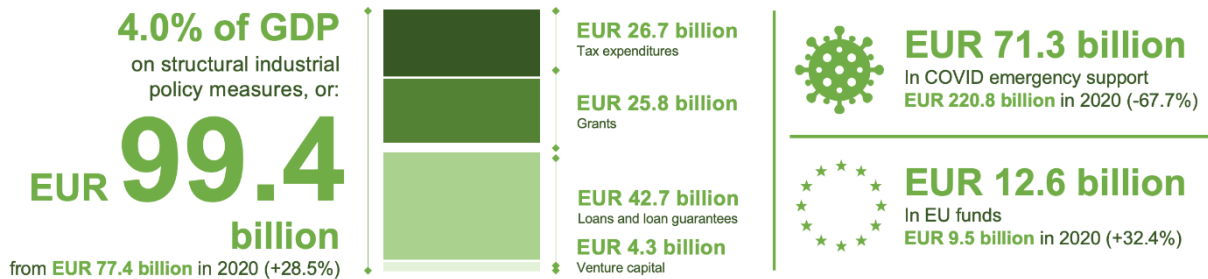


France: Quantifying Industrial Strategy

Highlights

- Industrial policy expenditures are significantly higher in France compared to countries in the benchmark (Canada, Denmark, Ireland, Israel, Italy, the Netherlands, Sweden, and the United Kingdom), both for grants and tax expenditures and for non-export financial instruments.
- France devotes significant amounts of industrial policy expenditures to support jobs and skills, by reducing labour costs, mainly through tax expenditures, and to a lesser extent by supporting apprenticeships, through grants.
- Among QuIS' participating countries, France is the second country with the highest non-export financial instruments after Italy. The bulk of these instruments is under the responsibility of BPI France and a large share of this support targets SMEs and intermediate-sized firms¹.
- French sectoral policies are targeted to the energy, and manufacturing sectors, for which support rates are higher than in the benchmark.

FRENCH INDUSTRIAL STRATEGY EXPENDITURES - 2021 NUMBERS



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The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

¹ This is an intermediate category between small and medium enterprises and large companies, defined by a French decree (<https://www.insee.fr/en/metadonnees/definition/c2034>).

The QuIS project



The 'Quantifying Industrial Strategies (QuIS)' project measures industrial strategies across OECD countries through harmonised data on industrial policy expenditures, their composition, their mode of delivery, and the characteristics of their beneficiaries. This allows participating countries to benchmark their industrial strategies against each other in terms of industrial policy expenditures, policy priorities, policy instruments and recipients.

The data gathered for each country were sent to the member states for additional checks and validation, also with questions regarding the detail of certain instruments as well as gaps in the available data. After countries' validation, the final cross-country data were compiled in a common database. Another relevant delivery of the QuIS project is the report 'Quantifying industrial strategies across nine OECD countries' published as an OECD Science, Technology and Industry Policy Paper, which consists in a cross-country analysis of the industrial strategies of the first nine countries participating in the project. Both the database and the report will be downloadable from <https://www.oecd.org/industry/industrial-policy-and-strategies/>.

General picture

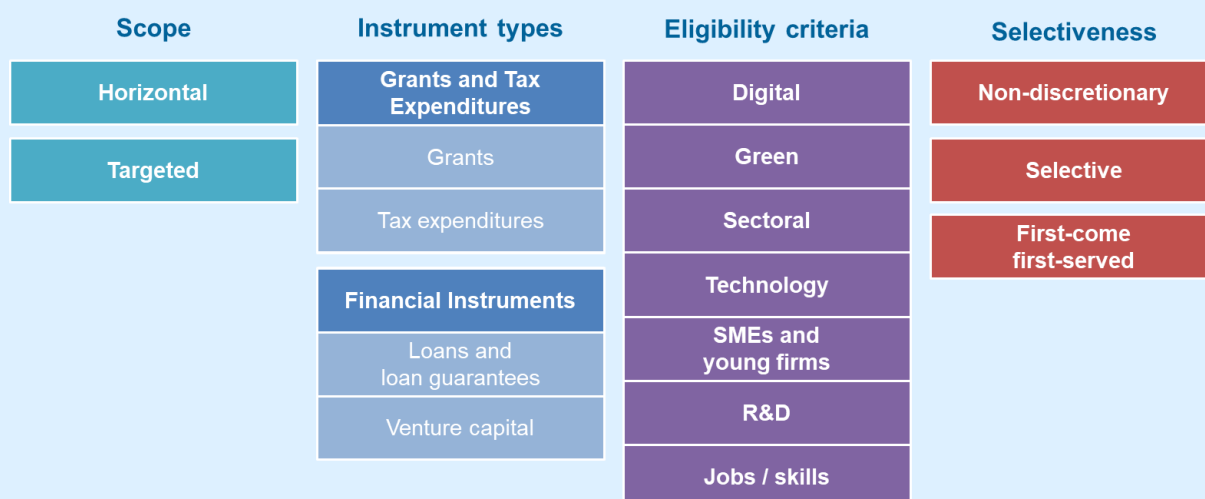
Industrial policy expenditures are significantly higher in France compared to the countries in the benchmark, both for grants and tax expenditures and financial instruments. Regarding grants and tax expenditures, France stands out with a significantly higher support to jobs and skills. These expenditures are aimed at reducing labour costs, mainly through tax expenditures and, to a lesser extent, grants to support apprenticeships. Regarding financial instruments, France is the second country with the highest non-export financial instruments among QuIS' participating countries. The bulk of these instruments is under the responsibility of BPI France where a large share of this support targets SMEs and intermediate-sized firms. French sectoral policies are targeted to the energy and manufacturing sectors, for which support rates are higher than in the benchmark. Green support is concentrated on the energy sector, but recent measures introduced in the recovery plan (*Plan de Relance*) tend to reduce this focus. The new investment plan 'France 2030', launched in October 2021 but not yet visible in 2021 industrial policy expenditures, has the potential to significantly affect this picture in the coming years.

