

MARCH 2023

**OVERVIEW OF SFDR
CLASSIFICATIONS IN THE FRENCH
FUNDS' UNIVERSE AND
PORTFOLIOS' EXPOSURE TO FOSSIL
ENERGIES AT THE END OF 2021**

**PIERRE-EMMANUEL DARPEIX
ANNE DEMARTINI**

This study was coordinated by the Research, Financial Stability and Risk Division. It builds on sources that are considered to be reliable but whose comprehensiveness and accuracy cannot be guaranteed. The views expressed in the “Risk and Trend Mapping” series are those of the authors; they do not necessarily reflect the position of the AMF.

Copying, distributing or reproducing this research paper, in full or in part, is subject to prior express written authorisation from the AMF.

ABSTRACT¹

This study targets two objectives:

- Provide an initial estimate of the breakdown of the approximately 10,600 collective investment undertakings domiciled in France at end-2021 in accordance with the categories introduced by SFDR; and
- Compare these classifications with the portfolios' exposure to fossil fuel industries (for the four main asset classes: equity funds, bond funds, diversified funds and money market funds).

This assessment therefore does not take into account the possible reclassifications made subsequently by some funds, especially over the fourth quarter of 2022.

At 31 December 2021, one-fifth of French funds, representing half of the assets under management promote environmental or social characteristics ("Article 8 funds") or claim a sustainable investment objective ("Article 9 funds"). The former alone account for more than 47% of assets under management. Article 9 funds, meanwhile, represent 3% of the total net assets and are relatively more numerous among equity funds.

Generally speaking, Article 8 and Article 9 *equity* funds have a lower exposure to fossil fuel industries than their Article 6 equivalents. The results are far less clear for the other fund types and the differences of exposure to fossil fuel sectors between Article 8 and Article 6 funds are only seldom significant in the statistical sense of the term. A specific analysis of exposures towards companies identified as fossil fuel developers (i.e. building new production capacity) leads to a similar conclusion. These observations suggests that the definition of Article 8 funds under SFDR is probably not very discriminating and the application of SFDR in its initial stage (before the entry into force of the regulatory technical standards, on 1 January 2023) could have resulted in a divergence between the expectations expressed by investors and actual practices.

¹ We wish to thank Gunther Capelle-Blancard, Delphine Lautier, Thierry Roncalli and Boris Vallée, members of the AMF Scientific Advisory Board, for their comments and suggestions on previous versions of the article. Any errors and omissions that may remain are naturally solely our responsibility.

INTRODUCTION

The Sustainable Finance Disclosure Regulation (SFDR) came into effect on 10 March 2021, and increased the environmental and social transparency requirements in the finance industry, including in the asset management sector. In particular, SFDR requires that all funds disclose information on how they take environmental, social and governance (ESG) risks into account, as well as the potential impact of those risks on the value of investments. For funds stating an environmental and social ambition, additional information has been required since the start of 2023.

Some market participants, such as Morningstar,² regularly publish analyses on the implementation of SFDR since its entry into force at the European level. The commercial data provider observes, for example, that the market share of funds with an environmental or a social ambition within the meaning of the SFDR became a majority from mid-2022. This trend can partly be explained by “upgrades” in the classification of funds previously considered non-ESG and now classified as stating a extra-financial ambition, reflecting, according to Morningstar, a reinforcement of fund managers’ processes to capture the extra-financial dimension of their investments, in particular through the inclusion of stringent criteria (such as reduction targets for greenhouse gas emissions) or even sometimes a radical change in the strategy adopted.³ However, Morningstar also observed a wave of “downgrades” at the end of 2022 among the funds considered most ambitious from a social and environmental viewpoint⁴ in the run-up to the entry into force, at the start of 2023, of the pre-contractual and periodic obligations to which these products are subjected.⁵

The Dutch market authority (Autoriteit Financiële Markten – AFM)⁶ published an initial review of the application of SFDR in its market at the end of 2021. Following a general overview of how asset managers chose to classify their funds with regard to sustainability, the AFM assessed whether the transparency requirements stipulated by SFDR were complied with, based on an analysis of the prospectuses of a sample of funds with an environmental and/or a social ambition. The AFM noted numerous possible areas for improvement. In general, it considers the information provided as being of a very generic nature, too imprecise and insufficiently concrete and objective.

The approach adopted here is somewhat different. **The aim is not to conduct a supervisory exercise to verify compliance with SFDR, but to produce an overview of the SFDR classifications breakdown for the French collective investment management market as a whole at end-2021. This assessment therefore does not take into account the possible reclassifications made subsequently by some funds, especially over the fourth quarter of 2022.** Secondly, and following on from the third joint AMF-ACPR report monitoring and assessing the commitments made by French financial institutions published in the autumn of 2022,⁷ the characteristics of French investment funds, and in particular their SFDR classifications, are compared with their portfolios, again at end-2021. In this analysis, emphasis is put on the environmental dimension of ESG.

Several variables of interest are compared across the SFDR classifications for the four main asset classes, namely equity, bond, diversified and money market funds:

- funds' exposures to green bonds, sustainability bonds, social bonds or sustainability-linked bonds (SLBs);
- funds' exposures to companies active in the fossil energies sector; and
- lastly, and more specifically, funds' exposures to coal or oil & gas developers.

The purpose of the analysis is thus to determine whether the funds announcing more ambitious sustainability features differ, in their investments, from other funds.

² See, for example, Bioy, Hortense (2021). [SFDR: Overview of Articles 8 and 9](#). Morningstar, 8 November 2021 and Bioy, Hortense (2022). [SFDR: 2021 review of Articles 8 and 9](#). Morningstar, 19 April 2022.

³ See, in particular, Bioy, Wang and Carabia (2022). [SFDR Article 8 and Article 9 Funds: Q3 2022 in Review](#), Morningstar, 27 October 2022.

⁴ Bioy, Wang and Carabia (2023). [SFDR Article 8 and Article 9 Funds: Q4 2022 in Review](#), Morningstar, 26 January 2023.

⁵ [Delegated Regulation \(EU\) 2022/1288 of the Commission of 6 April 2022 supplementing Regulation \(EU\) 2019/2088 of the European Parliament and of the Council](#).

⁶ AFM (2021). [Review of implementation of SFDR requirements by managers of Dutch collective investment schemes](#), AFM, September 2021.

⁷ ACPR, AMF (2022). [Monitoring and assessing the climate commitments made by French financial institutions – Third joint ACPR/AMF report](#), October 2022, 136 p.

1. A FEW REMINDERS CONCERNING THE APPLICABLE REGULATIONS

Central to the European Union's action plan on sustainable finance, together with the *Taxonomy Regulation* of 2020⁸ and the upcoming *Corporate Sustainability Reporting Directive* (CSRD),⁹ the Sustainable Finance Disclosure Regulation of 2019 (SFDR)¹⁰ aims to encourage the orientation of capital flows towards sustainable activities through the harmonisation and reinforcement of transparency requirements regarding sustainability in the financial services sector. SFDR applies to all financial products distributed in Europe (investment funds, be they UCITS or AIFs,¹¹ retirement savings products, insurance investment products, management mandates, etc.; only are structured products excluded from the scope), to financial market participants (insurers, investment firms, pension institutions, fund managers) as well as to financial advisers and insurance advisers, in order to improve product comparability in terms of sustainability for end investors and maximise the impact of the Regulation.

According to the double materiality principle, in particular, financial market participants are required to provide information on how the following aspects are accounted for in making their investment decisions or in their investment advice processes:

- the sustainability risks (Article 3), in other words the consequences that an environmental, social or governance-related event could have for the value of the investment (financial materiality / outside-in risks);
- for firms with more than 500 employees,¹² the main negative impacts that the firm could generate regarding sustainability by its investment decisions (Article 4), in other words the impact of the firm's investment decisions on the stakeholders, e.g. regarding environmental, social and personnel issues, respect for human rights and fight against corruption (environmental and social materiality / *inside-out risks*).

SFDR also introduces a classification of financial products organised around three categories defined according to the stated level of environmental and social ambition and whose name derives from the articles of SFDR to which they refer:

- **"Article 9"** financial products, which present a **sustainable investment objective**;
- **"Article 8"** products, which **promote sustainable characteristics, taking ESG criteria into account within the investment process, but do not pursue a sustainable investment objective**;
- products which come within neither of the two preceding categories and can therefore not be presented as sustainable, which constitute the residual **"Article 6"** category.

For all financial products subject to the Regulation – therefore including Article 6 funds – the SFDR requires that financial market participants disclose information in the pre-contractual documentation (prospectus, mandate contracts)¹³ to describe how sustainability risks are taken into account in investment decisions and the likely

⁸ [Regulation \(EU\) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment.](#)

⁹ At the date of writing the study, the draft CSRD directive has been approved by the [European Council](#) and the [European Parliament](#).

¹⁰ [Regulation \(EU\) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector.](#)

¹¹ UCITS Directive: [Directive 2009/65/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities \(UCITS\)](#);

AIFM Directive: [Directive 2011/61/EU of the European Parliament and of the Council of 8 June 2011 on Alternative Investment Fund Managers.](#)

¹² NB: Firms with less than 500 employees which might choose not to comply with these requirements must nevertheless provide clear information on the reasons for this choice (*comply or explain* – cf. Art. 4.1.b).

¹³ NB: Although Article 6.1 of SFDR seems to require that information be provided in the pre-contractual documentation in the broadest sense, Article 6.3 specifies for each type of product the document to be taken into account. For funds, this means the prospectus (cf. in particular Article 6.3.a for AIFs and Article 6.3.g for UCITS). Consequently, sustainability information is apparently not required in the other pre-contractual documents, and in particular in the Key Investor Information Document (KIID).

impacts of these risks on the product's returns. Article 8 and Article 9 products, meanwhile, are subject to additional transparency requirements: pre-contractual information on how these characteristics or this objective will be complied with, periodic information on the achievement of objectives and compliance with the characteristics, and additional information, notably concerning the methodology adopted.

SFDR came into effect on 10 March 2021 but its implementation is taking place gradually: while the classification of financial products as Article 6, Article 8 or Article 9 has been required since March 2021, the Regulatory Technical Standards (RTS) defining the pre-contractual and periodic information expected for Article 8 and Article 9 products came into effect on 1 January 2023.¹⁴

Let's emphasise that the categorisation of funds according to the SFDR classification is performed by the asset management companies on a self-reporting basis. Moreover, the concept of "**sustainable investment**" is defined by SFDR (Article 2(17)) very generally as ***an investment in an economic activity that contributes to an environmental or social objective, provided that such investments do not significantly harm other environmental or social objectives and that the investee companies follow good governance practices.***¹⁵ Given the lack of more detailed and objective criteria, one notes a relative heterogeneity in the implementation of SFDR classifications from one financial market participant to another.

Another aspect needs be highlighted: **SFDR introduces transparency requirements but creates no minimum standard for market participants.** For instance, Article 8 fund managers are not prohibited from investing in securities issued by fossil fuel developers or coal, oil and gas producers. However, Delegated Regulation 2022/1288 specifies the information to be published in periodic reports on the proportion of investments in these sectors.¹⁶ Regarding Article 9 products, it adds that the sustainable investment objective must be quantified. Moreover, market participants must be able to demonstrate that this sustainable investment objective causes no significant harm to other environmental or social objectives (the "Do No Significant Harm" principle: DNSH) by disclosing and analysing the **Principal Adverse Impacts (PAI) that the firm could generate**, such as the proportion of exposure to fossil energies, but here again the SFDR imposes no limitation or formal exclusion on investments.

It is essential to understand the philosophy of the SFDR, which is very atypical: the aim is to combat greenwashing by requiring that those market participants who claim a sustainable approach for their financial products disclose information enabling investors to make their own assessment of the products' sustainability. In this regard, the slightest mention of a sustainable characteristic in a product's documentation is sufficient to consider it as coming under Article 8 of SFDR ("promotion of sustainable characteristics"), and therefore imposes the disclosure of additional information. The classification of a fund in the Article 8 category of SFDR is therefore neither a label nor a guarantee of quality.

With regard to Article 9 funds, the European Commission specified in a Questions and Answers document released in July 2021 that they should comprise only sustainable investments within the meaning of SFDR (with the

¹⁴ [Delegated Regulation \(EU\) 2022/1288 of the Commission of 6 April 2022 supplementing Regulation \(EU\) 2019/2088 of the European Parliament and of the Council.](#)

¹⁵ The definition set out in [Article 2\(17\) of the SFDR](#) is as follows: "*'sustainable investment' means an investment in an economic activity that contributes to an environmental objective, as measured, for example, by key resource efficiency indicators on the use of energy, renewable energy, raw materials, water and land, on the production of waste, and greenhouse gas emissions, or on its impact on biodiversity and the circular economy, or an investment in an economic activity that contributes to a social objective, in particular an investment that contributes to tackling inequality or that fosters social cohesion, social integration and labour relations, or an investment in human capital or economically or socially disadvantaged communities, provided that such investments do not significantly harm any of those objectives and that the investee companies follow good governance practices, in particular with respect to sound management structures, employee relations, remuneration of staff and tax compliance.*"

¹⁶ Cf. [Delegated Regulation \(EU\) 2022/1288](#), Art. 54: "*In the section 'In which economic sectors were the investments made?' in the template set out in Annex IV to this Regulation, financial market participants shall provide information on the proportion of investments during the period covered by the periodic report in different sectors and sub-sectors, including sectors and sub-sectors of the economy that derive revenues from exploration, mining, extraction, production, processing, storage, refining or distribution, including transportation, storage and trade, of fossil fuels as defined in Article 2, point (62), of Regulation (EU) 2018/1999 of the European Parliament and of the Council.*"

exception of investments made for liquidity or hedging purposes).¹⁷ Yet, as the proposed definition leaves substantial room for interpretation when assessing the sustainable nature of an investment, a given investment could be considered sustainable by one market participant and not so by another. Therefore, the Article 9 category of SFDR does not constitute either a label or a guarantee of quality.

2. DETERMINATION OF THE SFDR CHARACTERISTICS OF FRENCH FUNDS

2.1. DATA AND METHOD USED

Each of the 10,616 French funds existing at the end of 2021 was classified based on the transparency requirements of SFDR, under the Article 6, Article 8 and Article 9 categories. The population analysed corresponds to €1,907 billion worth of assets under management (as at 31/12/2021).

The classifications reported by Morningstar and Lipper, two data providers, were used when they were available, i.e. for just over one-third of the funds under review (36%) and about 60% of assets under management – cf. Graph 1, left. Next, the missing data was searched for manually in the fund prospectuses and on the websites of the various asset management companies (AMCs).¹⁸ This approach made it possible to improve the coverage rate of the sample very significantly, ultimately reaching more than 63% of funds and around 85% of assets under management at the end of 2021 (Graph 1, right).¹⁹

In the remainder of this study, only will this improved variable ("enhanced SFDR") be used. One can observe, therefore, that at end-2021:

- One-fifth of French funds (1,963 funds) came under Article 8 and accounted for slightly less than half of the total net assets (NAV) of French funds;
- 2% of the funds (220 funds) were considered Article 9 funds and accounted for 3% of French funds' total net assets;
- 79% of the funds were classified as Article 6 or undetermined, accounting for 50% of the total NAV of French funds.

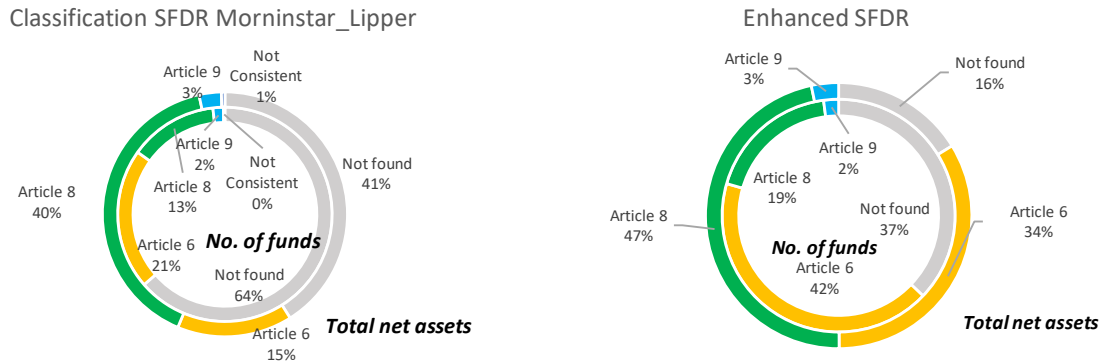
It appears therefore that there is a size effect: Article 9 funds, and even more so Article 8 funds, have on average a larger NAV than Article 6 funds.

¹⁷ [Question related to Regulation \(EU\) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector \(Sustainable Finance Disclosure Regulation 2019/2088\)](#)

¹⁸ The AMF is currently developing an automated prospectus-reading tool to detect SFDR classifications. It should make it possible to industrialise the manual checks that were performed for the purpose of this study (for subsequent iterations), and to propose a dynamic analysis of reclassifications.

¹⁹ A detailed description of the method followed to combine the information coming from Morningstar and Lipper and to perform manual categorisation is presented in Annex 1.

Graph 1: Breakdown of the French market for 2021
(Number of funds = 10,616 and total net assets = €1,907 billion)

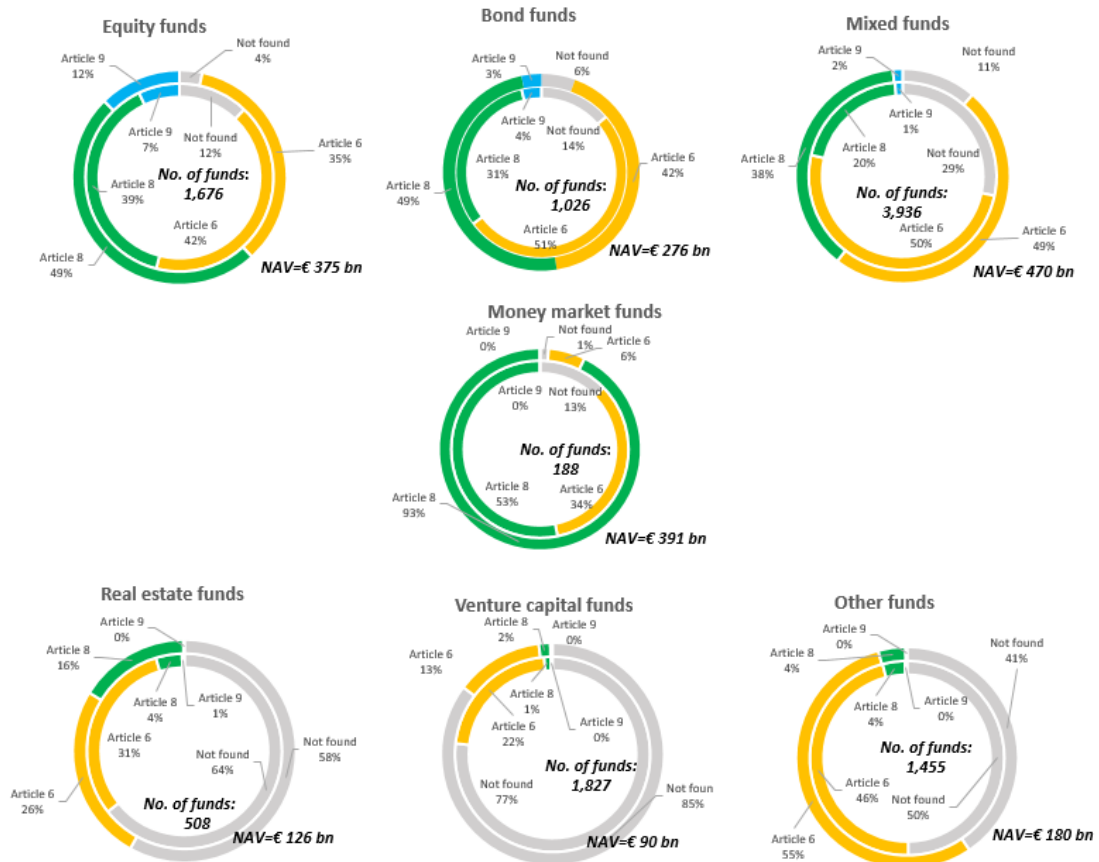


Source: AMF (BIO), Thomson Reuters Lipper, Morningstar, AMF calculations

NB: The inner circle indicates the proportion of each category measured in terms of the number of funds, while the outer circle presents these proportions relative to net assets. The "Not found" category corresponds to funds for which the corresponding SFDR category could not be determined.

Graph 2 breaks down the French market by major asset classes, in order to provide a more precise view of the breakdown along SFDR categories.

Graph 2: Breakdown of the French market for 2021 (total NAV of €1,907 billion)



Source: AMF (BIO), Thomson Reuters Lipper, Morningstar, AMF calculations

NB: The inner circle indicates the proportion of each category measured in terms of the number of funds, while the outer circle presents these proportions relative to net assets. The "Not found" category corresponds to funds for which the corresponding SFDR category could not be determined.

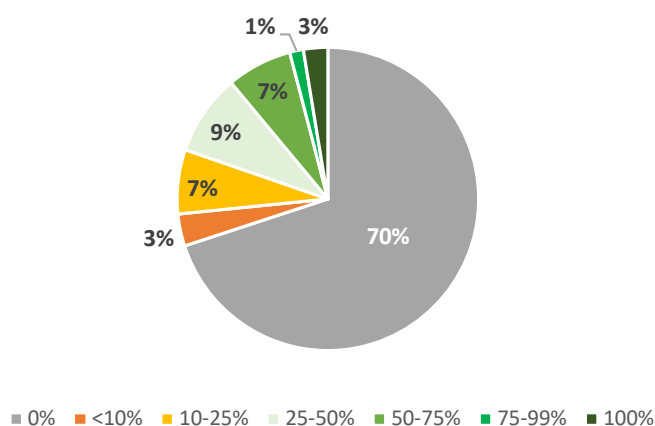
The proportion of funds for which information on the corresponding SFDR category was not found is especially high for real estate funds, venture capital funds and "other" funds. A large proportion of these funds were created before the start of 2021 and were no longer open for marketing when the SFDR came into effect. However, a Questions and Answers (Q&A) document published by the European Commission in May 2022 states that existing closed-end funds are indeed subject to SFDR requirements concerning periodic documents, the website and pre-contractual documents.²⁰ We shall see further on that information on the assets in the portfolio of these funds is generally also missing.

Article 8 funds account for around 50% of the assets under management of French equity and bond funds, about 40% of the AUM of diversified funds, but more than 90% of that of money market funds. The high proportion of bank and more generally financial issuers in the market for short-term securities probably makes their investable universe more compatible with existing environmental criteria.

Lastly, Article 9 funds are more represented in equity funds than in the other categories.

We observe that less than one-third of the population of 612 asset management companies (AMCs) have French-domiciled funds classified as Article 8 or 9 in their product range (Graph 3). For around 11% of asset management companies, the Article 8 and 9 funds are a majority, and for 3% they constitute the whole of the range, although it happens to be very small (2 funds on average).

Graph 3: Proportion of Article 8 and Article 9 funds per AMC (N=612)



Source: AMF (BIO), Thomson Reuters Lipper, Morningstar, AMF calculations

NB: 70% of the population of asset management companies report no French fund classified Article 8 or 9 under SFDR. 7% of the asset management companies report between half and three-quarters of their French funds as being Article 8 or Article 9 funds.

In the remainder of this study, funds for which the SFDR category could not be determined are allocated to the default category, i.e. Article 6 funds.

²⁰ European Commission (2022), *Questions related to Regulation (EU) 2019/2088 on SFDR*, May 2022.

See in particular p. 6: “[...] As regards situations of existing investors and **where a financial product is no longer made available to end investors as of 10 March 2021 and a financial market participant draws up for such product a periodic report referred to in Article 11(2) of Regulation (EU) 2019/2088 after that date, the periodic report must comply with the requirements laid down in Article 11(1) of that Regulation. Such financial products must also comply with the rules on transparency of the promotion of environmental or social characteristics and of sustainable investment objectives on websites enshrined in Article 10(1) and (2) of Regulation (EU) 2019/2088. [...]**”

3. ANALYSIS OF FRENCH FUNDS' PORTFOLIOS

French investment funds' portfolios as at December 2021 are compared across SFDR classifications. This section can be considered as a deepening of the analysis carried out in the Joint AMF-ACPR Report monitoring and assessing the commitments made by French financial institutions.²¹

In this section we confine ourselves to the categories of investment funds for which the coverage is satisfactory (for both the SFDR classifications and the portfolio data), namely equity, bond, money market and diversified funds.

