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Socioemotional Wealth and Debt Contract Design in Family Firms: Leverage, Maturity, and Rollover Risk in France

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Short Report

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Abstract

Purpose – This study examines how socioemotional wealth (SEW) shapes the design of corporate debt in family firms by separating the leverage margin from the debt-maturity margin, and by interpreting maturity as rollover-risk management that protects long-term orientation.

Design/methodology/approach – Using a matched panel of French non-financial firms (2010–2024) linked to ownership structures, governance events and leadership narratives, we operationalize SEW along three dimensions: family control (F), family identity (I) and emotional attachment (E). We estimate firm fixed-effects and industry×year fixed-effects models, dynamic System-GMM for leverage, and succession-based quasi-experiments (difference-in-differences and interaction-weighted event studies). Robustness and mechanism tests are reported in the Supplementary Material.

Findings – Family control is positively associated with leverage, consistent with non-dilutive control preservation. In contrast, identity and emotional attachment are associated with longer debt maturity, and these maturity effects are stronger for innovative firms and during refinancing-stress episodes (COVID-19 and the 2022–2023 monetary-tightening period). Supplementary mechanism evidence indicates that identity/attachment align with more concentrated relationship lending, lower short-term-debt exposure and lower proxy borrowing costs.

Originality/value – The study contributes to corporate finance by linking SEW to the term structure of debt and rollover risk; to the SEW literature by relying on multidimensional (including text-based) measures rather than a simple family-ownership dummy; and to comparative family-business research by showing how a bank-based setting (France) and crisis/innovation regimes shape the translation of SEW motives into debt contract design.

1. Introduction

How controlling owners finance their firms is central to corporate finance because financing choices allocate control rights, shape risk exposure, and constrain investment horizons. Family-controlled firms are a particularly salient setting: they often combine concentrated voting power with strong preferences for continuity, reputation, and transgenerational control. Socioemotional wealth (SEW) theory formalizes these preferences by treating non-financial utilities - such as control, identity, and affective attachment - as first-order objectives that can rationally influence economic decisions (Gómez-Mejía et al., 2007; Berrone, Cruz, and Gomez-Mejia, 2012). Yet reviews and meta-analyses emphasize that family-firm financing evidence is heterogeneous and sensitive to governance and institutional context (Michiels and Molly, 2017; Hansen and Block, 2021). One reason is that "capital structure" often conflates multiple contract dimensions. While SEW research has documented systematic differences between family and non-family firms, the corporate-finance channel remains less settled, especially when financing choices are decomposed into both the level of leverage and the maturity structure of debt.

This paper asks a focused question: do distinct SEW dimensions map to distinct financing margins? We argue that family control primarily affects the leverage decision, whereas identity and emotional attachment primarily affect the debt-maturity decision. This distinction is important because leverage and maturity respond to different risks. Leverage captures the overall reliance on debt relative to assets; debt maturity governs rollover risk and the probability that short-term market stress forces renegotiation, asset sales, or control-reducing recapitalizations (Diamond, 1991; He and Xiong, 2012). For family owners who care about continuity and reputation, maturity extension can be a direct way to protect the firm's long-term orientation.

From a family business management perspective, these financing choices are not purely mechanical outcomes: they are policies negotiated among the owning family, professional executives (CEO/CFO), the board, and core lenders. SEW therefore shapes financing through governance and decision rights (who can authorize leverage), through relationship lending (how refinancing is negotiated), and through communication that signals identity and continuity to stakeholders. Relationship lending has been shown to affect contract terms, including maturity, especially for opaque borrowers (Bharath, Dahiya, Saunders, and Srinivasan, 2011).

France provides a relevant institutional setting to examine these mechanisms. French corporate ownership is comparatively concentrated, and family control can be reinforced via holding structures and voting-right arrangements. At the same time, corporate lending has historically relied on relationship banking, which can support longer maturities when informational frictions are important. These features create a plausible environment in which SEW motives translate into both the level and the term structure of debt (Sraer and Thesmar, 2007).

Our empirical strategy links balance-sheet and ownership information from ORBIS/DIANE with governance events and leadership narratives to measure SEW and financing choices in a matched panel of French non-financial firms. Because consistent narrative disclosures are available from 2010 onward, our main estimation window is 2010–2024. We triangulate evidence using within-firm fixed-effects models, complemented by dynamic specifications and succession-based quasi-experiments.