Box 1. QuIS methodology

QuIS gathers publicly available data from many different and decentralised sources on industrial policy expenditures. For the case of France, the project focuses on annual industrial policy expenditures higher than EUR 46 Mn (0.002% of GDP in 2017). The period covered is 2019-2021 and the data track both structural policies and COVID-19 emergency support measures. Instruments targeting agricultural firms are excluded from the database and the analysis. Policy instruments are classified along four dimensions: scope, instrument type, eligibility criteria and selectiveness. The QuIS methodological paper outlines the scope and the definitions in more detail and can be found here: [oe.cd/il/QuIS](https://www.oecd.org/industry/industrial-policy-and-strategies/). Importantly, financial instruments, defined as the provision of loans, loan guarantees or equity investments, are measured through the so-called notional amounts method, which measures expenditures as the amount of financing (or guarantees) provided by public entities. This measure was chosen as it is the most widely available across countries. However, amounts obtained with this method are not directly comparable with grants and tax expenditures, so the two types of instruments are recorded and analysed separately.

Countries used to define the benchmark are Canada, Denmark, Ireland, Israel, Italy, the Netherlands, Sweden and the United Kingdom. Country notes are also available for these countries.

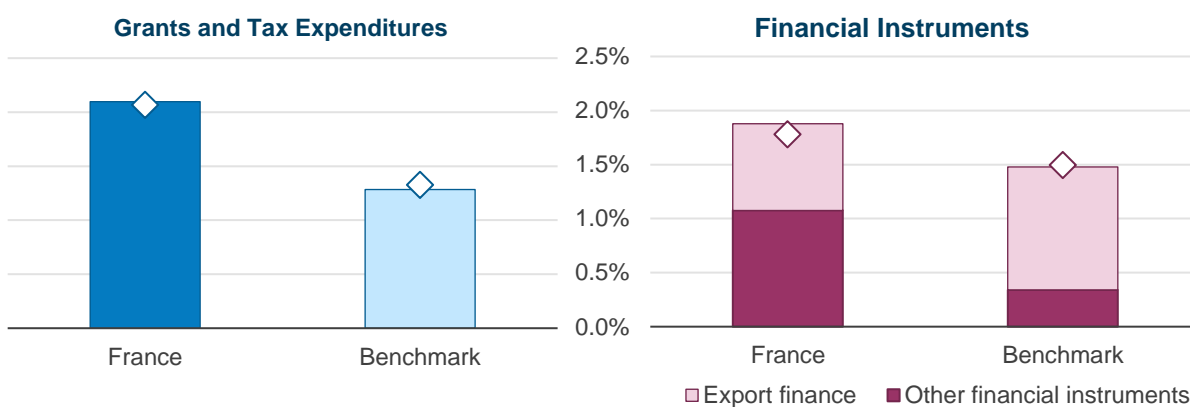
Figure 1. QuIS Data Categorisation



Note: Eligibility criteria are not mutually exclusive and some policies do not match any of the criteria

A. French industrial strategy has a strong focus on labour cost reduction

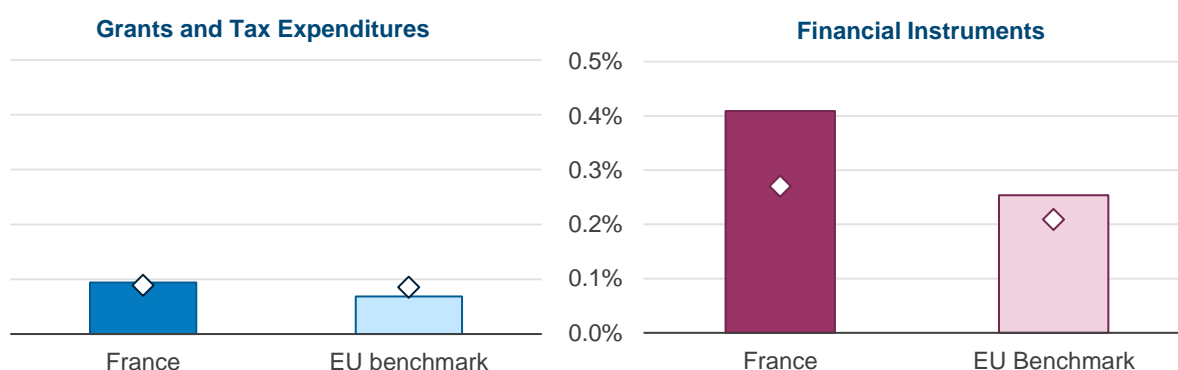
Figure 2. 2021 Industrial policy expenditures, % of GDP (diamonds – in 2019)



Note: Domestic and structural policies (i.e. excluding Covid and EU support).
Source: OECD calculations based on the QuIS database.

Figure 2 shows that French support, is higher than the benchmark in terms of both grants/tax expenditures (2.1% vs 1.3% of GDP), and financial instruments (1.9% vs 1.5% of GDP). The latter is driven by significantly larger expenditures on non-export financial instruments, whereas export finance in France is below the benchmark.

