

The margin rate of companies in France has withstood the rise in import prices well, due to their increased selling prices and wage moderation

Despite a price shock in imports as the health crisis ended, which was subsequently intensified by the invasion of Ukraine in 2022, the average corporate margin rate held firm: in 2023, it stood at two value-added points above its 2019 level. The terms of trade certainly deteriorated slightly over the period, but to a much lesser extent than during the oil shocks of the 1970s due to the buoyancy of export prices: part of the shock was therefore dissipated abroad, while domestic consumers were protected by the price moderation measures put in place by the government. Finally, at the heart of the inflationary period, real wages experienced an unprecedented decline, especially when compared to the oil shocks.

However, this overall resistance of the corporate margin rate masks strong disparities between branches of activity. Data by branch for the most recent years are based on partial sources, still subject to revisions, and so they should be viewed with caution. Subject to this reservation, the margin rates of the energy branch and the manufacturing industry in 2023 stood at 9 points and 4 points respectively above their pre-health crisis level while the margin rate of market services fell by 1 point compared to 2019. This sectoral divergence can be accounted for mainly by the effect of the terms of trade and the price-setting method: the energy sector benefitted directly from the price increase, while service companies belatedly passed on the increases in their wage costs.

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In the short term, an increase in import prices reduced corporate margins

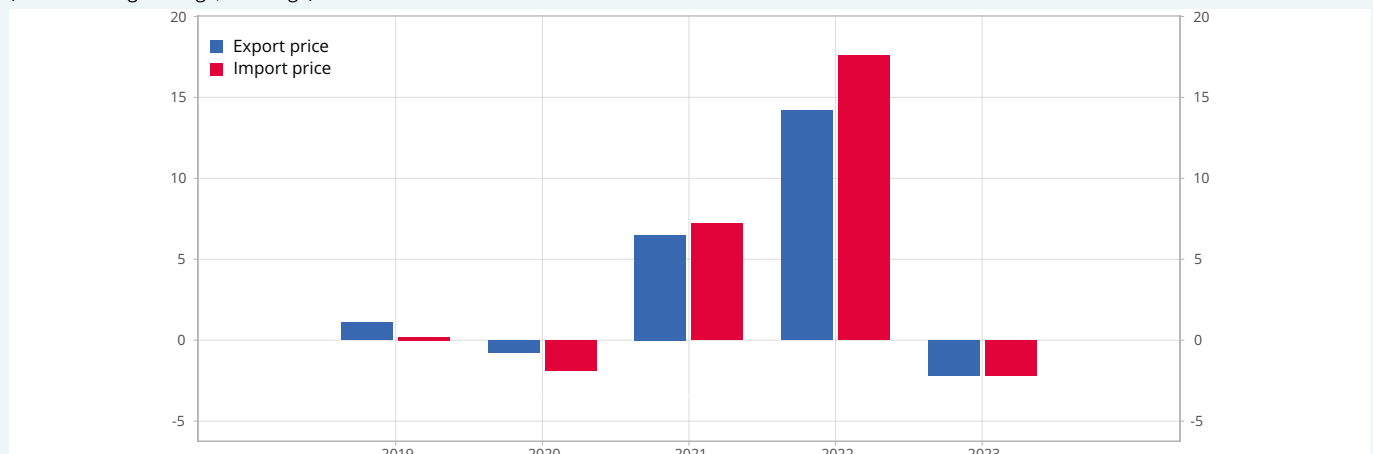
In the summer of 2021, amidst a recovery in global demand, bottlenecks appeared in supply chains, pushing import prices up. This increase was exacerbated by the invasion of Ukraine in February 2022. As a result, import prices increased by +7.2% in 2021 (► [Figure 1](#)) and then by +17.6% in 2022, before falling back slightly in 2023 (-2.2%) in line with the decline in commodity prices.

Such an increase in imported prices is likely to hold back the margin rate of non-financial corporations (NFCs), which is defined as the ratio of their gross operating surplus (GOS) to their value added (VA): it corresponds

schematically to the share of capital in the value added, i.e. the share of value added not used to pay wages. All things being equal, an increase in the price of imports increases the price of the intermediate consumptions of enterprises and therefore contributes to reducing the price of value added: consequently, for a given wage, an increase in the import price reduces the margins.

However, this reasoning only holds in the very short term because the price shock in imports is spread out: on the one hand, companies pass on the increase in their costs to their selling price; and on the other hand, employees, confronted with inflation, demand pay rises. The variation in the margin rate therefore reflects the ability of enterprisers to set their selling prices and negotiate pay rises.

► 1. Change in import and export prices since 2019 (annual average change, % change)



How to read it: in 2022, import prices increased by +17.6%, export prices increased by +14.2%.

Source: INSEE.

French economic outlook

Over the recent period, the corporate margin rate has been maintained due to the decline in real wages and the sharp rise in export prices

However, despite the significant rise in import prices observed over the recent period (+23% on an aggregate basis between 2020 and 2023), the margin rate of non-financial corporations increased, reaching 32.9% in 2023, two points above its 2019 level (30.9%). The usual breakdown of the variation in margin rate accounts for the mechanisms on which this dynamic performance is based, by defining the respective contributions of change in labour productivity, the real cost of labour,¹ the ratio of household consumer prices² to the NFC value-added price, and finally, taxes net of subsidies on production (► **Box Method**).