Several variables of interest are analysed in relation to the SFDR classification on the four main asset classes:

- the funds' exposure to green bonds, sustainability-linked bonds (SLBs), sustainability bonds and social bonds;
- the funds' exposure to companies active in the fossil energies sector;
- the funds' exposure to firms developing new production capacity in the coal, oil and gas sectors.

3.1. METHODOLOGICAL NOTES

□ Description of the data used

➤ Portfolio data

The composition of the portfolios was obtained from the Banque de France database on collective investment undertakings ("OPC titres" database) which provides at the fund level, the detailed list of assets in the portfolio of investment funds domiciled in France. The portfolio assets are identified by their ISIN code,²² just like the funds themselves. Investments in private equity or private debt assets, credit lines, loans, and exposures via derivatives instruments or via indices are not covered.

A one-step look-through approach was adopted for the funds present in the portfolios of French funds. This operation makes it possible to assess funds' exposures through the holding of other funds in the portfolio, whether French or foreign. These indirect exposures account for about 20% of the number of securities and of assets under management (AUM of €365 billion in 2021). About one-third of the looked-through funds are foreign funds whose assets under management were valued at €120 billion at end-2021.²³

The sample obtained after matching our initial SFDR database with partially looked-through portfolios contained 5,675 funds with around €1,500 billion in assets under management. Around two-thirds of the AUM corresponds to Article 8 and 9 funds. In the remainder of this study, non-classified funds, which are a very small minority,²⁴ are allocated to the default category, i.e. Article 6 funds (Graph 4).

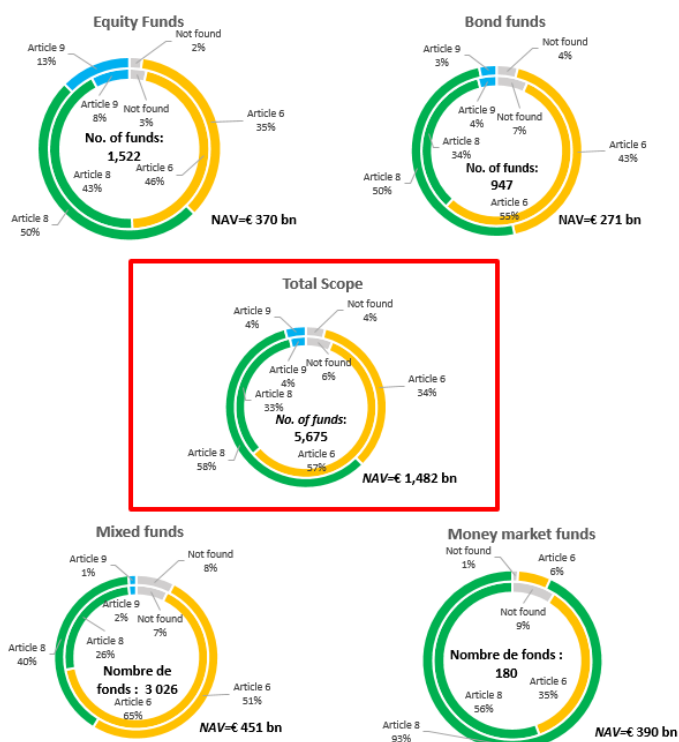
²¹ ACPR, AMF (2022), *op. cit.*

²² The ISIN code (International Securities Identification Numbers) is a standardised 12-character code enabling a financial security to be identified uniquely.

²³ The results presented hereafter include this look-through stage. Nevertheless, the estimates obtained from portfolios without look-through are reported in Annex.

²⁴ This proportion is extremely small for money market funds and equity funds (1% and 2% of AUM respectively). It stands at 4% for bond funds and 8% of AUM for diversified funds.

Graph 4: Breakdown of the funds of the sample according to their SFDR classification
(N = 5,675, NAV = €1,482 billion)



Source: Banque de France ("OPC titres" database), Lipper, Morningstar, AMF

NB: The inner circle indicates the proportion of each category measured in terms of the number of funds, while the outer circle presents these proportions relative to net assets. The "Not found" category corresponds to funds for which the corresponding SFDR category could not be determined.

➤ Data concerning green bonds

A green bond is a bond intended to finance projects having an environmental impact. The list of green bonds used in this study was produced based on the Thomson Reuters Eikon classification (Refinitiv). We filter for bonds issued globally before 2022 and still outstanding at end-2021. There is no authoritative regulatory framework concerning the designation of *green bonds*, even though general principles have been developed by the finance industry (cf. the *Green Bond Principles of the International Capital Market Association – ICMA*).²⁵ However, note that not all the green bonds present in our list are considered as being aligned with the ICMA standards. We identify more than 5,000 securities for around €1,500 billion in capital raised, including around €500 billion in 2021 alone, issued almost equally by non-financial companies, financial companies and public-sector entities. Stripping out perpetual bonds, the maturity of the securities at their issuance has tended to increase over time and stood at around 8 years at the end of the period. At end-2021 the bonds still outstanding had a residual maturity of 7 years.

➤ Data concerning sustainability-linked bonds

Sustainability-linked bonds are bond issues whose features, and in particular their financial characteristics, depend on whether or not pre-determined non-financial objectives are achieved. The list of SLBs issued globally before 2022 and still outstanding at end-2021 was obtained via Bloomberg. About 260 SLB issues are recorded, for an amount of approximately €100 billion since 2019, the year in which this type of instrument appeared. 90% of this volume was issued by non-financial companies, mostly European. The average maturity of the loans at their

²⁵ For more details, refer to the page devoted to [Green Bond Principles](#) on ICMA's website.

issuance was approximately 7 years. Just as green bonds, SLBs are not defined by the regulation. The terminology relates to voluntary standards developed by the finance industry, for which ICMA has established reference principles.²⁶

➤ Data concerning sustainability bonds

A sustainability bond is a bond intended to finance projects having both an environmental and a social impact. The list of sustainability bonds issued globally before 2022 and still outstanding at end-2021 is obtained via Bloomberg. About 1,140 issues are recorded, for an amount of approximately €400 billion. Most of them were carried out in 2020 and 2021 and two-thirds of the amounts raised are due to public-sector entities. The average maturity of the bonds at their issuance is approximately 7.5 years and their residual maturity slightly less than 7 years at end-2021. Here again, there is no authoritative regulatory framework for sustainability bonds, but the finance industry developed general principles.²⁷

➤ Data concerning social bonds

A social bond is a bond intended to finance projects that have a positive social impact on the target populations. The list of social bonds (issued globally before 2022 and still outstanding at end-2021) was obtained via Bloomberg. About 830 issues are inventoried, for an amount of approximately €400 billion, nearly all of which were carried out in 2020 and 2021 in the context of the pandemics. Public-sector entities are the originators of more than three-quarters of the issues. About one-fifth of these securities include environmental characteristics. The average maturity of the loans at their issuance is approximately 8 years. Social bonds are not a regulatory category, but voluntary standards have been developed by the finance industry.²⁸

Let's mention that although ICMA makes a [Sustainable Bonds Database](#) available to the public on its website, this data could not be exploited given that it usually records the issuers of green bonds, SLBs, sustainability bonds and social bonds and not the specific securities issued. As a given company may issue SLBs or green bonds in parallel to its conventional bond programmes, deciding which to consider is tricky. Moreover, the securities referred to by commercial data providers as SLBs, green bonds, sustainability bonds or social bonds are not necessarily aligned with the ICMA standards.

➤ Data concerning coal, oil and gas

Two data sources were used to calculate exposures to the coal sector on the one hand, and to oil and gas companies on the other hand: the data sets produced by the NGO **Urgewald** (the **GCEL** – [Global Coal Exit List](#) – and the **GOGEL** – [Global Oil and Gas Exit List](#) respectively) and the **Trucost** data provided by **Standard and Poor's**.

In its GCEL, Urgewald identifies firms active in the upstream and midstream coal chain. More precisely, it flags firms involved in coal exploration, processing and trading, in coal transportation and supply chain, in equipment manufacture, in operating and maintenance services, in EPC services (Engineering, Procurement and Construction), and in coal to gas production.

The GOGEL covers 887 oil and gas firms operating in the upstream and/or midstream sectors of the industry. It flags firms that, for example, produced more than 20 million barrels of oil equivalent (BOE) of oil and gas, more than 2 million BOE of non-conventional oil or gas, etc.

As for *Standard and Poor's* Trucost database, it lists more than 20,000 firms and gives information concerning the share of revenue attributable to fossil energies, enabling the AMF to identify around 1,400 companies involved in the activities of extraction, refining, transportation and distribution of hydrocarbons and in the production and distribution of carbon-emitting electricity in the portfolios of French funds. Unlike Urgewald, Trucost identifies companies by the ISIN code of their primary equity. Accordingly, for all the estimates made based on the

²⁶ For more details, refer to the page devoted to [Sustainability-Linked Bond Principles](#) on ICMA's website.

²⁷ For more details, refer to the page devoted to [Sustainability Bond Principles](#) on ICMA's website.

²⁸ For more details, refer, for example, to the page devoted to [Social Bond Principles](#) on ICMA's website.

information provided by Trucost, the capital ownership chain is partially accounted for (potential extension to other companies of the conglomerate).

In the Urgewald lists of entities in the coal sector (GCEL) and the oil & gas sector (GOGEL), companies developing new capacity are indicated. Trucost also establishes an inventory of companies increasing their coal production capacity but no equivalent for oil & gas.²⁹ These companies will be identified as coal and oil & gas developers respectively.

□ Methodology for exposure analysis by SFDR classification

The exposure variables correspond to the net holdings of the securities in question (green, sustainability or social bonds, SLBs, investments in the coal sector or oil & gas sector), relative to the net assets of the fund in question.

For visual purposes, we shall graphically present the gross distributions of fund-level exposure according to the various SFDR classifications based on looked-through portfolios. However, we shall use econometric techniques in order to enhance the robustness of the analysis and test the statistical significance of the observed differences (through p-values).

The basic regression (cross-section) is as follows:

$$Exposure(\%)_i = \alpha + \beta \cdot \mathbb{I}_i^{Art8} + \gamma \cdot \mathbb{I}_i^{Art9} + \varepsilon_i \quad (E1)$$

Where \mathbb{I}_i^{Art8} and \mathbb{I}_i^{Art9} are dummy variables indicating whether the fund i comes under Article 8 or Article 9 respectively. Accordingly, Article 6 funds serve as a reference category in our analyses.

Note that the regression analyses are performed by major fund category (i.e. one regression analysis is performed on equity funds, another on bond funds, a third on diversified funds and a fourth on money market funds).

In its simplest form, it comes down to a comparison of the mean exposure depending on whether the fund comes under Article 8 of SFDR, Article 9, or the default category (Article 6). However, this specification enables to observe directly where there exists a statistically significant difference between the exposure of Article 8 or Article 9 funds and the exposure of Article 6 funds. The estimated parameter $\hat{\beta}$ indicates whether Article 8 funds are, on average, significantly more ($\hat{\beta} > 0$) or less ($\hat{\beta} < 0$) exposed than Article 6 funds, while $\hat{\gamma}$ compares the mean exposure of Article 9 funds with that of Article 6 funds.

Moreover, it is also possible to test the significance of the difference between $\hat{\beta}$ and $\hat{\gamma}$ to know whether there is a real statistical difference between the exposure of Article 8 funds and that of Article 9 funds.

The baseline model (E1) can be supplemented by adding control variables to account for the potential impact of given fund characteristics. We shall present the estimates obtained by introducing two variables on the right-hand side of the equation: size (net assets in euros) and age (in years) to come up with model (E2), then by also adding a fixed effect for each asset management company, which yields to model (E3).

$$Exposure(\%)_i = \alpha' + \beta' \cdot \mathbb{I}_i^{Art8} + \gamma' \cdot \mathbb{I}_i^{Art9} + \delta' \cdot NAV_i + \theta' \cdot Age_i + \varepsilon_i \quad (E2)$$

$$Exposure(\%)_i = \alpha'' + \beta'' \cdot \mathbb{I}_i^{Art8} + \gamma'' \cdot \mathbb{I}_i^{Art9} + \delta'' \cdot NAV_i + \theta'' \cdot Age_i + \sum_{k=1}^K \mu_k \cdot \mathbb{I}_i^{SGPk} + \varepsilon_i \quad (E3)$$

Where $\mathbb{I}_i^{SGPk} = 1$ if the fund i is managed by the asset management company k , else 0.

²⁹ The Trucost *Coal Expansion* database indicates annual projections of coal-fired production capacity between 2020 and 2030 for 542 firms. Any entity whose production capacity increased over the period is considered as a developer (i.e. for at least one of the subsequent years, reported production capacity is strictly greater than what it was in 2020).

To study differences of exposure across the different fund categories, model (E1) is the most appropriate: it makes it possible to obtain a gross absolute measure of the mean deviations. By adding the age and size variables, model (E2) isolates more specifically the impact of the classification on exposure *by correcting the estimated parameters $\hat{\beta}$ and $\hat{\gamma}$* for effects attributable to the control variables. For example, if the least exposed funds are younger on average, and Article 8 funds are also younger on average, model (E2) will adjust the correlation between the classification variable and the exposure variable by deducting the effect related to the correlation between the age and the classification. The coefficients $\hat{\beta}$ and $\hat{\gamma}$ indicate the mean effect of the classification on exposure *for a given age (and size) ("all else being equal")*.

To some extent, these models introduce a kind of relativism by allowing part of the raw differences in exposure to be explained by additional characteristics of the funds. The relativism resulting from the controls is even more perceptible when considering AMC fixed effects in model (E3): the parameters $\hat{\beta}^{it}$ and $\hat{\gamma}^{it}$ measure the mean contribution of the difference of classification *within the range of funds managed by a given AMC*, but therefore overlook the possibility that certain AMCs may have only funds that are highly exposed, while others might have fund ranges that are very little exposed. While these refinements may be useful to attest the robustness of the analysis, they correspond to slightly different research issues.

In all the following analyses, we shall comment only on coefficients that are significant at the 10% threshold (at least). The various models are estimated with ordinary least squares (OLS) and the standard errors used to calculate the coefficients' p-values are robust.

3.2. EXPOSURES TO GREEN BONDS, SUSTAINABILITY-LINKED BONDS (SLBS), SOCIAL BONDS AND SUSTAINABILITY BONDS

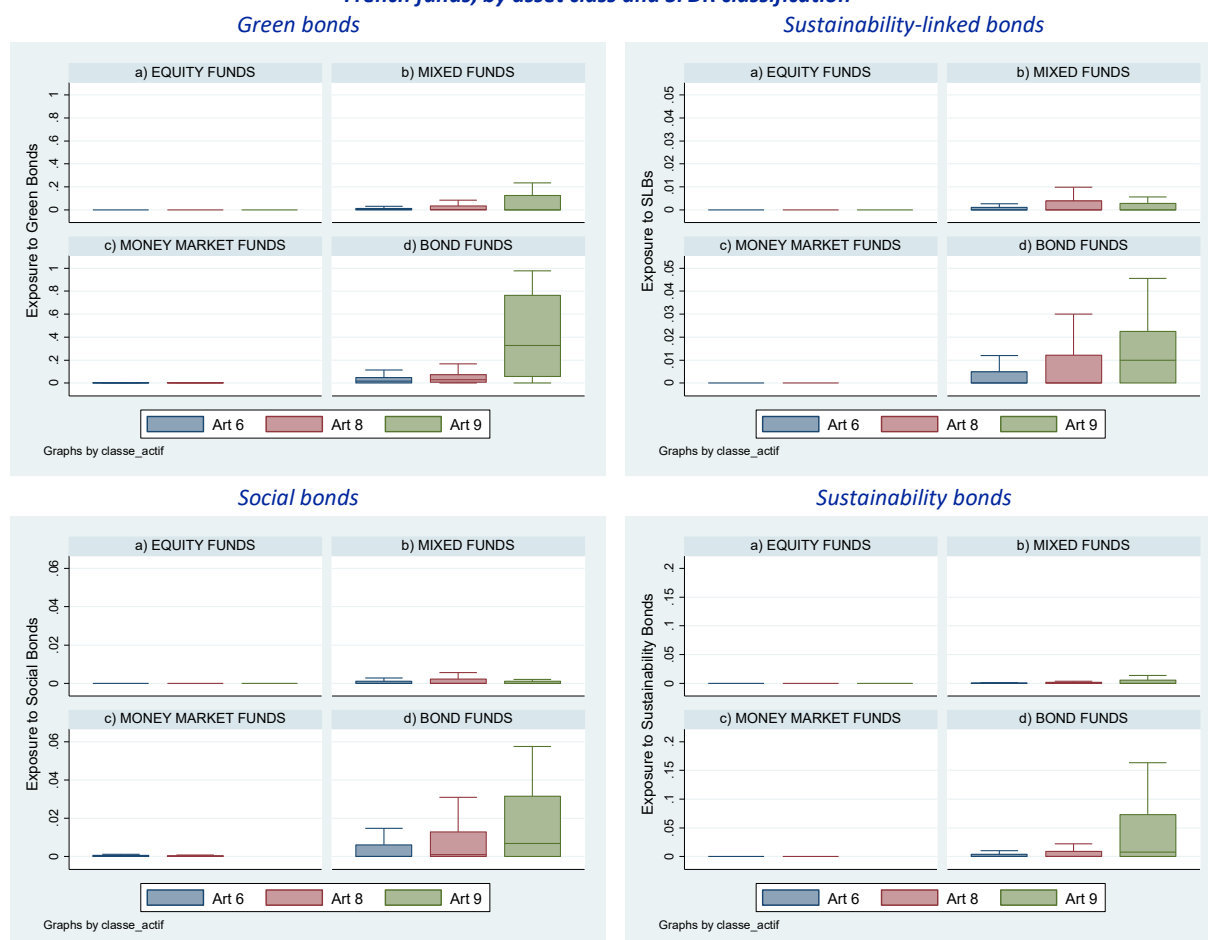
We shall first consider funds' holdings of those securities associated with a sustainability concept, whatever their focus: green bonds, sustainability bonds, social bonds and sustainability-linked bonds. In what follows, we place no restriction on the lists of securities that we downloaded (neither on the theme, nor on alignment with ICMA standards). The expected result is a higher proportion of these securities in the portfolios of funds classified as Article 8 and even more so as Article 9, compared with Article 6 funds. Moreover, given the fixed-income nature of the securities analysed, we expect to find them mainly in bond funds and diversified funds. However, they could also be found in money market funds (provided that the residual maturity is short) or in equity funds (which may hold some bonds).

Starting with a graphical analysis, we confirm that green bonds are found more often in bond funds and diversified funds than in equity funds or money market funds (Graph 5). Additionally, exposure to green bonds is especially high for diversified funds and bond funds claiming the Article 9 classification. Indeed, for around one-quarter of Article 9 bond funds, green bonds represent more than 80% of the NAV. In contrast, there is apparently not much difference between Article 8 funds and Article 6 funds.

SLBs are also mainly present in bond funds and diversified funds portfolios, but given that they were introduced only very recently, they appear in smaller proportions than green bonds (the scale of the graphs is far smaller). They represent at most 20% of the net assets of a fund, with a 99th percentile at 5%. No obvious difference is noted in the prevalence of SLBs among diversified funds according to their SFDR classification. In contrast, for bond funds, the distribution is stretched as one moves up on the SFDR scale: the weight of these securities is greater for Article 8 funds, and even more so for Article 9 funds, than for Article 6 funds.

Similar observations can be made concerning securities identified as social bonds or sustainability bonds. They are found mainly in bond funds, and to a lesser extent in diversified funds. The maximum exposure of a fund to social bonds is found in an Article 9 bond fund (these securities represent two-thirds of its NAV), but this case is rather exceptional (the following ones are below 20% and the 99th percentile has less than 6%). Sustainability bonds represent at most 17% of the net assets of a fund, with a 99th percentile at 3%.

Graph 5: Distribution of the proportion of green bonds, SLBs, social bonds and sustainability bonds in the portfolio of French funds, by asset class and SFDR classification³⁰



Source: Banque de France ("OPC titres" database), Lipper, Morningstar, Bloomberg, AMF

NB: In the box plot representation, the rectangle materialises observations located between the first and third quartiles (the bottom and the top of the box respectively). The horizontal line within the box indicates the median (second quartile). The extensions ("whiskers") represent "adjacent" observations, i.e., to simplify, the extent of the total distribution (excluding atypical extreme values).³¹

These preliminary graphical results are confirmed and refined by the statistical analyses. Table 1 reports for each variable of interest (proportions of green bonds, sustainability bonds, social bonds, or SLBs) and for each specification ($E1$, $E2$ or $E3$) the coefficients and p-values obtained in the regression analyses capturing the differences between Article 8 and Article 6 funds on the one hand, and between Article 9 and Article 6 funds on the other hand (i.e. $\hat{\beta}$ and $\hat{\gamma}$ respectively). We have also added a column to test the significance of the difference observed between Article 8 funds and Article 9 funds (i.e. $(\hat{\beta} - \hat{\gamma})$). For the sake of readability, the coefficients that are non-significant at the 10% threshold are indicated in orange. When the coefficients are positive and statistically significant, they are highlighted in green (pale green for low significance at 10%, dark green when the coefficient is significant at the 5% threshold). On the other hand, when they are negative and statistically significant, they are shown in red (pale red for significance at 10%, dark red for significance at 5%). The white boxes indicate absence of an estimate (no observations).³²

³⁰ Annex 2 refines these graphs by identifying more specifically the SLBs, sustainable bonds and social bonds with an environmental focus.

³¹ Mathematically, the smallest adjacent value is obtained by the following formula: $Q_1 - \frac{3}{2} (Q_3 - Q_1)$, while the largest adjacent value is obtained by the following formula: $Q_3 + \frac{3}{2} (Q_3 - Q_1)$, where Q_1 corresponds to the first quartile and Q_3 to the third quartile.

³² In all the tables commented on here, the exposure variables are computed from portfolios having undergone one stage of look-through. You will find in Annexes 4 to 8 the equivalents of these tables with exposure variables calculated from the raw data (before look-through).

Table 1 confirms that **Article 9 bond funds have on average a far larger proportion of green bonds than funds of the reference category (Article 6)**. Indeed, the coefficient on dummy variable \mathbb{I}_i^{Art9} is estimated very significantly (p-value <0.0001) around 0.36 (whatever the controls added), which means that the proportion of green bonds held by an Article 9 bond fund is on average around 36 percentage points higher than that of a fund of the same type classified as Article 6. Likewise, Article 9 bond funds hold far more green bonds than their Article 8 counterparts (+34 percentage points on average). Finally, the latter also hold on average a significantly larger proportion of green bonds than Article 6 bond funds, but the difference is found to be small (between 2 and 3 percentage points).

