation, the process of qualification and over and under qualification.

It is during the new definition of the tasks, at the time of process transformation, that can develop new collective structures of work which correspond to a better qualification for all the workers concerned by this (quality circles, professional families, etc.).

These possible qualifications improvements also demand an elevation of the level of initial training for low qualified jobs, characterized by the recognition and the valorization of Practical knowledges.

We attend nowadays a development of the individualization of personnel management which consists in rewarding the individual effort of the employees to improve their productive efficiency, but efficiency for one single employer does not mean an improvement in social skill for the wage-earner.

Praising individualization of efficiency , means also qualitative impoverishment and rigidity. It fundamentally contradicts the collective productivity principals. It is opposed to the flexibility of qualifications and job, insofar as it does not guarantee the wage-earner mobility apart from the specified firm which gives him an individual qualification.

It is essential that the qualifications are socially recognized to warrant the professional mobility and reliability. The education - training system plays of course a major role in this recognition.

In parallel to the necessity of taking into account the collective productivity, with the decline of the manual work and the work intensification limits, foremen and supervisors will see their productive skills valorized, while the the command functions loose their necessity.

More generally, intra-firm communication management, as well as vocational training promotion will induce a development of the so-called intermediary functions.

CONCLUSION

So the variables of the job content have to be analysed into words of profession, function and qualification.

The old forms of work move back, particularly simple manual tasks but they won't rapidly disappear.

The distinctions within the people contributing to the production express more and more themselves rather as functions than as qualification. The system binding since 1947, qualification, function, wage hierarchy and classification is mainly questioned.

The communication, inside firms and between them, takes an increasing place which appeals to more important needs of qualification, more polyvalent ones in primary as well as tertiary or secondary professions.

The machines and systems supervision more and more replaces the control over men by men ; the maintenance worker will gradually replace the mass production worker.

Yet one must not forget that the process of technology and innovation is not autonomous and the field of possibilities it can open mainly depend on the social relations which will surround them. The social and institutional modes of the employment transformations will be progressive but the steps for the settlement of the elements of a new deal for wages can not be defined today. The stake is rather a negotiated adaptation than an increasing precariousness dictated by the employment crisis.

This situation challenges the whole social system in such a way that it is able to involve as well the institutions in charge of the productive system as the training and social security system.

During a crisis period, it is always easier to sacrifice the long term to the short term constraints ; such a choice for the modes of employment adjustment would be really baneful.

Annex
PROFESSIONS AND QUALIFICATIONS IN 2000

The following synthetic tables show an evaluation fo the main evolutions of the professions and the competences required for the next fifteen years. These data give relevant indications to evaluate the needs of training and to identify the categories where the majority of creation of jobs occurred. They are presented by reference to some key-problems (the professions in electronics, the tertiary employment, the future of the non-qualified employment the feminized occupations), and on a detailed way, by occupation.

The evaluations made represent a relative but not an absolute quantification : the percentage of engineers and technicians in the total occupied population must increase, the one of qualified workers remain almost stable, the one of non-qualified workers decrease.

The estimations say nothing about the absolute level of the needs of working people in each category, which will closely depend on the level of the macro-economic production.

Table 3.12.

EMPLOYMENT AND QUALIFICATIONS IN THE SERVICE SECTOR

	Population in 1982 in thousand	Quantitative evolution (1) to 2000	Factors of evolution	Transformation of the required competences
Telecommunications	500	+	Productivity gains in mail and tele-communications sectors	Reduction of non-qualified jobs, initiation to computer tools
Transports	900	+	Transformation of the ways of life internationalization	No major changes
Trade	2 500	+ =	Concentration, evolution of the ways of management and of commercialisation, specialization	Specialization : technical and commercial competences ; stock control
Banks and insurances	600	-	Data process of the operations, office automation	Rise of the qualification level, development of commercial functions, adaptation to data processing and office automatic tools
Health social action	1 850	+ +	Evolution of social needs of the population	Increasing specialisation of qualified staffs
Automobile repairing	400	+	Evolution of consumery practices	Electronics
Engineering	700	+ + +	Externalization of the services for the industry	Computer
Hotels, "cafés", restaurants	600	+ +	Evolution of ways of life development of the tourism	Management/commercialization
Information/arts/Entertainment	100	+	Boom of the audiovisual activities	No major changes
Training/education	1 300	+	Development, boom of the permanent training (education)	Use of new tools. Increasing integration of the original and permanent training
Other services related to individuals	800	+ =	-	-
Other non-marketable services	1 900	-	Variable evolution, according to the macroeconomic scheme	Adaptation to the office automation
Other services related to firms	250	+ +		
TOTAL	12 400	+		

(1) Evolution with a constant occupied population
Source : estimations of the BIPE from the population census of 1982.

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Table 3.13.

EVOLUTION OF THE FEMALE OCCUPATIONS

in thousands

Categories of jobs with more than 20 % of women	% of women	Female population in 1982	Evolution (1) 1985 → 2000
Non qualified workers of the industrial type	37	772	-
Non qualified workers of the craft type	28	256	-
Trade employees	78	488	+
Intermediary occupations in the firms	39	359	+
Intermediary occupations in the administration	47	130	+
Top executives in the firms	20	110	+ +
Top executives in the administration	24	59	+
Services to individuals	83	652	+
Intermediary professions health and social work	74	437	+
Teachers and similar stakes	63	478	=
Employees of the administration	75	1 254	-
Administrative employees of the firms	76	1 551	-
Free lance profes. workers	27	64	+ +
Professors and scientists	45	157	+
Information/arts and entertainments	41	43	+
Others	< 20	1 490	+
		<hr/>	
TOTAL		8 300	

(1) Relative evolution of the category, male jobs included.
Source : BIPE estimations from the Population Census 1982.

TABLE 3.14

BIPE'S FORECAST OF THE EVOLUTION OF THE OCCUPATIONAL STRUCTURE
1985-2000

Occupational categories	% into the occupied population 1982	1985 → 2000 Decreasing categories	% into the occupied population 2000	1985 → 2000 Increasing categories qualitative changes
Farmers	6.9	All categories	3.5	Rise of the training level
Engineers and technicians	4.9	Drawers	9	Surveys and methods engineers, all specializations
Qualified workers (Industry, construction) - Craftsmen	24.4	Qualified workers for machine tools - Qualified workers of the construction sector. Qualified workers in the decreasing sectors	24	Maintenance specialists Mechanics/electronics Workers of the tertiary sector
Non-qualified workers	15.4	Production operators in robotized sectors	11	-
Superior and intermediary executives of the tertiary sector	9,5	-	12	Every category - Initiation to data processing
Firms' employees and Public Administration	14.8	Type-writers - Non qualified employees of banks and insurance companies	12	Training for the office automation
Salesmen and trade employees	6.6	Independent people of the food trade	5.5	Trade employees
Health and social action	5.2	Uncertainty about the status of the staff (marketable/non-marketable)	7	Qualified and non-qualified staff of the health sector
Services related to individuals	3.7	-	4.5	Catering - Domestic services
Training/education	5.2.	-	7	Development of the permanent training
Free lance professional workers	1.1	-	2	Development of the health and of the law professions
Professions of the information/Arts/entertainment sectors	0.5	-	0,7	Development of the audiovisual activities
Police/Army	1.8	-	1.8	Qualified officers
TOTAL	100		100	

Source : Estimations of the B.I.P.E. (from the last population census for the 1982 figures)

Chapter 4

CONTRACTUAL ARRANGEMENTS

The emergence of particular forms of employment refers to such a complex set of factors that it cannot be explained by a unique model. In this chapter, we propose to present the main causes of the development of the new forms of employment and to indicate their main features.

As we previously discussed (chapter 1), the new forms of employment cannot just be defined in opposition to a model of permanent stable and full time jobs insofar as this model has only concerned a more or less but always limited part of the manpower.

The novelty of such forms of employment as either temporary work, or short term labour contract, or part time employment rather comes from the fact that it touches different economic sectors and manpower categories according to the periods and the economic development states.

The development of these forms of employment will be studied here through three main factors (cf. scheme 4.1.).

The first one, probably the most important, results from the evolution of manpower policies in the firms facing the changes of the economical and social environment (4-1).

The second one refers to the households' behaviour linked to the deterioration of the situation on the labour market.

The third one deals with the effects of the employment policy of the public administration which generates intermediary categories between employment, unemployment and inactivity (4.3.).

FACTORS OF EMPLOYMENT, FORMS OF JOBS

SCHEME 4.1.

Economic agent	Main Factors		Forms of jobs
Firms	Internal Labour Market Policies	<ul style="list-style-type: none"> ◦ Lengthening of equipment utilization ◦ Reduction of activity ◦ Increase of opening hours (shops ...) 	Shift work Non typical working schedules Part time
	(Use of) External Labour Market	<ul style="list-style-type: none"> ◦ Uncertainty of demand ◦ Cope with absenteeism ◦ Selecting workers ◦ Externalization of some functions ◦ Reducing labour costs 	Temporary work Short term labour contract Black Labour
Workers	<ul style="list-style-type: none"> ◦ Way of professional insertion ◦ Unavailability of long term labour contract for the unskilled youth ◦ Better combination of work and leisure ◦ Way of creating one's job 		<ul style="list-style-type: none"> ◦ Temporary work ◦ Youth public schemes ◦ Short term labour contract ◦ Part time ◦ Self employment in some activities
Public Authorities	<ul style="list-style-type: none"> ◦ Improving professional insertion of the youth ◦ Reducing global unemployment ◦ Testing possible uses of telecommunication technologies 		<ul style="list-style-type: none"> ◦ Youth public schemes ◦ Tele-work

4-1. LABOUR POLICIES IN THE FIRMS AND NEW FORMS OF EMPLOYMENT

The emergence of new forms of employment can not be separated of the modifications of the economical environment and from the way by which firms adapted themselves to it. Schematically we can consider that companies had to cope with two main constraints during the last ten years :

- the slow down in growth of demand trend and of the output ;
- the increasing uncertainty about the structure of demand which is due to both variations and diversification of the demand (1).

In the same time, the transformation of production process, particularly with the automation development entailed a deep change in the qualifications required for the manpower.

Inevitably the manpower management policies had to adapt to these environmental changes. Those adaptations have been achieved through two main modes.

The first one is about the so-called management of the internal manpower market and concerns both all the actions about working time and the careers and professional training policies.

The second one is the use by firms of the external labour market and concerns as well the recruiting, the dismissal as the recourse to such forms of employment as either temporary work or short term labour contracts.

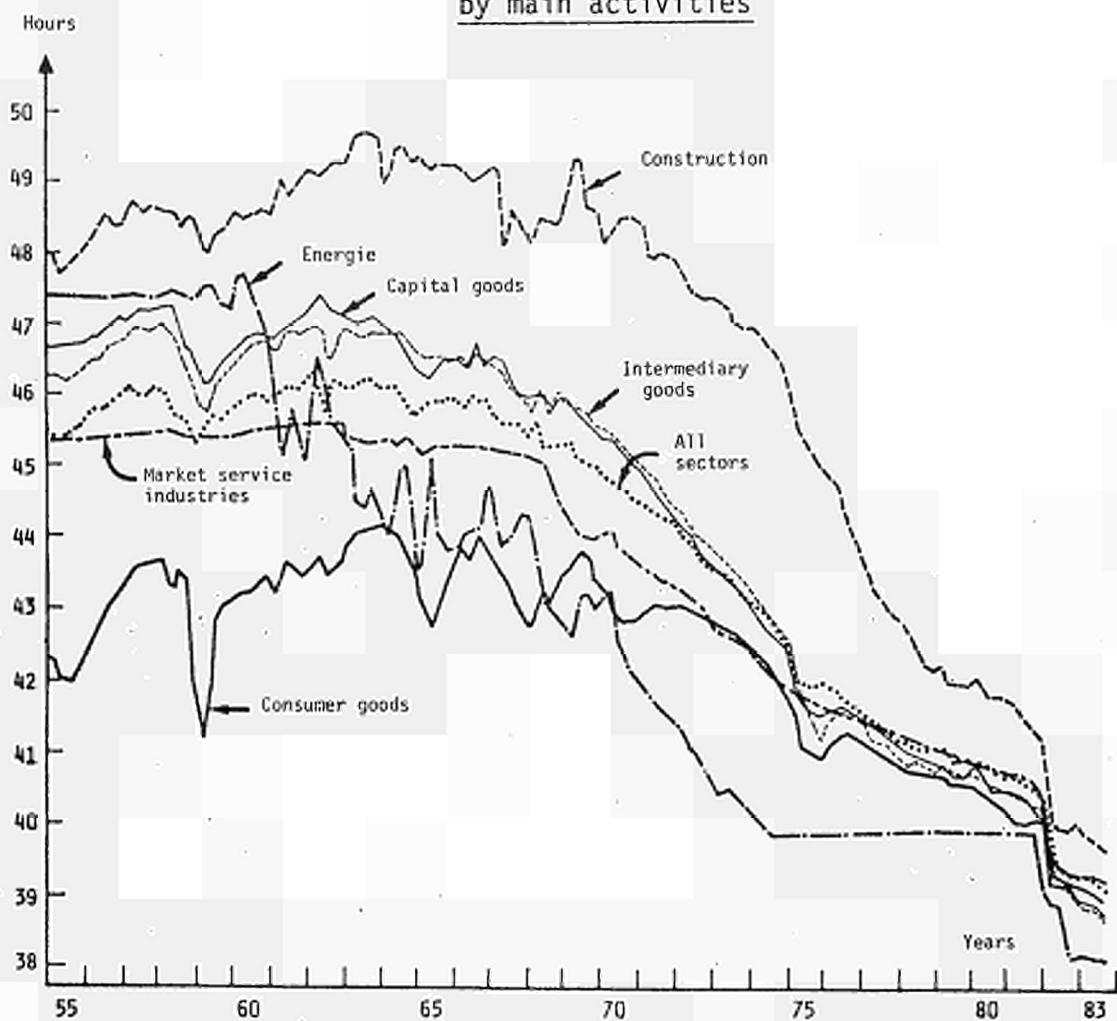
Obviously the forms of employment associated to each of these policies will not be the same even if they can be overlap in some cases.