Notably, using change in the ratio between the NFC value-added price and the household consumer price, it is usually possible, within a scale factor, to measure the impact of the terms of trade on the margin rate, i.e. the ratio of variation in the price of exports to the price of imports (► **Figure 2**). In fact, while an increase in import prices leads to a greater rise in the consumer price than in the value-added price, conversely, an increase in export prices corresponds to an increase in the value-added price, but with no impact on domestic consumer prices, which, all other things being equal, improves the corporate margin rate. In this way, the ratio of the value-added price to the consumer price usually changes in a similar manner to the terms of trade, at a similar scaling factor: in fact, value-added and household consumption prices depend not only on export and import prices, but also on the domestic prices

of goods produced in France. Changes affecting the ratio between these two prices are usually less than fluctuations in the terms of trade by a factor of about three, which corresponds to the weight of foreign trade in French GDP (► **Amoureux and al., 2022**).

Over the recent period, however, the significant increase in import prices has been partially offset by an increase in export prices. Export prices for all goods and services were buoyant in 2021 (+6.5%) and then in 2022 (+14.2%), even though this increase remained lower than that of import prices (+7.2% in 2021 and +17.6% in 2022). Finally, in 2023, the decline in export prices was exactly the same as that in import prices (-2.2%). Consequently, the terms of trade, defined as the ratio of the export price index to the import price index, contracted in 2021 (-0.7%) and again in 2022 (-2.9%) before stabilising in 2023: this drop represented 0.3 GDP points in 2021, and then a further 1.3 points in 2022. This decline in the terms of trade in 2022 was therefore much smaller than that which occurred during the first oil shock (-13.2% in 1974, or -3.1% of GDP). French enterprises therefore managed to pass on a large share of the price shock in imports towards the rest of the world, thereby preserving their margins.

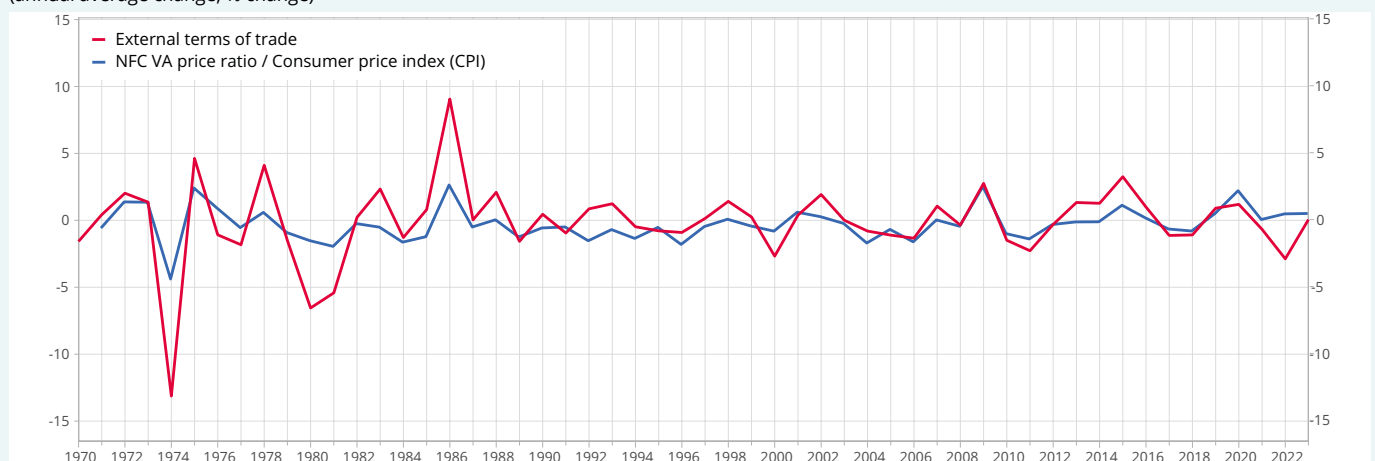
In addition, the implementation by the public authorities of various price moderation measures from 2021 and especially from 2022 onwards, especially those relating to energy products (► **Box** on tariff shield measures), enabled the modification of consumer prices without cutting value-added prices (► **Figure 3**): in 2022, the value-added price of non-financial corporations therefore increased more

1 Change in the cost of labour is traditionally due to changes in real wages per capita and the rate of social contributions payable by employers. Over the recent period, however, it should be borne in mind that the wages paid by companies has differed from the wages received by employees, because of the introduction of major payments by government in respect of short-time working during the health crisis. Consequently, the contribution of real wages (paid by companies) to the change in the margin rate can itself be broken down into a contribution for wages received by employees and a contribution for short-time working.

2 In this Focus, the household consumer price corresponds to the Consumer Price Index (CPI) and not to the household consumer price in the national accounts, in order to neutralise the effect of Financial Intermediation Services Indirectly Measured (FISIM).

► 2. Change in external terms of trade and in the ratio of NFC VA prices to consumer prices since 1970

(annual average change, % change)



Last point: 2023.

How to read it: in 2022, external terms of trade fell by -2.9%. Variation in the ratio of the NCF value added price to the household consumer price within the meaning of the CPI was +0.5%.

