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SOME DON'T LIKE IT HOT: BANK DEPOSITORS AND NGO CAMPAIGNS AGAINST BROWN BANKS

Formerly circulated under the title "Some Don't Like It Hot: Bank Depositors and NGO Campaigns Against Fossil Banks"

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Some Don't Like it Hot: Bank Depositors and NGO Campaigns Against Brown Banks.*

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Abstract

We study whether households respond to claims that their bank finances global warming. We leverage new data on NGO campaigns targeting financial institutions involved in climate-damaging, so-called “brown”, projects to measure the “brown” reputation of French banks. Using granular data on household deposit holdings in France from 2010 to 2020, we find that the worsened environmental reputation of a bank leads to a lower demand for its deposits. To interpret this as evidence that environmentally motivated customers leave brown banks, we exploit a 2017 regulatory reform that eliminated barriers to switching bank accounts. The relationship between deposit volumes and banks’ brown reputation strengthens markedly after the reform, suggesting that reduced frictions allowed households to act on their environmental preferences and change for greener banks.

Keywords: Climate change, Households finance, Fossil banks, Green preferences.

JEL Classification: G21, G51, Q54.

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1 Introduction

While academic research has long shown that individual bank customers care for the financial health of their deposit banks (see, e.g., Martinez Peria and Schmukler, 2001; Iyer et al., 2016), little is known about how much depositors also value the Environmental and Social (ES) performance of their bank. In this paper, we provide new evidence suggesting that bank depositors react to Non-Governmental Organization (NGO) campaigns against banks that finance climate-damaging activities, divesting from such banks and switching to competitors.

Since the 2015 Paris Agreement and the associated calls for more responsible private finance, environmental NGOs have increasingly tracked and made public the trillions of funds funneled annually by large banks worldwide into fossil fuels companies and projects which directly contribute to the global climate warming.¹ In recent years, many large banking groups have joined voluntary alliances for the climate, such as the UNEP-FI Principles for Responsible Banking, the FSB’s Task Force on Climate-related Financial Disclosure (TCFD) or the GFANZ Net Zero Banking Alliance. However, activist groups have repeatedly depicted these pro-climate commitments as not being binding enough and accused banks of largely greenwashing their activities.² Meanwhile, environmental NGOs have multiplied calls in the general public for boycotts of the banks depicted as *fossil* or *brown* because of their continued support to the fossil energy industry.³

In this study, we leverage new data on NGO campaigns blaming French brown banks.

¹A prominent example is the “Banking on Climate Chaos” report published every Spring by a consortium of NGOs led by the Rainforest Alliance Network. According to its 2023 release, the world’s 60 largest private banks financed fossil fuels with USD \$5.5 trillion over the period from 2016 to 2022.

²Such allegations of greenwashing are to some extent confirmed by regulators’ investigations and academic research as well. In May 2023, the European Banking Authority published its Progress report on Greenwashing Monitoring and Supervision, concluding that the total number of potential cases of greenwashing increased in the banking sector since 2012. Giannetti et al. (2023) provide recent evidence that euro area banks that communicate more about greening their business also lend more to the most-emitting firms and industries.

³An early example is a campaign launched by the French environmental NGO Les amis de la Terre in October 2015 called “My bank pollutes, I change banks!” (cf. <https://www.amisdelaterre.org/Ma-banque-pollue-je-change-de-banque/>).

We combine this data with detailed information on households' bank deposits in France over the years 2010 to 2020 in order to shed light on how individual customers respond to news revealing that their bank's business contributes to warming the climate. We find that, other things equal, banks which are repeatedly accused of financing unsustainable fossil companies or projects loose deposits.

France is an ideal testing ground for our purpose. First, since the early 2010s at least, French environmental NGOs, such as *Les Amis de la Terre* and *Reclaim Finance*, have been very vocal in denouncing the responsibility of banks in global warming because of their continued support of fossil fuel companies. Campaigns inviting customers to change for greener banks have been longstanding and regularly echoed in mass media. Second, an important reform suppressed in February 2017 the administrative burden faced by depositors when switching banks: the new bank then has to take in charge for free all the paperwork associated with the transfer of checking accounts between institutions. This regulatory change, called Article 43 LCACE hereafter for brevity, provides us with a quasi-natural experiment which cuts the transaction costs that may prevent individuals from aligning their choice of a deposit bank with their environmental values and concerns. Last, we can leverage unique monthly administrative data on households' deposits with French banks, as well as bank balance sheet ratios and bank branching networks for individual banks at the level of each of the 94 counties of Metropolitan France.⁴

Identification relies on the assumption that NGO campaigns about banks' role in global climate warming is exogenous to French households' (local) saving and borrowing decisions. This assumption is plausible for two reasons. First, NGOs campaigns regarding large banks and climate change mostly relate to international activities of the corporate and investment banking (CIB) arm of banking groups (such as arranging a syndicated loan that funds a pipeline in an African country) and arguably not with variations in the retail banking business of the same groups' retail banking arm in French counties. Second, the French banking system is quite concentrated, with seven large banking groups

⁴The French name for these administrative units is *départements*. We denote them counties for simplicity throughout.

accounting for the bulk of retail deposit taking and household lending in France. The ES responsibility of these large banking groups has been scrutinized by French NGOs for decades. Recent changes in the market shares of these bank brands in French retail banking, if any, are therefore unlikely to drive the decision of NGOs to start investigating their ES-related wrongdoings, and launch campaigns.

We get extensive information on NGO campaigns from Sigwatch, a European consultancy which monitors the activities of some 11,000 NGOs worldwide and advises targeted companies on how to engage with ES activism. We focus on campaigns that target the main brands of the seven largest banking groups operating in France for reasons related to climate change (such as funding fossil fuel companies). We assume that repeated NGO actions progressively increase the awareness of the general public and construct a time-varying index of each bank brand’s “brown” reputation based on accumulated negative alerts from NGOs. We first document the increasing pressure exerted by NGOs on the main French banking groups since the early 2010s and the strong increase in the number of actions that point at banks’ funding of fossil fuel industries. Interestingly, our Brown Reputation Index (BRI) exhibits a lot of variance both over time and across the main bank brands. We additionally use a web-scraping algorithm to show that NGO campaigns are likely to reach depositors through traditional mass media and through social media (focusing here on X, formerly Twitter). We find that around 70% of NGO campaigns are picked up and amplified by both mass media and social media. This suggests that tracked NGO campaigns have a significant reach and can influence public opinion on banks and sustainability issues. We then take advantage of the granular banking data from the Banque de France, which allows us to monitor households’ deposits for each of some 100 individual banks affiliated to the targeted banking groups, in each of mainland France’s 94 counties (*départements*) with *monthly* frequency. We match this information on individual banks’ business with the brown reputation indexes associated with popular bank brands, using both information on banks’ parent companies and the specifics of banks’ names.

We first run panel regressions of households sight deposits (at the individual bank level) on banks' brown reputation indexes, controlling for bank characteristics, including the interest rate paid on checking account balances, as well as bank and time fixed effects. For robustness, we also conduct the same analysis at the more granular bank-county level, which allows to also control for local bank presence, as well as for local economic activity. We find that browner banks experience a decline in households' demand for deposits. This evidence is robust to a number of variants in the way we construct banks' brown reputation measures. Further, as mentioned above, we exploit a well-publicized reform which, from February 2017 on, made it much easier and (transaction) cost-free for individuals to switch their bank account to a new bank (see section 2 below for institutional details). This vindicates our interpretation that NGO campaigns induce depositors to exit brown banks, but mostly when transaction costs are small enough. Indeed, we find that browner banks face a drop in sight deposits mostly *after* the implementation of the new regulation, when the administrative costs of changing banks are zero for consumers: other things equal, deposit volumes are then lower by some 2% when the brown reputation index of the bank is higher by one standard deviation.

This result of our baseline panel regressions is confirmed in a more standard difference-in-differences approach, where we define treated banks as the banks which belong to the three "brownest" national bank brands as measured in December 2016. Restricting the sample to a time window of six months before and six months after the implementation of the "easy bank switching" regulation, we find that "brown" banks face a lower demand for sight deposits by 1.2% in the months following the policy change, relative to banks in the control group.

Last but not least, while the impact of a bank's brown reputation on the demand for their deposits holds on average, we also document some geographic heterogeneity. In counties with more voters for green parties at the 2014 European Parliament elections, the impact of NGO campaigns on depositors' decision to change banks materializes also before the 2017 regulation, when transaction costs remain substantial, and is almost twice as large

thereafter.

Our study fits in the booming literature on climate finance (Giglio et al., 2021) and, more precisely, sustainable banking (De Haas, 2025; Morse and Sastry, 2024).

We first contribute to the stream of recent research that aims at assessing the impact of ESG news on firms and investors. For instance, Krueger (2015) finds that the stock prices of US firms drop in response to negative news from KLD related to firms' corporate and social responsibility. Consistently, Derrien et al. (2022) find that financial analysts downgrade the earning forecasts of firms in response to ESG controversies as monitored by RepRisk. Last, Choi et al. (2023) also exploit RepRisk data and find that US banks facing more ES controversies tend to experience declining deposits in US counties more exposed to sea-level rise, which they interpret as evidence that exposed US depositors exit banks with a browner reputation. In contrast with these papers, we consider adverse, climate change-related NGO campaigns, which are more likely to reach and influence individual bank depositors than ESG controversies from market data providers, and study how unsophisticated, but potentially environmentally motivated, bank depositors respond to these campaigns.

Second, since we exploit data on campaigns run by activist groups, our paper also relates to the literature on NGO activism and boycotts, including calls for boycotting financial institutions. Koenig and Poncet (2019) exploit the Sigwatch database and show that imports of clothes from Bangladesh after the Rana Plaza scandal drop in countries whose involved firms were the most vividly blamed by NGOs.⁵ Closer to our study, Homanen (2022) documents a decrease in deposit growth with banks involved in the controversial Dakota Access Pipeline in the US. In a similar vein, Jeung (2022) finds that banks shamed by activist groups because they fund the gun industry experienced a decrease in deposit growth after a deadly school shooting in Florida in 2018. While these two papers exploit a unique event, we consider the accumulated impact of hundreds of NGO campaigns

⁵More recently, Brendel et al. (2025) show that NGO campaigns that denounce greenwashing have negative financial effects on the targeted firms, while Fioretti et al. (2025) analyze the strategic timing of NGO campaigns around the dates of firms' annual general meetings.

on banks' brown reputation over a decade. Last, Dursun De Neef and Ongena (2023) find a lower growth of US households' deposits with branches of large banks that are listed in the "Banking for climate chaos" annual report, but only in counties that are affected by abnormally high temperatures. Compared to the latter, we notably improve on identification by exploiting a reform that cuts down the costs of switching banks.

Third, our paper speaks to recent studies that aim to evaluate the ESG preferences of individual investors and their willingness to pay (WTP) for their values, but our focus is on the *transaction* costs green-minded consumers of financial products accept (or not) to face. Several papers exploit administrative data and field experiments and/or surveys to elicit the non-pecuniary motives of responsible investors (Anderson and Robinson, 2021; Bauer et al., 2021; Giglio et al., 2023; Heeb et al., 2022; Riedl and Smeets, 2017). Other studies quantify the WTP in terms of lower expected return for various classes of assets (Barber et al., 2021; Riedl and Smeets, 2017).⁶ We contribute to this literature by focusing on unsophisticated retail investors, i.e. individual bank depositors, and by providing new evidence that too high (non-pecuniary) transaction costs may prevent depositors from changing banks according to their values.

Last, this study also connects to the long-standing banking literature on competition in deposit markets and the stickiness of deposits and depositors.⁷ A standard view in the US and also in Europe is that banks compete locally for demand deposits by adjusting deposit rates: as a consequence, rates paid on deposits tend to be lower in more concentrated markets.⁸ France is a special case here, as most banks do not pay interests on checking accounts (sight deposits), while the bulk of household savings deposits are state-regulated deposits that pay the same, tax-free interest whatever the bank.⁹ French banks, with

⁶Pastor et al. (2021) and Pedersen et al. (2021) provide theories explaining why ESG-motivated investors should expect lower returns for their responsible investment.

⁷See, e.g., Haddad et al. (2023) and Argyle et al. (2025), and the references therein. Degryse et al. (2009), pp. 49-54, provide a useful survey of empirical results across countries.

⁸For a recent debate regarding the local market power of banks, local vs nation-wide deposit rate setting schemes and the deposit channel of monetary policy in the US, see Drechsler et al. (2017), Drechsler et al. (2021) and Begenau and Stafford (2023).

⁹See below the discussion in Section 6 for more details.

the exception of a few online “neo-banks”, do not as a result really compete on deposit rates.¹⁰ Our findings however suggest that, at least in this specific context, greener banks may enjoy a competitive edge and be more able to keep their retail customers than brown competitors, at least in a legal environment which promotes bank mobility.

The paper is structured as follows. First, section 2 provides some institutional background on the 2017 “bank switching” regulation. We lay out our research hypotheses in section 3. We then present the data in section 4. Section 5 details how we build a measure of bank reputation based on NGO campaign alerts. Section 6 explains our empirical methodology and presents the results of our empirical analyses. Last, section 7 concludes.

2 Institutional Background

Many NGO campaigns run in France since 2010 have explicitly urged the customers of “brown” banks to change banks. However, changing banks entails *a priori* substantial transaction costs for the depositor, who must take care of the continuity of all regular payments and transfers (such as rents, tax payments, subscriptions etc) associated with her bank account. These transaction costs have long been identified as a reason for the observed low rate of bank switching in France, as in other European countries. We exploit in this paper a major regulatory change, which, from February 2017 on, cut down to zero the transaction costs of switching bank accounts for individuals in France. Moving deposits out of a brown bank into a greener one then became much easier after this date for any bank customer.

This reform was brought about by a provision of the so-called “Macron Law” of 6 August 2015 (hereafter denoted Article 43 LCACE), which entered into force on 6 February 2017.¹¹

This article notably transposed a European Directive of 2014 that aimed at regulating

¹⁰This is confirmed by our regressions where the bank-specific interest rate on checking accounts is never a significant driver of the volumes of sight deposits.

¹¹Cf. Article 43 of Law 2015-990 of August 6, 2015: *Loi pour la croissance, l'activité et l'égalité des chances économiques*, in short LCACE. At the time, the law was dubbed “Macron law” after the name of the then Finance minister, Emmanuel Macron, who promoted it.

the information on bank fees and facilitating the opening and switching of bank accounts in EU countries.¹² In practice, the new regulation requires that (i) closing any deposit account with a bank is cost-free for individuals and (ii) the new bank offers a free “bank switching service” to the customer who has just opened a new checking account, which means that the new bank will take in charge all the paperwork on behalf of the customer. By simply signing the bank switching mandate proposed by the new bank, and providing the details of the bank account held at the old bank, the customer authorizes the former to obtain from the latter all relevant information relating to valid direct debits, recurring transfers and undrawn cheques, and to inform the issuers of the new bank details of the customer. Once the customer has opened a deposit account with the new bank, the service enables the secure transmission between banks of the information needed for issuers to change the direct debit and recurring transfer bank details. Customers can also ask their new bank to close their account at their old bank and transfer their credit balance. The system is automated and swift: within 2 working days of signing the mobility mandate, the new bank sends a request to the old bank to collect the relevant information on ongoing, unwound operations and on recurring transfers over the last 13 months. However, the law does not cover the paperwork for switching term and savings deposits beyond the main checking account, which remains in charge of the customer.

This reform was soon perceived as a success. As soon as one month after its implementation, newspapers accounted for a visible impact of this regulation on customers’ behavior.¹³ With the benefit of more hindsight, a report by the *Conseil Consultatif du Secteur Financier*, an official evaluation committee backed by the French central bank, confirmed this early assessment in June 2018.¹⁴ The report presents the findings of a

¹²Directive 2014/92/EU of the European Parliament and of the Council of 23 July 2014 on the comparability of fees related to payment accounts, payment account switching and access to payment accounts with basic features (OJ L 257, 28.8.2014, pp. 214-246).

¹³For instance, France’s reference daily newspaper, *Le Monde*, reports on March 7, 2017, about the “promising start of the Macron law” (see [here](#)).

¹⁴Cf. CCSF (2018). *Réforme de la mobilité bancaire: le bilan*. June. Available at: <https://www.banque-france.fr/fr/publications-et-statistiques/publications/reforme-de-la-mobilite-bancaire-le-bilan>.

survey conducted in April 2018 with some 2,100 French bank customers. According to this survey, 67% of French people were aware of the new bank switching service one year after the reform was implemented. Further, 70% of the customers who had opened a new bank account since the reform had been offered the service and 85% of the users declared themselves fully satisfied. Over the first year of implementation alone, banks had to deal with some 1.2 millions of bank account switches.