Table 1: Summary table of regression coefficients for exposure to green bonds, SLBs, sustainability bonds and social bonds

	EQUITY FUNDS			BOND FUNDS			MIXED FUNDS			MMFs		
	N = 1 522 (of which 652 Art.8 and 118 Art.9)			N = 947 (of which 324 Art.8 and 38 Art.9)			N = 3 026 (of which 790 Art.8 and 51 Art.9)			N = 180 (of which 100 Art.8 and no Art.9)		
	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8
Green bonds (E1)	-0,0002 <small>(p-value) 0,1020</small>	0,0006 <small>0,3092</small>	0,0009 <small>0,1606</small>	0,0263 <small>0,0002</small>	0,3659 <small>0,0000</small>	0,3396 <small>0,0000</small>	0,0113 <small>0,0000</small>	0,0818 <small>0,0015</small>	0,0705 <small>0,0064</small>	0,0011 <small>0,2438</small>		
Green bonds (E2)	-0,0002 <small>(p-value) 0,1001</small>	0,0007 <small>0,2534</small>	0,0010 <small>0,1289</small>	0,0274 <small>0,0003</small>	0,3659 <small>0,0000</small>	0,3385 <small>0,0000</small>	0,0107 <small>0,0000</small>	0,0835 <small>0,0012</small>	0,0728 <small>0,0047</small>	0,0012 <small>0,2738</small>		
Green bonds (E3)	-0,0003 <small>(p-value) 0,0480</small>	0,0005 <small>0,5169</small>	0,0009 <small>0,2630</small>	0,0255 <small>0,0103</small>	0,3684 <small>0,0000</small>	0,3429 <small>0,0000</small>	0,0102 <small>0,0000</small>	0,0820 <small>0,0052</small>	0,0718 <small>0,0138</small>	0,0009 <small>0,5521</small>		
Sustainability-linked bonds (E1)	0,0000 <small>(p-value) 0,6763</small>	0,0000 <small>0,4658</small>	0,0000 <small>0,3662</small>	0,0025 <small>0,0251</small>	0,0086 <small>0,0172</small>	0,0061 <small>0,0949</small>	0,0028 <small>0,0000</small>	0,0020 <small>0,1556</small>	-0,0008 <small>0,6000</small>			
Sustainability-linked bonds (E2)	0,0000 <small>(p-value) 0,7255</small>	0,0000 <small>0,3808</small>	0,0000 <small>0,3073</small>	0,0030 <small>0,0081</small>	0,0086 <small>0,0167</small>	0,0056 <small>0,1235</small>	0,0028 <small>0,0000</small>	0,0020 <small>0,1663</small>	-0,0009 <small>0,5569</small>			
Sustainability-linked bonds (E3)	0,0000 <small>(p-value) 0,5339</small>	0,0000 <small>0,3568</small>	0,0000 <small>0,2556</small>	0,0019 <small>0,0964</small>	0,0045 <small>0,0878</small>	0,0026 <small>0,3358</small>	0,0023 <small>0,0000</small>	-0,0010 <small>0,3685</small>	-0,0033 <small>0,0033</small>			
Social bonds (E1)	-0,0001 <small>(p-value) 0,1058</small>	0,0001 <small>0,3844</small>	0,0002 <small>0,1392</small>	0,0027 <small>0,0487</small>	0,0246 <small>0,1553</small>	0,0218 <small>0,2068</small>	0,0016 <small>0,0003</small>	0,0032 <small>0,1559</small>	0,0016 <small>0,4842</small>	0,0006 <small>0,2388</small>		
Social bonds (E2)	-0,0001 <small>(p-value) 0,1050</small>	0,0001 <small>0,3183</small>	0,0002 <small>0,1111</small>	0,0022 <small>0,1165</small>	0,0246 <small>0,1556</small>	0,0224 <small>0,1934</small>	0,0013 <small>0,0081</small>	0,0034 <small>0,1285</small>	0,0021 <small>0,3612</small>	0,0008 <small>0,2046</small>		
Social bonds (E3)	-0,0001 <small>(p-value) 0,0768</small>	0,0000 <small>0,8242</small>	0,0002 <small>0,2399</small>	0,0022 <small>0,2278</small>	0,0277 <small>0,2529</small>	0,0255 <small>0,2796</small>	0,0015 <small>0,0011</small>	0,0024 <small>0,2884</small>	0,0010 <small>0,6698</small>	0,0007 <small>0,3451</small>		
Sustainability bonds (E1)	0,0000 <small>(p-value) 0,1303</small>	0,0002 <small>0,1620</small>	0,0002 <small>0,0909</small>	0,0017 <small>0,0123</small>	0,0285 <small>0,0000</small>	0,0268 <small>0,0001</small>	0,0006 <small>0,0160</small>	0,0069 <small>0,0165</small>	0,0063 <small>0,0286</small>	0,0000 <small>0,2932</small>		
Sustainability bonds (E2)	0,0000 <small>(p-value) 0,1185</small>	0,0002 <small>0,1395</small>	0,0002 <small>0,0776</small>	0,0016 <small>0,0275</small>	0,0285 <small>0,0000</small>	0,0269 <small>0,0001</small>	0,0004 <small>0,0993</small>	0,0071 <small>0,0126</small>	0,0067 <small>0,0192</small>	0,0000 <small>0,2996</small>		
Sustainability bonds (E3)	0,0000 <small>(p-value) 0,0397</small>	0,0001 <small>0,3161</small>	0,0002 <small>0,1698</small>	0,0017 <small>0,0315</small>	0,0280 <small>0,0003</small>	0,0263 <small>0,0005</small>	0,0006 <small>0,0239</small>	0,0063 <small>0,0420</small>	0,0057 <small>0,0621</small>	0,0000 <small>0,3343</small>		

Source: Banque de France ("OPC titres" database), Lipper, Morningstar, AMF

NB: The coefficients in red are negative and significant at the 5% threshold while the coefficient in pink is weakly significant (10%). The coefficients in dark green are positive and significant at the 5% threshold, while the coefficients in light green are weakly significant (10%). The coefficients in orange are not significant at the 10% threshold and therefore their sign is not commented on.

Still in Table 1, the block corresponding to the prevalence of SLBs among bond funds shows that **the proportion of SLBs in the portfolio of Article 8 and 9 funds is slightly higher than that found in Article 6 funds** (by approximately 0.2 percentage points for Article 8 funds and between 0.4 and 0.9 percentage points depending on the specifications for Article 9 funds). However, the difference between Article 8 funds and Article 9 funds is not always significant.

Sustainability bonds are found more often in the portfolios of Article 8 bond funds than of Article 6 equivalents (0.2 percentage points), but even more so in the portfolios of Article 9 funds (3 percentage points). The differences of exposure to social bonds in bond funds are far less statistically significant (the only significant coefficient corresponds to a difference of 0.3 percentage points between Article 6 and Article 8 funds under specification *E1*).

For diversified funds, green bonds represent on average one percentage point more in the net assets for Article 8 funds than for Article 6 funds. The difference between Article 9 and Article 6 funds is around 8 percentage points, and the difference between Article 9 funds and Article 8 funds is significant. Likewise, the differences in diversified funds' exposure to sustainability bonds are significant, although they are far smaller in magnitude. For SLBs and social bonds, on the other hand, the only significant difference is between Article 8 funds and Article 6 funds (0.3 and 0.2 percentage points respectively). Article 9 funds cannot be distinguished statistically from Article 8 funds, nor even Article 6 funds on the basis of the proportion of SLBs or social bonds in their portfolio.

With regard to money market funds (MMFs), in which the securities under review are far less common, no statistically significant difference is noted between Article 6 funds and Article 8 funds concerning their holdings of green bonds, social bonds or sustainability bonds. No SLBs are found in the population of MMFs, which explains the absence of coefficients in the corresponding block.

Lastly, given the almost complete lack of green bonds and SLBs in equity funds, the results are generally not significant.

3.3. FRENCH FUNDS' EXPOSURE TO FOSSIL ENERGIES

□ Methodological notes

For each data source, and following up on the third joint AMF-ACPR report monitoring and assessing the commitments made by French financial institutions³³ we used several methods to assess French funds' exposure to companies involved in the fossil fuel sectors. This makes it possible to take into consideration the complexity and subjectivity inherent in all analyses of exposure in a regulatory environment that remains relatively changeable, and sometimes ambiguous.

Identification via Urgewald data

Regarding estimates based on Urgewald data, three methods were applied:

- **Method U1:** The estimates of exposure to the coal sector (oil and gas respectively) are computed from a mere comparison between the lists of ISIN codes identified by Urgewald's GCEL (GOGEL respectively) and the list of securities in the portfolios of French funds. This strategy has the advantage of simplicity but may lead to underestimation of exposure to fossil energies to the extent that some securities (in particular short-term debt securities) are poorly referenced by commercial data providers.
- **Method U2:** This method enable to correct the disadvantage of the preceding method. It consists in identifying the companies involved in fossil energies by their ISIN code, but also by their LEI (Legal Entity Identifier), a data now frequently indicated by Urgewald.³⁴ This method can thus greatly increase the

³³ ACPR, AMF (2022), *op. cit.*

³⁴ "The Legal Entity Identifier (LEI) is a 20-character alphanumeric code based on ISO Standard 17442. It is linked to key reference information making it possible to identify clearly and uniquely legal entities taking part in financial transactions." See the [GLEIF website](#).

number of securities identified, even though it is not exhaustive insofar as ISIN codes in the funds' portfolios could not always be associated with an LEI.

- **Method U3:** This method makes it possible to take into account the capital structure of security issuers, by considering that if a group has a subsidiary involved in fossil energies, then the group as a whole is exposed. While this assessment constitutes an upperestimate of exposures, it is justified by the existence of intra-group loans. It can also provide some elements for comparison with assessments calculated with Trucost data, which structurally take into account the capital ties between companies.

These estimates are not weighted by the proportion of carbon-emitting activities in the business of the security issuer: with these methods, an investment of €100 in a company deriving 90% of its revenues from the use of coal is considered equivalent to €100 invested in a company whose coal activities are limited to 10% of its revenues.

Identification via Trucost

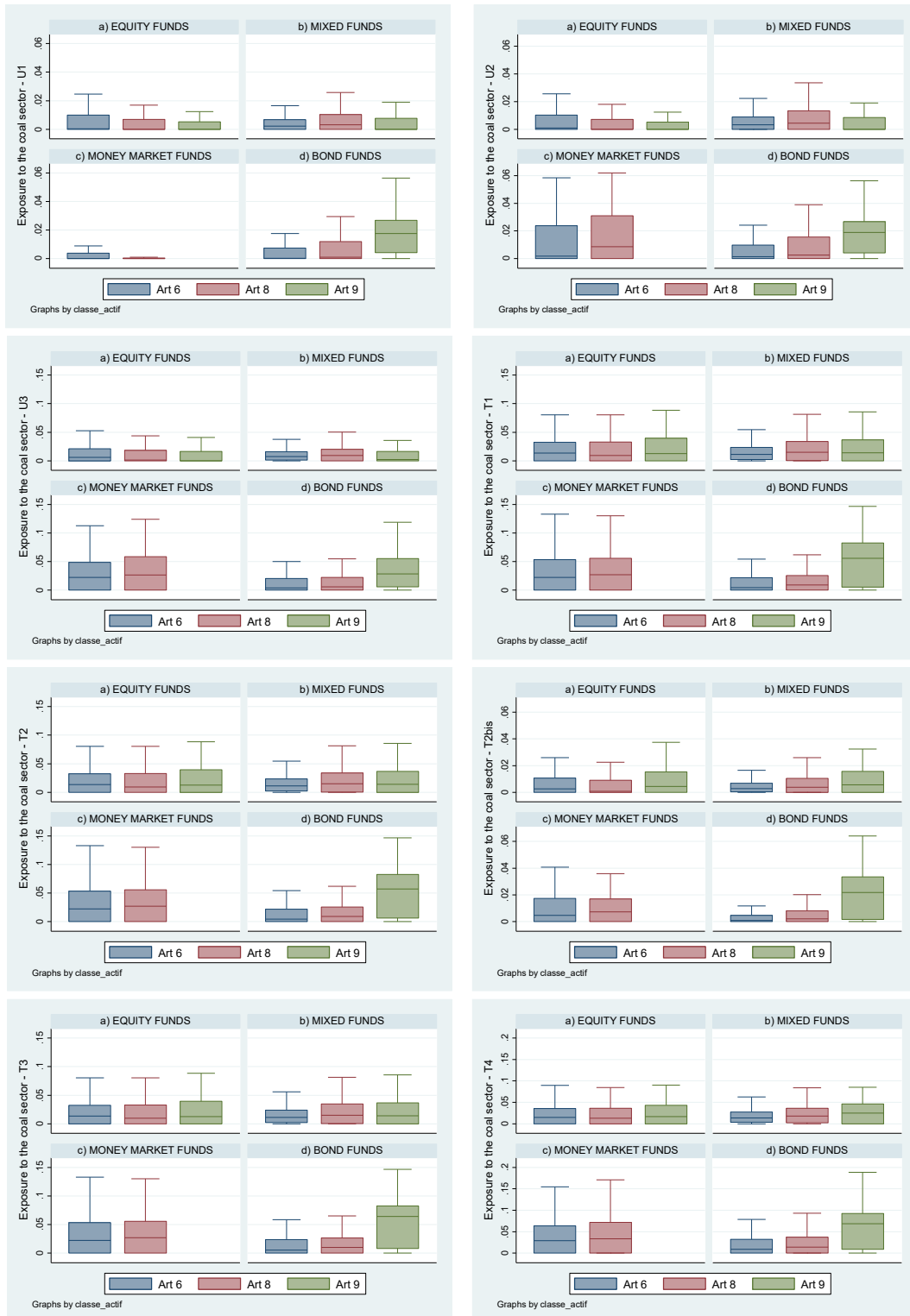
Regarding estimates building on Trucost data, five methods are applied:

- **Method T1** measures the funds' exposures to the 414 companies for which Trucost was able to determine the share represented by coal in their mining or electricity generation revenues. This method is applied only for exposures to the coal sector.
- **Method T2:** This method consists in measuring exposures to companies for which Trucost has estimated non-null revenues from the coal sector or from the oil and gas sector. Additionally, since the proportion of revenues attributable to each given line of activity is reported, it is possible to estimate French funds' exposures accounting for the revenue share that the security issuer derived from carbon-emitting activities: this weighted approach is called **Method T2 bis**. Hence, a €100 investment in a company deriving 90% of its revenues from the use of coal will translate into a coal exposure of €90, whereas the same €100 invested in a company whose coal activities are limited to 10% of its revenues would result in an exposure of only €10.
- **Method T3:** The analysis can further be supplemented by including the companies not covered by Trucost but which could be associated with fossil energy sectors via other sources (based in particular on the issuers' sector classifications, cf. Annex 3).
- **Method T4:** Finally, like for the work performed on the Urgewald databases, it is possible to compute exposures at the consolidated group level.

□ Exposure to the coal sector

The results of the graphs are relatively stable from one estimation method to another (Graph 6). Generally, the distribution of exposures between Article 6 funds and Article 8 funds does not seem substantially different. For bond funds, exposure to the coal sector is substantially greater for Article 9 funds than for Article 8 funds. This result, apparently counter-intuitive, could be explained by the higher proportion of green bonds, sustainability bonds, social bonds or SLBs in these funds.

Graph 6: Distribution of the proportion of securities associated with the coal sector, by asset class and SFDR classification



Source: Banque de France ("OPC titres" database), Lipper, Morningstar, Trucost, Uргewald, AMF

NB: The rectangle materialises observations located between the first and third quartiles (the bottom and top of the box respectively). The horizontal line within the box indicates the median (second quartile). The extensions represent "adjacent" observations, i.e., to simplify, the extent of the total distribution (excluding atypical extreme values).

The results of the statistical estimates are presented in Table 2 (for the exposure metrics derived from Urgewald's GCEL), and in Table 3 (for metrics taken from Trucost). These two tables adopt the formal structure of Table 1. The only major difference is that it is now the statistically significant *negative* coefficients that are in green, while the *positive* significant coefficients are in red. This substitution makes it possible to quickly identify results which "would seem to go in the right direction" from those which could appear more counter-intuitive. We want to know whether the funds which claim to promote environmental or social characteristics, or even which state a sustainable investment objective, are less exposed to the coal or oil & gas sectors than the others. This is a statistical hypothesis that we will test econometrically. However, it is important to stress again the fact that SFDR only introduces disclosure requirements, and not management constraints. In particular, SFDR is not prescriptive and does not contain sectoral exclusions.

For each data source, the baseline results are supplemented by robustness checks:

- A first series of tests is performed by deducting the securities identified as green bonds, SLBs, sustainability bonds or social bonds from the exposure metrics. Two restrictive conditions are introduced however: the securities in question must have an environmental theme, and be aligned with ICMA's standards.³⁵
- A second series of tests aims to account for the issuers' commitment to decarbonisation strategies by withdrawing from the exposure metrics investments in companies whose transition plans are deemed credible. Indeed, although currently involved in the fossil energies sector, some firms may have entered a transition process. As a robustness check, we thus adjust coal and hydrocarbon exposure metrics by removing companies that received a positive assessment of their transition plans. For this purpose, we refer to the transition plan assessments performed in accordance with the ACT methodology (*Assessing Low-Carbon Transition*, cf. Box 1).³⁶ For the 150 electricity producers and/or players in the oil and gas sector having an ACT score we consider credible those transition plans for which the total score is higher than the average (50/100), which is the case for 15 companies, 13 of which are found in the portfolios of French funds.³⁷ Let's stress however that two of these companies are considered as oil & gas developers by Urgewald.³⁸

These new exposure variables also served as variable of interest in regression analyses (*E1*), (*E2*) and (*E3*) and the results are reported following those obtained on the raw variables in Table 2 and Table 3.

³⁵ The distribution graphs excluding green bonds, social bonds, sustainability bonds and SLBs from the exposures are presented in Annex 9 for coal and in Annex 10 for oil & gas.

³⁶ NB: Other methodologies could be used, e.g. the [Science Based Targets initiative](#) (SBTi) methods, which monitor over time firms' progress towards the climate objectives that they have set themselves.

³⁷ The 13 companies are: CLP Holdings Limited; Centrais Elétricas Brasileiras S.A. – Eletrobrás; E.ON SE; EDP - Energias de Portugal, S.A.; ENGIE SA; Électricité de France S.A.; Enel SpA; Exelon Corporation; Iberdrola, S.A.; Neste Oyj; SSE plc; Xcel Energy Inc.; Ørsted A/S.

³⁸ Engie SA and Enel Spa.

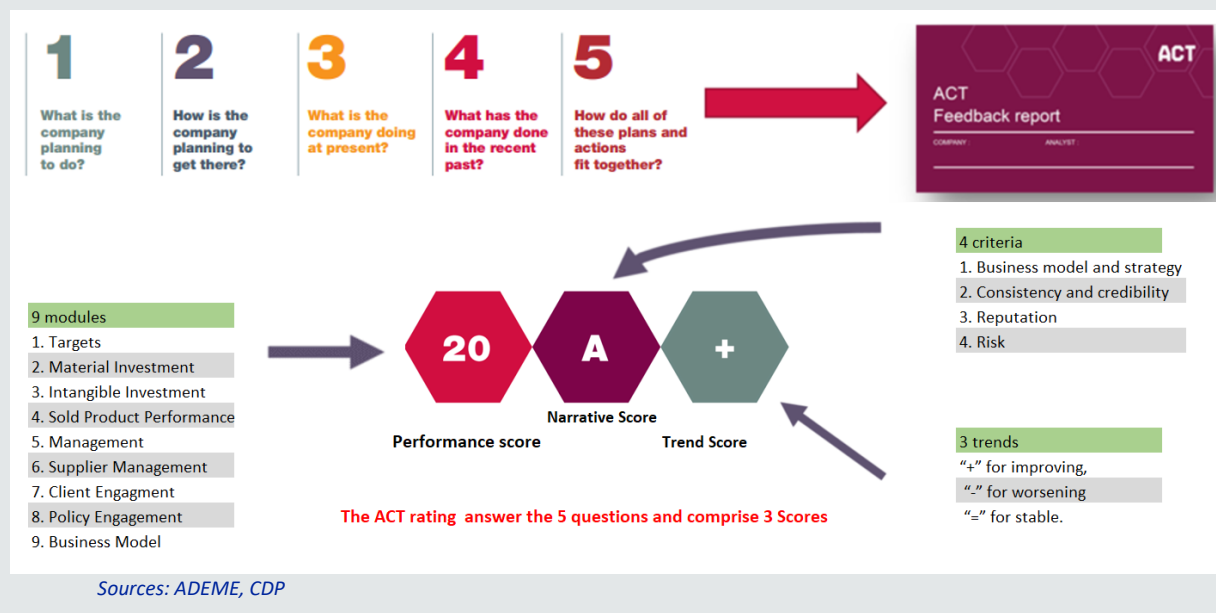
Box 1: ACT methodology – Assessing Low-Carbon Transition

ACT – *Assessing Low-Carbon Transition* is an initiative launched by the secretariat of the UNFCCC (United Nations Framework Convention on Climate Change) in order to encourage firms to place themselves on a trajectory compatible with global warming of less than 2°C. In order to achieve this objective, two of its founding members, the Agence de l'Environnement et de la Maîtrise de l'Énergie (ADEME) and the *Carbon Disclosure Project* (CDP), have jointly developed a methodology allowing a sector assessment of firms' transition plans.

The ACT score is a number on a scale ranging from 0 to 100, which reflects the degree of alignment of the firm's strategy with sector decarbonisation trajectories. The firm is assessed based on its past, present and future actions in all possible fields of action. The overall assessment is the result of the combination of 3 sub-scores:

- a performance metric (/20), assigned based on the scores relating to 9 modules which each comprise indicators defined on a sector basis. The modules concern the firm's reduction objectives (emission reduction and time frame), the material and immaterial investment committed, the energy performance of the products, management involvement, actions taken with customers and suppliers to encourage them to reduce their greenhouse gas emissions, policy statements and public commitments as well as an analysis of the business model (e.g., the proportion of revenues derived from renewable energies);
- a qualitative metric (a letter between A and E) summarising the assessment of the firm with regard to six criteria: its business model, its reputation, the maturity of its climate strategy and the risks entailed, its transparency and the consistency and credibility of the information provided during the assessment;
- an assessment of the issuer's prospects for change (+ / = / -), depending on whether an improvement, stability or a lowering of the score is expected.

Criteria assessed with the ACT methodology



Focusing first on equity funds, the results of the various estimates are generally consistent and appear to confirm the hypothesis of greater exposure of Article 6 funds to the coal sector: the exposure to the coal sector of an Article 8 equity fund is on average 0.2 to 0.4 percentage points less than the exposure of an Article 6 equivalent. The average difference between an Article 9 fund and an Article 6 fund is, depending on the models, in a range between 0.3 and 0.8 percentage points. In contrast, the difference between the exposure of Article 8 funds and that of Article 9 funds is more seldom significant (orange boxes). It is perceptible especially when the credibility of the transition plans is taken into consideration.