Source: INSEE.

vigorously than that of GDP, which followed the change in acquisition prices (+5.7% against +3.2%). All in all, the tariff shield reached almost €30 billion in 2022 and 2023 and consequently enabled the absorption of more than two thirds of the terms-of-trade shock. The consumer price used to break down the change in margin rate implicitly includes the tariff shield effect. Consequently, cumulatively over 2022 and 2023, the ratio of the value-added price of NFCs to consumer prices has tended to have a favourable effect on the corporate margin rate despite the deterioration in external terms of trade over the same period (► Figure 4).

However, it is also true that wages have not kept pace with inflation, which has contributed to the buoyant performance of the corporate margin rate in recent times: in fact, the average wage per capita received by employees (i.e. the wage paid by NFCs supplemented by the short-time working allowance paid by the authorities) increased less quickly than household consumer prices in 2022 and 2023, so that real wages fell back by about 2 points over two years (► Figure 5). This drop in real wages is

unprecedented when compared to the oil shocks of the 1970s, since real wages at that time continued to increase, especially during the first oil shock, and despite higher inflation, in a context in which annual gains in productivity were certainly higher than at present.

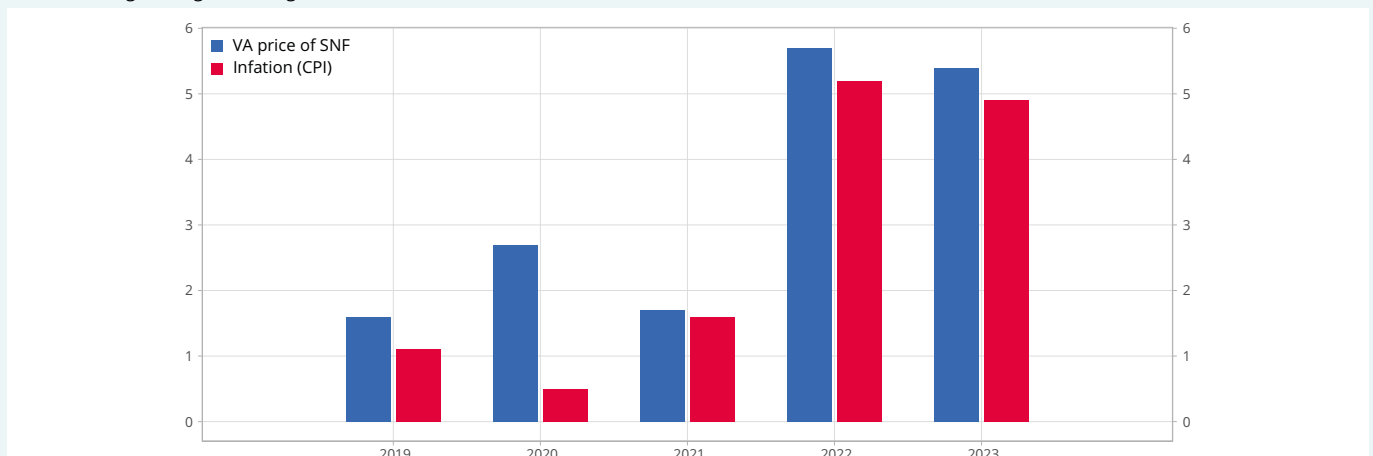
Finally, measures determined by the authorities since 2021 to reduce production taxes have helped support the corporate margin rate, to the tune of €11 billion in 2021, €4 billion in 2023 and an additional €1 billion in 2024.

Over the last two years, the margin rate of the energy branch has benefitted from the increase in the selling prices of its products, whereas the import price shock has hampered the margin rate of market services

While the margin rate of non-financial corporations has generally improved since 2019, this trend masks disparities between branches: the margins of the different branches of activity have evolved in different ways, due to the health crisis followed by the import price shock. In particular,

► 3. Change in NFC value added prices and household consumption since 2019

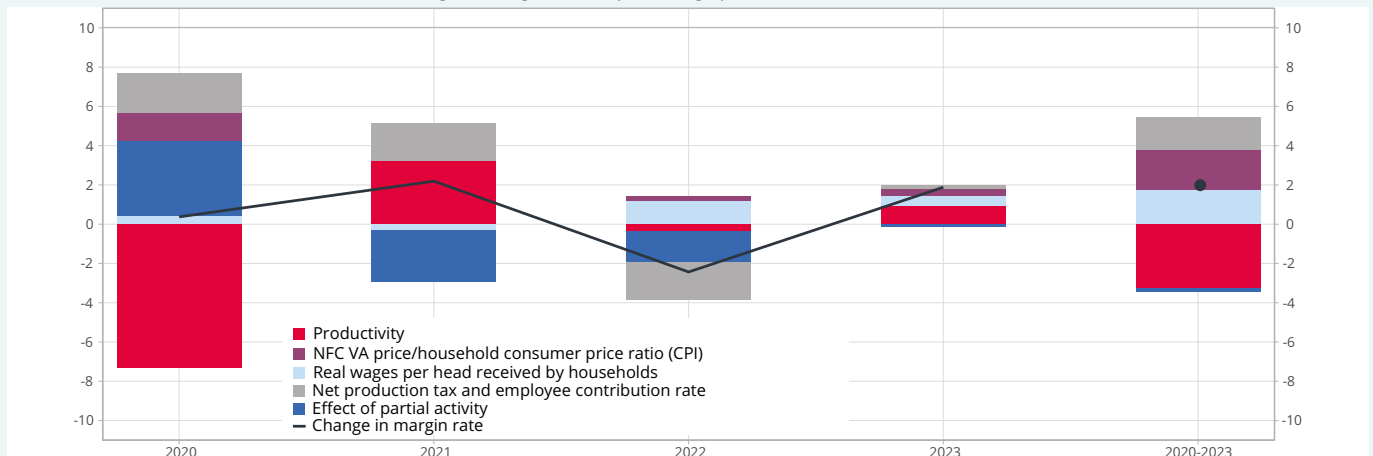
(annual average change, % change)