Figure 3. EU industrial policy support on grants/tax expenditures and financial instruments, 2021, % of GDP (diamonds – in 2019)

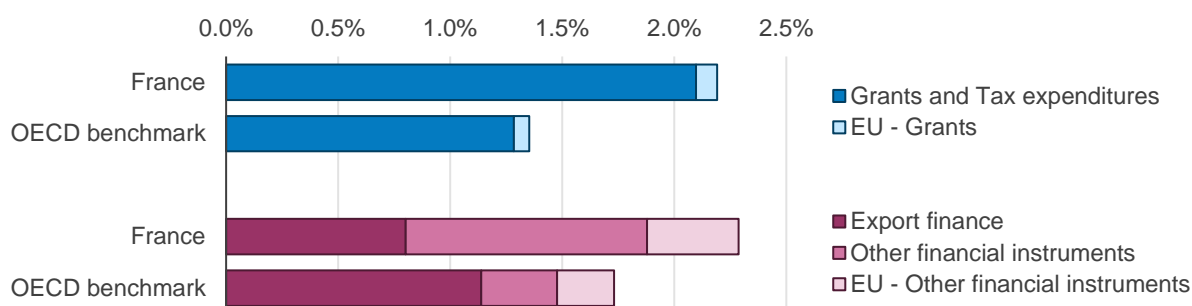


Note: EU benchmark = Denmark, Ireland, Italy, the Netherlands and Sweden.

Source: OECD calculations based on the QuIS database.

In 2021, France benefitted slightly more from EU industrial policy grants than the EU benchmark, as shown in **Figure 3 on the left** (0.09% vs 0.07% of GDP). The same is true for EU support through financial instruments, with France receiving 0.41% of GDP compared to the EU benchmark average of 0.25% of GDP (**Figure 3 on the right**). EU support in the form of grants is mainly driven by the European Regional Development Fund (0.08% of GDP), while EU support through financial instruments is mainly provided through loans from the European Investment Bank (0.15% of GDP) and the guarantees of the European Investment Fund (0.14% of GDP, including the ones provided via the European Fund for Strategic Investments – EFSI). Moreover, there was an increase in EU support through financial instruments from 2019 to 2021, driven by an increase in guarantees provided by the European Investment Fund (from 0.02% of GDP in 2019 to 0.14% in 2021).

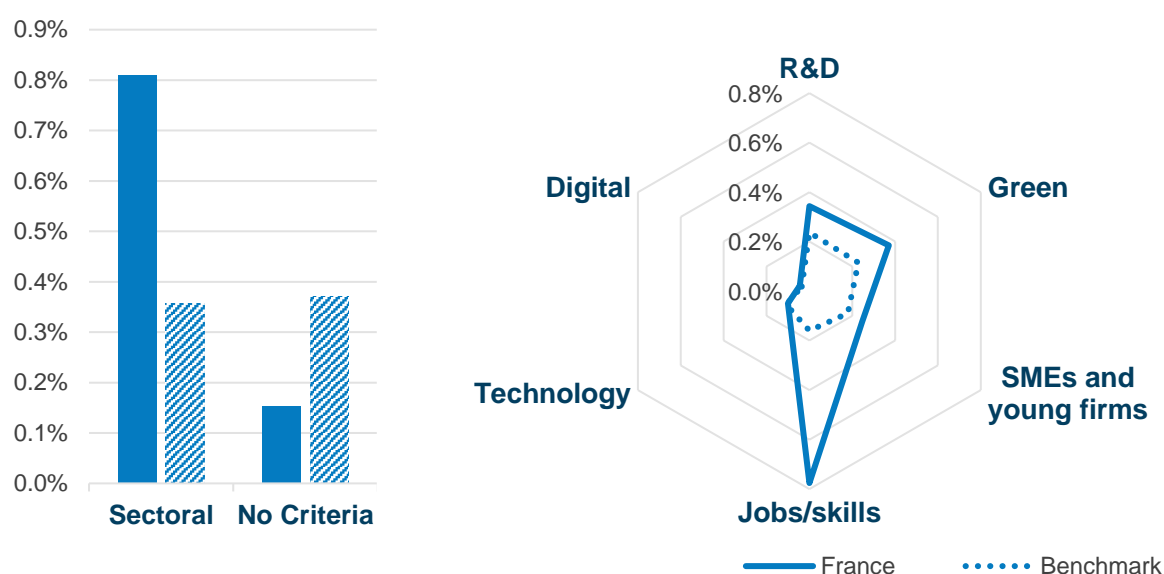
Summary Figure. Industrial policy expenditures by instrument type in 2021, as a % of GDP



Note: Includes EU support.

Source: OECD calculations based on the QuIS database.

Figure 4. Industrial policy expenditures (grants and tax expenditures) by eligibility criteria in 2021, % of GDP



Note: Structural policies (i.e. excluding Covid support).

Source: OECD calculations based on QuIS database

Regarding grants and tax expenditures, the priorities of the French industrial strategy are similar to those of the benchmark, except for a much stronger focus on sectoral and jobs and skills policies (**Figure 4**).

France's industrial strategy is characterised by a relatively high share of spending on jobs and skills (35% vs 11% in the benchmark – 0.78% of GDP vs 0.16% of GDP in 2021). Recent reviews of French industrial policies, although relying on a different scope of policy instruments, reach the same conclusion (France Stratégie, 2020). According to the methodology followed in this note, the generic reductions of social contributions for low wages (*Réductions Fillon*) are not included in industrial expenditures as they can be considered as part of the social contribution schedule. Their inclusion would have resulted on an even stronger focus on job and skills.