(1) This is particularly clear in the automobile industry with the multiplication of the options offered to the customers : the range of Renault 11 and 9 includes more than 200 different versions for the body before the painting.

4-1.1. The particular forms of employment linked to the internal labour market management

The reduction of the weekly working time looks like a first significant way to adapt the volume of production to the demand stagnation. We have previously seen that it had been particularly strong during the 1970s. It has slackened at the beginning of the 1980s by drawing close to legal length of 40 hours. It can be noted that this reduction enabled a sensible comparing of economic sectors.

Hours of work (weekly)
by main activities



Source : Ministère du Travail.

In the same time, the decline concerned almost all the manpower categories and there was a convergence in hours of work for blue collar and white collar employees. They are presently approximately equal.

The reduction process corresponded first to an orientation for working conditions improvement ; then as the economic situation was deteriorating, it was immediately considered first by the unions and then by the public administration as a means to avoid jobs losses.

However it must be noted that in most firms, the working time reduction did not involve a deep transformation of the production organization. This can be seen through the evolution of the equipments utilization duration in the industry which has remained constant until 1974 and has diminished afterwards (cf. tables).

Table 4.1. Average weekly utilization length of equipments in industrial activities

Economic sector	1963	1970	1974	1977	1981	1982
Agricultural and food industry ..	50,9	50,6	50,4	48,8	47,0	45,2
Manufacturing industries : inc.	53,4	52,5	52,2	49,7	47,7	46,0
- Intermediary goods	59,0	57,9	58,9	56,6	52,2	50,2
- Capital goods	51,6	51,2	50,0	47,8	47,5	45,9
- Consumer goods	50,6	49,3	48,9	46,6	43,6	42,6
Construction	nd	48,7	47,0	43,5	41,8	40,3

As a consequence, the ratio of workers involved in shift work has been decreasing from 22 % in 1974 to 17 % en 1982 (see table 2).

Table 4.2.

Evolution of the percentage of shift-work employees							
Economic sector	1959	1963	1970	1974	1977	1981	1982
Agricultural and food industry	11,1	15,0	17,2	21,8	24,1	32,2	21,7
Manufacturing industries: inc.	19,2	24,5	26,7	32,0	30,4	27,4	25,8
- Intermediary goods ..	27,1	33,8	35,4	44,0	44,7	37,7	35,4
- Capital goods	11,8	16,6	22,7	28,1	26,5	29,2	27,3
- Consumer goods	18,9	23,3	22,5	24,3	21,5	14,2	13,3
Construction	nd	nd	1,1	1,4	1,4	1,0	0,6
Transportation (non included SNCF and RATP)..	nd	nd	nd	9,3	8,7	6,1	7,8
Commerces	nd	nd	nd	7,7	5,2	3,1	3,3
Services	nd	nd	nd	5,2	7,5	4,7	4,4
All sectors	14,2	18,7	16,0	21,9	20,4	18,5	17,3

Concerning the employment, this way of management, by reducing the working time, certainly restricted the dismissals, but did not avoid them, particularly in sectors most affected by the crisis. Strongly favored by the unions, it contributed to limit the deterioration of the situation of the primary sector of the labour market. To day unions positions diverge about reducing work time policies).

From this point of view, it would have only indirectly contributed to the emergence of precarious status or works, by repercussion in some way.

This point of view is not totally correct insofar as particularly since 1982, some firms as well as the public administration have been more and more interested in the different modes of the working time arrangement - flexible hours, shift work, work during the week-end and so on - so in 1983, 20 % of the firms collective agreements dealt with working time arrangements. It is particularly difficult to statistically measure the spread of these forms, at a national level, however we can precise that the part-time employment notably developed by progressing from 6.2 % of the manpower in 1981 to 10.5 % in 1985. But this tendency is ambiguous because the available

data about part time work do not permit to distinguish the employees with a permanent work agreement from those who have a limited duration contract. The high percentage of part time employees in such sectors as trade (12.2 % of the wage earners) also corresponds to a widening of business hours of the shops.

The result of the internal market management policies also appears in the practices of the firms concerning the vocational training especially for the young people, but their effect on the manpower status mainly goes through a recourse to the external market.

4.1.2. The recourse to the external labour market and the particular forms of employment

Obviously, such particular forms of employment as either temporary work or limited duration contracts take place mainly at this level. However, also in this case, the factors of development of these forms of works are extremely various and correspond to different logics according to the economic sectors.

Table 4.3.

Particular forms of employment in the economic sectors					
Industry Building and Civil Engineering Cost services	Wage earners	Part-time workers	Short term labour contract	Temporary workers	Total employment in 1984 (x 1000)
	employment %	employment %	Wage earners %	Wage earners %	
Industry	95,1	3,5	1,9	1,1	5 183,4
Building and Civil Engineering	78,8	3,8	2,3	1,0	1 576,1
Marketable services	84,1	10,1	2,8	0,7	8 799,5

Then we see that the industry uses proportionally more temporary workers than the other sectors, while the share of part time work is more reduced.

More particularly, the three industrial sectors - intermediary goods, capital goods and consumer goods - which represented 24.4 % of the salaried employment in 1983, employed the same year 40 % of the temporary workers and 25 % of the workers on short term labour contracts.

The explanatory factors of the utilization of either temporary work or limited length contracts are very varied themselves.

Main motives of recourse to an employment agency or short term labour contract.

- . Adaptation of the staff to business variations
- . Laboriousness of some tasks
- . Absenteism
- . Some functions (cleaning, guarding) become external
- . Means to bypass a collective agreement, judged too rigid
- . Recruiting and selection of the manpower

Moreover the causes for the utilization of one form of employment or another one are not the same.

Concerning temporary work for instance, several inquiries let the following elements come out :

- the effective length of the spells of temporary agency work is smaller than the average of short term labour contracts ;

- temporary work is preferably used to face instant and short term needs of the firms.

So it was noticed that when the number of days entitled to be compensated as temporary lay off was increasing by 1 % in one month, the number of employment agency contracts was diminishing by 0,8% during the same month.

An important question is to know, to what extent the development of these forms of employment, of which we have otherwise seen they remain limited to a little part of the manpower, does correspond or not to a deliberate strategy from the employers to make jobs unstable, and to eventually obtain concessions from the unions. The large variety of the motives to use particular forms of works, as well as the diversity of the situations according to either the activities or the firms, do not permit to give a definitive answer to this question.

We will only note that the recourse to temporary work is more important in large sized firms : in 1980, 8,1 % of the little firms (less than 10 employees) of the non agricultural private sectors had resorted to this contractual type, versus 59.3 % of a large firms (employing more than 500 persons).

In the construction sector, 76,6 % of the large companies utilized temporary work. If we take into account the fact that the manpower mobility is more restricted in large sized firms, the particular forms of employment can be considered as a way to reduce rigidities.

Those ones can be due to an organization factor as well as to a social factor, the unions being more introduced in large companies than in small ones. Otherwise the recourse to temporary work for such tasks as cleaning or guarding refers to a more general process where some fonctions, previously achieved in the firm become external (cf. chapter 5).

If the field of particular forms of employment are widened to other aspects like black jobs, which are uneasy to measure by definition, such factors as the labour cost seem to play a more significant part, at any rate in some sectors like the construction industry.

4.2. THE MANPOWER AND THE PARTICULAR FORMS OF EMPLOYMENT

The characteristics of the manpower more particularly touched by non-typical forms of works give valuable indicators to understand their functions.

Table 4.4.

STRUCTURE OF TEMPORARY WORK

	1982 %	1983 %	1984 %	Permanent workers (31-12-1983) %
Males	74.4	73.8	67.9	61.8
Females	25.6	26.2	32.1	38.2

There has not always been a majority of men among temporary workers. In the beginning, the use of temporary working contracts was stronger for executives, qualified workers and office employees. The share of women was then more important. Its decrease started in the seventies when the demand for unqualified workers of manufacturing industries expanded.

Furthermore, the study of the age structures of the temporary workers shows that the part of young people is preponderant (cf. table). In 1984, 44 % of the temporary workers were less than 24 years old.

Table 4.5.

Age structure of workers in employment agency			
Age categories	1982	1983	1984
Less than 18 years	0.6	0.4	0.3
From 18 to 21 years	26.0	24.1	24.3
From 22 to 24 years	16.7	17.7	20.0
From 25 to 39 years	39.9	41.3	40.3
From 40 to 49 years	9.9	11.1	9.3
From 50 to 59 years	3.8	3.6	3.3
60 years and over	0.5	0.2	0.4
Unspecified age	2.6	1.6	2.1
Total employment	100.0	100.0	100.0
Average age (years)	28.5	28.7	28.4

The annual data for 1980 and 1981 do not exist
Source : Ministère du Travail

We must compare this proportion to the age structure of the unemployed people : the same year, those who are less than 25 years old were 1,9 million, and 51,4 % of all the job seekers.

The occupational structure of either temporary jobs or short term jobs points out some little differences between these two forms (cf. table)

Table 4.6.

Qualification structure of STL contracts (Short Term Labour Contracts) and temporary workers - 1985				
	STL Contacts		Temporary workers	
	Effective U = 1 000	%	Effective U = 1 000	%
Executives and superior intellectual professions	18,45	5,8	0,69	0,6
Intermediary occupations	42,32	13,4	10,31	9,2
Employees	96,22	30,5	28,19	25,0
Workers	157,98	50,02	73,33	65,2
inc. - Skilled	62,43	20,0	(33,46)	(29,7)
Unskilled	95,55	30,0	(39,89)	(35,4)
Total	314,97	100	112,5	100

This Table shows some interesting differences between the two populations. First, the use of temporary work is more spread among workers than the use of STL contracts, even though they account for fifty percent of all STL contracts. It is also significant that even if employees and workers account for a large share of these STL contracts, they are used also among executives at various levels, whereas temporary work contracts concern primarily employees' and workers' categories.

For the large majority of the employees, the use of temporary work or limited length contracts results more from a constraint than from a deliberate choice. A survey made for the temporary staff agencies association clearly shows it :

Table 4.7.

Main reasons for entering in an interim agency			
	Ensemble (%)	Less than 25 years old (%)	More than 25 years old (%)
Did not have choice	52	58	43
Did not want to remain unemployed	22	16	29
Expectative or transitory solution	9	9	10
Because a job can be easily and rapidly found	9	11	7
Freedom, variety	9	4	14
Acquiring a training	5	7	3
Hope to be employed in a firm	4	4	2
Other answers	6	5	8

Note : In answer to the question "for what reasons did you come to the interim ?"
Source : "Temporary work" 1983, march. PROMATT Symposium acts cf. 16.12.82

So we notice that 74 % of the young people adopted a job through an interim agency because either they did not have choice or they did not want to remain unemployed.

We will also note here the difference between this form of employment and other forms like part time work. Concerning the latter indeed, the demand seems more to correspond to a deliberate choice : in 1983, among 100 employees seeking for another job, 9 % declared to look for a part time job.

Although it is necessary to make a real distinction between the different forms of employment, it looks as if the passage by precarious forms is often perceived as a transitory situation and is only adopted because there is no other way.

4-3. THE ACTION OF THE PUBLIC ADMINISTRATION

The interference of the public administrations had two main consequences.

The first one concerns the measures taken by the government to regulate the recourse to temporary work. The aim of an order adopted in 1982 is on one hand to avoid usually permanent jobs from being replaced by temporary workers, on the other hand to improve workers rights (alignment of temporary workers wages on those of the regular workers for instance, or payment of holiday benefits).

This order certainly contributed to break the use of temporary work but it occurred just after the temporary work agencies turnover began to decrease. In constant francs, it went from the indicator 80 in 1975 to 160 in 1980 and got back to 130 in 1982. In the same time the limited duration agreements seem to have developed : 298 000 people in 1982 and 315 000 in 1985.

So we can wonder whether the effect of the government measures has been to substitute, partly at least, a precarious form of work to another one.

The second result of the government devices mainly concerns the young people employment. Since the middle of the 70s, a set of measures has been adopted to favour their entry into working life : period of instruction, employment, training agreement, etc. From 1981 to 1983, the number of young people and unemployed people trained by the state increased from 230 000 to 340 000. Insofar as the aim was to give a first professional experience and to increase the training level, these training periods could be hardly considered as jobs.

Otherwise, the national statistics do not take account of those who benefit from these training programs in the occupied labour force, excepted the apprentices.

Yet with the launching of the programme of collective utility works in september 1984 (cf. box), we can consider that a big step has been made towards creation of a particular form of works. The debate about the accounting of these people can be seen as an indicator of the difficulty to feature this type of jobs.

SCHEME 4.2.

The public utility work programme (T.U.C.)

TUC programme has been set up by a Cabinet decision in september 1984. It had two main purposes : prepare young people to professional activity and satisfy some needs that could not be met neither by the public nor by the private sector.

The "public utility jobs" are reserved to young people from the age of 16 to 21, and since July 1985, to registered unemployed persons until the age of 25.

Those training opportunities are limited to the public sector, with the exception of public ministries. This means that non profit making associations, local authorities may engage young people on TUC programs, as well as social security offices for instance.

The period of work cannot be shorter than three months and longer than a year. The working or training time is 20 hours a week and the indemnity is paid by the government, a supplement can be given by the association under the form of money or other (food, etc...).

The TUC programme differs from some other public youth employment schemes in the sense that it does not necessarily include a training activity. It may as well consist in low or moderately qualified work (cleaning streets, helping the aged people ...).

The programme registered a high success, since at the end of October 1985 about 170 000 persons had been employed on a TUC job. The figure for the end of 1985 should be even bigger.

The french authorities finally followed the International Labour Office's advice by registering the TUC into the total employment ; but it is clear that they represent an intermediary form between unemployment and inactivity. If those programmes have to develop in the future, the usual concepts of the National Accounting would need to be revised.

Finally we will briefly mention the case of people who have benefited from an anticipated retirement and who pursue, often voluntarily, an activity within non profit associations.

Still a marginal and hardly locatable phenomenon, however it testifies to the fact that the limits between unemployment and inactivity are probably more difficult to draw with certainty than during the past.

