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THE REORGANIZATION OF INDUSTRIAL STRUCTURES ✓
POLICIES AND INSTITUTIONS
THE EXPERIENCE OF FRANCE

by

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I. EVOLUTION OF STRUCTURES IN THE INDUSTRIAL SECTOR

In France at the end of the nineteenth century, there were not the movements towards concentration that took place in the United States and various European countries such as Great Britain and Germany. The first significant wave of concentration took place as part of the reconstruction of the French economy after the First World War, then by way of reorganization of the sectors which were declining after the 1930 depression. There were no significant movements during the period immediately following the Second World War; the psychological explanation of this lies in the threats of nationalization, to the extent that sectoral monopolies or oligopolies might have facilitated this.

The second great wave began in 1950, and has been accelerated by the Government's decision to open up the frontiers in the framework of the European Common Market.

1. Present structure of industry

Tables 1 to 5, annexed, indicate the following:

1.1. The technical concentration, measured by the size of establishments, is on the whole not as great in France as in the principal industrial countries (with the exception of Italy and Japan). In 1962, establishments with more than 500 employees accounted for only about 27 per cent of employment in France, while the corresponding rate for Germany was 39 per cent, and that for the United States 43 per cent.

Table 2 shows the concentration of establishments by sector. The sectors in which the concentration of establishments is highest are shipbuilding, basic metallurgy, automobile manufacturing, electrical engineering and the manufacture of non-electric machinery. This pattern of concentration has changed little since 1962.

1.2. The concentration of enterprises can be measured by the distribution of employment (table 3) and market structure (table 4).

In 1966, there were 619,000 enterprises in French industry. Of this total, 75,000 belonged to the building and public works sector, and 250,000 of these had fewer than ten employees. The 344,000 enterprises in the other industrial sectors were distributed as follows:

Fewer than 10 employees	296,179
10 - 50 employees	33,760
50 - 500 employees	12,190
500 - 1,000 employees	728
1,000 - 5,000 employees	537
More than 5,000 employees	73
Undeclared	956

The number of enterprises with fewer than ten employees is, then, substantial. Enterprises with more than 100 employees occupy a prominent place (accounting for more than half of all employment) in the petroleum industry, iron ore mining and iron and steel making, extraction and metallurgy of non-ferrous metals, electrical engineering, automobile manufacturing, ship and aircraft building and glass sectors. The smallest enterprises have a particularly important place in the agricultural and food industries (where 40 per cent of employees work for enterprises with fewer than 50 employees), mechanical engineering (22 per cent), clothing (41 per cent), leather (26 per cent), wood (55 per cent), the graphic industries (38 per cent), miscellaneous industries (36 per cent), building materials (36 per cent) and building (49 per cent).

Table 5a shows the distribution of concentration ratios for 195 branches of French industry in terms of employment and value of output. This table shows, on the one hand, that French industry is oligopolistic in structure and, at the same time, that the large producers are of little importance.

In this connexion, only ten branches have a concentration ratio of 75 per cent or more for the four largest establishments, as measured by the number of persons employed. There are 23 branches with a concentration ratio of 70 per cent or more for the first four enterprises, as measured by the number of persons employed, and there are 35 with this ratio for the first four enterprises, as measured in terms of the value of output. However, if the shares accounted for by the first twenty enterprises - or the first twenty establishments - are compared, it is seen that nearly half of all branches, or 83 out of 195, have a concentration ratio of more than 70 per cent in terms of the value of output. Hence, it appears that the second-ranking enterprises in an industry are not far behind the leading enterprises; the very large enterprises are not far ahead of the field of their immediate competitors. These facts are important for properly interpreting the objectives of the fifth and sixth economic development plans, which will be referred to later on in this report.

2. Branches of industry most affected by structural changes in the last ten years

It is impossible to give exhaustive statistics which can be compared for two different recent dates.

Table 6 shows the evolution of concentration operations carried out by limited companies between 1950 and 1967. It shows that, during this period, three sectors, including two industrial ones, namely mechanical and electrical engineering and the chemical industry, the third being the banking and insurance sectors, accounted for more than 50 per cent of the concentration movements noted. Since 1960, the movement has speeded up in two new sectors, namely the food industry and transports.

Table 7 describes the concentration operations carried out by the 500 largest French enterprises during the same period (1950-1969). It shows that while at the beginning of the period (1950-1954), the concentrations primarily affected the metallurgical and electrical engineering industries, the movement spread to take in all large enterprises beginning in 1955. From 1958 to 1962, the movement was particularly rapid in the chemical industries. Since 1962, it is in the food industries that the acceleration has been found. After these last two sectors, for which 236 and 212 operations, respectively, were registered between 1960 and 1969, come, in decreasing order, the mechanical engineering industry (122 operations), electrical engineering (110 operations) and the metallurgical and iron and steel making industries (100 operations).

3. Trend towards the reorganization of industrial structures

(a) The general reorganization movement

In general, there is a considerable acceleration in the reorganization movement, as measured by the number of operations. From an average of 651 for every year from 1956 to 1958, the number of operations increased to 1,028 in 1961 and 1,410 in 1966.

Two periods of acceleration can be distinguished. The first, in 1959-1963, corresponded to the signature of the Treaty of Rome and was a period of preparation for the heightened competition in the Common Market. The second, in 1965, reflected the implementation by the public authorities of an active policy of support of concentration.

However, at the same time, the significance of operations, as measured by the assets involved, having increased until around 1962, has been declining since that time (cf. table C).

(b) Nature of operations

The following table distinguishes takeovers, takeovers of subsidiaries, mergers and partial transfer of assets affecting limited companies. It shows that the number of mergers as such has been relatively small, although there is a trend towards an increase in the latest period. The phenomenon of takeovers of subsidiaries also became more wide-spread between 1960 and 1967 and is particularly important in the chemical and iron and steel making industries.

	Takeovers		Takeovers of subsidiaries		Mergers		Partial transfers and partial splits	
	No.	%	No.	%	No.	%	No.	%
1950-60	← - - - - - 500 - - - - - →						266	31.4
1961	65	51	29	24	3	2.5	23	19.5
1962	34	27	34	27	12	9	47	37
1963	56	37	33	22	22	15	39	26
1964	124	47	16	6	24	9	101	38
1965	72	44	21	13	19	11	52	32
1966	100	40	43	17	22	9	84	34
1967	45	30	43	31	20	14	36	25

It thus appears that the number of concentration operations is greater than the number of real operations. This movement is confirmed by analysis of the operations taking place among large enterprises. It can therefore be considered that this to a large extent reflects a financial concentration.

(c) The enterprises concerned

As regards the enterprises concerned, there is a trend towards an increase in the size of the enterprises taking over others and being taken over and towards a correlation between the number of operations realized and the size of the enterprises. Among the 500 largest French enterprises, 361 (52 per cent) had not carried out any concentration operation in 1963; this proportion had fallen to 30 per cent in 1966.

Table 9 indicates that, the larger the enterprises, the larger the average number of operations.

II. INDUSTRIAL REORGANIZATION POLICIES

In the case of France, Government policy has passed through two stages:

- In the first period, which coincided with the Fourth and, above all, the Fifth Development Plans (1965-1970), the Government endeavoured systematically to promote the effort to achieve larger size from the technical, commercial and financial points of view, directed in particular towards the establishment in each industrial branch of one or two dominant groups of international size;

- In the second period, which is that of the Sixth Plan, now being implemented, the Government is placing greater emphasis on structural flexibility, as reflected in diversified objectives aimed both at encouragement of continuation of the movement toward the establishment of a small number of large groups of international size, and also at the effort to achieve better specialization of medium-sized enterprises, promotion of sub-contracting and the establishment of new enterprises.

The means provided for to back these policies will be described in part III.

Their selection has depended on the analysis of the main obstacles to the objectives envisaged carried out in the framework of the preparation of each of the three development plans mentioned above. The idea of obstacles or incentives obviously varies depending on whether outright mergers, in other words increases in the size of enterprises with a view to increasing their financial means and giving them greater marketing or innovative capacity, or structural reorganization which in some cases may not involve an increase in size, but be aimed at increasing the flexibility of firms' strategies and thereby improving their ability to adapt to the market are envisaged. In addition, as the policies embodied in the Plan began to be implemented, the obstacles shifted. These favourable and unfavourable factors will therefore be classified according to the types of restructuring which they prevent.

A. Motivations

The desire of heads of enterprise to change existing structures is obviously at the bottom of any reorganization in a capitalist economy. Apart from all the technical means, three factors appear to be important.

. The development of the economic environment and competition

From this point of view, the acceleration of the concentration movement in France, particularly among large firms, has taken place largely in response to the intensification of competition arising out of the decision to establish a European Common Market and the actual establishment of the Common Market by progressive stages from 1960 to 1968, and also to the acceleration of the lowering of trade barriers with outside countries arising out of the Kennedy Round agreements, agreements between the European community and various outsider countries or groups of countries and the policy of an opening up of trade with the eastern European countries.

2. Development of the psychological climate

This is related to the economic environment. It appears that the opening up of frontiers has strengthened the feeling that private initiatives to increase the size - and hence the strength - of French enterprises would be understood by the public. Conversely, the climate immediately following the war, after the big nationalization movement in 1946, was not very favourable at all. The feeling of heads of enterprises in certain branches such as the pharmaceutical industry of being more closely watched by public opinion than is the case in other branches may constitute a restraint. In fact, in these sectors, reorganizations often take place through sale to foreign enterprises, the nationality of which appears to afford protection from nationalization.

3. The attitude of the State

In the French tradition, the State plays an essential promotion role, not only through the measures which it takes, but also by announcing the policy which it wishes to see followed. At present, the Government's policy is "publicized" in a plan whose recommendations are very extensively discussed with heads of enterprises and trade unions. The credibility of the State's attitude is strengthened by the fact that the Plan not only indicates the State's objectives, but also lists in some detail the new measures which it intends to implement during each plan.

B. The legal and accounting aspects of enterprise mobility

The recent history of industrial restructuring operations shows that this type of obstacle can be very important. Each of the last three plans occasioned consideration of these obstacles and recommendations for removing the obstacles spotted.