How to read it: in 2022, the NFC value added price increased by 5.7% whereas household consumer prices within the meaning of the CPI increased by 5.2%.
Source: INSEE.

► 4. Breakdown of NFC margin rate

(contribution of different factors and annual change in margin rate, in percentage points)



How to read it: in 2022, the NFC margin rate fell by 2.4 percentage points. The drop in real wages received by households made a positive contribution (+1.1 points).
Source: INSEE.

French economic outlook

the margin rate of the “Energy, water and waste” branch increased strongly (+9 points between 2019 and 2023) whereas the manufacturing industry margin rate increased more modestly (+4 points). In contrast, the margins of market services (excluding trade and excluding financial and real estate services) have slipped back (-1 point since 2019) (► **Figure 6**).

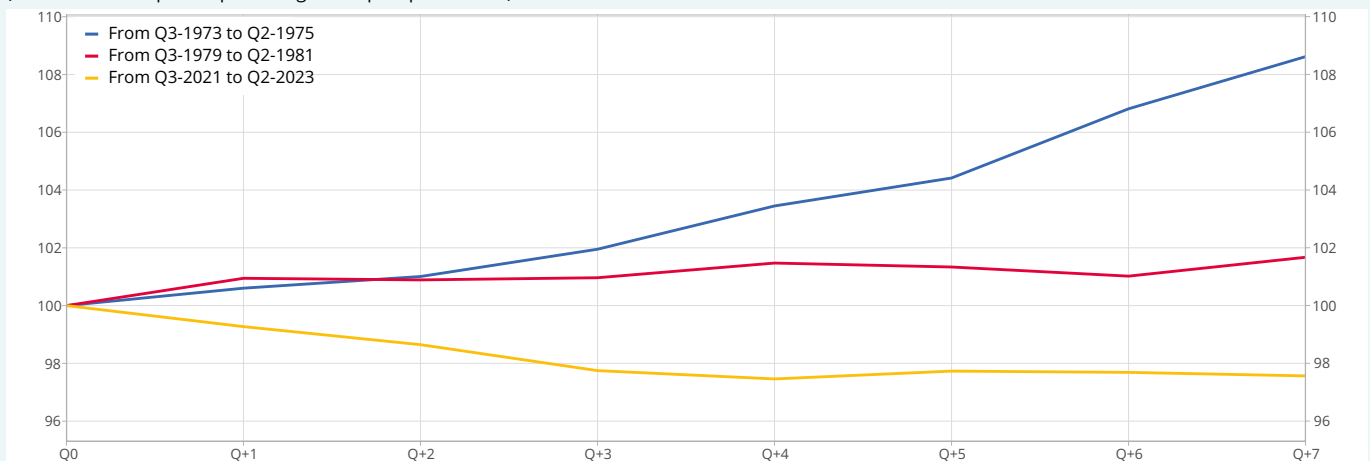
The economic breakdown of the margin rate (distinguishing between productivity effects, real wages per capita and the ratio of the VA price to the consumer price) can be further divided into sectoral levels (► **Box Method**). In this way, the economic determinants of variations in the margin rates can be assessed for each branch, including the role of value added prices in these main branches. However, margin rates by branch must be interpreted with care: detailed data from the structural

business statistics at branch level have not yet been incorporated into the National Accounts for 2022 and 2023. They may therefore need to be revised for the semi-definitive and definitive accounts.

In the “Energy” branch (which includes both energy producers and suppliers), the margin rate first declined in 2022 (-17.1 points), mainly due to the impact of the drop in productivity: in fact, employment in the sector was maintained, although activity collapsed due to the shutdown of numerous nuclear reactors. From an accounting perspective, the drop in subsidies relating to the contribution to the public electricity service (CSPE) also affected margins; however, this decline was caused by the increase in market prices of electricity, which also bolstered the margins of enterprises in the sector via their value-added price. A strong rebound then occurred in 2023

► 5. Change in real average wage per capita received by households

(base 100 in the quarter preceding the import price shock)



Note 1: the real average wage per capita (SMPT) received by households is obtained by deflating the nominal SMPT received by households (i.e. the SMPT paid by NFCs supplemented by the short-time working allowance paid by the authorities) by the household consumer price in the National Accounts for the 1973-1975 period and by deflating by the consumer price index for the period 2022-2023 in order to neutralise the effect of Financial Intermediation Services Indirectly Measured (FISIM).

