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France

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INTRODUCTION

A. General Policy Characteristics of the Period

After a period of reconstruction ending around 1949, France experienced sustained growth. The investments that had been made in the basic sectors of the economy bore fruit and the budget deficit was almost entirely attributable to public investment. There appeared to be a turning point in 1952 with the Pinay experiment, which included curbing inflationary tendencies by liberalizing trade, repatriating capital that had taken refuge abroad, stimulating the growth of voluntary savings, and integrating more effectively the investment efforts of the public and private sectors. In wage policy, free bargaining was resumed, with the additional security of a guaranteed minimum wage tied to the cost of living. The use of index clauses in labor contracts increased considerably until 1958.

Substantial success also attended efforts to increase productivity, essential if price stability, balance-of-payments equilibrium, and full employment were to be achieved and maintained. At first these efforts were aimed primarily at increasing the capital coefficient. It soon became apparent, however, that if waste were to be avoided,

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For conversion purposes, 1 franc = 20.3 U.S. cents, or 4.94 F = $1.

the investment effort had to be accompanied by changes in organization and management techniques. Outdated production methods ill-equipped to face strong international competition, inadequate research and development efforts, inflexible and outmoded distribution techniques, inadequate education and professional training, the rigidity of the social structure, and the unbalanced economic development of the nation were the basic structural deficiencies facing management.

A master idea of voluntary, flexible national economic planning evolved with the Fourth Plan. This planning is based on a regular exchange of views between government and business, which is a process of mutual education. Through it, the fundamental mechanisms of economic expansion become more readily apparent, and the interdependence of technical, cultural, economic, and sociopolitical problems is revealed. The result is both a better understanding of the goals of economic policy and a greater awareness of its limitations.

Within the general framework of financial policy, developments in taxation played a significant part in pursuing economic growth objectives. Tax revision was retarded by the large and persistent budget deficit, the monetary depreciation that had been going on almost continuously since World War I, and the high degree of tax evasion. Experimentation with new tax techniques could not be allowed to endanger existing tax yields. Although there were important reforms during 1945-62, none constituted a fundamental change.

Tax reform had three main objectives: simplification, neutrality, and increasing the effectiveness of the tax system as an instrument of economic policy. The first of these has been a major objective of all tax reforms; for complexity in taxation encourages fraud, which in itself represents a serious waste of economic resources, since it may become more profitable than other economic activities.

In trying to achieve the highest possible degree of neutrality in the impact of the tax system on the economy, the goal has been at least to make the base of a tax and its amount depend only on the economic content of a decision, not on its legal form, and at most to avoid influencing even the content of economic decisions by taxation.[1]

Finally, taxation has often been used as a direct instrument of economic policy to promote structural reforms, economic stabilization, or social policies. It is not always easy to distinguish between measures designed to carry out the second and third objectives, for very often the concern for the neutrality of a tax is greatest in the areas of most interest to the policy-makers. On the other hand, because of their selective nature, tax incentive and social measures may well increase the diversity and over-all complexity of the tax system and conflict with the objective of tax neutrality.

B. The Present Tax System

The major components of the present French tax system are income taxes, expenditure taxes, wealth taxes, payroll taxes, and social security contributions (although strictly speaking, the latter fall outside of the tax system).

The present income taxes consist of a progressive global tax on the net income of individuals and a proportional tax on corporate income. Originally introduced in 1917 as a schedular income tax, the former was modified in 1948 and in 1959. The 1948 changes produced the present taxes.

The progressive tax on individual income is highly personalized and related to the family responsibilities of the taxpayer. The tax is assessed on the sum total of family income, but the total income is divided into shares whose number varies with the number of children or other dependents. The progressive rate is applied to each share separately, so that the larger the family, the smaller is the impact of the progressive rates.

[1] Thus Maurice Laure, in his *Traité de politique fiscale* (Paris, 1956, p. 37), writes: "Considering in this context only domestic transactions, it is quite obvious that the tax system must consist of taxes whose total burden is exactly proportional to the value of each product, at any stage of its processing or distribution. The net effect of such a tax system is to increase all prices in the same proportion. This amounts simply to a general change in the value of money which leaves all other price ratios unchanged and has no effect on the relative cost structure."

The effective average rate of tax on individual income for 1961 is shown in Table 1 by income bracket and size of family.[2] The table shows the way in which the tax is progressive as income increases and degressive as the size of the family increases. These figures are much more meaningful than the theoretical rates of the progressive tax, which are given below for the year 1961:

Net Taxable Income (F)	*Statutory Tax Rate (per cent)*
0 to 2,300	5
2,000 to 4,000	15
4,010 to 6,750	20
16,260 to 32,000	45
32,000 to 64,000	55
Over 64,000	65

It should also be noted that there are special provisions for wages, salaries, and annuity income which lessen the effective burden of the tax. In effect, only about 70 per cent of wage and salary income is taxed.

In general, capital gains and losses are not taken into account in the computation of the individual income tax. There are two major exceptions: (1) gains realized from the sale of fixed assets of an industrial or commercial enterprise and (2) since the real estate tax reform of March and December 1963, gains realized from the sale of vacant land, land that is insufficiently developed, and buildings held less than five years.

Special treatment is also given other forms of investment income (dividends, interest, etc.) in the personal income tax. The tax due is withheld at the source, by the business firm making the payments, at the rate of 18 and 24 per cent for interest and dividends, respectively. The payee then deducts the amounts withheld from his personal income tax liability.

Income earned in industrial and commercial activities is taxed either under the individual or the corporate income tax. Under the first heading, the tax may be assessed on the basis either of estimated

[2] In each net taxable income bracket, the total tax paid by all families of a given size was divided by the number of taxpayers in the group. The resulting tax was then expressed as an index whose base of 100 was the average tax paid by the taxpayers in the lowest income bracket with no family dependents.

TABLE 1

Index of Average Income Tax Paid by Individuals in 1961, by Income Bracket and Size of Family[a]

Number of Family Shares[b]	Taxable Income Bracket (francs)				
	10 to 9,750	9,760 to 16,250	16,260 to 32,000	32,010 to 100,000	100,010 to 300,000
1	100	448.64	1,116.8	3,505.6	17,261.72
2	114.43	292.75	738.34	2,696.81	18,101.22
2.5	107.99	250.59	628.72	2,350.81	14,781.34
3	88.51	218.96	573.74	2,158.83	13,009.19
4	68.43	211.46	496.60	1,887.16	12,188.38
5	75.34	153.82	433.13	1,680.17	11,174.05
6	81.32	120.78	389.18	1,609.01	9,508.22

[a] The index base is the tax paid by taxpayers who are in the lowest income bracket and have no dependents.

[b] A bachelor would have one share; a couple without children, two shares; each child, half a share.

income or of actual income declared by the taxpayer. The estimated income method is used in the case of small businesses, chiefly in the service industries.

By way of illustration, in 1960 the breakdown of business firms for tax purposes was the following:

	Per Cent of Total Number of Firms
Single proprietorships and partnerships taxed on the basis of estimated income	78
Single proprietorships and partnerships taxed on the basis of actual income	11.4
Corporations taxed on the basis of actual income	10.6

But, of course, the firms taxed on the basis of estimated income accounted only for about 10 per cent of total business turnover in 1959, while the corporations accounted for 72 per cent.

When capital gains are realized from the sale or liquidation of a business, half the gain is taxable if the assets were held less than five years; assets held for a longer period are taxed at the rate of 10 per cent.

Capital gains realized from the sale of fixed assets in the course of operation of a business firm, on the other hand, are normally taxed as income, unless the firm makes a commitment to reinvest the entire proceeds of the sale within three years. The reinvestment must take the form of fixed assets. It may, however, also take the form of a purchase of shares in another firm, on condition that the new shares constitute more than 20 per cent of the total capital of the firm.

Taxes on expenditures include turnover taxes and excise taxes. The latter are levied on beverages, meat, coffee, tea, transportation, hides and skins, sugar beets, entertainment, etc. There are also state monopolies on tobacco and matches, and a variety of stamp taxes. These taxes are quite complex. Some simplification was introduced in April 1954 when the turnover tax system was transformed into a tax on value added (T.V.A.) and a tax on services. The former is at present levied at the standard rate of 20 per cent on most transactions, while the rate of the latter is 8.5 per cent. At the retail level, there is still a *local* tax of 2.75 per cent on retail sales and 8.5 per cent on entertainment and restaurant meals. This tax, in principle, is to be eliminated in the course of a comprehensive reform of local taxation.

The taxation of wealth takes various forms. The inheritance and gift tax is progressive and varies with the number of dependents. The tax is light when property passes between husband and wife or in direct line, owing to exemptions and low rates (5 to 15 per cent). On the other hand, the tax is 40 per cent when the heir is brother or sister of the deceased, and 50 per cent when the degree of kinship is more remote. Taxes are levied on all other forms of transfers of wealth as well (there are registration taxes, taxes on stock exchange operations, etc.).

Local taxes on wealth were revised in 1959, at least in theory, but the actual implementation of the reform has been difficult and constantly postponed. These taxes include, in particular, two taxes on land (one on vacant land and the other on developed land) and a tax on dwellings. These taxes are assessed on the basis of rental values, estimated every five years and subject to revision in the interval between valuations. These taxes brought in 2.5 billion francs in 1961, or 16 per cent of total receipts from the personal and corporate income tax.

A payroll tax (called *versement forfaitaire)* is levied at the rate of 5 per cent on salaries of less than 30,000 F a year, 10 per cent on amounts ranging between 30,000 F and 60,000 F, and 16 per cent for the bracket exceeding 60,000 F. This tax is paid by the employer. The employer is also required to earmark 1 per cent of his wage and salary bill for housing construction and 0.40 per cent for vocational education.

The revenues of the social security system fall outside the tax system. Social security contributions in general amount to 33.75 per cent of wages and salaries, up to a ceiling of 870 F a month. They amounted to about one-fifth of tax receipts proper in 1959-62.

Tables 2 and 3 show the distribution of total tax receipts by source since 1949. A number of features can be observed throughout the period:

1. The share of direct taxes (items 1 and 2 in Table 2) remained between 24 and 28 per cent of total tax receipts.

2. The corporate tax supplied about 11 per cent of total tax receipts.

3. Indirect taxes accounted for the great bulk of total tax receipts, ranging between 70 and 77 per cent. It may be argued, however, that not all items included in this group really are indirect taxes. It has been suggested that both the value-added tax and the payroll tax should be included with direct taxes, since the former is in fact a tax on gross income, while the latter is an income tax on wages and salaries withheld at the source by the employer.

However this may be, Table 2 makes clear the inflationary bias inherent in a tax system in which two-thirds of total receipts come from taxes which can easily be passed on to the consumer. On the other hand, in such a system, tax receipts are highly sensitive to changes in the level of economic activity and in the price level.

4. As shown below, the total tax burden in relation to the gross national product (column A) has tended to increase. The tax burden is on a net basis, i.e., after deduction of government subsidies ap-

TABLE 2

Distribution of Tax Receipts of Central Government, by Type of Tax, 1950–61

(per cent of total receipts)

Type of Tax	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
1. Individual income tax	12.8	11.4	12.5	15.2	13.6	12.2	13.8	13.6	14.4	15.9	13.5	14.1
2. Corporate income tax	11.9	10.3	10.0	11.1	10.2	10.4	11.9	10.6	11.4	11.8	10.8	10.4
3. Payroll tax[a]	8.0	8.0	8.5	8.1	8.4	8.7	9.3	8.7	8.4	8.1	8.2	7.9
4. Turnover tax and other consumption taxes	48.5	51.1	54.2	50.4	51.9	51.4	45.9	45.8	39.0	41.0	40.8	40.7
a. Production tax	33.8	35.6	33.5	27.8	18.8	—	—	—	—	—	—	—
b. T. V. A. (normal rates)	—	—	—	—	11.1	31.0	33.3	33.3	32.6	31.3	32.2	31.5
c. Other taxes	14.7	15.5	20.7	22.6	22.0	20.4	12.6	12.5	6.4	9.7	8.6	9.2
5. Custom duties	9.2	9.8	9.0	9.5	10.1	11.7	12.6	14.3	14.6	13.5	13.3	12.9
6. Registration taxes	5.5	5.1	4.9	4.7	4.7	4.4	4.4	4.5	4.3	4.7	4.6	4.4
a. Tax on transfer of wealth	2.8	2.6	2.7	2.9	2.8	2.5	2.6	2.8	2.7	2.5	2.4	2.6
b. Estate tax	1.3	1.5	1.2	1.4	1.3	1.3	1.2	1.3	1.4	1.5	1.3	1.3
7. Tax on stock exchange operations	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.4	0.2	0.4	0.3	0.3
8. Stamp tax	1.1	0.9	0.8	0.9	0.9	0.9	1.8	2.1	2.0	1.9	1.5	1.8
9. Miscellaneous taxes	2.9	3.3	—	—	—	—	—	—	5.7	2.7	6.4	7.9
Total	100	100	100	100	100	100	100	100	100	100	100	100

[a] 5 per cent tax paid by employers on wage and salary bill (*versement forfaitaire*).