In 2021, sectoral policies represent 37% of expenditures in France, compared to 28% in the benchmark (0.8% vs 0.4% of GDP). The most important sectoral instruments are the purchase contracts to support renewable electricity in mainland France (*Soutien aux énergies renouvelables électriques en métropole continentale - Contrats d'achat*, 0.23% of GDP) and the Support for electricity generation in areas not interconnected to the mainland grid (*Soutien à la production d'électricité dans les zones non interconnectées au réseau métropolitain*, 0.09% of GDP). The share of green expenditures is slightly higher than for the benchmark (17% vs 15%). The most important green instruments are the aforementioned purchase contracts for renewable electricity (0.23% of GDP) and the support provided in the context of the Important Project of Common European Interest (IPCEI) on hydrogen (0.05% of GDP)².

Expenditures to support R&D amounts to 0.34% of GDP in France, higher than in the benchmark, where it is 0.24%. Still, with 16% of total grants and tax expenditures supporting R&D, France is below the benchmark average of 20%. The largest instrument is the research tax credit – *Crédit d'impôt recherche*, 0.26% of GDP. Expenditures targeting SMEs and young firms are higher than the benchmark as a share of GDP (0.25% vs 0.18%), but lower as a share of total grants and tax expenditures (11% vs 12%).

In 2021, the largest instruments targeting jobs and skills are the Tax Credit for Competitiveness and Employment (*Crédit d'Impôt Compétitivité et Emploi* – CICE – 0.28% of GDP) and support to apprenticeships (see below). CICE is being phased out and progressively replaced by generic reductions of social contributions for low wages, which are not within QuIS' scope. The focus of French industrial policy expenditures on jobs and

² Even though support provided through IPCEIs is allowed at the EU level, expenditures are borne by national governments.

skills is robust to the exclusion of CICE. Excluding the CICE, jobs and skills grants and tax expenditures still represent 0.50% of GDP, compared to 0.16% in the benchmark countries (and 26% of grants and tax expenditures, vs 11% for the benchmark).

France also stands out for a smaller share of expenditures that do not fulfil any of the criteria relative to the benchmark, as highlighted in **Figure 4**. The largest instruments in this category are lower tax rates for offroad gasoil for non-agricultural uses (*Tarif réduit du gazole non routier autre que celui utilisé pour les usages agricoles*, 0.04% of GDP), the hyperamortisation scheme (0.02% of GDP) and the patent box (*Taxation au taux de 10% des revenus issus de certains actifs de propriété industrielle*, 0.02% of GDP). The higher share for ‘no-criteria’ instruments for the benchmark is driven by instruments such as the Electricity tax deduction in Denmark (0.65% of GDP), whereas similar deductions are both smaller and sectoral in France, or the ‘Innovation Box’ in the Netherlands (0.16% of GDP), which is much larger than its French equivalent.

Regarding financial instruments, France provides less export finance compared to the benchmark (0.80% vs 1.14% of GDP). For instance, export finance represents 4.46% of GDP in Canada and 1.88% in Sweden in 2021. Excluding export finance, France’s support through financial instruments (excluding export support) is almost three times higher than in the benchmark (1.08% vs 0.34%). As explained in the next section, these financial instruments benefit to a large extent SMEs and intermediate-sized firms.

The new investment plan ‘France 2030’, launched in October 2021, consists of EUR 54 billion support over the next 5 years, but is not yet included in the 2021 industrial policy expenditures. This plan is likely to further increase France’s industrial expenditures, with an increased focus on R&D, the green transition and sectoral or technology-focused measures, therefore decreasing the share of expenditures directly linked to jobs and skills.

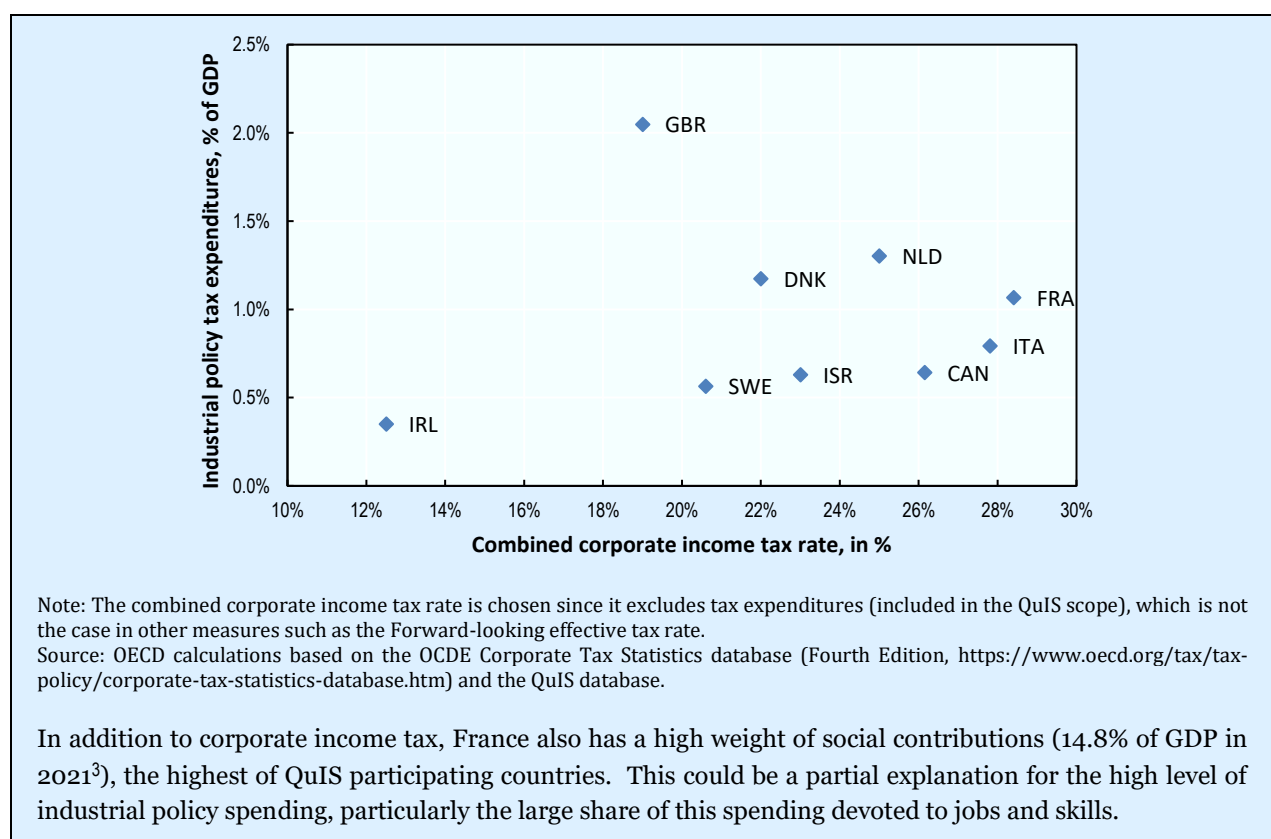
Box 2. Industrial policy tax expenditures and the baseline tax system