Note 2: before 1978, payroll employment by institutional sector is not known. For the 1973-1975 period, we refer to payroll employment in the market sector.

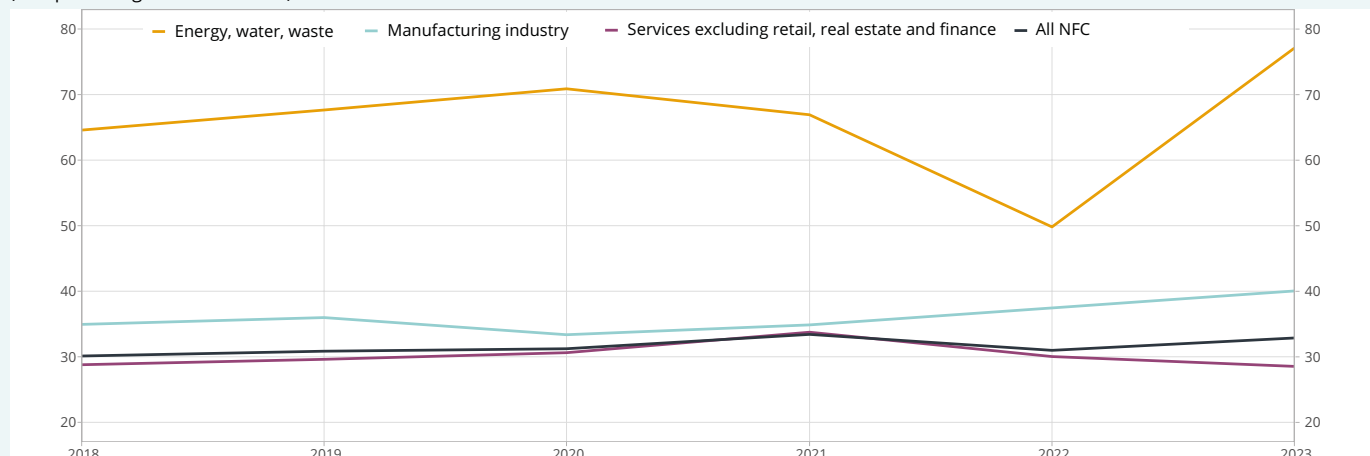
Note 3: for the 2021-2023 period, the average wage per capita is adjusted for the short-time working scheme.

How to read it: in Q2 2023, the average wage per capita received by households (i.e. the SMPT paid by NFCs supplemented by the short-time working allowance paid by the authorities) fell by 2.4% compared to Q3 2021.

Source: INSEE.

► 6. Change in the margin rate in different branches of activity since 2017

(as a percentage of value added)



How to read it: in 2023, the margin rate of the “Energy, water, waste” sector represents 77.1% of its value added.

Source: INSEE.

(+27.3 points): firstly, value added rebounded with the restarting of power plants (► [Box](#) on the contribution of energy to growth in 2023); secondly, the ratio of the value-added price to the consumer price continued to improve, contributing +16.7 points to the rise in margin rate (► [Figure 7](#)): the value added price in the energy branch improved significantly due to intermediate consumer prices dropping more sharply than producer prices.

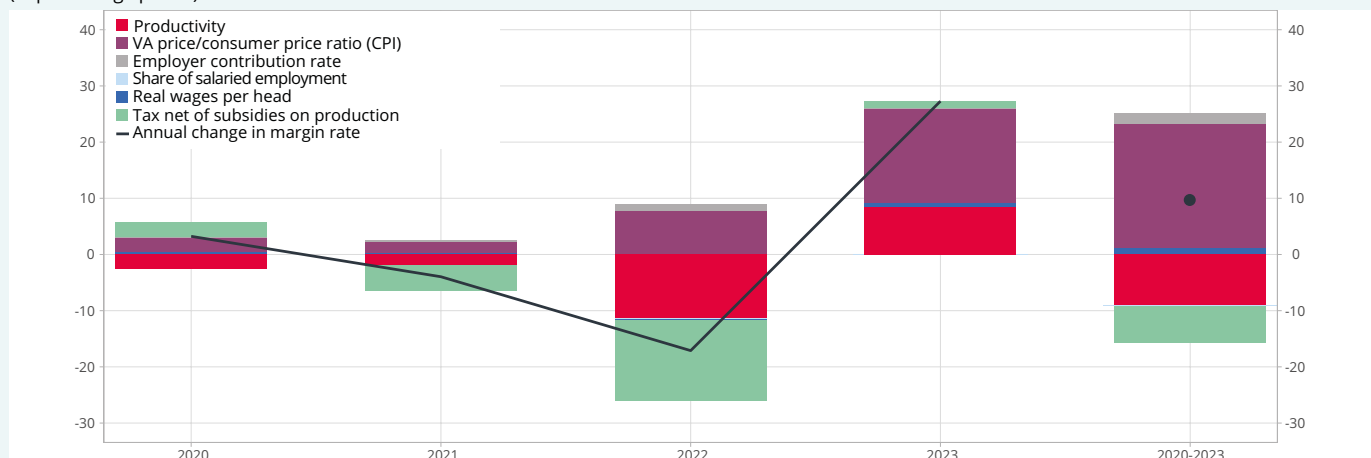
The margin rate in the manufacturing industry increased at the same rate in 2022 and 2023 (+2.6 points, ► [Figure 8](#)), but the contribution factors differed in the two years. In 2022, the margin rate of industrial enterprises increased, driven by the strong increase in the value-added price (+12.6%), as they had quickly passed on the increase in inputs to both their domestic and foreign customers. As a result, the increase in value-added prices exceeded the household consumer price, which was moderated by the tariff shield and by more inert components, notably the