The paper contributes to family-business and corporate-finance research in three ways. First, it connects socioemotional wealth (SEW) to the corporate-finance literature on debt maturity and rollover risk by showing that identity and emotional attachment are expressed primarily

through maturity choices that reduce refinancing exposure. Second, it advances SEW research by operationalizing SEW as a multidimensional construct and documenting a first-order mapping from control to leverage and from identity/attachment to maturity, helping reconcile heterogeneous evidence based on coarse family-ownership dummies. Third, leveraging the French institutional context and two stress regimes (COVID-19 and the 2022–2023 monetary tightening), we identify boundary conditions under which SEW-driven maturity extension is amplified, especially in innovation-intensive firms. While our primary maturity proxy is the long-term debt share (LT/TDebt), we document robustness to alternative maturity measures and fractional-response estimators in the Supplementary Material. The findings also translate into practical guidance on aligning leverage, maturity, relationship banking, and liquidity buffers with continuity goals.

The remainder of the paper is organized as follows. We first develop hypotheses linking distinct SEW dimensions to the leverage and debt-maturity margins. We then describe the data, measurement, and identification strategies, present the empirical results (including heterogeneity tests and succession-based quasi-experiments), and discuss managerial and policy implications before concluding.

2. Literature review and hypotheses

This section develops a cumulative argument linking socioemotional wealth (SEW) to financing policies in family firms. We build on the idea that “capital structure” is not a single choice: families can express SEW motives through both the level of leverage and the maturity structure of debt. We therefore organize prior work around these two margins, clarify the main competing mechanisms, and derive testable hypotheses. Cross-effects are possible—for example, control may also influence maturity and identity/attachment may also affect leverage—but our theory predicts a first-order mapping in which control loads more strongly on leverage, whereas identity and attachment load more strongly on maturity. Recent reviews synthesize the SEW literature and highlight open questions on bank financing and contract design in family firms (Reina et al., 2023; Vekemans et al., 2025).

2.1. Core puzzle and organizing framework: leverage versus maturity

Prior research documents systematic differences between family and non-family firms, yet evidence on family ownership and financing remains heterogeneous. This ambiguity is not surprising: families face two opposing forces. On the one hand, preserving control and strategic discretion makes non-dilutive financing attractive, which can push families toward debt rather than external equity (Gómez-Mejía et al., 2007; Miller and Le Breton-Miller, 2005). On the other hand, concentrated family wealth and strong survival preferences can increase aversion to financial distress, creditor intervention, and loss of discretion, which can push families toward more conservative leverage policies (Berrone et al., 2012). This tension is consistent with behavioral-agency arguments in which decision makers overweight losses relative to a reference point, making perceived threats to socioemotional wealth especially salient (Wiseman and Gómez-Mejía, 1998). Related evidence shows that families’ financing choices reflect a trade-off between risk aversion, creditor monitoring, and the desire to avoid control dilution, helping explain heterogeneous leverage findings across settings (Croci et al., 2011; González et al., 2013; Schmid, 2013; Jain and Shao, 2015; Baixauli-Soler et al., 2021; Blanco-Mazagatos et al., 2024) and that SEW objectives can mediate leverage choices (Muñoz-Bullón et al., 2024).

A key implication is that leverage and debt maturity capture different contracting problems and can therefore reveal different SEW channels. Leverage reflects how much the firm relies on debt relative to assets, and thus how control rights are preserved or diluted. Debt maturity governs the timing of repayments and exposure to refinancing pressure. In classic maturity-choice models, shorter maturities can strengthen discipline and monitoring through more frequent renewal and renegotiation (Diamond, 1991), but they also expose firms to liquidity and rollover risk when credit conditions tighten (He and Xiong, 2012; Brunnermeier and Oehmke, 2013). Longer maturities hedge rollover risk and stabilize investment horizons, lowering the probability that short-term stress forces disruptive refinancing, asset sales, or control-reducing recapitalizations (Barclay and Smith, 1995; Stohs and Mauer, 1996; Guedes and Opler, 1996). Because maturity also interacts with debt overhang and continuation incentives, it is particularly consequential when long-horizon value is high (Diamond and He, 2014). In the empirical analysis, we proxy debt maturity by the long-term debt share (long-term financial debt/total financial debt), a standard balance-sheet measure of the composition of outstanding debt; it does not observe contractual maturities directly, so we complement it with alternative maturity proxies and fractional-response specifications in robustness tests. Evidence on bank debt suggests that family control can also interact with rollover risk and the cost of bank borrowing (Chiu and Wang, 2019).