Differences in tax rates and tax base across countries are not reflected in industrial policy expenditures but may determine the extent to which countries rely on tax expenditures for industrial policy purposes, or more generally, the extent to which they support the corporate sector. Indeed, it could be the case that (1) countries with lower taxes have less leeway to provide tax expenditures, (2) tax expenditures are mechanically lower with lower taxes, and/or (3) some countries might consider lower baseline taxes and tax expenditures as partial substitutes for improving the competitiveness of their business sector.

It is therefore useful to compare industrial policy tax expenditures with a country-specific measure of the corporate tax rate, such as the ‘Combined Corporate Income Tax Rate’ from the OECD Corporate Tax Statistics database. This indicator is measured as the basic combined central and sub-central (statutory) corporate income tax rate given by the central government rate (less deductions for sub-national taxes) plus the sub-central rate. This indicator can be used to compare the standard corporate tax rate across countries and over time. As a statutory tax rate, this indicator measures the marginal tax that would be paid on an additional unit of income if there were no other provisions in the tax code.

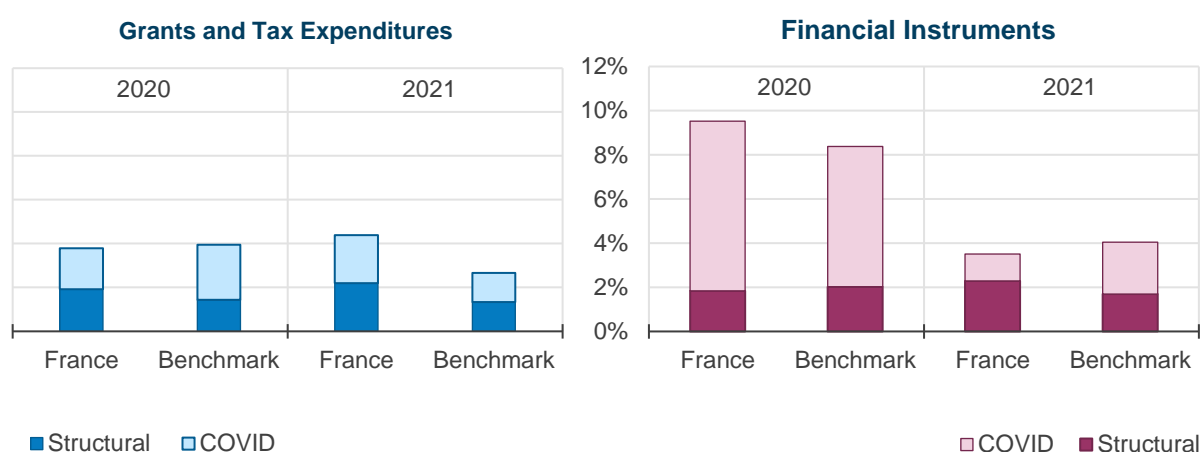
Figure 5 shows that France, which has high industrial policy expenditures compared to the benchmark (2.2% of GDP, of which 1.1% of GDP in tax expenditures), has the highest combined corporate income tax rate in 2021. The opposite pattern can be found for countries with low corporate income taxes, notably Ireland.

Figure 5. Industrial policy tax expenditures (as a percentage of GDP) against combined corporate income tax rate (in percentages), 2021



B. France largely resorted to financial instruments for COVID emergency support to businesses

Figure 6. COVID emergency support through financial instruments (left) and grants/tax expenditures (right), % of GDP



Source: OECD calculations based on the QuIS database.