TABLE 3

Distribution of Total Tax Receipts Between Direct and Indirect Taxes and Between Central and Local Government, 1949–62

(per cent of total receipts)

	Direct Taxes			Indirect Taxes[a]		
Year	Total	Central Govt.	Local Govt.	Total	Central Govt.	Local Govt.
1949	25.5	23.5	2	74.5	62.5	12
1950	26.5	24.7	1.8	73.5	62.0	11.5
1951	24.1	22.4	1.7	76.9	65.7	11.2
1952	23.0	21.5	1.5	77.0	65.0	12.0
1953	25.0	23.5	1.5	75.0	63.2	11.8
1954	23.5	21.0	1.5	76.5	64.3	12.2
1955	23.5	21.0	1.6	76.5	65.0	11.5
1956	25.0	23.4	1.6	75.0	63.0	12.0
1957	26.0	24.4	1.6	74.0	62.3	11.7
1958	29.0	27.5	1.5	71.0	60.2	10.8
1959	28.5	26.9	1.6	71.5	60.1	11.4
1960	28.0	26.4	1.6	72.0	60.4	11.6
1961	27.5	25.7	1.8	72.5	60.8	11.7
1962	26.5	24.8	1.7	73.5	61.9	11.6

[a] Indirect taxes include lines 3–9 of Table 2.

pearing in the national accounts. Column B is a value index of GNP.

	A (*per cent*)	*B*		*A* (*per cent*)	*B*
1949	17	100	1957	20	245
1952	19	168	1958	21	282
1953	20	175	1959	22	306
1954	19	185	1961	21	368
1955	19	197	1962	21	409
1956	19	220			

I. MAIN ASPECTS OF THE INFLUENCE OF THE TAX SYSTEM ON ECONOMIC GROWTH

The French economy since 1949, as can be seen in Chart 1, has experienced four periods of rapid growth (1950-51, 1953-57, 1959-60, and 1962-64) and three brief slowdowns. Various components of GNP have played a dynamic role in the periods of rapid expansion.

Although private consumption increased steadily and at a rapid pace throughout the period, it played a particularly important role during the first expansion period (1950-51). It accounted for 65 per cent of the GNP increase in 1950 and for 68 per cent in 1951. Its rapid pace was, moreover, the largest single factor in accelerating the rate of growth of domestic demand in 1951.

In the second expansion period (1953-57), private consumption demand does not appear to have initiated the acceleration of GNP growth. It did serve to sustain the rapid expansion in 1953 and thereafter, when export increases no longer provided the major growth impetus. The rate of growth of private consumption rose sharply in 1955 and even more so in 1956, but lost its momentum somewhat in 1957.

Essentially the same sequence characterized the 1959-60 expansion. In 1959 GNP increased as a result of growth in the export sector and in spite of a substantial slowdown in private consumption; in 1960, on the other hand, private consumption demand increased sharply.

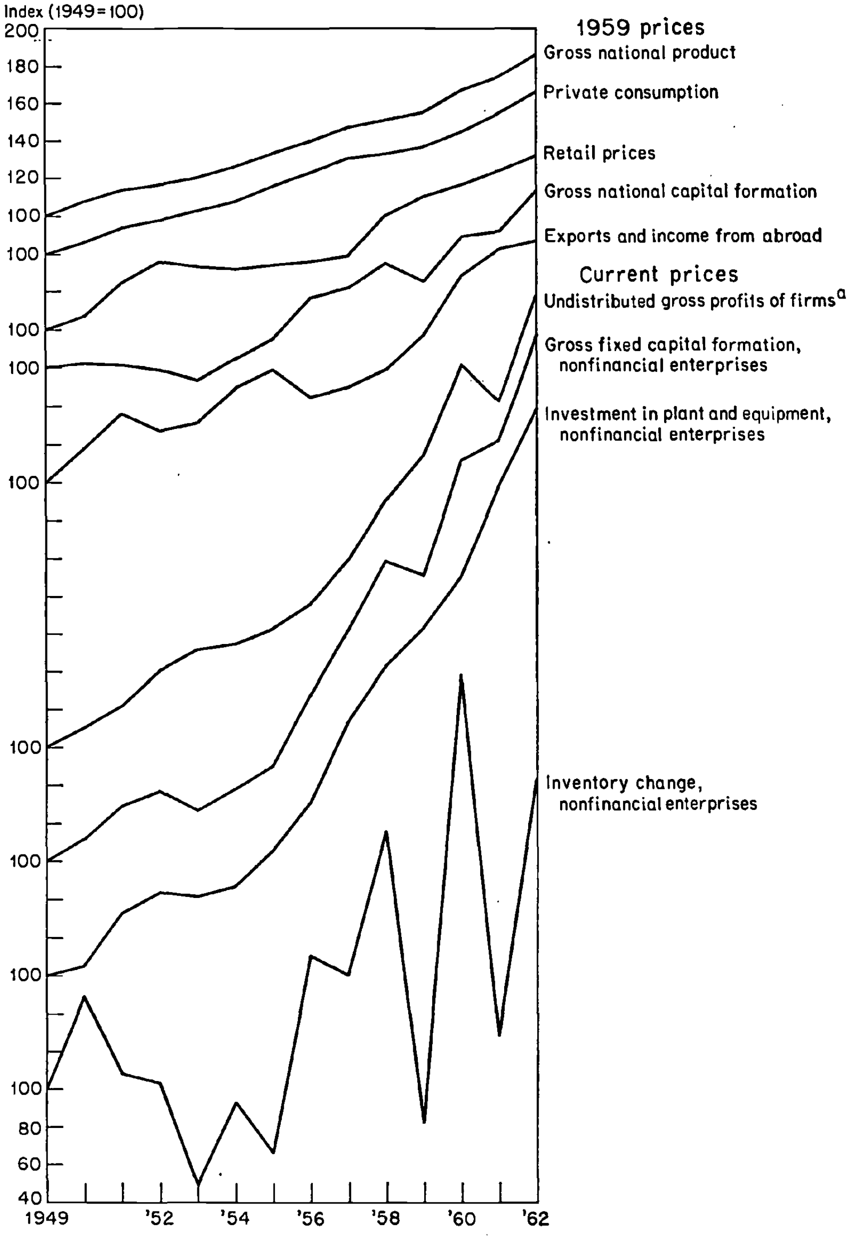
In 1962, private consumption again began to grow rapidly and appears to be the chief factor in the present expansion.

Public consumption expenditures were secondary, but not insignificant, factors throughout this period. In 1950-52, for instance, growth in this sector helped to maintain the over-all expansion. These outlays again rose relatively sharply in 1956 as a result of the Suez crisis (see Table 4).

Investment demand was an important element in the strong expansionary phases of the post recovery period. In 1951 gross fixed capital formation rose sharply and, together with private consumption outlays, was the chief growth factor of this expansion. After a

CHART 1

Indexes of Components of GNP, 1949-62
(1949 = 100)



Source: *Rapport sur les Comptes de la Nation de l'année 1963,* Paris, 1964.
[a] Depreciation plus reserves.

sharp dip in 1953, investment rose steadily through 1957 and contributed to the strength and duration of the 1953-57 expansion.

Investment also increased rapidly in the 1962 recovery, and may therefore be considered as the chief growth factor, together with private consumption, in the current expansion.

Exports have been crucial in the periods of rapid growth since 1949. In 1954 exports increased substantially and were truly the motive power behind the economic expansion at that time. The growth of exports was resumed at a rapid pace in 1958, and the strength of exports was at the root of the 1959 expansion.

It should be noted that in 1954 the increase in exports coincided with a rapidly growing domestic demand; in 1958-59, on the other hand, export demand served as a partial substitute for domestic outlays.

A. Impact of Taxation on Private Consumption and Personal Savings

1. TAX BURDEN AND HOUSEHOLDS' REAL CONSUMPTION

To determine the extent to which the level of consumption was influenced by changes in the tax burden, after allowing for changes in the level of income, a simple linear correlation was assumed:

$$\frac{dC}{C} = a\,\frac{dR}{R} + b\,\frac{\dfrac{dI}{R}}{I/R} + K,$$

where C is consumption, R is income,[3] I is the tax burden of households, and K is some constant, all in constant prices. Consumption is defined here in the same way as in national income accounting. It includes expenditure on consumer durables, but not on real property. The tax burden was calculated according to two alternative methods, depending on what taxes are included. According to the first method, the tax burden (I_1) equals individual income taxes

[3] The income of households is derived from the "appropriation" tables of the National Accounts. It includes the revenue of the social security system. Social security contributions are, therefore, considered part of the taxes paid by households.

TABLE 4

Annual Percentage Change in Total Demand and Its Components, 1950–60

Year	Private Consumption	Public Consumption	Gross Fixed Capital Formation	Change in Inventories	Total Domestic Demand	Foreign Trade Balance	Total Demand	GNP (in constant prices)	Price Effect
1950	9.8	2.9	1.1	1.2	15.0	0.6	15.6	6.1	9.5
1951	16.4	3.7	4.8	−0.8	24.1	−1.5	22.6	7.7	14.9
1952	10.6	4.4	2.7	−0.0	17.7	−0.6	17.1	3.1	14.0
1953	3.2	1.0	−0.0	−0.8	3.4	1.0	4.4	3.4	1.0
1954	3.4	−1.0	1.3	−0.6	4.3	1.5	5.8	4.9	0.9
1955	4.6	−0.0	2.3	−0.3	6.0	0.3	6.9	5.8	1.1
1956	7.2	3.0	2.3	1.4	13.9	−3.5	10.4	5.0	5.4
1957	7.3	1.9	3.2	−0.1	12.3	−0.6	11.7	5.8	5.9
1958	8.5	1.4	2.0	0.8	12.7	1.0	13.7	1.3	12.4
1959	4.8	1.9	0.8	−1.2	6.3	2.1	8.4	2.1	6.3
1960	5.9	1.0	1.4	1.2	9.5	0.0	9.5	6.1	3.4

plus social security contributions plus indirect taxes in the broad sense. According to the second method, the tax burden (I_2) equals I_1 plus corporate income taxes.[4] The figures indicate that 69 and 87 per cent, respectively, of the change in the level of real consumption is explained by changes in income and the tax burden. The fact that the coefficient of the term I/R is positive, i.e., that the level of consumption increases with the tax burden, appears to be paradoxical, but it may be that the income-redistribution effect of taxation, which is reflected in the term R in the equation, increases the average propensity to consume. Or it may be that an increase in the tax burden leads to a decrease in the propensity to save or even a negative rate of savings. No conclusion appears besides the expected relation between income and consumption with some tax adjustment.

[4] The data for the 1949-62 period yield the following results:

First method: $$\frac{dC}{C} = 1.013\frac{dR}{R} + 0.746\frac{dI_1/R}{I_1/R} - 1.940.$$

2. INDIRECT TAXATION AND CONSUMPTION

The turnover tax rates are not uniform, but are differentiated markedly among products. In the case of the tax on value added (T.V.A.), for instance, there are reduced rates, ranging between 6 and 10 per cent, for a number of fuels and essentials. The tax on these products accounted for about one-seventeenth of the total T.V.A. receipts in 1962.

On the other hand, there are surtax rates of 23 and 25 per cent on a number of luxury and semiluxury products, such as jewelry, toys, novelties, cosmetics, radios, televisions, etc. The tax on these products accounted for 16 per cent of the total T.V.A. receipts.