price of services. In 2023, contributions to the increase were more balanced: subsidies on production increased significantly with the ramping up of the “energy” window for businesses, the decline in real wages bolstered margins, as did the value-added prices and the recovery of productivity. Confronted with the resurgence of inflation, industrial enterprises quickly passed on the increase in costs to their customers while negotiating moderate pay rises with their employees, in a much more favourable manner than during past import price shocks. However, this overall increase in the margin rate of manufacturing branches masks a disparity between the different industrial enterprises as they have not all been exposed to the increase in energy prices in the same proportions (► [Lafrogne-Joussier, Martin and Méjean, 2023](#)).

Finally, in market services (excluding trade, and excluding financial and real estate services), the margin rate has deteriorated in the last two years, impacted mainly by the

► 7. Breakdown of the annual change in margin rate in the “Energy, water and waste” branch

(in percentage points)



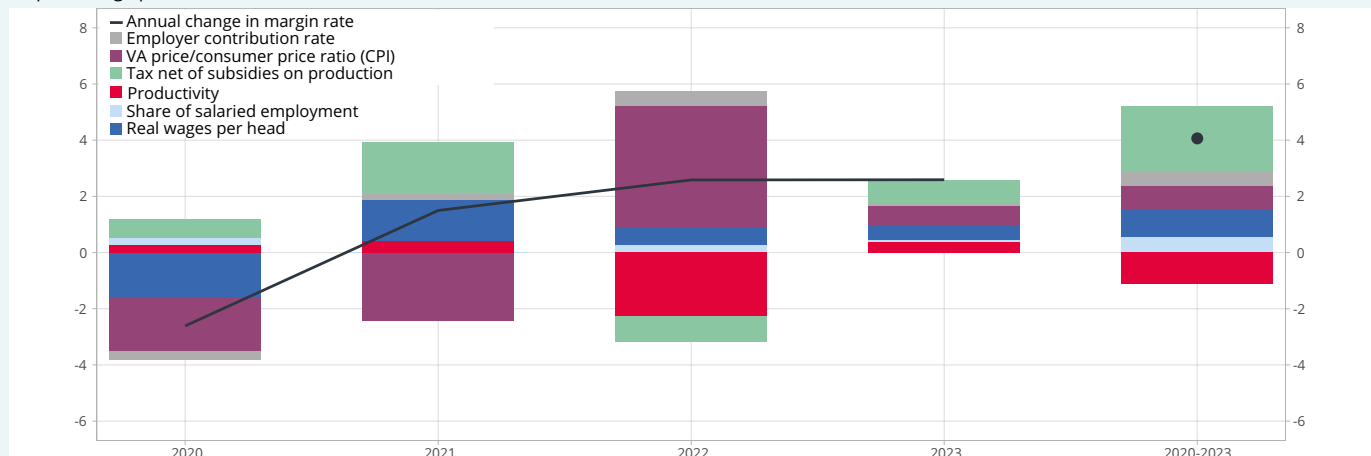
Note: for the “energy, water and waste” branch, taxes net of subsidies on production include public energy service charges.

How to read it: in 2022, the decline in productivity contributed -11.3 points to the change in the margin rate of the “Energy, water and waste” branch (-17.1 points).

Source: INSEE.

► 8. Breakdown of the annual change in the margin rate in the manufacturing industry sector

(in percentage points)



How to read it: in 2022, the decline in productivity contributed -2.3 points to the change in the margin rate of the manufacturing industry (+2.6 points).

Source: INSEE.