Overall, this reform provides us with a quasi-natural experiment that exogenously cuts the transaction costs of bank switching for individual customers. Interestingly, the reform affects the costs of their switching checking accounts (hence moving sight deposits), but not the costs of their switching also term or savings accounts and the associated balances. As a matter of fact, the CCSF’s report tells us that 60% of the surveyed bank switchers had kept at least one other account open in their old bank.

3 Research Hypotheses

In this short section, we spell out our research hypotheses. As detailed below, we exploit data on NGO campaigns that denounce the funding of fossil energy (or *brown*) projects and companies by French banking groups. We use these campaigns to construct a measure of French banks’ “brown” reputation with the general public. NGO campaigns generally target a general audience, so that a measure of banks’ reputation for climate responsibility built on NGO alerts naming and shaming banks is a reasonable proxy of how banks are perceived in that respect by individual bank customers. We provide evidence below that the campaigns in our dataset are on average largely echoed both in traditional mass media and social media, which confirms our hypothesis.

We then make the following hypotheses. First, we assume that climate-motivated bank customers react to the information conveyed by negative NGO campaigns and, to some extent, follow NGOs’ advice to boycott “brown” banks. Under the assumption that the proportion of such attentive, green-motivated depositors is high enough, banks with a

reputation of funding fossil projects detrimental to the climate should then face a lower *demand* for their deposits.¹⁵ We test this hypothesis by regressing the (log of) households' outstanding sight deposits on the brown reputation index of banks.

Second, climate-conscious bank customers may in theory react along both the intensive margin, i.e., reduce the amount of deposits they hold with the brown bank and reallocate some money with their other banks if they own checking accounts with several banks, or along the extensive margin: exiting the brown bank altogether. We assume that the extensive margin is the most relevant one in this context, since (i) NGOs blaming brown banks unambiguously call customers for exiting them and (ii) only a minority of French individuals hold more than one bank account.¹⁶ The extensive margin is however limited by the transaction costs of switching banks. Accordingly, any exogenous shock that cuts these costs should increase households' incentives to switch banks. We test for the importance of switching costs by using the Article 43 LCACE as a quasi-natural experiment, which transferred the administrative burden of changing banks from the customer to the new bank. Interestingly, as explained above, the reform should have an impact on the demand for sight deposits across banks, but not, or a smaller impact, on the demand for savings deposits, which we can test below.

4 Data

4.1 Data on NGO Campaigns

Presentation and cleaning. Our data on environmental NGO campaigns comes from Sigwatch.¹⁷ Sigwatch is a European consultancy which tracks and collects detailed information on NGO campaigns targeting companies worldwide. This consultancy was

¹⁵We use throughout the following language convention: the bank supplies (or issues) deposits, i.e., it faces a demand for deposits by households (who themselves supply funds, i.e., savings). This demand supposedly increases with the interest rate paid by banks on deposits.

¹⁶According to the 2022 issue of the survey conducted by the French Banking Federation and Ifop, only 37% of French depositors are clients of two or more banks.

¹⁷We thank Pamina Koenig (PSE) for sharing the access to this dataset with us.

founded at the beginning of the 2010s to help companies engage with activist groups and manage their reputation risk. According to their website, Sigwatch covers in 2023 the campaigns of some 11,000 activist groups (NGOs) naming (and often shaming) some 24,000 companies in the world. An NGO campaign is defined as a series of actions and communications by one NGO or a coalition of NGOs, targeting one or several companies in order to achieve a specific goal. A campaign may last for several months or even years. Campaign actions are the main milestones of campaigns, i.e. moments when new public protest actions take place, or when new reports are disseminated. They are the most likely to attract public attention.

For each country covered, Sigwatch monitors a list of active NGOs, which they regularly update. They then collect data on campaign actions by browsing the websites of the identified activist organizations.¹⁸ In the dataset provided by Sigwatch, individual observations are better described as company-specific *alerts*. An alert is created for each company named within the frame of a new campaign action. For instance, when a new NGO campaign targets three banks simultaneously for jointly funding a new fossil fuel extraction project, three new alerts are recorded in the dataset, one for each of the banks. For each alert, detailed information is collected on the participating NGOs (name, home country), the company blamed or, sometimes, praised (name, parent company, country, country of parent etc.), the campaign's details (registration date in Sigwatch's database, internet links, keywords, excerpts of manifestos naming the companies, country of the targeted audience).

Sigwatch also adds qualitative information by coding several proprietary variables: a measure of the NGOs' outreach (NGO power), a sentiment indicator (from very negative to very positive sentiment) and a prominence indicator which measures how exposed the named company is in the campaign. For instance, on 23 March 2018, the French environmental NGO *Les Amis de la Terre* (the French arm of Friends of the Earth International), in association with another French NGO called *i-boycott.org*, launched a new campaign to

¹⁸For a general description of the Sigwatch dataset, see Koenig (2017).

denounce the funding by Société Générale (SG) of two contended fossil energy projects: the Rio Grande LNG terminal and the Rio Bravo gas pipeline in Texas.¹⁹ This campaign was registered by Sigwatch on 28 March 2018. Sigwatch rated the campaign against SG as very negative and very prominent, as the call for a “citizen boycott” of the bank was echoed in several newspapers at the time. Interestingly, the webpage of the campaign also mentions BNP Paribas on a more positive note, emphasizing recent commitments by this bank to exit unconventional fossil fuels in response to alleged public pressure. This information translates in Sigwatch’s dataset into a second alert within the frame of the same campaign (same campaign action identifier), this time naming BNP Paribas. This second alert is associated by Sigwatch with a positive sentiment and an intermediate level of prominence.

For our purpose, we focused on campaigns (i) targeting French banks, (ii) because of some environmental and social (ES) issue and in particular on issues related to climate change, (iii) run by at least one French NGO, (iv) and/or addressing a French audience.²⁰ We parsed the campaigns’ keywords provided by Sigwatch to construct our own dictionary of terms identifying climate change (CC)-related campaigns, vs campaigns related to other environmental (OE) issues and campaigns related to social (S) issues. For instance, keywords such as “coal”, “oil”, “gas”, “shale”, “pipeline”, “fracking”, “drilling”, “fossil fuel”, “climate change” or “carbon” were used to pick climate change-related campaigns. Among campaigns not related to climate change, keywords such as “battery poultry”, “pollution”, “rainforest”, “palm oil”, “water use”, “greenwashing” were used to pick other environment (OE)-related campaigns. Last, remaining ES campaigns (i.e. after exclusion of a few campaigns related to non ESG topics, such as consumer protection) were defined as S. Campaigns we labelled as “social” point at a variety of social or ethical issues, such as human rights abuses, labor rights abuses, tax avoidance and tax havens, complicity in money laundering, illegitimate debt and poverty, social impact of mining activities,

¹⁹For details of the campaign, see: <https://www.amidelaterre.org/stop-rio-grande-lng-une-campagne-citoyenne-de-boycott-viser-societe-generale/>.

²⁰We include HSBC France, formerly *Crédit Commercial de France*, among French banks because of its large branch network in metropolitan France.

among others.²¹

NGO campaigns targeting banks generally mention the common name of large banking groups, such as *BNP Paribas* or *Crédit Agricole*, i.e. banking brands which are well known to retail customers, some of which may however not be the ultimate parent company. We identified nine banking brands in the cleaned campaigns dataset: Banque Populaire-Caisses d’Epargne (BPCE), BNP Paribas (BNP), Crédit Agricole (CA), Crédit Coopératif (CCoop), Crédit Lyonnais (LCL), Crédit Mutuel-CIC (CM-CIC), HSBC, La Banque Postale (LBP), and Société Générale (SG).²² We then matched individual campaign alerts with these bank brands. For instance, an alert naming BNP Paribas Wealth Management was identified as an alert pointing at the BNP brand. We are interested here in campaigns that aim to arise the awareness of the general public. Campaigns pointing at the asset management arms of large French banking groups without mentioning the brand of the parent bank were therefore considered irrelevant and dropped, because these financial institutions are unknown to most individual bank customers.²³

Descriptive Statistics. Our cleaned dataset of relevant NGO campaigns naming French bank brands includes 361 distinct ES alerts with a negative sentiment (“negative alerts”) over the period 2010-2020. Among these negative alerts, 244 relate to climate change issues (68%), 46 to other environmental issues (13%) and 71 to so-called social issues (19%).²⁴

Figure 1 provides an overview of this data. Figure 1 shows the yearly number of negative ES-related alerts targeting French banks, sorted by their main issue type (CC, OE, S). Two main facts emerge. First, the pressure exerted by NGOs on French banks for ES

²¹We double-checked that our CC, OE and S labels were indeed consistent with all keywords provided by Sigwatch to describe campaign contents, as well as, when still available, the online content of the campaigns.

²²Note that CCoop and LCL are affiliates of CM-CIC and CA, respectively. These two brands account for only three campaigns observations including all ES-related issues and are dropped during the matching process with bank-level data.

²³Cases in point are Natixis and Amundi, two large asset management firms which are respectively subsidiaries of BPCE and CA.

²⁴We also identify 79 “positive” ES alerts. Positive alerts are not only less frequent but also generally less prominent and we do not consider them in our baseline analysis. Including them separately as a control in the regressions does not change our results.

motives increased by a factor 8 over the period, with less than 15 alerts in 2010 against more than 110 alerts in 2020. Second, while OE and S issues dominated in the early 2010s, climate change-related alerts gained momentum over the decade and overwhelm other concerns in recent years.

Table 1 sheds light on who are the most active NGOs. Some campaigns are run by a coalition of NGOs. In such cases, we consider here only the NGO ordered first by Sigwatch.²⁵ As shown in Table 1, *Amis de la Terre* comes out as the most active NGO in denouncing ES misbehavior by French banks, with 59% of negative alerts on all ES issues and almost 70% of alerts on climate change-related issues. Together, only four NGOs (*Amis de la Terre*, Oxfam, ATTAC and Reclaim Finance) account for some 87% of all negative CC alerts targeting French banks. Meanwhile, *Amis de la Terre* and Reclaim Finance, a recent spin-off of the former, account for more than 77% of positive alerts of the issue.

Last, regarding targeted bank brands over the 2010 decade, which is our period of interest, BNP Paribas, SG and CA come out as the most often blamed banking groups. This ranking holds whenever we consider all ES issues, where these three brands account together for 80% of negative campaigns, as well as when we focus on climate change-related ones only (84% of the campaigns targeting these three brands). This does not come as a surprise: these three banking groups are, among those headquartered in France, the most internationally active ones, with large CIB arms funding projects (including brown ones) abroad. In contrast, other groups, such as CM-CIC and LBP, are more retail-oriented and have a stronger domestic focus.

²⁵Sigwatch is not explicit about the rationale behind this ordering. However, manual checks for some visible campaigns suggest that the “first” NGO indeed plays a leading role in the campaign, or at least in its French part.

4.2 Bank Data

Our main variables of interest are volumes of outstanding households deposits issued held by French banks in each county (in French: *département*) of mainland France.

We obtain bank-county-level information on deposits in France over the years 2010-2020 from CEFIT, a proprietary dataset of the Banque de France. Specifically, CEFIT provides us with details of the outstanding volumes of deposits issued and loans granted to non-financial customers by individual credit institutions in each of the 94 counties of mainland France. Credit institutions (hereafter, banks) are identified by a unique number (*Code d'identification bancaire*, CIB). We focus on deposits issued to resident households, which we sort into sight deposits (also called checking accounts) vs term and savings deposits. Deposits and loans amounts are observed with monthly frequency. We restrict the sample of banks to credit institutions which belong to one of the seven largest banking groups operating in France.²⁶ These groups account for more than 95% of outstanding household deposits throughout the period. Some smaller credit institutions only report to CEFIT with quarterly frequency. We drop these smaller banks and focus on the subsample within major groups which report with monthly frequency. We compute monthly rates of growth of deposits and loans and drop observations of the variables in levels corresponding to outlier growth rates (at the first and 99th percentiles), in order to mitigate the impact of possible reporting breaks (associated, e.g., with mergers of local banks). We are left with an unbalanced sample of some 100 individual banks affiliated to the seven major banking groups of the country, and 122,368 bank-county-month-level observations over January 2011 to November 2020.²⁷ In the baseline regressions, we however restrict the sample to banks for which we observe both key financial ratios and the interest rate paid on sight deposits (see below for details). The final regression sample therefore includes 57

²⁶These banking groups are six major banking groups headquartered in France (BNP, BPCE, *Crédit Agricole*, *Crédit Mutuel-CIC*, *Banque Postale*, *Société Générale*) and the French subsidiary group of HSBC group (HSBC France, formerly CCF).

²⁷Note that since our indexes of banks' brown reputation build on NGO alerts lagged by up to 12 months (see section 5 below for details), we lose the first year of observations. The final regression sample therefore starts in 2011 instead of 2010.

individual banks, affiliated to the same 7 banking groups. Over the 2011-2020 period, this corresponds to 88,856 bank-county-month observations, or equivalently 5,358 bank-month observations when we collapse the data at the bank level.

We then construct bank-related controls using various additional sources. Firstly, we use Banque de France’s *Fichier des implantations bancaires* (FIB) to construct local measures of bank size and competition in retail banking markets. The FIB dataset monitors the population of active bank branches of all banks in France, including their postal address, with monthly frequency. For each bank, we compute the (log) number of branches in each county as a proxy for the size of the bank’s local business. We use this variable as our main bank-county-level control in regressions explaining the level of deposits or loans.²⁸

Secondly, we exploit non-consolidated balance sheet and income statement information from the SURFI database of the French bank supervisory authority (ACPR) to construct additional bank-level controls with either monthly frequency. For all variables, we consider information related to the France-based business of available credit institutions (excluding branches located abroad or in French overseas territories). SURFI is structured in a variety of sub-datasets, or “reporting forms”. The first sub-dataset used, M-SITMENS, provides simplified balance sheet items with a monthly frequency for a large subsample of banks. We use this data to construct monthly measures of bank size (log of total assets), leverage (capital and reserves to assets), reliance on retail deposits (debt to non-financial customers to assets), as well as the relevant interest rates, which we include in our regressions explaining changes in the volumes of sight deposits or housing loans. The second sub-dataset used, INTDEPO, provides outstanding amounts of deposits and associated interest payments flow. We use this data to construct monthly measures of bank-level *apparent* interest rates on *existing* sight deposits (or checking accounts). We express these apparent rates on sight deposits in percentage points. Last, for some extensions where we look at savings deposits, we obtain the bank-specific, average interest rates on new

²⁸Loan officers of the French Post Bank, *La Banque Postale* (LBP), are located in local post offices. These post offices are not recorded in the FIB dataset, which only includes regional hubs of LBP. As a consequence, observations related to LBP are dropped from the regression sample when the number of branches at the bank-county level is used as a control variable.

longer-term (above 2 years) savings deposit contracts from the INTNOUA dataset.

4.3 Other Data

Socio-demographic data. We use Census data from 2008 to measure age and education at the city-level (ZIP code).²⁹ The dataset comprises information on educational attainment, categorized into 7 levels, of individuals aged 16 and over, who were not enrolled in school. It is segmented by gender and age group. We use this data to compute the share of adults with college education or higher education attainment at the county (*départements*) level as of 2008. We also leverage fiscal data from *Impot sur le Revenu des Communes de France* (IRCOM) to measure income per capita.³⁰ The data provides a snapshot of taxation from the previous year as of December 31 of the current year, as well as information on the number of tax households and the total amounts of salaries, wages, or pensions for county. We use this data to compute the average income per household at the county level as of 2010. Last, we sort counties into quartiles of the respective distributions of these measures of educational attainment and average income. Figure A2 in the appendix show the geographical distributions of these variables.

Green votes. We recover data on votes for green parties at the 2009 and 2014 European elections in France from the website of the French Ministry of Interior affairs.³¹ Electoral results (number of electors, voters, and votes for each candidate) are notably available at the level of counties (*départements*). We use election results to gauge the green preferences of people living in the respective *départements*. Elections of MEUP are relevant for our purpose because they are held under the proportional representation system and French green parties generally obtain their best scores at these elections as a result. Results are therefore more likely to reveal the pro-climate preferences of inhabitants than the share of green votes at other elections. For each EUP election in each county, we identify all

²⁹Data from INSEE available here: <https://www.insee.fr/fr/statistiques/1893149>.

³⁰Data available here: <https://www.data.gouv.fr/fr/datasets/limpot-sur-le-revenu-par-collectivite-territoriale-ircom>.