Receipts from taxes on expenditures were broken down as follows in 1962, excluding overseas territories (in billion francs):

Excise taxes	3.90
Transportation taxes	0.26
Value-added tax	20.00
Local taxes	4.18
Taxes on wine, cider, and meat	2.20
State monopoly on tobacco and matches	2.72
Miscellaneous	0.90

A study made by the Ministry of Finance[5] came to the conclusion that indirect taxes, excluding the payroll tax, had a slightly progressive effect on income. Their average burden rises from 15 per cent in the farm sector to 18 per cent among higher income groups. The author of the study observed that indirect taxation would have been more progressive if tobacco and alcohol taxes had been abolished, since consumption of these items is substantial in the lower income brackets. According to the author, receipts from indirect taxes on tobacco, alcohol, and luxuries or semiluxuries were 12.7

The square of the correlation coefficient (r^2) is 0.69.

Second Method: $\frac{dC}{C} = 0.858 \frac{dR}{R} + 0.350 \frac{dI_2/R}{I_2/R} - 0.203$ and $r^2 = 0.87$.

[5] Quoted by D. de la Martinière in his 1962-63 course at the Institute d'Etudes Politiques.

per cent of total tax receipts for 1961. It may be added that since the prices of services and luxuries tend to increase relatively faster than other prices, the progressive character of indirect taxation, though still very mild, should intensify with the growth of the economy.

3. IMPACT OF TAXATION ON PERSONAL SAVINGS

Table 5 shows the relative shares of personal savings, business savings, and savings of government agencies and financial institutions in total gross savings. The investments of unincorporated businesses have been included in savings of nonfinancial enterprises. These figures can easily be compared with those for gross investment (right-hand side of the table).

Although both direct and indirect taxation must have influenced personal savings, it has not been possible to measure this impact precisely and the calculation in Section 1 above is not of much help here. A number of observations may be made about the effect of direct taxation.

The effective tax burden is obviously smaller than the theoretical burden—even without considering tax evasion. The average effective rate of individual income tax paid in 1956 is shown in the last line of Table 6: it is approximately doubled from each income bracket shown to the next, except for the next to last bracket.

The effective marginal tax rates (in per cent) corresponding to these effective rates are shown below for each income bracket:

Second bracket	0.7	Sixth bracket	4.9
Third bracket	0.7	Seventh bracket	8.5
Fourth bracket	1.1	Eighth bracket	−1.1
Fifth bracket	2.4	Ninth bracket	18.6

The distribution of income (as reported on income tax returns) by source of income at the upper end of the income scale shows that the taxpayers with the highest incomes (beginning with the sixth bracket, or 30,000 francs) constitute 1.5 per cent of the population. However, the group with the highest propensity to save (see Table 6, lines 3 and 4) is taxed at a higher rate than the average of all taxpayers. The maximum average effective rate of individual income tax is 43 per cent.

TABLE 5

Breakdown of Domestic Saving and Investment, 1956–62

(per cent)

	Gross Savings							Gross Fixed Capital Formation and Change in Inventories						
	1956	1957	1958	1959	1960	1961	1962	1956	1957	1958	1959	1960	1961	1962
Nonfinancial enterprises	44	45	52	50	49	45	47	69	69	70	69	71	70	71
Households	40	39	31	30	32	36	36	19	19	18	18	16	16	15
Government	11	11	11	14	12	13	11	10	10	9	10	10	11	11
Financial institutions	5	5	6	6	7	6	6	2	2	3	3	3	3	3

SOURCE: Derived from *Les Comptes de la Nation* for 1958 and 1962 (from the capital account of each sector).

NOTE: Investments of unincorporated enterprises have been subtracted from the gross savings of households, as they appear in the capital account of the household sector, and included in savings of nonfinancial enterprises.

TABLE 6

Direct Tax Burdens of Households, 1956

(per cent of total income declared)

Occupational Group	Income Bracket (francs)									Total
	10 to 2,200	2,210 to 3,500	3,510 to 6,000	6,010 to 9,000	9,010 to 15,000	15,010 to 30,000	30,010 to 60,000	60,010 to 100,000	100,010 and Over	
1. Farmers	—	1.5	2.0	5.2	7.9	9.4	6.4	—	—	3.4
2. Agricultural wage-earners	—	—	0.1	0.7	1.1	—	—	—	—	0.2
3. Employers in industry and trade	—	3.1	6.2	10.1	13.7	20.8	27.5	28.4	38.2	15.4
4. Professional people and upper echelon executives	—	3.2	5.1	4.4	4.9	8.4	16.9	16.6	43.0	12.4
5. Middle echelon employees	—	0.4	1.4	1.8	3.2	5.6	8.8	8.0	8.6	4.3
6. Other employees	—	0.3	0.7	1.2	2.9	6.4	—	—	—	2.2
7. Wage-earners	—	0.1	0.2	0.7	2.4	4.3	8.1	—	—	1.2
8. Service personnel	—	0.4	0.8	1.2	2.7	4.3	—	—	—	1.4
9. Other	—	0.5	0.4	0.5	2.9	9.4	11.1	—	—	1.6
10. Unemployed	—	0.4	1.0	2.3	3.8	8.3	11.7	(1.1)	(21.6)	3.6
11. Total	—	0.7	1.4	2.5	4.9	9.8	18.3	17.2	35.8	6.1

SOURCE: *Etudes de Comptabilité Nationale*, July 1963, p. 454. Declared income is gross income.

The actual tax burden is certainly even lower than the apparent burden, in view of tax evasion and tax exemptions. There is a tradition of tax evasion in France. Jean Dubergé interviewed people in different social classes on their attitudes toward tax evasion. He reports in his book[6] that 47 per cent of the farmers interviewed approved of tax evasion, 59 per cent of the businessmen, and 61 per cent of the professional people.

Professional people, small businessmen, and shopkeepers can evade taxes, and any taxpayer who can claim some business activity enjoys some tax benefits. The owners of incorporated businesses can always accumulate their savings by keeping them as reserves in the firm. In this manner, they will only pay the corporate income tax on these earnings, which will not be taxed later when the reserves are distributed in the form of a stock split. As D. de la Martinière points out, any taxpayer whose income bracket is taxed at an individual income rate exceeding the corporate income tax rate would find it advantageous to save in this manner.

Capital gains have always been a way of accumulating wealth taxfree. Stock prices increased sevenfold between 1949 and 1962. Since 1955, receipts from land transactions have also become an important source of savings, especially after stock purchases became a less sure investment than in the past, and the growth of urban construction stimulated land speculation. Yet, until 1962, such land income was tax free.

There are numerous exemptions from the individual income tax, including interest on Treasury bills and other government securities, interest on deposits in the national savings bank system (*Caisse d'Epargne*), interest on bonds issued by the national agricultural bank (*Crédit Agricole*), family allowances, and various welfare payments, etc. The amounts involved here are relatively small. Exemption from the inheritance tax, on the other hand, is much more important: estates can avoid death duties thanks to the tax-exempt privileges of the well-known "Pinay bond issues" at 3.5 per cent of 1952 and 1958 and to the exemption of shares in real estate investment trusts.

The principle that personal saving should not be taxed was es-

[6] *The Social Psychology of Taxation in France Today,* Paris, 1961, p. 96.

tablished as far back as 1950, but its incorporation into actual legislation has been rather slow. Life insurance as a form of saving was undoubtedly launched by a regulation in effect between 1950 and 1958 which permitted the deduction of life insurance premiums from gross income subject to the progressive surtax. There was a ceiling of 10 per cent of taxable income on this deduction, which also varied with the number of dependents. In 1953 and 1959, additional legislation granted tax exemptions to interest earned on deposits in certain types of savings institutions and building associations. The purpose of this legislation was to channel larger amounts of individual savings into housing construction, where, between 1952 and 1958, they had amounted to less than one-fifth of financing from all sources.

B. Impact of Taxation on Investment Demand

A large number of special provisions, both general and selective, has been made in an effort to increase total investment and to direct capital formation into specific areas. The general provisions included: (1) the use of initial allowances and the declining-balance method in the depreciation of fixed assets introduced in 1959; (2) the tax exemption of capital gains on fixed assets, when reinvested (Article 40 of the General Taxation Code), which amounts to accelerated depreciation; (3) the tax treatment of revaluation reserves and the rules on inventory valuation which, up until 1959, exempted revaluation profits from taxation in order to allow for inflation (measures adopted merely to permit the replacement of capital equipment and inventories in inflationary periods); (4) the treatment of investment expenditures in the value-added tax system; (5) the treatment of losses, which may be carried forward and set off against the profits of the five succeeding years. Deferred depreciation can also be carried forward without any time limit.

In general, tax policy has favored accelerated depreciation as a means of inducing businessmen to maintain or even step up their rate of investment. The relatively small use made by business of these provisions will be examined in Section II below. It may be noted, however, that business investment has risen at a very striking rate, in spite of occasional slowdowns. The maintenance of consumption demand also undoubtedly stimulated investment.

Moreover, public funds financed investments amounting to between 30 and 40 per cent of total investments in 1950-55. The proportion was subsequently maintained between 23 and 25 per cent until 1962. These figures do not take into account the financing of housing construction and part of industrial investment through the banking system—through medium-term credits monetized by the Bank of France.

The adoption of the value-added taxation system in 1954 undoubtedly played an important part in promoting investment. Under the previous system of production taxes, only the goods physically embodied in final products were exempt from the tax. Depreciation on capital equipment used in the manufacture of the product, on the other hand, was regarded as a financial input, and therefore subject to the tax, which was paid at the time of purchase of the equipment. Investment goods were thus taxed twice.

Since 1954, producers have been allowed to deduct from their monthly value-added tax payments the value-added tax already paid on all inputs. This, in effect, represented a 20 per cent tax cut on investment. This extremely important reform abolished the discrimination against investment and reduced the cost of production of French products, which unquestionably acted as a stimulus in the equipment industries and for the use of capital in production.[7]

Investment in constant prices varied as follows (in billion francs):

1949	18.8	1954	17.2
1950	18.7	1955	19.4
1951	18.9	1956	21.6
1952	16.8	1957	24.0
1953	16.7	1958	24.7

The data suggest a strong upsurge beginning in 1954. Although the upsurge coincides with the recovery of economic activity after the 1952-53 recession, the favorable effect of the adoption of the T.V.A.

[7] In 1956, when the government proposed a return to the previous system, machinery and equipment orders were made under the proviso that they could be canceled if such a law were passed. M. Laure, *Au secours de la T.V.A.*, Paris, 1957, p. 13.

has been confirmed by all our empirical investigations. The replacement of equipment was accelerated, promoting productivity gains, while the steady rise in orders for machinery and equipment contributed to expansion in this sector of the economy.

The exemption of investments from the value-added tax, however, is not complete. In the first place, not all building purchases are tax exempt. While factory buildings are eligible for tax deduction, buildings used in wholesale or retail trade or for administrative offices are not. Furthermore, there are two regulations which restrict the scope of the exemption:

1. The proration rule. In some cases, only part of the sales of a firm is subject to the value-added tax and then the firm can deduct only the proportion of the tax on its investment purchases that its taxable sales bear to total sales. Yet, the ratio of taxable to total sales is not in any way related to the investment policy of the firm. The firm may thus be induced, purely for tax reasons, to increase output in the product lines subject to the value-added tax more than would normally be desirable, either in the interest of the firm or of the economy as a whole.

2. The deduction ceiling. The deductible amount of tax paid on inputs of a given product may not exceed the amount of tax due on the final product. As a result, a new firm cannot benefit fully from the tax deduction on its machinery and equipment purchases until the level of its sales has risen sufficiently. If production requires large investments, this will constitute a heavy financial burden, especially when there is an initial adjustment period before the venture can yield a normal return. And a venture which is exempted from the payment of the value-added tax will not be able to recover the tax paid on its capital investment purchases.[8]

C. Impact of Taxation on External Demand

The obvious advantage of the value-added tax and the service tax for French foreign trade is that firms engaged in the export busi-

[8] This rule led Maurice Laure to comment that "there is, therefore, a hidden percentage of T.V.A. on the products that are exempted from the tax, owing to the taxes that have been levied on the inputs of these products" (*ibid.*).

ness do not pay the value-added tax. The exemption applies to sales, brokerage and commission operations, and manufacturing. In fact, exporters are allowed to make all their purchases, up to the value of their exports of the previous year, free of tax in order not to increase the burden on their working capital even temporarily. When an exporter has had to pay some tax on his purchases, he can claim a refund within three years if the volume of his domestic sales is not high enough to permit deduction of the tax paid from the resulting liability.

