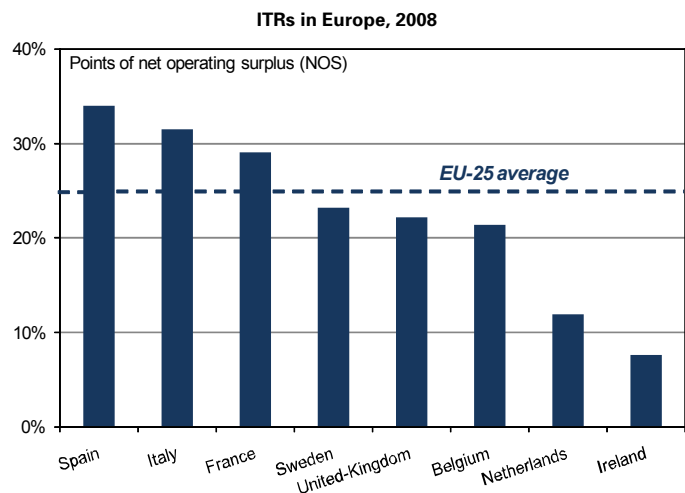


Implicit tax rate on corporate income in France

This study was prepared under the authority of the Directorate General of the Treasury (DG Trésor) and does not necessarily reflect the position of the Ministry for the Economy, Finance and Industry.

- Corporate income tax (CIT) is usually seen as a tax levied at the statutory rate of 33.33%. However, assessment rules, reduced rates, tax smoothing procedures, and other variations in the tax base do require a more comprehensive study of other indicators to estimate the true tax burden on businesses. One of the most telling indicators, particularly for international comparisons, is the implicit tax rate (ITR), defined as the ratio of CIT revenues to the tax base measured by net operating surplus (NOS). This indicator differs from the 33.33% statutory tax rate for two broad categories of reasons:
 - Rules for assessment of the tax base (particularly for loan-interest deductions) and for setting rates (reduced 15% rate applicable to a portion of profits of small and medium-sized enterprises [SMEs]) lower the ITR.
 - Other factors, at the opposite, tend to raise the ITR. One is business demography, which involves events such as the death of certain units. Another consists of carry-back or carry-forward rules, which allow firms to deduct losses from past or future profits; these rules explain why some losses recognized in a given year may never entitle the firm to a future tax rebate.
- For 2007, i.e., the year before the crisis, the ITR on non-financial firms in France reached 27.5%. With respect to the statutory rate, the assessment and rate rules lowered the ITR by eight points, while demographic factors raised it by two points.
- Large firms (5,000+ employees: hereafter LFs) display a lower ITR than micro-enterprises (fewer than ten employees). The differences are traceable to three factors: (1) assessment rules: loan-interest deductions lower the ITR for micro-enterprises by three points but that of LFs by nearly fourteen points; (2) rate-setting rules: the reduced rate for SMEs lowers the ITR for micro-enterprises by more than eleven points, but the annual flat tax (imposition forfaitaire annuelle: IFA), to be withdrawn in 2014, raises it by more than three points; (3) higher risk of death among the smallest enterprises: because of this demographic factor, the average ITR for micro-enterprises exceeds the rate that would apply to consistently profit-making micro-enterprises.
- As for 2008, European comparisons suggest, France ranked above the average for the European Union (EU-25) in 2008, but below countries such as Spain or Italy. In nominal terms, the only country to post a higher rate than France was Malta.



Source: Eurostat, *Taxation Trends in the European Union*, 2010 edition.

1. Several indicators exist for measuring the corporate income tax (CIT) burden

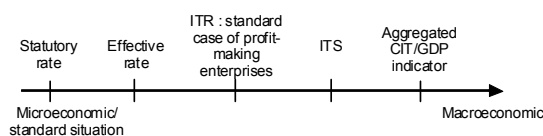
The ratio of corporate income tax (CIT) to corporate income gives a sense of the actual size of the central government's levy on business profits. Several indicators can be used for this purpose. Each obeys a specific rationale and has its limits:

- The straightforward indicator is the **statutory CIT rate**. However, as it does not reflect assessment rules, it does not allow comparisons between two taxation approaches—the first with a broad base and a low rate, the second with a narrower base and a high rate—particularly at international level. The treatment of interest expenses, tax credits, and reduced rates can significantly curtail the effective tax burden.
- A second microeconomic approach seeks to simulate the cost-benefit analysis that a firm may undertake to determine whether a planned investment is profitable. The procedure consists in estimating **effective tax rates** in a typical situation, taking a theoretical investment project as a starting point.¹ The investment yields a given return, taxed under prevailing legal provisions. The latter, however, depend on assessment rules and other factors. These effective rate indicators give information on average taxation over time, but they are contingent upon assumptions that may play a dominant role (speed of capital depreciation, interest rate, type of investment). As a result, they cannot measure an average tax burden.
- The indicator illustrated in this study seeks to be consistent with the tax status of the average enterprise and follows an intermediate path between the standard situation and an estimate for the total economy—i.e., half-way between the microeconomic and macroeconomic approaches. **The implicit tax rate (ITR) is the ratio of corporate income tax (CIT) to a profit indicator—here, net operating surplus (NOS = value added - compensation of employees - taxes on production - depreciation of physical capital).** We calculate the indicator for France from accounting data contained in the tax returns collected by the Public

Finances General Directorate (Direction Générale des Finances Publiques: DGFIP). It can be determined for specific enterprise categories (by size or sector). In particular, it can be confined to consistently profit-making enterprises, in which case it reflects the standard situation slightly more closely as it disregards loss-making enterprises.

- A final, macroeconomic indicator consists of the ratio of CIT revenues to the wealth produced by the total economy, as measured by gross domestic product (GDP). This indicator is ill-suited for evaluating the economic weight of corporate taxation. The reason is that the economic assessment base for CIT differs substantially from GDP owing to variations in factors such as the margin ratio and the investment cycle. However, the indicator is useful for interpreting the data in a "public finances" perspective, and thus makes it possible to assess the importance of CIT relative to other compulsory levies.

Not all these indicators are general in scope. Some are more applicable to the standard situation, which is not necessarily representative of the average enterprise. Others are calculated on observed data—national-accounting data or accounting data for individual firms—and offer a closer approximation of average taxation. These indicators may be schematically arranged in a sequence ranging from microeconomic to macroeconomic:



The multiplicity of indicators for measuring taxes on profits shows that there is no single definition or measure of the average tax rate (see box 1). As a result, the average rate cannot be evaluated solely with the ITR indicator chosen here.

2. The implicit tax rate (ITR) indicator allows both macroeconomic interpretation and microeconomic analysis by type of enterprise

Applied to all firms, the ITR indicator is consistent with the options chosen for international comparisons, such as those made by Eurostat (which effectively uses NOS as the denominator of its indicator: see below).

By determining the ratio of taxes paid by enterprises to NOS as a relevant economic basis, we can get an economic interpretation of the allocation of net income:

- Owing to loss carry-back and carry-forward mechanisms,² the economic assessment of CIT is effectively based on net income (profit/loss), not on profits alone.

- Net income is equatable with return on equity.³ In addition to covering CIT, net income serves to enable employees to share in corporate profits and pay providers of funds (shareholders and creditors). Any amount left over from this distribution goes to increase equity (which may later be used to finance investment or be distributed).

The ITR indicator can then be calculated for a sub-set of enterprises with specific characteristics (notably with regard to investment financing), such as SMEs.

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- (1) Method used by M.P. Devereux and R. Griffith (2002), "The impact of corporate taxation on the location of capital: A review," *Swedish Economic Policy Review*, no. 9, pp. 79-102.
 - (2) When an enterprise posts a loss in one year, the loss is regarded as an expense booked to the following financial year. As a result, the loss can be offset against future profits ("carry-forward"). If the enterprise so chooses, it can also be offset against the profits of the three previous years, thereby constituting a receivable that will be repaid to the enterprise at the end of the five-year period following the loss ("carry-back").
 - (3) Net of operating costs, such as (1) intermediate consumption and compensation of employees, but also (2) taxes on production, such as the local business tax (formerly tax professionnelle; since 2010, contribution économique territoriale) or property tax (taxe foncière), and (3) investments (which are deferred expenses, smoothed over several years in corporate income statements via depreciation).