³¹Data available here: <https://www.archives-resultats-elections.interieur.gouv.fr/resultats/europeennes-2009/index.php>.

candidates standing for green parties (*Europe Ecologie-Les Verts*, *Génération Ecologie*, *Cap 21* etc.) and add up the votes they obtain to compute their total share of expressed votes. As before, we sort counties into quartiles of the respective distributions of green vote shares. Figure A3 in the appendix shows the geographical distribution of green votes across French counties.

5 Measuring Banks’ Brown Reputation

5.1 NGO campaigns and Mass Media

We aim to construct a monthly measure of French banks’ “brown” reputation in the general public, i.e. Main Street bank depositors. Our source of information are NGO campaigns that raise the public’s attention to banks’ irresponsible business. NGO campaigns can reach the general public through a variety of channels, including mass media, NGOs’ websites and social networks. To vindicate our approach, we therefore first investigate whether the NGO alerts selected from the Sigwatch dataset find their way into general interest newspapers or other mass media, and, second, we study social media reactions through the analysis of tweets related to NGO campaigns posted on X (ex-Twitter).

Newspapers’ websites. We first gauge the impact of NGO campaigns on retail bank customers by web-scraping a broad selection of French information websites for corresponding mass media releases.³² For each NGO campaign alert in our dataset, our Python algorithm launches a Google query using the respective NGO and bank names, as well as selected keywords from the alert’s content, and then returns the URL and titles of newspapers articles meeting these criteria within a time window of 10 days before and 30 days after the recorded alert date. We manually drop irrelevant hits (false positive) that are not related to climate change.

³²We include the websites of all nation-wide daily newspapers, the first 19 daily regional newspapers, all weekly general interest or economics-related magazines, and major TV and radio broadcasts. See the complete list in the appendix.

Social media. Social media platforms like X (ex-Twitter) serve as agoras where individuals engage in discussions, express opinions and share information on a global scale. Analyzing the tweets that relate to NGO campaigns can therefore help us to assess how the public is affected by these initiatives. We developed a web scraping algorithm to identify the tweets which pertain to the selected NGO campaigns in our dataset. The algorithm runs targeted search queries containing the names of both the NGO initiating the campaign and the targeted bank, along with variations of their names, keywords and hashtags. We focus our search on a time window spanning from 5 days before to 30 days after the beginning of the campaign. We collected over a thousand tweets, and on average 8.3 negative tweets per campaign.

Overall, we identify some newspaper (and other mass media) coverage for about a half of all negative, climate change-related, NGO campaign alerts over 2010-2020. When news releases are identified, the median alert benefits from two releases, while the top 10% of media-covered campaign alerts are echoed by four media websites or more. Regarding social media, we gather at least some tweets related to about 60% of all negative, climate change-related, campaigns over the same period. For these campaigns, the number of tweets spans from only one to more than 50. Overall, around 70% of the NGO campaign alerts in our cleaned dataset are covered either by newspaper articles, tweets, or both. Figure 2 shows the share of negative, climate change-related, alerts with (i) mass media coverage only, (ii) social media coverage only and (iii) both mass and social media coverage through time. Coverage fluctuated over the decade, reaching first a high in 2015, the year of the Paris Agreement, then regaining momentum towards the end of the sample period with more than two thirds of alerts being echoed in newspaper articles or social media. In spite of possible shortcomings of our search algorithms, which may miss relevant newspaper articles or tweets, this evidence suggests that the NGO alerts in our sample are very likely to reach a broad audience among French bank customers.

5.2 Brown Reputation Indexes

5.2.1 Methodology

In this section, we detail how we use NGO campaigns related to the negative impact of banks lending policies on global warming to construct our index of banks’ “brown” reputation. We construct this Brown Reputation Index (BRI) in three steps.

For each negative climate change-related alert naming a bank brand, we first use the qualitative information provided by Sigwatch to compute an alert-specific impact score AIS_{nbd} :

$$AIS_{nbd} = S_{nbd} \times P_{nbd} \times N_{nbd}$$

where n denotes the NGO (or coalition of partner NGOs) running the campaign, b denotes the targeted bank brand, d the date of release of the alert. S_{nbd} is the absolute value of the (negative) sentiment qualifying the alert, scaled to one. P_{nbd} is the prominence of the bank’s brand in the alert, also scaled to one. Last, N_{nbd} denotes the unit-scaled “power” (outreach) of the most powerful of the NGOs participating in the campaign. Concretely, an alert is supposed to have a maximal impact (score equal to one) when the associated sentiment is very negative (sentiment of -2), the prominence of the bank brand in the release is very high (4, i.e., the bank is named in the headlines of the campaign’s material) and at least one of the participating NGOs is viewed by Sigwatch as very powerful.³³

This definition of an impact score of individual alerts follows closely on Sigwatch’s own definition of the so-called Reputational Impact Score of NGOs’ actions.³⁴ To further vindicate the relevance of this approach in our context, i.e., gauging whether NGO actions reach a general audience through the medias, we document the correlation of these S_{nbd} , P_{nbd} , and N_{nbd} variables with media coverage and social media attention. In practice,

³³The maximum value of the NGO power variable is 2.75 for a global coalition.

³⁴As Sigwatch puts it in their lastest Methodology booklet: “Because Reputational Impact scores measure the view of NGOs rather than from any ensuing media coverage (or in many cases, absence of coverage), they are a valuable indicator of what NGOs are really worried about and provide a unique early warning system for emerging reputational problems.”

we regress the number of tweets or online articles of major newspapers and TV or radio broadcasts on Sigwatch’s (unit-scaled) NGO power, (negative) sentiment, and prominence variables. Table 2 presents the results. We find confirmation that more negative NGO campaigns find more echoes on Twitter and in mass media. The prominence of bank’s brand in a NGO campaign also significantly contributes to the success of this campaign on Twitter.³⁵

Second, for each bank brand, we then sum over all alerts’ impact scores within a month and take the square root of this sum. We denote the resulting bank-month variable MRS_{bt} (for Monthly Reputation Score):

$$MRS_{bt} = \sqrt{\sum_{det} AIS_{nbd}}$$

Applying a concave function to the sum of alerts’ scores is intended to account for a decreasing marginal impact of news on the perception of a bank’s responsibility by depositors: in other words, the first article blaming SG for funding a controversial gas terminal is supposed to raise the awareness of customers by more than the 10th article accusing SG of fueling climate change in the same month.³⁶

Motivated by research in cognitive science (Mullainathan, 2002; Kahana, 2012) which documents that recall probabilities decay over time, we assume that depositors retain awareness of NGO campaigns for a limited period.³⁷ Accordingly, a bank’s brown reputation builds with successive (negative) climate-related NGO campaigns but decays over time as earlier events fade from public memory. We model this dynamic by constructing

³⁵Note that Sigwatch’s measure of the NGOs’ outreach does not come out as a significant driver of media coverage. In a robustness exercise detailed below, we therefore checked that omitting this factor in the definition of the alert impact scores does not affect qualitatively our main results.

³⁶In a similar vein, Ardia et al. (2022), who construct a daily index of media climate change concern (MCCC) based on articles in US newspapers, also apply a square root function to their daily sum of individual alerts in order to “capture the fact that increased media attention always increases climate change concerns, but at a decreasing rate”. We however checked that our main results are robust to an alternative definition of the MRS_{bt} variable, where we do not apply any concave transformation to the sum of alert-level scores.

³⁷See also recent finance evidence of fading memory, e.g., (Nagel and Xu, 2022; Malmendier and Nagel, 2016; Malmendier and Nagel, 2011).

a monthly Brown Reputation Index (BRI), in which past campaigns are down-weighted using an exponential decay function:

$$BRI_{bt} = \sum_{\tau=0}^{12} \exp(-\tau.\theta).MRS_{b,t-\tau}$$

where the decay parameter $\theta = \ln(2)/6$, so that the memory of past NGO campaign alerts halves after six months. This shortcut amounts to assuming that 50% of the targeted audience forgets about these news after 6 months (75% after 12 months, 100% after more than one year). We verify that our main results are robust to alternative calibrations of the time-decay parameter and to simpler definitions of the shocks, as detailed in the robustness section below.³⁸

Figure 3 shows the resulting brown reputation index BRI_{bt} of the seven main bank brands (BPCE, BNP, CA, CM-CIC, HSBC, LBP, SG) in France over the 2010 decade. Importantly for the empirical relevance of our exercise, the figure witnesses a lot of variation, both within banks and across banks.³⁹

5.2.2 From Bank Brands to Individual Banks

We build brown reputation indexes for all the major bank brands in France. However, we observe deposits and loans, as well as individual housing loans for individual banks, and not for the brands they may share. We explain in this section how we match bank brands with individual credit institutions.

The nine brands identified in the Sigwatch dataset belong to the seven largest banking groups operating in France. We therefore restrict our sample to the 100 individual credit

³⁸Figure A5 in the appendix displays alternative measures of the brown reputation index of one major bank when we vary this calibrated parameter.

³⁹Figure A4 in the online appendix shows the same indexes when the computation of alert impact scores does not factor in Sigwatch’s assessment of NGOs’ outreach. The levels and volatility of the brown reputation indexes of the seven large bank brands are then somewhat higher, notably in the most recent years, as many recent campaigns are run by French NGOs whose “power” is assessed by Sigwatch as intermediate only (i.e., below one after re-scaling). Note, however, that the relative positions of the reputation indexes of the respective bank brands remain broadly unaffected by this change.

institutions that are affiliated with these banking groups and report to CEFIT. We then match these individual institutions with their group's main brand whenever the brand is transparent in the bank's name. Otherwise, we assume that the bank's name is its own brand in the eye of individual customers.

The rationale for this procedure is that retail depositors know big bank brands but are unlikely to be aware that their bank belongs to a criticized banking group when the bank's affiliation is not transparent in its name. For instance, *Crédit Agricole Ile-de-France*, a cooperative regional bank, obviously belongs to *Crédit Agricole* (or CA) group. The affiliation is transparent to all depositors, even unsophisticated ones. When customers of this bank read negative news about some climate-damaging business of CA, they therefore feel involved.

In contrast, *Crédit du Nord* is a smaller banking group, mostly present in Northern France, which belongs to the larger *Société Générale* (SG) group. Until 2022, the visual identity of *Crédit du Nord* made no reference to SG group and *Crédit du Nord* enjoyed a large degree of operational autonomy. We therefore assume that its customers would not identify themselves as customers of SG group, and we associate *Crédit du Nord* with its own, specific brand. Similarly, customers of *Banque de Savoie*, a small local bank, are unlikely to see themselves as customers of its parent company, BPCE group, mostly known for its large network of regional cooperative banks and local savings banks. We therefore associate *Banque de Savoie* with its own, specific brand and not with BPCE. We end up having 23 different brands for the 100 banks in our sample. Only the nine largest bank brands show up in NGO alerts covered by Sigwatch. The 16 banks associated with the 16 remaining brands are therefore never affected by NGO campaigns.⁴⁰

⁴⁰See the online appendix for a list of these banks.

6 Empirical Design and Results

6.1 Panel Regressions

We aim to evaluate whether NGO campaigns affect households’ demand for deposits from “brown” banks, blamed for “banking on climate change”. Since the treatment is at the bank level, we first conduct the main analysis using monthly data collapsed at the level of individual banks. We however check below that the results hold whenever we exploit more granular, bank-county-level information before also investigating potential heterogeneous effects across counties depending on the characteristics of local bank depositors.

Using monthly data on households deposits at the bank level, we estimate the following empirical model:

$$\begin{aligned} \ln(D_{bt}) = & \beta \cdot BRI_{bt} + \gamma \cdot r_{bt} + \theta \cdot Z_{b,t-1} \\ & + \kappa \cdot nbb_{bt} + \delta_b + \delta_t + u_{bt} \end{aligned} \tag{1}$$

where D_{bt} is the outstanding amount at the end of month t of sight deposits issued to households by bank b . The main independent variable of interest is our index of banks’ brown reputation (BRI_{bt}). We expect coefficient β to be negative. Note here that BRI_{bt} is defined at the level of a bank brand, which reflects in general the name of the consolidating parent bank. Within a banking group, some banks are affected by the reputation index of the group’s brand and some are not because their affiliation to the group is not obvious to retail customers.

In the baseline regression, we control for the rate of interest paid by each bank on its sight deposits in month t , r_{bt} , as well as for a set of (lagged) monthly bank-level balance sheet variables stacked in $Z_{b,t-1}$.⁴¹ We include in Z the (log) total assets of the bank, its leverage and its reliance on deposits. In a variant, we also control for the (log) number of

⁴¹The deposit rate is an apparent rate, computed as the ration of interest payment over the current month to the outstanding volume of deposits at the end of the previous month. There is therefore no need to lag this control variable in the regression.

bank b 's branches in mainland France nbb_{bt} . Last, we control for bank fixed effects δ_b and for time fixed effects δ_t . The former absorb all invariant unobserved bank characteristics (including for instance the bank type, i.e. cooperative vs commercial bank). The latter account for unobserved time-varying macroeconomic factors (such as economic activity or the monetary policy stance) that may impinge on the demand for bank deposits by households. In all regressions, we cluster standard errors at the level of individual banks, which is the dimension of treatment. Table A5 presents descriptive statistics for the dependent and independent variables used in these regressions.

To highlight the role of transaction costs in constraining the reaction of bank customers, we then estimate the following augmented specification:

$$\begin{aligned} \ln(D_{bt}) = & \beta \cdot BRI_{bt} + \beta_{Post} \cdot BRI_{bt} \times Post_t + \gamma \cdot r_{bt} + \theta \cdot Z_{b,t-1} \\ & + \kappa \cdot nbb_{bt} + \delta_b + \delta_t + u_{bt} \end{aligned} \quad (2)$$

We interact the bank's brown reputation index with a dummy variable for the period posterior to the implementation of the bank switching reform in February 2017 (*Post*).

6.2 Results

6.2.1 Baseline specification

Table 4 reports the estimation results of equations 1 in columns (1-3) and 2 in columns (4-6). The dependent variable is the volume of households' sight deposits with a bank and the main independent variable of interest is the bank's brown reputation index. Columns (1) and (3) control for the interest rate on sight deposits and bank and time fixed effects, while other columns also control for time-varying bank balance sheet ratios. Columns (3) and (6) also include the time-varying number of each bank's branches in mainland France. Including the size of bank branching networks helps to control for changes in the supply of retail deposits by banks, but it comes as a cost as this information is not available for the network of the French Post bank (*La Banque Postale*), which consists of local post

offices (not covered by the FIB dataset). This bank is then dropped from the regression sample in columns (3) and (6).

Considering first the average effect over the whole 2011-2020 period, we find that the demand of sight deposits by households decreases significantly when negative NGO campaigns heighten the brown reputation of the bank: the coefficient of the brown reputation index is negative and significant at the 1 percent level whatever the controls and even when the inclusion of bank-level controls reduces the size of the sample from 97 to 57 banks. Interestingly, the results in columns (4-6) also show that the negative effect of NGO alerts denouncing brown banks is much larger and more significant *after* Article 43 LCACE is implemented. This confirms our hypothesis that bank customers punish banks perceived as brown by exiting them and switching their checking account to greener competitors, but only when the transaction costs of doing so are small enough.

Regarding control variables, we find that a larger bank size (be it measured in terms of total assets or size of the branching network and compared to the bank's average) is associated with a larger amount of households sight deposits, as is a lower capitalization ratio (which is consistent with the fact that such deposits are insured by the public deposit insurance scheme but also with the fact that larger banks are less capitalized and less dependent on deposits for funding on average). However, we do not find evidence of any significant effect of the interest rate paid on the volume of these deposits, although the estimated coefficient comes out as positive as the intuition would suggest.

This last result may seem surprising at first sight. Indeed, banks are commonly expected to compete on the interest rate they pay on deposits.⁴² This low interest rate sensitivity of sight deposit volumes can nevertheless be easily rationalized in the French institutional context.⁴³ Paying interests on checking account balances has long been prohibited by the law in France and this regulation was only removed in 2005. However, even after

⁴²Note however that many papers have shown that the interest rate sensitivity of sight deposit rates and volumes to market rates is low because the deposit franchise gives banks market power in deposit markets. See, e.g., Drechsler et al. (2021) and references therein.