French products benefit from a tax advantage amounting to about 25 per cent of total cost. In contrast, products exported from countries where indirect taxes are cumulative cannot in general receive a rebate on these taxes and must pay the usual turnover tax when entering the French market.

On the other hand, the French products that are exempt from the value-added tax and subject instead to special excise taxes cannot benefit from the above advantages. This is one of the arguments invoked in favor of the abolition of all exceptions to the T.V.A. The export of a number of agricultural raw materials, processed products, fertilizers, and services (including the hotel industry) is hampered.

The contribution made by the adoption of the T.V.A. in 1954 to the upsurge of exports in 1954 is undeniable. The new tax system was responsible for an estimated reduction of 2 per cent in the sales price of exports. The system was considerably simplified and contained fewer elements of uncertainty.

Two additional tax regulations subsequently completed the overall picture: special accelerated depreciation provisions were introduced in 1957 to remain applicable under certain conditions until 1965 (see Section II); and exporters were also allowed to accumulate special tax-free reserves out of profits against the risks incurred in extending medium-term export credits.

At various times, special taxes on foreign trade were used as substitutes for devaluation of the currency or multiple exchange rate systems. In view of the difficulties attendant on trade liberalization, it was sometimes necessary to take measures to offset the elimination of quantitative restrictions: taxes ranging between 10 and 15 per cent were added to import duties in April 1954; they were all raised to 15 per cent in 1957, and then replaced by a 20 percent surcharge on exchange purchases.

The export curve in Chart 1 reflects the impact of all these measures, together with that of the substantial facilities that were made available in export credits and insurance.

D. Influence of the Tax System on Financing Investment

Throughout the period under consideration, public expenditure played an important part in financing investment. About one-fourth of total investment was financed in this manner each year. However, public investment is largely concentrated in certain sectors of the economy. In 1960 and 1961, for instance, the share of public investment in total investment by sector was as follows (in per cent):[9]

	1960	*1961*
Agriculture	26	25.1
Power	48	45.4
Transportation and telecommunications	31.6	30.4
Construction and urbanization	25.5	24.6
Cultural and social services	59	67.5
Manufacturing, trade, and tourism	4.6	4.2

Analysis of the loans granted by the Fund for Economic and Social Development, from 1948 through 1962, shows that this source of funds did not exceed 11.8 per cent of the total for private manufacturing, trade, and tourism. In these three sectors, therefore, the effects of taxation on private financing of investment is likely to be significant.

Delineation of these effects cannot, however, be precise. In the first place, tax fraud is prevalent in small and medium-sized businesses and can hardly be avoided, in view of the inadequate inspection facilities available to the tax authorities.

Secondly, we know very little about the shifting and incidence of business taxation, particularly the taxation of business profits. Advances in knowledge in this area are required if we are to understand the effects of tax policy on both investment demand and the

[9] Eighth Report of the Fund for Economic and Social Development in *Statistiques et Etudes Financières,* No. 174, Supplement, June 1963, pp. 810-811.

ability of private enterprises to finance investment expenditures. Moreover, these effects have to be examined in the context of the monetary policies and conditions prevailing at the time. Some firms are significantly influenced in their investment programs by the effects of monetary policy while other firms, relying more heavily on internal funds, are influenced less and more slowly by such changes. Business firms, therefore, have to be classified according to criteria derived from the combined impact of both monetary and tax policies.

A yearly comparison of the internal financial resources of all French businesses, in the national accounts, with their gross private capital formation yields the following results (in per cent):[10]

1959	72
1960	69
1961	63.5
1962	64
1963	60

The importance of internal financing varies with the firm's size and rate of growth. Our study, based on data for 6,000 firms in mechanical engineering and electrical industries from 1957 to 1960, shows that the share of internal financing in total investment is substantially lower for the bigger firms. The rate is higher for the biggest of the medium-sized firms than for small businesses. The rate of internal financing varies also from one year to the next, according to the level of business activity and the availability of market financing.

The use of outside capital is limited. At present, the capital market is so narrow that only the most powerful industrial and financial interests have access to it. Very few new and innovating firms issue stocks and bonds in the market. As a result, most new businesses are very likely to find themselves, sooner or later, under pressure to merge into one of the established interest groups. This consolidates oligopolistic concentration and financing from within.

There are many reasons for the narrowness of the capital market, and the tax system is certainly one of them. Internal financing results in a lower tax burden than that attendant upon the use of the

[10] Calculated from *Rapport sur les Comptes de la Nation de l'année 1962,* Paris, 1964, Table 118, p. 161.

TABLE 7

Annual Distribution of Personal Financial Investments, 1951–62

(per cent of total)

Year	Cash and Demand Deposits	Other Deposits	Stocks, Bonds, and Other Securities	Short-Term Loans	Gold and Foreign Exchange Holdings
1951	52.6	26.5	11.5	—	9.4
1953	28.3	42.6	23.7	—	5.4
1956	28.8	32.7	36.0	2.5	—
1957	25.0	32.0	37.0	6.0	—
1959	40.3	38.4	28.0	4.5	2.4
1960	49.1	24.1	23.5	0.6	2.7
1961	51.6	22.1	24.8	1.8	2.7
1962	50.7	22.5	24.8	2.0	—

SOURCE: *Les Comptes de la Nation.*

capital market (see Section II). The activity of the market is also limited by a variety of tax regulations which have had the effect of freezing the ownership of large blocks of securities held by holding companies.

The pattern of personal savings is also influenced by the tax system. The latter reinforces the public's inclination, which is already strong, to keep its savings in liquid and semiliquid forms (see Table 7). This phenomenon was clearly analyzed in the Lorrain Report,[11] which showed how certain tax privileges led people in the upper income brackets to concentrate on liquid investments and thereby discourage risk investment. It must be remembered, however, that many other factors besides taxes have turned savers away from corporate bonds, which since 1959 no longer carry index clauses. Finally, the government itself plays an active part in the capital market.

The French flow-of-funds picture may be described in the following way. The distribution of net financial saving by sector of origin

[11] Report presented to the Ministry of Finance and Economic Affairs in June 1963 by the committee created to study investment financing (*Statistiques et Etudes Financières*, Sepember 1963, p. 1033).

TABLE 8

Net Financial Saving: Distribution by Sector of Origin, 1959–62

	Million Francs				Per Cent of Total			
Sector of Origin	1959	1960	1961	1962	1959	1960	1961	1962
Business firms	8,980	8,520	9,280	8,950	36.7	31.4	28.9	23.6
Households	9,770	12,800	14,720	18,170	39.9	47.2	45.9	47.9
Local governments and other organizations	1,020	2,160	2,440	3,040	4.2	8.0	7.6	8.0
Foreign countries	660	630	880	880	2.7	2.3	2.7	2.3
Overseas associated states and territories	4,050	3,020	4,800	6,880	16.5	11.1	14.9	18.2
Official	840	−150	−1,810	−3,440	3.4	−0.5	−5.6	−9.1
Private	3,210	3,170	6,610	10,320	13.1	11.6	20.5	27.3
Total	24,480	27,130	32,120	37,920	100.0	100.0	100.0	100.0

SOURCE: *Statistiques et Etudes Financières*, September 1963, p. 1028. The savings were held in the form of cash, sight and term deposits, stocks and bonds.

TABLE 9

Net Financial Saving: Distribution by Issuing Institution, 1959–63

(per cent)

Year	Stock and Bond Issues of Nonfinancial Institution	Monetary System			Other Financial Institutions			Treasury			Less Acquisition of Liquid Assets by Financial Institutions	Net Financial Saving of Nonfinancial Sectors
		Bank of France	Banks	Total	Stocks and Bonds	Liquid Assets	Total	Bonds	Bills and Liquid Assets	Total		
1959	21.7	0.8	36.4	37.2	6.7	23.2	29.9	−3.4	28.9	25.5	−14.3	100.0
1960	18.7	16.5	26.9	43.4	4.8	20.7	25.5	−4.7	30.3	25.6	−13.2	100.0
1961	20.0	17.5	31.4	48.9	5.7	19.3	25.0	−2.0	20.8	18.8	−12.7	100.0
1962	20.5	16.5	33.8	50.3	5.7	25.0	30.7	−2.4	14.3	11.9	−13.4	100.0
1963	16.4	16.5	26.2	42.7	5.7	28.0	33.7	5.3	14.3	19.6	12.4	100.0

SOURCE: *Rapport sur les Comptes de la Nation*, Paris, 1964.

over the years 1959-62 is given in Table 8. Its distribution by issuing institution is shown in Table 9.

The Treasury, besides receiving funds directly from the public, also has access to part of the funds channeled through banks and other financial institutions. The following figures[12] give an indication of the magnitude of the flow of funds through the Treasury and of the extent to which these funds went into long-term loans or shares as distinguished from short-term credits and other assets:

	1959	*1960*	*1961*	*1962*	*1963*
			(million francs)		
Source of funds	+8,323	+5,267	+3,795	+3,938	+10,001
Short-term	+8,660	+7,689	+7,112	+8,394	+ 9,148
Long-term	− 337	−2,422	−3,317	−4,456	+ 853
Uses of funds	+8,323	+5,267	+3,795	+3,938	+10,001
Short-term	+ 933	+ 507	−1,185	−2,624	+ 3,574
Long-term	+7,294	+6,648	+5,828	+5,376	+ 6,198
Other[13]	+ 96	−1,888	− 848	+1,186	+ 229

To sum up, the characteristics of the tax system, the importance of internal sources of business finance, the degree of liquidity of personal savings, and the channeling of part of these savings through the Treasury into long-term loans are all interrelated. Treasury loan policies, however, are influenced by factors other than the tax system—factors related to the structure of modern industry or political traditions—and it is useless to seek the determining factor. It is reasonable to suppose that the part played by the government in investment financing will diminish in importance if personal savings grow as expected and if simultaneously the structure of the capital market and business policies are adequate to take care of the forthcoming volume of savings. But the actual trend of events in this area will depend on the philosophy that prevails about the role of the government in the growth of the economy.

E. Taxation and Economic Efficiency

Numerous factors have played a part in changing the structure of the economy, such as public expenditure policies, various incentive policies pursued by the government and professional associations,

[12] Taken from *Comptes de la Nation, 1963,* Table 120, p. 165.
[13] Including claims on international monetary organizations.

the liberalization of trade, and the future prospects and the problems of France's adherence to the Common Market. Exports have been an important factor in the country's economic growth and resulted in a greater awareness of comparative cost problems and balance-of-payments constraints. The over-all dynamic impact was thus far greater than the actual increase in exports. Similarly, although the burden of taxation rose throughout the period, the various tax reform measures had an important psychological effect. They showed the government was anxious to make use of its taxing powers so as to facilitate to the utmost the adjustment of business to foreign competition. The principle of tax neutrality also became the accepted doctrine and was embodied in the T.V.A., as well as in various other efforts to keep taxation from distorting economic relationships.

Efforts were also made to use tax policy to stimulate industrial decentralization and regional development. The aim was to correct regional discrepancies by creating new growth points and lessening the barriers to labor mobility. To date, taxation has contributed to the realization of these objectives primarily by not hampering private initiative. Tax policy, however, will become an important positive factor when the prospects for profits improve, markets are opened up, and an adequate supply of labor comes forth.

There are, of course, a number of other major structural adjustment problems in agriculture, distribution, land and real estate holding regulations, scientific research, overseas investment, investment in the "human capital" of the country, some of which will be examined in later sections.

Tax policy has also been concerned with the effects of the tax structure on production and distribution at the level of the firm. The aim is primarily to promote cooperation and specialization among business firms and at least to encourage the strong trend toward concentration. There was little industrial concentration in France before World War II, and the situation showed relatively little change in the immediate postwar period. After 1950, however, the trend toward concentration was stepped up sharply.

Concentration is taking place in every branch of industry through outright and complete merger, through partial transfers of assets and exchange of stock, and through intercompany agreements and cartels (for the specialization of production, sharing of the market, etc.) which seek not to abolish competition, but to organize it.