The previous measures are of course the major ones as far as their effects on new forms of employment are concerned. Incidentally, we may mention another very specific form of work, closely linked to administration : the teleworking. It has been tested for about two years by the Direction Générale des Télécommunications on a few workers but at the time being, it remains at an experimental level and does not seem to be enlarged in the next future.

4.4. THE NEW FORMS OF EMPLOYMENT AND THE LABOR MARKET

The appearance of particular forms of employment is indissociable from the transformation the labor market has known since the full employment period of the early 70's. We will restrict ourselves to two main trends :

- The slackening of occupational mobility

Between 1969 and 1984, the stability rate, measured by the proportion of people who did not change from their firm from one year to another, rose from 77 % to 82 % for men, and from 73 %

to 80 % for women. This larger manpower stability mainly occurred to the detriment of the mobility either between sector or between firms, the unemployment of course increasing.

Then, during the year 1969, 84 000 men and 62 000 women left the industry to work in the marketable service sector : during the year 1983, they are only 43 000 and 20 000 respectively.

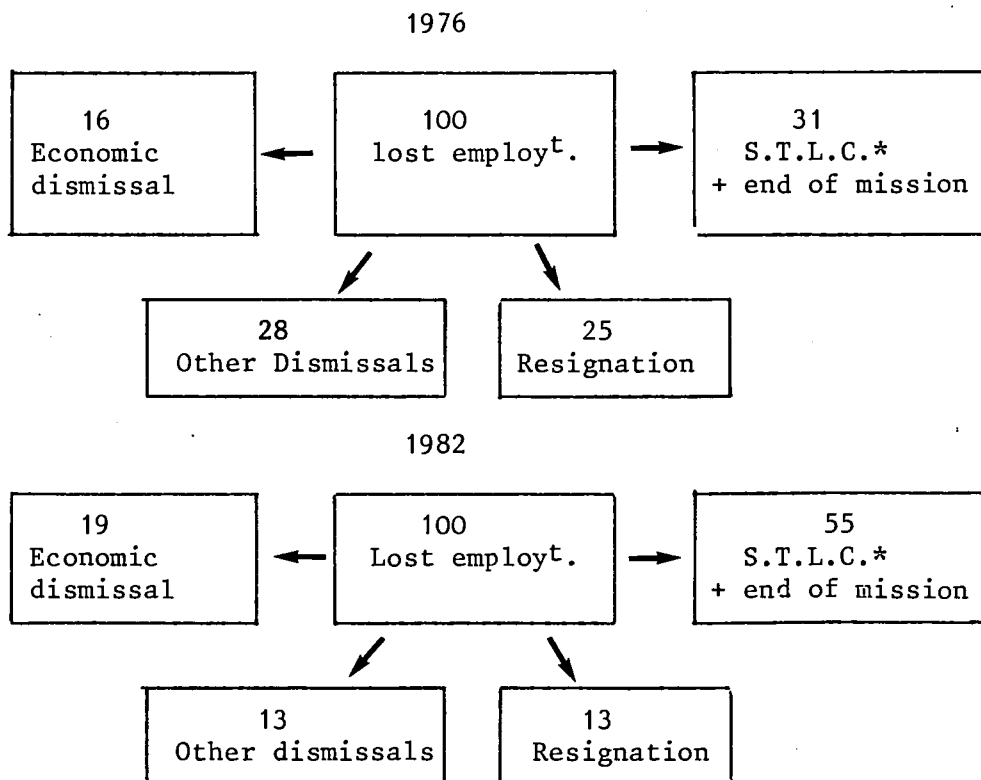
Everything happens as if the fear of unemployment exerted a mighty immovable effect on the manpower mobility.

- The increasing part of precarious forms of employment in manpower flows.

The following scheme shows this tendency.

SCHEME 4.3.

Main factors of registration at the national unemployment agency (ANPE) (in %)



* S.T.L.C. Short term labor contract

Source : A.N.P.E.

So we note that 55 % of the manpower who joined the ANPE in 1983 after having lost their job had either a short term labor contract or a temporary job while they were only 31 % in this situation in 1976.

We also find again among the employment vacancies deposited by the firms to the ANPE, the evolution of their recruiting behavior, analysed in paragraph 4.1. : in 1971, on 1,3 million of vacancies, 17,1 % concerned either temporary, or seasonal or very short term works ; in 1984, on 857 000 vacancies, this percentage reached 47,7 %.

We can draw two main conclusions from the previous comments. The development of particular forms of employment can be considered as an undesirable slackening of occupational mobility, while this mobility becomes more and more necessary because of the restructuration of the productive system. Incidentally, the price to pay for this mobility is transferred to some categories of the manpower : young people, women, non skilled workers.

Secondly, the passage by either temporary work or short term labor contracts tends to be indispensable as a way to recruit manpower. This is both explained by a stronger selectivity of the firms during the recruiting and by the insufficiency or the inadequacy of the initial trainings of some job seekers, especially the youth, which enforce them to accept a transitory period, more or less long, before a definitive post.

Conclusion : New forms of employment and precariousness: contradictory tendencies.

In this chapter, we have pointed out the complexity of the phenomenon that means the word "new forms of employment". This intricacy is such that we cannot be satisfied with a general tendency to feature the evolutions verifiable today. However, we can make see three main results :

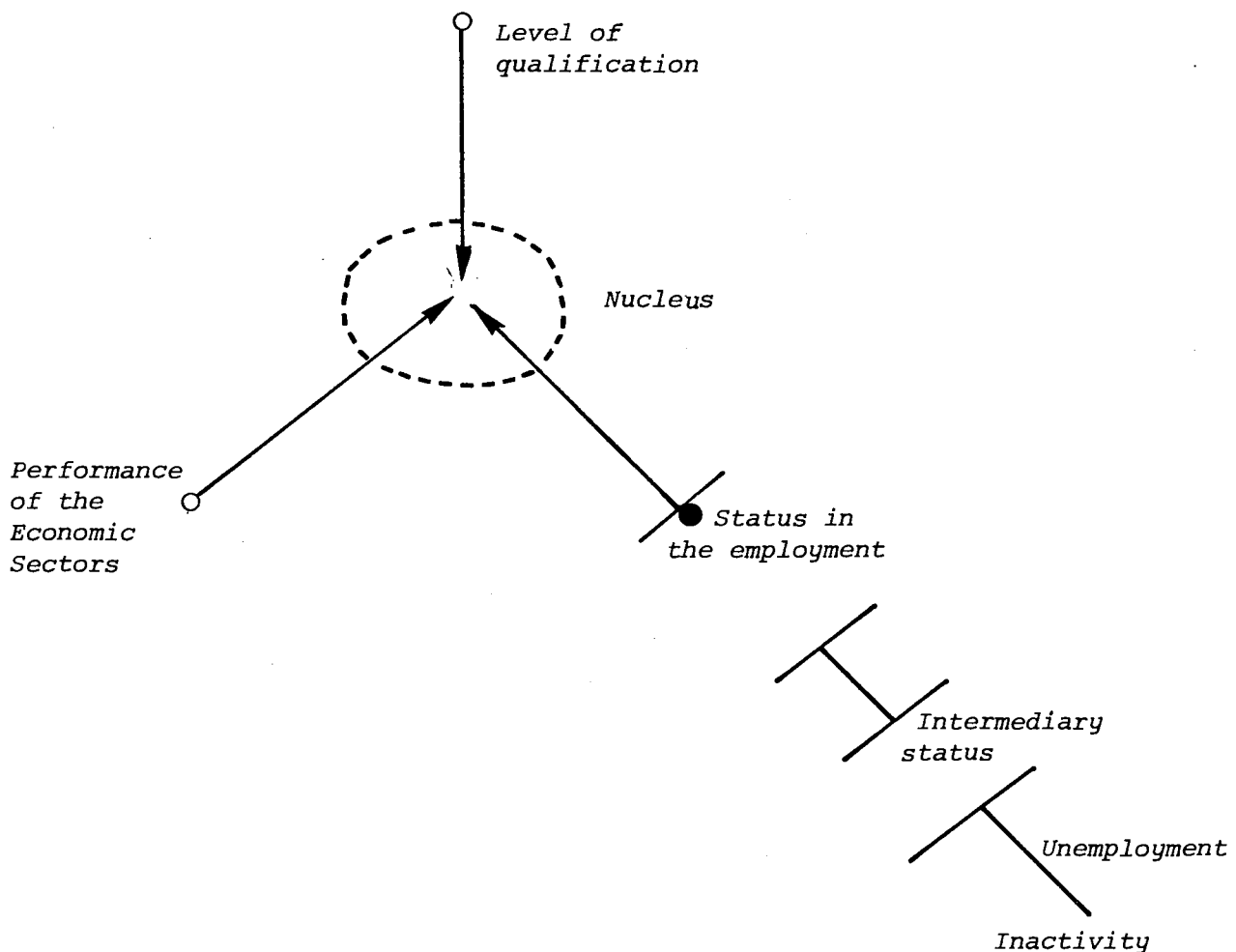
- The manpower status is not sufficient to define the precariousness :

Taking into account the high level of unemployment France presently knows, the labour force in a precarious situation is not constituted just by the occupants of temporary jobs or short term labour contract jobs. From this point of view, one of the insufficiencies of the opposition between nucleus and periphery, often used in the dualism theories, is to focus too exclusively on (the matter of) the status. It leads it to neglect such other variables as the level of qualification, the economic sector, or the size of the firm. Such an opposition also involves that possible evolutions are not correctly taken into account.

Nevertheless, unemployment is structured by different oppositions which can be summarized by the following scheme.

Scheme 4.4.

Relations between qualifications and status in the employment



Then we realise that a range of situations can exist, going from the most precarious ones : low qualification, temporary job, declining economic sector, to the most stable ones : high qualification, developing sectors, steady job.

. The two faces of the new forms of employment.

It is possible to analyze temporary work, short term labour contracts or trainings for young people as a form of marginalization in comparison with the stable jobs of the adults. This marginalization corresponds to the job's content indeed, often with low qualification, risk of being unemployed again and having a low wage. In the same time, the tendency to look for particular forms of employment is also explained by the evolution of population attitudes towards working. The raise of part time jobs largely composed of women can be explained by the wish of women to combine better working life and family life.

So, the development of new forms of employment includes also some positive aspects.

The perspectives of particular forms of employment.

At present, nothing allows us to consider that precarious forms of employment (short term labour contracts, temporary work) will sensibly increase in the future. It would probably be contradictory to look both for a increase of the qualification level, a larger involvement of employees in their work, and to extend the use of external workers. Conversely it seems difficult to expect that the growth recovery and the raise of recruitings mean a rapid reversal of firms behaviors. The possibility they have to select manpower through the filter of temporary work for instance, is such that this type of employment will certainly maintain in the future.

It is more difficult to have an opinion about the future evolution of self-employment. We can consider that in some activities at least, the creation of non wage-earning jobs represents a way to avoid unemployment (The construction industry for example). Inversely, in many advanced sectors, the importance of required investments and the variety of

skills (production, management, trade, etc.) do not permit to small firms to operate on the long term. We can however notice some experiences still very limited, consisting for a large firm in helping to the setting of companies with very few employees. The development of this type of relations between firms could improve job creations.

On the middle term, the most probable tendency is certainly the stabilization of respective percentages of wage earners and self-employed. This stabilization represents a significant change in comparison with the evolution of the last two decades.

The last point is the case of public programmes for youth. The uncertainty is mainly due to the choices which will be made by the public authorities which finance a big part of these programmes. The tendency rather consisted in increasing the number of people benefiting from them, insofar as the number of young people having completed their education and not finding a job raised. This tendency finds its own restrictions with the constraints it implies on the public finances, and it does not seem probable that on the middle term, the cost of these measures could be supported by local authorities. Here again, we could be tempted to forecast either a maintain or a low raise of these forms of employment.

Finally, the perspectives we are presently able to foresee for the new forms of employment are moderately optimistic. The most important risk gets less on the deterioration of social status - except of course for phenomenons of poverty and definitive exclusion from the labour market - than on the consequences resulting from the inadequation of people qualifications to job contents generated by the productive system.

This diagnosis is only worthy with the clause "ceteris paribus" and cannot take into account the effects of sudden changes in the economic actors' attitudes.

Chapter 5

NEW AREAS AND FORMS OF EMPLOYMENT

France has lost a lot of industrial jobs during the last few years ; the only creations were made in the service sector.

Is the dynamics of the service activities - empirically unquestionable - able to let enough jobs to absorb the losses generated by the suppression of works ?

If the service activities are heterogeneous, their relations with strictly industrial activities are also ambivalent.

In France, during the recent period, the new service jobs were not sufficient to compensate the important losses from the industry. Between 1980 and 1983, the service sector created more than 400 000 jobs whereas the manufacturing industry was losing 675 000 jobs.

Today, the rythm of creation of service jobs has slackened again.

Table 5.1.

Period	Creation of jobs in the service industry in annual average
1959 - 1974	180 000
1974 - 1979	216 000
1979 - 1983	129 000
1983 - 1984	50 000

However we must leave general data and current events to enter upon the service jobs dynamics.