French economic outlook

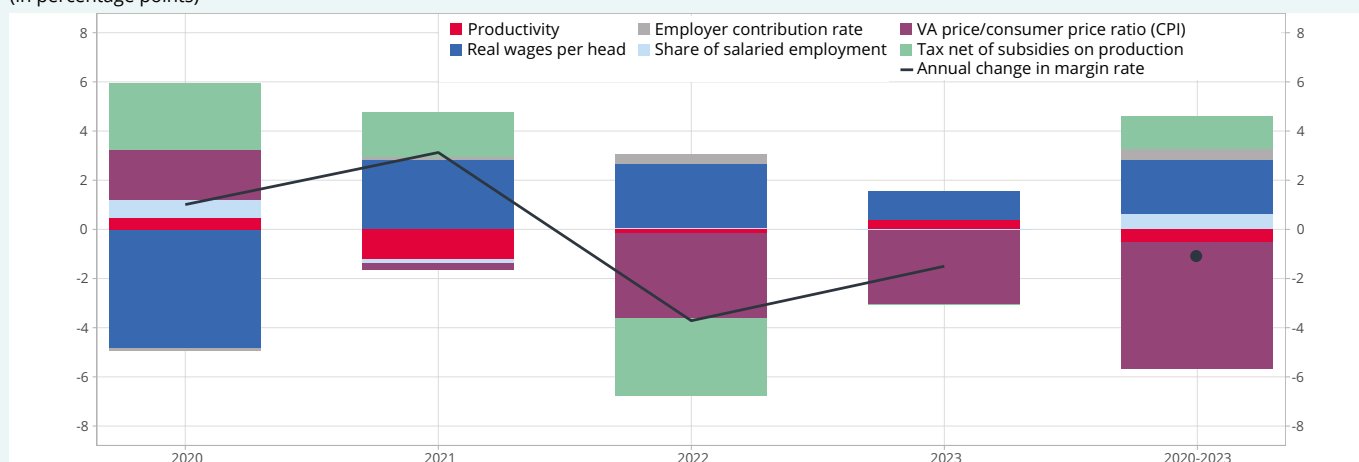
ratio of value-added prices to consumer prices (at -3.7 points in 2022 and -1.5 points in 2023, ► [Figure 9](#)). In fact, service enterprises are slowly passing on the increase in their costs in their margin rates (► [Benchekara and Roulleau, 2023](#)). These labour-intensive enterprises are strongly affected by second-round effects: the rise in import prices increases headline inflation via its volatile components (energy in addition to food and manufactured products), which leads to an increase in wage costs. However, this deterioration in margins may be only temporary: the prices of services are currently increasing faster than headline inflation (► [Sheet Consumer prices](#)) and enterprises in these sectors are therefore gradually rebuilding their margins. In addition, as in the rest of the economy, the rise in wages has been significantly lower than the rise in inflation, which facilitates the rebuilding of margins.

In 2024, corporate margin rates are expected to slow down in industry and continue to catch up in market services

In 2024, the overall margin rate of NFCs is likely to slow down, and reach 32.2% of their value added, after 32.9% in 2023 (► [Sheet Entreprises' earnings](#)). This decline is expected to be especially pronounced in industry, whereas the margin rate in the tertiary market sector should continue to pick up. In both the manufacturing industry and in energy, selling prices look set to decline, which would then affect margins. Conversely, in market services, value-added prices should remain relatively buoyant, with enterprises belatedly passing on the increase in their wage costs. ●

► 9. Breakdown of the annual change in the margin rate in the market services sector (excluding trade, excluding financial and real estate services)

(in percentage points)



How to read it: in 2022, the decline in productivity contributed -0.1 points to the change in the margin rate of market services excluding trade and excluding financial and real estate services (-3.7 points).

Source: INSEE.

The introduction of price-moderation measures by the public authorities enabled the moderation of consumer prices without cutting enterprises' selling prices

To limit the effect of the energy price shock on enterprises' earnings in 2022, the State implemented various measures (► [INSEE, 2024](#)), some in the form of tax cuts or increases in subsidies on products (► [table 1](#)). In the National Accounts, subsidies and taxes on products correspond to a monetary amount to be paid either per unit of quantity of the goods or services produced, or in the form of a percentage of a unit price. For example, taxes on products are mainly Value Added Taxes (VAT) or taxes on energy products. The specific feature of these taxes or subsidies is that they are recorded directly at price level and not recorded as transfers between sectors. In this way, they induce a difference between, on the one hand, enterprises' value added, valued at the selling price, and on the other hand, final jobs and GDP, which are valued at the acquisition price: such measures therefore have an impact on the ratio of the consumer price to the NFC value added price. In total, these measures amounted to around €29 billion in 2022 and 2023.

In terms of the amount, the main measure put in place was the tariff shield on electricity. The blocking of the regulated sales tariff (TRV) for households and for very small enterprises was counted as a subsidy on the product and limited the increase in the household consumer price (► [Bourgeois and Lafrogne-Joussier, 2022](#)). Likewise, the domestic tax on final electricity consumption (TICFE) was reduced to €0.5 per MWh in 2022 and 2023 for businesses, and to €1 per MWh for households, against €22.50 per MWh before. Finally, in 2022 the State raised the ceiling on the ARENH (Regulated Access to Historic Nuclear Electricity) volume by an additional 20 TWh that EDF was required to provide for alternative suppliers. The ARENH allowed alternative suppliers to access electricity produced by EDF's historic nuclear power plants at a regulated price, which was much lower than the market price in 2022. The alternative suppliers were then required to pass on this reduction in costs by limiting the increase in prices charged to their residential customers. This system resulted in both direct and indirect losses for EDF, amounting to €8.2 billion in 2022. In the National Accounts, this price drop is considered as a subsidy on products, paid by the State. At the same time, the electricity shock absorber enabled electricity prices to be reduced for the consumption of very small, small and medium-sized enterprises. This aid was also counted as a subsidy on products.

The tariff shield on gas benefitted households exclusively and also limited the increase in the price of household consumption. This also applied to the fuel reduction provisionally implemented by the State in 2022. ●

► 1. Amounts on "tariff shield" measures recognised in the National Accounts as a tax or subsidy on products

(in billions of euros)

Measure	2022	2023
Electricity tariff shield	16.6	26.5
Of which: reduction in TICFE*	6.2	8.8
Of which: blocking of the regulated sales tariff (TRV)	2.2	15.5
Of which: increase in the ARENH ceiling	8.2	
Of which: electricity shock absorber for VSEs/SMEs		2.2
Gas tariff shield	4.5	2.0
Fuel reduction	7.7	
Total	28.8	28.5

*In relation to revenue for 2021

Source: INSEE.