Table 10 shows that the number of mergers and assimilated operations subject to tax stayed approximately at the 1950 level until 1961 (the average number of mergers was 760 a year, of partial mergers 72). The average value of assets transferred increased, on the whole, although this increase reflects in part the rise in prices.

TABLE 10

Tax Statistics on Mergers and Assimilated Operations, 1950–61

	Mergers		Partial Transfer of Assets		Splits	
Year	Number	Value[a] (mill. francs)	Number	Value[a] (mill. francs)	Number	Value[a] (mill. francs)
1950	979	12.4	203	4.6		
1951	340	38.0	48	9.5		
1952	724	44.2	12	68.4	8	15.5
1953	1,212	62.5	35	1,697.1	106	32.6
1954	613	34.1	19	90.5	40	39.2
1955	991	60.1	72	316.1	226	31.6
1956	670	100.2	73	80.8	150	75.1
1957	677	105.9	50	180.6	180	38.9
1958	452	44.7	82	664.0	57	37.0
1959	734	113.6	60	558.3	137	17.1
1960	830	185.6	105	540.3	153	326.1
1961	872	140.4	156	440.7	171	44.0

[a] Average value of assets transferred.

NOTE: These figures give an approximate indication of the actual number of mergers. If a large corporation takes over ten small companies in the same year, the tax statistics will show only one merger during the year. Furthermore, only the partial mergers approved by the Plan are included in these figures.

A great deal remains to be done, however. Many businesses still remain outside the reach of competition in certain regions and certain sectors of economic activity. Structural adjustment is hampered by a variety of tax regulations. For instance, small businessmen, craftsmen, small shopkeepers, and farmers receive special favorable treatment. Although the efficient farmers are the ones who benefit most from this special tax treatment, the disappearance or rationalization of marginal farming is also slowed down.

In distribution, the present value-added and local taxes discriminate against direct sales by the producer to the consumer, as well as against sales to a subsidiary company. The distribution channel that receives the most favorable tax treatment is shipment to a department store, and the next is to retail establishments. In striving for a more rational and efficient distribution system, the government has proposed the elimination of the local tax and the extension of the T.V.A. to wholesalers and retailers with gross sales of at least 400,000 francs.

Tax policy has scarcely been applied to improving labor productivity and welfare. To be sure, certain taxes, such as the local business tax, may discriminate against businesses that do not economize their use of labor or against those that use highly trained labor. Tax measures should be devised to encourage business firms to develop personnel training programs and to participate in an overall program of vocational and social advancement. The individual income tax could also be modified to this end.

The classic question of the impact of progressive taxation on the efforts of individuals, and particularly of management, is yet to be resolved. But self-employed taxpayers (professional people, heads of family businesses, etc.) no doubt adjust their working efforts to the weight of taxation: the cost of leisure is reduced in a society which nowadays makes strong appeals to the taste for leisure; the cost of risk-taking can be simultaneously increased. The combined impact of progressive income taxation and capital gains taxation—which is still recent in France—can only reinforce this type of tax avoidance. The more active individuals will seek out those economic activities where tax evasion is easiest or those that are tax exempt.

In any case, only with a better knowledge of the actual mechanisms involved in the income distribution process will it be possible to say under what circumstances the taxpayers will shift the tax, intensify their efforts and risk-taking, or go into semiretirement.

In spite of all the efforts to simplify it, the complexity of the tax system is still a major reason for tax fraud.

Although greater tax neutrality was the objective of several partial tax reforms, the principle of tax neutrality has been applied sometimes quite selectively, particularly when the government has tried to induce businesses to implement its economic policies by granting special concessions for specific operations. The principles underlying the use of this device are undoubtedly open to criticism. The reasons for its use are well known: the tax concession device enables the government, by entering into special agreements with business firms, to grant well-defined, limited tax advantages in individual cases without modifying the general tax law and to reduce the risk of generalization of these advantages through pressure group actions. But, it is doubtful whether all business firms can benefit from this special tax concession device. Negotiating with the government is easier for the large corporations, whose top executives can make their voices heard and know how to use the appropriate economic language. For medium-sized firms, on the other hand, the very idea of negotiation is unacceptable and even dangerous. Finally, the procedure for tax concessions by special agreement involves a high degree of centralization. If the use of this device were to be extended and decentralized, it is not certain that the local authorities could remain independent of the interest groups involved. Neither would the interests of the public be so clearly apparent.

II. TAXATION AND INTERNAL SOURCES OF BUSINESS FINANCING

The ways in which taxation affects distributed and undistributed profits has a bearing on the extent to which firms rely on internal financing. Since the effective rate of tax depends in part on how the tax base is defined and since roughly half of the resources available for internal financing come from depreciation reserves, the tax treatment of depreciation is an important determinant of business financing.

The value of direct taxes paid by all French corporations together rose faster, on the average, than undistributed gross profits (corporate savings), at least until 1958. Corporate self-financing must, therefore, have borne part of the tax burden. But distributed profits (regular dividends and stock dividends) have increased considerably less than taxes. At first sight, it would seem therefore that distributed profits, too, bore an increasing share of the tax burden.

A. Impact of Taxation on the Financial Structure of Business Firms

Various features of the tax structure impose a bias in favor of internal financing, principally by imposing additional tax burdens on distributed profits. The corollary of this tax bias against distributing earnings is a greater reliance on retained earnings and a smaller impetus for developing capital markets.

Up until 1960, corporate profits had to bear the corporate income tax, the proportional tax of 24 and 12 per cent for dividends and interest, respectively, and the progressive individual income tax. In order to be able to distribute a 1-franc dividend, a company had to earn a taxable profit X such that

$$X - .5X - .24 = 1 \quad \text{or } X = 2.48.$$

In order to pay 1 franc of interest on its bonds, a company had to earn a taxable profit X such that:

$$X - .5X - .12 = 1 \quad \text{or } X = 1.24.$$

In the short run, therefore, the self-financing formula made the lowest demands on taxable profits, which were only required in a one-to-one ratio in this case.

The proportional tax on dividends and interest was eliminated in 1960 and replaced by withholding at the source of an amount of tax which is then credited to the account of the taxpayer receiving the dividend and interest income. As a result, in principle, only the corporate and individual income taxes are now levied on dividends and interest. In practice, however, corporations continue to be responsible for the 12 per cent withholding tax on bond interest. However that may be, the tax advantages of financing from internal resources persist.

Share financing is especially burdensome in France, in view of the prevailing custom of paying virtually constant dividends. For this reason, since 1954, with the recovery of the stock market, corporations have attempted to satisfy their shareholders at the lowest possible cost. They have incorporated reserves into their capital and distributed them to the shareholders in the form of stock dividends, which are not subject to the individual income tax. Thanks to this device, many corporations have been more successful in increasing their capital than they would have been had they had to distribute cash dividends.

In 1957, however, an important tax regulation was introduced in order to increase the supply of shares on the stock exchange. This law, treating dividends as interest payments, allows corporations to deduct part of the dividends distributed on newly issued stocks from their taxable income for seven years. This tax privilege can only be secured through special approval of the General Planning Commission and the Finance Ministry. From 1957 to the end of 1962, the privilege was granted for 575 stock issues amounting to 7.1 billion francs, or 25 per cent of total stocks issued against payment in cash or kind during the period. In a large number of cases, approval was granted only to the firms who made a commitment to increase their exports. The sectors that benefited from these measures in 1961 and 1962 included chemicals, metalworking, banks and holding companies, and electrical equipment.

B. Tax-Free Reserves

Many types of tax-free reserves are available which reduce the effective rate of tax on gross business. Data derived from *Statistiques et Etudes Financières,* a publication which analyzes the annual statistics of business earning, indicate that large corporations are better able to take advantage of tax-free reserves than medium-sized firms. From 1955 through 1959, corporations with gross sales of over 1 billion francs, accounting for 47 per cent of total gross sales of French business firms but representing only 0.3 per cent of the total number of firms, were able to accumulate between 60 and 70 per cent of the depreciation reserves set aside by all business firms assessed on the basis of actual income. They also accounted for an increasing percentage of the aggregate of other tax-free reserves—67 per cent in 1955 and 80 per cent in 1959. In 1959, corporations accounted for 92 per cent of total depreciation and other tax-free reserves, while unincorporated firms accounted only for the remaining 8 per cent. Depreciation and other reserves amounted to about 68 per cent of gross earnings in the case of corporations, and only about 27 per cent in the case of unincorporated businesses. Naturally, this reflects the fact that the large corporations undertake the bulk of the investment and assume the greatest risks.[14] But the fact remains that they seem to be better equipped to take advantage of the tax-free reserve allowances, and these reserves, being renewed and even increased each year, provide them with liquid funds at no cost.

In 1955-60 depreciation reserves accounted for the following percentages of the aggregate tax-free reserves of business firms assessed on the basis of actual income:

1955	71	1958	70
1956	72	1959	72
1957	73	1960	73

The ratio of depreciation and other tax-free reserves to net earnings varies with the type of business. The substantial range of this variation can be seen in Table 11.

C. Assets Revaluation During Inflation

Reference has been made earlier to the tax provisions on gains and losses from revaluation of balance-sheet items. Profits from assets revaluation are considered taxable income unless otherwise specified. As a result, business firms were tempted not to revalue their balance sheets, which therefore lost a good deal of their economic significance. From the financial point of view, this could have had serious consequences, for depreciation reserves, legally computed on the basis of historic cost, were inadequate to permit

[14] From 1955 to 1959, for instance, businesses with gross sales of over 1 billion francs accounted for more than 70 per cent of total investments of all businesses assessed on the basis of actual income, and for about 42 per cent of total investments.

the replacement of fixed assets. This led to price and internal financing policies that were likely to feed the inflationary process. Inventory profits reflecting only nominal gains were also taxable, which often gave an illusion of prosperity that led to wasteful practices and slowed down the implementation of the structural reforms needed after the war.

For this reason, beginning with the decree of August 15, 1945, business firms were allowed to revalue part or all of their balance sheets, and hence their investments and depreciation reserves, without having to pay income tax on the revaluation profits. The tax-free treatment of part or all of the nominal profits from inventory revaluation has existed in one form or another under a variety of tax laws, some of which go as far back as 1939. In 1952-59 it was possible to deduct from taxable income the revaluation profits corresponding to a minimum base stock computed from the average level of inventories held in preceding years. The law of December 28, 1959, introduced two major changes, on the assumption that the level of prices would henceforth remain stable. On the one hand, Article 39 of this law made a revaluation of balance sheets mandatory for all firms with gross sales of over 5 million francs. The revaluation, however, could only take into account the price rises of the period preceding June 30, 1959. On the other hand, the tax treatment of inventories was modified. It was no longer possible to set up tax-free reserves (called *dotations*) to offset revaluation profits accrued after June 30, 1959. However, firms were allowed to set up reserves against price rises of more than 10 per cent. As a rule, these reserves could remain free of tax for six years.

In each year from 1953 to 1960, about 10 to 12 per cent of all business firms assessed on the basis of actual income revalued balance sheets, and 31 to 36 per cent of corporations assessed on the basis of actual income, as can be seen below:

	1953	*1954*	*1955*	*1956*	*1957*	*1958*	*1959*	*1960*
Per cent of total number of firms	9.8	9.7	10.3	10.3	10.8	11.5	12	12
Per cent of number of corporations			36	32	35	32	31	32

The more detailed information available for business income

TABLE 11

Tax-Free Reserves as a Percentage of Net Income in Various Industries, 1961

	Depreciation Reserves	Other Tax-Free Reserves
Iron and steel	570	35
Mechanical engineering	68	20
Automobiles	130	20
Electrical engineering and electronics	63	24
Construction materials	110	7
Chemical industry (no. 35)	126	15
Textile industry	118	40
Shoes	80	27
Wood and furniture	67	13
Department and chain stores	57	8
Financial institutions	12	47
Entertainment	82	16

earned in 1960 and declared in 1961 (*Statistiques et Etudes Financières,* October 1963) shows that of the larger firms—those with gross sales exceeding 10 million francs—75 per cent revalued their balance sheets. This confirms that the frequency of revaluation increased as the size of the firm increased. As shown in Table 12, the number of firms to revalue increased sharply from 1958 to 1961. The percentage of total fixed assets revalued each year also rose sharply until 1960, but fell again in 1961. The annual additions to the revaluation reserves represented an increasing proportion of gross profits, rising from 6.1 to 13.6 per cent for all firms and from 5.9 to 14 per cent for corporations. Buildings and equipment accounted for most of the annual revaluation, between 68 and 80 per cent of the total revaluation reserves each year for all firms and between 63 and 82 per cent for corporations.