For example, for the Fifth Plan^{1/}, the studies analysed the following factors:

- Uncertainties in the legislation on French and European agreements (which prescribed, in article 67, and following, of the Treaty of Rome, and regulation No. 17 of the Council of Ministers, previous declaration of all agreements, thereby automatically making them suspect).
- Absence of flexible legal formulas permitting the partial re-grouping of enterprises, in particular medium-sized and small ones.

^{1/} Cf. Rapport de la Commission de l'Economie générale et du Financement du V^e Plan (Report of the Commission on the General Economy and Financing of the Fifth Plan), Volume II, Annex 2A. Report by Mr. Michel Vassur on the legal problems posed by the reorganization of industrial structures in the French context and in the context of the EEC. Edited by Documentation française, 1965.

- Failure of the French law (in contradistinction to the Dutch, German and Italian laws) to recognize the validity of limited companies made up of a single person. This hampered the establishment of subsidiaries starting from a single parent company with a view to specialization and individualization of the activities of a department.
- Absence of legal status for groups of companies.
- Inflexibility of legislation regarding the number of directors and general directors. More flexibility makes it possible to settle matters relating to the careers of managers, which are often a basic obstacle to mergers. Similarly, the security of the directors of the companies taken over can be increased through the signature of technical management job contracts between the new company and a director.
- The development of guarantees of the rights of third parties, e.g. creditors, lessors of buildings, shareholders; problems of solidarity between the company taking over and the company taken over; advertisement of the merger contract. The idea which should be upheld is that the company which is the transfer beneficiary is continuing the original company.
- The status of trade representatives and commercial travellers in France.
- Regulations concerning the right to vote, which, by restricting or prohibiting the issuing of shares to which plural voting rights are attached, now hampers mergers and take-overs in which the majority share-holder has only a small majority and where the new company must turn to an outside financial organiser, selling him equity. In these cases, the majority share-holders may fear losing control of their business.
- The absence of provision for status as a European company and of provisions favourable to mergers of companies of different nationalities.

A number of legislative measures were taken regarding these matters during the Fifth Plan. They were again considered even more thoroughly by a specialised body during the preparation of the Sixth Plan.^{2/} Taking into account French legislation in 1971, this group specially stressed the following problems, in connexion with structural mobility.

^{2/} Report: "Droit et Financement des entreprises" (Enterprise Law and Financing), drafted by the Group for Applied Legal Futurology for the Sixth Plan, Documentation française, collection of reports by the committees for the Sixth Plan, 1972.

1. The inferences drawn from the idea of capital being fixed lead to a restraint of the financial dynamism of enterprises: this involves the preferential right of shareholders to subscribe to increases in capital maintained by the reformed law on companies of 2 July 1966; limitation of the possibility for a company to buy in its own shares; fixed face value of shares, preventing companies whose shares are quoted from increasing their capital in every circumstance, when this possibility is now withheld where their shares are quoted below face value.

2. The absence of a legal framework adapted to the existence of new economic entities, groups of enterprises or companies. Two factors now appear to be able to facilitate their establishment and operation:

- The protection of minority share-holders at the time of establishment of groups and during their lifetime;
- The removal of obstacles to the organization of groups: French legislation does not recognize the function of director or president; it makes no provision for joint management of assets which companies do not wish to regroup in a subsidiary which is a legal entity.

C. The fiscal aspects of restructuring

These have been studied regularly and in depth, especially within the framework of the various Development Plans.^{3/} On the one hand, the Government has endeavoured to remove fiscal obstacles to restructuring and, on the other hand, has sometimes tried to go beyond fiscal neutrality and provide incentives.

In a general way, the introduction of the value added tax in 1954 enabled various ideas for the division of labour without tax penalization to be put into practice at the level of taxes on industrial activity.

When the Fourth Plan (1962-1965) was being prepared, preliminary research put the main accent on the need to reform the fiscal system governing parent and subsidiary firms in order to ensure that the yield from shares of a subsidiary company - which may be transferred through the capital of several distinct corporations before reaching the shareholders - is not taxed several times.

During a second stage - when the Fifth Plan (1965-1970) was being prepared - the stress was placed on the transformation of tax legislation in the direction of providing greater incentives. This was effected by the law of 12 July 1965. This text introduces three innovations in the French system:

1. It transforms the system of tax regulations applicable to mergers and partial transfers of assets by considerably reducing the taxes on mergers - and, when the Government has expressly given its approval, on partial transfers of assets and the splitting of companies.
2. It reduces the tax burden on groups of companies, in the case of express approval by the Government.
3. It introduces into French legislation the concept of taxation on the basis of world-wide profit - also in the case of approval (the possibilities of approval were extended by the Sixth Plan - 1971-1975).

^{3/} cf. In particular, the Report mentioned in footnote 2. See also for the Fourth Plan. Rapport général de la Commission de l'économie générale et du financement du 4e Plan (General Report of the Committee on the General Economy and Financing of the Fourth Plan) - La Documentation française, 1962.

Sixth Plan: Reports of the Fiscal Group, Joint Group on the Financing of Industry La Documentation française, 1971-1972.

In 1967, in order to accelerate the trend towards mergers, various measures were adopted making it possible to spread out over a period of time - in the case of approval - the burden of taxation on capital gains from mergers. These measures were revoked at the end of 1971.

At that time also, the Fourth Plan stressed certain practical difficulties regarding the application of taxes in respect of restructuring: any regrouping of a certain size raises controversial questions in regard to which, in spite of all the consultations that may be undertaken, the directors of enterprises remain uncertain as to the solutions to be adopted. An ill-defined "tax risk" may thus obstruct the rapid carrying out of operations which are in general strongly encouraged by the public authorities. The Government has therefore decided that, in the case of mergers, splits and partial transfers of assets, a specialized unit of the Directorate-General for Taxes of the Ministry of Economic Affairs and Finance will protect enterprises - in co-ordination with the Office of the Commissioner-General for the Plan - against subsequent sanctions not based on clear cases of fraud, through a rapid procedure for the preliminary examination of individual cases.

In 1972 - after the decisions taken within the framework of the Sixth Plan - there remain, over and above the provisions of ordinary law automatically applicable to mergers five provisions for the granting of approval in respect of the re-organization of the structure of enterprises.^{4/}

In addition, in 1967, to facilitate the adoption of formulas for groupings of enterprises adapted to the specific problems of medium-sized enterprises (and especially enabling them to retain their individuality), the Government introduced greater flexibility in the tax provisions on groupings of economic interests. This measure had very successful results and certainly met a very important need.

^{4/} Article 14 of the law of 12 July 1965: Approval for partial transfers of assets and the splitting of companies.

Art. 209, para. II, of the Tax Code: Approval for the carrying over of deficits in the case of company mergers.

Art. 239 bis B of the Tax Code: Approval for the winding up of inactive companies.

Art. 238 of the Tax Code: Approval for the payment of funds to research organizations.
Order (ordonnance) of 4 February 1959: Approval of companies covered by agreements (groupings of medium-sized and small enterprises).

Financial aspects of the restructuring of enterprises

The French Government has tried to take action along three lines.

4.1. Reinforcing the financial market in order to enable it to respond flexibly to the varied needs for external financing (by debenture loan or issues of stock of enterprises whose restructuring is accompanied by substantial investment programmes).

Action is taken at the level of:

Supplying of the market through encouragement of invested saving in the form of shares or bonds (recently, under the Sixth Plan, important decisions have been taken which, in particular, enable insurance companies to invest in industrial securities);

The operation of the market through measures such as the promotion of collective savings (investment companies with variable capital, investment funds), improved public information (guaranteed henceforth by a Commission on Stock Exchange Transactions), the establishment of an "over the counter" market and various changes of a technical nature.

4.2. Developing the machinery of credit for enterprises:

In this regard, the Government introduced greater flexibility in 1967 in the formerly rigid distinction between deposit banks (or commercial banks) and finance companies (banques d'affaires);

In addition, a network of banks established or controlled by the State is aimed at meeting varied credit needs;

For the largest enterprises there is the Crédit national, really an organ of the Plan, in so far as all important dossiers involving requests for loans of more than 10 million francs (some 60 dossiers a year) are submitted to the Office of the Commissioner General for the Plan for its judgement;

For medium-sized enterprises, there are the Caisse centrale de crédit Hôtelier, industriel et commercial and the Caisse nationale des Marchés de l'Etat;

For medium-sized provincial enterprises, 15 regional development corporations were set up in 1955, both to take out shares and to make long-term loans.

4.3. Developing financial institutions which specialize in the taking out of shares when a sector is restructured. After various fruitless attempts in 1960, the Institut de développement industriel (IDI) was established in 1969 on similar lines to the Industrial Reconstruction Corporation in the United Kingdom. An independent institution but financed from budgetary resources, IDI acts, apparently unlike the Industrial Reconstruction Corporation, less as an entrepreneur specializing in major restructuring operations than as an institution supplementing the bank network for the purpose of operations involving risks being undertaken or proposed by medium-sized enterprises; regroupings constitute only one part of these operations, the other operations being the launching of new activities and the commencement of operations abroad. IDI works by various means, including direct investment in firms, but also mere financial or management advice or the performance of intermediary functions in negotiations between enterprises. IDI has also been entrusted by the Government with a specific task, namely to "examine the overall situation in certain sectors (designated by the Government as priority sectors, mainly on the basis of the recommendations in the Plan) in order to bring out their weaknesses and their potential for expansion, with the possibility that this examination will lead it to suggest various measures for promoting the development either of a sector as a whole or of certain enterprises".

In certain branches, private institutions have been established by professional associations, either to provide guarantees for certain operations carried out by their members or to finance restructuring directly. Two of these - the Inter-Professional Committee of the Textile Industry (CIRIT) and the Committee for the development of the furniture industries (Comité de développement des industries de l'amouplement) - receive State aid in the form of the transfer to them of the revenue from a para-fiscal tax.

In the sphere of operations involving risks and the establishment of new enterprises the new approach in the policies for the restructuring of industry - the Government has encouraged the formation of specialized private institutions. This is a field in which further progress is awaited: a committee of experts created under the auspices of the Office of the Commissioner-General for the Plan and the Ministry of Industrial and Scientific Development is to submit a report on this subject containing specific proposals towards the end of 1972.

The social aspects of restructuring

The risks which restructuring entails for employment - particularly in regions where there are traditional industries threatened by technical progress and where the labour market is small - are undoubtedly an obstacle not so much to decisions regarding mergers as to the implementation of the rationalization programmes accompanying these decisions.