Table 2: Summary table of regression coefficients for exposure to the coal sector (URGEGWALD)

		EQUITY FUNDS N = 1 522 (of which 652 Art.8 and 118 Art.9)			BOND FUNDS N = 947 (of which 324 Art.8 and 38 Art.9)			MIXED FUNDS N = 3 026 (of which 790 Art.8 and 51 Art.9)			MMFs N = 180 (of which 100 Art.8 and no Art.9)			
		Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	
Excluding Green Bonds, SLBs, etc.	method U1	(E1)	-0,0028	-0,0031	-0,0003	0,0022	0,0116	0,0094	0,0013	-0,0023	-0,0036	-0,0015		
		(p-value)	0,0000	0,0013	0,7647	0,0069	0,0000	0,0001	0,0059	0,0050	0,0000	0,2307		
		(E2)	-0,0028	-0,0031	-0,0003	0,0024	0,0116	0,0092	0,0013	-0,0024	-0,0036	-0,0018		
	(p-value)	0,0000	0,0013	0,7305	0,0038	0,0000	0,0001	0,0078	0,0053	0,0000	0,1528			
	(E3)	-0,0030	-0,0032	-0,0002	0,0026	0,0127	0,0101	0,0006	-0,0023	-0,0028	-0,0027			
	(p-value)	0,0000	0,0078	0,8609	0,0033	0,0000	0,0003	0,3044	0,0351	0,0083	0,1053			
	method U2	(E1)	-0,0027	-0,0032	-0,0005	0,0025	0,0126	0,0101	0,0010	-0,0033	-0,0043	0,0006		
		(p-value)	0,0000	0,0008	0,5887	0,0048	0,0000	0,0004	0,0702	0,0002	0,0000	0,8697		
		(E2)	-0,0028	-0,0033	-0,0005	0,0025	0,0126	0,0100	0,0009	-0,0033	-0,0042	-0,0010		
(p-value)	0,0000	0,0008	0,5575	0,0048	0,0000	0,0004	0,0830	0,0003	0,0000	0,7824				
(E3)	-0,0031	-0,0033	-0,0003	0,0028	0,0143	0,0114	-0,0003	-0,0039	-0,0036	-0,0037				
(p-value)	0,0000	0,0061	0,8075	0,0046	0,0000	0,0004	0,6939	0,0106	0,0067	0,3759				
method U3	(E1)	-0,0031	-0,0052	-0,0021	0,0019	0,0221	0,0202	0,0001	-0,0042	-0,0043	0,0032			
	(p-value)	0,0010	0,0002	0,1238	0,1239	0,0000	0,0000	0,8934	0,0151	0,0115	0,5597			
	(E2)	-0,0033	-0,0055	-0,0022	0,0020	0,0221	0,0200	-0,0001	-0,0040	-0,0039	0,0006			
(p-value)	0,0005	0,0001	0,1117	0,1127	0,0000	0,0000	0,8811	0,0192	0,0207	0,9128				
(E3)	-0,0037	-0,0074	-0,0037	0,0028	0,0241	0,0213	-0,0023	-0,0069	-0,0046	-0,0004				
(p-value)	0,0007	0,0004	0,0318	0,0516	0,0000	0,0000	0,0741	0,0281	0,0637	0,9442				
Excluding credible transition plans	method U1	(E1)	-0,0028	-0,0031	-0,0003	0,0016	0,0004	-0,0012	-0,0001	-0,0030	-0,0029	-0,0015		
		(p-value)	0,0000	0,0011	0,7379	0,0278	0,7937	0,4866	0,8335	0,0000	0,0000	0,2307		
		(E2)	-0,0028	-0,0031	-0,0003	0,0017	0,0004	-0,0013	-0,0001	-0,0031	-0,0030	-0,0018		
	(p-value)	0,0000	0,0012	0,7018	0,0218	0,7986	0,4450	0,7622	0,0000	0,0000	0,1528			
	(E3)	-0,0030	-0,0033	-0,0002	0,0018	0,0025	0,0007	-0,0006	-0,0028	-0,0022	-0,0027			
	(p-value)	0,0000	0,0074	0,8423	0,0209	0,1713	0,7145	0,2220	0,0011	0,0078	0,1053			
	method U2	(E1)	-0,0027	-0,0032	-0,0005	0,0019	-0,0003	-0,0022	-0,0004	-0,0041	-0,0037	0,0006		
		(p-value)	0,0000	0,0007	0,5639	0,0195	0,8455	0,2122	0,3336	0,0000	0,0000	0,8697		
		(E2)	-0,0028	-0,0033	-0,0005	0,0018	-0,0004	-0,0022	-0,0005	-0,0042	-0,0037	-0,0010		
(p-value)	0,0000	0,0007	0,5314	0,0252	0,8333	0,2190	0,2931	0,0000	0,0000	0,7824				
(E3)	-0,0031	-0,0034	-0,0003	0,0020	0,0022	0,0002	-0,0014	-0,0046	-0,0032	-0,0037				
(p-value)	0,0000	0,0057	0,7873	0,0290	0,2778	0,9358	0,0286	0,0005	0,0030	0,3759				
method U3	(E1)	-0,0031	-0,0053	-0,0022	0,0010	-0,0017	-0,0026	-0,0016	-0,0072	-0,0056	0,0027			
	(p-value)	0,0010	0,0002	0,1146	0,3440	0,3542	0,1596	0,0314	0,0000	0,0000	0,6168			
	(E2)	-0,0033	-0,0056	-0,0023	0,0009	-0,0017	-0,0026	-0,0018	-0,0071	-0,0054	0,0001			
(p-value)	0,0005	0,0001	0,1028	0,4177	0,3442	0,1775	0,0157	0,0000	0,0000	0,9880				
(E3)	-0,0037	-0,0074	-0,0038	0,0011	0,0016	0,0005	-0,0037	-0,0097	-0,0060	-0,0012				
(p-value)	0,0008	0,0000	0,0296	0,3564	0,4835	0,8281	0,0032	0,0006	0,0033	0,8472				
Excluding credible transition plans	method U1	(E1)	-0,0027	-0,0038	-0,0011	0,0000	0,0058	0,0058	-0,0013	-0,0008	0,0005	0,0000		
		(p-value)	0,0000	0,0000	0,0096	0,9766	0,0006	0,0006	0,0000	0,2091	0,3448	0,1594		
		(E2)	-0,0026	-0,0038	-0,0012	-0,0001	0,0058	0,0058	-0,0014	-0,0010	0,0004	0,0000		
	(p-value)	0,0000	0,0000	0,0064	0,9114	0,0006	0,0006	0,0000	0,1479	0,4877	0,1604			
	(E3)	-0,0029	-0,0040	-0,0011	0,0004	0,0069	0,0064	-0,0016	-0,0013	0,0003	0,0000			
	(p-value)	0,0000	0,0000	0,1193	0,4067	0,0007	0,0017	0,0000	0,0980	0,6228	0,3544			
	method U2	(E1)	-0,0027	-0,0039	-0,0013	0,0003	0,0062	0,0059	-0,0016	-0,0016	0,0000	0,0004		
		(p-value)	0,0000	0,0000	0,0043	0,6107	0,0028	0,0047	0,0000	0,0130	0,9829	0,8472		
		(E2)	-0,0026	-0,0039	-0,0013	0,0001	0,0061	0,0060	-0,0017	-0,0018	-0,0001	-0,0004		
(p-value)	0,0000	0,0000	0,0031	0,8107	0,0026	0,0036	0,0000	0,0101	0,8356	0,8540				
(E3)	-0,0029	-0,0041	-0,0011	0,0007	0,0078	0,0071	-0,0023	-0,0028	-0,0005	-0,0027				
(p-value)	0,0000	0,0000	0,1051	0,2738	0,0009	0,0029	0,0000	0,0319	0,6262	0,2816				
method U3	(E1)	-0,0029	-0,0056	-0,0027	-0,0007	0,0053	0,0060	-0,0023	-0,0023	0,0000	0,0012			
	(p-value)	0,0000	0,0000	0,0000	0,3423	0,0167	0,0068	0,0000	0,0041	0,9949	0,6519			
	(E2)	-0,0028	-0,0056	-0,0028	-0,0009	0,0052	0,0061	-0,0024	-0,0025	-0,0001	-0,0003			
(p-value)	0,0000	0,0000	0,0000	0,2083	0,0161	0,0047	0,0000	0,0030	0,9242	0,9126				
(E3)	-0,0033	-0,0068	-0,0035	-0,0002	0,0073	0,0075	-0,0029	-0,0035	-0,0006	-0,0012				
(p-value)	0,0000	0,0000	0,0002	0,7840	0,0035	0,0028	0,0000	0,0131	0,6158	0,6765				

Source: Banque de France ("OPC titres" database), Lipper, Morningstar, Trucost, Uргewald, AMF

NB: The coefficients in red are positive and significant at the 5% threshold, while the coefficients in pink are weakly significant (10%). The coefficients in dark green are negative and significant at the 5% threshold, while the coefficients in light green are weakly significant (10%). The coefficients in orange are not significant at the 10% threshold and therefore their sign is not commented on.

On the other hand, the results for bond funds show that the difference in exposure between Article 8 funds and Article 6 funds is at best non-significant, and at worst frequently positive and significant. The rate of exposure of Article 8 funds appears, according to certain models (including those correcting for the bias related to green bonds and SLBs), 0.2 to 0.6 percentage points higher than for Article 6 funds.

Table 3: Summary table of regression coefficients for exposure to the coal sector (TRUCOST)

		EQUITY FUNDS N = 1 522 (of which 652 Art.8 and 118 Art.9)			BOND FUNDS N = 947 (of which 324 Art.8 and 38 Art.9)			MIXED FUNDS N = 3 026 (of which 790 Art.8 and 51 Art.9)			MMFs N = 180 (of which 100 Art.8 and no Art.9)		
		Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8
		(p-value)	(p-value)	(p-value)	(p-value)	(p-value)	(p-value)	(p-value)	(p-value)	(p-value)	(p-value)	(p-value)	(p-value)
Excluding Green Bonds, SLBs, etc.	method T1	(E1)	-0,0028 0,0593	-0,0015 0,5378	0,0013 0,5705	0,0055 0,0022	0,0404 0,0000	0,0349 0,0000	0,0036 0,0001	0,0030 0,3866	-0,0006 0,8430	0,0008 0,8878	
		(E2)	-0,0032 0,0011	-0,0021 0,3741	0,0011 0,6549	0,0061 0,0012	0,0404 0,0000	0,0342 0,0000	0,0033 0,0009	0,0033 0,2820	0,0000 0,9908	-0,0017 0,7706	
		(E3)	-0,0022 0,1877	-0,0045 0,0951	-0,0024 0,3667	0,0059 0,0034	0,0407 0,0000	0,0348 0,0000	0,0011 0,3576	0,0014 0,6876	0,0003 0,9209	-0,0050 0,4355	
	method T2	(E1)	-0,0028 0,0592	-0,0015 0,5376	0,0013 0,5705	0,0054 0,0059	0,0404 0,0000	0,0350 0,0000	0,0036 0,0001	0,0030 0,3287	-0,0006 0,8561	0,0008 0,8878	
		(E2)	-0,0032 0,0011	-0,0021 0,3740	0,0011 0,6549	0,0060 0,0011	0,0403 0,0000	0,0343 0,0000	0,0033 0,0009	0,0033 0,2763	0,0000 0,9956	-0,0017 0,7706	
		(E3)	-0,0022 0,1876	-0,0045 0,0951	-0,0024 0,3667	0,0058 0,0047	0,0407 0,0000	0,0350 0,0000	0,0011 0,3513	0,0015 0,6759	0,0004 0,9108	-0,0050 0,4355	
	method T2bis	(E1)	-0,0018 0,0020	0,0009 0,3665	0,0028 0,0057	0,0024 0,0002	0,0176 0,0000	0,0152 0,0000	0,0012 0,0002	0,0029 0,0091	0,0017 0,1991	-0,0016 0,4216	
		(E2)	-0,0020 0,0009	0,0007 0,5262	0,0026 0,0086	0,0026 0,0002	0,0176 0,0000	0,0150 0,0000	0,0011 0,0051	0,0029 0,0069	0,0018 0,1651	-0,0025 0,2559	
		(E3)	-0,0015 0,0020	0,0002 0,8382	0,0018 0,1177	0,0024 0,0008	0,0170 0,0000	0,0146 0,0000	0,0005 0,2833	0,0024 0,1208	0,0019 0,2093	-0,0043 0,0719	
	method T3	(E1)	-0,0028 0,0594	-0,0015 0,5389	0,0013 0,5740	0,0048 0,0114	0,0394 0,0000	0,0347 0,0000	0,0037 0,0002	0,0029 0,3402	-0,0007 0,8122	0,0008 0,8878	
		(E2)	-0,0032 0,0021	-0,0022 0,3610	0,0010 0,6581	0,0056 0,0044	0,0394 0,0000	0,0338 0,0000	0,0034 0,0007	0,0032 0,2895	-0,0002 0,9532	-0,0017 0,7706	
		(E3)	-0,0021 0,1888	-0,0045 0,0947	-0,0024 0,3666	0,0055 0,0082	0,0402 0,0000	0,0347 0,0000	0,0012 0,3032	0,0012 0,2783	0,0000 0,9896	-0,0050 0,4255	
method T4	(E1)	-0,0023 0,1280	0,0003 0,9325	0,0026 0,3080	0,0047 0,0061	0,0464 0,0000	0,0417 0,0000	0,0037 0,0007	0,0064 0,0737	0,0027 0,4569	0,0040 0,5436		
	(E2)	-0,0027 0,0026	-0,0003 0,9081	0,0024 0,3544	0,0053 0,0039	0,0463 0,0000	0,0410 0,0000	0,0034 0,0008	0,0068 0,0651	0,0034 0,1646	0,0011 0,9200		
	(E3)	-0,0018 0,1234	-0,0029 0,2409	-0,0012 0,6801	0,0052 0,0034	0,0487 0,0000	0,0436 0,0000	0,0008 0,3789	0,0044 0,2889	0,0035 0,2847	-0,0023 0,7656		
Excluding credible transition plans	method T1	(E1)	-0,0028 0,0610	-0,0016 0,5128	0,0012 0,6030	0,0019 0,0992	-0,0007 0,7679	-0,0027 0,2694	0,0009 0,8016	-0,0026 0,2325	-0,0035 0,1107	0,0003 0,9519	
		(E2)	-0,0032 0,0021	-0,0022 0,3521	0,0009 0,6911	0,0021 0,0773	-0,0008 0,7519	-0,0029 0,2589	0,0006 0,4611	-0,0025 0,2524	-0,0031 0,1582	-0,0023 0,7013	
		(E3)	-0,0021 0,1889	-0,0046 0,0886	-0,0025 0,3441	0,0019 0,1473	0,0020 0,4880	0,0002 0,9467	-0,0015 0,1823	-0,0044 0,1293	-0,0029 0,2725	-0,0057 0,3866	
	method T2	(E1)	-0,0028 0,0610	-0,0016 0,5127	0,0012 0,6030	0,0018 0,1244	-0,0008 0,7449	-0,0026 0,3031	0,0009 0,2984	-0,0026 0,2348	-0,0035 0,1176	0,0003 0,9519	
		(E2)	-0,0032 0,0021	-0,0022 0,3520	0,0009 0,6911	0,0020 0,0940	-0,0008 0,7291	-0,0029 0,2624	0,0007 0,4570	-0,0024 0,2654	-0,0031 0,1668	-0,0023 0,7013	
		(E3)	-0,0021 0,1892	-0,0046 0,0886	-0,0025 0,3441	0,0017 0,1885	0,0021 0,4853	0,0003 0,9125	-0,0014 0,1868	-0,0043 0,1348	-0,0029 0,2883	-0,0057 0,3866	
	method T2bis	(E1)	-0,0029 0,0340	-0,0009 0,6777	0,0020 0,3710	0,0020 0,0707	-0,0002 0,8349	-0,0022 0,3611	0,0005 0,5728	-0,0021 0,3233	-0,0026 0,2362	-0,0008 0,8803	
		(E2)	-0,0033 0,0048	-0,0016 0,4854	0,0017 0,4459	0,0023 0,0527	-0,0002 0,9178	-0,0025 0,3141	0,0003 0,7607	-0,0020 0,3415	-0,0023 0,2830	-0,0034 0,5411	
		(E3)	-0,0025 0,0992	-0,0040 0,1220	-0,0015 0,5586	0,0018 0,1453	0,0026 0,3764	0,0008 0,7842	-0,0017 0,1073	-0,0038 0,1810	-0,0021 0,4206	-0,0069 0,2507	
	method T3	(E1)	-0,0028 0,0565	-0,0016 0,4955	0,0012 0,6056	0,0012 0,3518	-0,0017 0,5126	-0,0029 0,2829	0,0010 0,2585	-0,0027 0,2168	-0,0037 0,0989	0,0003 0,9519	
		(E2)	-0,0032 0,0027	-0,0023 0,3395	0,0009 0,6944	0,0016 0,2273	-0,0018 0,4998	-0,0034 0,2218	0,0007 0,4021	-0,0025 0,2421	-0,0033 0,1896	-0,0023 0,7013	
		(E3)	-0,0021 0,1844	-0,0046 0,0882	-0,0025 0,3420	0,0015 0,2885	0,0015 0,6238	0,0001 0,9819	-0,0013 0,2301	-0,0046 0,1088	-0,0033 0,2139	-0,0057 0,3866	
method T4	(E1)	-0,0023 0,1362	0,0002 0,9112	0,0025 0,3238	0,0010 0,5080	-0,0019 0,5135	-0,0029 0,3353	0,0009 0,3718	-0,0001 0,9740	-0,0010 0,2009	0,0035 0,5907		
	(E2)	-0,0027 0,0859	-0,0004 0,8770	0,0023 0,3793	0,0011 0,4731	-0,0020 0,4997	-0,0031 0,3124	0,0006 0,5391	0,0001 0,9650	-0,0005 0,8549	0,0005 0,9393		
	(E3)	-0,0017 0,3158	-0,0030 0,3062	-0,0013 0,6558	0,0009 0,5782	0,0025 0,4479	0,0016 0,6394	-0,0019 0,1844	-0,0023 0,5527	-0,0004 0,9014	-0,0031 0,6668		
Excluding credible transition plans	method T1	(E1)	-0,0018 0,0328	-0,0051 0,0000	-0,0033 0,0016	0,0012 0,1706	0,0145 0,0000	0,0132 0,0000	-0,0001 0,8449	-0,0009 0,5310	-0,0008 0,5890	-0,0014 0,6053	
		(E2)	-0,0018 0,0381	-0,0051 0,0000	-0,0034 0,0011	0,0014 0,1325	0,0144 0,0000	0,0130 0,0000	-0,0002 0,7406	-0,0010 0,4894	-0,0008 0,5674	-0,0029 0,2970	
		(E3)	-0,0018 0,0632	-0,0064 0,0000	-0,0047 0,0092	0,0015 0,1574	0,0167 0,0000	0,0152 0,0000	-0,0009 0,0916	-0,0013 0,8997	-0,0005 0,7727	-0,0058 0,0339	
	method T2	(E1)	-0,0018 0,0327	-0,0051 0,0000	-0,0033 0,0016	0,0011 0,2168	0,0144 0,0000	0,0133 0,0000	-0,0001 0,8545	-0,0008 0,5603	-0,0007 0,6080	-0,0014 0,6053	
		(E2)	-0,0018 0,0380	-0,0051 0,0000	-0,0034 0,0011	0,0013 0,1617	0,0143 0,0000	0,0130 0,0000	-0,0002 0,7501	-0,0009 0,5167	-0,0008 0,5993	-0,0029 0,2970	
		(E3)	-0,0018 0,0631	-0,0064 0,0000	-0,0047 0,0092	0,0014 0,2041	0,0167 0,0000	0,0154 0,0000	-0,0009 0,0977	-0,0013 0,4225	-0,0004 0,7951	-0,0058 0,0339	
	method T2bis	(E1)	-0,0018 0,0275	-0,0044 0,0000	-0,0027 0,0080	0,0012 0,1769	0,0145 0,0000	0,0133 0,0000	-0,0001 0,8144	-0,0006 0,6895	-0,0004 0,7525	-0,0014 0,6085	
		(E2)	-0,0017 0,0326	-0,0045 0,0000	-0,0028 0,0054	0,0014 0,1137	0,0145 0,0000	0,0131 0,0000	-0,0002 0,7297	-0,0007 0,6382	-0,0005 0,7268	-0,0029 0,2995	
		(E3)	-0,0018 0,0491	-0,0059 0,0000	-0,0041 0,0099	0,0015 0,1607	0,0169 0,0000	0,0154 0,0000	-0,0008 0,0982	-0,0010 0,5255	-0,0002 0,9134	-0,0058 0,0339	
	method T3	(E1)	-0,0019 0,0294	-0,0052 0,0000	-0,0033 0,0015	0,0005 0,6146	0,0135 0,0000	0,0129 0,0000	0,0000 0,9931	-0,0009 0,5172	-0,0009 0,5241	-0,0014 0,6053	
		(E2)	-0,0018 0,0494	-0,0052 0,0000	-0,0034 0,0012	0,0009 0,6265	0,0134 0,0000	0,0125 0,0000	-0,0001 0,9812	-0,0010 0,4672	-0,0009 0,5083	-0,0029 0,2970	
		(E3)	-0,0018 0,0641	-0,0064 0,0000	-0,0047 0,0097	0,0011 0,2256	0,0162 0,0000	0,0151 0,0000	-0,0007 0,1665	-0,0016 0,2310	-0,0008 0,9548	-0,0058 0,0339	
method T4	(E1)	-0,0014 0,1469	-0,0033 0,0000	-0,0019 0,1933	0,0004 0,7463	0,0204 0,0000	0,0200 0,0000	0,0000 0,9850	0,0026 0,1546	0,0026 0,2026	0,0018 0,9074		
	(E2)	-0,0013 0,1779	-0,0033 0,0000	-0,0020 0,1449	0,0005 0,6698	0,0204 0,0000	0,0198 0,0000	-0,0001 0,9356	0,0026 0,1611	0,0026 0,2011	-0,0001 0,9851		
	(E3)	-0,0014 0,2038	-0,0048 0,0000	-0,0034 0,0072	0,0008 0,6210	0,0247 0,0000	0,0240 0,0000	-0,0011 0,1129	0,0016 0,5001	0,0027 0,2560	-0,0032 0,8946		

Source: Banque de France ("OPC titres" database), Lipper, Morningstar, Trucost, Urgewald, AMF

NB: The coefficients in red are positive and significant at the 5% threshold, while the coefficients in pink are weakly significant (10%). The coefficients in dark green are negative and significant at the 5% threshold, while the coefficients in light green are weakly significant (10%). The coefficients in orange are not significant at the 10% threshold and therefore their sign is not commented on.

The difference between Article 9 funds and Article 6 funds appears non-significant when the exposure metrics are adjusted for green bonds, sustainable bonds, social bonds and SLBs, but positive in all other cases (even when the transition plans regarded as credible are deducted). The magnitude of the estimated coefficients is between one and five percentage points with raw exposures, and between 0.5 and 2.5 percentage points when the credibility of the transition plans is taken into account. The difference between Article 8 bond funds and Article 9 funds also appears non-significant or positive (i.e. in the sense of greater exposure to the coal sector for Article 9 funds). It might seem surprising that the promotion of environmental or social characteristics in the published pre-contractual information (Article 8) is not reflected by significant differences in exposure to the coal sector, but remember, again, that SFDR only introduces transparency requirements and not management constraints, and that the slightest mention of a sustainable characteristic in a product's documentation is sufficient to consider it as coming under Article 8 of SFDR.

For diversified funds, the results vary depending on the data source. The results concerning the difference between Article 8 funds and Article 6 funds are relatively consistent for the two sources when we focus on the raw metrics (not adjusted): Article 8 funds appear slightly more exposed to the coal sector than their Article 6 counterparts (by 0.1 to 0.4 percentage points). However, this result no longer holds when the exposure metrics are adjusted to deduct SLBs, social bonds, sustainable bonds and green bonds or to take into consideration credible transition plans. Indeed, the difference is no longer significant using Trucost metrics, while it may become negative with Urgewald metrics. Likewise, the difference between Article 9 funds and Article 6 funds is generally non-significant with Trucost metrics, whereas it seems to point to lower exposure with Urgewald metrics.

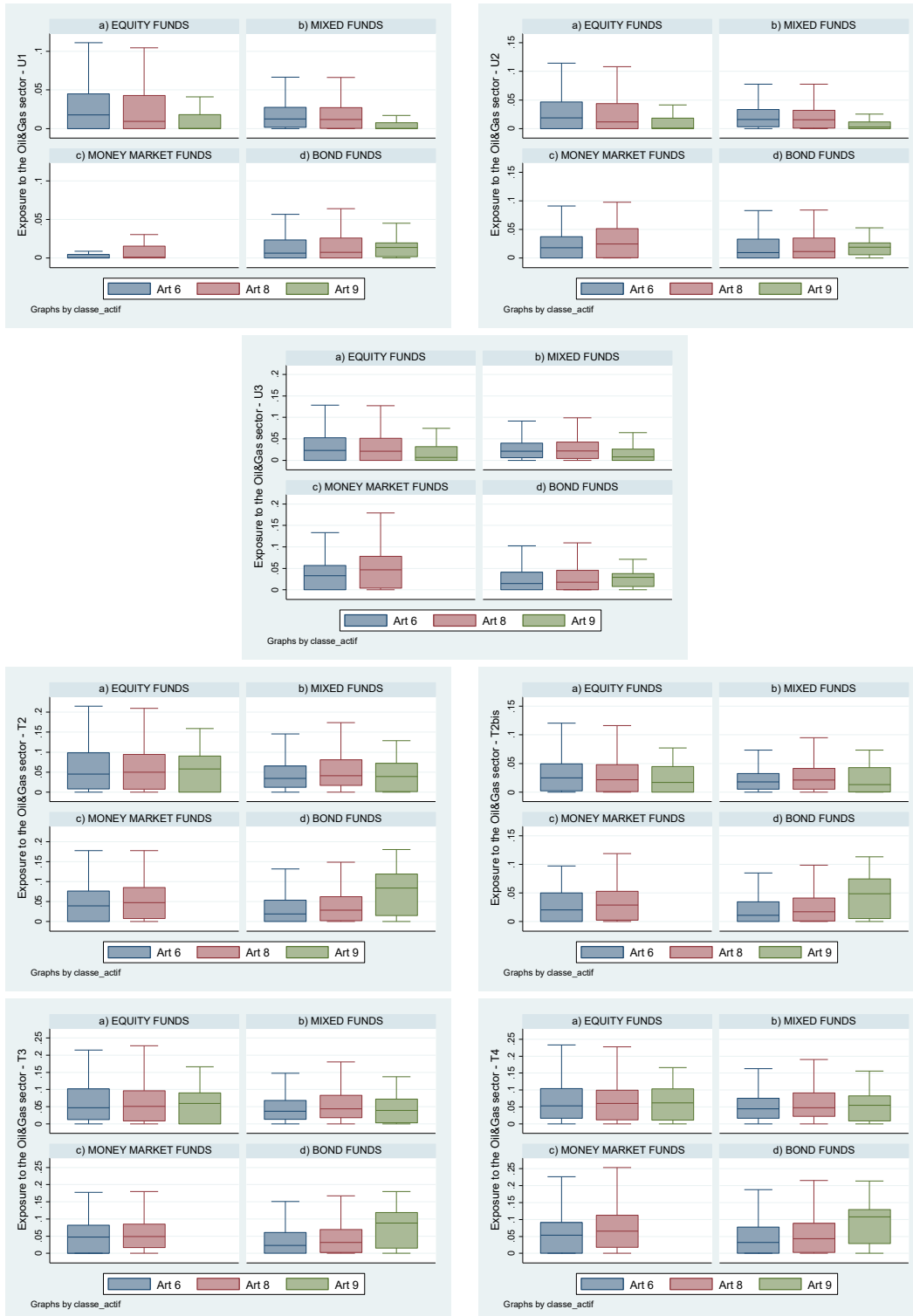
The non-significance of the difference in exposure between Article 8 money market funds and their Article 6 equivalents is fairly striking. Out of the 72 estimated coefficients reported in Table 2 and Table 3, only five are significant (all obtained with the Trucost metrics). **It is therefore generally not possible to distinguish between Article 6 and Article 8 money market funds based on their portfolios' exposure to the coal sector.**

3.4. FRENCH FUNDS' EXPOSURE TO THE OIL AND GAS SECTOR

The various exposure metrics are computed for oil & gas.³⁹ The graphical diagnostic is similar to the one derived with coal exposures (Graph 7). Overall, and whatever the metrics used, the difference of exposure between Article 6 funds and Article 8 funds is not blatantly obvious. Article 9 funds, for their part, seem less exposed to the oil & gas sector, except in the case of bond funds. Here again, this apparent result can be due to the higher proportion of green bonds, social bonds, sustainability bonds and SLBs in bond funds, and the following econometric analyses will propose robustness checks to take into consideration this hypothesis.