5.1. EVOLUTION OF THE EMPLOYMENT IN THE SERVICE INDUSTRY

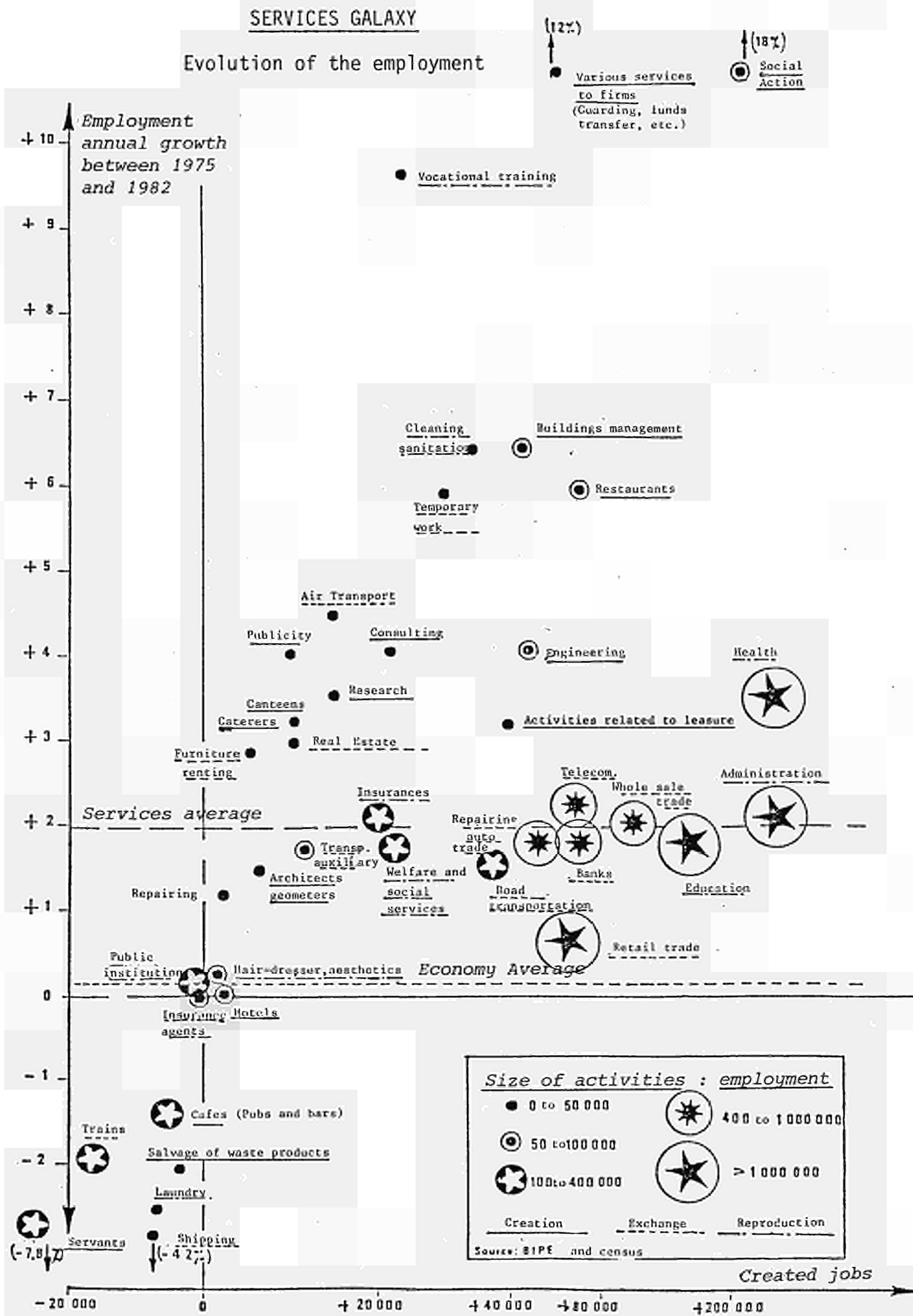
If we focus on final services, at least partly related to individuals, what do we observe in the employment evolution from one census to another ? Generally, the services will have created on average between 1975 and 1982, 226 000 jobs a year (+ 2,0 %). By setting apart the "services to firms" which are the most dynamic, the rythm of annual creation decreases a little (+ 1,8 % corresponding to 187 000 jobs). Among these eleven million people, we will notice that non marketable services, mainly financed by redistribution, register the strongest growth (+ 2,3 %), which enabled them to create about 75 000 jobs a year on average. On the opposite side, the logistic services (trade, transportation, ...) had a lower dynamics : the rythm of 1.2 % will have generated a little more than 50 000 jobs each year.

Table 5.2.
Employment in the service activities

	Number of jobs in thousands			Annual growth %
	1975	1982	Variations	
All the services	10 762	12 345	+ 1 583	+ 2.0
Services to firms	792	1 062	+ 270	+ 4.3
Services non including "services to firms"	9 970	11 283	+ 1 313	+ 1.8
- Logistic (trade, transport, telecom., finances, estate renting)	4 188	4 547	+ 359	+ 1.2
- Individual services (automobile repair, hotels, cafes, restaurants, health, domestic services, individual services)	2 740	3 173	+ 433	+ 2.1
- Non marketable services (n.i. domestic services)	3 042	3 563	+ 521	+ 2.3

Source : Census and BIPE

Scheme 5.1.



5.2. A VERY HETEROGENEOUS DEVELOPMENT

A view to the "servicesgalaxy" shows how, between the two census of 1975 and 1985, the growths of the employment in services differed from each other.

In sectors most remote from the average, guarding and social action, sectors related to firms for the first one, to households for the second one, testify to the large heterogeneity of the employment dynamics in the services in France.

Let us focus on one area. (see scheme 5.1.) By choosing about twenty activities including 9,5 millions jobs in 1982 and having generated about 160 000 jobs a year since 1975, we can make a list of the employment growth during the recent years. The leading ones include : social action, marketable services to firm, and, the trio at the tail end : railroad transportations, laundry and domestic services. Yet above all, we must point out that the whole set constituted by social action, health, general administration and education, of which we know how much it is controlled by the public authorities, will have achieved alone the four fifths (+ 126 000 a year) of the net creation of jobs due to these twenty activities.

5.3. EXTERNALIZATION : AN INCENTIVE AMONG OTHERS OF THE SERVICE DEVELOPMENT

We won't discuss here the difficult problems of classification and statistical measure of the different marketable services related to firms. We know about the difficulty to observe the consumer prices or production prices of the firms, contrary to the prices of the services offered to households (1).

The question is two-fold: do the firms of the industrial sector exteriorize their jobs to the service sector? Does this externalization imply that jobs become more and more precarious? The authors agree positively on the second question - we do not develop this point here - and are very cautious about the first one.

The measures of externalization are not convincing whether the point is the researches led before or since 1974.

Two methods were used, it is useful to rapidly expound the conclusions.

5.3.1. The Direction of Forecasting tried to measure the "direct transfers of jobs", that is to say the shiftings of persons between industry and services and/or trade.

(1) Omitting the hazardous evaluation of the quality effects.

The following table can summarize the conclusions :

Transfers of jobs

Table 5.3.

March 71 \ March 72	Labour force having a job (in thousands)					
	K.G.	I.G.	C.G.	TI	TTS	T
K.G. Capital Goods ...					25,9	19.7
I.G. Intermediary goods					30.4	21.2
C.G. Consumer goods					38.9	46.7
T.I. Total industry .					95.2	87.7
TTS Total transporta- tions and services	27.1	22.8	31.4	81,4		
T Whole sale and retail trade	18 0	21 6	42.5	82.1		

in : "Were jobs transferred since 1969 from the industry to services and trade linked to the industry ?" Paris, Economy Department, Direction of Forecasting, p. 5

The table reproduced above indicates all the jobs transferred from manufacturing industries to services and commerce from march 1971 to march 1972. It must be read in the following way : 95 200 jobs were transferred from the industry to the services, but 81 400 in the opposite direction. It very largely seems that the direct transfers of jobs between sectors are approximately the same and with few extremities.

5.3.2. The "Job Structure" survey was put into requisition

Some regroupments by "professions" were made, their evolution studied.

Table 5.4.

Evolution 1974/1968 of tertiary jobs in both industrial and service sectors

1968 = 100

Activities Professions	Inter- mediary goods	Capital goods	Consumer goods	Total Industry (excluding services)	Marketed Services rendered to Firms	Inter-in- dustrial
Administrative pro- fessions	128.0	115.9	123.0	122.5	164.7	140.8
Data processing profes- sions	179.1	176.8	161.9	172.6	219.4	211.7
Commercial professions	132.4	126.6	131.6	180.1	145.0	164.8
Others	137.0	128.6	131.6	132.4	175.1	197.4
Total services	132.6	122.3	127.4	127.2	170.6	154.6
All employees	124.6	120.5	120.2	121.9	178.3	147.7

Legend : This table can be read in the following way

The growth of administrative professions in intermediary goods activities has reached 28 % between 1968 and 1974, whereas it averaged 64.7 % in services rendered to firms.

It is clear from this table that :

- the part of the administrative profession is constant, but it diminishes in the services and the trade linked to them ;
- industry and trade more and more call for data processing professions ;
- the part of the commercial professions is more intricate (let us note that temporary work was not taken into account by this time).

It comes out of these works led in 1979 and still recently tested, that the function transfers are often bilaterals : they cannot explain the strong growth of services jobs related to firms and to individuals, not help in understanding the real meaning of externalization.

5.4. ARE THE HIGHEST EMPLOYMENT GROWTH IN THE SERVICES SECTOR DUE TO A LOW PRODUCTIVITY ?

For a given rate of output, the lower labour productivity in services, compared with manufacturing might be an explanatory factor of their faster employment growth. However this would imply that productivity is comparable in both sectors but it is not so because of two reasons at least.

On one hand, the services heterogeneity is such that the input and output are imperceptible on an aggregate level, on the other hand the services "market" is too particular to be identified to the classical ideal competitive market.

Between 1970 and 1984, the rapid progression of the employment in the services (+ 2 % a year) results from a limited growth of the apparent productivity, inferior to half of the production growth (1,8 % compared to 3,8 %). During the same period, there is a big contrast with the rest of the economy of which the sensible decline concerning the employment (- 1,2 %) proceeds from productivity gains superior by 50 % to the production ones (3,6 % compared to 2,4 %). The following graph illustrates those differences from an examination of the evolutions known by fourteen sectors.

We will note that all the service sectors create jobs by achieving medium productivity performances which however do not seem to question their dynamism on the market. Would the services escape from the iron law of wages of the industrial economy ?

Table 5.5.
Evolution of production, productivity and employment
1970-1984
(in annual %)

	Whole economy	Services	Rest of the economy
Effective production (F.70)	+ 2,9	+ 3,8	+ 2,4
Employment	+ 0,2	+ 2,0	- 1,2
Apparent Labour productivity	+ 2,7	+ 1,8	+ 3,6

The evolutions of the work productivity also seem to depend on the professional structure in the service sectors. Some INSEE surveys showed that such services as repairing, laundry, cleaning, with a low proportion of executives and a high part of production staff registered important productivity gains : 4 % - 5 % a year between 1950 and 1980. Inversely, in other sectors, with a ratio of "white collars" (executives, employees) superior to the two-third of the jobs - accounting, publicity - the productivity gains were less important. However, the effect of the manpower structure cannot be considered as the only factor of the productivity.

A second explanatory factor comes from the more or less important permeability to the technical progress, or the equipment diffusion.

Office automation directly concerns some services (banks, travel agencies ...) but not all of them ("cafés" ...). In many sectors, it is possible to follow the rise of the capital coefficient (1). It has been particularly sensible in telecommunications, financial services, health and most services related to firms, but much less in transports, trade and restaurants.

(1) According to J.C. DUTAILLY, for the same stock of capital of one million francs, we should have 1.3 job in ferrous metals sectors, 1.8 in transports, 5.5. in the restaurants, cafés, hôtels, 6.3. in the commerces and more than 8 in the marketed services, difference wich make remember that the right of entrance in capital favors services.

CONCLUSION

The recent development of employment in new sectors, and particularly in the service sector, takes an ambiguous form.

The creation of jobs in services has been reduced and no more compensate the industrial losses. If there should be a creation by externalization - which is not obvious - its volume would be restricted in the future. Mainly remain the jobs of the non-marketed sector and of the services to households ; whose dynamics is strongly dependant on the public authorities. The budget constraints strongly interferes and high are the risks that a substitution of the private financing to the public expenditures leads to a polarization of jobs inside the service sector, opposing "good" and "bad" jobs.

Finally, if the services develop with various ways, the new forms of employment could be either high qualified jobs in manufacturing or industry related services, or "half jobs" in services related to individuals.

Moreover, the development of intermediary jobs, if it leads to a reduction of direct and indirect incomes of their bearers, is likely to limit or even reduce the households demand. It is also the reason why, if the new forms of employment are only temporary work, short term labour contracts and jobs for young people, we find difficult to consider that they will become the majority of employment in the post industrial society.

In the future, the work productivity evolution represents a major challenge for the dynamics of the employment in the services, even if, as we noticed previously, this notion is more difficult to measure than in the industry. So some sectors as banking or insurance will probably record significant productivity gains during the next decade. However, other sectors (services to individuals) could experience slower productivity growth.

Finally, communication related activities are associated with both high output growth and high productivity growth. Their capacity to create increases in employment would seem to be very limited over the medium term.

Chapter 6

CONCLUSION

The first part of this conclusion summarises the main trends that have been determined in the previous chapters. Some of these trends may be considered stable enough and should continue in the future. Some others seem more conditional and subject to environmental changes.

In the second part, some recommendations are presented. They deal with issues related to employment policies, as well as to methodological considerations.

6.1. MAIN TRENDS AND CONDITIONAL EVOLUTIONS

6.1.1. Certain evolutions

The transformation of employment structure : main tendencies. Decrease of the agricultural employment, then of employment in the manufacturing sector, both in relative and absolute terms. These both tendencies should remain in the future.

6.1.1.1. The employment in the service steadily increased but its rise has recently slackened. The forecasts available at the moment emphasize a significantly lower increase than during the past.

6.1.1.2. The number of wage-earners strongly increased proportionally to the occupied population until 1975, more slowly until 1982. This high rise is essentially explained by the increasing rate of working women and by the increase of services, particularly non-marketable ones. This high rise seems today to have reached a maximum.

6.1.1.3. The work duration strongly diminished in all the economic sectors. This decline interrupted after 1982 (1). The total worked volume has also fallen taking into account the employment decrease (dismisses and early retirements). In the future, it seems that the reduction of the work duration will occur through such forms as part-time job, rather than with a decrease of the weekly work duration.

6.1.1.4. Concerning the structure of employment : the jobs with low qualification decreased in absolute terms in the industry (omitting the problems related to the qualification measure) and increase in the service sector in relative terms. The intermediary professions changed and become more important relatively to the productive functions : the occupations related to very control work have however diminished. Nevertheless, in the future we cannot expect a disappearance of non qualified jobs.

6.1.1.5. An increase of tertiary jobs can be seen in most of the economic sectors. This growth did not always mean higher qualifications, or status improvement.