Our organizing framework is therefore that different SEW dimensions are more likely to surface in different margins. SEW-Control (F) should manifest primarily through leverage because it directly concerns control dilution and decision rights. By contrast, SEW-Identity (I) and SEW-Emotional Attachment (E) should manifest primarily through maturity because they elevate concerns about continuity and reputational exposure to refinancing shocks. The hypotheses below formalize this mapping while acknowledging credible countervailing mechanisms that make the net effect an empirical question.

2.2. Two-sided contracting and SEW dimensions: demand, supply, and competing mechanisms

Financing policies are equilibrium outcomes negotiated between borrowers and lenders, not unilateral choices. A two-sided contracting view clarifies why SEW may influence leverage and maturity differently. On the demand side, the owning family's non-financial objectives shape preferred instruments, horizons, and risk tolerance. On the supply side, banks and other creditors price and ration credit based on information, collateral, governance, and the expected costs of renegotiation. Relationship lending can mitigate information frictions and make longer-term contracts feasible when repeated interactions support trust and private information (Petersen and Rajan, 1994; Berger and Udell, 1995). At the same time, relationship lending can create borrower lock-in and creditor bargaining power when banks accumulate private information, implying that contract terms (including maturity) reflect bargaining as well as borrower preferences (Sharpe, 1990; Rajan, 1992; Boot, 2000). Consistent with a contract-design view, maturity is bundled with other terms such as collateral and covenants; lending relationships influence this bundle and its monitoring-versus-bargaining trade-offs (Bharath et al., 2011).

SEW is not monolithic. Following the family-business literature, we distinguish three dimensions (Berrone et al., 2012). Control (F) captures the family's ability to influence decisions through voting rights, governance involvement, and managerial positions. Identity (I) captures the extent to which the firm publicly embodies the family name and reputation (e.g., eponymy and sustained family-brand signaling). Emotional attachment (E) captures legacy- and stewardship-oriented affective ties that intensify continuity motives. Empirically, Identity is captured by eponymy and family-name signaling in leadership narratives, whereas Attachment is captured by legacy/continuity language in those narratives; Supplementary Appendix B reports validation exercises (manual coding, placebo sections, and lead–lag tests) supporting construct validity. These dimensions imply distinct mechanisms and, critically, distinct financing margins in which they are most likely to appear. Because managerial narratives can also reflect strategic disclosure and impression management, as well as contemporaneous financing conditions, we treat text-based SEW proxies as potentially endogenous signals and rely on multiple validation and placebo tests (Supplementary Appendix B) to support interpretation.

Importantly, each mechanism admits plausible counter-arguments—especially for debt maturity. From a lender's perspective, some family firms may be perceived as more opaque or prone to entrenchment, tunneling, or delayed restructuring (Chen et al., 2014), which can make creditors prefer shorter maturities that allow tighter monitoring and more frequent renegotiation. Likewise, strong attachment could be interpreted as rigidity that raises expected renegotiation costs. Therefore, whether identity and attachment are associated with longer maturities depends on how these borrower preferences interact with lender beliefs, relationship strength, and institutional constraints.

France provides a relevant setting to adjudicate among these competing channels. Ownership is relatively concentrated and control can be reinforced through governance structures, increasing the salience of non-dilutive financing for controlling families. At the same time, bank-oriented finance and relationship banking can support longer maturities when reputational concerns and information advantages are credible (Sraer and Thesmar, 2007). Finally, major stress regimes—COVID-19 and the 2022–2023 monetary tightening—raise refinancing risk and make maturity choices particularly consequential, allowing us to test whether SEW-related motives are amplified when rollover risk is high.

2.3. Leverage margin: family control and capital structure (H1)

Family control is the SEW dimension most directly implicated in the leverage decision because it concerns the preservation of voting power, strategic discretion, and dynastic continuity. External equity can dilute control and introduce outside influence, whereas debt can finance growth without changing ownership shares. This control-preservation logic predicts a substitution toward debt when families value discretion and transgenerational control (Gómez-Mejía et al., 2007; Miller and Le Breton-Miller, 2005).