³⁹ Except for method T1, which is not applicable in the case of oil & gas.

Graph 7: Distribution of the proportion of securities associated with the oil & gas sector, by asset class and SFDR classification



Source: Banque de France ("OPC titres" database), Lipper, Morningstar, Trucost, Uргewald, AMF

NB: The rectangle materialises observations located between the first and third quartiles (the bottom and top of the box respectively). The horizontal line within the box indicates the median (second quartile). The extensions represent "adjacent" observations, i.e., to simplify, the extent of the total distribution (excluding atypical extreme values).

Table 4 and Table 5 present the various results of the econometric models applied to the oil & gas exposure metrics derived from the Urgewald and Trucost data respectively.

For equity funds, Article 8 funds seem slightly less exposed to oil and gas firms (by 0.5 percentage points on average), but this difference is significant only for the exposure metrics based on the Urgewald data (and still, not according to all the specifications). Article 9 funds also seem to finance firms in the oil & gas sector to a lesser extent than their Article 6 equivalents. The difference is approximately 1 to 1.6 percentage points. It is significant for all the exposure metrics derived from Urgewald, and more seldom for the Trucost data – although the metrics corrected for credible transition plans all have significant coefficients.

Regarding bond funds, the Article 8 funds appear at best as much exposed to the oil & gas sector as the Article 6 funds (no significant coefficient for the Urgewald metrics), and sometimes even more exposed according to several specifications with the Trucost metrics. With the raw metrics, Article 9 funds also seem as much or even more exposed than Article 6 funds to the oil and gas sector (by up to four percentage points for the Trucost raw metrics). This phenomenon clearly seems due to the greater exposure to green bonds, social bonds, sustainable bonds and SLBs: hence, when the exposure metrics are adjusted for these specific securities, the coefficients become non-significant, or are even inverted. However, if the only correction made is for credible transition plans, Trucost metrics again indicate greater exposure of Article 9 funds to the oil & gas sector.

Analysis of the diversified funds again shows results that are variable depending on the data sources. According to Urgewald exposure metrics, Article 9 funds are indeed significantly less exposed to the oil & gas sector than Article 8 funds, which are themselves less exposed than Article 6 funds. However, with Trucost data, the difference between Article 8 funds and Article 6 funds seems non-significant, or even points in the direction of greater exposure of Article 8 funds (raw metrics). Article 9 funds are significantly less exposed than Article 6 or Article 8 funds only where exposure variables are adjusted for green bonds, social bonds sustainability bonds and SLBs (or even, to a lesser extent, when credible transition plans are taken into consideration).

Lastly, the exposure of Article 8 money market funds to the oil & gas sector is generally not significantly different from that of Article 6 MMFs. The only (rare) significant coefficients would even point to greater exposure of Article 8 funds (by approximately 0.3 percentage points – method U1).

Table 4: Summary table of regression coefficients for exposure to the oil & gas sector (URGEWALD)

		EQUITY FUNDS N = 1 522 (of which 652 Art.8 and 118 Art.9)			BOND FUNDS N = 947 (of which 324 Art.8 and 38 Art.9)			MIXED FUNDS N = 3 026 (of which 790 Art.8 and 51 Art.9)			MMFs N = 180 (of which 100 Art.8 and no Art.9)			
		Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	
Excluding Green Bonds, SLBs, etc.	method U1	(E1)	-0,0043 0,0867	-0,0140 0,0000	-0,0097 0,0015	0,0016 0,3201	0,0010 0,7000	-0,0006 0,8380	-0,0015 0,1490	-0,0125 0,0000	-0,0110 0,0000	0,0034 0,0167		
		(E2)	-0,0054 0,0306	-0,0155 0,0000	-0,0101 0,0013	0,0017 0,3238	0,0010 0,7061	-0,0007 0,8130	-0,0022 0,0458	-0,0122 0,0000	-0,0100 0,0000	0,0035 0,0213		
		(E3)	-0,0045 0,1084	-0,0153 0,0001	-0,0108 0,0023	0,0013 0,4530	0,0051 0,0710	0,0037 0,1996	-0,0036 0,0033	-0,0108 0,0000	-0,0072 0,0039	0,0032 0,1130		
	method U2	(E1)	-0,0044 0,0786	-0,0145 0,0000	-0,0100 0,0011	0,0013 0,4922	0,0001 0,9630	-0,0012 0,7238	-0,0028 0,0194	-0,0151 0,0000	-0,0124 0,0000	0,0042 0,3273		
		(E2)	-0,0056 0,0263	-0,0160 0,0000	-0,0104 0,0009	0,0014 0,4885	0,0001 0,9767	-0,0013 0,6989	-0,0035 0,0043	-0,0148 0,0000	-0,0113 0,0000	0,0033 0,4636		
		(E3)	-0,0049 0,0875	-0,0157 0,0000	-0,0108 0,0022	0,0016 0,4705	0,0055 0,1153	0,0039 0,2777	-0,0057 0,0007	-0,0155 0,0000	-0,0098 0,0010	-0,0003 0,9474		
	method U3	(E1)	-0,0041 0,1356	-0,0141 0,0000	-0,0100 0,0040	0,0000 0,9967	0,0009 0,8422	0,0009 0,8359	-0,0015 0,2672	-0,0133 0,0000	-0,0118 0,0001	0,0078 0,2552		
		(E2)	-0,0057 0,0384	-0,0164 0,0000	-0,0107 0,0026	0,0003 0,9079	0,0008 0,8589	0,0004 0,9178	-0,0022 0,1054	-0,0128 0,0000	-0,0105 0,0003	0,0058 0,4222		
		(E3)	-0,0040 0,2000	-0,0154 0,0003	-0,0114 0,0044	0,0001 0,9679	0,0062 0,2034	0,0061 0,1802	-0,0055 0,0025	-0,0144 0,0004	-0,0089 0,0125	0,0010 0,8988		
Excluding Green Bonds, SLBs, etc.	method U1	(E1)	-0,0043 0,0868	-0,0140 0,0000	-0,0097 0,0015	0,0012 0,4354	-0,0081 0,0000	-0,0093 0,0000	-0,0017 0,0996	-0,0131 0,0000	-0,0114 0,0000	0,0029 0,0310		
		(E2)	-0,0054 0,0306	-0,0155 0,0000	-0,0101 0,0012	0,0012 0,4689	-0,0081 0,0000	-0,0093 0,0000	-0,0024 0,0290	-0,0128 0,0000	-0,0104 0,0000	0,0029 0,0490		
		(E3)	-0,0045 0,1086	-0,0153 0,0001	-0,0108 0,0023	0,0008 0,6479	-0,0040 0,0366	-0,0048 0,0187	-0,0039 0,0017	-0,0114 0,0000	-0,0076 0,0024	0,0025 0,2010		
	method U2	(E1)	-0,0044 0,0788	-0,0145 0,0000	-0,0101 0,0010	0,0009 0,6437	-0,0113 0,0000	-0,0121 0,0000	-0,0030 0,0102	-0,0161 0,0000	-0,0131 0,0000	0,0038 0,3814		
		(E2)	-0,0056 0,0264	-0,0160 0,0000	-0,0104 0,0009	0,0008 0,6753	-0,0113 0,0000	-0,0121 0,0000	-0,0037 0,0021	-0,0158 0,0000	-0,0120 0,0000	0,0028 0,5400		
		(E3)	-0,0048 0,0878	-0,0157 0,0000	-0,0109 0,0022	0,0008 0,6923	-0,0058 0,0229	-0,0066 0,0138	-0,0060 0,0003	-0,0164 0,0000	-0,0105 0,0000	-0,0011 0,8352		
	method U3	(E1)	-0,0041 0,1361	-0,0141 0,0000	-0,0100 0,0039	-0,0005 0,8639	-0,0138 0,0000	-0,0133 0,0000	-0,0018 0,1756	-0,0156 0,0000	-0,0138 0,0000	0,0074 0,2836		
		(E2)	-0,0057 0,0386	-0,0164 0,0000	-0,0107 0,0025	-0,0003 0,9213	-0,0139 0,0000	-0,0136 0,0000	-0,0025 0,0636	-0,0151 0,0000	-0,0126 0,0000	0,0053 0,4678		
		(E3)	-0,0039 0,2008	-0,0154 0,0003	-0,0115 0,0043	-0,0009 0,7772	-0,0086 0,0372	-0,0077 0,0384	-0,0058 0,0014	-0,0165 0,0014	-0,0107 0,0014	0,0002 0,9742		
Excluding credible transition plans	method U1	(E1)	-0,0039 0,0993	-0,0150 0,0000	-0,0112 0,0000	0,0004 0,7392	-0,0066 0,0003	-0,0070 0,0003	-0,0024 0,0067	-0,0116 0,0000	-0,0092 0,0000	0,0022 0,0202		
		(E2)	-0,0048 0,0406	-0,0164 0,0000	-0,0116 0,0000	0,0004 0,7813	-0,0066 0,0003	-0,0070 0,0005	-0,0030 0,0010	-0,0114 0,0000	-0,0084 0,0000	0,0024 0,0213		
		(E3)	-0,0041 0,1211	-0,0155 0,0000	-0,0113 0,0002	0,0002 0,8840	-0,0028 0,1726	-0,0030 0,1602	-0,0041 0,0001	-0,0097 0,0000	-0,0056 0,0057	0,0021 0,1311		
	method U2	(E1)	-0,0039 0,0995	-0,0152 0,0000	-0,0113 0,0000	0,0003 0,8544	-0,0087 0,0001	-0,0090 0,0001	-0,0035 0,0003	-0,0139 0,0000	-0,0104 0,0000	0,0035 0,2813		
		(E2)	-0,0048 0,0409	-0,0165 0,0000	-0,0117 0,0000	0,0002 0,8910	-0,0087 0,0001	-0,0090 0,0002	-0,0041 0,0000	-0,0137 0,0000	-0,0096 0,0000	0,0029 0,3977		
		(E3)	-0,0042 0,1159	-0,0156 0,0000	-0,0114 0,0001	0,0006 0,7688	-0,0036 0,1541	-0,0042 0,1161	-0,0057 0,0000	-0,0133 0,0000	-0,0076 0,0011	-0,0009 0,8171		
	method U3	(E1)	-0,0036 0,1545	-0,0145 0,0000	-0,0109 0,0002	-0,0010 0,7126	-0,0103 0,0008	-0,0093 0,0007	-0,0027 0,0176	-0,0132 0,0000	-0,0105 0,0000	0,0060 0,2762		
		(E2)	-0,0049 0,0515	-0,0164 0,0000	-0,0115 0,0001	-0,0008 0,7559	-0,0104 0,0009	-0,0096 0,0008	-0,0033 0,0041	-0,0129 0,0000	-0,0096 0,0000	0,0042 0,4616		
		(E3)	-0,0034 0,2245	-0,0148 0,0000	-0,0113 0,0007	-0,0013 0,6746	-0,0054 0,1596	-0,0041 0,2198	-0,0059 0,0002	-0,0137 0,0001	-0,0078 0,0089	-0,0007 0,9111		

Source: Banque de France ("OPC titres" database), Lipper, Morningstar, Trucost, Uргewald, AMF

NB: The coefficients in red are positive and significant at the 5% threshold, while the coefficients in pink are weakly significant (10%). The coefficients in dark green are negative and significant at the 5% threshold, while the coefficients in light green are weakly significant (10%). The coefficients in orange are not significant at the 10% threshold and therefore their sign is not commented on.

Table 5: Summary table of regression coefficients for exposure to the oil & gas sector (TRUCOST)

		EQUITY FUNDS N = 1 522 (of which 652 Art.8 and 118 Art.9)			BOND FUNDS N = 947 (of which 324 Art.8 and 38 Art.9)			MIXED FUNDS N = 3 026 (of which 790 Art.8 and 51 Art.9)			MMFs N = 180 (of which 100 Art.8 and no Art.9)				
		Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8		
Excluding Green Bonds, SLBs, etc.	method T2	(E1)	-0,0014 0.6905	-0,0053 0.2748	-0,0039 0.4463	0,0087 0.0050	0,0449 0.0000	0,0362 0.0002	0,0055 0.0037	-0,0013 0.8270	-0,0067 0.2505	0,0047 0.5630			
		(E2)	-0,0036 0.3062	-0,0085 0.0983	-0,0048 0.3585	0,0098 0.0030	0,0448 0.0000	0,0351 0.0003	0,0048 0.0133	-0,0001 0.9836	-0,0049 0.3999	0,0018 0.8294			
		(E3)	-0,0009 0.8266	-0,0078 0.2111	-0,0069 0.2589	0,0079 0.0218	0,0458 0.0000	0,0379 0.0003	0,0010 0.6788	-0,0008 0.8990	-0,0018 0.7774	-0,0050 0.5875			
	method T2bis	(E1)	-0,0029 0.2396	-0,0103 0.0901	-0,0074 0.0110	0,0054 0.0127	0,0268 0.0000	0,0214 0.0008	0,0028 0.0121	0,0028 0.6798	-0,0014 0.2121	-0,0042 0.7151	0,0018 0.5875		
		(E2)	-0,0038 0.1227	-0,0115 0.0000	-0,0077 0.0075	0,0058 0.0106	0,0267 0.0000	0,0209 0.0012	0,0023 0.0669	-0,0009 0.7827	-0,0032 0.3382	0,0004 0.9434			
		(E3)	-0,0013 0.6481	-0,0113 0.0017	-0,0100 0.0039	0,0049 0.0425	0,0282 0.0001	0,0233 0.0012	0,0001 0.9593	-0,0028 0.5226	-0,0028 0.4693	-0,0032 0.5813			
	method T3	(E1)	-0,0014 0.6961	-0,0057 0.2506	-0,0043 0.4108	0,0070 0.0396	0,0412 0.0000	0,0342 0.0004	0,0056 0.0039	-0,0025 0.6599	-0,0082 0.1654	0,0034 0.6683			
		(E2)	-0,0036 0.3187	-0,0087 0.0914	-0,0051 0.3311	0,0084 0.0149	0,0410 0.0000	0,0326 0.0009	0,0049 0.0140	-0,0015 0.7945	-0,0064 0.2754	0,0007 0.9314			
		(E3)	-0,0003 0.9432	-0,0075 0.2332	-0,0072 0.2423	0,0061 0.0922	0,0426 0.0001	0,0366 0.0006	0,0010 0.6702	-0,0022 0.7411	-0,0032 0.6183	-0,0036 0.6977			
	method T4	(E1)	-0,0024 0.5224	-0,0061 0.2260	-0,0038 0.4765	0,0051 0.2063	0,0458 0.0000	0,0407 0.0002	0,0037 0.0665	-0,0018 0.7726	-0,0056 0.3872	0,0079 0.3939			
		(E2)	-0,0044 0.2279	-0,0091 0.0844	-0,0047 0.3848	0,0063 0.1276	0,0456 0.0000	0,0393 0.0003	0,0031 0.1372	-0,0009 0.8807	-0,0040 0.5290	0,0050 0.6040			
		(E3)	-0,0015 0.7172	-0,0077 0.2330	-0,0061 0.3294	0,0043 0.3551	0,0497 0.0001	0,0454 0.0002	-0,0003 0.8895	-0,0016 0.8211	-0,0012 0.8548	-0,0007 0.9454			
Excluding Green Bonds, SLBs, etc.	method T2	(E1)	-0,0014 0.6952	-0,0054 0.2649	-0,0040 0.4308	0,0045 0.0718	-0,0077 0.0605	-0,0122 0.0057	0,0016 0.3713	-0,0097 0.0499	-0,0113 0.0252	0,0042 0.6014			
		(E2)	-0,0036 0.3095	-0,0086 0.0937	-0,0050 0.3442	0,0050 0.0549	-0,0078 0.0623	-0,0129 0.0050	0,0009 0.6340	-0,0087 0.0791	-0,0096 0.0579	0,0013 0.8799			
		(E3)	-0,0009 0.8324	-0,0079 0.2047	-0,0070 0.2494	0,0034 0.2227	-0,0043 0.3596	-0,0077 0.1122	-0,0026 0.2427	-0,0087 0.1486	-0,0062 0.2866	-0,0057 0.5321			
	method T2bis	(E1)	-0,0014 0.6952	-0,0054 0.2649	-0,0040 0.4308	0,0045 0.0718	-0,0077 0.0605	-0,0122 0.0057	0,0016 0.3713	-0,0097 0.0499	-0,0113 0.0252	0,0042 0.6014			
		(E2)	-0,0036 0.3095	-0,0086 0.0937	-0,0050 0.3442	0,0050 0.0549	-0,0078 0.0623	-0,0129 0.0050	0,0009 0.6340	-0,0087 0.0791	-0,0096 0.0579	0,0013 0.8799			
		(E3)	-0,0009 0.8324	-0,0079 0.2047	-0,0070 0.2494	0,0034 0.2227	-0,0043 0.3596	-0,0077 0.1122	-0,0026 0.2427	-0,0087 0.1486	-0,0062 0.2866	-0,0057 0.5321			
	method T3	(E1)	-0,0014 0.7008	-0,0058 0.2415	-0,0044 0.3962	0,0028 0.3103	-0,0115 0.0108	-0,0143 0.0028	0,0017 0.3436	-0,0110 0.0276	-0,0127 0.0125	0,0030 0.7101			
		(E2)	-0,0035 0.3220	-0,0088 0.0871	-0,0053 0.3177	0,0037 0.1969	-0,0116 0.0119	-0,0153 0.0021	0,0010 0.6042	-0,0101 0.0437	-0,0111 0.0302	0,0002 0.9834			
		(E3)	-0,0003 0.9490	-0,0076 0.2266	-0,0073 0.2333	0,0016 0.5968	-0,0074 0.1463	-0,0090 0.0870	-0,0025 0.2570	-0,0101 0.0987	-0,0075 0.1967	-0,0043 0.6386			
	method T4	(E1)	-0,0023 0.5263	-0,0063 0.2170	-0,0039 0.4599	0,0008 0.8317	-0,0154 0.0027	-0,0162 0.0018	-0,0003 0.8700	-0,0112 0.0384	-0,0109 0.0478	0,0074 0.4217			
		(E2)	-0,0044 0.2305	-0,0093 0.0801	-0,0049 0.3693	0,0014 0.6991	-0,0156 0.0032	-0,0170 0.0016	-0,0010 0.6169	-0,0105 0.0531	-0,0096 0.0844	0,0045 0.6444			
		(E3)	-0,0015 0.7227	-0,0078 0.2258	-0,0063 0.3178	-0,0003 0.9401	-0,0092 0.1393	-0,0089 0.1417	-0,0040 0.0827	-0,0104 0.1050	-0,0064 0.3020	-0,0015 0.8902			
Excluding credible transition plans	method T2	(E1)	-0,0010 0.7388	-0,0094 0.0123	-0,0084 0.0359	0,0044 0.0497	0,0182 0.0017	0,0138 0.0163	0,0014 0.3075	-0,0060 0.1453	-0,0074 0.0745	0,0025 0.6423			
		(E2)	-0,0027 0.3638	-0,0118 0.0029	-0,0091 0.0253	0,0049 0.0355	0,0181 0.0014	0,0132 0.0246	0,0010 0.4967	-0,0053 0.1989	-0,0063 0.1331	0,0007 0.9017			
		(E3)	-0,0012 0.7162	-0,0102 0.0309	-0,0090 0.0523	0,0035 0.1671	0,0215 0.0016	0,0180 0.0089	-0,0016 0.3598	-0,0051 0.2666	-0,0035 0.4199	-0,0059 0.3344			
	method T2bis	(E1)	-0,0010 0.7388	-0,0094 0.0123	-0,0084 0.0359	0,0044 0.0497	0,0182 0.0017	0,0138 0.0163	0,0014 0.3075	-0,0060 0.1453	-0,0074 0.0745	0,0025 0.6423			
		(E2)	-0,0027 0.3638	-0,0118 0.0029	-0,0091 0.0253	0,0049 0.0355	0,0181 0.0014	0,0132 0.0246	0,0010 0.4967	-0,0053 0.1989	-0,0063 0.1331	0,0007 0.9017			
		(E3)	-0,0012 0.7162	-0,0102 0.0309	-0,0090 0.0523	0,0035 0.1671	0,0215 0.0016	0,0180 0.0089	-0,0016 0.3598	-0,0051 0.2666	-0,0035 0.4199	-0,0059 0.3344			
	method T3	(E1)	-0,0010 0.7462	-0,0097 0.0109	-0,0087 0.0313	0,0027 0.2827	0,0144 0.0110	0,0118 0.0491	0,0016 0.2825	-0,0073 0.0792	-0,0089 0.0352	0,0013 0.8131			
		(E2)	-0,0026 0.3817	-0,0120 0.0027	-0,0094 0.0222	0,0036 0.1652	0,0143 0.0133	0,0108 0.0715	0,0011 0.4714	-0,0067 0.1081	-0,0077 0.0660	-0,0004 0.9401			
		(E3)	-0,0006 0.8544	-0,0099 0.0381	-0,0093 0.0471	0,0017 0.5432	0,0184 0.0088	0,0167 0.0180	-0,0015 0.3845	-0,0065 0.1644	-0,0049 0.2670	-0,0044 0.4671			
	method T4	(E1)	-0,0019 0.5372	-0,0102 0.0110	-0,0083 0.0511	0,0008 0.8145	0,0191 0.0062	0,0183 0.0081	-0,0004 0.8063	-0,0066 0.1583	-0,0062 0.1900	0,0057 0.3856			
		(E2)	-0,0035 0.2635	-0,0125 0.0030	-0,0090 0.0361	0,0015 0.6626	0,0189 0.0071	0,0174 0.0129	-0,0008 0.6178	-0,0062 0.1887	-0,0054 0.2591	0,0039 0.5704			
		(E3)	-0,0019 0.6024	-0,0101 0.0429	-0,0082 0.0899	-0,0001 0.9775	0,0254 0.0032	0,0255 0.0029	-0,0031 0.1172	-0,0064 0.2347	-0,0033 0.5152	-0,0016 0.8364			

Source: Banque de France ("OPC titres" database), Lipper, Morningstar, Trucost, Urgewald, AMF

NB: The coefficients in red are positive and significant at the 5% threshold, while the coefficients in pink are weakly significant (10%). The coefficients in dark green are negative and significant at the 5% threshold, while the coefficients in light green are weakly significant (10%). The coefficients in orange are not significant at the 10% threshold and therefore their sign is not commented on.

3.5. EXPOSURE TO COAL OR OIL & GAS DEVELOPERS

It might be argued that exposure to the coal or oil & gas sector is not a sufficiently precise criterion to measure portfolios' alignment with the promotion of environmental or social characteristics (Article 8) or with a sustainable investment objective (Article 9). It is true that the companies in these sectors may be committed to the energy transition, or be only slightly involved in the most polluting activities. In the preceding section, we endeavoured to respond to these criticisms by presenting the results obtained (1) after deducting from the exposure metrics the securities identified as green bonds, SLBs, sustainability bonds or social bonds having an environmental focus and aligned with the ICMA standards; (2) by deducting entities whose transition plans are considered most credible; and (3) by weighting, when possible, the exposure to a company by the proportion of fossil-fuel activities in its revenues (method T2bis). To go further, here we examine French funds' exposure to securities issued by firms identified as coal developers by Urgewald or Trucost, or as oil and gas developers by Urgewald.⁴⁰ We therefore focus on French funds' exposure to entities that, according to one source or the other, plan to develop their production capacity in the coal or oil & gas sectors.