6.1.1.6. The content of the industrial job, particularly the worker one, evolved with the joint effect of the productive processes changes and the crisis of the taylorist organizational mode. This evolution brought out a misadjustment between the new skills evolved by technical innovations, and the worker's know-how.

6.1.1.7 The work productivity results indeed from the combined effect of many factors among which technology and its recent applications are important but not unique.

The working social relations and particularly the capacities of collective interventions of the staffs in the new productive processes, will play a key-role in the future.

(1) Not taking into account the raise of part-time job.

6.1.1.8. The inter-industry and intra-industry work mobility was strongly reduced by the economic crisis and the high increase of unemployment (cf part 2).

6.1.1.9. The public authorities created new intermediary forms of jobs between activity and inactivity. During the last period, we have seen a decline of full-employment policies which associated a voluntary creation of public jobs to the raise of demand. Some new jobs with intermediary status (mid-employment - mid-unemployment) were substituted to them. According to us, these forms will very probably continue in the future. More generally, to full employment policies were substituted local and specific policies, considered as temporary, which involve to reduce the flow inwards the occupied population and to accelerate the flow outwards (early retirements).

6.1.2. The problematic or conditional evolutions

6.1.2.1. The size of firms is an ambiguous factor as far as the creation of jobs is concerned : if little units seem more dynamic, their propensity for dismissing is stronger than in large firms. The latter ones tend to favor the stability of the number of employees.

6.1.2.2. The employment dynamics of the services brings up several questions :

- the increase of employed people in this sector has slackened so much that it no more compensates the losses of industrial sectors.

- a part of these service jobs, difficult to determine, is made of production jobs, some of them being unskilled.

- the creations of jobs in non-marketable services, very dependant on the public authority, are likely to decrease in the future because of the following reasons :

Some service sectors already show a decreasing demand, whether because the changing households preferences, or because financing by the welfare system is reduced.

- other services (banking, insurance, ...) are concerned by latent productivity gains, very meaningful : the development of the technics of automation and electronic money threatens the employment of these sectors.

For all these reasons, the contribution of the services to the straightening out of employment is problematic on medium term.

6.1.2.3. Among the new forms of employment, we must distinguish the precarious jobs which are however included in the employment with the usual meaning, and the intermediary jobs that we mentioned earlier.

Even if the steady and legal transformations favour the development of limited length jobs and temporary work, there is no proof in the medium that term, their number can significantly increase. The raise of a category of marginal workers inside the firms does not seem indeed to be consistent with such aims as the growth of productivity and the products quality which involve an occupational training and an increasing involvement of the employees.

- The "intermediary" jobs are created with the initiation of the public authorities and are particularly directed to young unemployed people. In that meaning, their potentialities of development are restricted by budgetary constraints and by government decisions. However we cannot ignore the risks related to an exaggerated growth of these "semi-jobs", insofar as they would not involve a real professional and social integration.

Moreover, if the "second place" jobs entail a reduction of the incomes of their holders, this will restrain the growth of consumer demand. Such a process would emphasize the polarization of the ways of life and of consumption, implicating the model that has governed the relations between employment, income and growth for the last thirty years.

6.2. RECOMMANDATIONS

6.2.1. General advices

The transformation of the structure of employment results from several interdependant factors. Moreover, it makes interfere many actors : firms, state, unions, individuals or groups of individuals. So it is difficult to propose precise and operational recommendations. However, it is possible to draw out a few general orientations which derive from the analysis proposed in the former chapters. Three observations are particularly important.

- The level of unemployment can be explained by an insufficient growth and the weight of the external constraint, but it is also related to lags between jobs and occupational that the productive system tends to eliminate, and those it needs. These lags do not only come from the insufficiency of the education made by school or university but also from the fact that some professions become less and less qualified (like the specialized workess of the automobile industry).

- In the same time, the rise of unemployment and the increasing uncertainty concerning the opportunities of jobs for the individuals resulted in a clear decrease of the professional mobility between economic sectors.

- Finally, facing the uncertainty of the outlets on medium term and the raising variability of the demand on short term, the firms increased the use of hiring with precarious job contracts, particularly for young people. This type of contract became an almost obligatory way for professional integration. Yet it remains insufficient to reduce the unemployment of young people, hence the increase of intermediary forms of jobs between activity an unemployment.

At least one common factor links these three constata-tions : the way the society manages the mobility between occupational func-tions (inside the firm), between professions, or between economic sectors.

Obviously, this way of management particularly affected certain manpower categories : young people, women, old workers, with, for the last ones, the recourse to different forms of early retirement.

There is apparently no way to change this situation on short-term, yet we could look on medium term for a better combining between the different constraints noticed before (transformation of the required compe-tences by the technological change for instance) and such aims as the reduction of the level and duration of unemployment.

The following means could favor this research :

- developing in the firms a manpower planning management of employment permitting to identify both professions and occupational categories for which jobs are threatened, and either functions or skills which should be developed. Such a management would also allow to enlarge and to better direct the efforts of professional training according to the present and future needs.

- Seeking a more important manpower mobility thanks to a collective system of information and settlement, but also by inciting the firms themselves to help their employees to find new jobs, through either local or regional associations of firms for example. It should in priority concern the most threatened categories of jobs inside the firms, but should not however exclude more qualified workers.

- The necessity of an effort for professional training has been already so often noticed, whether in France or in foreign countries, that we hesitate to mention it again. We will only insist on the fact that the training of adults is still conceived on a too selective way and sometimes inadequate to the individuals' needs : it is estimated that almost 7 job seekers out of 10 are excluded from the training systems financed by the state and the local communities because of an insufficient level of knowledge, which is rather paradoxal. It seems real to search for a higher efficiency of the training systems of either the state or the firms.

- All the questions concerning the reduction and the flexibility of the work duration were the subject of many debates in France during the last years. There again, it is not useful to see all their aspects. Different measures were adopted to favor the recourse to part-time work, the development of shift work, and the adaptation of the work week to seasonal variations of the activity (example : building and public works sector, food industries).

One conclusion of these debates is that it is possible to improve the internal flexibility of productive organizations, which could restrict the use of such forms of external flexibility as dismissals.

The former considerations let us think that a real questioning of the different rules which frame the working relations in our country, by passing too unilaterally the cost of the economic modernization on some manpower categories, would be negative. It is likely that the process of modernization would not be accelerated.

6.2.2. Methodological proposals

The change of the employment structure in different countries of the EEC, if it has some differences related to the specificity of the national environments, has also some real similarities. Identifying their respective part supposes a coherent statistic instrument of measure.

According to us, the comparative and prospective thinking would be greatly improved if we would search for an harmonization in two main matters.

- The systems of classification: classification of socio-occupational categories, of professions, of qualifications and of the level of initial education and professional training.

So we could think of the construction of an european standardized classification of socio-professional categories.

- The collection of information itself, through the various surveys organized by the statistic offices of the different countries could be standardized on these aspects.

With the same spirit, we could also imagine that the data about peculiar forms of jobs, with all the meanings of the word (temporary work, short term labour contacts, part time) would be made on an european basis, for the whole economy of the EEC countries, at least for some sectors. To favor the comparability of data, these information should be presented in the activity classification of the EEC (NACE). As far as the intermediary jobs are concerned (public schemes for young people for instance) it could be necessary to develop the monitoring of their evolution in european countries. This would involve to improve the comparability of the definition of these forms between the different countries.

APPENDIX

QUALIFICATIONS AND OCCUPATIONS

The purpose of this appendix is to present the main statistical classifications available in France and to consider the possibilities of crossing between activities, occupations and qualifications.

In a first step, we deal with the available classifications and their characteristics (Part I), then we present the main crossings which are given directly on the data (Population Census, Survey of Employment, etc.) (Part II). We shall try also to point out the level of disaggregation in which those informations are available.

TABLE A.1

Nomenclature d'activités et de produits (NAP)

U 16	T 40	Titres	S 90*	NAP 100
U 01	T 01	Agriculture, sylviculture, pêche	S 01, S 02, S 03.	01, 02, 03.
U 02		Industries agricoles et alimentaires.		
	T 02	Industries de la viande et du lait	S 35, S 36.	35, 36.
	T 03	Autres industries agricoles et alimentaires	S 37, S 38, S 39, S 401, S 402, S 403, S 41, S 42.	37, 38, 39, 40, 41, 42.
U 03		Production et distribution d'énergie.		
	T 04	Production de combustibles minéraux solides et cokéfaction	S 041, S 042.	04.
	T 05	Production de pétrole et de gaz naturel	S 051, S 052, S 053.	05.
	T 06	Production, distribution d'électricité, distribution de gaz et d'eau	S 06, S 07, S 08.	06, 07, 08.
U 04		Industrie des biens intermédiaires.		
	T 07	Production de minerais et métaux ferreux, première transformation de l'acier	S 09, S 10, S 11.	09, 10, 11.
	T 08	Production de minerais, métaux et demi-produits non ferreux	S 12, S 13.	12, 13.
	T 09	Production de matériaux de construction et minéraux divers	S 14, S 15.	14, 15.
	T 10	Industrie du verre	S 16.	16.
	T 11	Chimie de base, production de fils et fibres artificiels et synthétiques	S 171, S 172, S 43.	17, 43.
	T 13	Fonderie et travail des métaux	S 20, S 21.	20, 21.
	T 21	Industrie du papier et du carton	S 50.	50.
	T 23	Industrie du caoutchouc et de la transformation des matières plastiques	S 52, S 53.	52, 53.
U 05		Industrie des biens d'équipement.		
U 05 A		Industrie des biens d'équipement professionnel.		
	T 14	Construction mécanique	S 22, S 23, S 24, S 25, S 34.	22, 23, 24, 25, 34.
	T 15 A	Construction électrique et électronique professionnelle	S 27, S 28, S 291.	27, 28, 29, 30, 32, 33.
	T 17	Construction navale et aéronautique, armement	S 26, S 32, S 33.	
U 05 B	T 15 B	Construction de biens d'équipement ménager	S 292, S 30.	
U 05 C	T 16	Construction de véhicules automobiles et d'autres matériels de transport terrestre	S 311, S 312.	31.
U 06		Industrie des biens de consommation courante.		
	T 12	Parachimie et industrie pharmaceutique	S 18, S 19.	18, 19.
	T 18	Industrie textile et de l'habillement	S 441, S 442, S 443, S 47.	44, 47.
	T 19	Industries du cuir et de la chaussure	S 451, S 452, S 46.	45, 46.
	T 20	Industries du bois et de l'ameublement, industries diverses	S 48, S 49, S 54.	48, 49, 54.
	T 22	Imprimerie, presse, édition	S 51.	51.
U 07	T 24	Bâtiment, génie civil et agricole	S 55.	55.
U 08	T 25-8	Commerce	S 57 à S 64.	57 à 64.
	T 25	Commerce de gros alimentaire	S 57.	57.
	T 26	Commerce de gros non alimentaire	S 58, S 59, S 60.	58, 59, 60.
	T 27	Commerce de détail alimentaire	S 61, S 62.	61, 62.
	T 28	Commerce de détail non alimentaire	S 63, S 64.	63, 64.
U 09		Transports et télécommunications.		
	T 31	Transports	S 68, S 691, S 692, S 70, S 71, S 72, S 73-4.	68, 69, 70, 71, 72, 73, 74.
	T 32	Télécommunications	S 75.	75.
U 10		Services marchands.		
	T 29	Réparation et commerce de l'automobile	S 65.	65.
	T 30	Hôtels, cafés, restaurants	S 67.	67.
	T 33	Services marchands rendus principalement aux entreprises	S 56, S 76-9, S 80, S 82-3.	56, 76, 77, 78, 79, 80, 82, 83.
	T 34	Services marchands rendus principalement aux particuliers	S 66, S 84, S 85-7.	66, 84, 85, 86, 87.
U 11	T 35	Location et crédit-bail immobiliers	S 811, S 812.	81.
U 12	T 36	Assurances	S 88.	88.
U 13	T 37	Organismes financiers	S 89.	89.
U 14	T 38	Services non marchands	S 90-1, S 92-3, S 94-9.	90, 91, 92, 93, 94, 95, 96, 97, 98.

* Le découpage en S 90, issu de la NAP 100, est utilisé pour l'élaboration du tableau entrées-sorties.

I - MAIN STATISTICAL CLASSIFICATIONS11 - FRENCH INDUSTRIAL CLASSIFICATION OF ECONOMIC ACTIVITIES

As the first intermediary report has showed it most of the usual data on employment (salary workers, sex, self employed, ...) are available in various levels of the same classification, the "Nomenclature d'Activités et de Produits".

In order to avoid any ambiguity it may be useful to recall that:

- any active person is classified according to the plant in which he/she is employed or that he/she is owning and not in the firm, considering that a firm may operate on various industries;
- active workers employed in service activities such as maintenance, caretaking or temporary working agencies are classified according to the activity of the plant they are employed by and not of the plant they work for. For instance, typists on temporary work (cf. chapter 2), working in the chemical industry will be classified in the service activities.

The main activity levels the following: 14, 40, 100, 600 (cf. Table 1).

The best information about employment is given by the Population Census which occurs every 7 years. Between those Census the data on employment given in the National Accounts are built from the "Enquête Emploi" (INSEE), the "Enquête ACEMO" (Ministry of Labour) and the UNEDIC data (Unemployment insurance statistical office). The last 1982 Population Census has induced to a reconsideration of employment data since 1975. The data at the level 14,40 are available on an annual basis and are exhaustive.

112 - European Classification

The data given in the French Classification can be rearranged in order to fit the European Standards (NACE). Annual data about total employment, salaried workers, and sex are then available at INSEE, but since the results have been reconsidered in the last National Accounts (1984), due to the last Population Survey, the whole series have to be reset. They will not be available until September 1986.

12 - STATUS CLASSIFICATION

This classification is used in some surveys. It contains a broad classification distinguishing salaried workers and self-employed workers. A more precise classification provides some informations according to the type of labour contract and the type of employer (private or public). Some of the categories of this classification are used in the new occupation classification (see 13 below).

The results for 1983 are the following (Enquête Emploi).