From this point of view, the factors most conducive to the removal of these obstacles are, in France's experience:

- An active policy of job-finding on the part of the public agencies responsible for employment policy;
- The provision of generous unemployment assistance;
- The planning of job reductions in co-ordination with the administrative organs responsible for regional planning, and the establishment of new undertakings (this requires good co-operation between enterprises and the public authorities);
- An intensive policy of vocational training at all levels, particularly continued training;
- A flexible system for guaranteeing retirement benefits, especially in the case of senior staff.

STATE EFFORTS TO PROMOTE RESTRUCTURING

A. The role of the State in France has historically been significant in promoting restructuring in certain cases and in removing obstacles to such operations in all cases.

Thus, since around 1960, i.e. from when the repercussions of the Common Market made themselves felt, the State has adopted a series of measures designed to reorganize certain sectors. In 1963, studies were conducted, on the initiative of the State, on the problems of industries such as aluminium production, heavy mechanical engineering and the manufacture of major chemical intermediates. The recommendations contained in these studies, which were communicated to the enterprises concerned, formed a sort of charter for the reorganization of these sectors over a period of ten years or so.

Persuant to the recommendations of the Fifth Plan and as a means of ensuring their application, other measures were taken in the following branches, often in conjunction with private professional bodies, on the recommendations of an Industrial Development Committee established in 1966 for this purpose:

Iron and steel: Action in this sector took the form of a professional contract signed in 1966 with the industry as a whole for the duration of the Fifth Plan. In order to benefit from various State loans, enterprises had to accede on an individual basis to the agreement, which contained detailed provisions for the reformation of enterprises into several groups;

Electronic data processing: The adoption of a Computer Plan (Plan Calcul) by the State led to the merger in 1967 of three small computer manufacturers to form the International Electronic Data Processing Company (Compagnie Internationale pour l'Informatique), the strategy and procedures of which were worked out jointly by the State and the enterprise. The agreement was renewed in 1972 and agreements of the same type, although on a smaller scale, were subsequently adopted for other fields of electronic data processing (components and peripheral equipment);

Ship-building (1967): A framework agreement with the industry, completed by the accession of individual enterprises, made it possible to reduce the number of shipyards from approximately ten around 1961 to three in 1970;

State action in the chemical sector (1966) led to a regrouping into two enterprises l'Entreprise minière et chimique and la Société des charbonnages;

The agricultural and food industries;

The machine tool industry;

The public works industry.

The Industrial Development Committee drew up a strategy for these last three fields, the application of which was left to the initiative of enterprises acting in conjunction with the traditional and regular procedures employed by the State.

During the period 1965-1970, the State has also adopted measures, in addition to the specific action of the Industrial Development Committee and its specialized groups, to promote the reorganization of sectors in which its participation is significant: in particular the aeronautics industry, where State action led to the

establishment of the Société nationale d'Etude et de Construction des Moteurs d'Avion (SNECMA) -- an amalgamation of all enterprises with State capital participation in this sector, and the Société nationale Industrielle aérospatiale (SNIAS) in 1969, -- the result of a series of mergers of enterprises manufacturing cells, helicopters and engines of various types. Action was also taken by the State in the petroleum industry, where a series of regroupings affected public participation in the petroleum and natural gas industry (Elf-ERAP, Société nationale des Pétroles d'Aquitaine) and in the chemical industry (establishment of the ATO co-operative society). The banking and insurance sectors were also involved.

Generally speaking, as shown in part 2, the State has endeavoured to evolve a framework which from the general, financial, fiscal, legal and social point of view is conducive to restructuring operations, and the various administrations responsible for the different sectors have attempted to provide a steady flow of information and constant encouragement.

B. The institutions involved are numerous. Their duties and activities are based on two principles; the search for an overall strategy and the co-ordination of measures taken to apply this strategy.

The guidelines for the overall strategy are worked out at the time of preparing the long-term Economic and Social Development Plan. The Plan is prepared by administrations in conjunction with professional and trade union organizations. It does not, generally speaking, provide a basis for the discussion of cases of individual enterprises, but it does make it possible to define three types of policy in the industrial field^{5/}:

- An "industrial environment" policy which defines precisely the measures taken by the Government during the period of execution of the Plan in the legal, financial, social, infrastructure, research and land management fields;
- A structural policy which defines the types of structural re-organization which will be encouraged by public authorities in their day-to-day action; this is a sort of statement of the "rules of the game" so far as structures are concerned;
- A sectoral policy which defines sectoral priorities and desirable developments in certain sectors and indicates sectors in which the establishment of a programme involving joint action by enterprises and by the State is required and what form it should take.

^{5/} Cf. Sixth Plan: Report on the main options of the Sixth Plan, Sixth Economic and Social Development Plan, La Documentation française, 1971.

The programmes themselves are discussed in specialized bodies and are subject to governmental approval when they involve large-scale public action. The measures themselves take the form of laws, decrees or budgetary provisions as the case requires: the implementation of the Plan is examined annually by the Office of the Commissioner-General which submits a report to the Government and to Parliament.

2. Co-ordination of public action

Since 1970, a specialized governmental body, the Inter-Ministerial Committee for Industrial Policy, has been responsible for supervising the execution of the Plan and co-ordinating Government policy in this area.

On a continuous basis, the initiative lies either with:

- The head of the enterprise, in this case a request is made to the administration whenever authorization, assistance or at least information are required;
- The administration, as part of its regular duties for executing the Government's industrial policy;
- The professional organizations, which generally play an important role by providing information and sometimes negotiating either between enterprises or between enterprises and the State (a function very clearly illustrated in the preparation of the iron and steel and shipbuilding agreements to which reference was made above).

Co-ordination is effected in several ways:

Basically, it is carried out within the framework of the Management Committee of the Economic and Social Development Fund (FDES), (special section of the Treasury established by decree of 13 June 1965 which regroups the budgetary allocations earmarked for public action in the economy). This Committee is assisted by a number of specialized committees, several of which are concerned with industry:

Committee 1, under the chairmanship of the Commissioner-General for the Plan, advises the Minister of Finance on State loans, grants and tax exemptions for industry in general. It is this Committee in particular which approves fiscal decisions concerning benefits granted temporarily for the restructuring of enterprises after the files have been studied by the competent administrations (industry, finance, planning). Its authority extends to all areas, with the exception of two sectors, which are the responsibility of the following two committees:

- Committee 6, which is responsible for agriculture and also co-ordinates public action in the agricultural and food industries sector;
- Committee 8, which deals with transport enterprises with State capital participation (sea and air transport).

Co-ordination bodies are sometimes established on a temporary basis to supervise the execution of a programme; this was the case for the agreement on iron and steel, the application of which was supervised by an advisory committee under the chairmanship of the Commissioner-General for the Plan.

Co-ordination is ensured between the Crédit national and the Office of the Commissioner-General for the Plan (which receives advice from the administrations concerned) with regard to financing files.

For several years, inter-ministerial co-ordination has been in effect in the field of price policy. This was established in June 1972 in direct negotiations between the Price Board and enterprises.

Apart from its general promotion activities, the Ministry of Industry established in 1969 a Merger Office (Bureau des Fusions) to provide information to enterprises. This office can also assist enterprises in their negotiations and put them in touch with the administrative services which are responsible for the various procedures employed more or less directly in mergers of enterprises.

The opportunities for contact and discussion between the administration and enterprises provided within the framework of the various administrative procedures are also often in practice more important than the substance of the decisions which may be taken on individual dossiers.

The financial significance of these procedures is described in detail in the study referred to in footnote No. 6.

In 1971, approval was granted in the following cases:

6/ Cf. Revue économique - June 1970.

Approval of partial transfers of assets and the splitting up of companies:	166
" for the carrying over of deficits in the case of mergers:	32
" for the dissolution of inactive companies:	170
" for payments to research bodies:	5
" for establishing companies with which agreements were concluded:	5

FDES loans to industry, including medium and small-scale enterprises, rose to 660 million francs in 1972 as against 795 in 1970: such loans are not granted in the case of all mergers. To this figure should be added State loans granted to aeronautics enterprises with public capital participation (88 million francs in 1970 and 110 million francs in 1971) in order to give an idea of total State loans to enterprises in competitive sectors (i.e. excluding public services).

Long-term Crédit national loans (which are not granted in the case of all merger operations) have risen to a total of 771 involving an amount of 330,000 francs (as against 100,000 francs in 1964).

Action by IDI was taken in a total of 486 cases in 1970 and 1971. This total includes 22 share taking operations, only two of which were intended to bring companies together, involving a total of 220 million francs. It is therefore still too early to assess the effectiveness of the role of this institution in financing the restructuring of enterprises.

IV - V LESSONS TO BE DRAWN FROM THE FRENCH EXPERIENCE

As suggested by the foregoing, the French experience is in the process of evolution and has developed through several phases. The concept of concentration has gradually been obscured by the broader notion of structural mobility and flexibility. State action has been increasingly oriented towards the creation of an "economic environment" which favours the mobility of industrial structures and the successful adaptation to the markets of different enterprises.^{7/} This may require both concentration operations and the reorganization or establishment of new enterprises or co-operative groups.

The factors which have played the most decisive role are:

- Increased competition as a result of the opening up of frontiers and the establishment of the European Economic Community;
- The adoption of a favourable attitude by the State.

^{7/} The wording of the options of the Sixth Economic and Social Development Plan is particularly explicit. Cf. in particular: Chapter IV - The policy of enterprises (p.161) Report on the main options of the Sixth Plan. La documentation française, 1971.

The main results are:

1. The placing of new investments or rationalization, which has made it possible to increase the productive capacity of plants: this is particularly true in the iron and steel industries, shipbuilding and the textile industry;
2. Improved financial management, which has enabled enterprises to respond to requirements for investment in marketing and research;
3. The retention of national manufacturers in vanguard branches in which foreign investments accounted for more than half the total capital in the sector, such as computers.

The analyses conducted for the preparation of the Sixth Plan showed that the general framework of official policy was well adapted to the needs of industrial regroupings. They even concluded that it would be possible to discontinue as of 1971 certain incentives introduced in 1967 and that on the other hand the State's action in the field of industrial structures should be re-oriented in two new directions: the establishment of highly innovative and rapidly growing enterprises, and the establishment of installations abroad.

Nevertheless, experience has shown that the initiative for regrouping should basically be with the heads of enterprises and that a merger never automatically solves the management problems previously experienced by one of the partners to the merger.