When considering COVID emergency support (**Figure 6**), grants and tax expenditures in France were lower than the benchmark in 2020 (1.87% of GDP vs 2.51%). However, support through financial instruments was

³ <https://data.oecd.org/tax/social-security-contributions.htm#indicator-chart>

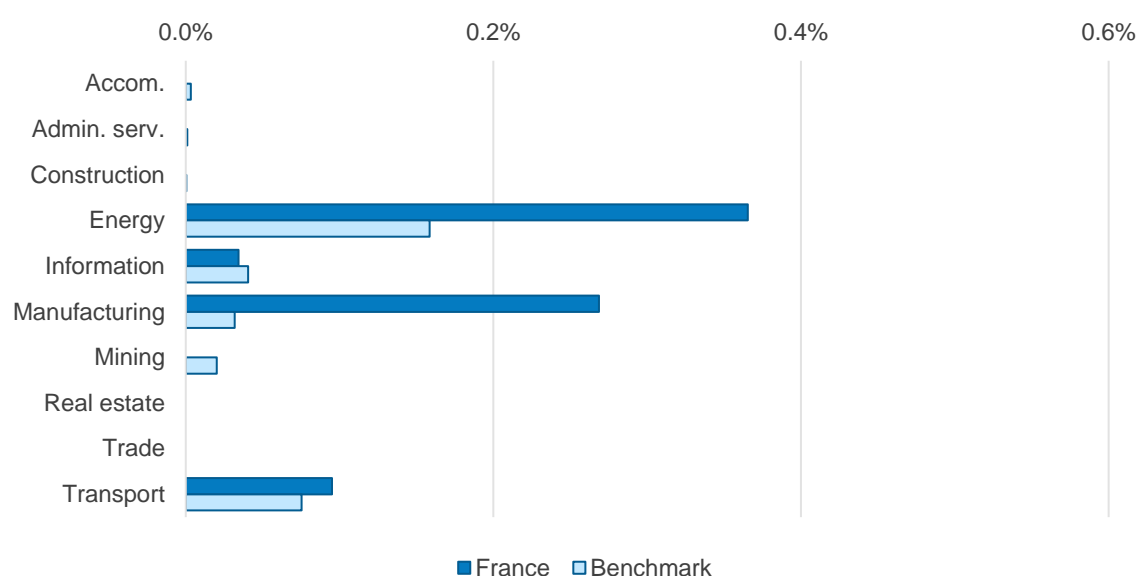
higher (7.69% of GDP compared to 6.36% for the benchmark). This is to a large extent driven by the state-guaranteed loan programme (Prêts garantis par l'État – 5.9% of GDP in 2020).

Financial instruments, and in particular the state-guaranteed loan programme, were quickly phased out in 2021, faster than in the benchmark. However, grants and tax expenditures only slightly decreased in France in 2021, much less than in the benchmark. Whereas the cost of the Covid short-time work scheme decreased significantly (*Activité partielle – Partie Covid* - from 1.1% to 0.3% of GDP), the cost of the solidarity fund, supporting companies and self-employed whose activity was affected by the Covid-19 and its consequences (*Fonds de solidarité*), doubled from 0.5% of GDP in 2020 to 1.0% in 2021.

Deep dive on France's industrial strategy

A. French sectoral policies are targeted to the energy and manufacturing sectors

Figure 7. Sectoral support by sector – Grants and tax expenditures as % of GDP, 2021



Reading example: In France, the amount of support, in the form of grants and tax expenditures, specifically directed to the energy sector represented 0.37% of total GDP, whereas it represents 0.16% in the benchmark.

Note: Includes EU support. Instruments targeting agricultural firms are excluded from the QuIS database and analysis.

Source: OECD calculations based on the QuIS database.

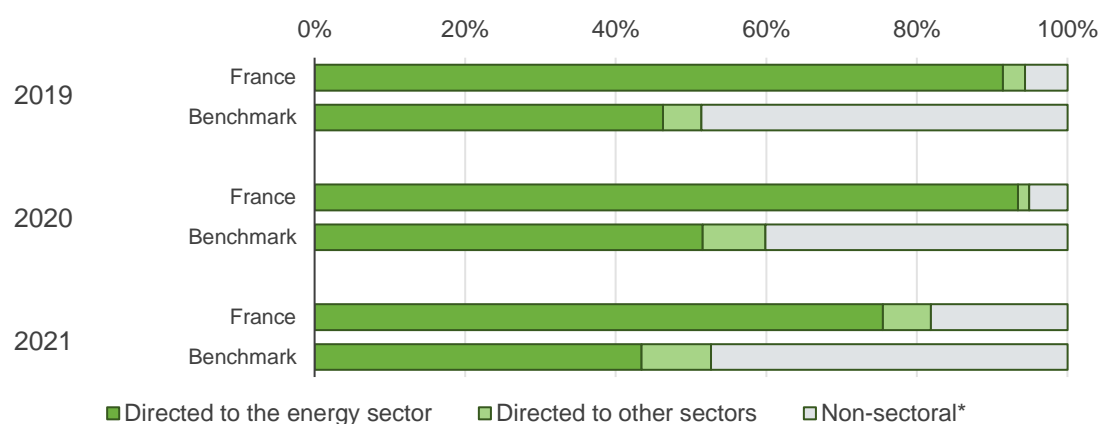
A sectoral lens reveals that industrial policy in France is primarily focused on two sectors (**Figure 7**), namely energy (0.37% of GDP) and manufacturing (0.27% of GDP). In these two sectors, support is higher than the benchmark as a share of GDP. The energy sector benefits exclusively from grants, the largest one being the above-mentioned purchase contracts for renewable electricity in mainland France (0.23% of GDP). Finally, the manufacturing sector benefits more than twice as much from grants (0.19% of GDP) than tax support (0.08% of GDP). The most significant instruments include the reduced tax rate on electricity for electricity-intensive industries and grants for Civil Aeronautics R&D (*R&D dans le domaine de l'aéronautique civile - CORAC*), accounting for 0.04% of GDP each. Support to the manufacturing sector is characterised by the large number of instruments (21, vs 5 for Energy).