Concerning entities involved in the expansion of coal activities, Trucost identifies 72 different securities in the portfolios of French funds (€198 million in holdings), versus 186 for Urgewald (€694 million). The two sources agree on 50 ISIN codes (€191 million). As one can see, even regarding the specific identification of coal developers, supposedly more consensual, there can be significant differences.⁴¹

Moreover, several ISIN codes associated with coal or oil & gas developers have been identified as SLBs, green bonds, sustainable bonds or social bonds with an environmental focus, which may seem incompatible. In what follows, these securities have nevertheless been considered simultaneously as both SLBs/green bonds/etc. and as coal or oil & gas developers.

For example, two ISIN codes of SLBs associated with an environmental objective and found in the portfolio of French funds were issued by coal developers (identified as such by both Urgewald and Trucost),⁴² and two other SLBs are securities of oil & gas developers according to Urgewald⁴³ (out of a total of 99 SLBs with an environmental focus – €2.4 billion in assets under management – identified in the portfolio of French funds in 2021 after one stage of look-through).

As for green bonds, we find three securities issued by an entity considered as a coal developer by Urgewald,⁴⁴ but six associated with coal developers according to Trucost,⁴⁵ and 22 issued by oil & gas developers according to Urgewald⁴⁶ (out of a total of 1,161 green bonds – €27 billion – identified in the portfolio of French funds in 2021 after one stage of look-through).

Two sustainable bonds with an environmental focus associated with a coal developer according to Urgewald are also identified (three if we take the Trucost list),⁴⁷ but none seems to be associated with an oil & gas developer.

Lastly, we find no developer (coal or oil & gas) among the issuers of social bonds.

In our study, we consider that if a company is involved in the development of coal or oil and gas, then the group to which it belongs (and all its subsidiaries) is too. In other words, we go up the capital ownership chain, because we consider that the strategic decision to increase the exploitation of coal, oil or gas resources is especially important.

⁴⁰ As a reminder, Trucost establishes no inventory of companies increasing their production capacity for oil & gas.

⁴¹ NB: The comparisons are made on the raw list of securities considered as "expanding" (i.e. without expanding the characteristic to the whole conglomerate). In other words, only are those developers positively identified by Urgewald and Trucost selected.

⁴² A single issuer, for a total of €100 million in the portfolios. These two securities do not seem to be aligned with the ICMA standards.

⁴³ Two different issuers for around €74 million in the portfolios. These two securities do not seem to be aligned with the ICMA standards.

⁴⁴ Three different issuers for a total of €8 million in the portfolios. Two securities seem to be aligned with the ICMA standards.

⁴⁵ Four different issuers for a total of €8.5 million in the portfolios. Three securities seem to be aligned with the ICMA standards.

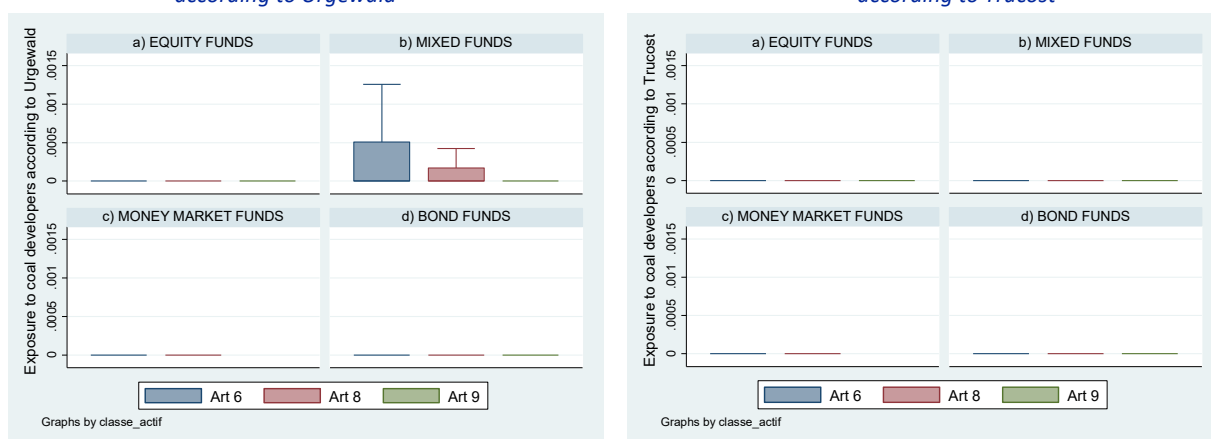
⁴⁶ Five different issuers for a total of around €600 million in the portfolios of French funds. With the exception of 5 securities from the same issuer, all the securities seem to be aligned with the ICMA standards.

⁴⁷ A single issuer accounting for €34 million in the portfolios of French funds. Trucost identifies a second coal developer having issued a sustainable bond (€26,000 in the portfolio). All these securities seem to be aligned with the ICMA standards.

Graph 8 illustrates the weight of coal and oil & gas developers in the portfolios of the various fund classes according to the Urgewald and Trucost data sources respectively. The two data sources lead to fairly different results for diversified funds.

Coal developers are not very present in French funds' portfolios according to the Trucost data. Urgewald identifies more of them, but they are found mostly in diversified funds, with a smaller proportion for Article 8 funds than for Article 6 funds. Article 9 funds are apparently not exposed.

Graph 8: Distribution of the proportion of coal developers in the portfolio of French funds by asset class and SFDR classification according to Urgewald

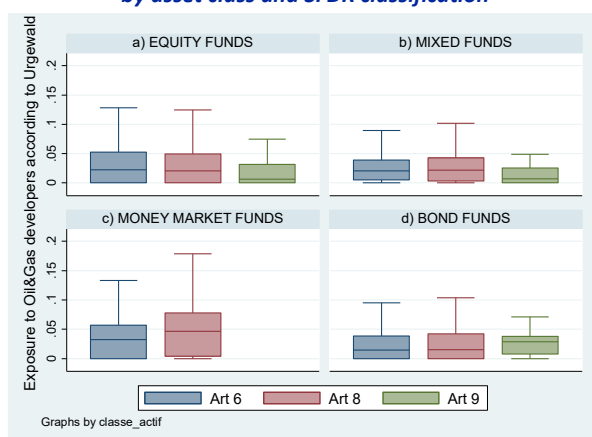


Source: Banque de France ("OPC titres" database), Lipper, Morningstar, Urgewald, Trucost, AMF

NB: The rectangle materialises observations located between the first and third quartiles (the bottom and top of the box respectively). The horizontal line within the box indicates the median (second quartile). The extensions represent "adjacent" observations, i.e., to simplify, the extent of the total distribution (excluding atypical extreme values).

Regarding the **exposure to oil & gas developers**, which can be measured only from the Urgewald data, it is greater than the exposure to coal developers, whatever the asset class in question (Graph 9). For each of them, moreover, Article 8 funds appear as much or even more exposed than Article 6 funds. Also, in the case of bond funds, the Article 9 funds have a higher median than Article 6 and Article 8 funds.

Graph 9: Distribution of the proportion of oil & gas developers in the portfolio of French funds (according to URGEWALD), by asset class and SFDR classification



Source: Banque de France ("OPC titres" database), Lipper, Morningstar, Urgewald, AMF

NB: The rectangle materialises observations located between the first and third quartiles (the bottom and top of the box respectively). The horizontal line within the box indicates the median (second quartile). The extensions represent "adjacent" observations, i.e., to simplify, the extent of the total distribution (excluding atypical extreme values).

The econometric results for exposure to coal and oil & gas developers are presented in Table 6. Again, the statistically significant and negative coefficients are in green, and the positive and significant coefficients are in red. We aim to test statistically whether Article 8 and Article 9 funds are less exposed to coal or oil & gas developers than Article 6 funds. We also test the statistical hypothesis of a lower exposure of Article 9 funds compared with Article 8 funds. We thus try to find out whether the promotion of environmental or social characteristics by Article 8 funds, or the stated sustainability objective of Article 9 funds induces differences in the funds' exposure to firms developing new capacity in the coal or oil & gas sectors. However, remember that SFDR only introduces transparency requirements, and not management constraints.

The first three rows of Table 6 concern exposure to **coal developers** according to **Urgewald**. The distributions are very tight around relatively low values. **The difference of exposure between the Article 8 and Article 6 categories is generally non-significant or very small. For Article 9 funds the differences with Article 6 funds are significant but remain very small, approximately 0.1 percentage points.**

Focusing on the results obtained based on the **list of coal developers produced with Trucost data set**, the differences of exposure between the various SFDR categories are non-significant for equity funds. Article 9 bond funds and diversified funds seem slightly less exposed than their Article 6 and Article 8 equivalents, but the difference is approximately 0.01 percentage points, and is found to be hardly significant between the Article 9 and Article 8 categories.

Concerning exposure to oil & gas developers (according to the Urgewald list), we again note that the Article 8 funds are seldom significantly different from their Article 6 equivalents. For equity funds and diversified funds, Article 9 funds seem less exposed than Article 6 funds (by approximately 1 percentage point). For bond funds, however, the difference is not significant.

Table 6: Summary table of regression coefficients for exposure to coal and oil & gas developers

	EQUITY FUNDS			BOND FUNDS			MIXED FUNDS			MMFs		
	N = 1 522 (of which 652 Art.8 and 118 Art.9)			N = 947 (of which 324 Art.8 and 38 Art.9)			N = 3 026 (of which 790 Art.8 and 51 Art.9)			N = 180 (of which 100 Art.8 and no Art.9)		
	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8
Coal dev. Urgewald (E1)	-0,0004 <small>0,2490</small>	-0,0011 <small>0,0072</small>	-0,0007 <small>0,0609</small>	-0,0006 <small>0,0479</small>	-0,0012 <small>0,0000</small>	-0,0006 <small>0,0012</small>	0,0000 <small>0,8592</small>	-0,0005 <small>0,0123</small>	-0,0005 <small>0,0281</small>	0,0004 <small>0,1808</small>		
Coal dev. Urgewald (E2)	-0,0004 <small>0,2741</small>	-0,0010 <small>0,0108</small>	-0,0007 <small>0,0698</small>	-0,0005 <small>0,0568</small>	-0,0012 <small>0,0000</small>	-0,0007 <small>0,0010</small>	0,0000 <small>0,9338</small>	-0,0005 <small>0,0062</small>	-0,0005 <small>0,0212</small>	0,0004 <small>0,2160</small>		
Coal dev. Urgewald (E3)	-0,0006 <small>0,1567</small>	-0,0012 <small>0,0349</small>	-0,0005 <small>0,3084</small>	-0,0003 <small>0,2858</small>	-0,0016 <small>0,0072</small>	-0,0012 <small>0,0265</small>	0,0000 <small>0,8707</small>	-0,0005 <small>0,0373</small>	-0,0005 <small>0,0972</small>	0,0005 <small>0,2178</small>		
Coal dev. Trucost (E1)	0,0000 <small>0,8217</small>	-0,0002 <small>0,2319</small>	-0,0002 <small>0,1591</small>	0,0000 <small>0,7803</small>	-0,0001 <small>0,0038</small>	-0,0001 <small>0,0821</small>	0,0000 <small>0,8775</small>	-0,0001 <small>0,0036</small>	-0,0002 <small>0,0621</small>			
Coal dev. Trucost (E2)	0,0001 <small>0,7534</small>	-0,0002 <small>0,2732</small>	-0,0002 <small>0,1575</small>	0,0000 <small>0,5247</small>	-0,0001 <small>0,0093</small>	-0,0001 <small>0,1519</small>	0,0000 <small>0,8930</small>	-0,0002 <small>0,0026</small>	-0,0002 <small>0,0569</small>			
Coal dev. Trucost (E3)	-0,0001 <small>0,7558</small>	-0,0003 <small>0,2773</small>	-0,0002 <small>0,4726</small>	0,0000 <small>0,5834</small>	-0,0002 <small>0,1729</small>	-0,0001 <small>0,3071</small>	0,0000 <small>0,6335</small>	-0,0002 <small>0,1211</small>	-0,0002 <small>0,1177</small>			
Oil&Gas dev. Urgewald (E1)	-0,0044 <small>0,1081</small>	-0,0141 <small>0,0000</small>	-0,0097 <small>0,0048</small>	0,0000 <small>0,9960</small>	0,0015 <small>0,7267</small>	0,0015 <small>0,7222</small>	-0,0010 <small>0,4585</small>	-0,0131 <small>0,0000</small>	-0,0121 <small>0,0000</small>	0,0078 <small>0,2558</small>		
Oil&Gas dev. Urgewald (E2)	-0,0060 <small>0,0381</small>	-0,0164 <small>0,0000</small>	-0,0104 <small>0,0030</small>	0,0003 <small>0,9265</small>	0,0015 <small>0,7395</small>	0,0012 <small>0,7817</small>	-0,0017 <small>0,2063</small>	-0,0125 <small>0,0000</small>	-0,0108 <small>0,0002</small>	0,0058 <small>0,4228</small>		
Oil&Gas dev. Urgewald (E3)	-0,0041 <small>0,1791</small>	-0,0155 <small>0,0002</small>	-0,0114 <small>0,0040</small>	0,0004 <small>0,9047</small>	0,0070 <small>0,1398</small>	0,0067 <small>0,1312</small>	-0,0049 <small>0,0068</small>	-0,0138 <small>0,0007</small>	-0,0089 <small>0,0121</small>	0,0010 <small>0,8986</small>		

Source: Banque de France ("OPC titres" database), Lipper, Morningstar, Trucost, Urgewald, AMF

NB: The coefficients in red are positive and significant at the 5% threshold, while the coefficients in pink are weakly significant (10%). The coefficients in dark green are negative and significant at the 5% threshold, while the coefficients in light green are weakly significant (10%). The coefficients in orange are not significant at the 10% threshold and therefore their sign is not commented on.

4. FOCUS ON ARTICLE 9 FUNDS

We have detailed portfolios for 219 Article 9 funds at end-2021, corresponding to €62 billion in assets under management and 9,233 different securities in the portfolio.

Focusing again on funds belonging to the main underlying asset classes (equities, bonds, diversified, money market), there remain 207 funds for €61 billion in AUM and 9,217 different securities in the portfolio (see Tableau 7).

Table 7: Description of the population of Article 9 funds

Article 9 funds	No. of funds	AUM (€bn)	No. of securities
Equity funds	118	46.1	5,098
Bond funds	38	8.3	3,315
Diversified funds	51	6.7	6,225

Source: Banque de France ("OPC titres" database), Lipper, Morningstar, Trucost, Urgewald, AMF

We now consider securities associated with coal or oil & gas developers in which Article 9 funds invested at end-2021. As already stressed, the "coal developer" characteristic is indicated in the Urgewald GCEL database, and was also indicated to us by Trucost. However, the "oil & gas developer" characteristic is available only via Urgewald's GOGEL.

Table 8 identifies the aggregate investment of Article 9 funds (from the four main asset class categories) in companies identified as coal or oil & gas developers according to the various sources. We note that ten Article 9 funds invested in coal developers as identified by Urgewald, representing total financing of around €12 million. When accounting for other entities belonging to the same conglomerate, we find that 17 funds provided €14.5 million in financing. With Trucost data, the results are of an even far smaller magnitude (three funds contributed an amount of €20,000, and if the coal developer characteristic is extended to the other entities of the same conglomerate, we end up with five funds and €260,000 in financing). As a reminder, the analysis covers the classifications and portfolios at end-2021. In 2022, some funds were reclassified to Article 8, and the exposures at end-2022 may have changed. Programming work is under way to automatically detect SFDR categories in prospectuses, and this should soon make it possible to provide a dynamic analysis of reclassifications.

Concerning exposure to oil & gas developers, the raw Urgewald data indicates that 116 Article 9 funds are exposed for €540 million, and taking into account parent companies we reach €1.35 billion in financing via 135 funds.

Table 8: Presence of coal or oil & gas developers in the portfolio of Article 9 funds

	Value of securities (€m)	No. of funds concerned
Coal developers (Urgewald)	11.7	10 funds
Coal developers (Urgewald) + related conglomerate	14.5	17 funds
Coal developers (Trucost)	0.02	3 funds
Coal developers (Trucost) + related conglomerate	0.26	5 funds
Oil & gas developers (Urgewald)	540	116 funds
Oil & gas developers (Urgewald) + related conglomerate	1,353	135 funds

Source: Banque de France ("OPC titres" database), Lipper, Morningstar, Trucost, Urgewald, AMF

CONCLUSION

This study had two objectives: The aim was, on the one hand, to allocate the approximately 10,600 French collective investment undertakings identified at end-2021 within the categories introduced by SFDR, and on the other hand to compare fund portfolios' exposure to fossil-fuel industries across these categories (for the four main underlying asset classes: equity, bond, diversified and money market funds).

At 31 December 2021, one-fifth of the French funds representing half of the assets under management promote environmental or social characteristics ("Article 8 funds") or claim a sustainable investment objective ("Article 9 funds"). The former alone account for a total of more than 47% of AUM. As for Article 9 funds, they represent 3% of the NAV and are relatively more numerous among equity funds. Worth noting: for a non-negligible part of the population (one-third of the funds and one-fifth of assets under management), no information relating to the SFDR classification is available, although it should be. This is even the case for a great majority of real estate and private equity funds.

Regarding portfolio analysis, the study focuses mainly on exposure to fossil energies, which is the subject of special attention for numerous market participants. In this regard, however, bear in mind that at this stage the regulations place no constraint on fund managers in their investment process, but rather introduces transparency requirements.

Generally speaking, Article 8 and Article 9 *equity* funds have a lower exposure to fossil fuel industries than their Article 6 equivalents. The results are far less clear for the other fund types and the differences of exposure to fossil fuel sectors between Article 8 and Article 6 funds are only seldom significant in the statistical sense of the term. A specific analysis of exposures towards companies identified as fossil fuel developers (i.e. building new production capacity) leads to a similar conclusion. These observations suggests that the definition of Article 8 funds under SFDR is probably not very discriminating. Accordingly, the application of SFDR in its initial stage (before the entry into force of the regulatory technical standards, on 1 January 2023) could have resulted in a divergence between the expectations expressed by investors and actual practices.

Annex 1: Determination of the SFDR characteristics of French funds.

For the time being, SFDR categories are not directly reported to the regulator. In order to determine the French funds' SFDR categories, we built on the classifications established by two commercial data providers (Thomson Reuter Lipper and Morningstar) and we supplemented this initial stage by a manual search for the missing information on the websites of the various asset management companies, and where appropriate in the funds' prospectuses.

We encountered several stumbling blocks:

- 1) First, the fund identifiers are not necessarily the same from one data provider to another: in particular, the concept of primary fund class (i.e. generally the fund class whose ISIN code is selected to designate the fund) is not defined unambiguously. We therefore built a data repository listing all the ISIN codes associated with French funds based on the AMF's supervision data (around 18,000 different codes for the study period), and we extracted from Lipper and Morningstar the SFDR data corresponding to this list of ISIN codes.⁴⁸
- 2) Second, the SFDR data currently available in the commercial databases is not historicised. This means that we only have the latest update of the variable, and not its prior versions. Expressed more simply, it is not possible to know whether (and when) a fund has changed category since the entry into force of SFDR.
- 3) Lastly, the SFDR categories reported in Morningstar and those of Lipper are not exactly superposable (cf. Table A-1).
 - a. In particular, Morningstar does not report the "Article 6" category (i.e. the default category of SFDR). What is more, there are cases where, even when the ISIN code is indeed recognised by Morningstar, the SFDR variable is empty or else indicates "Not Stated".
 - b. As for Lipper, its SFDR variable may adopt the "Article 6" value; however, it may also be empty or "Not Reported".

Note, eventually, that a large number of ISIN codes are outright not identified by the data providers.

The establishment of a consolidated variable combining the SFDR information from the two sources therefore requires several assumptions.

Table A-1: Comparison of the SFDR variables in Lipper and Morningstar (list of ISIN codes of the AMF data repository)

		Morningstar					Total
		not found	Article 8	Article 9	Empty	Not Stated	
Lipper	not found	7,792	343	60	639	522	9,356
	Article 6	118	163	-	50	2,407	2,738
	Article 8	139	3,155	9	16	264	3,583
	Article 9	39	48	495	1	23	606
	Empty	64	56	5	472	155	752
	Not Reported	88	134	9	200	515	946
	Total	8,240	3,899	578	1,378	3,886	17,981

Source: AMF (BIO), Thomson Reuters Lipper, Morningstar, AMF calculations

Table A-1 compares, for around 18,000 ISIN codes extracted from the AMF data repository of fund classes, the SFDR classifications reported by Lipper and Morningstar. Apart from the large number of ISIN codes that are identified by neither of the two data providers, we note a substantial compatibility of the classifications in the

⁴⁸ These extractions were performed in October 2022, before the wave of reclassification that occurred in the last two months of 2022.

centre of the table (boxes in yellow) and substantial overlapping between Morningstar's "Not Stated" category and Lipper's Article 6 category.

Table A-2 presents, by means of a colour code, the assumptions adopted to build an SFDR variable combining the information from Lipper and Morningstar. The boxes in blue have been allocated to the Article 9 category, those in green to the Article 8 category, and those in orange to the Article 6 category. The general rule adopted is that the "Empty", "Not Stated" and "Not reported" categories, together with the "Not Found" category (i.e. the ISIN codes that one of the two sources was unable to identify) have been considered as uninformative compared with the positive statements in the Article 6, Article 8 and Article 9 categories. The boxes in grey are considered as undetermined, either because the ISIN codes have been recognised by neither of the two sources, or because the same ISIN code is associated with two different non-residual categories.

Table A-2: Combination of the SFDR variables in Lipper and Morningstar (list of ISIN codes of the AMF data repository)

		Morningstar					Total
		not found	Article 8	Article 9	Empty	Not Stated	
Lipper	not found	7,792	343	60	639	522	9,356
	Article 6	118	163	-	50	2,407	2,738
	Article 8	139	3,155	9	16	264	3,583
	Article 9	39	48	495	1	23	606
	Empty	64	56	5	472	155	752
	Not Reported	88	134	9	200	515	946
	Total	8,240	3,899	578	1,378	3,886	17,981

Source: AMF (BIO), Thomson Reuters Lipper, Morningstar, AMF calculations

Next, the information collected at the ISIN code (i.e. the fund share class) level was aggregated at the fund level. Indeed, the SFDR categories depend on the investment policy, which is common to all the various fund share classes. Accordingly, if a given fund share class is considered as coming under Article 8, this category can be extended to the other fund share classes of the same fund. This makes it possible to complete the SFDR classifications for around one thousand ISIN codes which had not been recognised by the commercial data providers. Conversely, a few cases of divergences between classes of a given fund are also identified (Table A-3).

Table A-3: SFDR information feedback to the fund level

Number of share classes		Number of funds	
SFDR	Freq.	SFDR	Freq.
?	7,029	?	5,001
Article 6	5,776	Article 6	3,086
Article 8	4,382	Article 8	1,444
Article 9	687	Article 9	168
not consistent	107	not consistent	23
Total	17,981	Total	9,722

Source: AMF (BIO), Thomson Reuters Lipper, Morningstar, AMF calculations

The SFDR classifications of missing or inconsistent funds were searched for manually between October and November 2022 based on the lists published on the websites of the various asset management companies, or by searching for the information directly in the prospectuses when such lists were not available.

As can be seen in Table A-4, manual enhancement made it possible to identify about sixty Article 9 funds, more than 500 Article 8 funds and around 2,300 Article 6 funds.⁴⁹ For slightly more than 2,000 funds, reading the prospectuses did not make it possible to determine the SFDR classification unambiguously.