⁴³See, for instance, Duquerroy et al., 2024 for more details.

this date, most banks and in particular banks affiliated with the main banking groups have kept offering checking accounts that *do not* bear interest to the holder.⁴⁴ Indeed, since January 2009, all credit institutions in France are allowed to offer to their customers regulated savings deposits, the most popular of which is called *Livret A*.⁴⁵ On such a savings account, an individual can save up to 22,950 euros.⁴⁶ The interest rate paid on these regulated savings accounts is set by the law and thus the same for all banks.⁴⁷ Interests earned are tax-free and the *Livret A* is highly liquid, as amounts held can be instantly transferred from and to the holder’s checking account at will and without cost. These very attractive features explain why most French individuals hold bank checking accounts that do not pay any interest and simultaneously hold one such regulated savings account at the same bank, which they use to earn interest on their idle checking account balances.⁴⁸ As a consequence, the interest rate paid on sight deposits is very unlikely to be a significant driver of households’ bank choice in France.

Figure 4 shows estimates of the main coefficient of interest (β_{Post}) in a dynamic specification of equation (2) (as in column 6 of Table 4, where the brown reputation index of the bank is interacted with year dummies instead of the *Post* step variable. As the figure shows, the impact of banks’ brown reputation on the demand for sight deposits is significantly negative (at the 95% level) in the first three years of the new policy regime. Importantly, the usual parallel assumption holds, since no significant effect is visible before

⁴⁴For instance, according to the Banque de France, the average interest rate paid on sight deposits in France was 0.06% as of November 2024, to be compared to a policy rate (ECB’s repo rate) at 3.40% and a 3-month Euribor rate at 3.01%.

⁴⁵Other regulated savings accounts, such as *LDD*, *Livret Jeunes* etc, with smaller outstanding volumes than the *Livret A* work along very similar lines.

⁴⁶This does not include capitalized interests. This ceiling was increased from 15,300 euros in two steps, in October 2012 and January 2013.

⁴⁷The interest rate paid on the *Livret A* is calculated by the French Central Bank twice a year, on January 15 and July 15, and becomes effective on February 1 and August 1, respectively. The formula used is set by law and depends on year-on-year CPI inflation and current short-term market rates on the interbank market.

⁴⁸For instance, as of November 2024, French individuals held some 1,862 billion euros of bank deposits, of which 29% of sight deposits and 37% of regulated savings accounts (21% for the *Livret A* alone. Note that some banks, notably online “neo-banks”, nevertheless pay an interest on the sight deposits they issue, but this interest is taxed and the after-tax benefit is generally very close to the benefit earned by the holder of a *Livret A*.

2017.

The estimated effect of negative campaigns against brown banks is economically significant, but small. Other things equal, a one-standard-deviation (0.51) larger brown reputation index induces a (non-significant) drop in households' sight deposits by only 0.5% before Article 43 LCACE is implemented, and by some 2% to 2.5% thereafter (using the coefficients in column 5 of the table). If we ignore bank balance sheet controls so as to include 93 banks in the regression sample instead of 57, the total estimated effect after the reform more than triples, to reach some 6.6%.⁴⁹ In euros, the baseline, conservative estimate (-2%) translates into a drop in households' sight deposits for the average bank by some 80 million euros once transaction costs have been cut. Although this may seem large, this number is small compared with the standard deviation of sight deposits at the bank level, at 8.3 billion euros.

6.2.2 Robustness and Placebo Test

We checked the robustness of our baseline results along a number of dimensions. First, these results are robust to variants in how we construct the brown reputation index. As shown in Table 5, the baseline results above remain qualitatively unchanged when (i) we drop the “NGO power” factor in the definition of the alert-specific impact score AIS_{nbd} , (ii) we additionally drop all alerts for which we cannot pick at least one related online newspaper article or at least one tweet on X/Twitter, and (iii) we replace the brown reputation index with a dummy variable that takes the value of one when the bank brand is hit by at least one negative (positive) campaign within the month. Beyond, Table 6 shows how estimation results in column (5) of Table 4 change when the time-decay parameter θ is set to reflect alternative assumptions regarding the persistence in peoples' mind of past monthly bad reputation scores (MRS_{bt}). For the sake of comparability across columns, the main variables of interest (alternative versions of BRI_{bt}) are here standardized. The first column shows the results under the assumption of no memory of

⁴⁹Note that in this extended sample, the standard deviation of the BRI is larger, at 0.78.

past monthly reputation scores. Subsequent columns show the results when 50% of past news are forgotten after, respectively, 1, 3, 6 (the baseline) and 9 months. The negative impact of a bank’s brown reputation seems to increase markedly, then level off, when θ grows from 1 to 6 months, which supports our calibration.

Second, we run a placebo test and replace the dependent variable in equation (1), households’ outstanding sight deposits, with their outstanding savings deposits. As explained above, Article 43 LCACE does not bring in any reduction of transaction costs when individuals want to move their savings accounts from one bank to another. Table A6 in the online Appendix shows the results. We find no significant effect of banks’ brown reputation on the demand for savings deposits issued by these banks, even after the new policy is enforced, which supports our interpretation of the role of transaction costs associated with switching banks.

6.2.3 Bank-County Level Analysis

Last, we replicate the baseline analysis above but using more granular data at the bank-county level instead of the bank level. Table 7 shows estimation results for within-regressions similar to equations (1) and (2) when we observe sight deposits volumes at the bank-county level. This finer disaggregation allows us to better control for changes in local deposit demand and supply by including among regressors both county-by-time fixed effects and the (log) number of each bank’s branches in each county.

The results are virtually unchanged. In economic terms, we find that, after Article 43 LCACE, deposit demand by households drops by an average 2.9% following a one-standard-deviation shock to the brown reputation of a bank (using again column 3 the Table 7).⁵⁰

Note that, looking at figure 2, one may be concerned that the change induced by the 2017

⁵⁰Descriptive statistics of our data at the bank-county level are presented in Table A3 of the online Appendix. The standard deviation of the brown reputation index in this more granular regression sample is 0.91.

regulation coincides with a period of better coverage of NGO campaigns by French mass media. To alleviate this concern, we limit the sample in columns (4-5) of Table 7 to years when the media coverage of NGO campaigns against brown banks in France was similarly high: from 2015 (before the policy change) to 2017 (thereafter). The main results still hold on this shorter period of time, although the magnitude of the effect is a bit smaller than on the full sample.

6.3 Difference-in-Differences Approach

As a last test vindicating our general approach, we focus on a narrower time window around the implementation of Article 43 LCACE (from August 2016 -six months before- to February 2018 -12 months after-) and run a proper difference-in-differences regression. For this purpose, we first sort individual banks into two groups, depending on the brown reputation index of their respective brands as of December 2016. According to our measure, three large brands, accounting for 37 banks in our full sample, then stand out as "brown" before the implementation of the reform (see also Figure 3). We expect that banks belonging to these brands (i.e., "treated" banks) will face a lower demand for deposits by households after February 2017, when the transaction cost of aligning an individual's bank choice with her concerns about climate warming becomes very small. The other banks are considered a control group in this respect. We then estimate the following regression:

$$\begin{aligned} \ln(Y_{bt}) = & \beta \cdot \text{Brown}_b \times \text{Post}_t \\ & + \gamma \cdot r_{bt} + \theta \cdot Z_{b,t-1} + \kappa \cdot \text{nb}_{bt} + \delta_b + \delta_t + u_{bt} \end{aligned} \quad (3)$$

where, again, the dummy variable Post_t takes a value of one for all dates after February 2017. The coefficient of interest is the coefficient of the interacted term $\text{Brown}_b \times \text{Post}_t$. The two components of this interacted term are absorbed by the bank and time fixed effects. As shown in columns 3 and 4 of Table 8, banks identified as brown face a decrease

in sight deposits by some 1.2% on average in the six months following the reform. The effect is somewhat larger in column (2) when we do not include bank balance sheet controls and keep more banks in the sample.

Last, Figure 5 shows the estimated coefficients of interest for a dynamic version of the same test, where the treatment dummy for brown banks is interacted with year-month dummies. The figure confirms that the usual parallel assumption holds, which validates this last result.

6.4 Extension: Climate Change vs. Other ES Concerns

We focus in the baseline above on the impact on deposit demand of NGO campaigns that denounce fossil energy funding by brown banks. However, NGO also blame banks for funding projects which raise other types of ES concerns (e.g., human right abuses). Which ES issue do bank depositors value most? To answer this question, we run the same regression as in column (3) of table 4 above, but this time replacing the climate change-related negative BRI with reputation indexes related to the other ES issues, which we constructed along the same lines as the BRI.

Table A7 in the online appendix reports the results of these alternative specifications. As shown in columns (2) and (3), individual depositors seem to also react to NGO campaigns blaming their bank for reasons related to other environmental (OE) or social (S) issues and this reaction is larger after the implementation of Article 43 LCACE. However, when we consider all types of alerts together (column 4), the response to climate change-related controversies clearly stands out as the largest and the only significant one. We conclude that ES-motivated bank depositors mostly choose to switch banks in response to news related to climate change. In other words, depositors really “don’t like it hot”.

6.5 Heterogeneous effects of Households Characteristics and Local Bank Competition

In this section, we investigate whether the impact of negative NGO campaigns denouncing brown banks is larger among more climate-conscious, or green-motivated, depositors. We do not observe individual bank customers and even less their political preferences. However, we observe the local votes for green parties, notably at the elections of Members of the European Parliament (MEPs), which take place every six years. We focus on European Parliament elections because they follow a proportional voting system, which is generally viewed as more supportive of smaller parties such as the Greens, and we consider the voting outcomes at both the European 2009 and 2014 elections. We also look at potential heterogeneous reactions of bank customers depending on their education and income. Indeed, electoral studies suggest that electors who vote for green parties are on average more educated, and to some extent, more urban and well off.⁵¹

We therefore take advantage of observing household deposits at the level of French counties and exploit heterogeneity in county-level demographics and electoral outcomes. For this purpose, we augment our empirical model in equation 2 and include in the regression additional interaction terms with variables that account for geographical heterogeneity in key dimensions of households' characteristics:

$$\begin{aligned}
 \ln(Y_{bct}) = & \beta \cdot BRI_{bt} \\
 & + \beta_{Post} \cdot BRI_{bt} \times Post_t + \beta_X \cdot BRI_{bt} \times TopX_c \\
 & + \beta_{X,Post} \cdot BRI_{bt} \times Post_t \times TopX_c \\
 & + \gamma \cdot r_{bt} + \theta \cdot Z_{b,t-1} + \kappa \cdot nbb_{bt} + \delta_b + \delta_{ct} + u_{bct}
 \end{aligned} \tag{4}$$

where $TopX_c$ denotes a dummy variable for counties above the median in terms of, respectively, the share of households with college education, average households income,

⁵¹Table A4 in the appendix shows the pairwise correlations between (quartiles of) average levels of education, income, bank competition (here a proxy for city size) as of the end of the 2000s and green vote across French counties in 2009 and 2014.

and the share of green votes in the 2009 and 2014 elections of MEP. We cluster here standard errors at the bank-county level.

Table 9 displays the results. Each column investigates in turn one dimension of heterogeneity. Estimation results point to a stronger impact of NGO campaigns on deposits held in politically greener counties, *throughout the period*, at least when political preferences are measured in 2014 (column 4), closer to but before the implementation of Article 43 LCACE. While average bank depositors react to NGO campaigns after the enforcement of the “Bank mobility” regulation, “green-motivated” households seem to be willing to exit brown banks even in the presence of transaction costs and they do react about twice as much when these costs are cut. Estimated coefficients in columns (1-3) also point to a negative response to banks’ brown reputation even before 2017 in counties populated by on average richer and more educated households, but the effect is smaller and not statistically significant. This in turn suggests that pro-environmental preferences, which are more directly related to votes, are the most relevant dimension to explain geographical differences in the intensity of the channel we explore.

Last, we also test for the role of local bank competition. Intuitively, switching banks should prove easier in a more competitive banking environment, even in the presence of transaction costs. We sort counties into bank competition quartiles based on the Herfindahl index of households’ bank deposits in each county as of 2010.⁵² Results are presented in the last column of table 9. The coefficient of the interaction between the brown reputation index and a dummy for counties above the median level of bank competition is again negative and of similar size as the coefficients of other interacted terms in the previous columns, albeit not significant.

⁵²Figure A1 in the appendix shows the geography of bank competition across counties.

7 Conclusion

We provide evidence in support of a growing influence of sustainability considerations in shaping financial decisions of households. We find that French bank customers significantly react to NGO campaigns spotlighting banks' adverse contributions to climate warming. A non-negligible proportion of depositors actively withdraw their deposits from banks perceived as environmentally irresponsible and seek greener alternatives. Additionally, using a reform that facilitated bank switching from February 2017 on, we highlight the limiting role of transaction costs. The average customer does not react to the news blaming her brown bank before the administrative costs to do so have become negligible. However, customers in counties where pro-environmental concerns are more widely shared -as proxied by votes for green parties- tend to act based on their ES preferences even in the presence of such costs. These findings contribute to the literature in sustainable finance by shedding light on retail customers' responsiveness to banks' environmental reputation. Our paper aligns with previous work documenting the impact of environmental, social, and governance (ESG) factors on financial decision-making by individuals but complements it by focusing on the market for bank deposits and studying the influence of NGO campaigns.

These findings have implications for banks, NGOs, and policymakers. For financial institutions, they suggest that reputational exposure to climate-related NGO campaigns may influence deposit stability, particularly when frictions to switching are low. This highlights the potential value of credible and transparent commitments to sustainable practices in mitigating reputational risk. For NGOs, the results indicate that targeted campaigns can shape depositor behavior, thereby serving as a channel for broader environmental influence through the financial system. Finally, for regulators, the evidence suggests that reducing transaction costs associated with switching banks can enhance market discipline and may facilitate a shift toward more environmentally responsible banking.

References

- Anderson, Anders and David T. Robinson (2021), *Climate Fears and the Demand for Green Investment*, Research Paper No. 19-14, Swedish House of Finance.
- Ardia, David, Keven Bluteau, Kris Boudt, and Koen Inghelbrecht (2022), “Climate Change Concerns and the Performance of Green vs. Brown Stocks”, *Management Science* forthcoming.
- Argyle, Bronson, Benjamin Charles Iverson, Jason D. Kotter, Taylor Nadauld, and Christopher Palmer (2025), *Sticky Deposits, not Depositors*, unpublished manuscript, MIT Sloan.
- Barber, Brad M., Adair Morse, and Ayako Yasuda (2021), “Impact investing”, *Journal of Financial Economics* 139.1, pp. 162–185.
- Bauer, Rob, Tobias Ruof, and Paul Smeets (2021), “Get Real! Individuals Prefer More Sustainable Investments”, *The Review of Financial Studies* 34.8, pp. 3976–4043.
- Begenau, Juliane and Erik Stafford (2023), *Uniform Rate Setting and the Deposit Channel*, mimeo, Stanford University.
- Brendel, Janja, Cai Chen, Thomas Keusch, and Zacharias Sautner (2025), *The Value of NGO Activism*, Finance Working Paper, European Corporate Governance Institute.
- Choi, Daewoung, Yong Kim Gam, and Hojong Shin (2023), “Environmental Reputation and Bank Liquidity: Evidence from Climate Transition”, *Journal of Business and Finance Accounting* 50, pp. 1274–1304.
- De Haas, Ralph (2025), “Sustainable Banking”, in: ed. by Allen N. Berger, Philip Molyneux, and John O.S. Wilson, *The Oxford Handbook of Banking*, Oxford University Press, chap. 14.
- Degryse, Hans, Moshe Kim, and Steven Ongena (2009), *Microeconomics of banking: methods, applications and results*, Oxford University Press.
- Derrien, Francois, Philipp Krueger, Augustin Landier, and Tianhao Yao (2022), *ESG News, Future Cash Flows, and Firm Value*, Research Paper 21-84, Swiss Finance Institute.
- Drechsler, Itamar, Alexi Savov, and Philipp Schnabl (May 2017), “The Deposits Channel of Monetary Policy”, *The Quarterly Journal of Economics* 132.4, pp. 1819–1876.
- Drechsler, Itamar, Alexi Savov, and Philipp Schnabl (2021), “Banking on Deposits: Maturity Transformation without Interest Rate Risk”, *The Journal of Finance* 76.3, pp. 1091–1143.