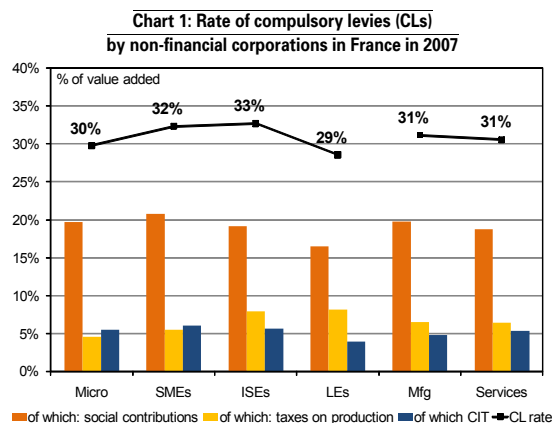
Box 1: The ITR on profits yields information on only one facet of business taxation

Taxes on business profits are only one aspect of levies on enterprises. An overall view of taxes and contributions paid by businesses (excluding indirect taxes such as VAT) is therefore more informative in the context of the approach emphasized in the rest of this study. We should note that the latter approach is purely accounting-based and has no economic significance, as it does not address tax-incidence issues.

Compulsory levies on enterprises in France accounted for an average 31% of their value added^a in 2007. This figure takes into account employers' social contributions, taxes on production (including the property tax and local business tax^b), and CIT -setting aside tax-incidence issues.^c The levy rate is 30% for micro-enterprises, 32% for small and medium-sized enterprises (SMEs), 33% for intermediate-sized enterprises (ISEs), and 29% for large enterprises (LEs). There is no difference between the total manufacturing sector and the service sector (see chart 1).

The percentage gaps are due to the production structure (see below for differences regarding CIT). The most capital-intensive enterprises are also the largest, as their fixed costs provide an incentive to concentration (see box 3). These firms therefore pay more taxes on capital (local business tax and property tax).

They are also less labor-intensive and hence pay a smaller proportion in social contributions. By contrast, micro-enterprises in which individual compensation is, on average, lower than for large enterprises-fully benefit from social-contribution relief.



Sources: tax returns (DGFIP); DGTresor calculations.

- For the total rate of compulsory levies on enterprises, the appropriate indicator to be used as the denominator is indeed value added, which measures the wealth produced by the enterprise. It is therefore the aggregate commensurable with GDP used to calculate a country's total rate of compulsory levies. Levies are applied both to labor (social contributions) and to capital (CIT, property tax, etc.), whose total productivity is, precisely, value added.
- The 2010 tax returns are not yet available. They will enable us to assess the changes due to the replacement of the *taxe professionnelle* by the new *cotisation économique territoriale* in 2010.
- An enterprise's tax burden in economic terms is not equivalent to the levies paid by the enterprise. In particular, we need to determine which economic entity ultimately carries the tax burden, in terms of tax incidence. For example, the distinction between employers' and employees' social contributions is not necessarily relevant to the measurement of tax incidence.

3. The limitations of the ITR indicator

The ITR is a macroeconomic indicator, as it consists of the ratio of tax owed by a set of enterprises to the set's aggregate net income, i.e., profits net of losses. But the tax used as the numerator will be paid in a given year only by profit-making enterprises. This approach is consistent in terms of scope of coverage. The reason is that the tax owed by enterprises is computed after deduction of past losses and net of the loss carry-back recognized during the financial year. Admittedly, the ITR can be determined for profit-making enterprises alone. If so, however, for the sake of time consistency, the tax used as the numerator will have to be the tax owed excluding carry-backs and carry-forwards.⁴

Our study covers resident enterprises, and the indicator measures only taxes paid and profits realized in France. For a multinational group, the figures therefore differ from those published in the annual report: these reflect the activities of the entire group, including its foreign affiliates taxed at local rates.

The indicator is calculated exclusively for non-financial corporations,⁵ which generate four-fifths of the €49.3

billion in CIT collected in France in 2008. Our choice is guided by the fact that the notion of net income in the NOS sense is not directly applicable to financial corporations, notably on account of the cost-accounting breakdowns available in the tax returns. The first accounting indicator that can be interpreted for the returns is current income before taxes, which includes net interest.

Return on equity partly consists of dividends received and capital gains. These revenue items are not included in NOS, so we deliberately exclude them from the ITR denominator to avoid double counting. These revenues can be viewed as transfers between enterprises. If so, they represent a distribution of income, i.e., of NOS. As we are examining sets of enterprises, including these revenue items would be tantamount to counting a portion of the return on equity twice, once as NOS, once as a distribution of that income.

To measure the tax relief offered by provisions such as the research tax credit (*crédit d'impôt recherche*: CIR), the tax defined as the numerator is net of that credit.