Neither is it certain that the policy of the public authorities should be concentrated in a single institution: the French experience shows that agreement on objectives which are sufficiently clear and published well enough in advance makes it possible to benefit at the execution stage from advantages in flexibility and efficiency, as the result of de-centralizing the action of administrations or specialized institutions whose activities can be co-ordinated, or at least supervised at a later stage.

It should, however, be noted that this process has evolved through a first phase which seems to approximate more closely the experience of the developing countries: this phase was characterized by an awareness of the existence of minimum thresholds of efficiency which determined "critical sizes" for plants, enterprises and groups. These critical sizes vary depending on whether problems of production, marketing, research or financing are involved. They also vary from one sector to another and from one market to another.

In conclusion, while the methods employed in the restructuring policy now seem fairly familiar and relatively simple to define and apply from the technical point of view, the strategy - in other words, the reply to the question "What to do?" as opposed to "How to do it?" - certainly requires extremely careful study by the public authorities and an open mind.

Annex 1

AGREEMENT BETWEEN THE STATE AND THE IRON AND STEEL INDUSTRY (1966-1970):
AN EXAMPLE OF RESTRUCTURING CARRIED OUT BY MUTUAL CONSENT

In its annex dealing with iron and steel, the Fifth Plan described the situation in this sector as follows:

"The development of production capacity markedly in excess of demand ... the increased competition which resulted and the consequent decline in prices on all markets explain the difficulties encountered by iron and steel enterprises in financing their investment programmes. Their operating results deteriorated, obliging them to borrow more and more and thus increase their total debts to about 60 per cent of the annual turnover at the end of 1964, instead of the 40 per cent envisaged in the Fourth Plan for 1969".

The Fifth Plan therefore set the following target:

"To make the iron and steel industry internationally competitive under normal conditions of competition; to that end, firstly, to increase enterprises' ability to compete by a vigorous effort to reduce production costs, improve quality, rationalize production and systematically re-organize the structure of the industry, inter alia by effecting mergers and closing down unprofitable works and shops, and, secondly, to provide the industry with operating conditions comparable to those enjoyed by its competitors, particularly as regards the cost of energy and transport".

The instrument by which this policy was carried out was the General Agreement between the State and the Iron and Steel Industry, concluded on 29 July 1966. It laid down inter alia the programme of rationalization and investment which the industry undertook to carry out and the nature of the aid to be granted by the State. Special provisions dealt with the measures to be taken to retrain labour and create new employment and the procedures for consulting trade union organizations and keeping a check on the way the Agreement is applied.

Both because of the originality of the machinery established and the success achieved the Agreement between the State and the Iron and Steel Industry is a particularly interesting example of a policy carried out by mutual consent, the main results of which are worth briefly summarizing.

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Structure of the industry

The signature of the General Agreement was preceded and followed by many re-organization operations. The most spectacular took place in heavy iron and steel making, with the establishment inter alia of two main centres in this field:

- Merger of Usinor and Lorraine-Escout in 1966; this also led to the merger of the parent companies of the two groups into a new company with the name of Denain-Nord-Est-Longwy;
- Merger of the Société de Wendel with Sidelor and the Société Mosellane de Sidérurgie in 1968, leading to the establishment of the Société Wendel-Sidelor, around which gravitate the Sollac, Sacilor, and more recently Solmer companies.

In the field of fine iron and steel making, the most notable operation during this period remains the establishment of the Société Creusot-Loire, in 1970, formed from the Compagnie des Ateliers et Forges de la Loire and the Société des Forges et Ateliers du Creusot, among others.

Mention should also be made of various shared-cost operations for the construction of new plant (electrical steelworks for stainless steels at Isbergues, joint coking plants in the north and in Lorraine, etc.) and many rationalization and specialization agreements.

Apart from actual restructuring operations, a large-scale programme of new projects was undertaken, the State making a contribution of 2,700 million francs in the form of credits extended by the Economic and Social Development Fund on particularly easy terms.

All in all, the rationalization and modernization operation carried out between 1966 and 1970 was very considerable:

The total number of iron and steel companies was reduced from 82 to 66, the number of works from 118 to 99 and the number of units specializing in the production of cast iron from 11 to 5. In heavy iron and steel making, two groups of international class were established, Usinor and Wendel-Sidelor, together accounting for more than two thirds of France's crude steel output.

Plant taken out of operation included 20 blast furnaces, 25 Bessemer converters, 21 open-hearth furnaces and 5 electric furnaces. Nevertheless, in 1970 France produced 3.5 million more tonnes of cast iron and 4.2 million more tonnes of crude steel than in 1965. The average output per unit in operation showed significant changes:

Blast furnaces:	+ 55%
Bessemer converters:	+ 44%
Open-hearth furnaces:	+ 9%
Crucible and oxygen furnaces:	+ 21%
Electrical furnaces:	+ 62%

Other plant declared obsolete included 11 roughing rolls, 24 long-product rolls and 2 electrical sheet shops. At the same time, the investment made over this period resulted in an increase in French output of rolled goods from 14.8 million tonnes in 1965 to 18 million tonnes in 1970, the average output per works increasing by 65 per cent.

The following table shows the 12 leading iron and steel companies (by turnover) in 1970 (representing 90 per cent of French crude steel production) and indicates concentration operations carried out between 1966 and 1970.

	1966	1967	1968	1969	1970	Millions of francs Turnover free of tax, 1970
De Wendel et Cie						5,906
Sidélcor						
Société Mosellane de Sidérurgie						
Sollac						1,710
Sacilor						511
Usinor						5,304
Lorraine-Escaut						
C.A.F.L. (Compagnie des Ateliers et Forges de la Loire)						2,568
S.F.A.C. (Société des Forges et Ateliers du Creusot)						
Société métallurgique d'Imphy						
Forges de Chatillon, Commentry, Neuves-Maisons						968
Biache Saint Vaast						
Société des Aciéries et Tréfileries de Neuves Maisons Chatillon						364
Hauts fourneaux de la Chiers						937
Forges de Gueugnon						575
Société des Aciéries de Pompey						479
Société Métallurgique de Normandie						505
Aciéries de Paris et d'Outreau						358

Labour

The changes that have taken place in iron and steel during the industry plan have meant that considerable social protection machinery has had to be set up from the very beginning.

Thus, many provisions in the General Agreement were devoted to the problems of assigning labour and creating new employment. Among the measures giving greater guarantees to iron and steel workers, mention should be made of the special grants made by the National Employment Fund for workers over 60, the payment of various kinds of assistance to facilitate a change of trade (either under the treaty establishing the European Coal and Steel Community ^{1/} or through the National Employment Fund), co-ordination of dismissal and recruitment decisions and the expansion of vocational training activities. The State and the industry also undertook in the General Agreement to encourage the creation of employment and the establishment of new activities, in particular by increasing the assistance and financial resources available to regions affected by re-organization.

Despite the difficulties involved in the re-organization operation, the social results have on the whole been positive. The number of workers fell by 15,000 between 1965 and 1970. Lorraine was particularly affected (10,000 less). White-collar staff nevertheless rose by over 6,000 during the same period.

As a result of the limitation on recruitment, the normal loss of staff through retirement and voluntary resignation and early retirement of workers over 60, it was more or less possible to avoid actual dismissals. Application of the principle of priority for re-employment in iron and steel, laid down in the General Agreement, programming of labour movements, assistance to workers seeking new employment, measures to facilitate intensive vocational training and action to encourage the establishment of new activities made it possible to avoid an unemployment situation and at the same time to mitigate the difficulties encountered by workers who found themselves having to change jobs.

Results

Output of cast iron, crude steel and finished products increased by an average of 22 per cent a year during the period of the industry plan:

Product	(millions of tonnes)		
	1965	1970	1970/1965
Cast iron	15.8	19.2	+ 22%
Crude steel	19.6	23.8	+ 22%
Roller products	14.8	18.0	+ 22%

^{1/} Re-organization assistance granted by the European Coal and Steel Community.

The targets set in the General Agreement - 22 to 24 million tonnes of crude steel by 1970 - were fully achieved.

Output of fine and special steels increased by 9.6 per cent a year and in 1970 accounted for 11.3 per cent of total output as against 8.7 per cent in 1965. The share of flats in the output of fine products rose from 48 per cent in 1965 to 50 per cent in 1970.

The trend in deliveries reflects the trend in demand. It shows that the domestic market was an increasingly important outlet for French iron and steel, taking 70 per cent in 1970 as against 65 per cent in 1965.

The trend in foreign sales was not favourable. In tonnage, the foreign trade balance for steel - traditionally positive - was slightly negative in the last two years of the Fifth Plan; in value the excess of exports over imports rose from 1,381 million francs in 1965 to 263 million in 1970. This trend was however due, in very large part, to the tension existing on the domestic market in 1969 and at the beginning of 1970.

The structural reforms, the improvement in the market situation at the end of the Plan, the modernization of old plant and the introduction of new plant resulted in an appreciable increase of activity.

The productivity of the labour force as a whole increased by an annual average of 6.7 per cent from 1965 onwards. At that time it took 17.7 manual and white-collar worker hours to produce one tonne of crude steel; in 1970 it only took 12.5. The target set in the Agreement - an annual increase of 5 per cent - was thus considerably exceeded.

Total energy consumption per tonne of steel, in kilogrammes of coal equivalent, declined by 5 per cent in five years.

One of the most important results achieved over the period of the industry plan was the increase in the self-financing capacity of the French iron and steel industry as a whole.

The General Agreement had envisaged that the companies' gross return would rise from 10 per cent of their pre-tax turnover to 15 per cent in 1970, and to 16 per cent allowing for the fall in fuel prices. This target was considerably exceeded in 1969 (17.9 per cent) and 1970 (22.8 per cent). The average proportion during the period of the industry plan was 15.6 per cent, whereas the target had only been 12.6 per cent. In absolute value, the return practically quadrupled over the period in question.