As for the reserves set up to offset inventory revaluation profits, an indication of their importance can be obtained by comparing the *dotations,* and subsequently the annual deduction from revaluation profits (for price rises exceeding 10 per cent), with the annual depreciation reserves. For all firms assessed on the basis of actual income, the ratio of annual inventory revaluation reserves to an-

TABLE 12

Selected Data on Revaluation of Balance Sheets, 1958–61

	Number of Firms That Revalued Their Balance Sheets		Cost (after revaluation) of Revalued Assets as Percentage of Total Fixed Assets		Additions to Revaluation Reserves as Percentage of Gross Profits		Percentage Share of Revaluation Reserves Arising from Revaluation of: Nondepreciable Assets (land)		Buildings		Equipment		Securities	
Year	All Firms (1)	Corporations (2)	All Firms (3)	Corporations (4)	All Firms (5)	Corporations (6)	All Firms (7)	Corporations (8)	All Firms (9)	Corporations (10)	All Firms (11)	Corporations (12)	All Firms (13)	Corporations (14)
1958	1,871	623	9.2	12	6.1	5.9	6	7.7	49	44	24	27	11	10
1959	1,754	584	19.3	27	9.4	11	4	4.2	39	39	41	43	9	10
1960	5,071	534	22.3	27.2	13.6	14	10	11.2	34	34	34	32	14	15
1961	3,890	1,446	10.3				10	10	40	41	28	21	18	20

NOTE: The figures on fixed assets include investments in securities in 1960 and 1961, but not in 1958 and 1959.

nual revaluation reserves on investments was as follows (in per cent):

1955	4.2
1956	5.0
1957	6.5
1958	3.8
1959	7.6

These figures indicate that a relatively small amount of resources was obtained in this manner.

It is often said that the legal revaluation coefficients do not generally keep pace with the rise in prices. A rough comparison with the coefficients used in the revaluation of investments is far from conclusive (see Table 13). At most, the revaluation coefficients lag slightly behind prices beginning in 1950. But the price index was based largely on the trend of wholesale prices. What is needed is a capital goods price index, which does not exist at the moment.

The tax-free treatment of revaluation profits is offset in part by the establishment of taxes on business reserves. Revaluation reserves on investments have been taxed since 1959 at the rate of 3 per cent. This frees them from all other taxes on business earnings, unless they are distributed, in which case they must pay a 12 per cent tax at least until 1964.

At the same time, to the extent that the assets revalued were acquired with funds borrowed since 1944, the revaluation reserves have also had to pay a 5 per cent tax since 1959. This is in order not to favor firms that financed their investments by borrowing.

In the case of inventories, the tax on valuation reserves is at the rate of 6 per cent. The firm is then freed from all other income taxes, as long as the funds are not distributed. If they are, they become liable to ordinary income taxation.

As already pointed out, the proportion of all firms that revalued their balance sheets from 1953 to 1960 barely exceeds 10 per cent on the average. The figure rises to about 30 per cent for corporations.

In the case of small firms that are assessed on the basis of actual income, the limitation on revaluation apparently is the complexity of the system and the expense it entails (accountants' fees, etc.).

Among larger firms, the fact that revaluation increases reserves

TABLE 13

Comparison of Price Index and Revaluation Coefficients, Selected Years, 1915–59

Year	Price Index[a]	Revaluation Coefficients[b]
1915	210	170
1938	33.5	38
1948	1.94	2.3
1950	1.52	1.6
1952	1.20	1.15
1954	1.28	1.25
1956	1.22	1.20
1958	1.04	1.05
1959	1	1

[a] Measured by change in wholesale prices between year shown and 1959.
[b] Used in revaluation of assets held since year shown.

makes the firm more vulnerable to the demands of shareholders, associates, and even employees. As a result, the firms which find it difficult to pay a return on their capital may be hesitant about accounting changes which would make their situation appear to be stronger than it actually is.

If the firm has a net operating loss, it can get no immediate benefit from a revaluation of its assets, since it cannot take advantage of the additional depreciation for which it becomes eligible for tax purposes. It postpones the use of depreciation allowances which it is entitled to apply against future earnings without any time limitation.

The 3 per cent tax on revaluation reserves may constitute a financial burden, especially for firms with only a small net loss against which to offset the tax. Yet, under certain circumstances, there is a definite advantage, in spite of the payment of the tax; the refusal to revalue can then be explained only as irrational behavior. The poorer the organization of the firm, the more complex the law, and the more dubious its interpretation, the more this irrational behavior is likely to prevail. It is also more likely if the rate of the tax on revaluation reserves is expected to increase. The 3 per cent tax appears particularly burdensome, however, for firms which have few depreciable assets and large security holdings since, under these circumstances, taxable income is affected very little by the revaluation.

In any case, business firms feel they can always revalue later, after they have had time to think it over. It seems, however, that the need for bank credit has induced some firms to put their balance sheets in a more favorable and realistic light, especially when they are seeking medium-term credits.

D. Tax Treatment of Depreciation

On the whole, the rates of depreciation in France compare favorably with those abroad. A distinction must be made between the standard treatment of depreciation and the special treatments. Up until 1959, the straight-line method was used. Numerous exceptions had been made, however, to promote business investment, so that when the declining-balance method was introduced in 1959, only a moderate amount of additional funds became available. The tax exemption provided for capital gains under certain circumstances also amounts to an accelerated depreciation.

1. METHOD OF COMPUTATION BEFORE 1960

Until 1960, the tax law provided for a standard straight-line method of computing the depreciation of all capital assets except land and good will. The method involved the application of a constant rate to the purchase price of the asset. The rates were subject to negotiation, but those customarily agreed on averaged 5 per cent on factory buildings, 10 per cent on furniture, 10 to 20 per cent on machinery and equipment, and 20 to 25 per cent on automobiles and other vehicles.

However, there were also a number of special provisions permitting accelerated depreciation. These were quite important in scope, so that the practical results were substantially different from those that would have prevailed under the general rule. For machinery and equipment acquired since January 1, 1951, which has a useful life of more than five years and is used in manufacturing, processing, handling, and transport, the depreciation allowance may be doubled in the first year. For certain types of equipment acquired since January 1, 1954 (mechanical handling devices for use inside the factory, power plants, safety devices, office machines, laboratory and research equipment), there is a special initial depreciation allowance of 10 per cent of cost at the time of purchase. Subsequent depreciation allowances, including the accelerated ones described above, are then based on 90 per cent of the purchase price. A 1959 law increases substantially the scope of this measure for machinery and equipment ordered in the second half of 1959.

Beginning in 1953, steelmaking and mining concerns have been allowed to add a supplementary depreciation allowance, based on their rate of turnover, to the regular rate of depreciation.

The decrees of October 26, 1957, and March 5, 1959, allowed recognized export firms to take additional depreciation allowances varying with the importance of their export business. In the case of a firm with a regular depreciation allowance of 10 million francs and an export business amounting to 50 per cent of its total turnover (net of taxes), the additional depreciation allowance was: $150\% \times 10 \times 50\% = 7.5$ million francs.

A large number of special measures, some of them permanent and others only temporary, allowed the use of accelerated depreciation in various branches of industry (mining, metallurgy, shipbuilding, the shoe industry, natural gas, synthetic textiles, printing, mechanical engineering, aeronautics, etc.).

Holdings of shares in special corporations set up under agreement with the government (*sociétés conventionnées*) to promote either construction or the adjustment of business firms to the Common Market can be depreciated, immediately upon purchase, up to 50 per cent of their value in the case of the former and up to 100 per cent of their value in the case of the latter.

Article 40 of the General Tax Code amounts to another accelerated depreciation device. Capital gains realized upon the sale of business assets are normally treated as taxable income. But such capital gains are exempt from income tax if the firm makes a commitment to reinvest the sales proceeds (i.e., the original cost of the asset plus the capital gain) within three years. The reinvestment may take the form of machinery and equipment, building, land, or even purchases of shares in another firm, provided that this gives the investing firm control over more than 20 per cent of the capital. This percentage can be reduced to 10 per cent by agreement with the General Planning Commission.[15] There is no mandatory minimum percentage for reinvestment in stocks and bonds of the *sociétés conventionnées* set up to promote the adjustment of business firms to the Common Market.

This exemption of capital gains from taxation amounts in fact to accelerated depreciation, since the gains must be earmarked for use as reserves against the depreciation of fixed investments. But, of course, when the reinvestment takes the form of assets that do not depreciate, such as land and good will, the tax exemption is genuine, and amounts to a subsidy.

Although it is quite advantageous, recourse to Article 40 raises some difficulties, for it is not always easy to find adequate reinvestment opportunities within the three-year period. This is especially true when the capital gain is derived from important land sales effected as part of a change in factory location. Yet reinvestment in the form of securities is often limited by the 20 per cent participation clause. As a result, the possibility of purchasing shares in the *sociétés conventionnées* without any mandatory minimum provides a temporary alternative. The reinvestment of proceeds from capital gains on real estate has been subject to government approval since December 1963.

2. THE DECLINING-BALANCE METHOD IN EFFECT SINCE 1960

The law of December 28, 1959 (Article 37) permits the use of the declining-balance method for assets acquired since January 1, 1960, except residential and office buildings. The normal useful life of the asset must exceed three years. Under this method, a constant rate of depreciation is applied to the book value of the asset, the difference between purchase price and depreciation taken in preceding years.

[15] Agreement was granted in seventeen cases, covering investments of 54 million francs in 1961 and 1962.

The rate of depreciation under the declining-balance method is obtained by multiplying the straight-line rate of depreciation by 1.5 for assets with a useful life of three or four years, by 2 for assets with a useful life of five or six years, and by 2.5 for assets with a useful life of six years. Table 14, which compares the results obtained by applying the old and the new method of depreciation, illustrates the advantages of the new system. The assets were assumed to benefit, before 1959, from the 10 per cent initial allowance. Assets with a useful life of ten years were also assumed to benefit from the doubling of the first-year allowance under the old system. It was assumed that the assets were acquired in the middle of the fiscal year.

Table 14 indicates, for instance, that for an asset with a useful life of ten years, the new method of computing depreciation would permit the accumulation of depreciation reserves exceeding those accumulated under the old system by 1.5 per cent of the cost of the asset at the end of the first year, 11.25 per cent of this cost at the end of the second year, 16.31 per cent at the end of the third year, etc.

It is readily apparent from the figures that, on the one hand, the formula of straight-line depreciation plus a liberal use of additional allowances already amounted to accelerated depreciation before 1960. On the other hand, the declining-balance method is unquestionably more advantageous over most of the period.

Although it was not possible to estimate the share of accelerated depreciation in the aggregate depreciation of business assets, a field survey showed that business did not always take immediate advantage of the new opportunities. Since 1960, for instance, a number of firms have elected to continue using the old depreciation method until 1965, so as to continue to benefit from the additional depreciation allowances for exporters. Most of the company treasurers interviewed were aware of the advantages to be derived from accelerated depreciation, namely, that it makes financial resources available now at the expense of subsequent periods. Going back to Table 14, it can easily be calculated that the annual depreciation allowance under the declining-balance method is larger than that

TABLE 14

Depreciation Allowances Before and After 1960: Cumulative Differential Between Allowances Computed Under New and Old System

(per cent of cost of asset)

At the End of	Assets with a Useful Life of Three Years	Assets with a Useful Life of Five Years	Assets with a Useful Life of Ten Years[a]
1 year	25	21	1.5
2 years	20	27	11.25
3 years	15	23.4	16.31
4 years		16.2	17.86
5 years		9	17.77
6 years			13.70
7 years			9.15
8 years			4.60
9 years			0.05
10 years			0

SOURCE: Derived from a study by the Credit Lyonnais in "Etudes et Commentaires," 1960.

[a] These assets are assumed to benefit from the doubling of the first-year allowance.

under the previous method only for the first four of the ten years. As a result, the accelerated depreciation technique becomes less advantageous to the firm fearing tax increases during the deceleration phase, or a drop in bank credit, or any other factor likely to create financial difficulties in the future.