However, higher leverage can also increase exposure to creditor monitoring, covenant pressure, and distress costs. In incomplete-contracting settings, debt reallocates control rights to creditors in downside states, which may conflict with families' desire for discretion (Aghion and Bolton, 1992; Hart and Moore, 1994). Moreover, relationship lending can both alleviate information frictions and create an informational monopoly that increases banks' bargaining power (Sharpe, 1990; Rajan, 1992; Boot, 2000). Our directional expectation is nevertheless positive on average in the French setting: concentrated control makes dilution costs salient, and repeated bank–firm interactions combined with reputational capital can lower the cost of non-dilutive debt for established family firms, making leverage an attractive control-preserving instrument.

H1. Family control is positively associated with leverage (interest-bearing debt-to-assets).

2.4. Maturity margin: identity, attachment, rollover risk, and boundary conditions (H2–H4)

Identity and emotional attachment tie the family's self-concept and legacy to the firm. These dimensions increase the salience of continuity, reputation, and stakeholder relationships and therefore shift attention from the level of borrowing to the stability of funding over time (Berrone et al., 2012). Corporate-finance research emphasizes that debt maturity is shaped by refinancing risk, information asymmetries, and renegotiation costs (Diamond, 1991; Barclay and Smith, 1995; Stohs and Mauer, 1996). Rollover risk can endogenously amplify shocks when short-term funding must be renewed in stressed markets (He and Xiong, 2012), and strategic interactions can generate a "maturity rat race" in

which firms collectively shorten maturities even when longer terms would be privately valuable (Brunnermeier and Oehmke, 2013). Longer maturity reduces rollover exposure and can protect long-horizon strategies by lowering the likelihood that short-term credit stress forces disruptive renegotiation (Guedes and Opler, 1996; Diamond and He, 2014). Recent studies in the family-firm literature document systematic differences in debt-maturity choices and show that governance involvement and SEW-related factors can shape maturity structure (Díaz-Díaz et al., 2016; Domenichelli and Bettin, 2021; Ginesti et al., 2023; Feito-Ruiz and Menéndez-Requejo, 2022).

Identity and attachment also operate through distinct, complementary channels. Identity is outward-facing: when the firm bears the family name and reputation, refinancing distress becomes more visible and potentially more damaging, strengthening incentives to lock in long-term funding and to cultivate stable lender relationships. Attachment is inward-facing: strong legacy ties can increase the family's willingness to bear private costs to protect continuity, including the pursuit of more stable financing structures and precautionary buffers. Together, these channels suggest that identity and attachment should be expressed primarily through maturity rather than mechanically through higher leverage.

At the same time, lender-side countervailing forces remain plausible. If banks associate stronger family identity or attachment with opacity or entrenchment, they may prefer shorter maturities to preserve discipline. In a relationship-banking environment, however, repeated interactions and reputational concerns can reduce informational frictions and facilitate longer maturities when borrower–lender trust is strong (Berger and Udell, 1995; Boot, 2000). We therefore test whether, on average, identity and attachment are associated with a higher long-term debt share, conditional on fundamentals and fixed effects.

H2. Family firms with stronger identity and emotional attachment exhibit longer debt maturities (a higher long-term debt share).

Stress periods heighten rollover risk and make maturity choice especially consequential. During credit tightening, firms that rely heavily on short-term funding face more frequent refinancing and renegotiation, increasing exposure to covenant pressure and the risk of control-threatening recapitalizations. If emotional attachment strengthens relational contracting with core lenders and motivates proactive rollover-risk management, then more attached family firms should maintain longer maturities precisely when refinancing risk rises. Because crisis policies can also mechanically affect observed maturities—most notably the COVID-era state-guaranteed loan program (PGE)—we pre-specify safeguards in both theory and design: we absorb industry×year fixed effects, we replicate estimates excluding 2020–2021, and we test that the attachment–maturity relation holds outside the policy window.

H3. Emotional attachment mitigates crisis-induced shortening of debt maturity: during stress periods, more attached family firms maintain longer maturities.