When measured as a share of sectoral value added, support to the energy and manufacturing sectors remains higher than in the benchmark. While the conclusion on support to manufacturing differs from previous studies

(France Stratégie, 2020), this is explained by the new approach taken in this note rather than by differences in the underlying data⁴.

B. Green support is concentrated on the energy sector, but recent measures tend to reduce this focus

Figure 8. Sectoral composition of green support in France, % of total green industrial support in grants and tax expenditures



*"Non-sectoral" refers to policies that are not targeted to a specific sector. Nevertheless, some beneficiaries of these policies may belong to the energy sector.

Note: Includes EU support.

Source: OECD calculations based on the QuIS database.

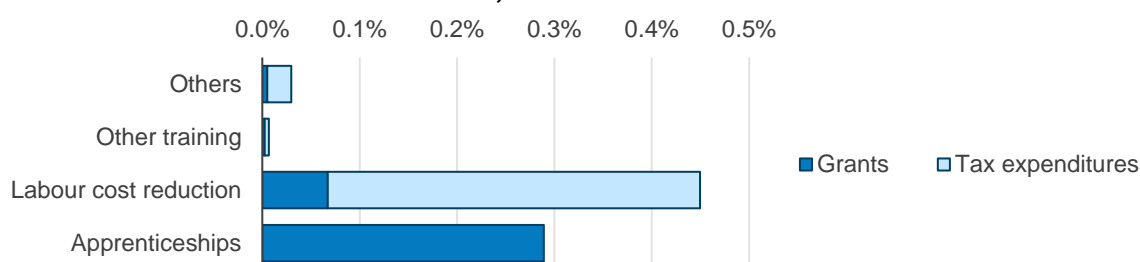
Green industrial policy spending is more focused on the energy sector than in other countries (**Figure 8**), and therefore relies less on non-sectoral instruments or instruments targeting other sectors. Green support to the energy sector is notably driven by the purchase contracts for renewable electricity sourced in mainland France (0.23% of GDP). Nevertheless, thanks to several measures introduced in the recovery plan in 2021 (*Plan de Relance*), green support is spreading beyond the energy sector, with the Important Project of Common European Interest (IPCEI) on hydrogen (0.05% of GDP), considered as non-sectoral as it targets simultaneously a large number of sectors along the hydrogen value chain, and support to energy efficiency and low-carbon heat in the manufacturing sector (*Soutien à l'efficacité énergétique et à l'adaptation des procédés des entreprises industrielles* and *Soutien à la chaleur bas-carbone des entreprises industrielles*, 0.01% of GDP for each instrument).

While tax expenditures account for a significant share of total funding, as in many other countries, green support in France is almost exclusively provided through grants.

⁴ France Stratégie (2020) concludes that the share of manufacturing in business support is lower than its share in value added, a statement that is not inconsistent with the results in Figure 7. First, Figure 7 presents the level of support in international comparison, whereas France Stratégie (2020) compares different sectors within France. Second, Figure 7 is restricted to sectoral instruments and France Stratégie (2020) shows that manufacturing, being less labour intensive than other sectors, benefits less from the large horizontal instruments aimed at reducing labour costs (see subsection C below).

C. Jobs and skills industrial policies support labour cost reductions and apprenticeships

Figure 9. Jobs and skills industrial policy expenditures, by objective and instrument, France, % of GDP in 2021



Reading example: In France in 2021, of the total job and skills industrial policy expenditures, the equivalent of 0.45% of GDP targets labour cost reductions, with most of this support channelling through tax expenditures; 0.29% of GDP targets apprenticeships, with the totality of the support being provided through grants.

Source: OECD calculations based on the QuIS database.

Most of the jobs and skills industrial policies aim to reduce labour costs (0.45% of GDP in 2021), mainly through tax expenditure (0.38% of GDP – with instruments such as the Tax Credit for Competitiveness and Employment – *Crédit d'Impôt Compétitivité et Emploi* – 0.28% of GDP) but also through grants (0.07% of GDP – with instruments such as the support for hiring of young people – *Aide à l'embauche des jeunes* – 0.04% of GDP). The generic reductions of social contributions for low wages (2.0% of GDP in 2021) are not considered as industrial policy expenditures, but rather as part of the tax schedule. Taking them into account would significantly accentuate the focus on labour cost reductions.

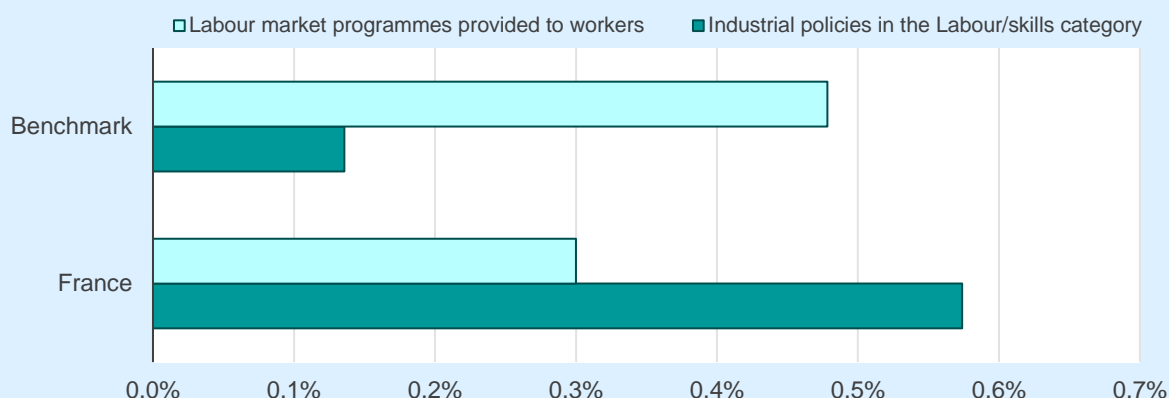
French jobs and skills industrial policies also largely support apprenticeships (0.29% of GDP in 2021), through grants, such as the exceptional support to employers of apprentices (*Aide exceptionnelle aux employeurs d'apprentis* – *AECA*, 0.24% of GDP).