Table A-4: SFDR variable after manual supplements

Results after manual checks	
	2,118
Article 6	5,385
Article 8	1,990
Article 9	229

Source: AMF (BIO), Thomson Reuters Lipper, Morningstar, AMF calculations

Market structure of French funds according to their SFDR category

The information relating to funds' SFDR characteristics can be matched with the AMF's supervision data (BIO database) and with the detailed fund portfolio data which is collected by the Banque de France ("OPC titres" database). It is thus possible to provide, for the universe of French funds, an estimate of assets under management by SFDR type, asset class and legal nature, and to compare the SFDR classifications with the reality of the securities held in the portfolio.⁵⁰

Table A-5: Market structure of French funds (by number and volume)

Combination of MS / Lipper data on SFDR			Improved SFDR variable		
	31/12/2021			31/12/2021	
	Number of funds	Total net assets (Mds€)		Number of funds	Total net assets (Mds€)
Not found	6,752	783.14	Not found	3,939	309.17
Article 6	2,256	290.04	Article 6	4,494	643.12
Article 8	1,417	768.56	Article 8	1,963	891.48
Article 9	168	56.21	Article 9	220	62.99
Not Consistent	23	8.81			
Total	10,616	1,906.76	Total	10,616	1,906.76

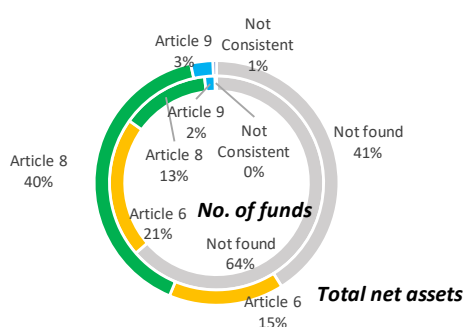
Source: AMF (BIO), Thomson Reuters Lipper, Morningstar, AMF calculations

Graph A-1: Breakdown of the French market for 2021 (total NAV of €1,907 billion)

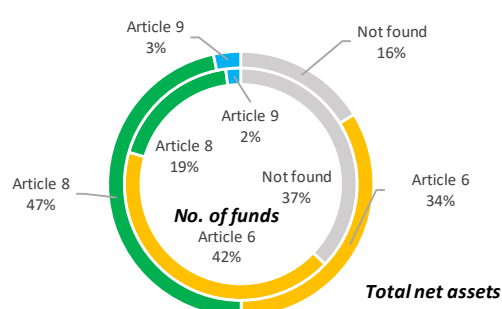
⁴⁹ An automated prospectus reading tool is currently under development to industrialise the search for legal notices relating to the SFDR. Nevertheless, this first manual analysis, exhaustive and tedious, will make it possible to verify the performance of automatic detection when the project is completed. In addition to the time saving for subsequent work on the SFDR, the detection tool applied to prospectuses from various years will be able to provide a dynamic view of the market breakdown according to the various classifications.

⁵⁰ Note that for Table A-5, the figures are presented in relation to total net assets of the funds present in the BIO data repository at year-end. Some of these funds have no ISIN code, which explains the slightly larger number of "not found" funds than in tables A-3 and A-4.

Classification SFDR Morninstar_Lipper



Enhanced SFDR



Source: AMF (BIO), Thomson Reuters Lipper, Morningstar, AMF calculations

NB: The inner circle indicates the proportion of each category measured in terms of the number of funds, while the outer circle presents these proportions relative to net assets. The "Not found" category corresponds to funds for which the SFDR category was unable to be identified.

Graph A-1 reveals the improvement in coverage resulting from the manual search. At end-2021, the 220 Article 9 funds accounted for about 3% of the net assets of French funds, compared with 47% for the 1,963 funds coming under Article 8. Contrary to what may have been noted sometimes (on the basis of the fund universe covered by the commercial data providers), Article 8 funds do not account for the majority of AUM, but nevertheless slightly less than half.

In the remainder of this study, we shall only use the improved SFDR variable (i.e. completed manually). Table A-6 breaks down the French market by major asset classes, in order to provide a more precise view of the breakdown by SFDR category.

Table A-6: Market structure of French funds, by major asset class and SFDR category (by number and volume)

	31/12/2021			
	Number of funds	% nb	Total net Assets (Mds€)	% €
EQUITY FUNDS	1,676		374.51	
Not found	203	12.1%	s.84	3.4%
Article 6	702	41.9%	130.34	34.8%
Article 8	652	38.9%	185.00	49.4%
Article 9	119	7.1%	46.33	12.4%
BOND FUNDS	1,026		275.96	
Not found	141	13.7%	15.39	5.6%
Article 6	523	51.0%	115.64	41.9%
Article 8	324	31.6%	135.99	49.3%
Article 9	38	3.7%	8.93	3.2%
MIXED FUNDS	3,936		469.46	
Not found	1,116	28.4%	52.95	11.3%
Article 6	1,978	50.3%	230.79	49.2%
Article 8	791	20.1%	178.86	38.1%
Article 9	51	1.3%	6.86	1.5%
MMFs	188		391.32	
Not found	24	12.8%	5.46	1.4%
Article 6	64	34.0%	23.09	5.9%
Article 8	100	53.2%	362.77	92.7%
Article 9		0.0%		0.0%
REAL ESTATE FUNDS	508		125.98	
Not found	327	64.4%	73.17	58.1%
Article 6	157	30.9%	32.38	25.7%
Article 8	22	4.3%	20.24	16.1%

Article 9	2	0.4%	0.19	0.2%
PE FUNDS	1,827		89.66	
Not found	1,403	76.8%	76.44	85.3%
Article 6	399	21.8%	11.45	12.8%
Article 8	20	1.1%	1.49	1.7%
Article 9	5	0.3%	0.29	0.3%
OTHER	1,455		179.87	
Not found	725	49.8%	72.91	40.5%
Article 6	671	46.1%	99.43	55.3%
Article 8	54	3.7%	7.13	4.0%
Article 9	5	0.3%	0.40	0.2%

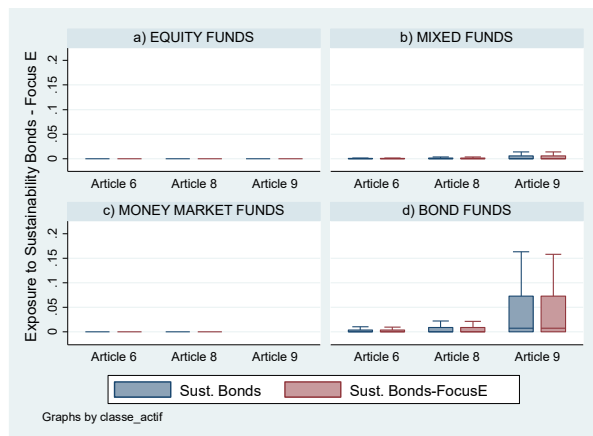
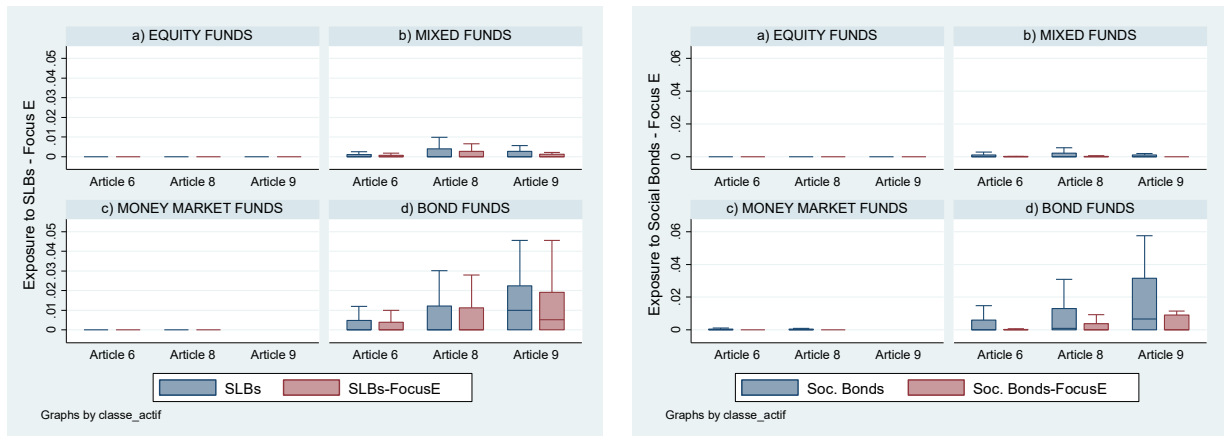
TOTAL	10,616		1,906.76	
Not found	3,939	37.1%	309.17	16.2%
Article 6	4,494	42.3%	643.12	33.7%
Article 8	1,963	18.5%	891.48	46.8%
Article 9	220	2.1%	62.99	3.3%

Source: AMF (BIO), Thomson Reuters Lipper, Morningstar, AMF calculations

Several observations can be made:

- First, we note that the proportion of funds for which the SFDR characteristics were not found is especially high for real estate funds, venture capital funds and “other” funds.
- It can be seen clearly that Article 9 funds are more present in equity funds than in the other categories.
- Article 8 funds account for around 50% of the volume of French equity and bond funds, about 40% of the AUM of diversified funds, but more than 90% of that of money market funds.

Annex 2: French funds' exposure to SLBs, sustainable bonds and social bonds having an environmental focus



Source: Banque de France ("OPC titres" database), Lipper, Morningstar, Bloomberg, AMF

NB: The rectangle materialises observations located between the first and third quartiles (the bottom and top of the box respectively). The horizontal line within the box indicates the median (second quartile). The extensions represent "adjacent" observations, i.e., to simplify, the extent of the total distribution (excluding atypical extreme values).

Annex 3: Identification of firms in fossil energies sectors based on TRUCOST data

		# ISIN	# companies (TCUID)	Coal (# TCUID)	Oil & Gas (# TCUID)
EDX_27 (all sectors) – the latest data available for each company is kept		19 470	19 532		
Coal / Oil / Gas (excluding petrochemicals/asphalt)		1 364	1 369	413	1 173
Crude petroleum and Natural gas extraction	211111		384		384
Tar sands extraction	211111A		0		0
Natural gas liquid extraction	211112		151		151
Bituminous Coal and Lignite Surface Mining	212111		158	158	
Bituminous Coal Underground Mining	212112		121	121	
Drilling oil and gas wells	213111		58		58
Support activities for oil and gas operations	213112		127		127
Support activities for other mining	21311A		40		
→ Restricted based on GICS sub-industry*			13	10	13
Coal Power Generation	221122A		263	263	
Natural Gas Power Generation	221122B		282		282
Petroleum Power Generation	221122C		120		120
Electric Bulk Power Transmission and Control	221121		117		
→ Restricted to entities producing power from Coal / Natural Gas / Petroleum **			79	61	69
Electric Power Distribution	221222		235		
→ Restricted to entities producing power from Coal / Natural Gas / Petroleum **			164	118	151
Natural gas distribution	221200		232		232
Other nonresidential structures	230103		651		
→ Restricted based on GICS sub-industry*			57 (50)	12	49
Petroleum refineries	324110		134		134
Mining and oil and gas field machinery manufacturing	333130		66		66
Petroleum, Chemical, and Allied Products Wholesalers	424700A		0		0
Gasoline Stations	447000		77		77
Nonstore Retailers	454000		290		
→ Restricted based on GICS sub-industry*			3 (2)	0	2
Rail transportation (Electric)	482000A		0	0	0
Rail transportation (Diesel)	482000B		0	0	0
Water transportation	483000		213		
→ Restricted based on GICS sub-industry*			60	60	60
Truck transportation	484000		91		
→ Restricted based on GICS sub-industry*			6	6	6
Pipeline transportation	486000		142		142
Warehousing and storage	493000		123		
→ Restricted based on GICS sub-industry*			10 (10)	3	10

Source: S&P Trucost, AMF calculations

* The scope is restricted to the following 10 GICS sub-industry sectors: Coal & Consumable Fuels / Integrated oil & gas / oil & gas Drilling / oil & gas Equipment & Services / oil & gas Exploration & Production / oil & gas Refining & Marketing / oil & gas Storage & Transportation / Electric Utilities / Gas Utilities / Independent Power Producers & Energy Traders. Moreover, for Electric Utilities and for Independent Power Producers & Energy Traders, the only entities kept are those involved in the production of energy based on coal, oil or natural gas.

** Regarding electricity transportation and distribution, we only consider entities which produced energy based on hydrocarbons (394 companies total: 263 from coal, and 298 from oil or natural gas).

Annex 4: Summary table of regression coefficients for raw exposure (before look-through) to

- **green bonds, SLBs, social bonds, sustainability bonds**
- **coal developers according to Urgewald and Trucost;**
- **oil & gas developers according to Urgewald.**

	EQUITY FUNDS N = 1 522 (of which 652 Art.8 and 118 Art.9)			BOND FUNDS N = 947 (of which 324 Art.8 and 38 Art.9)			MIXED FUNDS N = 3 026 (of which 790 Art.8 and 51 Art.9)			MMFs N = 180 (of which 100 Art.8 and no Art.9)		
	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8
	(p-value)	(p-value)	(p-value)	(p-value)	(p-value)	(p-value)	(p-value)	(p-value)	(p-value)	(p-value)	(p-value)	(p-value)
Green bonds (E1)	0,0000	0,0001	0,0001	0,0247	0,2925	0,2677	0,0077	0,0590	0,0513	0,0006		
Green bonds (E2)	0,0000	0,0001	0,0001	0,0256	0,2924	0,2669	0,0072	0,0594	0,0522	0,0005		
Green bonds (E3)	0,0000	0,0001	0,0001	0,0218	0,2863	0,2645	0,0062	0,0561	0,0499	0,0000		
Sustainability-linked bonds (E1)	0,0000	0,0000	0,0000	0,0022	0,0075	0,0053	0,0024	0,0025	0,0001			
Sustainability-linked bonds (E2)	0,0000	0,0000	0,0000	0,0026	0,0075	0,0049	0,0025	0,0024	-0,0001			
Sustainability-linked bonds (E3)	0,0000	0,0000	0,0000	0,0016	0,0029	0,0013	0,0020	-0,0005	-0,0024			
Social bonds (E1)	0,0000	0,0000	0,0000	0,0027	0,0199	0,0172	0,0013	0,0012	-0,0001	0,0010		
Social bonds (E2)	0,0000	0,0000	0,0000	0,0022	0,0199	0,0178	0,0011	0,0012	0,0001	0,0010		
Social bonds (E3)	0,0000	0,0000	0,0000	0,0025	0,0228	0,0203	0,0011	0,0002	-0,0010	0,0008		
Sustainability bonds (E1)	0,0000	0,0000	0,0000	0,0017	0,0160	0,0143	0,0003	0,0050	0,0046	0,0000		
Sustainability bonds (E2)	0,0000	0,0000	0,0000	0,0015	0,0160	0,0145	0,0002	0,0051	0,0049	0,0000		
Sustainability bonds (E3)	0,0000	0,0000	0,0000	0,0016	0,0145	0,0129	0,0003	0,0042	0,0039	0,0000		
Coal dev. Urgewald (E1)	-0,0003	-0,0008	-0,0005	-0,0005	-0,0010	-0,0005	0,0002	0,0000	-0,0002	0,0006		
Coal dev. Urgewald (E2)	-0,0003	-0,0008	-0,0005	-0,0005	-0,0010	-0,0005	0,0001	-0,0001	-0,0002	0,0006		
Coal dev. Urgewald (E3)	-0,0005	-0,0008	-0,0003	-0,0003	-0,0015	-0,0012	0,0001	-0,0001	-0,0002	0,0007		
Coal dev. Trucost (E1)	0,0000	-0,0003	-0,0003	0,0000	-0,0001	-0,0001	0,0001	-0,0001	-0,0001			
Coal dev. Trucost (E2)	0,0000	-0,0003	-0,0003	0,0000	-0,0001	-0,0001	0,0001	-0,0001	-0,0002			
Coal dev. Trucost (E3)	-0,0001	-0,0004	-0,0003	0,0000	-0,0002	-0,0001	0,0001	-0,0001	-0,0002			
Oil&Gas dev. Urgewald (E1)	-0,0032	-0,0093	-0,0060	0,0014	-0,0004	-0,0017	0,0024	-0,0043	-0,0068	0,0117		
Oil&Gas dev. Urgewald (E2)	-0,0048	-0,0119	-0,0071	0,0016	-0,0005	-0,0020	0,0015	-0,0041	-0,0056	0,0078		
Oil&Gas dev. Urgewald (E3)	-0,0038	-0,0113	-0,0075	0,0017	0,0039	0,0022	0,0005	-0,0019	-0,0024	0,0010		

Source: Banque de France ("OPC titres" database), Lipper, Morningstar, Trucost, Urgewald, AMF

NB: The coefficients in dark green are **negative** and significant at the 5% threshold, while the coefficients in light green are weakly significant (10%). The coefficients in red are **positive** and significant at the 5% threshold, while the coefficients in pink are weakly significant (10%). The coefficients in orange are not significant at the 10% threshold and therefore their sign is not commented on.

Annex 5: Summary table of regression coefficients for exposure to the coal sector (URGEGWALD) (before look-through)

		EQUITY FUNDS N = 1 522 (of which 652 Art.8 and 118 Art.9)			BOND FUNDS N = 947 (of which 324 Art.8 and 38 Art.9)			MIXED FUNDS N = 3 026 (of which 790 Art.8 and 51 Art.9)			MMFs N = 180 (of which 100 Art.8 and no Art.9)			
		Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	
Excluding Green Bonds, SLBs, etc.	method U1	(E1)	-0,0025	-0,0020	0,0004	0,0024	0,0085	0,0061	0,0022	-0,0009	-0,0031	-0,0007		
		(p-value)	0,0001	0,0331	0,6057	0,0027	0,0006	0,0156	0,0000	0,2250	0,0001	0,5573		
		(E2)	-0,0025	-0,0021	0,0003	0,0026	0,0085	0,0059	0,0021	-0,0009	-0,0030	-0,0011		
	(p-value)	0,0001	0,0262	0,7012	0,0015	0,0006	0,0192	0,0000	0,2375	0,0002	0,3361			
	(E3)	-0,0026	-0,0019	0,0007	0,0026	0,0089	0,0063	0,0017	-0,0004	-0,0021	-0,0017			
	(p-value)	0,0004	0,1204	0,5181	0,0028	0,0010	0,0222	0,0003	0,6058	0,0077	0,3204			
	method U2	(E1)	-0,0024	-0,0021	0,0003	0,0028	0,0100	0,0072	0,0023	-0,0010	-0,0033	0,0015		
		(p-value)	0,0002	0,0273	0,7299	0,0012	0,0010	0,0194	0,0000	0,1890	0,0001	0,6670		
		(E2)	-0,0024	-0,0023	0,0002	0,0028	0,0099	0,0071	0,0021	-0,0010	-0,0031	-0,0010		
(p-value)	0,0002	0,0199	0,8454	0,0012	0,0009	0,0195	0,0000	0,2007	0,0001	0,7727				
(E3)	-0,0026	-0,0019	0,0007	0,0030	0,0109	0,0080	0,0017	-0,0004	-0,0022	-0,0042				
(p-value)	0,0005	0,1108	0,5631	0,0021	0,0010	0,0173	0,0004	0,5875	0,0092	0,3547				
method U3	(E1)	-0,0027	-0,0034	-0,0007	0,0025	0,0164	0,0139	0,0025	-0,0002	-0,0027	0,0059			
	(p-value)	0,0042	0,0183	0,6175	0,0393	0,0012	0,0066	0,0001	0,8791	0,0807	0,2386			
	(E2)	-0,0029	-0,0038	-0,0009	0,0026	0,0163	0,0137	0,0021	-0,0002	-0,0023	0,0018			
(p-value)	0,0023	0,0095	0,5066	0,0378	0,0012	0,0065	0,0009	0,9153	0,1468	0,7340				
(E3)	-0,0030	-0,0048	-0,0019	0,0031	0,0172	0,0141	0,0015	-0,0003	-0,0018	-0,0011				
(p-value)	0,0063	0,0081	0,2765	0,0242	0,0004	0,0041	0,0268	0,8424	0,2138	0,8776				
Excluding credible transition plans	method U1	(E1)	-0,0025	-0,0020	0,0004	0,0018	0,0009	-0,0009	0,0010	-0,0008	-0,0018	-0,0007		
		(p-value)	0,0001	0,0331	0,6050	0,0107	0,5899	0,5745	0,0049	0,1959	0,0057	0,5573		
		(E2)	-0,0025	-0,0021	0,0003	0,0019	0,0008	-0,0011	0,0009	-0,0008	-0,0017	-0,0011		
	(p-value)	0,0001	0,0262	0,7004	0,0081	0,5990	0,5203	0,0101	0,1928	0,0083	0,3361			
	(E3)	-0,0026	-0,0019	0,0007	0,0020	0,0027	0,0007	0,0008	-0,0001	-0,0008	-0,0017			
	(p-value)	0,0004	0,1204	0,5174	0,0110	0,1398	0,6932	0,0428	0,9291	0,2330	0,3204			
	method U2	(E1)	-0,0024	-0,0021	0,0003	0,0022	0,0006	-0,0016	0,0011	-0,0009	-0,0020	0,0015		
		(p-value)	0,0002	0,0273	0,7292	0,0049	0,7421	0,3578	0,0025	0,1379	0,0021	0,6670		
		(E2)	-0,0024	-0,0023	0,0002	0,0021	0,0005	-0,0016	0,0010	-0,0009	-0,0019	-0,0010		
(p-value)	0,0002	0,0199	0,8445	0,0065	0,7592	0,3600	0,0069	0,1359	0,0037	0,7727				
(E3)	-0,0026	-0,0019	0,0007	0,0022	0,0027	0,0004	0,0008	-0,0001	-0,0009	-0,0042				
(p-value)	0,0005	0,1108	0,5624	0,0091	0,1660	0,8201	0,0363	0,8589	0,1899	0,3547				
method U3	(E1)	-0,0027	-0,0034	-0,0007	0,0017	-0,0013	-0,0030	0,0011	-0,0018	-0,0029	0,0056			
	(p-value)	0,0042	0,0183	0,6180	0,0948	0,4615	0,1142	0,0304	0,0547	0,0026	0,2588			
	(E2)	-0,0029	-0,0038	-0,0009	0,0015	-0,0014	-0,0029	0,0008	-0,0018	-0,0025	0,0015			
(p-value)	0,0022	0,0095	0,5071	0,1281	0,4459	0,1249	0,1540	0,0677	0,0105	0,7769				
(E3)	-0,0030	-0,0048	-0,0019	0,0018	0,0014	-0,0004	0,0005	-0,0014	-0,0019	-0,0015				
(p-value)	0,0062	0,0081	0,2768	0,1066	0,5043	0,8717	0,4071	0,1810	0,0760	0,8289				
Excluding credible transition plans	method U1	(E1)	-0,0023	-0,0030	-0,0008	0,0002	0,0034	0,0033	-0,0003	0,0000	0,0003	0,0000		
		(p-value)	0,0000	0,0000	0,0675	0,7193	0,0279	0,0376	0,1723	0,9396	0,5901	0,1594		
		(E2)	-0,0022	-0,0031	-0,0009	0,0001	0,0034	0,0033	-0,0004	-0,0001	0,0003	0,0000		
	(p-value)	0,0000	0,0000	0,0415	0,8051	0,0275	0,0349	0,0894	0,8220	0,6121	0,1604			
	(E3)	-0,0024	-0,0029	-0,0006	0,0004	0,0040	0,0036	-0,0004	-0,0002	0,0002	0,0000			
	(p-value)	0,0001	0,0001	0,3933	0,4100	0,0314	0,0623	0,1243	0,6513	0,6463	0,3544			
	method U2	(E1)	-0,0022	-0,0031	-0,0009	0,0005	0,0041	0,0035	-0,0003	-0,0002	0,0001	0,0010		
		(p-value)	0,0000	0,0000	0,0473	0,3203	0,0432	0,0818	0,2961	0,7195	0,8961	0,6332		
		(E2)	-0,0021	-0,0031	-0,0010	0,0004	0,0041	0,0037	-0,0003	-0,0003	0,0001	-0,0002		
(p-value)	0,0000	0,0000	0,0292	0,4910	0,0421	0,0675	0,1505	0,6142	0,8894	0,9163				
(E3)	-0,0024	-0,0030	-0,0006	0,0008	0,0051	0,0043	-0,0004	-0,0003	0,0001	-0,0032				
(p-value)	0,0002	0,0001	0,3629	0,2010	0,0244	0,0637	0,1405	0,5233	0,8265	0,2485				
method U3	(E1)	-0,0023	-0,0042	-0,0019	-0,0003	0,0028	0,0031	-0,0006	-0,0002	0,0004	0,0019			
	(p-value)	0,0005	0,0000	0,0005	0,7114	0,1782	0,1410	0,0605	0,7532	0,5971	0,4403			
	(E2)	-0,0022	-0,0043	-0,0020	-0,0005	0,0028	0,0033	-0,0007	-0,0003	0,0004	-0,0002			
(p-value)	0,0007	0,0000	0,0003	0,4724	0,1770	0,1108	0,0237	0,6422	0,5889	0,9463				
(E3)	-0,0025	-0,0049	-0,0024	0,0001	0,0041	0,0040	-0,0006	-0,0002	0,0004	-0,0026				
(p-value)	0,0013	0,0000	0,0074	0,9091	0,0771	0,0901	0,0815	0,7348	0,5807	0,4141				

Source: Banque de France ("OPC titres" database), Lipper, Morningstar, Trucost, Urgewald, AMF

NB: The coefficients in red are positive and significant at the 5% threshold, while the coefficients in pink are weakly significant (10%). The coefficients in dark green are negative and significant at the 5% threshold, while the coefficients in light green are weakly significant (10%). The coefficients in orange are not significant at the 10% threshold and therefore their sign is not commented on.