Innovation provides a further boundary condition. Long-term orientation has been conceptualized and measured in family-business research and is linked to strategic persistence and entrepreneurial outcomes (Lumpkin et al., 2010; Brigham et al., 2014). Relationship lending also matters for innovation: disruptions to lending relationships can reduce innovative activity and trigger inventor mobility (Hombert and Matray, 2017). Related evidence indicates that family identity considerations can shape innovation inputs such as R&D spending (Brinkerink and Bammens, 2018). Innovative projects have distant and uncertain payoffs, increasing the continuation value of stable funding. Classic corporate-finance theory highlights that debt can generate underinvestment in growth opportunities when cash flows are back-loaded (debt overhang; Myers, 1977), making the design of long-horizon financing especially consequential for innovative firms. Long-horizon financing can protect exploration by reducing the probability that short-term setbacks trigger refinancing pressure that forces premature cuts to R&D and intangible investment (Manso, 2011). Recent theory also links maturity choice directly to innovation incentives by modeling long-term debt as a commitment device under incomplete contracting (Mitkov, 2024). At the same time, a discipline–stability trade-off remains: longer maturity can stabilize funding but may also weaken short-horizon discipline, making the net effect an empirical question.

H4. SEW (identity and emotional attachment) and innovation are complements: the maturity-increasing effect of SEW is stronger when innovation intensity is higher.

Taken together, these arguments yield a clear mapping from SEW dimensions to financing margins. Control is expected to shape leverage (H1), whereas identity and attachment are expected to shape debt maturity and its resilience under refinancing risk, particularly when investment horizons are long (H2–H4). The next section describes the data, measurement, and identification strategies used to test these predictions.

3. Data and methodology

3.1. Institutional setting: financing and family control in France

France is a bank-oriented financial system in which relationship lending and concentrated ownership remain important for many mid-sized firms. These features are relevant for SEW-driven financing because they jointly affect (i) the feasibility of substituting debt for equity without relinquishing control and (ii) the availability of long-term credit through durable bank-firm relationships. In addition, French corporate governance allows controlling shareholders to preserve influence through ownership structures (e.g., holding companies and pyramids) and, in

listed settings, through voting-right arrangements. Together, these mechanisms make France an informative context to test whether control, identity, and attachment map to different financing margins.

A key feature of our setting is the policy environment during major shocks. In 2020–2021, French firms had broad access to liquidity support, including state-guaranteed bank loans (Prêt garanti par l'État, PGE) and related deferral measures. These instruments can mechanically affect observed debt maturity (e.g., through standardized maturities and grace periods) and could therefore confound crisis-period maturity patterns. Our baseline maturity specifications mitigate this concern by absorbing industry×year fixed effects, which capture sector-level credit supply conditions and broad policy shocks, and by focusing on within-industry differential responses to SEW. Importantly, Table 5's interaction design isolates differential slopes during COVID-19 and the 2022–2023 monetary tightening, while the baseline (non-crisis) effect of attachment on maturity remains positive, alleviating concerns that the main results are driven solely by PGE/COVID-related debt programs. A clean exclusion check dropping 2020–2021 is summarized in Supplementary Appendix C, Table C7.

Table 5

Attachment and stress periods (H3). *Dependent variable: Debt maturity (Long-term financial debt / total financial debt)*