Many firms, in fact, try to lessen such risks by not using up all of their depreciation potential at any given time. In this manner, they keep a certain amount of leeway which enables them to resort to additional tax write-offs when needed.

Moreover, as a rule, the amount of depreciation a firm writes off depends on its gross earnings, its desired net income, and the size of the dividend it has to distribute. If gross income is inadequate, depreciation will be postponed and offset against future earnings. When its stock is traded on the Stock Exchange, the firm may have to show a sizable net income, which would induce it not to claim all of its depreciation allowances. On the other hand, in advance of a large borrowing, substantial depreciation reserves will be shown on the balance sheet.

In any case, the benefits to be derived from the use of the various accelerated depreciation formulas are partially offset by the increase in the value of inventories which automatically follows and raises taxable income. For, under French tax law, as a rule, it is mandatory to take all depreciation write-offs into account in the valuation of inventories. This stringent requirement apparently seeks to discourage thoughtless businessmen from writing off too much depreciation in good times and thereby jeopardizing their financial position in bad times.

III. IMPACT OF THE TAX SYSTEM ON THE ORGANIZATION OF PRODUCTION

Many steps have been taken, as part of the policy of raising productivity, to encourage investment, business concentration and specialization, the coordination of efforts in distribution and research, and the adoption of better management techniques. The following discussion is focused on taxation and research and on taxation and business concentration.

A. Taxation and Research

One of the sources of increasing productivity is research and development. This is an area that has only recently begun to attract interest as a target for tax-incentives policies and hence, it is still too early to judge the effectiveness of such policies. However, in view of the way in which industrial and scientific research is carried out nowadays, the best possibilities rest with increases in the size of firms, their cooperation in research, the support of newly established firms and innovating firms, and legislation on patents and licenses.

Specific tax measures have been adopted aimed at increasing research and development. Contributions (gifts and subsidies) to scientific organizations in general can be deducted from gross income, up to 0.1 per cent of gross sales. In addition, contributions to public and private research organizations approved by the government can be deducted up to 0.2 per cent of gross sales. In 1959-61 such government approval was granted to fifty industrial associations or research centers, not including all the University research centers. This is not very much, but it must not be forgotten that business firms can always charge to overhead their expenditures on research contracts, so that the provisions of this article and those of the general tax law overlap somewhat.

There is an accelerated depreciation allowance, in the first year, on 50 per cent of the purchase price of buildings, materials, and equipment devoted to research. This seemed to be a useful device for certain companies setting up research facilities whose equipment has a high rate of obsolescence. In any case, this was eliminated, except as a transitional device, with the introduction of the declining-balance method of computing depreciation. On the other hand, when a business firm has research undertaken by a specialized company, it can also make use of a special depreciation allowance of 50 per cent in the first year for the purchase of shares in an approved research concern. This remains valid for shares purchased since 1960.

In spite of these advantages, the government received only sixteen requests for approval, representing amounts exceeding 15 million francs. This relative lack of success is largely attributable to the difficulties involved in securing the cooperation in research of competing firms which are jealous of the autonomy.

Various suggestions have come from professional circles to increase these tax benefits in a way which would amount to real subsidization, whereas accelerated depreciation only supplies assistance in the form of greater liquidity. The danger would be, in our view, that firms that have neither the size nor the adequate organization might be induced to incur unjustified research expenditures for prestige or other reasons.

The laws on patents also continue to be favorable. The capital gains realized from the sale of a patent or the granting of exclusive rights to foreign licensing under a patent are not subject to the business income tax. But, according to the above-mentioned principles of Article 40, the proceeds of the sale must be reinvested in fixed assets within three years, which constitutes a mechanism for accelerated depreciation of the new investment. The gain derived from turning a patent or exclusive rights over to another company is also exempt from income tax by Article 40. Since 1962, with government approval, the firm contributing the patent has not been required to secure control of over 20 per cent of the capital of the receiving firm to be entitled to the tax exemption.

Certain tax measures, for instance, the local business tax which is partly based on the number of persons employed, can, on the other hand, hamper the development of research. Furthermore, businesses that are exempt from the value-added tax and subject instead to special taxes cannot deduct taxes paid at the time of purchase on the capital goods and other products incorporated into their own output.

In conclusion, although certain general tax measures may have constituted an obstacle to the development of research, the regulations specifically concerned with research appear favorable. To go further with the accelerated depreciation device—or even to make this device still more advantageous—would alter the nature of government participation in private risk-taking. Besides, on a national scale, the factors relating to business organization and to the organization of the research effort play a much more important part than taxation.

B. Taxation and Business Concentration

In spite of all efforts, a large number of small, isolated firms with low productivity still existed in the French economy in 1963, side by side with large concerns operating on the worldwide or European scale. The strengthening of the French economy requires increased specialization and the creation of common facilities for research, administration, distribution, and financing at least as much as it requires increases in the size of existing firms. The increase in size of any given firm has its limitations. This explains the growing importance of other, more flexible formulas for industrial groupings which increase cooperation, spread the risks, promote the exchange of information, and facilitate forecasting and financing.

The use of taxation to promote mergers and other forms of business concentration started right after the end of the war. It was intensified with the decontrol of the economy beginning in 1952, accession to the European Economic Community, and the general acceptance of certain planning techniques. The use of special measures to promote business concentration led to the introduction of a new type of corporation (*société conventionnée*) to operate in construction and research and to promote the adjustment of industry, trade, and agriculture to the Common Market through intercompany cooperation in distribution and administration. The tax treatment of investment trusts has facilitated financial cooperation, promoted the growth of oil exploration, and contributed to regional and overseas development. Finally, a systematic effort was made to achieve the highest possible degree of neutrality and noninterference of the tax system in the legal forms of business organization.

1. SPECIAL TAX REGULATIONS

The device of the *sociétés conventionnées,* introduced in February 1959, is open only to small and medium-sized businesses with a maximum of 500 employees and 5 million francs of capital. It is intended to enable the participating firms to set up common facilities for distribution, market research, accounting, etc.—in a word, to cooperate in the implementation of a specific program without losing their independence. It is hoped that in this manner intercompany cooperation will not be hampered by personal rivalries. The program is spelled out in a special agreement with the government so that the participating firms can enjoy the following privileges: First, they receive a special depreciation allowance equal to the value of their financial contribution to the common program. Second, capital gains accruing from the sale of their share in the common venture are tax free, provided the funds are reinvested within a year in the same type of venture. Finally, the dividends paid by a *société conventionée* do not pay the 24 per cent tax on dividends.

Sixty such corporations, representing 600 to 800 firms, were chartered between 1959 and 1963, which implied a fairly slow beginning. The device is not yet well understood, and small businesses are very jealous of their independence.

More recently, measures were taken to improve the distribution apparatus. Available only to corporations with a capital of 1 million francs or more, these measures established corporations designed to facilitate the purchasing and marketing activities of the participating firms. The subsidiaries established for this purpose would be taxed like partnerships, i.e., they would not be liable to the corporation income tax or to the 24 per cent dividend tax. Moreover, in cases of losses, each participating firm would be entitled to offset its share of the losses against its own earnings.

Finally, within the framework of the regional development policy, efforts have been made to encourage the formation of professional associations through which members would seek to rationalize their activities. Members can then deduct contributions to the association from taxable income. This regulation does not seem to be used very much. Most of the businesses which could take advantage of it are assessed on the basis of estimated, rather than actual, income, or, if they pay taxes on actual income, they have already included such contributions in their overhead costs. Only two requests were submitted for government approval in 1962.

Investment trust (1954) corporations for financing oil exploration and development and regional development corporations (1955-58) were designed to promote capital market activity and to channel savings into certain key sectors, such as oil production and regional development. They do not pay corporate income taxes, and the regular and stock dividends they distribute to their shareholders are not liable to the 24 per cent dividend tax. The tax code treats them as purely formal devices permitting better management of the financial resources of the member firms. These institutions have played a significant role, although regional development corporations, which are under the control of regional interests, have failed at times to support new firms and basic structural reforms. The subject deserves detailed study, as do the operations of investment trusts, which up until now have helped members to manage their portfolio investments more than they have contributed to the growth of public participation in the stock exchange.

2. GENERAL TAX REGULATIONS ON BUSINESS CONCENTRATION

Value-added taxation, as such, seems to have had two contradictory influences. On the one hand, being noncumulative, it does not encourage vertical integration through mergers. In the automobile industry, for instance, a large number of subcontractors have reappeared since 1954. At the same time, however, this permits the establishment of subsidiary relationships among firms with separate legal status. The value-added tax contains little bias on this score. The breakdown of a manufacturing process into several steps performed by a succession of different firms is not hampered, since each firm purchases its inputs free of tax.

These advantages can be curtailed by the operation of the proration provision and the deduction ceiling described earlier in this paper. For instance, a firm buying from one of its subsidiaries must pay the T.V.A. on such purchases at the full rate, even when it is itself not liable to the tax, and therefore unable to offset it against any value-added tax liability on its own sales. A parent company rendering services to its subsidiaries may elect to apply the T.V.A. rate to these transactions rather than the lower service tax rate, in order to increase its own final value-added tax payments. It may thereby overburden the cost structure of its subsidiary if the latter does not have a sufficient volume of gross sales to recover all the tax paid on its inputs. In both these cases, an integrated firm would have enjoyed more advantageous treatment.

Besides, a subsidiary that has just been organized does not operate at a high enough level to recover all of the taxes paid on its inputs. This burden on working capital can weigh all the more heavily on the financial resources of a subsidiary, while the tax treatment of loans from the parent company makes such loans quite onerous above a certain level.

When a merger takes place, the income or loss of the new firm is set against that of the merged corporations. But the profits and losses of a subsidiary are regarded as separate from those of its parent company. However, a 1962 law allows the consolidation of a subsidiary's profit and loss account with that of the parent company for five years following the establishment of a subsidiary that has received special approval from the General Planning Commission. Thus the parent company can deduct the losses of its subsidiary from its own earnings for a period of five years.

Under the same general heading, the above-mentioned law also allows firms disappearing in a merger to transfer their loss carryover from earlier years to the newly formed company provided the approval is secured. The purpose of this regulation is to insure that merger transactions are not held back purely for tax reasons. Fourteen requests for approval have been examined since January 1, 1963, but only seven were accepted, involving a total loss carry-over of 5.8 million francs.

The existence of subsidiary company relationships means that some corporate earnings have to be transferred in several stages up the subsidiary ladder before they reach the ultimate beneficiary. Hence the danger that income taxes will be piled up repeatedly on the same amount of dividend income.

The double taxation of dividends paid by a subsidiary to its parent company is avoided by allowing the latter a credit for the 24 per cent dividend tax paid by the subsidiary when the parent company in turn reckons it own tax liability upon redistribution of the dividends. However, the credit is valid only if the dividends are redistributed by the parent company in the year they were received. If this redistribution cannot take place within the year (when the parent company has a net loss, for instance), the 24 per cent tax paid by the subsidiary cannot be recovered at a later date.

The dividends paid out by a subsidiary to its parent company have already borne the corporate income tax. They are included in the taxable income of the parent company, in the ratio of 5 per cent when the parent company controls 50 per cent or more of the stock of the subsidiary, in the ratio of 10 per cent when the parent company participation is between 35 and 50 per cent, and in the ratio of 20 per cent if this participation is between 20 and 35 per cent.

It will be recalled that, with government approval, a company which reinvests the sales proceeds of an asset in the shares of another company, with a minimum participation of 10 per cent in the new company, benefits from tax-free treatment of the capital gains involved in the sale (Article 40 of the General Tax Code).

A parent company often makes substantial loans to its subsidiaries, which usually do not enjoy enough credit to borrow on the market. The parent company, playing the part of an investment bank, must in turn borrow to be in a position to finance the expansion of its subsidiary through advances. However, the interest rate a corporation pays to shareholders may not exceed the rate of "Bank of France advances" by more than 2 percentage points. Moreover, a subsidiary may not deduct from its gross earnings interest payments on loans from the parent company in excess of half of its own capital. Interest payments of the parent company on loans exceeding this limit are taxed at the rate of 24 per cent, and must be regarded as taxable dividend income for the parent company.