Annex 7: Summary table of regression coefficients for exposure to the oil & gas sector (URGEWALD) (before look-through)

		EQUITY FUNDS N = 1 522 (of which 652 Art.8 and 118 Art.9)			BOND FUNDS N = 947 (of which 324 Art.8 and 38 Art.9)			MIXED FUNDS N = 3 026 (of which 790 Art.8 and 51 Art.9)			MMFs N = 180 (of which 100 Art.8 and no Art.9)				
		Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8		
Excluding Green Bonds, SLBs, etc.	method U1	(E1)	-0,0032 0,1861 0,0005	-0,0097 0,0296	-0,0065 0,0188	0,0023 0,1571	0,0009 0,7604 0,6375	-0,0014 0,6249 0,6331	0,0002 0,8205 0,0046	-0,0063 0,0040	-0,0065 0,0191	0,0029			
		(E2)	-0,0043 0,0759	-0,0115 0,0001	-0,0071 0,0188	0,0024 0,1741	0,0008 0,7704	-0,0015 0,6249	-0,0005 0,6331	-0,0062 0,0069	-0,0057 0,0144	0,0027			
		(E3)	-0,0041 0,1364	-0,0114 0,0021	-0,0073 0,0317	0,0021 0,2505	0,0042 0,1405	0,0021 0,4770	-0,0010 0,4077	-0,0039 0,1227	-0,0029 0,2433	0,0024	0,1968		
	method U2	(E1)	-0,0034 0,1716	-0,0101 0,0004	-0,0067 0,0248	0,0024 0,2169	-0,0003 0,9237	-0,0027 0,4496	0,0001 0,9307	-0,0070 0,0017	-0,0071 0,0018	0,0072	0,0746		
		(E2)	-0,0045 0,0672	-0,0119 0,0001	-0,0074 0,0154	0,0025 0,2299	-0,0004 0,9073	-0,0029 0,4357	-0,0008 0,4974	-0,0070 0,0027	-0,0062 0,0083	0,0052	0,2226		
		(E3)	-0,0043 0,1188	-0,0116 0,0017	-0,0073 0,0322	0,0027 0,2193	0,0040 0,2462	0,0013 0,7224	-0,0011 0,3774	-0,0045 0,0779	-0,0034 0,1759	0,0007	0,8945		
	method U3	(E1)	-0,0030 0,2624	-0,0092 0,0049	-0,0062 0,0693	0,0014 0,6338	-0,0009 0,8411	-0,0023 0,6142	0,0020 0,1106	-0,0044 0,1234	-0,0064 0,0293	0,0117	0,0663		
		(E2)	-0,0046 0,0900	-0,0119 0,0007	-0,0073 0,0363	0,0017 0,5653	-0,0010 0,8233	-0,0027 0,5604	0,0011 0,4178	-0,0043 0,1483	-0,0053 0,0768	0,0078	0,2397		
		(E3)	-0,0038 0,2135	-0,0112 0,0075	-0,0075 0,0548	0,0015 0,6584	0,0031 0,5033	0,0016 0,7076	0,0000 1,0000	-0,0023 0,4487	-0,0023 0,4493	0,0010	0,9069		
Excluding credible transition plans	method U1	(E1)	-0,0032 0,1860	-0,0097 0,0005	-0,0065 0,0296	0,0020 0,1985	-0,0071 0,0001	-0,0091 0,0000	0,0001 0,9074	-0,0065 0,0031	-0,0066 0,0032	0,0027	0,0285		
		(E2)	-0,0043 0,0758	-0,0115 0,0001	-0,0071 0,0188	0,0019 0,2366	-0,0071 0,0001	-0,0091 0,0000	-0,0006 0,5633	-0,0064 0,0049	-0,0058 0,0120	0,0024	0,0585		
		(E3)	-0,0041 0,1363	-0,0114 0,0021	-0,0073 0,0317	0,0017 0,3183	-0,0035 0,0493	-0,0052 0,0068	-0,0011 0,3544	-0,0041 0,1081	-0,0030 0,2352	0,0020	0,2698		
	method U2	(E1)	-0,0034 0,1715	-0,0101 0,0004	-0,0067 0,0248	0,0020 0,2764	-0,0098 0,0000	-0,0118 0,0000	0,0000 0,9778	-0,0075 0,0007	-0,0074 0,0010	0,0069	0,0847		
		(E2)	-0,0045 0,0671	-0,0119 0,0001	-0,0074 0,0154	0,0020 0,3133	-0,0099 0,0000	-0,0118 0,0000	-0,0009 0,4328	-0,0074 0,0013	-0,0065 0,0049	0,0049	0,2492		
		(E3)	-0,0043 0,1187	-0,0116 0,0017	-0,0073 0,0322	0,0022 0,3033	-0,0050 0,0316	-0,0072 0,0041	-0,0012 0,3283	-0,0049 0,0580	-0,0037 0,1481	0,0003	0,9534		
	method U3	(E1)	-0,0030 0,2623	-0,0092 0,0049	-0,0062 0,0694	0,0011 0,7043	-0,0131 0,0000	-0,0142 0,0000	0,0018 0,1337	-0,0059 0,0268	-0,0078 0,0048	0,0115	0,0720		
		(E2)	-0,0046 0,0899	-0,0119 0,0007	-0,0073 0,0363	0,0012 0,6616	-0,0132 0,0001	-0,0144 0,0000	0,0009 0,4751	-0,0058 0,0367	-0,0067 0,0176	0,0075	0,2577		
		(E3)	-0,0038 0,2134	-0,0112 0,0075	-0,0075 0,0548	0,0007 0,6187	-0,0089 0,0180	-0,0096 0,0036	-0,0001 0,9683	-0,0036 0,2154	-0,0035 0,2230	0,0006	0,9450		
Excluding credible transition plans	method U1	(E1)	-0,0029 0,2126	-0,0111 0,0000	-0,0083 0,0013	0,0012 0,3691	-0,0052 0,0041	-0,0064 0,0009	-0,0006 0,4653	-0,0061 0,0012	-0,0055 0,0044	0,0022	0,0184		
		(E2)	-0,0038 0,0983	-0,0127 0,0000	-0,0089 0,0006	0,0011 0,4320	-0,0052 0,0042	-0,0064 0,0015	-0,0012 0,1645	-0,0061 0,0017	-0,0049 0,0129	0,0023	0,0268		
		(E3)	-0,0037 0,1504	-0,0121 0,0001	-0,0084 0,0033	0,0011 0,4799	-0,0019 0,3308	-0,0030 0,1504	-0,0016 0,1017	-0,0038 0,0664	-0,0022 0,2905	0,0018	0,1864		
	method U2	(E1)	-0,0028 0,2171	-0,0112 0,0000	-0,0084 0,0011	0,0014 0,4155	-0,0070 0,0013	-0,0083 0,0004	-0,0010 0,2747	-0,0069 0,0003	-0,0059 0,0021	0,0053	0,0951		
		(E2)	-0,0038 0,1014	-0,0128 0,0000	-0,0090 0,0005	0,0013 0,4699	-0,0070 0,0014	-0,0083 0,0006	-0,0017 0,0695	-0,0070 0,0004	-0,0053 0,0074	0,0040	0,2329		
		(E3)	-0,0037 0,1532	-0,0121 0,0001	-0,0085 0,0032	0,0018 0,3666	-0,0026 0,2885	-0,0044 0,0910	-0,0019 0,0680	-0,0044 0,0325	-0,0026 0,2118	-0,0005	0,9124		
	method U3	(E1)	-0,0024 0,3179	-0,0101 0,0002	-0,0076 0,0083	0,0004 0,8871	-0,0094 0,0030	-0,0098 0,0007	0,0005 0,5998	-0,0054 0,0184	-0,0059 0,0114	0,0082	0,1138		
		(E2)	-0,0037 0,1261	-0,0124 0,0000	-0,0086 0,0030	0,0005 0,8536	-0,0095 0,0031	-0,0100 0,0008	-0,0002 0,8633	-0,0054 0,0225	-0,0052 0,0301	0,0050	0,3453		
		(E3)	-0,0032 0,2418	-0,0112 0,0011	-0,0080 0,0118	0,0002 0,9606	-0,0054 0,1368	-0,0056 0,0770	-0,0010 0,4024	-0,0030 0,2017	-0,0021 0,3886	-0,0016	0,8182		

Source: Banque de France ("OPC titres" database), Lipper, Morningstar, Trucost, Urganal, AMF

NB: The coefficients in red are positive and significant at the 5% threshold, while the coefficients in pink are weakly significant (10%). The coefficients in dark green are negative and significant at the 5% threshold, while the coefficients in light green are weakly significant (10%). The coefficients in orange are not significant at the 10% threshold and therefore their sign is not commented on.

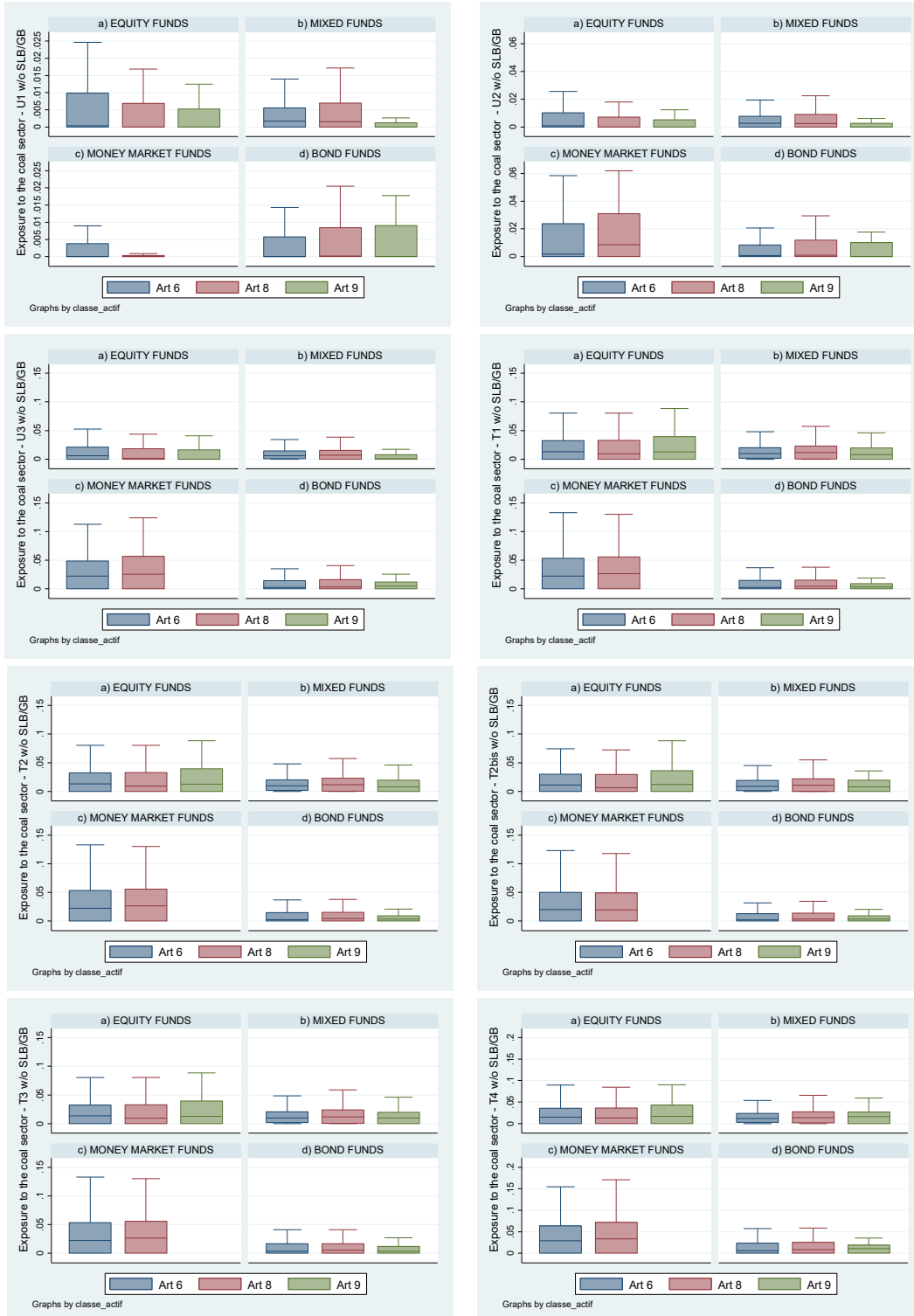
Annex 8: Summary table of regression coefficients for exposure to the oil & gas sector (TRUCOST)
(before look-through)

		EQUITY FUNDS N = 1 522 (of which 652 Art.8 and 118 Art.9)			BOND FUNDS N = 947 (of which 324 Art.8 and 38 Art.9)			MIXED FUNDS N = 3 026 (of which 790 Art.8 and 51 Art.9)			MMFs N = 180 (of which 100 Art.8 and no Art.9)			
		Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	Art 8 vs. Art 6	Art 9 vs. Art 6	Art 9 vs. Art 8	
Excluding Green Bonds, SLBs, etc.	method T2	(E1)	-0,0004	0,0007	0,0011	0,0096	0,0325	0,0229	0,0084	0,0069	-0,0015	0,0092		
		(E2)	-0,0026	-0,0031	-0,0005	0,0105	0,0323	0,0218	0,0075	0,0073	-0,0002	0,0038		
		(E3)	-0,0017	-0,0033	-0,0016	0,0086	0,0310	0,0224	0,0060	0,0108	0,0048	-0,0046		
	method T2bis	(E1)	-0,0022	-0,0062	-0,0040	0,0060	0,0191	0,0130	0,0049	0,0037	-0,0012	0,0052		
		(E2)	-0,0031	-0,0078	-0,0047	0,0065	0,0190	0,0125	0,0043	0,0038	-0,0005	0,0024		
		(E3)	-0,0014	-0,0078	-0,0064	0,0055	0,0190	0,0134	0,0037	0,0050	0,0013	-0,0020		
	method T3	(E1)	-0,0003	0,0006	0,0009	0,0082	0,0292	0,0210	0,0086	0,0062	-0,0024	0,0090		
		(E2)	-0,0024	-0,0032	-0,0008	0,0094	0,0290	0,0195	0,0076	0,0065	-0,0011	0,0038		
		(E3)	-0,0011	-0,0029	-0,0018	0,0071	0,0282	0,0211	0,0062	0,0100	0,0039	-0,0035		
	method T4	(E1)	-0,0016	-0,0011	0,0005	0,0068	0,0328	0,0260	0,0063	0,0064	0,0001	0,0153		
		(E2)	-0,0037	-0,0048	-0,0011	0,0078	0,0325	0,0248	0,0054	0,0065	0,0010	0,0096		
		(E3)	-0,0017	-0,0034	-0,0017	0,0058	0,0337	0,0279	0,0046	0,0098	0,0053	0,0006		
Excluding credible transition plans	method T2	(E1)	-0,0004	0,0007	0,0011	0,0058	-0,0075	-0,0134	0,0052	0,0012	-0,0040	0,0089		
		(E2)	-0,0026	-0,0031	-0,0005	0,0063	-0,0077	-0,0140	0,0042	0,0016	-0,0027	0,0035		
		(E3)	-0,0017	-0,0034	-0,0016	0,0050	-0,0048	-0,0098	0,0034	0,0059	0,0025	-0,0050		
	method T2bis	(E1)	-0,0004	0,0007	0,0011	0,0058	-0,0075	-0,0134	0,0052	0,0012	-0,0040	0,0089		
		(E2)	-0,0026	-0,0031	-0,0005	0,0063	-0,0077	-0,0140	0,0042	0,0016	-0,0027	0,0035		
		(E3)	-0,0017	-0,0034	-0,0016	0,0050	-0,0048	-0,0098	0,0034	0,0059	0,0025	-0,0050		
	method T3	(E1)	-0,0003	0,0006	0,0008	0,0044	-0,0109	-0,0152	0,0054	0,0005	-0,0049	0,0087		
		(E2)	-0,0024	-0,0032	-0,0008	0,0052	-0,0110	-0,0162	0,0044	0,0008	-0,0036	0,0035		
		(E3)	-0,0011	-0,0029	-0,0018	0,0035	-0,0076	-0,0110	0,0035	0,0051	0,0016	-0,0039		
	method T4	(E1)	-0,0016	-0,0011	0,0005	0,0030	-0,0153	-0,0182	0,0031	0,0002	-0,0029	0,0150		
		(E2)	-0,0037	-0,0048	-0,0011	0,0035	-0,0155	-0,0190	0,0022	0,0002	-0,0020	0,0093		
		(E3)	-0,0017	-0,0034	-0,0017	0,0023	-0,0102	-0,0125	0,0019	0,0045	0,0026	0,0002		
Excluding credible transition plans	method T2	(E1)	0,0005	-0,0040	-0,0045	0,0052	0,0110	0,0058	0,0043	0,0018	-0,0025	0,0052		
		(E2)	-0,0012	-0,0070	-0,0058	0,0057	0,0109	0,0052	0,0036	0,0020	-0,0017	0,0020		
		(E3)	-0,0013	-0,0062	-0,0049	0,0043	0,0127	0,0083	0,0028	0,0052	0,0024	-0,0057		
	method T2bis	(E1)	0,0005	-0,0040	-0,0045	0,0052	0,0110	0,0058	0,0043	0,0018	-0,0025	0,0052		
		(E2)	-0,0012	-0,0070	-0,0058	0,0057	0,0109	0,0052	0,0036	0,0020	-0,0017	0,0020		
		(E3)	-0,0013	-0,0062	-0,0049	0,0043	0,0127	0,0083	0,0028	0,0052	0,0024	-0,0057		
	method T3	(E1)	0,0006	-0,0042	-0,0048	0,0038	0,0076	0,0039	0,0045	0,0011	-0,0034	0,0051		
		(E2)	-0,0011	-0,0071	-0,0060	0,0045	0,0075	0,0029	0,0038	0,0012	-0,0026	0,0020		
		(E3)	-0,0006	-0,0057	-0,0051	0,0028	0,0099	0,0071	0,0029	0,0045	0,0015	-0,0047		
	method T4	(E1)	-0,0008	-0,0059	-0,0051	0,0024	0,0113	0,0089	0,0022	0,0013	-0,0009	0,0114		
		(E2)	-0,0023	-0,0087	-0,0063	0,0029	0,0111	0,0082	0,0016	0,0012	-0,0004	0,0078		
		(E3)	-0,0013	-0,0062	-0,0050	0,0015	0,0154	0,0138	0,0013	0,0043	0,0029	-0,0006		

Source: Banque de France ("OPC titres" database), Lipper, Morningstar, Trucost, Uргewald, AMF

NB: The coefficients in red are positive and significant at the 5% threshold, while the coefficients in pink are weakly significant (10%). The coefficients in dark green are negative and significant at the 5% threshold, while the coefficients in light green are weakly significant (10%). The coefficients in orange are not significant at the 10% threshold and therefore their sign is not commented on.

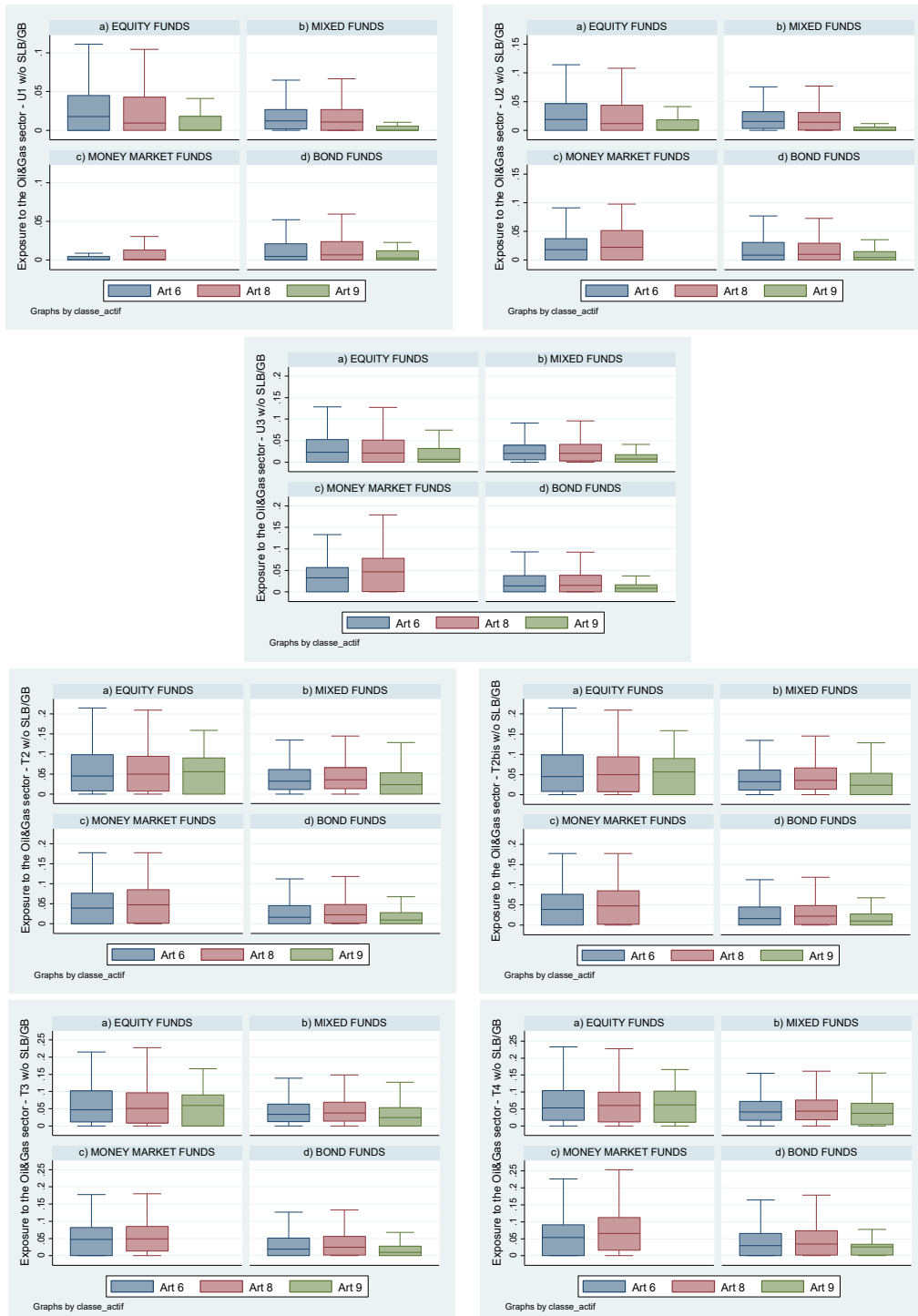
Annex 9: Graphs of the distribution of funds' exposure to the coal sector (after look-through) after deducting exposure to green bonds, SLBs, social bonds and sustainability bonds (ICMA aligned and environmental focus)



Source: Banque de France ("OPC titres" database), Lipper, Morningstar, Trucost, Uргewald, AMF

NB: The rectangle materialises observations located between the first and third quartiles (the bottom and top of the box respectively). The horizontal line within the box indicates the median (second quartile). The extensions represent "adjacent" observations, i.e., to simplify, the extent of the total distribution (excluding atypical extreme values).

Annex 10: Graphs of the distribution of funds' exposure to the oil & gas sector (after look-through) after deducting exposure to green bonds, SLBs, social bonds and sustainability bonds (ICMA aligned and environmental focus)



Source: Banque de France ("OPC titres" database), Lipper, Morningstar, Trucost, Uргewald, AMF

NB: The rectangle materialises observations located between the first and third quartiles (the bottom and top of the box respectively). The horizontal line within the box indicates the median (second quartile). The extensions represent "adjacent" observations, i.e., to simplify, the extent of the total distribution (excluding atypical extreme values).