Operating accounts of the 12 leading iron and steel companies
(millions of francs)

	1965	1966/65 Index	1966	1967/66 Index	1967	1968/67 Index	1968	1969/68 Index	1969	1970/69 Index	1970	1970/65 Index
Production account												
Deliveries, pre-tax	11,058	100	11,016	99	10,899	103	11,281	126	14,205	132	18,787	170
Stock variations	- 24		- 20		32		4		523		1,466	
Production total	11,034	100	10,996	99	10,931	103	11,285	131	14,728	138	20,253	183
Intermediate consumption	6,651	104	6,681	97	6,559	104	6,848	127	8,674	139	12,049	181
Gross value added pre-tax ...	4,383	98	4,315	101	4,372	101	4,437	135	6,054	136	8,204	187
Production total	11,034		10,996		10,931		11,285		14,728		20,253	
Trading account												
Staff costs	3,185	99	3,156	97	3,075	104	3,194	115	3,664	116	4,268	134
Gross trading surplus	1,198	97	1,159	112	1,297	96	1,243	192	2,390	165	3,936	329
Total for gross value added pre-tax	4,383		4,315		4,372		4,437		6,054		8,204	
Profit and loss account												
Gross trading surplus	1,198		1,159		1,297		1,243		2,390		3,936	
+ financial receipts	51		40		47		55		85		156	
- financial expenses	484	103	500	105	527	105	554	119	661	111	736	152
= gross pre-tax operating profit	765	91	699	117	817	92	744	244	1,814	185	3,356	439
+ unforeseen gains - unforeseen losses	9		20		3		- 3		2		- 22	
- profit tax	29		43		33		28		91		356	
= self-financing capacity ...	745	91	676	116	787	91	713	242	1,725	173	2,978	400
- dividends	95		87		82		95		182		213	
= self-financing	650	91	589	120	705	88	618	250	1,543	179	2,765	426

Annex 2

REORGANIZATION OF THE FRENCH SHIPBUILDING INDUSTRY

The world's shipbuilding industry is subject to full competition over the whole of its output because of the absence or marginal nature of restrictions on trade in ships. It is therefore of vital importance to remain competitive, i.e. able to sell at prices which are in line with those on the international market and which also guarantee firms a sufficient return.

A. French shipbuilding at the end of the Fourth Plan

The targets set for this sector in the Fourth Plan were of an organizational nature and concerned the development of concentration among enterprises and manpower trends.

1. Reorganization of enterprises

The changes in the structure of production in this sector during the Fourth Plan were appreciable, but less in extent than had been envisaged by the authorities from 1959 onwards.

The report on the Fourth Plan had strongly recommended concentration and integration operations. As far as integration is concerned, there was no progress among the big shipyards. Concentration operations, on the other hand, were more numerous and led to the disappearance from the list of shipyards of three establishments, which were involved in various merger operations:

- The Ateliers et Chantiers de la Loire at Nantes, which combined with the Ateliers et Chantiers de Bretagne, also at Nantes, following the merger of the two companies in 1961;
- The Chantiers Réunis Loire-Normandie at Grand Quévilly, which combined in 1964 with the former Chantiers Dubigeon, taking the name of Dubigeon-Normandie;
- The firm of Augustin Normand at Le Havre, which merged with the Chantiers Duchesne et Bossière in 1964, the new company taking the name of Ateliers et Chantiers du Havre.

The number of big shipyards, which had been 14 in 1953, was thus reduced to 11, or 2 including the Ateliers et Chantiers du Havre.^{1/} In 1965, the branch of shipbuilding represented by the big shipyards thus consisted of 10 companies with 14 establishments, 2 of them building hulls.

This total included 4 shipyards which had been deprived by an administrative decision of the right to build ships of more than 3,000 tonnes gross register (or equivalent): Aubigeon-Normandie (Nantes); Ateliers et Chantiers de la Rochelle-Pallice (La Rochelle); Forges et Chantiers de la Méditerranée (Graville); Ateliers et Chantiers du Havre (Le Havre).

Of the remaining 8 yards, 4 were still very busy and essentially concerned with building merchant vessels of more than 3,000 tonnes gross register (or equivalent): Ateliers et Chantiers de France-Gironde (Dunkirk); Chantiers de l'Atlantique Penhoët-Loire (Saint-Nazaire); Chantiers Navals de la Ciotat (La Ciotat); Forges et Chantiers de la Méditerranée (La Seyne). The 4 others took orders for medium-sized vessels and smaller or more specialized vessels. It should be noted that 3 of these last 4 had established special ties - financial or commercial - with one or other of the 4 yards mentioned previously.

Manpower trends

The Fourth Plan had envisaged that the tonnage put into construction (350,000 tonnes gross register) could be completed with a shipbuilding labour force reduced by 12,000, or about one-third of the industry's strength in 1959 (14 main shipyards).

The conditions in which this target had to be achieved were considerably different from what had been envisaged. The Fourth Plan recommended that all personnel withdrawn from shipbuilding who were not covered by some normal cause of staff "wastage" (resignation, retirement, illness, death) should be assigned to redeployment, whether external or internal. In actual practice it was not possible to achieve this objective, despite the efforts made.

1. During a first stage (1960-1961), considerable progress was made in internal redeployment. This made it possible to maintain the total labour force without appreciably increasing the ratio of labour not directly engaged in production to the total production

^{1/} The former Ateliers Duchesne et Bossière was in fact replaced in this group of shipyards by the Le Havre firm of Chantiers A. Normand, which has been dismantled.

strength. The proportion of productive labour assigned to non-shipbuilding activities in relation to the total productive labour force improved from 12.44 per cent to 15.88 per cent.

2. Unfortunately, during a second stage (1962-1963) progress in internal redeployment slowed up and then stopped.

The difficulties encountered by enterprises in their redeployment efforts during this second stage were reflected in a marked increase in the ratio of the total shipyard strength to labour directly engaged in production, which reached a maximum of 1.90 in 1963, as against 1.81 in 1961 and only 1.79 in 1959.

During the third stage (1964-1965), the proportion of the direct labour force assigned to internal redeployment declined slightly to a level near that for the years 1961-1962.

The Government having decided to apply the early retirement procedures introduced by the Act of 18 December 1963 setting up the National Employment Fund, the number of persons benefiting from these procedures amounted to about 1,250 and it was possible to redeploy about 1,000 others, as a result, in particular, of the efforts made by the shipyards and the assistance secured by the Government from enterprises in the public sector.

Thus, the conditions in which the reduction in the labour force was effected during the Fourth Plan can be summed up as follows, in round figures:

- (i) Of the 12,000 workers withdrawn from shipbuilding over a period of seven years 2,500 continued to be employed within the same enterprise, through internal redeployment;
2,000 found other employment outside the enterprise without any hiatus;
- (ii) 7,500 workers were thus withdrawn from shipbuilding without being re-employed. This number breaks down as follows:
3,200 workers were collectively dismissed as redundant (of whom 1,000 were subsequently retrained for other jobs);
4,300 workers, without being replaced, left the firm which employed them, either as a result of individual dismissals, or voluntarily, or in order to retire in the normal way.

B. The industry contract and French shipbuilding in relation to the Fifth Plan

The period of the Fifth Plan was marked by the need to make the big shipyards competitive on a lasting basis. To that end an Inter-Ministerial Commission was set up in September 1966. The outcome was an industry contract concluded between the big shipyards and the State, which made it possible to bring the amount of public assistance down to the level regarded as permissible by the EEC Commission.

1. The industry contract

This contract, which was signed in 1968, sets forth the obligations of the State and the industry to each other as follows:

The State, taking note of the commitments entered into by the industry under the present contract, undertakes:

1. To grant aid for shipbuilding up to a limit of 500,000 tonnes gross register for each of the two financial years 1969 and 1970 for ship orders actually taken by the six companies listed above in their shipyards existing at today's date, in view of the commitments entered into with regard to the cessation of subsidized construction at the Chantiers de Bordeaux and Chantiers du Trait;
2. To fix the level of aid for orders after 1 July 1968 at 10 per cent of the contract price, allowing for unforeseen increases in construction prices;
3. To take the necessary measures to introduce, from 1 July 1968, general customs exemption for all imported materials included in the ships, whatever flags they may fly and whatever the origin of the materials;
4. To contribute to the financing of productive investment programmes necessary to restore the situation of the shipyards, increasing their productivity;

It is noted that the State has already contributed by means of loans from the Economic and Social Development Fund to the financing of modernization investment proposed by ACDB, the Chantiers de l'Atlantique and the company specially set up for the construction of a large dock at La Ciotat and that it has also undertaken to contribute to the financing of an investment programme submitted by CNIM:

5. To encourage exports of vessels outside EEC by making sure that the periods and amounts of the necessary credits are in line with conditions on the international market and by authorizing shipyards to cover themselves against currency risks, in accordance with conditions to be determined case by case, in the event that the money of account under the contract could not be the French franc because of the purchaser;

6. To facilitate external redeployment as provided for in paragraphs 10 and 11, particularly with regard to the Bordeaux and Nantes shipyards, invoking the provisions of the decree of 21 May 1964, and, for the staff of the Chantier du Trait, those of the decree of 25 April 1966, which will be extended and the application of which will be entrusted to an inter-ministerial commission set up for the purpose under the Minister responsible for the Plan and Regional Development, on-the-spot execution being entrusted to a representative appointed by the Minister of Transport and the Minister responsible for the Plan and Regional Development;

7. To put into effect, as necessary, the various means of action of the National Employment Fund, in the form of agreements on training, special allowances and decreasing allowances;

The industry undertakes:

8. Not to increase its labour force in 1968 over the 31 December 1967 level, this commitment being observed shipyard by shipyard; in 1969 and 1970, the total labour force shall remain within the limit of 16,750 persons employed in shipbuilding, excluding those engaged in the construction of marine engines;

9. To pursue the structural reforms with a view to arriving at the establishment of two groups of comparable size before 31 December 1968; the first of these groups would consist of the Chantiers de l'Atlantique and the company which is to operate the two shipyards at Nantes; the second group will be composed of the other companies mentioned above; the members of each of these groups shall follow a policy of collaboration and co-operation within the groups;

This policy of co-operation and collaboration shall be followed by a Standing Committee on Co-ordination set up at the highest level, which may be supported if necessary by specialized co-ordination committees, concerned, for example, with marine affairs or land affairs;

10. To examine within a maximum period of three years the possibility of a merger of the companies belonging to each of these groups after a thorough economic and financial study to show the advantages of such a step, on condition that over the two years before the merger their records have shown their ability to balance their trading accounts and pay a normal return on capital invested; this procedure would then be submitted without delay to the general meetings of the companies;