(4) An enterprise that never posts a loss will never have losses to charge against profits.

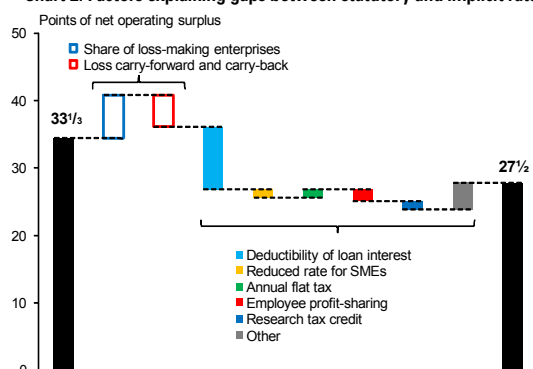
(5) That is a major difference with the results published in the report by the Council on Compulsory Levies (Conseil des Prélèvements Obligatoires), *Les prélèvements obligatoires des entreprises dans une économie globalisée*, October 2009. The report's scope of coverage included all enterprises.

4. The ITR for all non-financial corporations is estimated at 27.5% for 2007

Because of the economic crisis, we focus on 2007 in the remainder of this study, as it represents a cyclical peak. We deem it more representative of the "normal" situation of enterprises than 2008 and 2009, although the nature of the observations does not depend on the year examined (see below). Note that this calculation refers to a financial year and not to the year in which the tax is paid. Because French CIT is paid by advance installments and a final adjustment, the tax on 2007 income is paid partly in 2007 and partly in 2008 (see box 2).

The 27.5% figure differs from the statutory 33.33% rate⁶ for two major categories of reasons. The first concerns tax base rules (particularly for loan-interest deductions) and rate rules (reduced rate for SMEs). The second concerns business demography, most notably the deaths of firms.

Chart 2: Factors explaining gaps between statutory and implicit rates



Sources: tax returns (DGFiiP); DGTTrésor calculations.

Business demography explains part of the gap between the ITR and the statutory rate:⁷

- We expect that a given enterprise causes the ITR for its category to rise in the year when it reports a loss, and

causes the ITR to fall proportionally in the year when the loss can be offset against a possible profit.

- **On average, the two phenomena should net to zero. However, their combination contributed two points to the ITR increase in 2007:**⁸
 - On the one hand, enterprises may go out of business, especially if they are losing money. This may explain, at the aggregate level, why certain losses can never be offset, thereby increasing the intertemporal average ITR.
 - On the other hand, the ITR measured here is merely a snapshot of a given year. In some years, depending on the position in the economic cycle, the losses recorded will cause the ITR to rise more than the deduction of past losses will cause it to decline; in other years, the opposite occurs.⁹

We can also break down this demographic effect-which exerts an upward pressure on the ITR-into two components:

- Only profits are effectively taxed in a given year, whereas the aggregated NOS includes losses by loss-making enterprises. This drives up the ITR by more than six points. For example, an enterprise that reports a profit of 90 or a loss of 30 in alternate years would pay an average tax of 15 (on a 33.33% assessment base), absent carry-forwards and carry-backs. The intertemporal ITR would thus be 50%.
- Conversely, the carry-forward and carry-back mechanisms for smoothing CIT over time lower the ITR (by nearly five points in 2007) and thus bring it closer to the statutory rate. If we return to the previous example, the average tax paid with loss carry-forwards and carry-backs would be 10, i.e., an intertemporal ITR of 33.33%.

Box 2: Rules for payment of corporate income tax

Corporate income tax is paid by enterprises that owe it in four advance installments and a final adjustment. Excluding a voluntary reduction and fifth-installment procedure (see below), the sum of the four advance payments must be equal to the tax due on the previous financial year.

To settle the tax bill for the previous financial year, enterprises must pay the balance starting in April if the sum of the four advance installments is less than the tax due. Conversely, enterprises that have paid too much in advance are refunded.

Starting with the third advance payment, enterprises can adjust their payments downward to allow for a possible decline in their current profit (voluntary reduction). For the fourth and final installment, the largest enterprises must adjust it upward when their current profit exceeds their previous year's profit. This additional payment is known as the fifth advance installment.