Variables	(1) Family - baseline	(2) + E×COVID	(3) + E×Hike	(4) + both shocks	(5) Full - both shocks
SEW identity (I)	0.028***	0.027***	0.028***	0.027***	0.020**
	(0.010)	*(0.010)*	*(0.010)*	*(0.010)*	*(0.008)*
SEW attachment (E), lagged	0.022**	0.018**	0.019**	0.016*	0.012*
	(0.009)	*(0.009)*	*(0.009)*	*(0.009)*	*(0.007)*
E × COVID (2020–2021)		0.030**		0.028**	0.020**
		(0.012)		*(0.012)*	*(0.010)*
E × Rate hike (2022–2023)			0.025**	0.023**	0.018*
			(0.011)	*(0.011)*	*(0.009)*
Leverage	0.115***	0.112***	0.114***	0.111***	0.088***
	(0.039)	*(0.039)*	*(0.039)*	*(0.039)*	*(0.030)*
Profitability (ROA)	-0.054**	-0.052**	-0.053**	-0.051**	-0.043**
	(0.024)	*(0.024)*	*(0.024)*	*(0.024)*	*(0.020)*
Size (ln assets)	0.014***	0.014***	0.014***	0.014***	0.012***
	(0.004)	*(0.004)*	*(0.004)*	*(0.004)*	*(0.003)*
Tangibility (PPE/assets)	0.069**	0.068**	0.069**	0.068**	0.060**
	(0.028)	*(0.028)*	*(0.028)*	*(0.028)*	*(0.022)*
Growth (Δ ln assets)	-0.011	-0.011	-0.011	-0.011	-0.009
	(0.008)	*(0.008)*	*(0.008)*	*(0.008)*	*(0.006)*
Innovation intensity	0.040***	0.040***	0.040***	0.040***	0.035***
	(0.015)	*(0.015)*	*(0.015)*	*(0.015)*	*(0.012)*
Firm FE	Yes	Yes	Yes	Yes	Yes
Industry×Year FE	Yes	Yes	Yes	Yes	Yes
Obs.	1260	1260	1260	1260	2520
R^2	0.630	0.640	0.640	0.650	0.600
Within R^2	0.090	0.100	0.100	0.110	0.070

Notes: COVID and rate-hike dummies are absorbed at the level by industry×year fixed effects; coefficients identify differential effects across firms. Attachment is lagged, so the estimation window starts in 2011. Standard errors are clustered by firm and reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

3.2. Data sources and sample construction

3.2.1. Data sources

We assemble the dataset by linking multiple sources at the firm-year level using the SIREN identifier. Financial statements, balance-sheet items, and ownership information are drawn from ORBIS/DIANE (Bureau van Dijk) for 2000–2024. Governance and legal events (e.g., executive appointments, capital changes, insolvency notices) are collected from Pappers and BODACC. Innovation activity is measured from R&D expenditures in ORBIS/DIANE and patent data from INPI and EPO/PATSTAT, complemented by WIPO PATENTSCOPE where needed. Text-based SEW measures are built from French annual reports and management narratives; because systematic text availability begins in 2010 for the firms in our matched panel, the main estimation sample is 2010–2024.

Sample construction proceeds in three steps. First, we restrict the population to non-financial firms and apply standard filters to remove regulated sectors and observations with missing or implausible balance-sheet items. Second, we construct family and non-family groups and implement propensity-score matching to ensure comparability on core firm characteristics. Third, we merge annual-report narratives and retain only firms for which the required text sections can be collected and reliably linked across years. These steps yield a balanced matched panel of 180 firms (90 family and 90 non-family) observed over 2010–2024 (2,700 firm-year observations). Supplementary Appendix B, Figure B1 summarizes the sample construction flow and reports diagnostics comparing firms with versus without text coverage to assess potential selection. Selection diagnostics and selection-correction models (IPW-FE and Heckman) indicate that restricting to firms with narrative coverage does not drive the key coefficients (Supplementary Appendix C, Table C1).

3.2.2. Sample definition: family and non-family firms

Following prior international work, we classify a firm as family-controlled if (i) an individual or family group is the ultimate owner with at least 25% of voting rights, or (ii) a family blockholder holds at least 10% of voting rights and at least one family member serves as CEO or chair. We conduct robustness checks using alternative voting-right thresholds (20% and 33%). Non-family firms are those that satisfy none of these conditions.

To strengthen comparability, we construct a matched control group using propensity score matching (PSM). We estimate a logit model of family status on size, profitability, tangibility, growth, firm age, and industry (NAF 2-digit) and match each family firm to one or three non-family firms within a caliper of 0.01 under common support (Rosenbaum and Rubin, 1983). Balance diagnostics indicate strong covariate balance after matching (standardized mean differences below conventional thresholds).

3.3. Variables and measurement

3.3.1. Dependent variables

We study two corporate-finance outcomes. Leverage is defined as total interest-bearing debt divided by total assets. Debt maturity is measured as long-term financial debt divided by total financial debt (LT/TDebt). These measures are standard in capital-structure and maturity research (Barclay and Smith, 1995; Stohs and Mauer, 1996; Frank and Goyal, 2009). To avoid mechanical breaks due to IFRS 16 lease capitalization after 2019, we document whether lease liabilities enter the debt definition and provide robustness checks excluding lease-related debt.