11. To endeavour to preserve continuity of employment and not to resort to the collective redundancy procedure until the possibilities of re-deployment within or outside the industry have been exhausted,

To this end the industry will inform the competent departments of the Ministry of Social Affairs every year of the employment outlook; it will also inform the Ministry and workers' organizations of the posts available within the enterprise or in other enterprises in the sector which they could enter directly or after training;

It is agreed that in order to provide for internal or external reassignment and to deal with the changes made necessary by technical progress, the industry will establish within shipyards, in collaboration with the National Employment Fund, the training sections necessary to provide for staff retraining, if the region is not sufficiently well supplied with FPA sections;

12. To continue paying the wages of personnel admitted to redeployment courses even when they are being trained for redeployment outside the shipyard; the shipyards shall be compensated for part of the cost of the wages under an agreement with the National Employment Fund and they undertake to pay a gratuity of one month's pay to personnel who take a training course under an agreement with the National Employment Fund;

13. Not to enter into labour contracts, apart from essential technical subcontracting, except at peak load periods; by labour contracts shall be understood contracts which do not cover technical supervisors or in which the labour is not assigned to work defined in the contract;

14. To consult the committees of the enterprises concerned in good time.

2. Trends in the structural organization of shipyards

The Fifth Plan allowed for shipyards constructing vessels with a tonnage of more than 3,000 gross register. This figure was reduced to five in 1970 by the following restructuring measures:

At the beginning of 1966 the Chantiers et Ateliers de Provence ceased all activities both at Marseilles and at Port-de-Bouc;

In the same year, the Foreges et Chantiers de la Méditerranée also closed; the Chantier de la Seyne was taken over by a new company "Les Constructions Navales et Industrielles de la Méditerranée" (CNIM);

In June 1966 the Chantiers du Trait were acquired by the Chantiers de la Ciotat;

In 1967 the Bordeaux yard of the Société France-Gironde was made a subsidiary, "Les Constructions Industrielles et Navales de Bordeaux" (CINB):

In March 1968 the Société Babcock-Atlantique was set up; it took over all the boiler-making activities of the Chantiers de l'Atlantique;

On 1 January 1969 the Ateliers et chantiers de Bretagne transferred their shipbuilding division to the Chantiers Dubigeon-Normandie; only one shipyard thus remains at Nantes;

The winding-up of all shipbuilding activities at CINB, which had been going on gradually since July 1969, was completed on 31 December 1970.

Finally, following the signature of the industry contract, negotiations were started with a view to arriving at two groups of comparable size. The initial results are satisfactory and have led to the establishment of preferential channels of co-operation, particularly at the technical and commercial levels, approved by protocols of agreement in July 1967 for the Nord-Midi group (Chantiers Navals de la Ciotat, CNIM, ACDB) and in March 1969 for the Ouest group (Chantiers de l'Atlantique-Dubigeon-Normandie).

In addition, within the first group, ACDB and CNIM have set up a joint commercial subsidiary, CIFRAM (Comptoir interchantiers navals France-Méditerranée), which is responsible for supervising business on behalf of both, from the invitation of tenders to the conclusion of the contract.

As regards the medium-sized Chantiers du Havre and Chantiers de la Rochelle-Pallice the idea of a joint company controlling both plants was adopted in February 1970.

The small shipyards have also followed the same trend and co-operation agreements have led to the establishment of bodies such as SERNAMO^{1/} and the Consortium de la Construction navale. The establishment of SOPREXAM^{2/} has also brought together the yards building warships (Dubigeon-Normandie, Chantiers Franco-Belges, Chantiers de l'Esterel).

1/ Société d'Etudes et de Réalisations Navales Manche-Océan.

2/ Société Française d'Exportations de Matériels Navals Militaires.

3. Trends in employment

The reduction in the labour force has affected 3,800 persons. The largest reductions have been made at the Chantiers de l'Atlantique and Dubigeon-Normandie. But they are more apparent than real, because they are partly the result of re-organization designed to separate shipbuilding as such from related marine activities, such as marine engines, and from land activities. The labour force of the Chantiers navals de la Ciotat, by contrast, because of the considerable expansion of production there, has increased over the period in question by nearly 1,000 workers and white-collar staff. In all, the labour force of the two largest shipyards accounts for about 45 per cent of the total number of workers employed by the five big yards.

4. Co-operation within the groups provided for in the Sixth Plan forecasts
The industry contract

Following the signature of the industry contract in 1968, negotiations were undertaken with a view to arriving at the establishment of two groups of comparable size. The initial results have led to the establishment of preferential channels of co-operation, particularly at the technical and commercial levels. Co-operation has developed particularly within the two groups provided for in the industry contract, which remain the priority framework for co-operation; in some cases, it has also been developed with companies belonging to different groups with regard to matters of common interest.

The effectiveness of current co-operation can be appreciated in the following main fields:

Purchases and supplies, which have two different aspects:

As regard specifically marine equipment, a field in which any measure leading to longer series can be beneficial, since they are usually very short, the heterogeneity of the production of the shipyards in question, and in some cases the distances between them, have limited the scope for joint action;

As regards everyday equipment which is not specifically marine, the outlets offered by shipbuilding are relatively marginal and the ability of groups to make bulk purchases does not, therefore, bring special advantages from this point of view;

Technical co-operation:

Co-operation has developed with regard to the organization of labour, problems connected with data processing, studies, technology, mechanical calculations, and above all certain special techniques, such as natural gas tankers;

Trade policy and industrial co-operation:

A trade policy has been introduced within the Nord-Midi group, and more particularly between ACDE and CNIM, which have set up a joint trade subsidiary. In the case of these two shipyards the trade policy consists mainly in the use for natural gas tankers of one and the same technique, operated by a joint subsidiary. Despite the geographical separation of the shipyards, the policy is extended into many joint operations: for example, investment studies, estimates and plans, and data processing.

In addition, joint operations have also been undertaken by shipyards belonging to two different groups, inter alia with regard to the construction of series of vessels and the use of data processing.

C. Systems of aid to shipbuilding

1. Different forms of public aid in the world

Public action in the field of shipbuilding varies greatly from one country to another, the main forms being as follows:

Measures to protect the national market:

Restrictions on imports of vessels;

Advantages given to national shipowners for vessels built in national shipyards;

Customs duties;

Public participation in shipyard capital;

Direct subsidies to shipyards;

Fiscal measures;

Credit and credit insurance measures;

Measures to assist the fitting out of shipyards;

Measures to facilitate regular production at shipyards;

Support for research programmes.

Contrary to what is generally believed, direct subsidies to shipyards - which are only given in a limited number of countries (France, Italy, United States, Canada) - though they may be the most obvious kind of intervention are not necessarily the most "harmful". The measures applied by some countries to protect the national market (Japan, Spain, United States, Canada), measures in the field of credit and credit insurance, whether they take the form of interest rebates (Federal Republic of Germany, Netherlands, Japan), assistance in fitting out shipyards (Japan, United Kingdom, Spain, Denmark) or export credit insurance facilities (Italy, Federal Republic of Germany, Japan, Sweden, United Kingdom) often have considerable repercussions on the world shipbuilding market. In this respect the influence of Japan, the world's leading ship-builder, is decisive.

It is difficult to make a general comparison of these different systems and to assess the impact of the measures concerned. It may, however, be noted by way of example that a rebate of one percentage point of the interest rate on export credits is equivalent to a direct subsidy of 3.2 per cent of the cost of the ship; the level of the rebates in the Netherlands and the Federal Republic of Germany being 3.25 per cent and 3.5 per cent respectively, these represent direct subsidies of 10.4 per cent and 11.20 per cent. Italy's direct subsidies average 11 per cent; in the United States of America, the rate is about 120 per cent, though it should be added that the United States does practically no exporting in this sector.

Independently of such direct governmental assistance, particular industrial structures can affect the shipbuilding industry. Among these more favourable structures, one may mention participation by the State or by regional or local authorities in the capital of certain shipyards (particularly in the United Kingdom, Chile and Germany), the organization of sub-contracting or of shipyard suppliers in such a way as to make it possible to avoid the amassing of large reserve stocks (Japan) and to obtain lower prices for steel at the world level (Japan), the greater or lesser possibility of making orders for steel at firm prices (Sweden), etc.

At the international level, the problem of State assistance has been studied by OECD, within the framework of which an "Arrangement" on export credit conditions came into force on 1 July 1969 between 13 member countries. This Arrangement is intended to arrest the escalation taking place throughout the world in regard to the conditions for the financing of ships for export. Its main clauses relate to the minimum level of the interest rate, the maximum duration of the credit and the minimum level of the amount to be paid on delivery.

With regard to the European Economic Community (EEC), a directive of the Council on the granting of aid for shipbuilding aimed at correcting the distortions of competition on the international market came into force on 28 July 1969. This directive - optional in nature - limits the aid which may be granted to shipping to a maximum amount of 10 per cent of the contract price of the ships. This measure is also intended to avoid an escalation of subsidies within the Community. To take into account present trends in the international market for shipbuilding, and the OECD Arrangement, studies have been initiated on the desirability of lowering the maximum rate of subsidy allowable.

2. Trends in subsidies in France

Shipbuilding benefits in France from specific assistance - the basic assistance, calculated as a percentage of the contract price of the ship - and a price guarantee system designed to cover some of the increase in prices occurring between the giving of the order and the actual completion of the work.

The rate of specific assistance has gone down sharply and on 1 July 1968 France fell into line with the EEC proposal fixing the maximum allowable assistance at 10 per cent of the price of the ship. This is a considerable achievement when it is remembered that in 1960 the rate of assistance was still 21 per cent. Since 1968, the rate of basic assistance was reduced to 7 per cent following devaluation on 8 August 1969, and then to 4.9 per cent from 1 January 1970.

Simultaneously, however, the cost of the coverage of exceptional price fluctuations has increased sharply in spite of significant modifications - in particular, the introduction of high ceilings, brought into force from 1968. It was impossible, either in the planning forecasts or in the forecasts of the 1966 interministerial commission, for the working hypotheses to take into account the sharp increase in prices resulting from the May 1968 events and general world inflation.

This trend in the nature of the assistance granted is in reality a positive factor since the price guarantee system extended to shipbuilding is now analogous to the COFACE system for guaranteeing against economic risks. In 1969 and 1970 respectively, basic assistance represented only 134 million and 131 million francs out of a total of 233 million and 274.5 million francs.