- (6) To which we should add the social contribution on profits for the largest enterprises, putting the total rate at 34.4%.
- (7) We do not regard the gain from tax integration as an explanation of the gap in the discussion that follows. Tax integration is an option that allows the consolidation of profits and losses of subsidiaries that are over 95%-owned by each group's head company. However, this gain merely accentuates the convergence of the tax toward the tax due on the group's total income, which is the base that makes sense from an economic standpoint.
- (8) In other words, under this assumption, the ITR of profit-making enterprises alone is two points below the ITR of all enterprises.
- (9) In 2006, for instance, the combined effect of the two phenomena was +4 points, versus +2 points in 2007.

The assessment and rate rules lower the ITR by eight points:

- The CIT assessment base differs from NOS, as it includes deductible expenses such as interests (contribution of -9 points to the ITR) and the sums paid into employee profit-sharing plans (-2 points). Conversely, some income items not included in NOS (dividends and non-exempt capital gains) are taxed. These other factors contribute a combined +4 points to the ITR increase.
- Some expenses entitle an enterprise to a tax credit that

lowers the ITR. The most important is the research tax credit (-1 point, before the tripling of the credit in 2008).

- The annual flat tax (imposition forfaitaire annuelle: IFA) is a tax assessed on total sales¹⁰ and raises the ITR by an average of one point. The 2011 Budget Act calls for its elimination by 2014.
- Independent enterprises with under €7.6 million in sales are eligible for a reduced rate of 15% on €38,120 of their profits (-1 point).

5. The ITR concept allows comparisons between enterprises

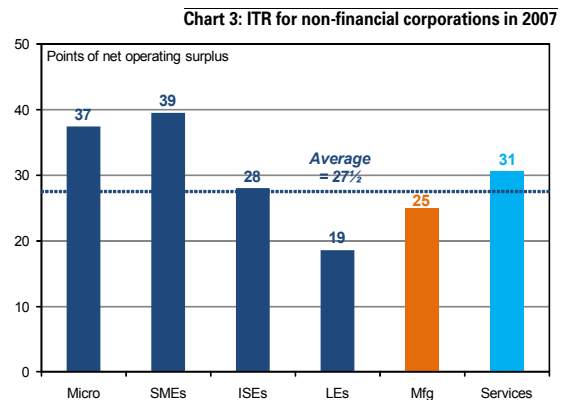
The differences in the ITR, whether due to economic sector or enterprise size, are directly related to the characteristics of these categories of enterprises, i.e., their production structure, particularly capital intensity and method of financing (assessment and rate rules), and the proportion of loss-making enterprises (business demography).

In 2007, the ITR varied from 39% for SMEs (10-249 employees) to 19% for large firms (LFs) (5,000+ employees: see chart 3). The ITR for micro-enterprises (<10 employees) was 37%. For intermediate-sized enterprises (ISEs), the ITR lay within the average range at 28%. In this breakdown, the enterprises examined are consolidated in taxable group entities. Accordingly, an SME owned by a large enterprise group will be included in the LE category.¹¹

The divergence between SMEs and LFs is due in equal measure to assessment and rate rules and to business demography. Regarding assessment and rate rules:

- Loan-interest deductibility is a major factor in the observed gaps (see table 1), a phenomenon that may be due to differences in corporate investment needs (see box 3).
- Other factors are closely linked to business size: the

annual flat tax (IFA), whose last bracket will be abolished in 2014; reduced rate for independent SMEs, whose main effect is to substantially lower the ITR for micro-enterprises (by more than eleven points); and the calculation of employee profit-sharing in enterprises with more than fifty employees.



Sources: tax returns (DGFIP); DGTresor calculations.

Table 1: Factors explaining gap between ITR and statutory rate and differences between enterprises in 2007

Deviation from statutory rate (34.4% ^a)	Micro	SMEs	ISEs	LFs	Mfg	Services	All non-financial corporations (NFCs)
Loan-interest deduction	-2.7	-3.7	-8.8	-13.9	-9.3	-10.0	-9.3
Reduced rate for SMEs	-11.5	-2.0	-	-	-0.5	-1.7	-1.2
Annual flat tax (IFA)	+3.1	+2.7	+0.8	+0.3	+0.9	+1.5	+1.2
Profit-sharing	-0.1	-1.1	-2.4	-2.0	-2.5	-1.6	-1.7
Research tax credit	-1.5	-1.2	-1.4	-1.2	-2.8	-0.8	-1.3
Others factors	+5.5	+3.0	+2.5	+4.6	+3.9	+5.6	+4.0
Assessment and rate rules	-7.2	-2.3	-9.3	-12.2	-10.3	-7.0	-8.3
Share of loss-making enterprises	+14.9	+10.4	+5.6	+3.8	+4.2	+8.5	+6.4
Carry-forward and carry-back	-4.7	-3.0	-2.7	-7.4	-3.3	-5.3	-4.7
Demography	+10.2	+7.4	+2.9	-3.6	+0.9	+3.2	+1.7
ITR	37.4	39.5	28.0	18.6	25.0	30.6	27.5

a. Statutory rate of 33.33%, to which we add the social contribution on profits for the largest enterprises.