TABLE A.2

ACTIVE POPULATION ACCORDING TO STATUS AND SEX - 1983

Unit: 1 thousand

S T A T U S	MALE	FEMALE	TOTAL
<u>SELF-EMPLOYED:</u>			
- Independent workers	2 152	576	2 728
- Family workers	132	782	915
<u>PRIVATE SECTOR :</u>			
- Temporary worker (intérimaire)	67	43	110
- Apprentice	133	46	179
- Trainee	31	23	54
- Short term Labour contract	124	132	256
- Other salary workers	7 958	4 565	12 524
<u>PUBLIC SECTOR:</u>			
- Occupant workers (titulaires)	1 640	1 726	3 367
- Non occupant	254	501	756
- Indefinite status	193	291	484
TOTAL:	12 684	8 685	21 373

13 - OCCUPATIONS AND SOCIO PROFESSIONAL CATEGORIES CLASSIFICATION131 - The new "occupations and socio-professional categories" classification

The present Occupations and socio-professional categories classification is the result of a remodelling of the various classifications that were used before. Those classifications were quite different and hard to link together. Some of them dealt with jobs, some others with social categories without any easy connections. The main ones were the "Socio-professional categories code" which took place in 1950 and the "Job classification" (Nomenclature des Emplois) which was used in the survey called "Structure des Emplois", run by INSEE.

TABLE A. 3

**NOMENCLATURE DES CATÉGORIES SOCIOPROFESSIONNELLES,
CORRESPONDANCE ENTRE LES NIVEAUX 8, 24 ET 42**

Niveau agrégé (8 postes dont 6 pour les actifs occupés)	Niveau de publication courante (24 postes dont 19 pour les actifs)	Niveau détaillé (42 postes dont 32 pour les actifs)
1 Agriculteurs exploitants	10 Agriculteurs exploitants	11 Agriculteurs sur petite exploitation. 12 Agriculteurs sur moyenne exploitation. 13 Agriculteurs sur grande exploitation.
2 Artisans, commerçants et chefs d'entreprise.	21 Artisans.	21 Artisans.
	22 Commerçants et assimilés.	22 Commerçants et assimilés.
	23 Chefs d'entreprise de 10 salariés ou plus.	23 Chefs d'entreprise de 10 salariés ou plus.
3 Cadres et professions intellectuelles supérieures.	31 Professions libérales.	31 Professions libérales.
	32 Cadres de la fonction publique, professions intellectuelles et artistiques.	33 Cadres de la fonction publique. 34 Professeurs, professions scientifiques. 35 Professions de l'information, des arts et des spectacles.
	36 Cadres d'entreprise.	37 Cadres administratifs et commerciaux d'entreprise. 38 Ingénieurs et cadres techniques d'entreprise.
4 Professions intermédiaires.	41 Professions intermédiaires de l'enseignement, de la santé, de la fonction publique et assimilés.	42 Instituteurs et assimilés. 43 Professions intermédiaires de la santé et du travail social. 44 Clergé, religieux. 45 Professions intermédiaires administratives de la fonction publique.
	46 Professions intermédiaires administratives et commerciales des entreprises.	46 Professions intermédiaires administratives et commerciales des entreprises.
	47 Techniciens.	47 Techniciens.
	48 Contremaîtres, agents de maîtrise.	48 Contremaîtres, agents de maîtrise.
5 Employés.	51 Employés de la fonction publique.	52 Employés civils et agents de service de la fonction publique. 53 Policiers et militaires.
	54 Employés administratifs d'entreprise.	54 Employés administratifs d'entreprise.
	55 Employés de commerce.	55 Employés de commerce.
	56 Personnels des services directs aux particuliers.	56 Personnels des services directs aux particuliers.
6 Ouvriers.	61 Ouvriers qualifiés.	62 Ouvriers qualifiés de type industriel. 63 Ouvriers qualifiés de type artisanal. 64 Chauffeurs. 65 Ouvriers qualifiés de la manutention, du magasinage et du transport.
	66 Ouvriers non qualifiés.	67 Ouvriers non qualifiés de type industriel. 68 Ouvriers non qualifiés de type artisanal.
	69 Ouvriers agricoles.	69 Ouvriers agricoles
7 Retraités.	71 Anciens agriculteurs exploitants.	71 Anciens agriculteurs exploitants.
	72 Anciens artisans, commerçants, chefs d'entreprise.	72 Anciens artisans, commerçants, chefs d'entreprise.
	73 Anciens cadres et professions intermédiaires.	74 Anciens cadres. 75 Anciennes professions intermédiaires.
	76 Anciens employés et ouvriers.	77 Anciens employés. 78 Anciens ouvriers.
8 Autres personnes sans activité professionnelle.	81 Chômeurs n'ayant jamais travaillé.	81 Chômeurs n'ayant jamais travaillé.
	82 Inactifs divers (autres que retraités).	83 Militaires du contingent. 84 Élèves, étudiants de 15 ans ou plus. 85 Personnes diverses sans activité professionnelle de moins de 60 ans (sauf retraités). 86 Personnes diverses sans activité professionnelle de 60 ans ou plus (sauf retraités).

The reasons for the building of a new social classification are not only the necessity of a simpler system. The steady transformation of occupations requires, from time to time, the classifications into which they are broken down for the sake of statistical analysis to be modified. In that sense, the new classification provides some informations on the new jobs, according to various criteria such as the job content, the educational level and professional training, the income or the general cultural level.

The new classification has been the result of an important work between many administrations, public offices and research centers. Some special efforts have been made to obtain a clearer representation of some categories which content was somewhat fuzzy such as employees, intermediary executives, and so on . . .

The following Table presents the main differences and similarities between the previous classifications and the new one.

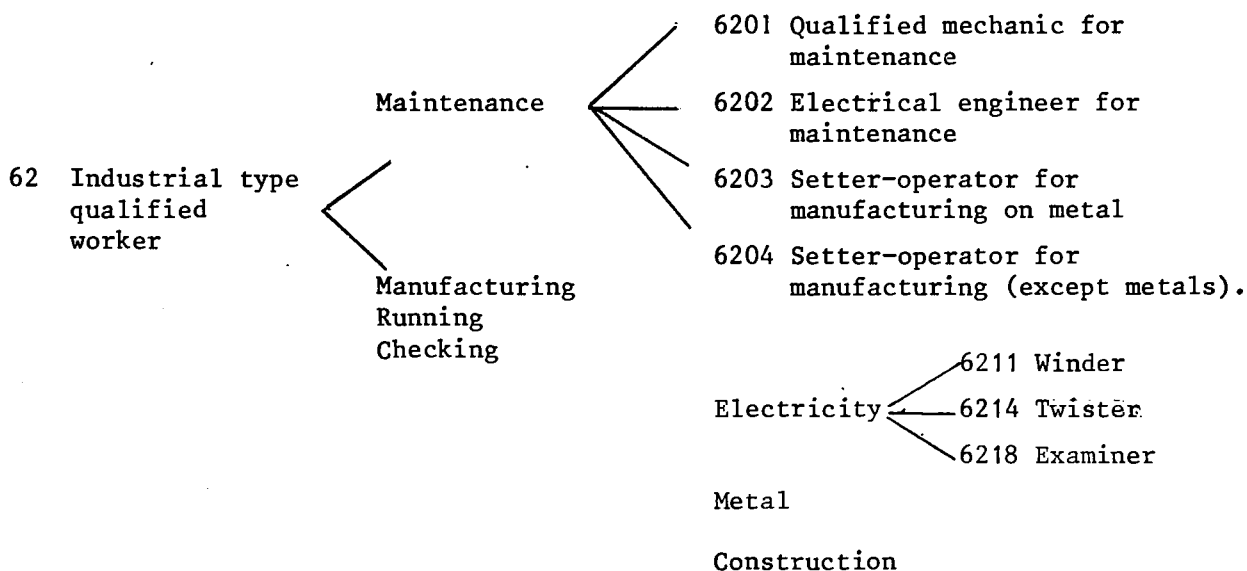
TABLE A.4

Les effectifs des anciennes et des nouvelles catégories socioprofessionnelles en 1982 (population active)

Anciennes catégories	Nouvelles catégories
0. AGRICULTEURS EXPLOITANTS..... 1 448 000	1. AGRICULTEURS EXPLOITANTS..... 1 475 000
00. Agriculteurs exploitants.....	11. Agriculteurs sur petite exploitation..... 690 000
1. SALARIÉS AGRICOLES..... 304 000	12. Agriculteurs sur moyenne exploitation..... 450 000
10. Salariés agricoles.....	13. Agriculteurs sur grande exploitation..... 335 000
2. PATRONS DE L'INDUSTRIE ET DU COMMERCE. 1 737 000	2. ARTISANS, COMMERÇANTS ET CHEFS D'ENTRE- PRISE..... 1 835 000
21. Industriels..... 71 000	21. Artisans..... 904 000
22. Artisans..... 573 000	22. Commerçants..... 797 000
23. Patrons pêcheurs..... 13 000	23. Chefs d'entreprise de 10 salariés ou plus..... 134 000
26. Gros commerçants..... 210 000	
27. Petits commerçants..... 870 000	
3. PROFESSIONS LIBÉRALES ET CADRES SUPÉRIEURS. 1 810 000	3. CADRES ET PROFESSIONS INTELLECTUELLES SUPÉRIEURES..... 1 895 000
30. Professions libérales..... 220 000	31. Professions libérales..... 239 000
32. Professeurs, professions littéraires et scientifiques. 479 000	33. Cadres de la fonction publique..... 244 000
33. Ingénieurs..... 347 000	34. Professeurs, professions scientifiques..... 353 000
34. Cadres administratifs supérieurs..... 764 000	35. Professions de l'information, des arts et des spec- tacles..... 117 000
4. CADRES MOYENS..... 3 254 000	37. Cadres administratifs et commerciaux d'entreprise 559 000
41. Instituteurs, professions intellectuelles diverses.. 828 000	38. Ingénieurs et cadres techniques d'entreprise... 383 000
42. Services médicaux et sociaux..... 432 000	4. PROFESSIONS INTERMÉDIAIRES..... 3 971 000
43. Techniciens..... 923 000	42. Instituteurs et assimilés..... 777 000
44. Cadres administratifs moyens..... 1 071 000	43. Professions intermédiaires de la santé et du travail social..... 613 000
5. EMPLOYÉS..... 4 677 000	44. Clergé, religieux..... 159 000
51. Employés de bureau..... 3 746 000	45. Professions intermédiaires administratives de la Fonction publique..... 278 000
53. Employés de commerce..... 931 000	46. Professions intermédiaires administratives et commerciales des entreprises..... 995 000
6. OUVRIERS..... 8 266 000	47. Techniciens..... 678 000
60. Contremaîtres..... 464 000	48. Contremaîtres, agents de maîtrise..... 571 000
61. Ouvriers qualifiés..... 3 292 000	5. EMPLOYÉS..... 6 247 000
63. Ouvriers spécialisés..... 2 605 000	52. Employés civils et agents de service de la fonction publique..... 1 703 000
65. Mineurs..... 49 000	53. Policiers et militaires..... 380 000
66. Marins et pêcheurs..... 33 000	54. Employés administratifs d'entreprise..... 2 532 000
67. Apprentis ouvriers..... 124 000	55. Employés de commerce..... 742 000
68. Manœuvres..... 1 699 000	56. Personnels des services directs aux particuliers... 890 000
7. PERSONNELS DE SERVICE..... 1 531 000	6. OUVRIERS..... 7 749 000
70. Gens de maison..... 214 000	62. Ouvriers qualifiés de type industriel..... 1 602 000
71. Femmes de ménage..... 112 000	63. Ouvriers qualifiés de type artisanal..... 1 509 000
72. Autres personnels de service..... 1 205 000	64. Chauffeurs..... 567 000
8. AUTRES CATÉGORIES..... 498 000	65. Ouvriers qualifiés de la manutention, du magasi- nage et du transport..... 417 000
80. Artistes..... 74 000	67. Ouvriers non qualifiés de type industriel..... 2 353 000
81. Clergé..... 61 000	68. Ouvriers non qualifiés de type artisanal..... 1 007 000
82. Armée et police..... 363 000	69. Ouvriers agricoles..... 294 000
POPULATION ACTIVE..... 23 525 000	81. Chômeurs n'ayant jamais travaillé..... 353 000
	POPULATION ACTIVE..... 23 525 000

In order to obtain a simpler system, the new classification has been built so that the more aggregated levels (levels 8, 24, 42), the socio-professional categories, amalgamate the more detailed level (455) of occupations.

The connection between the levels 8, 24 and 42 is given in Table 3. Let us give an example of the connection between the level "42" and the level "455". If one considers the workers group (level 6) and the sub-group of qualified workers (61) then goes to the 62 level: Industrial type qualified workers, it is yet possible to go to a more detailed level, dealing with occupations:



In that sense, the new classification deals in the same time with the social categories (aggregated level) and the occupations and skills (detailed level).

132 - Improvement of the new classification

The new classification has been prepared in order to be used for the 1982 Population Census. However, it should be noted that, in order to maintain some continuity with the preceding classification, the broad distinctions level "8") remain almost unchanged, except for the intermediary executives. Therefore, some comparisons can still be made with the previous Population Census (1975, 1968).

The new classification has been also used for some employment surveys such as the "Enquête Emploi" (INSEE).

1321 - The "Enquête Emploi"

This annual survey made by INSEE uses the new classification since March 1982. Because of the rather small size of the sample, it provides data at the more aggregated levels only (8 and 24). Here again, for some categories the continuity with the previous classification should be possible. Nevertheless, the level is so aggregated that the survey gives only broad informations about the new forms of jobs. It may be noted that it gives some indications about precarious forms of jobs as will be seen in Chapter 2.

1322 - The "Enquête Structure des Emplois"

This survey has been built in 1968, using some employers data giving some informations about the main occupations inside the firm.

The need for this kind of informations had been underlined during the preparation of the 5th and the 6th French Plan (1966 and 1971). The survey considered primarily the qualified jobs and workers and used an ad hoc classification of 294 jobs. Some crossings were made with some industry classifications, some of them aggregated (MT2, 5 industries) and some more detailed (MT 1, 36 industries; SECT 38, 38 industries). Those industry classifications were different of the NAP classification already mentioned. The comparisons and linkings were then not very practicable.