TABLE 1

The size of industrial enterprises in seven developed countries

MANUFACTURING INDUSTRY AS A PERCENTAGE OF GROSS DOMESTIC PRODUCT 1/	United States (1963)	Federal Republic of Germany (1961)	Nether- lands (1962)	Belgium (1963)	France (1962)	Japan (1963)	Italy (1961)
Data on con- centration							
Number of estab- lishments	306,617	553,035	2/	2/	498,839	619,403	608,976
Total number of staff	16,234,506	9,489,927	1,197,741	1,062,652	5,274,723	10,415,178	4,495,563
Average number of staff per establishment	53	17	2/	2/	11	17	7
Average number of staff per establishment:							
50 persons or more	263	265	254	240	215	192	198
More than 1,000 persons	2,580	2,680	2,519	2,331	2,311	2,266	2,245
Percentage of staff employed in estab- lishments of:							
50 persons or more	42.9	38.8	40.5	37.7	26.8	24.3	21.4
500 persons	40.7	34.1	35.7	38.5	36.8	33.1	31.7
100 persons	13.1	13.9	15.9	16.4	17.2	27.2	18.9
10 persons	3.3	13.2	7.9	7.4	19.2	15.4	28.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Relative indicators							
Percentage of staff employed in:							
5% largest establishments	62	72	68	67	67	57	65
10% largest establishments	75	82	79	78	79	68	74

Excluding mining, construction and public works.

Neither the total number of establishments nor the average number of staff per establishment is given for Belgium and the Netherlands. The information provided by OSCE for these two countries grossly under-estimated the number of very small establishments, and this completely invalidated the four sets of data.

Source: INSEE Collections No. E1 (May 1969).

TABLE 2

Concentration of enterprises in major sectors of activity (1962)

Activity (Two-figure nomenclature (N.I.C.E.))	Proportion of establishments (%) employing (no. of persons)									No. of estab- lishments	Proportion of staff employed in the x largest estab- lishments		Average No. of staff per estab- lishment	Me
	1 - 4	5 - 9	10 - 19	20 - 49	50 - 99	100 - 499	500 - 999	More than 1,000	X _{5%}		X _{10%}			
20. Agricultural and food industries	32.8	6.9	6.2	11.6	10.1	23.7	7.3	4.6	94,225	58	68	6	5	
23. Textile industry	5.4	2.9	4.4	12.1	13.0	41.6	10.8	9.8	22,569	62	72	24	16	
24. Footwear and clothing	28.7	6.7	7.0	14.8	12.6	24.8	3.4	2.0	105,874	62	71	5	7	
25. Wood and cork industry	25.0	10.3	11.4	20.2	12.8	16.1	4.2	-	25,932	53	65	6	8	
26. Wood furniture industry	40.6	10.3	10.9	16.7	10.2	10.7	0.6	-	27,906	47	59	4	9	
27. Paper and paper-board industry	3.0	3.0	4.4	14.0	12.0	45.4	12.6	5.4	3,171	50	64	39	0	
28. Printing and publishing	13.2	7.7	8.8	16.3	12.6	25.1	2.0	8.3	14,468	58	70	12	1	
29. Leather industry	23.6	7.5	8.7	18.4	10.6	23.8	7.4	-	12,149	59	72	6	8	
30. Rubber industry	5.5	6.1	4.3	11.6	8.4	24.0	10.8	29.4	4,914	67	77	29	4	
31. Chemical industry	4.1	3.6	4.6	11.5	10.3	33.9	16.1	15.9	8,250	60	73	34	2	
33. Non-metal ores	9.9	5.9	7.0	14.2	9.3	31.6	13.4	8.7	13,298	63	76	16	1	
34. Basic metallurgy	0.3	0.4	0.8	2.0	2.8	16.2	10.8	66.7	1,307	69	82	232	2,1	
35. Metalworking	22.9	6.2	8.2	16.4	10.6	26.2	6.8	2.7	80,472	63	74	6		
36. Manufacture of non-electrical machinery	3.3	2.5	4.3	11.6	11.0	35.6	11.7	20.0	12,460	60	74	39	2	
37. Electrical engineering	4.5	2.3	3.3	8.7	8.5	30.0	16.3	26.4	10,879	72	83	29		
38. Automobile manufacturing	2.9	1.1	1.5	3.2	3.1	12.4	9.9	65.9	5,247	91	95	51	4,0	
39. Precision instruments	16.3	5.4	6.3	13.0	12.2	28.3	9.5	9.0	12,620	68	78	9		
Total manufacturing industries	14.6	4.6	5.5	11.7	9.8	27.0	9.5	17.3	498,839	67	79	11		

Source: Table based on the Recensement industriel (Industrial census)

TABLE 3

Percentage of staff employed in 1966 in enterprises of:

as a % of the total of each sector

Number of employees	1	10	50	200	500	1,000	Salaried or employees (00,000)
	9	49	199	499	999	more	
	1	2	3	4	5	6	
1 Code							
CN National Accounting Office (<u>Comptabilité National</u>) sectors							
2 Agricultural and food industries	23.3	17.0	19.3	13.5	9.6	17.3	519
3C Petroleum	17.6	9.4	8.0	5.9	9.0	50.1	81
4A Iron ore mining, iron and steel	-	0.1	0.6	3.7	3.2	92.5	253
4B Non-ferrous metals	1.0	5.5	13.7	12.3	10.3	57.2	20
5A Metallurgy	15.5	17.6	21.6	17.5	13.3	24.3	409
5B Mechanical engineering	5.5	16.8	23.9	15.0	10.7	28.1	653
5C Electrical and electronic engineering	2.1	6.9	12.2	10.7	10.7	57.4	389
5D Automobile manufacture	1.3	4.0	6.1	5.5	5.9	77.2	335
5E Shipbuilding, Manufacture of aircraft and armaments	1.1	3.6	5.4	8.0	10.4	71.6	188
6A Glass	4.0	11.3	9.8	10.8	13.6	50.4	57
6B Industrial chemicals, rubber	2.3	8.8	15.9	14.9	12.7	45.5	345
7A Textiles	3.2	12.2	22.4	20.1	13.8	28.3	522
7B Clothing	15.7	25.3	26.2	17.7	8.0	7.2	311
7C Leather	9.3	18.8	29.0	18.3	11.9	12.7	157
7D Wood	21.0	33.8	28.4	9.1	4.8	3.0	207
7E Paper, paperboard	2.7	13.8	24.4	23.9	15.0	20.2	127
7F Printing industries	14.0	24.2	21.6	13.4	10.0	16.8	204
7G Miscellaneous industries	10.8	25.0	29.4	16.1	10.9	7.9	181
8A Construction materials	12.0	23.6	23.1	12.8	9.0	19.4	202
8B Construction - Public Works	22.9	26.5	22.6	10.6	6.7	10.6	1,532
2-8B TOTAL INDUSTRY	11.5	17.5	19.7	13.1	9.4	29.0	6,672
2-8A TOTAL INDUSTRY (excluding Construction and Public Works)	8.1	14.8	18.9	13.8	10.2	34.3	5,140

Source: Fichier des entreprises et des établissements - INSEE (1966)

TABLE 4

Proportion of the largest enterprises in each sector
Rate of specialization (average) of each sector

No. N.A.E.	Title of sector	4	8	20	50	100	500	1000	Total number of enterprises	Rate of speciali- zation
020	Agricultural and food industries	13.6	17.5	23.9	32.0	39.5	61.3	71.8	16,620	92.8
030	Coal	85.8	96.8	99.9	-	-	-	-	47	78.4
031	Gas, electricity, water	94.4	96.0	98.2	99.4	99.8	-	-	283	98.0
032	Petroleum refin- ing and distri- bution	45.2	68.2	88.6	94.3	96.7	99.5	-	958	96.3
040	Iron ore mining and iron and steel	42.6	64.0	86.1	97.4	-	-	-	94	74.0
041	Extraction of non-ferrous ores	58.3	73.7	86.3	96.1	99.7	-	-	136	69.8
050	Basic metallurgy	15.1	20.8	27.2	35.7	44.6	69.8	79.7	11,476	82.5
051	Mechanical engineering	6.9	11.0	17.7	26.7	35.5	59.7	71.5	18,914	80.5
052	Electrical and electronic engineering	17.6	27.6	40.3	54.8	66.4	83.3	94.7	5,838	76.5
053	Automobile industry	54.2	66.6	79.9	87.3	91.5	98.1	99.4	3,320	83.4
054	Shipbuilding & aeronautics	41.9	56.5	74.8	88.1	93.8	99.4	99.9	1,109	77.1
060	Glass industry	44.3	54.4	68.2	79.2	86.0	98.2	99.9	1,110	91.1
061	Chemical & rub- ber industry	15.3	22.6	35.3	48.1	59.8	85.2	93.5	4,324	87.1
070	Textile industry	11.9	16.2	22.5	31.5	40.8	69.1	81.7	8,807	92.3
071	Clothing industry	3.2	4.8	8.6	15.6	22.6	46.0	58.2	31,591	91.6
072	Leather industry	6.3	9.6	17.0	26.6	36.5	65.8	78.7	12,948	91.6
073	Wood industry	4.2	6.2	10.4	16.2	21.0	41.7	52.9	28,987	84.8
074	Paper industry	13.0	20.4	31.6	47.3	61.5	90.5	97.4	2,132	90.0
075	Printing and publishing	6.6	10.9	17.7	28.2	38.2	63.9	74.9	10,769	91.0
076	Plastics manufacture	5.1	8.3	13.8	23.4	34.1	62.7	75.9	12,466	82.2
080	Construction materials	14.1	19.3	27.9	38.4	46.9	67.4	76.8	13,501	91.1
081	Building and public works	2.4	3.9	7.1	11.7	16.2	29.7	36.8	202,602	94.1

Source: INSEE collections, Series E, No. 2.