Sources: 2007 tax returns (DGFIP); DGTresor calculations.

Interpretation: To calculate the ITR gain due to deductibility, we performed simulations reincorporating excess interest in the CIT assessment base. The gain shown takes into account the excess of past losses that could have been offset under this simulation. We estimated the contribution of the share of loss-making enterprises by calculating the ITR for profit-making enterprises alone.

(10) Because of its brackets, the annual flat tax (IFA) burden differed between enterprise-size categories, especially among the smallest units. The IFA paid in 2008 on 2007 income follow a graduated schedule from €1,300 for sales of €400,000 and more to €110,000 for sales above €500 million. The IFA, currently levied only on the largest enterprises, will be totally abolished by 2014.

(11) More specifically, enterprise size and activity sector are determined at taxable group level. The size classification complies with the recommendations of France's National Council for Statistical Information (CNIS) (Rapport du groupe de travail sur la définition des catégories d'entreprises, November 2008). Micro-enterprises have fewer than 10 employees, and sales and assets under €2 million. SMEs have fewer than 250 employees, sales under €50 million, and assets of less than €43 million. Intermediate-sized enterprises have fewer than 5,000 employees, sales under €1.5 billion, and assets of less than €2 billion. The fourth category consists of large enterprises.

Box 3: Financing needs and financing methods by enterprise size

The largest enterprises are those that invest the most (for a given level of value added: see table 2).

They also rely more on external financing, whether through equity or debt. The ratio of shareholders' equity to value added (VA) varies from 80% for micro-enterprises to over 450% for large enterprises. The debt ratio (ratio of the sum of bank and bond debt net of receivables booked under assets to value added) ranges from 90% to 270% (for an average debt ratio of 170%:^a see table 2):

- These ratios reflect equity and credit supply as well as demand, for example for investment purposes.
- On the supply side: the equity level reflects the accumulation of past income, as well as capital increases, confined to the largest enterprises; the debt level partly reflects credit-access constraints.
- On the demand side: owing to the size of their investment expenditures, the largest enterprises rely less on self-financing and more on external financing.

Table 2: Financing methods of non-financial corporations

% of value added	Micro	SMEs	ISEs	LFs	Mfg	Services	All NFCs
Investissement rate	15%	15%	19% ^(a)	30% ^(b)	18%	18% ^(c)	18% ^(d)
Shareholders' equity	80%	100%	240%	450%	300%	220%	260%
Gross debt	150%	160%	340%	590%	390%	350%	360%
Net debt ^(e)	90%	70%	170%	270%	140%	180%	170%

Source: 2007 tax returns (DGFIP).

Interpretation: we choose to adjust physical investment by not including real-estate services and energy, two sectors that displayed atypical profiles in 2007 owing to non-recurring transactions: (a) excluding real-estate services, otherwise 32%; (b) excluding energy, otherwise 46%; (c) excluding real-estate services, otherwise 24%; (d) excluding real-estate services and energy, otherwise 30%; (e) gross debt minus loans booked to assets and trade receivables.

- a. This figure cannot be compared directly with the macroeconomic ratio of debt to value added (ca. 120%), for it does not include enterprises subject to personal income tax (impôt sur le revenu: IR), which would automatically lower the ratio.

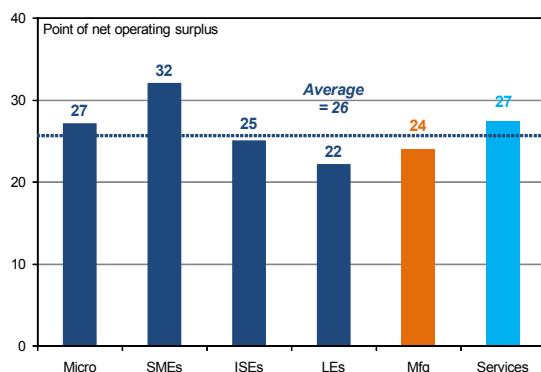
As regards business demography, the smallest enterprises face a higher death risk (outright death, growth and transition to higher category, or acquisition). This explains why the combined effect of carry-back/carry-forward and the inclusion of loss-making enterprises in a given year is above average for SMEs. Conversely, for large enterprises, the combined effect is weaker. It was even negative in 2007, a year when the economic cycle was at a peak and profit-making enterprises were able to offset large stocks of past losses. In 2006, the combined effect for large enterprises was zero.