This form of the "Structure des Emplois" survey has been used until 1983. The new form starts in 1984 and its results should be available by the end of 1986. It is framed now on the new "occupations and socio-professional categories" classification already mentioned and should provide some very interesting crossings between activities, socio-professional categories and size of plants. The cross-data we shall mention in the synthetical Table of the Part 2 of this Chapter are taken from the new version of the survey.

In that case, there will be a breaking between the previous series and the new ones, starting on 1984. However, some data should be given in the former classification. It will be necessary to wait until the data are available to know which particular data remain.

1323 - Compatibility with the ISCO classification

Unfortunately, the new "Socio-professional categories" classification is not directly comparable with the European ISCO classification. After having checked this point with the "Division Emploi" of INSEE, it appears that the INSEE experts have not yet tried to build some matrix allowing some compatibility or comparison with the ISCO system.

This means that international comparisons on this matter may be quite uneasy.

TABLE A.5

DIPLOMA CLASSIFICATION

CORRESPONDANCE BETWEEN AGGREGATE LEVEL AND DETAILED LEVEL

Diplome regroupé (DDIPL)	Diplome détaillé (DIPL)
Diplome non déclaré	Diplome non déclaré.....
7. Aucun diplôme ou certificat d'études (CEP) seul	71. Aucun diplôme..... 70. Certificat d'études primaires (CEP) seul.....
6. BEPC (ou BE, BEPS) seul	60. BEPC (ou BE, BEPS) seul.....
5. CAP, BEP, ou autre diplôme de ce niveau	51. CAP, BEP, ou diplôme technique de ce niveau avec un diplôme (éventuel) d'enseignement général au plus égal au CEP..... 50. CAP, BEP, ou diplôme technique de ce niveau avec un BEPC, BE ou BEPS.....
4. Baccalauréat ou brevet professionnel, ou autre diplôme de ce niveau	43. Brevet professionnel, BEA, BEC, BEI, ... avec un diplôme (éventuel) d'enseignement général au plus égal au BEPC 42. Baccalauréat F, G, H, BT, BSEC, ... avec diplôme (éventuel) d'enseignement général au plus égal au BEPC..... 41. Baccalauréat général (1ère ou 2è partie) ou BS, seul... 40. Baccalauréat général (1ère ou 2è partie) ou BS, avec un diplôme technique.....
3. Diplôme du 1er cycle universitaire, BTS, DUT, diplôme paramédical ou social	33. Diplôme paramédical ou social, sans bacc. général.... 32. Diplôme paramédical ou social, avec bacc. général.... 31. DUT, BTS, ou autre diplôme du niveau technicien supérieur..... 30. Diplôme du 1er cycle universitaire, diplôme pédagogique
1. Diplôme du 2è ou du 3è cycle universitaire, diplôme d'une grande école ou école d'ingénieur	10. Diplôme du 2è ou 3è cycle universitaire..... 11. Diplôme d'une grande école ou école d'ingénieur.....
En cours d'études initiales	En cours d'études initiales

14 - DIPLOMA CLASSIFICATION

If we keep in mind the distinction between the job qualification and the personal qualification, diploma level remains an important criterium for the approach of the latter.

There are three main sources for data on diploma and they use different classifications and provide different levels of details.

The annual survey "Enquête Emploi" provides informations on a fairly aggregated basis. First, they deal with the training followed while the survey is done, and separate between education with or without professional activity. Secondly, all other active persons indicate their educational level and the highest diploma they have. The answers about diplomas can then be broken into two main classifications: a broad one with 6 items and a more detailed one with 15 items, as showed in the following Table:

The Population Census contains some data about educational level and training which are comparable to the "Enquête Emploi" and a slightly more detailed classification.

The last source is an other survey from INSEE, the "Formation qualification-profession" Survey, which is conducted on a quite long periodicity: the last one has been done in 1977, the next one, for the year 1984, will be available in September 1986. It gives a wide variety of classifications, some of them very detailed. However, for the sake of cross classifications with industries or socio-professional categories, all of them are not fit for use. We shall restrict ourselves to the classifications which could be used for this purpose (1).

A first broad distinction can be made between the initial education and the post-school training:

- Initial education: all studies from the primary level until high education level. Apprenticeship is included in this category.
- Post-school education and training: this category can itself be divided into two subdivisions:
 - . courses for adults, primary, secondary or superior, taken after a break that is not due to illness or military service.
 - . all kinds of training programs such as professional training courses (Formation Professionnelle des Adultes) or courses for adults organized by universities or foundations, etc...

Then, the diploma classification used for cross data, is the same as the one used by the "Enquête Emploi" with an exception: the high level diplomas (level 1 in the "Enquête Emploi") are splitted into two categories, so that the classification contains 7 items instead of 6.

After having surveyed the main classifications used in France for industries, social categories and diploma, we can come to the possible crossings between them.

(1) The cross classifications are given in the Part 2 of this Chapter.

II - AVAILABILITY OF CROSS CLASSIFICATIONS

21 - PRESENTATION OF THE CROSS CLASSIFICATIONS

In order to check all the cross classifications that are possible with a simple use of available data, we have set up the following Table (see page 16) which deserves some explanations.

(1) Socio-professional categories

We have presented before the main levels of the new occupations and socioprofessional categories classifications. They are reproduced here and crossed with the other items.

The line "< 8" may have two meanings:

- the first one can be the classification used specifically in one survey called the "Declaration Annuelle des Salaires" (INSEE). This classification is not exhaustive and deals only with salaried workers.

It's categories are the followings:

- . High level executives.
- . Medium level executives.
- . Employees.
- . Workers.
- . Other salaried workers.

- the second one means that the "8" level of the new classification is being used but does not contain some items such as unemployed persons.

(2) Industries: activités

For this item, we have the different levels available in the "N.A.P." (Industrial Classification) which are the levels 14, 40, 100 and 600.

		⑥ Formation					⑤ Taille	④ Statut			Salariés	③ Sexe	② Activité				
		5p	14p	Form. init.	Form. contin.	Au-tres	Entreprise Etablissement.	2 postes	Détaillé				14	40	100	600	NACE
① Catégories socio-professionnelles	< 8						DAS 2/DAS 3		EE 2	DAS 1		RP 5	EE 4 RP 5 SDE 12				
	8	RF 3	RF 4				SDE11/SDE13 /SDE15		RP 1		EE1/RP1	EE3 SDE14	SDE1 SDE13	SDE10 SDE11	SDE9		
	24		EE 8	EE 8 FQP5	FQP3	FQP6	SDE4/SDE8			EE 7	EE7/RP6	SDE2 SDE7	RP6 SDE2 SDE5,6	SDE4			
	42		RF 5						EE 5								
	455	RF 6									RP 4	SDE3					RP4
② Activité	14	RF 7		FQP7*			SDE8, SDE15										
	40	FR7					DAS5/SDE13		RP2		EE4/RP2 RP5						
	100						SDE4.SDE11	RP3			RP3						
	600								DAS 4	UNEDIC							
	NACE								DE		DE	DE					
	Global	EE6															
	Partiel				FQP2						DAS 1						
③ Sexe		EE6 RF1 RF7	RF2			FQP6		RP3	RP2				EE4 RP5				
④ Statut	2 postes																
	Détaillé	RF8	FQP4	FQP4													
	Salariés seulement				FQP2												
⑤ Taille Entreprise ou établissement					FQP2												
⑥ Formation	5 P																
	14 P																
	Formation init.				EE10												
	Formation contin.																

(3, 4) Status, sex: statut, sexe

For these items, the availability of the data is given whenever it seems relevant. However, some data given in other crossings, such as socio-professional categories and activities may contain a distinction between males and females. It should be necessary to go inside the particular data to check if this information is available.

(5) Size of plant: taille d'établissement

In most cases, this criterium is set up with the size of the plant and not of the firm. The distinctions between sizes may differ and in some cases small size plants - less of ten persons for instance - may not appear or be less precise.

(6) Education and training: formation

As mentioned before, we have only presented here the data dealing with training that could be crossed with other variables such as socio-professional categories or activities. This means that diploma classifications at the global level are not presented here.

The codes given in the Table correspond with the codes used in the survey and census used in this Chapter (see Annex 1).

As it could be expected, some crossing remain empty, and some others which make a correspondence between detailed level of classification are not available on an annual basis. Nevertheless, it appears that the number of cross data is quite high (around 80). It is therefore impossible to present them all.

In order to give a rough idea of the results of those cross data, we shall limit ourselves to a few Tables. The other Tables may of course be given later on.

22 - SOME EXAMPLES OF CROSS CLASSIFICATIONS

- (1) Tableau 03
Socio-professional categories and diploma level; total population.
Source: 1982 Population Census.
- (2) Tableau 09
Activities (14 and 40 level) and diploma level; active population.
Source: 1982 Population Census.
- (3) Tableau PA 11
Activities and socio-professional categories, active population aggregated level.
Source: 1985 Enquête Emploi - Annual.
- (4) Tableaux 21 et 22
Qualification structure of salaried workers and size of firm (1976), qualification structure of workers and size of plant 1980.
Source: 1980 Declaration Annuelle de Salaires.

TABLE A.6

- Population totale, âgée de 15 ans ou plus, par sexe, catégorie socioprofessionnelle (Niveau 8) et diplôme regroupé.

Notes n° 21, 36

Catégorie socioprofessionnelle (Niveau 8)	Ensemble	Diplôme regroupé					
		Aucun diplôme déclaré ou CEP	BEPC seul	CAP, BEP	Baccalauréat ou brevet professionnel	Baccalauréat + 2 ans	Diplôme supérieur

Les deux sexes

ENSEMBLE.	43040220	25898480	3599860	6275420	3942360	1703000	1621100
1 AGRICULTEURS EXPLOITANTS	1475380	1140960	46940	200080	69640	9460	7900
2 ARTISANS, COMMERÇANTS, CHEFS D ENTREPRISE	1834620	975120	125600	438080	218720	31180	45860
3 CADRES, PROFESSIONS INTELLECTUELLES SUPERIEURES	1894720	202860	110400	140640	352580	218720	869520
4 PROFESSIONS INTERMÉDIAIRES	3971100	818280	322680	731020	965330	860120	273620
5 EMPLOYÉS (Y COMPRIS PERSONNELS DES SERVICES)	6247240	2917900	748820	1629920	756740	140820	5040
6 OUVRIERS (Y COMPRIS AGRICOLES)	7748860	5259200	254320	1977340	203560	18480	5860
7 RETRAITÉS	7436020	6264020	365040	252020	309820	106300	138820
8 AUTRES PERSONNES SANS ACTIVITÉ PROFESSIONNELLE	12432260	8290140	1620060	906320	1065860	317420	226480

Sexe masculin

ENSEMBLE.	20731220	11769760	1460780	3781960	1944800	697160	1036760
1 AGRICULTEURS EXPLOITANTS	927340	679900	25140	155640	53460	6480	6720
2 ARTISANS, COMMERÇANTS, CHEFS D ENTREPRISE	1218340	600220	63320	344900	146960	21100	39840
3 CADRES, PROFESSIONS INTELLECTUELLES SUPERIEURES	1424940	160060	81120	109860	277280	159400	637220
4 PROFESSIONS INTERMÉDIAIRES	2369480	589900	190940	588880	571680	323760	124320
5 EMPLOYÉS (Y COMPRIS PERSONNELS DES SERVICES)	1724860	829460	213100	416520	207740	34540	21500
6 OUVRIERS (Y COMPRIS AGRICOLES)	6147700	3999780	181080	1773500	174500	14300	4540
7 RETRAITÉS	3619600	2959760	147080	170720	193120	36320	112600
8 AUTRES PERSONNES SANS ACTIVITÉ PROFESSIONNELLE	3298960	1950880	557000	241940	358060	101260	90020

Sexe féminin

ENSEMBLE.	22309000	14128720	2139080	2493460	1957560	1005440	584340
1 AGRICULTEURS EXPLOITANTS	548040	461060	21800	44440	16180	3580	1180
2 ARTISANS, COMMERÇANTS, CHEFS D ENTREPRISE	616280	374900	62280	93180	69820	10080	5020
3 CADRES, PROFESSIONS INTELLECTUELLES SUPERIEURES	469780	42800	29280	30780	75300	59320	232300
4 PROFESSIONS INTERMÉDIAIRES	1601620	228360	131740	162140	393700	535360	149300
5 EMPLOYÉS (Y COMPRIS PERSONNELS DES SERVICES)	4522380	2088440	533720	1213400	549000	106280	31540
6 OUVRIERS (Y COMPRIS AGRICOLES)	1601160	1289420	73240	203840	29050	4280	1320
7 RETRAITÉS	3816420	3304260	217960	81300	116700	69480	26220
8 AUTRES PERSONNES SANS ACTIVITÉ PROFESSIONNELLE	9133320	6339460	1069060	654360	707800	216160	136480

TABLE A.7

- Population active ayant un emploi, par sexe, activité économique (Niveaux 15 A et 40) et diplôme regroupé.