Mergers and concentrations of enterprises in France

TABLE 5a
Ratio of concentration of establishments and enterprises
in 195 branches of French industry in 1962

Ratio of concentration	Number of branches showing ratio of concentration						
	For the 4 largest		For the 8 largest		For the 20 largest		
	1: enterprises 2: establishments		1: enterprises 2: establishments		1: enterprises 2: establishments		
	Absolute number by class	Cumul.	Absolute number by class	Cumul.	Absolute number by class	Cumul.	
Less than 5%.....	1	10	10	4	4	1	1
5 - 9%.....	2	17	17	6	6	4	4
10 - 14%.....	1	18	28	12	16	5	6
15 - 19%.....	2	29	46	19	25	5	9
20 - 24%.....	1	25	53	12	28	7	13
25 - 29%.....	2	24	70	18	43	12	21
30 - 34%.....	1	23	76	16	44	12	25
35 - 39%.....	2	27	97	20	63	11	32
40 - 44%.....	1	15	91	15	59	4	29
45 - 49%.....	2	18	115	14	77	7	39
50 - 54%.....	1	10	101	15	74	12	41
55 - 59%.....	2	11	126	18	95	12	51
60 - 64%.....	1	14	115	14	88	9	50
65 - 69%.....	2	13	139	11	106	14	65
70 - 74%.....	1	14	129	8	96	10	60
75 - 79%.....	2	9	148	8	114	10	75
80 - 84%.....	1	4	133	12	108	11	71
85 - 89%.....	2	9	157	11	125	7	82
90 - 94%.....	1	8	141	7	115	8	79
95 - 99%.....	2	6	163	12	137	13	95
100%.....	1	8	149	9	124	10	89
	2	2	165	9	146	9	104
	1	9	158	6	130	4	93
	2	8	173	5	151	6	110
	1	7	165	11	141	16	109
	2	6	179	7	158	7	117
	1	7	172	6	147	4	113
	2	6	185	5	163	12	129
	1	4	176	8	155	8	121
	2	4	189	5	168	12	141
	1	8	184	6	161	8	129
	2	2	191	3	171	5	146
	1	6	190	8	169	11	140
	2	1	192	8	179	8	154
	1	1	191	7	176	14	154
	2	2	194	11	190	8	162
	1	1	192	8	184	10	164
	2	1	195	2	192	9	171
	1	3	195	9	193	12	176
	2	0	195	2	194	15	186
	1	0	195	2	195	19	195
	2	0	195	1	195	9	195

Source: INSEE. Recensement industriel (Industrial census), 1963.

TABLE 5b

Relative size of major French and German enterprises in 1966

	Rank of enterprises										
	1st	50th	100th	150th	200th	250th	300th	350th	400th	450th	500th
Germany	100	100	100	100	100	100	100	100	100	100	100
France	95.73	79.52	81.17	98.17	107.1	111.2	128.1	141.2	148.0	151.7	180.

Source: Enterprises: the firms are classified according to magnitude of own capital.

TABLE 6

Number of concentration operations carried out by limited companies, 1950-1969 (classified by sector)

	Feed	Banking, insurance	Building, public works	Mechanical and electrical engineering	Chemistry, petroleum	Iron and steel, metallurgy	Textiles	Transport	Miscel- laneous	Total
1950 - 1960	85	183	54	181	149	98	58	41	-	849
1961	12	16	3	9	17	18	10	20	15	120
1962	17	24	3	29	30	7	4	3	10	127
1963	22	17	23	27	25	4	8	9	15	150
1964	44	49	21	AC	39	20	12	7	27	255
1965	29	30	19	25	29	8	7	5	12	164
1966	33	52	11	32	-	22	13	25	33	219
1967	13	43	12	10	17	22	8	9	10	144
1968	30	36	15	14	38	16	16	13	38	216
1969	24	37	14	38	37	6	9	11	16	132
GRAND TOTAL	309	487	175	411	409	221	145	143	176	2476
TOTAL : 1961 - 1969	224	304	121	230	260	123	87	102	176	1627

SOURCE : "Direction", February 1970.

TABLE 7

The 500 largest enterprises and concentration operations classified by year and major sectors of activity, 1950-1969

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	Total
Food	2	2	5	6	1	8	9	10	6	6	14	11	20	32	26	22	20	11	12	13	236
Automobile industry	2		1	3		4		1		2	3	7	2	4	3	8	10		1		48
Public services										50				5	9						12
Building & public works	3	2	2	1	3	2	4	3	3	8	4	3	12	14	14	8	5	7	3	7	100
Chemistry	3	2	3	8	2	2	7	2	14	16	12	23	21	24	23	20	3	9	9	9	212
Electricity	3	1	5	4	3	8	17	5	6	9	6	4	5	2	2	6	11	4	7	8	110
Mining & quarrying		4					1	2		8	6	2	2	13	9	2	3	9	3		65
Paper & printing				4	1	1	3			4	5	3	7	8	1	3	6	1	3	2	52
Engineering	2		3	4		7	2	4	7	6	8	5	14	9	7	9	10	6	7	11	122
Metallurgy: iron & steel	7			5		4	2	6	1	6	13	6	4	4	13	7	6	3	4	7	102
Petroleum industry	1			1	7	1	3	1	7	4	4	1	3	7	1	4	3	1	2	3	46
Textile industry				3		1	1	1				2	2	3	5	5	3	3	3	9	41
Transport	1			2	1	3	2		1	3		3	1	8		2	2	3	5	3	40
Miscellaneous								1													1
TOTAL	500	21	9	22	41	16	52	36	45	68	75	70	93	131	113	96	79	57	56	72	1193

SOURCE : "Direction", February 1970.

TABLE 8

Total number of concentration operations carried out by French enterprises as a whole, 1956-1969

Year	Number of operations	Financial resources (00,000 francs)	Year	Number of operations	Financial resources (00,000 francs)
1956	893	not available	1963	1 525	4.1
1957	907	not available	1964	1 288	2.9
1958	541	not available	1965	1 590	not available
1959	931	2.8	1966	1 959	-
1960	1 058	3.8	1967	1 752	-
1961	1 199	2.5	1968	2 240	-
1962	1 320	6.1	1969	n.d.	-

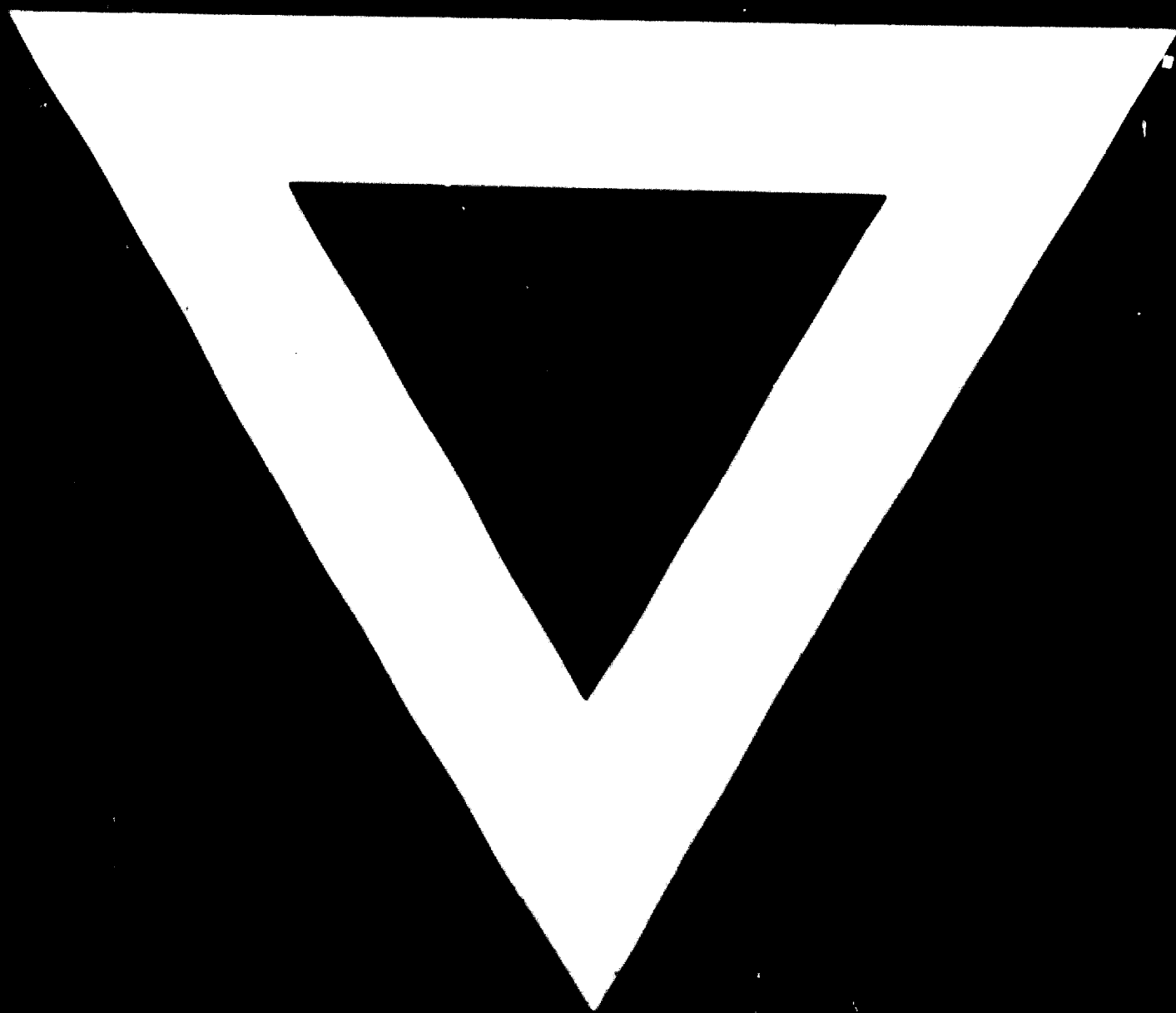
SOURCE : Ministry of Industrial and Scientific Development, Merger Office - Notes et études documentaires.

TABLE 9

The 500 largest enterprises, and concentration operations carried out between 1950 and 1969, ranked according to size

Size range	Number of companies belonging to the range	Number of companies which have carried out at least one concentration operation	Number of concentration operations carried out	Average number of operations
0-10	10	10	95	9.5
11-20	10	9	46	5.1
21-30	10	8	64	8.0
31-40	10	6	47	7.8
41-50	10	9	58	6.4
0-50	50	42	310	7.3
51-100	50	33	191	5.7
0-100	100	75	501	6.6
101-200	100	68	261	3.8
201-300	100	54	141	2.6
301-400		61	123	2.0
401-500	100	57	167	2.9
0-500	500	315	1,193	3.7

Source: "Direction", February 1970



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