These demographic effects are neutralized when we examine profit-making enterprises alone and exclude carry-backs and carry-forwards.¹² The ITR for profit-making enterprises is slightly lower than for all enterprises in the aggregate. The reason is that a propor-

tion of the losses posted by the "all enterprises" category will never be offset, owing to the death of some of the loss-making units. Moreover, the ITR's apparent heterogeneity by size is halved, because the only remaining differences are those due to assessment and rate rules (see chart 4). However, by excluding loss-making enterprises, the analysis does not reflect the French economy as a whole.

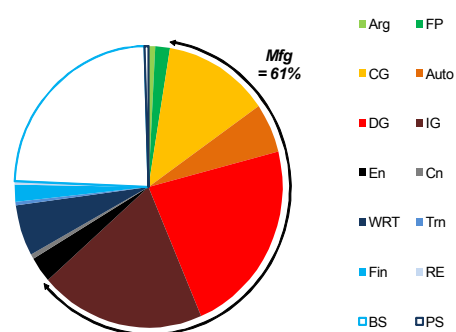
The ITR is 31% in market services (including construction) and 25% in manufacturing. This gap illustrates a size composition effect in each sector. Because of the greater investment needs, the percentage of large production units is higher in manufacturing than in other sectors.¹³ The gap also reflects the impact of the research tax credit, which is concentrated in manufacturing (see chart 5 for the latest available data, for 2008, whose breakdown closely resembles that of the 2007 figures).¹⁴

Graphique 4 : ITR for profit-making non-financial corporations in 2007



Sources: tax returns (DGFIP); DGTrésor calculations.

Graphique 5 : Research tax credit accrued in 2008 by sector



Source: DGFIP.

Key: Agr = agricultural products; FP = food products; CG = consumer goods; Auto = automobile; DG = durable goods; IG = intermediate goods; En = energy; Cn = construction; WRT = wholesale/retail trade; Trn = transportation; Fin = finance; RE = real estate; BS = business services; PS = personal services.

- (12) For the sake of time consistency, our calculation must neutralize loss carry-backs and carry-forwards in order to consider the situation of the average profit-making enterprise, which has, by definition, never posted losses.
- (13) In manufacturing, nearly four-fifths of operating income is generated by intermediate-sized and large enterprises, versus slightly over three-fifths in services.
- (14) However, the research tax credit is not a differentiating factor for enterprise-size categories.

Box 4: After shedding four points in 2008, the ITR appears to have returned to its 2007 level in 2009

In 2008, taxable corporate income fell by 25%; for non-financial corporations (NFCs) alone, nearly 12%. For NFCs, the drop was mainly due to the decrease in the margin ratio, amid resilient employment and a business downturn, but also a steeper rise in interest expenses, which eroded taxable income.

In 2008, the ITR reached 23.5% (down four points from 2007). It ranged from 38% for SMEs to 13% for large enterprises. The gap between manufacturing and services widened to 19% versus 26%, notably on account of the tripling of the research tax credit from financial 2008 onward (the impact was a negative two points in the economy as a whole but a negative six points in manufacturing).

Only one-half of the ITR decline is permanent, with the tripling of the research tax credit; another portion is temporary. In particular, the increase in the loss carry-back recorded in 2008, because of the early refund provided in the stimulus package, should have an estimated downward effect of nearly one point on the ITR computed for 2008.

In 2009, the data suggest that taxable corporate income remained nearly stable, but was reduced by nearly 7% for NFCs alone, owing to a further deterioration in profit margins and despite an improvement in financial income.

An initial analysis of 2009 tax returns indicates that the ITR for NFCs nearly returned to its pre-crisis level, at 27%. This sharp upturn is believed to be partly temporary and caused by the large number of loss-making enterprises, which automatically drives up the ITR.