Notes n°s 21, 41

Activité économique (Niveaux 15A et 40)	Ensemble	Diplôme regroupé					
		Aucun diplôme déclaré ou CEP	BEPC seul	CAP, BEP	Baccalauréat ou brevet professionnel	Baccalauréat + 2 ans	Diplôme supérieur
Les deux sexes							
ENSEMBLE.	21465960	10379840	1474900	4740360	2417020	1236940	1216900
U01 T01 AGRICULTURE, SYLVICULTURE, PECHE.	1759220	1362920	56800	233080	83400	12760	10260
U02 INDUSTRIES AGRICOLES ET ALIMENTAIRES.	626420	377660	36360	153300	39220	10780	9100
T02 INDUSTRIES DE LA VIANDE ET DU LAIT	189040	119540	10380	40860	12360	3680	2220
T03 AUTRES INDUSTRIES AGRICOLES ET ALIMENTAIRES	437380	258120	25980	112440	26860	7100	6880
U03 PRODUCTION ET DISTRIBUTION D ENERGIE.	301440	146300	20160	98840	43400	12140	20600
T04 PROD. COMBUST. MINER. SOLIDES, COKEFACTION	58920	34900	1680	17040	3440	620	1240
T05 PRODUCTION DE PETROLE ET DE GAZ NATUREL	41300	11640	2660	9920	7740	3390	6040
T06 PROG. ET DISTR. ELECTRICITE, DISTR. GAZ, EAU	201220	99760	15820	71880	32220	8220	13320
U04 INDUSTRIES DES BIENS INTERMEDIAIRES.	1452440	822660	63660	379740	111040	35760	39500
T07 PR. MINERAIS, METAUX FERR., IRE TRANSF. ACIER	163520	89640	5640	48300	11360	3960	4620
T08 PR. MINERAIS, METAUX, DEMI-PRODUITS NON FERR.	77580	41020	3740	18760	7200	3200	3460
T09 PR. MATERIAUX DE CONSTR. ET MINERAUX DIVERS	184780	118400	7540	39420	11620	3620	4180
T10 INDUSTRIE DU VERRE	67560	41220	3140	15860	4260	1320	1760
T11 CHIMIE DE BASE, PR. FILS, FIBR. ARTIF. ET SYNTH	150520	68960	8240	37580	17840	7500	10400
T13 Fonderie et travail des métaux	474760	258480	17620	146780	34680	9440	7760
T21 INDUSTRIE DU PAPIER ET DU CARTON	114100	73580	5900	22820	7520	1820	2460
T23 IND. CAOUTCHOUC, TRANSF. MATIERES PLASTIQUES	219620	131360	11840	50020	16560	4900	4940
U05 INDUSTRIES DES BIENS D EQUIPEMENT.	1797420	838640	77420	541240	178860	78700	82560
T14 CONSTRUCTION MECANIQUE	532100	237400	21140	185420	52500	18980	16660
T15A CONSTR. MATERIELS ELECTR. ET ELECTRON. PROFESS	404200	202360	27480	121580	60620	33860	38300
T15B FABRICATION D EQUIPEMENT MENAGER	80940	49460	3940	17420	5340	2440	2340
T16 CONSTR. VEH. AUTOM. ET AUTRES MAT. TRANSP. TERR	472920	274260	15520	128300	32740	11150	10940
T17 CONSTR. NAVALE ET AERONAUTIQUE, ARMEMENT	227260	75160	9340	88520	27660	12260	14320
U06 INDUSTRIES DES BIENS DE CONSOMMATION .	1403580	848160	81980	297520	105460	31240	39220
T12 PARACHIMIE ET INDUSTRIE PHARMACEUTIQUE	177400	83440	12160	32200	24880	11260	13460
T18 INDUSTRIES TEXTILE ET DE L HABILLEMENT	513080	352440	26220	97600	25680	5440	5700
T19 INDUSTRIES DU CUIR ET DE LA CHAUSSURE	102960	74800	5940	16600	4020	800	890
T20 IND. BOIS ET AMEUBLEMENT, IND. DIVERSES	381540	237500	19200	90140	23600	6140	4960
T22 IMPRIMERIE, PRESSE, EDITION	228600	99980	18460	60980	27280	7600	14300
U07 T24 BATIMENT ET GENIE CIVIL ET AGRICOLE.	1763380	1023840	57020	533280	99220	23340	21680
U08 COMMERCE.	2542660	1288120	224600	602160	282520	78160	67100
T25 COMMERCE DE GROS ALIMENTAIRE	294180	168040	22600	63340	27940	6760	5500
T26 COMMERCE DE GROS NON ALIMENTAIRE	663580	277900	57000	170900	99820	28520	29440
T27 COMMERCE DE DETAIL ALIMENTAIRE	652360	343960	52720	164460	40460	6720	4046
T28 COMMERCE DE DETAIL NON ALIMENTAIRE	932540	458220	92280	203460	114300	36160	28120
U09 TRANSPORTS ET TELECOMMUNICATIONS.	1358160	619120	197400	300320	173860	31640	35820
T31 TRANSPORTS	890440	461060	73720	229160	84440	21600	20460
T32 TELECOMMUNICATIONS ET POSTES	467720	158060	123680	71160	89420	10040	15360
U10 SERVICES MARCHANDS.	4032100	1652540	275600	845960	474580	475600	307820
T29 REPARATION ET COMMERCE DE L AUTOMOBILE	411240	203560	24840	144480	31180	4160	3020
T30 HOTELS, CAFES, RESTAURANTS	620280	386140	45840	122240	47360	11760	6940
T33 SERVICES MARCHANDS RENDUS AUX ENTREPRISES	1062340	331880	87200	230320	190360	74380	148200
T34 SERVICES MARCHANDS RENDUS AUX PARTICULIERS	1938240	730960	117720	348920	205680	385300	149660
U11 T35 LOCATION ET CREDIT BAIL IMMOBILIERS.	68800	37780	4920	14160	7920	1880	2140
U12 T36 ASSURANCES.	147920	41880	19860	37720	31140	6460	10860
U13 T37 ORGANISMES FINANCIERS.	429540	82780	45320	121060	125040	23700	31640
U14 T38 SERVICES NON MARCHANDS.	3782880	1272440	313800	581980	661360	414780	538520

TABLE A.8

Actifs occupés selon le sexe, l'activité économique regroupée (14 postes) et la catégorie socioprofessionnelle (niveau agrégé).

Sexe et activité économique regroupée (14 postes)	Agricul-teurs exploitants	Artisans, commerçants chefs d'ent	Cadros, professions intell. sup.	Professions inter-médiaires	Employés	Ouvriers	Total
HOMMES							
Activité indéterminée.....	10 385	3 617	4 341	6 926	4 159	18 918	48 346
01. Agriculture.....	912 688	3 261	3 318	16 620	3 910	177 255	1 117 052
02. Industries agricoles et alimentaires.....	328	52 283	23 062	57 941	9 130	290 894	433 638
03. Energie.....	-	-	32 226	82 167	20 247	99 460	234 100
04. Industrie des biens intermédiaires.....	629	28 910	71 103	225 050	25 691	716 817	1 068 200
05. Industrie des biens d'équipement.....	-	25 346	160 885	378 359	35 092	700 751	1 300 433
06. Industrie des biens de consommation.....	1 900	59 337	77 340	125 400	13 648	406 034	683 659
02 à 06. Industrie.....	2 857	165 876	364 616	868 917	103 808	2 213 956	3 720 030
07. Batiment, génie civil et agricole.....	607	292 521	47 276	145 059	10 546	947 849	1 443 858
08. Commerce.....	3 080	271 614	132 253	253 758	141 693	444 890	1 247 088
09. Transports et télécommunications.....	-	47 366	80 767	178 603	216 685	442 684	966 105
10. Services marchands.....	1 001	291 984	402 950	403 801	313 752	454 890	1 868 378
11 à 13. Institutions financières.....	-	6 854	85 480	77 882	122 392	19 792	312 400
14. Services non marchands.....	196	1 799	324 213	501 635	464 477	370 954	1 743 274
08 à 14. Tertiaire.....	4 277	619 617	1 025 663	1 495 679	1 258 999	1 733 010	6 137 245
TOTAL.....	930 814	1 084 892	1 445 214	2 533 201	1 381 422	5 090 968	12 466 531
FEMMES							
Activité indéterminée.....	9 562	3 109	1 561	3 393	11 774	4 432	33 831
01. Agriculture.....	572 035	1 913	599	1 218	9 544	42 058	627 367
02. Industries agricoles et alimentaires.....	-	37 528	3 707	13 476	72 589	90 008	217 308
03. Energie.....	-	-	1 941	16 291	33 758	4 920	56 910
04. Industrie des biens intermédiaires.....	-	9 745	5 130	31 327	85 906	132 050	264 158
05. Industrie des biens d'équipement.....	-	4 652	10 645	48 129	118 994	211 055	393 475
06. Industrie des biens de consommation.....	-	29 075	26 759	59 204	101 740	430 452	647 230
02 à 06. Industrie.....	-	81 000	48 182	168 427	412 987	868 485	1 579 031
07. Batiment, génie civil et agricole.....	-	38 977	2 149	11 823	58 484	7 566	118 999
08. Commerce.....	1 548	246 993	48 139	133 931	695 663	100 571	1 226 045
09. Transports et télécommunications.....	-	9 263	10 698	74 197	220 986	15 659	330 802
10. Services marchands.....	981	228 121	152 608	512 778	1 168 226	157 852	2 220 566
11 à 13. Institutions financières.....	-	2 898	20 214	55 673	249 691	20 792	349 263
14. Services non marchands.....	-	735	210 531	761 896	1 336 456	56 007	2 365 625
08 à 14. Tertiaire.....	2 529	488 010	442 190	1 538 475	3 671 022	350 860	6 493 106
TOTAL.....	584 126	613 009	494 681	1 723 336	4 163 811	1 273 421	8 852 384
LES DEUX SEXES							
Activité indéterminée.....	19 947	6 726	5 902	10 319	15 933	23 350	82 177
01. Agriculture.....	1 484 723	5 174	3 917	17 838	13 454	219 313	1 744 419
02. Industries agricoles et alimentaires.....	328	89 811	26 769	71 417	81 719	360 902	650 946
03. Energie.....	-	-	34 167	98 458	54 005	104 380	291 010
04. Industrie des biens intermédiaires.....	629	38 655	76 233	256 377	111 597	848 867	1 332 358
05. Industrie des biens d'équipement.....	-	29 998	171 530	426 483	154 086	911 605	1 693 908
06. Industrie des biens de consommation.....	1 900	88 412	104 099	184 604	115 328	836 486	1 330 899
02 à 06. Industrie.....	2 857	246 876	412 798	1 037 344	516 795	3 082 441	5 299 111
07. Batiment, génie civil et agricole.....	607	331 498	49 425	156 882	69 030	955 415	1 562 857
08. Commerce.....	4 628	518 607	180 392	387 689	837 356	545 251	2 473 933
09. Transports et télécommunications.....	-	56 629	91 465	252 800	437 671	458 342	1 296 907
10. Services marchands.....	1 932	520 105	555 558	915 579	1 481 978	612 742	4 088 944
11 à 13. Institutions financières.....	-	9 752	105 694	133 555	372 683	40 584	661 668
14. Services non marchands.....	196	2 534	534 744	1 343 531	1 800 933	426 961	4 108 899
08 à 14. Tertiaire.....	6 806	1 107 627	1 467 853	3 034 154	4 930 021	2 083 890	12 630 351
TOTAL.....	1 514 940	1 697 901	1 939 895	4 256 537	5 545 233	6 364 409	21 318 915

TABLE A.9

Structure de la population salariée par catégorie socioprofessionnelle et taille d'entreprise en 1976
(tous salariés à temps complet)

Source : INSEE - DAS

(En %)

Catégorie socioprofessionnelle	1 à 5 salariés	6 à 9 salariés	10 à 19 salariés	20 à 49 salariés	50 à 99 salariés	100 à 199 salariés	200 à 499 salariés	500 à 999 salariés	1 000 à 1 999 salariés	2 000 à 4 999 salariés	5 000 salariés et plus
Cadres supérieurs	4,4	7,3	6,8	6,0	4,9	4,5	4,5	5,1	5,4	5,3	5,3
Cadres moyens	7,1	10,0	10,5	11,2	11,6	12,0	12,8	14,9	15,0	15,7	15,3
Employés	28,4	25,9	23,9	20,9	19,4	17,9	20,2	20,3	20,1	23,1	23,1
Ouvriers	50,6	51,2	53,9	57,5	59,1	60,4	57,8	54,7	53,4	50,6	54,4
Personnel de service et autres	9,5	5,6	4,8	4,4	4,9	5,2	4,8	5,0	6,2	5,3	2,0
Ensemble	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

TABLE A.10

Structure de qualification des ouvriers par taille d'établissement en 1980

Source : INSEE - DAS

(En %)

	1 à 5 salariés	6 à 9 salariés	10 à 19 salariés	20 à 49 salariés	50 à 99 salariés	100 à 199 salariés	200 à 499 salariés	500 à 999 salariés	1 000 à 1 999 salariés	2 000 à 4 999 salariés	≥ 5 000 salariés
Contremaîtres	2,2	4,0	5,8	6,7	7,7	7,9	8,4	9,9	10,3	10,4	8,2
Ouvriers qualifiés	57,6	55,5	51,0	48,3	45,8	46,4	47,7	52,4	54,2	56,6	54,4
Ouvriers spécialisés + manœuvres	40,2	40,5	43,2	45,0	46,5	45,7	43,9	37,7	35,5	33,0	37,4

- REFERENCE CODE:

The code names of the preceding Table refer to the data of the different statistical sources that we have surveyed.

1) ENQUETE EMPLOI:

EE 1 = PA 03
EE 2 = PA 02
EE 3 = PA 11
EE 4 = PA 12
EE 5 = PA 05
EE 6 = FORM 03
EE 7 = PA 06
EE 8 = FORM 05
EE 9 = FORM 02
EE 10 = FORM 01

2) POPULATION CENSUS "ACTIVE POPULATION" - 1982:

RP 1 = TAB 02
RP 2 = TAB 03
RP 3 = TAB 04
RP 4 = TAB 06
RP 5 = TAB 07/1
RP 6 = TAB 07/2

3) POPULATION CENSUS "EDUCATION AND TRAINING" - 1982:

RF 1 = TAB 01
RF 2 = TAB 02
RF 3 = TAB 03
RF 4 = TAB 06
RF 5 = TAB 07
RF 6 = TAB 08
RF 7 = TAB 09
RF 8 = TAB 11

4) EMPLOYERS WAGE STATEMENTS (Déclarations Annuelles de Salaires):

DAS 1 = TAB 6
DAS 2 = TAB 21
DAS 3 = TAB 22
DAS 4 = EMP 1
DAS 5 = EMP 6

5) SPECIAL SURVEY "EDUCATION, TRAINING, SKILLS" - 1977:
(Formation, qualification, profession)

FQP 1 = TAB 27
FQP 2 = TAB 28
FQP 3 = TAB 30
FQP 4 = TAB 42
FQP 5 = TAB 43
FQP 6 = TAB 64
FQP 7 = TAB 68

6) STRUCTURE OF EMPLOYMENT:

- (New classification)

SDE 1 à 15 = TAB 1 to TAB 15

- (Previous classification is continued on Tables 16 to 24, but not mentioned in our cross classification table).

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