- Duquerroy, Anne, Adrien Matray, and Farzad Saidi (2024), *Tracing Banks' Credit Allocation to Their Profits*, CRC TR 224 Discussion Paper Series, University of Bonn and University of Mannheim, Germany.
- Dursun De Neef, H. Ozlem and Steven Ongena (2023), *Climate change and bank deposits*, Discussion Paper 18619, CEPR.
- Fioretti, Michele, Victor Saint-Jean, and Simon Smith (2025), *NGO Activism: Exposure vs. Influence*, mimeo, ESSEC Business School.
- Giannetti, Mariassunta, Martina Jasova, Maria Loumioti, and Caterina Mendicino (2023), *'Glossy Green' Banks: The Disconnect Between Environmental Disclosures and Lending Activities*, tech. rep. 23-07, Swedish House of Finance Research Paper.
- Giglio, Stefano, Bryan Kelly, and Johannes Stroebe (2021), "Climate Finance", *Annual Review of Financial Economics* 13.1, pp. 15–36.
- Giglio, Stefano, Matteo Maggiori, Johannes Stroebe, Zhenhao Tan, Stephen Utkus, and Xiao Xu (2023), *Four Facts About ESG Beliefs and Investor Portfolios*, Working Paper 31114, National Bureau of Economic Research.
- Haddad, Valentin, Barney Hartman-Glaser, and Tyler Muir (2023), *Bank Fragility When Depositors Are the Asset*, unpublished manuscript, UCLA.
- Hartzmark, Samuel M. and Abigail B. Sussman (2019), "Do Investors Value Sustainability? A Natural Experiment Examining Ranking and Fund Flows", *The Journal of Finance* 74.6, pp. 2789–2837.
- Heeb, Florian, Julian Koebel, Falko Paetzold, and Stefan Zeisberger (2022), "Do Investors Care About Impact?", *The Review of Financial Studies* forthcoming.
- Homanen, Mikael (2022), "Active depositors", *Journal of Banking and Finance* 136, p. 106417.
- Iyer, Rajkamal, Manju Puri, and Nicholas Ryan (2016), "A Tale of Two Runs: Depositor Responses to Bank Solvency Risk", *The Journal of Finance* 71.6, pp. 2687–2726.
- Jeung, Jinoug (2022), *Politically Polarized Depositors*, Working Paper, Chinese University of Hong Kong.
- Kahana, Michael Jacob (2012), *Foundations of human memory*, OUP USA.
- Koenig, Pamina (2017), *Notes on Sigwatch's NGO campaign database*, Working Paper 62, Paris School of Economics.
- Koenig, Pamina and Sandra Poncet (2019), "Social responsibility scandals and trade", *World Development* 124, p. 104640.

- Krueger, Philipp (2015), “Corporate goodness and shareholder wealth”, *Journal of Financial Economics* 115.2, pp. 304–329.
- Malmendier, Ulrike and Stefan Nagel (2011), “Depression babies: do macroeconomic experiences affect risk taking?”, *The quarterly journal of economics* 126.1, pp. 373–416.
- Malmendier, Ulrike and Stefan Nagel (2016), “Learning from inflation experiences”, *The Quarterly Journal of Economics* 131.1, pp. 53–87.
- Martinez Peria, Maria Soledad and Sergio L. Schmukler (2001), “Do Depositors Punish Banks for Bad Behavior? Market Discipline, Deposit Insurance, and Banking Crises”, *The Journal of Finance* 56.3, pp. 1029–1051.
- Morse, Adair and Parinitha Sastry (2024), *The Economics of Net Zero Banking*, tech. rep. 33148, NBER Working Paper.
- Mullainathan, Sendhil (2002), “A memory-based model of bounded rationality”, *The Quarterly Journal of Economics* 117.3, pp. 735–774.
- Nagel, Stefan and Zhengyang Xu (2022), “Asset pricing with fading memory”, *The Review of Financial Studies* 35.5, pp. 2190–2245.
- Pastor, Lubos, Robert F. Stambaugh, and Lucian A. Taylor (2021), “Sustainable investing in equilibrium”, *Journal of Financial Economics* 142.2, pp. 550–571.
- Pedersen, Lasse Heje, Shaun Fitzgibbons, and Lukasz Pomorski (2021), “Responsible investing: The ESG-efficient frontier”, *Journal of Financial Economics* 142.2, pp. 572–597.
- Riedl, Arno and Paul Smeets (2017), “Why Do Investors Hold Socially Responsible Mutual Funds?”, *The Journal of Finance* 72.6, pp. 2505–2550.

Table 1: Negative NGO campaigns targeting French banks: breakdown by NGO and ES topic.

| NGO Name | Climate Change-related issue | | | | | |
|-----------------------------------|------------------------------|-------|-----|-------|-------|-------|
| | No | | Yes | | Total | |
| | No | Col % | No | Col % | No | Col % |
| Action Non-violente COP21 | 1 | 0.9 | 0 | 0.0 | 1 | 0.3 |
| Amis de la Terre | 43 | 36.8 | 170 | 69.7 | 213 | 59.0 |
| Attac France | 19 | 16.2 | 9 | 3.7 | 28 | 7.8 |
| BankTrack | 0 | 0.0 | 2 | 0.8 | 2 | 0.6 |
| Bizi | 3 | 2.6 | 0 | 0.0 | 3 | 0.8 |
| Extinction Rebellion | 0 | 0.0 | 1 | 0.4 | 1 | 0.3 |
| FIDH | 1 | 0.9 | 0 | 0.0 | 1 | 0.3 |
| Facing Finance | 0 | 0.0 | 1 | 0.4 | 1 | 0.3 |
| FairFin | 2 | 1.7 | 0 | 0.0 | 2 | 0.6 |
| Fondation 30 Millions d'Amis | 7 | 6.0 | 0 | 0.0 | 7 | 1.9 |
| France Libertes | 0 | 0.0 | 1 | 0.4 | 1 | 0.3 |
| Friends of the Earth | 4 | 3.4 | 4 | 1.6 | 8 | 2.2 |
| Global Witness | 3 | 2.6 | 0 | 0.0 | 3 | 0.8 |
| Greenpeace | 6 | 5.1 | 9 | 3.7 | 15 | 4.2 |
| LDH | 6 | 5.1 | 0 | 0.0 | 6 | 1.7 |
| Notre Affaire A Tous | 0 | 0.0 | 3 | 1.2 | 3 | 0.8 |
| Observatoire des Multinationales | 2 | 1.7 | 3 | 1.2 | 5 | 1.4 |
| Oxfam | 0 | 0.0 | 23 | 9.4 | 23 | 6.4 |
| Pax | 1 | 0.9 | 0 | 0.0 | 1 | 0.3 |
| Rainforest Network Alliance | 0 | 0.0 | 2 | 0.8 | 2 | 0.6 |
| Reclaim Finance | 0 | 0.0 | 11 | 4.5 | 11 | 3.0 |
| Secours Catholique | 5 | 4.3 | 0 | 0.0 | 5 | 1.4 |
| Sherpa | 3 | 2.6 | 3 | 1.2 | 6 | 1.7 |
| SumOfUs | 3 | 2.6 | 0 | 0.0 | 3 | 0.8 |
| Tax Justice Network TJN | 3 | 2.6 | 0 | 0.0 | 3 | 0.8 |
| Transparency International France | 1 | 0.9 | 0 | 0.0 | 1 | 0.3 |
| UFC Que Choisir | 1 | 0.9 | 0 | 0.0 | 1 | 0.3 |
| Western Sahara Resource Watch | 3 | 2.6 | 0 | 0.0 | 3 | 0.8 |
| Youth For Climate France | 0 | 0.0 | 2 | 0.8 | 2 | 0.6 |
| Total | 117 | 100.0 | 244 | 100.0 | 361 | 100.0 |

Note. Period: 2010-2020. All ESG issues, and breakdowns. Only campaigns by French-based NGOs and/or targeting France. Source: Sigwatch, authors' computations.

Table 2: NGO campaigns against brown banks and their coverage on Twitter and in major newspapers: exploring the determinants.

| | Tweet Count | | | | Newspaper count | | | |
|----------------|-------------------|--------------------|---------------------|--------------------|-------------------|------------------|-------------------|--------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| NGO Power | -0.211 [0.579] | | | -0.309 [0.581] | -0.308 [0.570] | | | -0.465 [0.575] |
| Neg. sentiment | | 0.998** [0.396] | | 0.804** [0.405] | | 0.337 [0.219] | | 0.659** [0.280] |
| Prominence | | | 1.277*** [0.445] | 1.122** [0.458] | | | -0.225 [0.398] | -0.394 [0.404] |
| Bank FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Obs. | 249 | 249 | 249 | 249 | 234 | 234 | 234 | 234 |
| Pseudo R2 | 0.215 | 0.231 | 0.240 | 0.250 | 0.065 | 0.024 | 0.065 | 0.075 |

Note. Period: 2012-2020. Dependent variable in columns (1-5): count of Tweets for each NGO campaign alert. Dependent variable in columns (5-8): number of media releases (online articles) for each NGO campaign alert. Negative and neutral alerts are included. Regression method: PPML. *NGO power*, *Negative sentiment*, *Prominence*: qualitative variables from Sigwatch, with positive sign, rescaled to unity. Robust standard errors.

Table 3: Bank-level regression sample: descriptive statistics

| | Mean | Std.Dev. | p10 | p25 | Median | p75 | p90 | Nb.Obs. |
|------------------------|----------|----------|-----------|-----------|----------|----------|----------|---------|
| Sight deposits (thds) | 3.81e+06 | 8.33e+06 | 455086.00 | 779627.00 | 1.35e+06 | 2.15e+06 | 4.79e+06 | 5358 |
| Sight deposits (log) | 14.23 | 1.18 | 13.03 | 13.57 | 14.11 | 14.58 | 15.38 | 5358 |
| Brown RI | 0.31 | 0.51 | 0.00 | 0.00 | 0.09 | 0.42 | 0.91 | 5358 |
| Nb branches (log) | 3.93 | 2.31 | 0.00 | 1.95 | 4.72 | 5.52 | 6.14 | 5208 |
| Interest rate (in pp) | 0.03 | 0.04 | 0.00 | 0.00 | 0.01 | 0.03 | 0.09 | 5358 |
| Assets(-1) (log) | 23.77 | 1.28 | 22.38 | 23.09 | 23.55 | 24.17 | 25.51 | 5358 |
| Capital/Ass.(-1) | 0.05 | 0.02 | 0.02 | 0.03 | 0.06 | 0.07 | 0.08 | 5358 |
| Non-bank dep./Ass.(-1) | 0.59 | 0.16 | 0.34 | 0.56 | 0.64 | 0.69 | 0.73 | 5358 |

Note. Bank-level baseline regression sample: 57 banks with available monthly financial ratios and deposit interest rate. Interest rate on sight deposits in pp. Period: 2011-2020. Deposits and loans in euro thds.

Table 4: Banks' brown reputation and the demand for sight deposits: baseline.

| | Log(Deposits) _{bt} | | | | | |
|--------------------------------|-----------------------------|----------------------|----------------------|----------------------|---------------------|----------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Brown RI | -0.069*** [0.013] | -0.029*** [0.008] | -0.025*** [0.007] | -0.026*** [0.006] | -0.010 [0.007] | -0.005 [0.006] |
| Brown RI × Post | | | | -0.057*** [0.014] | -0.038** [0.014] | -0.037*** [0.013] |
| Interest rate, sight dep. (pp) | 0.178 [0.155] | 0.044 [0.132] | 0.037 [0.111] | 0.213 [0.155] | 0.052 [0.129] | 0.045 [0.107] |
| Assets(-1) (log) | | 0.245*** [0.087] | 0.116** [0.055] | | 0.245*** [0.086] | 0.117** [0.055] |
| Capital/Ass.(-1) | | -3.294 [2.000] | -2.021*** [0.718] | | -3.252 [1.980] | -1.981*** [0.711] |
| Non-bank dep./Ass.(-1) | | 0.075 [0.276] | -0.101 [0.181] | | 0.087 [0.273] | -0.092 [0.178] |
| Nb branches (log) | | | 0.461*** [0.094] | | | 0.459*** [0.093] |
| Bank FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Time FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Obs. | 10100 | 5962 | 5803 | 10100 | 5962 | 5803 |
| Clusters | 93 | 57 | 55 | 93 | 57 | 55 |
| R ² Within | 0.091 | 0.305 | 0.519 | 0.134 | 0.311 | 0.526 |

Note. Bank-level sample. Period: 2011-2020. Dep. variable: log sight deposits of households. *Brown RI* is the brown reputation index of the bank. *Post* is a dummy variable for the period after the implementation of Article 43 LCACE. *Interest rate* is the bank-specific interest rate on sight deposits. *Nb branches* is the number of branches of the bank. SE clustered at the bank (CIB) level.

Table 5: Banks' brown reputation and the demand for sight deposits: alternative measures of brown reputation.

| | Baseline | | No NGO factor | | Media release | | CC dummy | |
|--------------------------------|---------------------|----------------------|---------------------|----------------------|---------------------|----------------------|---------------------|----------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Brown RI | -0.010 [0.007] | -0.005 [0.006] | -0.011* [0.006] | -0.007 [0.006] | -0.013** [0.006] | -0.011** [0.006] | 0.006 [0.009] | 0.012 [0.007] |
| Brown RI \times Post | -0.038** [0.014] | -0.037*** [0.013] | -0.020** [0.010] | -0.021** [0.009] | -0.027* [0.014] | -0.033*** [0.012] | -0.047 [0.029] | -0.048** [0.022] |
| Interest rate, sight dep. (pp) | 0.052 [0.129] | 0.045 [0.107] | 0.052 [0.129] | 0.045 [0.107] | 0.044 [0.128] | 0.040 [0.105] | 0.041 [0.130] | 0.034 [0.108] |
| Assets(-1) (log) | 0.245*** [0.086] | 0.117** [0.055] | 0.245*** [0.086] | 0.117** [0.055] | 0.248*** [0.086] | 0.117** [0.054] | 0.249*** [0.088] | 0.120** [0.056] |
| Capital/Ass.(-1) | -3.252 [1.980] | -1.981*** [0.711] | -3.243 [1.977] | -1.974*** [0.711] | -3.231 [1.981] | -1.939*** [0.701] | -3.271 [2.010] | -2.002*** [0.709] |
| Non-bank dep./Ass.(-1) | 0.087 [0.273] | -0.092 [0.178] | 0.087 [0.273] | -0.092 [0.178] | 0.109 [0.269] | -0.072 [0.173] | 0.095 [0.274] | -0.080 [0.184] |
| Nb branches (log) | | 0.459*** [0.093] | | 0.458*** [0.093] | | 0.463*** [0.091] | | 0.463*** [0.094] |
| Bank FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Time FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Obs. | 5962 | 5803 | 5962 | 5803 | 5962 | 5803 | 5962 | 5803 |
| Clusters | 57 | 55 | 57 | 55 | 57 | 55 | 57 | 55 |
| R^2 Within | 0.311 | 0.526 | 0.312 | 0.526 | 0.310 | 0.530 | 0.301 | 0.517 |

Note. Bank-level sample. Period: 2011-2020. Dep. variable: log sight deposits of households. *Brown RI* stands for alternative measures of the bank's brown reputation. Columns (1-2) show results when we use the baseline brown reputation index (BRI). In columns (3-4), the index does not factor in Sigwatch's measure of the campaigning NGOs' "power". In columns (5-6), we furthermore consider only NGO alerts for which our web-scraping algorithm identifies at least one news release on the French mass media websites or at least one tweet on X (formerly Twitter). Last, in columns (7-8), we replace the baseline index with a dummy for at least one negative campaign in the month that blames the bank for their financing brown activities. *Post* is a dummy variable for the period after the implementation of Article 43 LCACE. *Interest rate* is the bank-specific interest rate on sight deposits. *Nb branches* is the number of branches of the bank. SE clustered at the bank (CIB) level.

Table 6: Banks' brown reputation and the demand for sight deposits: varying the persistence of the public's awareness.

| | (1) | (2) | (3) | (4) | (5) |
|--------------------------------------|---------------------|---------------------|----------------------|---------------------|---------------------|
| | No mem. | HL: 1m | HL: 3m | HL: 6m | HL: 9m |
| Brown RI (stdd) | 0.003 [0.004] | 0.002 [0.004] | -0.003 [0.005] | -0.007 [0.006] | -0.009 [0.006] |
| Brown RI (<i>times</i> Post (stdd)) | -0.014** [0.007] | -0.021** [0.008] | -0.025*** [0.009] | -0.025** [0.009] | -0.025** [0.009] |
| Interest rate, sight dep. (pp) | 0.041 [0.130] | 0.046 [0.129] | 0.051 [0.129] | 0.052 [0.129] | 0.052 [0.129] |
| Assets(-1) (log) | 0.249*** [0.088] | 0.248*** [0.087] | 0.246*** [0.086] | 0.245*** [0.086] | 0.245*** [0.086] |
| Capital/Ass.(-1) | -3.276 [2.011] | -3.256 [1.999] | -3.246 [1.984] | -3.252 [1.980] | -3.256 [1.979] |
| Non-bank dep./Ass.(-1) | 0.095 [0.274] | 0.096 [0.273] | 0.091 [0.273] | 0.087 [0.273] | 0.085 [0.273] |
| Bank FE | Yes | Yes | Yes | Yes | Yes |
| Time FE | Yes | Yes | Yes | Yes | Yes |
| Obs. | 5962 | 5962 | 5962 | 5962 | 5962 |
| Clusters | 57 | 57 | 57 | 57 | 57 |
| R^2 Within | 0.301 | 0.306 | 0.310 | 0.311 | 0.312 |

Note. Bank-level sample. Period: 2011-2020. Dep. variable: log sight deposits of households. *Brown RI* is the brown reputation index of the bank, here standardized. *Post* is a dummy variable for the period after the implementation of Article 43 LCACE. *Interest rate* is the bank-specific interest rate on sight deposits. *Nb branches* is the number of branches of the bank. In column (1), no persistence is assumed. In column (2) to (5), the time-decay parameter is adjusted so that the half-life of news is 1, 3, 6 (baseline) and 9 months respectively. In all cases, we assume that all information older than 12 months is forgotten. SE clustered at the bank (CIB) level.