Method: Accounting breakdown of change in the margin rate of NFCs

The margin rate of NFCs is the ratio of the gross operating surplus (GOS) to value added (VA). In this Focus, the value-added price of NFCs is calculated by approximation as the price of value added in the market sectors, excluding financial and real estate services.

In the short term, the variation in margin rate can be broken down into the sum of contributions by labour productivity, the real cost of labour, the terms of trade and a term dependent on subsidies and taxes on production.

All other things being equal:

- an increase in apparent labour productivity, defined as the ratio of the value added of NFCs (by volume) and total employment of NFCs, raises the margin rate. As employees are more productive, the gross operating surplus increases for a given job;
- an increase in the real average wage per capita or in social contributions payable by employers, expressed in real value, holds back the corporate' margin rate;
- an increase in the ratio of household consumer prices (partly for imported goods) to the NFC price of value added (goods and services produced in the economic territory, partly exported), affects the corporate margin rate. In fact, to maintain a constant real average wage per capita, NFCs must increase employees' wages by a factor greater than the increase in the price of their value added. Such a situation leads to a deterioration in terms of trade (the ratio of the value-added price to the consumer price generally varies in the same way as the external terms of trade, to the nearest scale factor);
- an increase in taxes net of subsidies on production affects businesses' margin rate.

In formal terms, the margin rate of NFCs is expressed as follows:

$$\begin{aligned}
 TM &= \frac{EBE}{VA} = 1 - \frac{MS + S - I}{VA} = 1 - \frac{MS}{VA} + \frac{S - I}{VA} \\
 TM &= 1 - \frac{EM * SMPT_{SNF} * (1 + txcot)}{Y * P_{VA}} + \frac{S - I}{VA} \\
 TM &= 1 - \frac{EMP}{Y} * \frac{SMPT_{SNF} * (1 + txcot)}{P_{VA}} + \frac{S - I}{VA} \\
 TM &= 1 - \frac{EMP}{Y} * \frac{SMPT_{SNF} * (1 + txcot)}{IPC} * \frac{IPC}{P_{VA}} + \frac{S - I}{VA} \\
 TM &= 1 - \frac{EMP}{Y} * \frac{SMPT_{ménages}}{IPC} * \frac{SMPT_{SNF} * (1 + txcot)}{SMPT_{ménages}} * \frac{IPC}{P_{VA}} + \frac{S - I}{VA}
 \end{aligned}$$

Where:

EBE: gross operating surplus of NFCs (GOS);

VA: value added of NFCs by value;

Y: value added of NFCs by volume;

MS: payroll paid by NFCs;

EMP: total employment of NFCs in full-time equivalent (FTE);

SMPT_{SNF}: average wage per capita paid by NFCs;

SMPT_{ménages}: SMPT received by households, which corresponds to the SMPT paid by NFCs supplemented by short-time working paid by the authorities;

Txcot: employers' contribution rate;

IPC: household consumer price within the meaning of the Consumer Price Index (CPI);

PVA: value-added price of NFCs in the National Accounts;

S: subsidies on production;

I: taxes on production.

This breakdown can be used to isolate the effect of the short-term working scheme (term corresponding to the ratio of the SMPT paid by NFCs to that received by households). This scheme buoyed up the margin rate of NFCs in 2020 since a proportion of the wages received by households was paid directly by general government. In addition, in the breakdown in ► **Figure 4**, the contribution rate and taxes and subsidies on production terms are grouped together, in order to take account, in the period under consideration, of the transformation of the CICE (tax credit for encouraging competitiveness and jobs – considered in the accounts as a subsidy on production) into a reduction in social contributions.

This breakdown of the margin rate is valid at NFC level. However, the National Accounting System does not provide data that cross-references the institutional sector (NFC) with branches of activity. It is therefore possible to perform this breakdown at the level of each branch (this breakdown then concerns all the institutional sectors of the branch and not only the NFCs), provided that an additional factor is introduced, corresponding to change in the share of wage-earning employment within the branch (► **Laurent and Quévat, 2022**): this enables the inclusion of non-salaried sole proprietors whose work is remunerated via a “mixed income” which they pay themselves, recognised in the accounts, by convention, entirely in the gross operating surplus. When the share of employees in a branch declines, the margin rate of the branch automatically increases.

In formal terms, this breakdown by sector is expressed as follows:

$$TM = 1 - \frac{VHT}{Y} * \frac{SMPT * (1 + txcot)}{IPC} * \frac{VHS}{VHT} * \frac{IPC}{P_{VA}} + \frac{S - I}{VA}$$

Where:

VHT: total number of hours worked in the branch;

VHS: total number of employee hours worked in the branch.

When the economic breakdown of the change in margin rate is defined at sectoral level, it is not possible to break down the contribution of real wages paid by the NFCs into real wages received by households and the effects of short-time working.

These breakdowns of the margin rate of NFCs or of sectoral margin rates are of an accounting nature and therefore correspond to an ex ante effect, without taking the adaptation behaviour of enterprises into account. ●

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