Box 3. Interactions of French industrial policies in the jobs/skill category with active labour market programmes provided to workers

QuIS' scope includes labour policies geared towards enhancing competitiveness, investment, or economic development by providing direct support to firms, linked to their wage bill, employment, hiring or training expenditures. Hence, active labour market policies that are directly provided to workers are excluded, such as public employment services, institutional training, 'sheltered and supported employment and rehabilitation' and direct job creation.

To understand the high expenditure on industrial policies in the jobs/skill category, it is useful to compare it with the expenditures on labour market programmes provided to workers from the OECD Labour market Programmes Database. In particular, while France spends more than the benchmark on industrial policies in the jobs/skill category in 2020 (0.57% of GDP vs 0.14% of GDP), it spends less than the benchmark on active labour market programmes provided to workers (0.30% of GDP vs 0.48% of GDP) (**Figure 10**), whereas the opposite pattern is found in other benchmark countries, e.g. Denmark. This reflects two main features: 1) labour market policies that fall within the scope of QuIS and active labour market programmes may be considered substitutes by some countries, and 2) France provides a significant part of its support for jobs and skills through companies rather than directly to workers.

Figure 10. Labour industrial policies and labour market programmes provided to workers in France and the benchmark, % of GDP in 2020

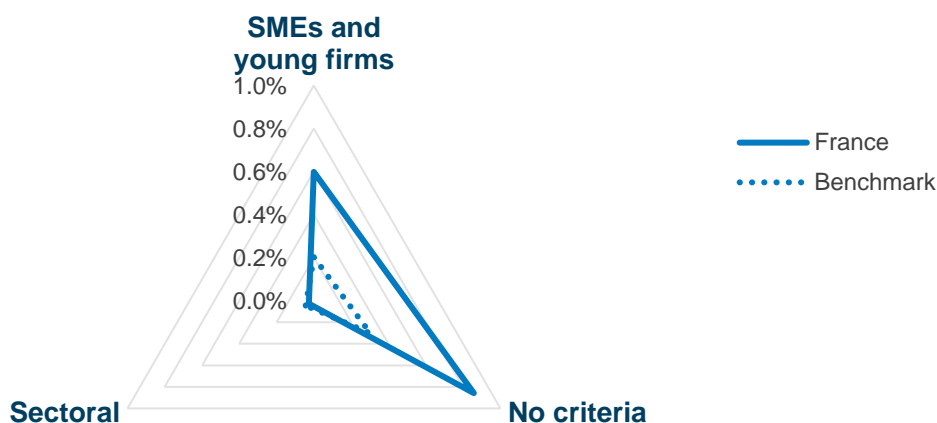


Source: OECD calculations based on the OECD Labour Market Programmes database and the QuIS database. Note: 2020 is the last available year of data on Labour Market Programmes (2019 for Israel, recent data are not available for the United Kingdom). The labour market programmes considered were “Public employment services”, “institutional training”, “Sheltered and supported employment and rehabilitation” and “Direct job creation”, which are the ones directly provided to workers. Passive labour market programmes (e.g. unemployment benefits) are not included since their main goal is to provide benefits to the unemployed rather than enhancing employment creation and human capital of the workforce.

D. A large share of financial instruments channels through BPI France and targets SMEs and intermediate-sized firms

France’s industrial policy financial instruments are centralised in BPI France, which manages the export finance schemes and almost 98% of the other financial instruments.

Figure 11. Industrial policy expenditures by eligibility criteria in 2021
Non-export financial instruments - % of GDP



Source: OECD calculations based on QuIS database

40% of support through financial instruments (0.60% of GDP) is focused on firms below a certain size threshold (and therefore tagged as ‘SMEs and young firms’ according to the methodology followed in this project, Criscuolo et al., 2022), consistently with BPI France’s mandate to support SMEs and intermediate-sized firms. Such instruments include for example BPI France’s guarantees (0.26% of GDP) and its loans with guarantees (0.19%

of GDP). The share of financial instruments targeting SMEs and young firms is only 34% in the benchmark and represents only 0.20% of GDP.

58% of financial instruments do not fulfil any of the criteria (0.86% of GDP), notably BPI France's 'Short term loans and use of trade claims as collateral' (*Prêts de court terme et mobilisation de créance* – 0.29% of GDP) and BPI France's equity investments (estimated to represent 0.15% of GDP in 2021, excluding investments linked to the 'Invest for the Future Plan' – *Programme d'investissements d'avenir*). A significant share of these amounts might nevertheless be invested in SMEs and intermediate-sized firms.

Loans represent the majority of financial instruments (55% in 2021, vs 50% for the benchmark), with guarantees amounting to 30% of financial instruments (vs 36% for the benchmark), and equity investments 15% (vs 14% for the benchmark).