Table 7: Banks' brown reputation and the demand for sight deposits: within bank-county regression.

| | 2011-2020 | | | | 2015-2017 | |
|------------------------|----------------------|----------------------|---------------------|----------------------|---------------------|----------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Brown RI | -0.023*** [0.006] | -0.030*** [0.009] | -0.009 [0.005] | -0.010 [0.006] | -0.002 [0.008] | 0.002 [0.007] |
| Brown RI \times Post | | | -0.023** [0.009] | -0.030*** [0.009] | -0.015** [0.006] | -0.020*** [0.006] |
| Assets(-1) (log) | 0.124** [0.053] | 0.094* [0.048] | 0.123** [0.051] | 0.090* [0.046] | 0.043 [0.032] | 0.033 [0.032] |
| Capital/Ass.(-1) | -2.490* [1.288] | -1.964 [1.257] | -2.705** [1.243] | -2.214* [1.223] | 0.135 [0.950] | -0.261 [1.012] |
| Non-bank dep./Ass.(-1) | 0.843*** [0.230] | 0.511** [0.212] | 0.858*** [0.230] | 0.520** [0.218] | 0.450*** [0.157] | 0.355** [0.151] |
| Interest rate | 0.016 [0.133] | -0.003 [0.161] | 0.012 [0.132] | -0.013 [0.160] | 0.146 [0.088] | 0.079 [0.068] |
| Nb branches (log) | | 0.122* [0.064] | | 0.129** [0.062] | | 0.092 [0.063] |
| Bank-County FE | Yes | Yes | Yes | Yes | Yes | Yes |
| County-Time FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Obs. | 96704 | 78760 | 96704 | 78760 | 30080 | 24633 |
| Clusters | 57 | 55 | 57 | 55 | 56 | 55 |
| R2 Within | 0.133 | 0.094 | 0.142 | 0.111 | 0.016 | 0.018 |

Note. Bank-county-level sample. Period: 2011-2020, except columns (5-6): 2015-2017. Dep. variable: log sight deposits of households. *Brown RI* is the brown reputation index of the bank. *Post* is a dummy variable for the period after the implementation of Article 43 LCACE. *Interest rate* is the bank-specific interest rate on sight deposits. *Nb branches* is the number of branches of the bank *in the county*. SE clustered at the bank (CIB) level.

Table 8: Difference-in-differences test.

| | Log(Deposits) _{bt} | | | |
|------------------------|-----------------------------|----------------------|---------------------|----------------------|
| | (1) | (2) | (3) | (4) |
| Post × Brown | -0.016*** [0.005] | -0.016*** [0.005] | -0.012** [0.005] | -0.012*** [0.004] |
| Interest rate | | | -0.227 [0.222] | -0.229 [0.221] |
| Nb branches (log) | | 0.046 [0.044] | | 0.040 [0.040] |
| Assets(-1) (log) | | | -0.034* [0.018] | -0.034* [0.017] |
| Capital/Ass.(-1) | | | -0.597 [1.021] | -0.416 [0.900] |
| Non-bank dep./Ass.(-1) | | | 0.093 [0.093] | 0.077 [0.085] |
| Bank FE | Yes | Yes | Yes | Yes |
| Time FE | Yes | Yes | Yes | Yes |
| Obs. | 1236 | 1223 | 680 | 667 |
| Clusters | 98 | 97 | 56 | 55 |
| R ² Within | 0.036 | 0.044 | 0.026 | 0.036 |

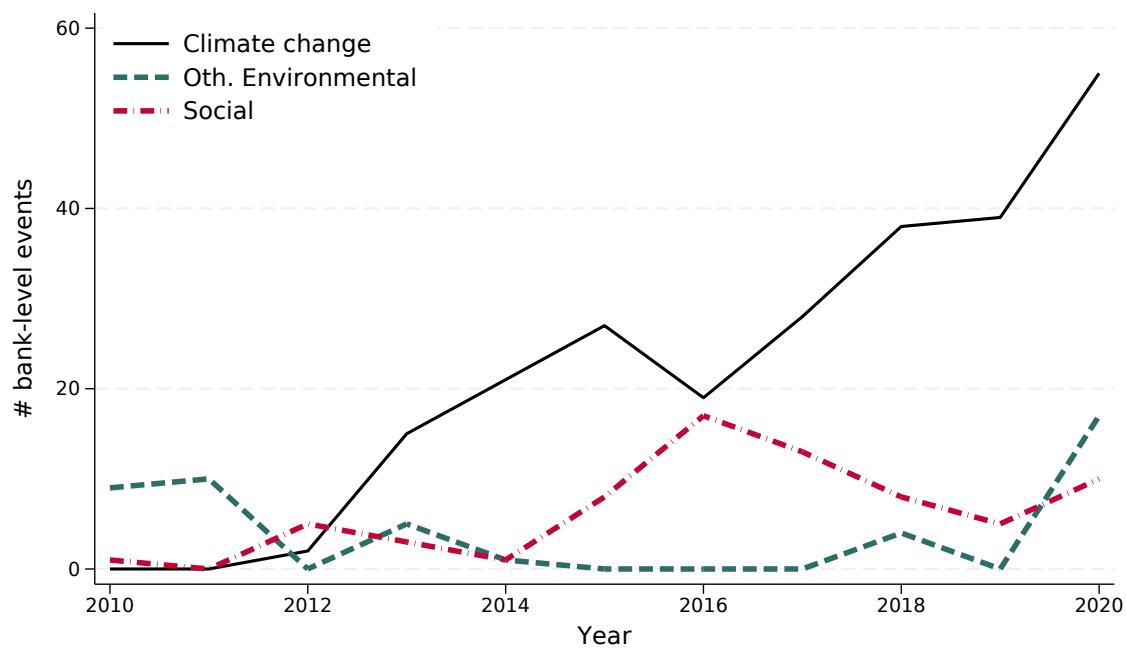
Note. Bank-level sample. Period: July 2016-July 2017. Dep. variable: log sight deposits of households. *Treated* stands for banks belonging to the three “brownest” brands (highest brown reputation index) as of December 2016. *Post* is a dummy variable for the period after the implementation of Article 43 LCACE. *Interest rate* is the bank-specific interest rate on sight deposits. *Nb branches* is the number of branches of the bank in the county. SE clustered at the bank (CIB) level.

Table 9: Exiting brown banks: the role of local characteristics.

| | (1) X=Educ. | (2) Income | (3) Green 2009 | (4) Green 2014 | (5) Bank compet. |
|---------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Brown RI | 0.011 [0.012] | 0.010 [0.011] | 0.008 [0.012] | 0.015 [0.011] | 0.011 [0.011] |
| Brown RI \times Post | -0.045*** [0.008] | -0.048*** [0.008] | -0.047*** [0.008] | -0.040*** [0.008] | -0.045*** [0.009] |
| Brown RI \times Top X | -0.030 [0.021] | -0.030 [0.020] | -0.027 [0.022] | -0.039* [0.021] | -0.029 [0.020] |
| Brown RI \times Post \times Top X | 0.015 [0.012] | 0.020* [0.012] | 0.018 [0.012] | 0.005 [0.012] | 0.014 [0.013] |
| Nb branches (log) | 0.939*** [0.031] | 0.939*** [0.031] | 0.939*** [0.031] | 0.939*** [0.031] | 0.939*** [0.031] |
| Bank controls | Yes | Yes | Yes | Yes | Yes |
| Bank FE | Yes | Yes | Yes | Yes | Yes |
| County-Time FE | Yes | Yes | Yes | Yes | Yes |
| Obs. | 78760 | 78760 | 78760 | 78760 | 78760 |
| Clusters | 732 | 732 | 732 | 732 | 732 |
| R2 | 0.947 | 0.947 | 0.947 | 0.947 | 0.947 |

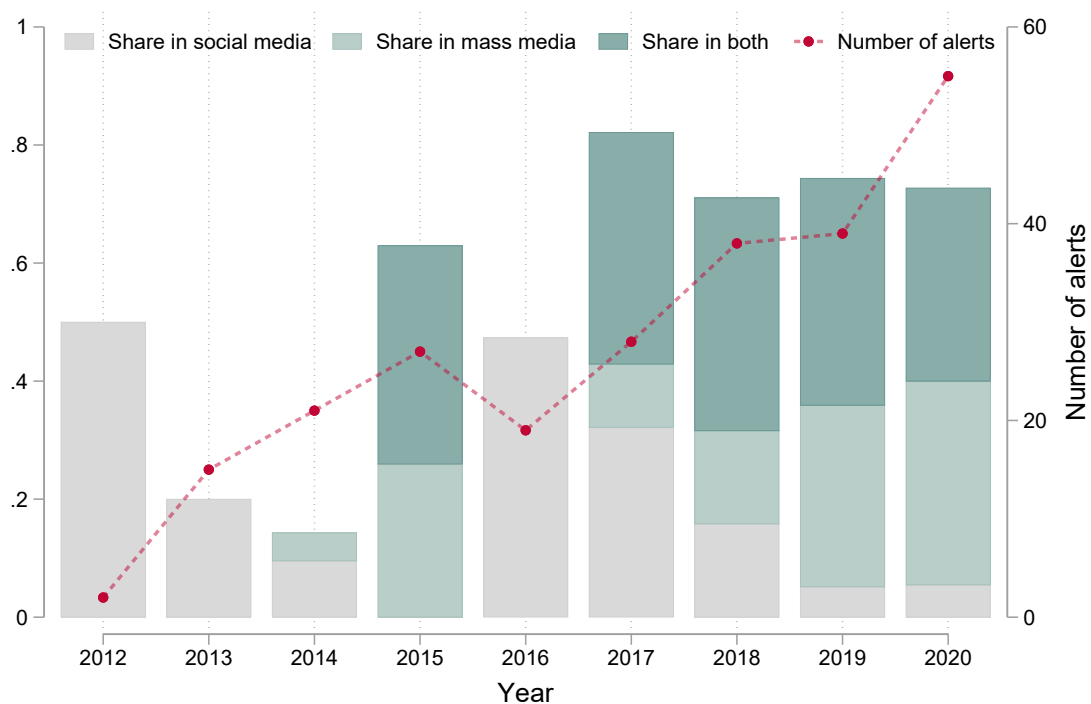
Note. Bank-county-level sample. Period: 2011-2020. Dep. variable: log sight deposits of households. *Brown RI* is the brown reputation index of the bank. *Post* is a dummy variable for the period after the implementation of Article 43 LCACE. *Interest rate* is the bank-specific interest rate on sight deposits. *Nb branches*: number of branches of the bank in the county. *Top X*: dummy for counties above median of X (where X stands for, in turn, the share of college education (col. 1), average annual income (col. 2), the share of green vote as measured either at the 2009 or 2014 EU-Parliament elections (col. 3-4), or an index of bank competition for deposits (col. 5). SE clustered at the bank (CIB) level.

Figure 1: NGO campaigns targeting French banks on ES issues, by issue type.



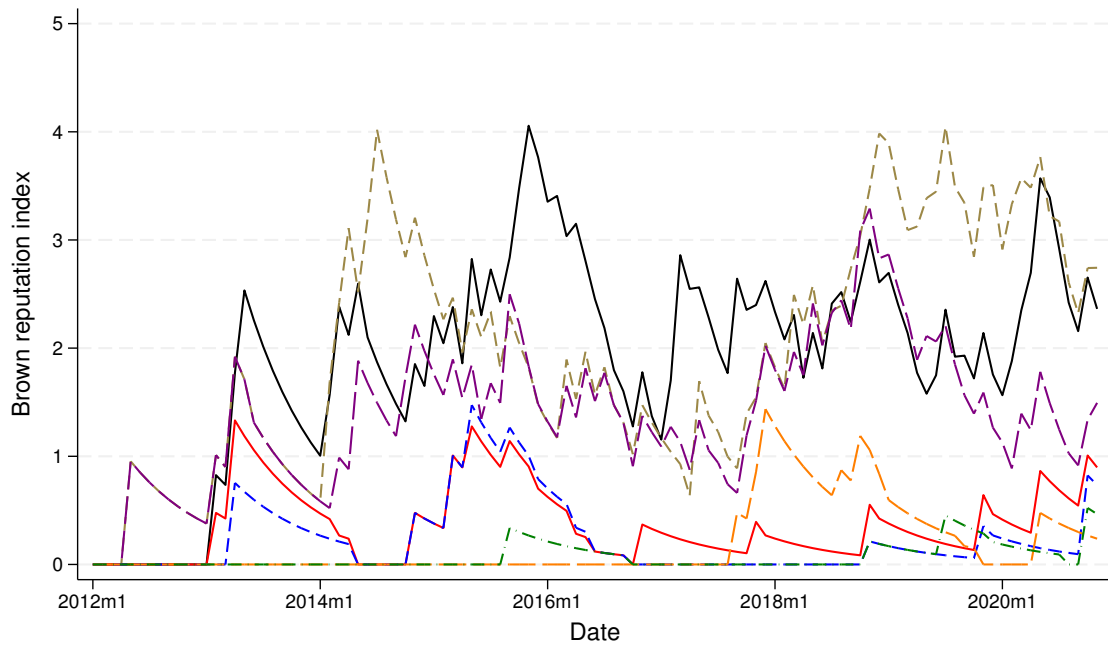
Note. Period: 2010-2020. Negative NGO campaign alerts pointing at French banks (bank brands). An alert is defined by a campaign event and the name of the targeted bank. Source: Sigwatch, authors' computations.

Figure 2: Negative NGO alerts on climate change: mass and social media coverage.



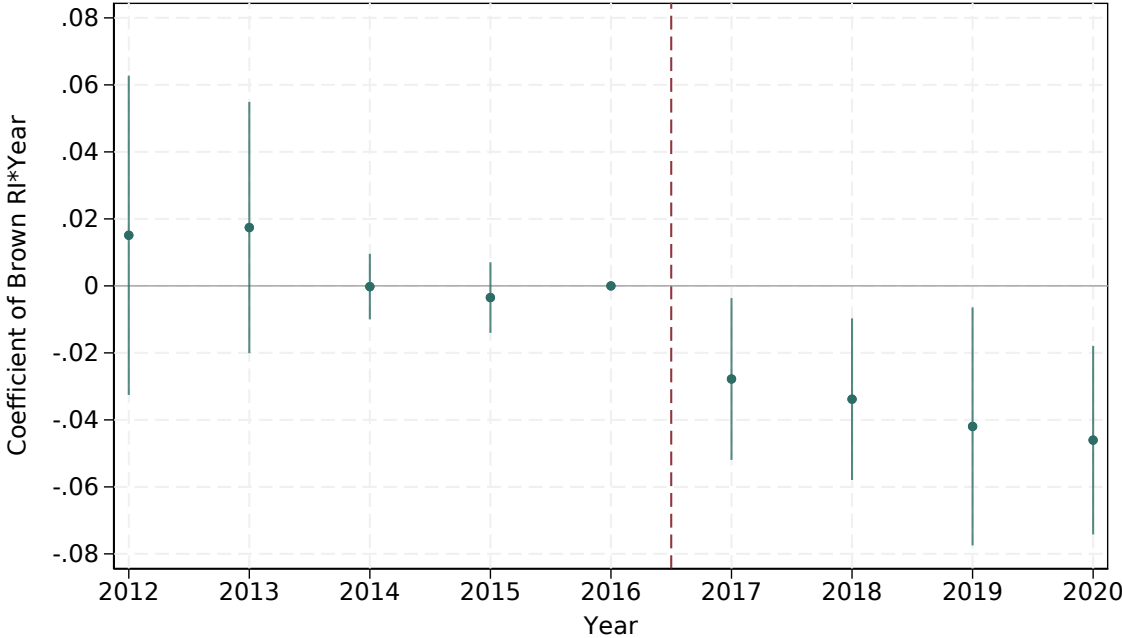
Note. Share of negative NGO campaign alerts against brown banks for which we can identify news releases by major mass media (all national and major regional French daily and weekly newspapers, as well as French TV and radio broadcasts), and/or tweets mentioning both the NGO and the bank. Period: 2010-2020. Source: Sigwatch, Twitter/X, media websites, authors' computations.