6. The ITR concept should be used with caution for international comparisons

The ITR concept allows comparisons between countries on national-accounting data. Eurostat, for instance, releases¹⁵ an ITR on business income, defined as the ratio of corporate income tax (CIT) (including on financial corporations) to aggregate net operating surplus (NOS). However, these international comparisons should be handled with caution:

- International comparisons rely on national-accounting data:
 - The corporate income tax examined is the tax paid in a given year, not the tax due for a given year, as in business accounting. Tax-payment mechanisms can therefore amplify ITR variations, as occurs with the French system of advance installments and final adjustment (see box 2). Moreover, the tax paid in a given year is net of tax credits refunded that year, whereas the tax due for a given year is net of the tax credits accrued for that year. **The ITR country ranking can thus be strongly influenced by short-term economic or policy developments (see below).**
 - In national accounting, NOS is the difference between gross operating surplus and fixed-capital consumption, which is a construct based on balance sheets and assumptions on the pace of capital depreciation. In business accounting, NOS is net operating income, in which capital depreciation is based on accounting rules.
- As for some countries-including France-most profits are subject to corporate income tax (CIT); in other countries, a large proportion of enterprises are subject to personal income tax (PIT). In Germany, for example, PIT on business partnerships and sole proprie-

torships yielded €33 billion in 2008, versus only €22 billion for CIT in the formal sense.¹⁶

- As CIT is designed as a levy on the return on equity, if we want to compare its weight in France and other countries, we need to examine all taxes on returns on equity. For example, the German equivalent of France's *taxe professionnelle*, the *Gewerbesteuer*, which yielded €41 billion in 2008, is also assessed on a profit concept. In this sense, the tax is levied on corporate equity. In France, one should also take into account the portion of the *taxe professionnelle* (or the contribution économique territoriale since 2010) assessed on property assets and productive capital.¹⁷
- The taxation of returns on equity, whether in the form of CIT or a tax on the stock of capital, cannot be dissociated from the total taxation of capital and capital income, notably the taxes levied on households. Here as well, international comparisons are hampered by the difficulty of isolating the share of taxation on capital income in total income tax.

Eurostat estimates the ITR for France at 29% in 2008. We can compare this figure with the 2007 ITR measured from tax returns (for the tax paid in 2008 is largely based on 2007 results, as described in box 2), except for the fact that it is a rate calculated for all enterprises, including financial corporations.

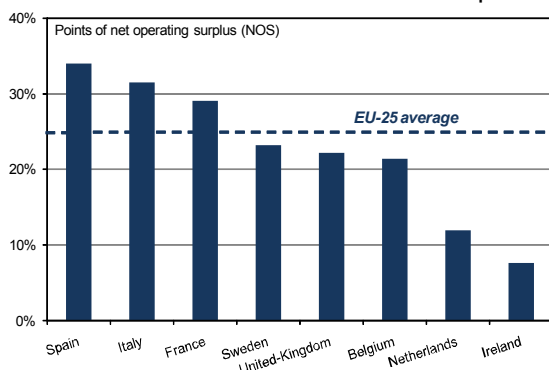
France's ITR apparently exceeds the 25% average for the European Union with 25 Member States (27% for the European Union with 16 Member States). Some countries such as Ireland and the Netherlands stand out for their particularly low ITRs (see chart 6).

(15) See Eurostat (2010), *Taxation Trends in the European Union*.

(16) Source: OECD, *Revenue Statistics*.

(17) See special section entitled "Fiscalité et compétitivité" (taxation and competitiveness) of *Rapport sur les prélèvements obligatoires et leur évolution* (report on compulsory levies and their changes) appended to the French 2011 budget bill (Projet de Loi de Finances). Even after 2010, part of the new contribution économique territoriale on businesses continues to be assessed on their capital, particularly real-estate assets.

Chart 6: ITR in Europe in 2008



Source: Eurostat, *Taxation Trends in the European Union, 2010 edition*.
Note: France's ITR for 2008 basically corresponds to taxes on 2007 income, owing to CIT payment rules (see box 2).

This ranking may change substantially in 2009 because of economic conditions and economic policy-making. The national-accounting figures currently available suggest an ITR on business income of only 14% in France in 2009. This decline appears due to (1) the early refund of research tax credits and the loss carry-backs provided for in the stimulus package, and (2) the CIT payment mechanism described in box 2. In 2009, many enterprises received refunds for their excess tax payments in the previous year, which correspondingly reduced their net tax bill.

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