Furthermore, a subsidiary going through a prosperous expansion period and accumulating liquid reserves would normally lend such funds to its parent company at interest. Yet, such loans are regarded as taxable dividend payments. The tax is reimbursed, however, upon repayment of the loan by the parent company.

These regulations are a definite hindrance to the movement of funds between parent companies and subsidiaries. They reflect the government's lack of confidence in such intercompany financial transfers, which could serve as a basis for tax fraud.

It should be pointed out that the transactions described above must involve French companies to be eligible for the various tax concessions mentioned. In the case of mergers and partial transfers of assets, the law is valid as long as the company that benefits from the transaction is French. Detailed information on tax regulations on business concentration at the international level can be found in the excellent report presented by A. Turq at the recent meeting of the International Congress on Tax and Financial Law held in Paris in September 1963.[16]

[16] *Cahier de Droit Fiscal International,* Vol. XLVIII, 1963, France, Part I.

CONCLUSIONS

France's rate of economic growth does not seem to have been substantially affected by the steady, and even slightly rising, pressure of the tax burden (as a share of GNP) since 1950. It is difficult to get a clear picture of the conflicting influences of public expenditures, the effective incidence of taxation, fraud, and the various devices for minimizing taxes.

On the whole, the new tax techniques (especially the value-added tax) and the striving for a neutral tax system have helped to simplify taxation. They have also favored exporters and contributed to the elimination of economic distortions due to taxation. But tax laws and regulations are still highly complex. The large number of exceptions to the general rule generates uncertainty, as well as opportunities for evasion of the law and pressures from special interest groups.

Some social and professional groups are in practice undertaxed, which may reduce both growth and equity. There is no denying that the decontrol of the economy, the growing pressures of domestic and foreign competition, the expenditure policies of the government, and the combined roles of government authorities and professional groups have played a far more important part than taxation in the renovation of the economic structure.

Considerations of the impact of the individual income tax are not of great practical significance because of the relative importance of taxes on expenditure—which account for about two-thirds of total tax receipts. Moreover, in view of our inadequate knowledge of the determinants and distribution of income and wealth, we have had to be cautious in our observations of the actual impact of progressive tax rates on savings, individual efforts, and risk-taking.

On the other hand, the tax system has unquestionably encouraged business firms to draw on internal resources for their financing —particularly through the device of accelerated depreciation and the exemption of capital gains from taxation when the funds are reinvested in fixed assets or company shares. This technique is the most appropriate one to induce the accumulation and replacement of industrial equipment, as well as the improvement of production methods. It has also been possible to further economic policy objectives with selective tax incentives by making some tax concessions contingent on special agreements with the government.

Although some obstacles remain, the French tax system has purposely encouraged mergers and, even more, other forms of business consolidation. This has reinforced the firms' economic strength of domestic firms relative to foreign competitors. Powerful holding companies have acted as investment banks for their subsidiaries, and new firms have tended to affiliate with one of the existing groups because of the restricted access to the capital market. On the other hand, the tax system has done little to force the reconversion or the elimination of marginal firms, even though it has not hindered eventual attempts at reconversion.

Thus, the tax system has given business firms increased autonomy and greater competitive potential. This is especially true of the larger firms, which are better able to take advantage of legal opportunities to manipulate taxable income. The country's productivity will probably benefit. But the paralyzing influence of antiquated structures must be overcome without falling into the excesses of uncontrolled expansion. The instruments of monetary policy, the opening of the economy to foreign competition, the techniques developed for the harmonious integration of public and private programs—all have a part to play in the undertaking. Whether the means available in these various areas are adequate remains to be seen.

COMMENT

ROBERT LIEBAUT, COMPAGNIE SHELL FRANÇAISE

I would like to say at the outset that I am not a fiscal specialist. I am a business economist, one of whose main concerns is forecasting prices and production. Since fiscal policy is an important element in the determination of each of these indexes of economic well-being, I know something about the effects which tax measures can have on business practices and policies. I have no comment to make on the technical points in Tabatoni's paper, but I would like to say something about his conclusions and to express some of my own views.

But first I should like to talk about the growth of the French economy, and especially about the outlook for the immediate future, say, until 1965. Gross national product could increase from 264 billion francs in 1961 to 328 billion in 1965, or by 25 per cent. Over the same period investment should increase by 30 per cent to about 76.5 billion francs. This would represent 21.9 per cent of GNP as against 20.7 per cent in 1961. By means of the national accounts system, it is possible to estimate that business saving in 1965 will amount to 39.1 billion francs, while business investment is expected to be 56.8 billion francs. Since household saving for the same year is estimated at 29.8 billion francs against capital needs of 9.9 billion francs, it can be seen that the shortage of investment funds in the business sector of 17.7 billion francs will be somewhat less than the surplus in the household sector.

This is an old story: the difficulty of getting the wealth created by enterprises and passing through the hands of private individuals to come back to the enterprises. How this could happen is well known; but how to bring it about is not.

Theoretically, the financial market ought to be the answer, but at the present time only 12 per cent of the financial requirements of business enterprises are covered in this way.

On the other hand, it is predicted that, between now and 1980, France's industrial capacity should double to cover the needs of an increasing population. Nobody could imagine that this means simply increasing the capacity of firms already in existence; many new small and medium-sized firms must be established. Present fiscal arrangements for corporations have been designed by those who think in terms of the global economy and they do not meet the needs of the small independent company.

Two remarks might be made at this point to bring the issue into sharper focus. The financial market now supplies no more than 12 per cent of the funds needed by business, and even if another 12 per cent could be supplied in the form of medium-term loans, this market would still not be able to further increase its share as long as the largest part of private savings was collected by a very strong network of state administrators.

In the same terms, it could be calculated that, if the economy grows by about 60 per cent during the next ten years and if we keep tax rates at the present level our fiscal resources will increase by 100 per cent.

It looks as if we have reached the point where, after having enjoyed economic growth spurred by fiscal incentives, we have to be very careful not to go any further if we want to have new investors and new businesses contributing to further growth.

The time has now come to think about one aspect of this problem which, it seems to me, has been overlooked. Income taxes on private individuals are intended to fall on their annual receipts; but by a rather curious assimilation, corporations also are taxed on what is considered to be income. But this is not income in itself, it is only the origin of income.

I cannot develop this thought in terms of its fiscal implications because I am not a specialist in these matters, but I wonder if it would not lead to an interesting study which could help to set up a fiscal scheme that would be able to cope with small as well as large enterprises.

I now come back to Tabatoni's report and to his conclusions. When he asks whether in the recent past private savings could have been used in a more productive way than public savings (which amounted to 90 per cent of national savings), my answer would be no because what has been done during this period was well adapted to reconstruction after the war.

When he asks why firms have not fully utilized all the tax saving possibilities that have been given them by the administration, I would say, whatever the technical explanation might be, that it is most likely an indication that existing fiscal techniques have lost their effectiveness as growth stimulants. For example, this is true of research and development and industrial localization. To improve our situation, I feel that we should switch more and more of our direct income taxes to what we call our tax on value added, which is in fact a sort of income tax levied on expenditures.

In conclusion, I would like to say that now that many countries, and particularly France, have reached the stage where tax measures have become more of a burden than an incentive, we may have to consider whether it is not the time to back another horse and shift more of the cost of government into the prices paid by consumers.

D. DE LA MARTINIÈRE, MINISTRY OF FINANCE

It has been my responsibility for the last few years to help plan the French tax policy. Therefore I am inclined to be less critical of it than Pierre Tabatoni. However, I agree with him in many respects and I would like to discuss only specific features of French tax policies which generally are misinterpreted at home as well as abroad.

First, the French system is very productive. Including social security contributions, tax collections amount to 37 per cent of GNP. And they say Frenchmen don't pay taxes!

Secondly, in my opinion it is doubtful whether corporation tax policies may artificially increase private savings to a large extent. Besides, the budgetary cost of such tax policies is quite high compared with the results. On the other hand, experience shows it is very easy to create distortions. That is why for the last ten years French policies have been aimed at making the system as neutral as possible. Indeed, when the tax is not neutral, it creates actual, though invisible, barriers which upset domestic competition and cause a misallocation of resources just as specific custom duties would. And these effects are especially important in countries where indirect taxes are important. From this point of view, the suppression of numerous specific taxes, the reduced taxation of land purchased for industrial purposes in underdeveloped areas, and measures favoring mergers and partial transfers of assets or investment have the same significance.

Gradually over the years, the walls that impede movement, progress, competition, and structural change are examined, analyzed, and, if budgetary and political considerations permit, torn down. These measures may be compared to those which promote free competition within the Common Market.

As for tax on value added (T.V.A.), which is by far the most productive of the whole system, its effects are not well understood either in France or in other countries. In fact, as Martin Nor of the Harvard Law School has pointed out, the T.V.A. is nothing but a general tax on income measured by expenditure. The best way to achieve that purpose would be to tax only retail sales and services rendered to individuals. But this would not be practical, for it is extremely difficult, from a legal point of view, to define an actual retail sale. Moreover, the taxpayers involved are mostly small family concerns, prone to cheat to avoid any kind of tax. Consequently, the tax must be collected at all stages of production, but all payments made prior to the ultimate sale are nothing but sums withheld at the source since they are successively deducted until the ultimate transaction takes place. Thus the T.V.A. is not a tax on the gross profits of the firms; it is only a refined method by which the collection of a general tax on expenditure may be divided among all concerned, without risk of distortion, whatever the technical process or the channels involved.

Some technical analysis is necessary to avoid misinterpretation of the facts. For instance, investments are not exempt from tax. The deduction of the T.V.A. included in cost serves only to avoid double taxation, the first when the machine is sold and the second when the depreciation is included in the price of the final product. Nor are exports exempt from tax. Since the purpose of the T.V.A. is to tax the income of individual residents of France according to their expenditures, it is obvious that the income of foreign consumers of French products and their expenditures on such products cannot be taxed. It is equally clear that the tax withheld at the source on any part of exported goods must be refunded. In that respect, the position of French products on world markets does not differ from that of British products which are not subject to purchase tax when sold outside the United Kingdom.

The T.V.A. is, therefore, neutral in its incidence on both the domestic and foreign markets.

The T.V.A. may have a strong impact on economic growth, compared with income tax, since it is used to collect part of the revenue which in other countries is obtained from taxation of the net income of households. First, it encourages savings because it applies only to expenditures. Secondly, being less subject to fraudulent practices than the income tax, it avoids the distortions arising from such practices. And this must be kept in mind in analyzing the social incidence of the T.V.A. People who escape the income tax cannot avoid the T.V.A., which is included in the price of the things they buy. It is very important, too, to realize that the effect of the T.V.A. on individual incomes is quite different from that of specific excise duties, which generally are regressive, and from that of cumulative turnover taxes, which apply indiscriminately to all products at least up to the last stage.

With its varying rate schedules, the T.V.A. is actually based on ability to pay; the tax burden increases progressively as expenditures cover a smaller proportion of foodstuffs and a larger proportion of luxuries.

Is it proper to classify such a tax among special taxes on foodstuffs and all of the widely used commodities? Personally I do not believe so. You can tax income as received, as the United States or Great Britain does, without splitting income among children and with high rates even for low income brackets. We prefer to tax income as spent, in order to promote savings, to take account of family burdens, and to maintain low rates for low incomes. In my opinion, it is merely a question of method. The problem is to gauge the real incidence of the two systems and to compare the effect on savings, on business, on the birth rate, and, last but not least, on social or economic distortions due to fraud.

To conclude, I believe the attention of the conference should be drawn to a matter which is very important in considering French economic growth and fiscal policy. The yield of our personal income tax would be almost twice as large as it is presently if there were no splitting of income among children. Stalin used to say that manpower was the most valuable of all capital goods. Indeed, no investment is more necessary, productive, and unfortunately more expensive than a man's education and training.

France had a terrible population crisis from the time of the Napoleonic Wars until the end of World War II. For the last eighteen years, on the other hand, the birth rate has remained at a relatively high level, in view of the large number of old and very young people. Besides, the quality of school education has greatly improved. This situation explains, to a large extent, the difficulties of the French economy. For instance, the heavy burden of the unemployed does not permit a level of savings and investment as high as in countries like Germany. In that respect, the French tax system has an important effect; splitting of medium incomes among children, in particular, encourages the raising of families, insuring the future growth of the economy.