Figure 3: Brown reputation indexes of the seven largest bank brands in France.



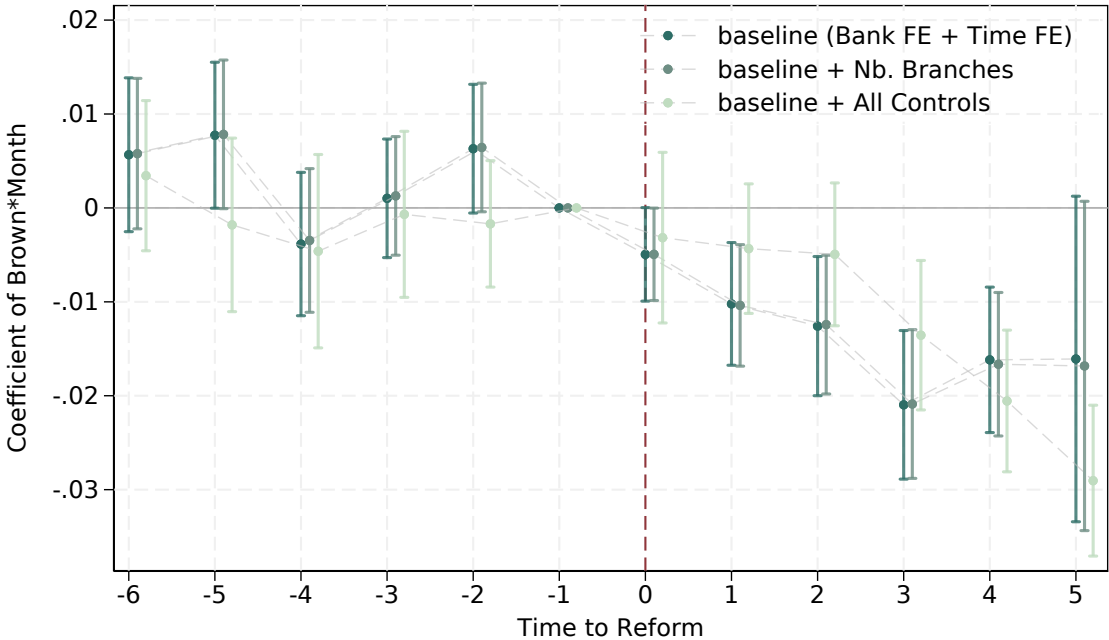
Note. Negative NGO campaigns targeting the banking groups main brand. Source: Sigwatch, authors' computations.

Figure 4: Banks' brown reputation, sight deposits and the 2017 bank switching regulation: dynamic specification.



Note. Bank-level sample. Period: February 2011-January 2021. Dep. variable: log sight deposits of households. The figure shows the estimated coefficients of the brown reputation index (negative sustainability index related to CC issues) interacted with year dummies. For readability, calendar years are adjusted to match the implementation month of Article 43 LCACE (February 2017). For instance, "2017" is a dummy for the 12 months from February 2017 to January 2018. Bars: 95% confidence intervals.

Figure 5: Difference-in-differences test: brown banks vs controls before and after the 2017 bank mobility regulation.



Note. Bank-level sample. Period: July 2016-July 2017. Dep. variable: log sight deposits of households. The figure shows the estimated coefficients of the treatment dummy for brown banks (as of December 2016) interacted with year-month dummies. The vertical line marks the implementation date of Article 43 LCACE (February 2017). Bars: 95% confidence intervals.

A Online Appendix

Table A1: Evaluating the media coverage of NGO alerts: list of mass media outlets used for the web-scraping exercise.

| Nation-wide daily newspapers |
|--|
| www.lemonde.fr |
| www.liberation.fr |
| www.lesechos.fr |
| www.lopinion.fr |
| www.lefigaro.fr |
| www.humanite.fr |
| www.latribune.fr |
| www.20minutes.fr |
| Regional newspapers |
| www.ouestfrance.fr |
| www.sudouest.fr |
| www.leparisien.fr |
| www.lavoixdunord.fr |
| www.ledauphine.com |
| www.letelegramme.fr |
| www.leprogres.fr |
| www.lanouvellerepublique.fr |
| www.lamontagne.fr |
| www.ladepeche.fr |
| www.dna.fr |
| www.estrepublicain.fr |
| www.midilibre.fr |
| www.laprovence.com |
| www.republicain-lorrain.fr |
| www.nicematin.com |
| www.ouest-france.fr/le-courrier-de-l-ouest |

www.lunion.fr
www.lardennais.fr.

Weekly newspapers and information websites

www.marianne.net
www.lexpress.fr
www.lepoint.fr
www.nouvelobs.com
www.huffingtonpost.fr
www.slate.fr
www.challenges.fr
www.la-croix.com
lexpansion.lexpress.fr
www.jeunefrique.com
lentreprise.lexpress.fr
www.capital.fr
investir.lesechos.fr.

Radio and TV broadcasts

www.france24.com
www.actu.fr
www.franceinfo.fr
information.tv5monde.com
www.europe1.fr
www.rtl.fr
korii.slate.fr
www.rfi.fr
france3-regions.francetvinfo.fr
www.franceculture.fr
www.francetvinfo.fr.

Table A2: Credit institutions not associated with the main brand of their parent banking group (estimation sample).

| Bank Name | Bank Group |
|--|------------------|
| Banque de Savoie | BPCE |
| Banque Chaix | BPCE |
| Banque BCP | BPCE |
| Crédit commercial du Sud-Ouest | BPCE |
| Banque Palatine | BPCE |
| Crédit lyonnais | CREDIT AGRICOLE |
| Lyonnaise de banque | CREDIT MUTUEL |
| Banque Transatlantique S.A. | CREDIT MUTUEL |
| BPE/Louvre Banque Privée* | LA POSTE |
| Banque Courtois | SOCIETE GENERALE |
| Crédit du Nord | SOCIETE GENERALE |
| Banque Laydernier | SOCIETE GENERALE |
| Boursorama | SOCIETE GENERALE |
| Banque Tarneaud | SOCIETE GENERALE |
| Banque Rhone-Alpes - Groupe Crédit du Nord | SOCIETE GENERALE |
| Société marseillaise de crédit | SOCIETE GENERALE |

Note. (*) BPE was a subsidiary of Crédit Mutuel Arkea up to April 2013.

Table A3: Bank-county-level regression sample: descriptive statistics

| | Mean | Std.Dev. | p10 | p25 | Median | p75 | p90 | Nb.Obs. |
|------------------------|-----------|-----------|----------|----------|-----------|-----------|-----------|---------|
| Sight deposits (thds) | 229222.77 | 411608.79 | 12392.00 | 39851.50 | 109518.00 | 246179.00 | 546268.00 | 96704 |
| Sight deposits (log) | 11.43 | 1.49 | 9.42 | 10.59 | 11.60 | 12.41 | 13.21 | 96704 |
| Savings deposits (log) | 11.93 | 1.56 | 9.82 | 10.96 | 12.05 | 13.11 | 13.82 | 94860 |
| All deposits (log) | 12.42 | 1.53 | 10.34 | 11.51 | 12.58 | 13.51 | 14.27 | 95755 |
| Brown RI | 0.51 | 0.90 | 0.00 | 0.00 | 0.00 | 0.60 | 2.04 | 96704 |
| Dummy neg. CC news | 0.12 | 0.32 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 | 96704 |
| Nb branches (log) | 2.35 | 1.32 | 0.00 | 1.39 | 2.40 | 3.30 | 4.01 | 78760 |
| Interest rate | 0.02 | 0.03 | 0.00 | 0.01 | 0.01 | 0.03 | 0.05 | 96704 |
| Assets(-1) (log) | 25.18 | 1.85 | 23.01 | 23.60 | 25.48 | 26.40 | 27.76 | 96704 |
| Capital/Ass.(-1) | 0.04 | 0.02 | 0.02 | 0.02 | 0.02 | 0.05 | 0.07 | 96704 |
| Non-bank dep./Ass.(-1) | 0.50 | 0.25 | 0.13 | 0.17 | 0.62 | 0.68 | 0.74 | 96704 |
| Share green vote | 13.83 | 5.46 | 7.91 | 9.29 | 12.62 | 18.21 | 22.02 | 96704 |
| Share college educ. | 0.22 | 0.07 | 0.16 | 0.18 | 0.20 | 0.24 | 0.30 | 96704 |
| Income per hhld. (log) | 3.13 | 0.15 | 2.98 | 3.03 | 3.10 | 3.18 | 3.29 | 96704 |
| HHI deposits (pp) | 1.24 | 0.58 | 0.53 | 0.82 | 1.17 | 1.67 | 2.02 | 96704 |

Note. Bank-county-level sample. Period: 2011-2020. Deposits and loans in euro thds.

Table A4: Socio-demographic variables, green vote and bank competition in French counties: correlation matrix

| | Educ. | Inc. | Green 2009 | Green 2014 | Comp. |
|------------|-------|------|------------|------------|-------|
| Education | 1.00 | | | | |
| Income | 0.74 | 1.00 | | | |
| Green 2009 | 0.77 | 0.55 | 1.00 | | |
| Green 2014 | 0.63 | 0.24 | 0.77 | 1.00 | |
| Bank comp. | 0.65 | 0.60 | 0.44 | 0.22 | 1.00 |

Note. This table shows the correlation matrix of (quartiles of) the following four variables measured at the county level: the share of adults with college education or higher in 2008, the average income per household in 2010, the share of green vote in expressed votes in the 2009, resp. 2014, European Parliament elections, bank competition for deposits in 2010 (based on the HHI of deposits across banks within a county).

Table A5: Bank-level regression sample: descriptive statistics

| | Mean | Std.Dev. | p10 | p25 | Median | p75 | p90 | Nb.Obs. |
|--------------------------------|----------|----------|-----------|-----------|----------|----------|----------|---------|
| Sight deposits (thds) | 2.83e+06 | 6.42e+06 | 542571.00 | 865746.50 | 1.36e+06 | 2.02e+06 | 3.41e+06 | 10100 |
| Sight deposits (log) | 14.17 | 0.97 | 13.20 | 13.67 | 14.12 | 14.52 | 15.04 | 10100 |
| Brown RI | 0.69 | 0.78 | 0.00 | 0.00 | 0.39 | 1.22 | 1.83 | 10100 |
| Nb branches | 238.22 | 622.25 | 3.00 | 32.50 | 122.00 | 203.00 | 322.00 | 10100 |
| Nb branches (log) | 4.19 | 1.89 | 1.10 | 3.81 | 4.81 | 5.32 | 5.77 | 9941 |
| Interest rate, sight dep. (pp) | 0.02 | 0.04 | 0.00 | 0.00 | 0.01 | 0.02 | 0.06 | 10100 |

Note. Bank-level total sample: all banks with available interest rate on deposits. Interest rate on sight deposits in pp. Period: 2011-2020. Deposits and loans in euro thds.

Table A6: Banks' brown reputation and the demand for sight deposits: placebo.

| | Sight dep. | | Savings dep. | |
|--------------------------------|---------------------|----------------------|---------------------|----------------------|
| | (1) | (2) | (3) | (4) |
| Brown RI | -0.010 [0.007] | -0.005 [0.006] | -0.007 [0.015] | -0.008 [0.017] |
| Brown RI \times Post | -0.038** [0.014] | -0.037*** [0.013] | -0.020 [0.014] | -0.024 [0.016] |
| Interest rate, sight dep. (pp) | 0.052 [0.129] | 0.045 [0.107] | | |
| Term dep. rate (long) | | | 1.053 [0.763] | 1.652** [0.762] |
| Assets(-1) (log) | 0.245*** [0.086] | 0.117** [0.055] | 0.252*** [0.052] | 0.177*** [0.047] |
| Capital/Ass.(-1) | -3.252 [1.980] | -1.981*** [0.711] | -4.449* [2.238] | -5.135*** [1.370] |
| Non-bank dep./Ass.(-1) | 0.087 [0.273] | -0.092 [0.178] | 0.751*** [0.184] | 0.658*** [0.171] |
| Nb branches (log) | | 0.459*** [0.093] | | 0.271** [0.114] |
| Bank FE | Yes | Yes | Yes | Yes |
| Time FE | Yes | Yes | Yes | Yes |
| Obs. | 5962 | 5803 | 3125 | 3121 |
| Clusters | 57 | 55 | 56 | 56 |
| R^2 Within | 0.311 | 0.526 | 0.350 | 0.418 |

Note. Bank-level sample. Period: 2011-2020. Dep. variable: log sight deposits of households in columns (1-2), savings deposits in columns (3-4), all household deposits in columns (5-6). *Brown RI* is the brown reputation index of the bank. *Post* is a dummy variable for the period after the implementation of Article 43 LCACE. *Nb branches* is the number of branches of the bank. SE clustered at the bank (CIB) level. *Sight dep. rate* is the apparent rate on checking accounts (annualized) as before. *Term dep. rate* is the interest rate on new term deposit contracts with an initial maturity of more than two years. SE clustered at the bank (CIB) level.

Table A7: Banks' negative reputation regarding climate change vs other ES issues: impact on sight deposits.

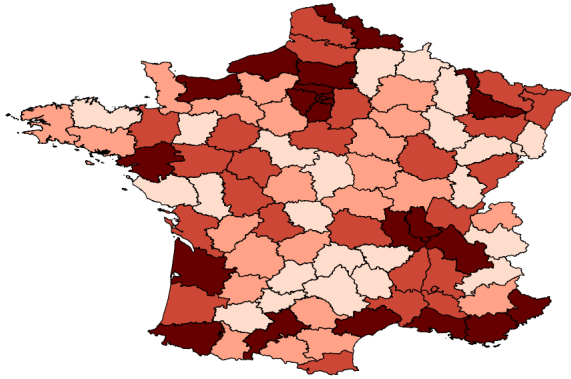
| | (1) | (2) | (3) | (4) |
|--------------------------------|---------------------|---------------------|----------------------|---------------------|
| Neg. CC RI | -0.010 [0.007] | | | -0.009 [0.008] |
| Neg. OE RI | | 0.045* [0.023] | | 0.011 [0.018] |
| Neg. S RI | | | -0.009 [0.019] | -0.017 [0.019] |
| ... CC \times Post | -0.038** [0.014] | | | -0.031** [0.014] |
| ... OE \times Post | | -0.102** [0.048] | | -0.027 [0.030] |
| ... S \times Post | | | -0.054*** [0.014] | -0.008 [0.014] |
| Interest rate, sight dep. (pp) | 0.052 [0.129] | 0.037 [0.131] | 0.038 [0.130] | 0.048 [0.129] |
| Assets(-1) (log) | 0.245*** [0.086] | 0.247*** [0.087] | 0.250*** [0.087] | 0.245*** [0.086] |
| Capital/Ass.(-1) | -3.252 [1.980] | -3.280 [2.011] | -3.303 [1.997] | -3.249 [1.978] |
| Non-bank dep./Ass.(-1) | 0.087 [0.273] | 0.088 [0.277] | 0.076 [0.282] | 0.079 [0.278] |
| Bank FE | Yes | Yes | Yes | Yes |
| Time FE | Yes | Yes | Yes | Yes |
| Obs. | 5962 | 5962 | 5962 | 5962 |
| Clusters | 57 | 57 | 57 | 57 |
| R^2 Within | 0.311 | 0.303 | 0.304 | 0.312 |

Note. Bank-level sample. Period: 2011-2020. Dep. variable: log sight deposits of households. *Negative CC SRI* (resp. *Negative OE SRI*, *Negative S SRI*) is the negative sustainability reputation index (SRI) of the bank brand because of CC (resp. OE, S) issues. *Post* is a dummy variable for the period after the implementation of Article 43 LCACE. *Interest rate* is the bank-specific interest rate on sight deposits. *Nb branches* is the number of branches of the bank. SE clustered at the bank (CIB) level. SE clustered at the bank (CIB) level.

Figure A1: Bank competition, county-level heterogeneity.

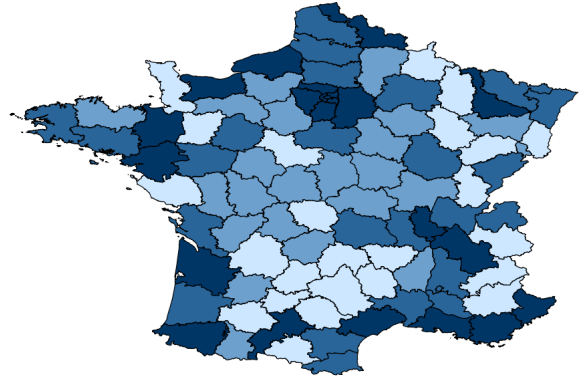
Housing loans

Banking market competition: housing loans, 2010



Households deposits

Banking market competition: households deposits, 2010



Note. Quartiles of the HHI of deposits/housing loans across banks in each county. Darker color: lower HHI, i.e. more competitive local bank market.

Figure A2: Higher education and income, county-level heterogeneity.
 College education (2008) Income per household (2010)

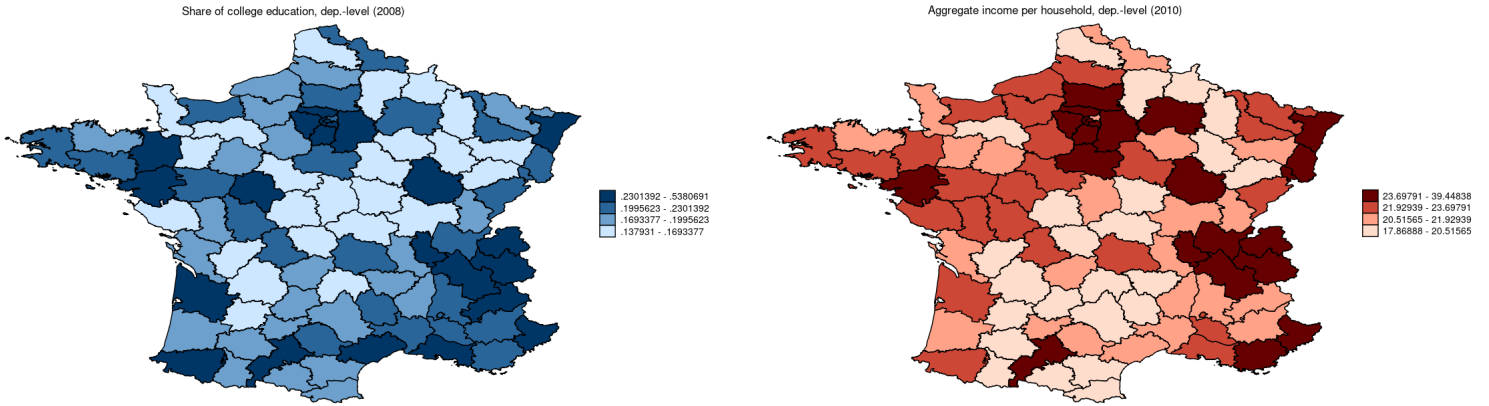


Figure A3: Vote for green parties at the EUP elections, county-level heterogeneity.
 2009 2014

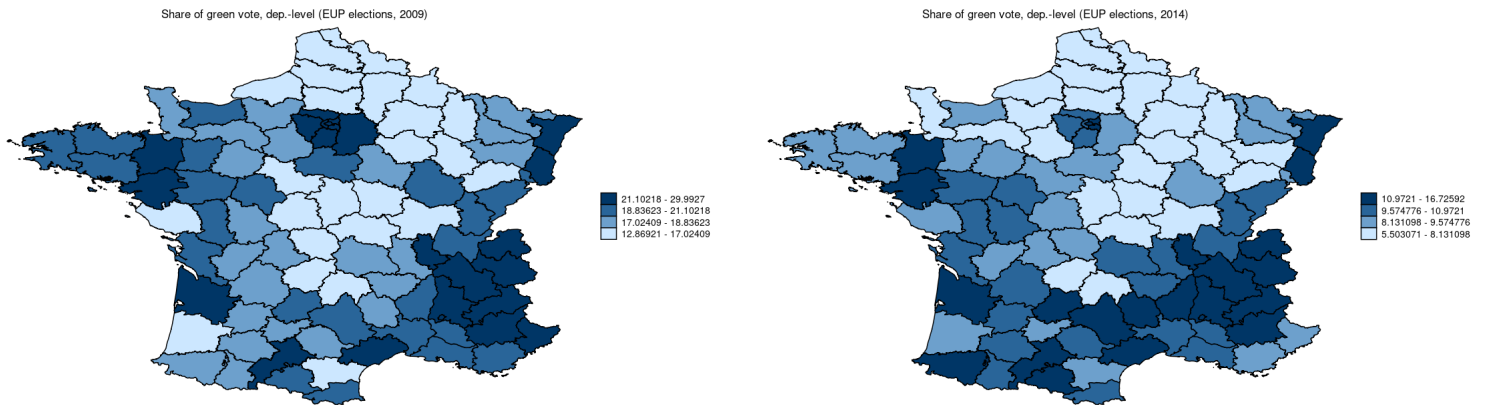
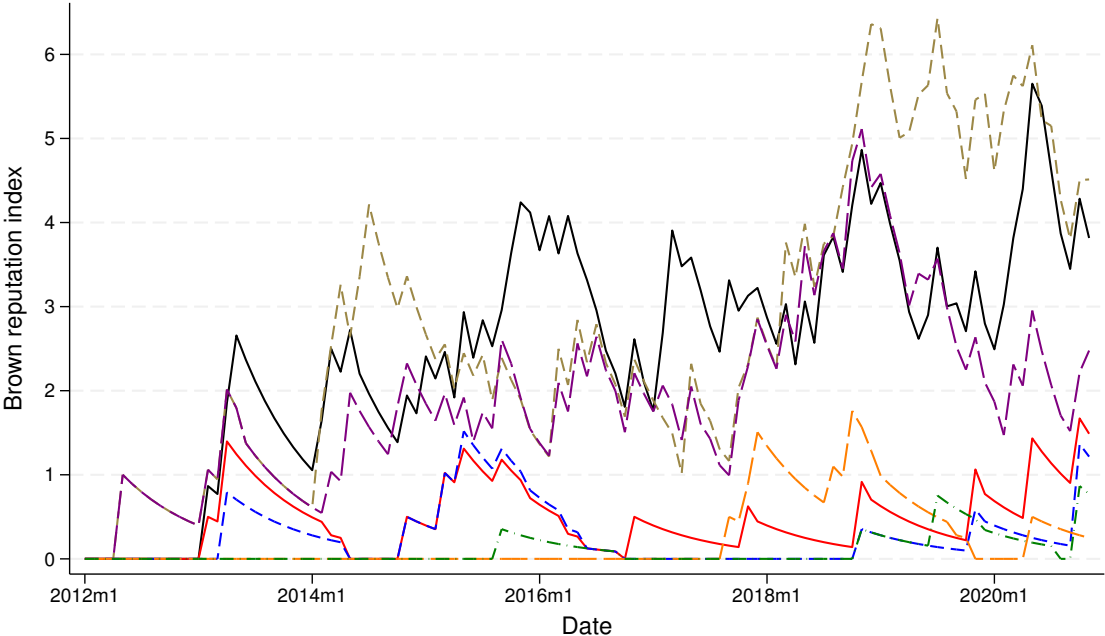
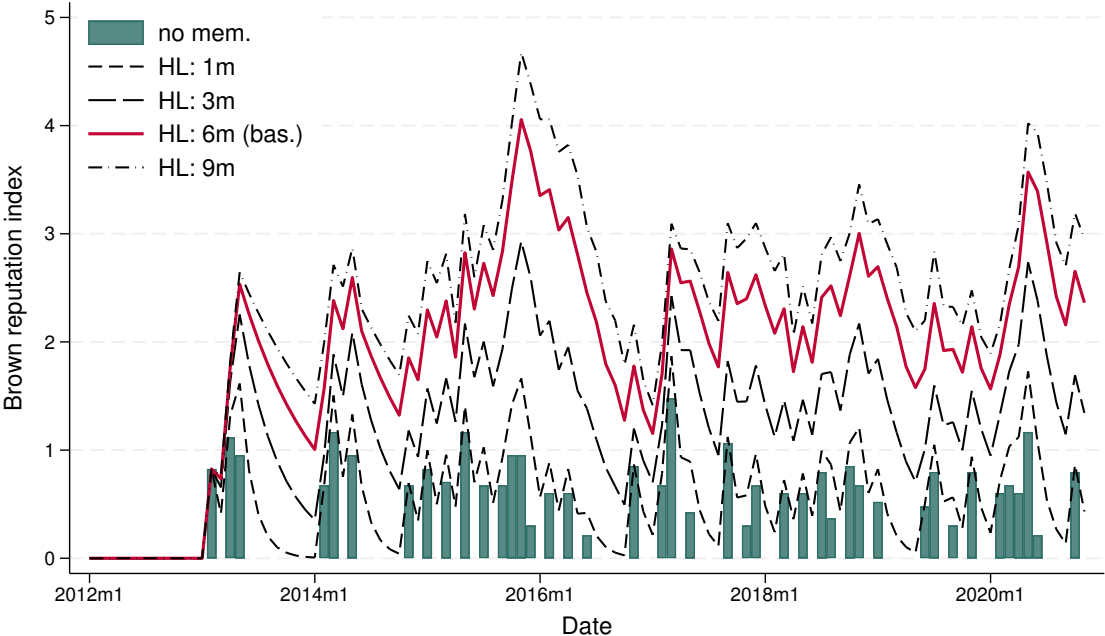


Figure A4: Banks' brown reputation: alternative definition (no account of Sigwatch's *NGO power*).



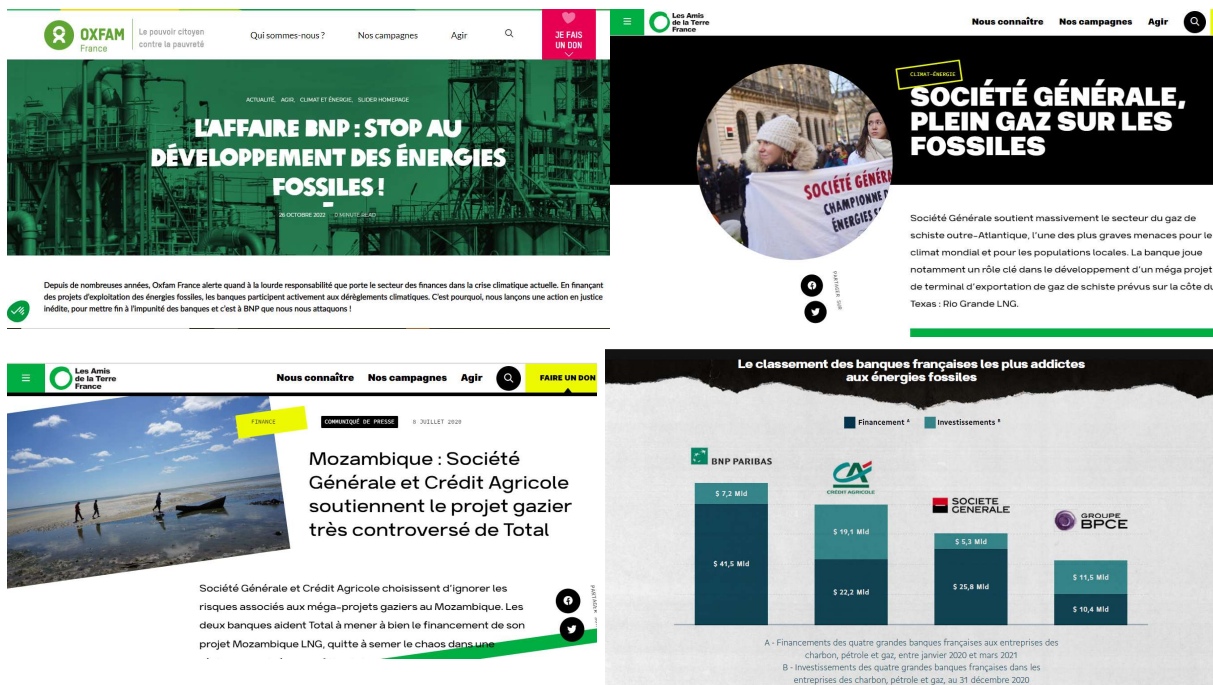
Note. In this figure, individual alert impact scores do not factor in Sigwatch's measure of the campaigning NGO's power. Source: Sigwatch, authors' computations.

Figure A5: Brown reputation index: alternative assumptions regarding news persistence in the public’s awareness.



Note. The figure shows alternative measures of the brown reputation index of one of the most targeted bank brands, depending on our assumptions regarding how fast people forget about past information. The bars show the monthly brown reputation score, assuming that people stay aware for only one month. Lines show the computed brown reputation indexes series when the half-life (HL) of past news is 1, 3, 6 or 9 months. Source: Sigwatch and authors’ computations.

Figure A6: NGO Campaigns Against French Banks: Examples



Note. The figure shows 4 examples of NGO campaigns targeting French banks: Oxfam (1), Les Amis de la Terre (2 and 3), and Greenpeace France (4). Targeted banks include BNP Paribas, SG, CA.

Figure A7: From NGO Campaigns to Mass Media

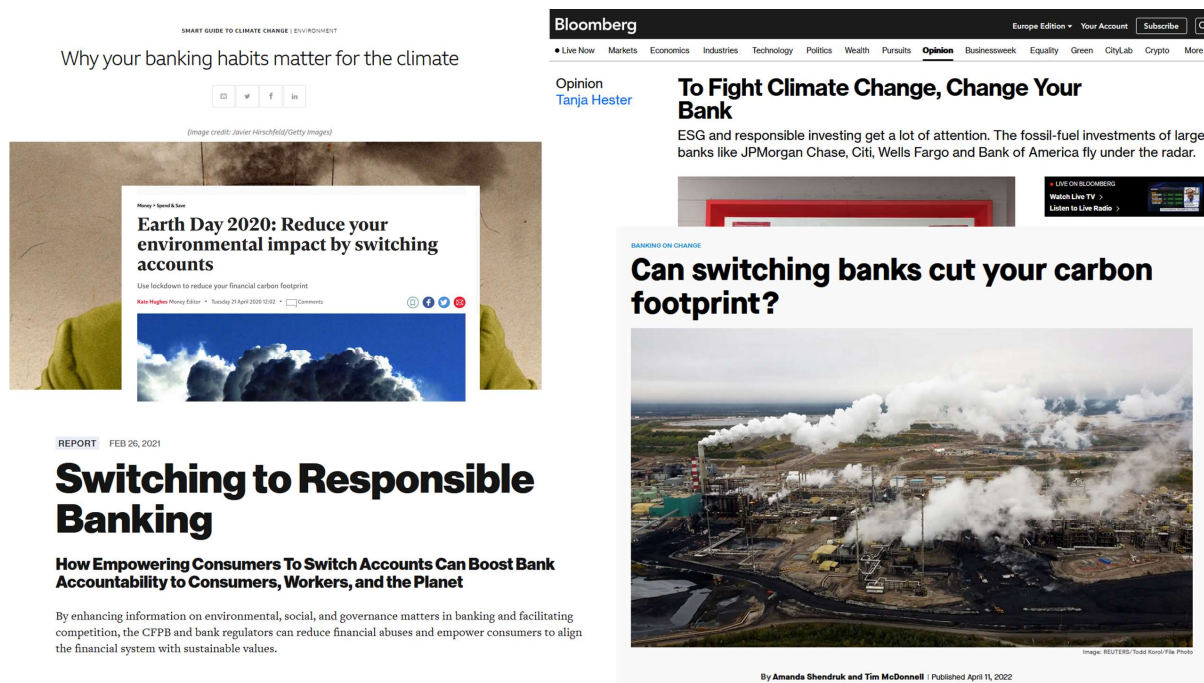


Source: Réseau Action Climat (NGO)

Source: Ouest France (Sep. 2022)

Note. The figure illustrates an NGO campaign by *Réseau Action Climat* and a media article covering it, published in *Ouest France*, France's most widely circulated daily newspaper, printing approximately 645,000 copies per day in 2022. The NGO campaign explicitly encouraged consumers to switch banks.

Figure A8: Calls for Switching to Green Banks: Examples Beyond France



Note. The figure displays five newspaper articles published outside France that explicitly encourage consumers to switch banks for environmental reasons. Articles are from the BBC, Bloomberg, The Independent, Quartz, and the public policy research organization Center for American Progress