Debt maturity is long-term financial debt divided by total financial debt. The ratio is defined when total debt > 0; zero-debt observations are excluded from maturity regressions but retained for leverage analyses. We keep LT = 0 cases so maturity can equal 0 when only short-term debt is used. Continuous variables are winsorized within year (p1–p99). Robustness uses the short-term share, log(LT/ST) when positive, and fractional-response models (Papke & Wooldridge, 1996). Appendix Table A1 consolidates the exact definitions of debt, leverage, and maturity used throughout the paper (including the treatment of leases and zero-debt observations). These maturity results therefore describe the composition of financial debt conditional on using debt. As robustness, we re-estimate using LT financial debt/assets and selection-adjusted specifications (Supplementary Appendix C, Table C4).

3.3.2. SEW dimensions

We operationalize SEW along three dimensions aligned with the family-business literature (Berrone et al., 2012). Family control (F) is an index that aggregates three components: family ownership (FO, voting-right share held by the family), family governance involvement (FG, family presence on the board or top management team), and family management (FM, an indicator for a family CEO/chair). We standardize each component within year and compute the control index as the average of standardized FO, FG, and FM.

Identity (I) is captured through eponymy and family-brand signaling. We code whether the legal name, trade name, or prominent branding contains the family name and complement this indicator with frequency-based cues from annual reports (e.g., repeated family-name references in corporate identity statements). The identity score is standardized within year to facilitate interpretation across time.

Because the eponymy component is largely time-invariant, identification in our fixed-effects models comes primarily from within-firm variation in the narrative intensity component (i.e., frequency-based family-name cues) and from the small set of cases in which corporate naming/branding changes over time. Appendix Table A2 documents non-trivial within-firm variation in the Identity proxy, supporting its use in

firm fixed-effects specifications. Accordingly, in fixed-effects specifications the Identity coefficient should be interpreted as the effect of within-firm changes in identity salience/signaling, rather than a purely time-invariant identity attribute.

Emotional attachment (E) is derived from leadership narratives using a French lexicon capturing legacy/continuity/stewardship language (T^{+}) net of rupture/detachment language (T^{-}), scaled by document length, winsorized within year, and standardized. To reduce simultaneity and reflect that lender perceptions adjust with a lag, maturity specifications use E lagged by one year.

Textual measures of identity and attachment are built from the leadership narrative most directly expressing family goals and legacy concerns. For listed firms, we collect the Universal Registration Document (URD) and annual report sections typically titled “Message du Président/Chair’s Statement,” “Lettre aux actionnaires,” and the “Rapport de gestion.” For large private firms with available narrative filings, we use management reports filed with registries or disclosed on company websites. Documents are downloaded in PDF/HTML format, converted to raw text, and linked to firm-year observations using SIREN identifiers and manual checks when company names change. We remove boilerplate tables, duplicated disclosures, and accounting footnotes to isolate the narrative voice most relevant to socioemotional objectives.

In brief, we implement a standardized French-language text pipeline that is fully documented in Supplementary Appendix B: we collect leadership narratives, convert them to plain text, clean and lemmatize while preserving negations, compute dictionary term frequencies normalized by document length (per 1,000 words), and then winsorize (p1–p99) and standardize scores within year. For reporting, we rescale the resulting SEW indices to [0,1] (Table 1); results are unchanged if we use within-year z-scores instead.

Table 1
Descriptive statistics and SEW measures.

Panel A. Summary statistics (full sample).						
Variable	**Mean**	**Median**	**SD**	**Min**	**Max**	**N**
Leverage	0.368	0.359	0.107	0.170	0.710	2700
Debt maturity	0.243	0.260	0.118	0.051	0.582	2700
Profitability	0.031	0.028	0.019	0.000	0.116	2700
Size	14.438	14.412	0.582	12.595	16.772	2700
Tangibility	0.142	0.097	0.118	0.010	0.548	2700
Growth	-0.001	-0.001	0.150	-0.489	0.500	2700
Innovation intensity	0.015	0.008	0.021	0.000	0.133	2700
Panel B. Differences in means by family status.						
Variable	**Family Mean**	**Family SD**	**Non-family Mean**	**Non-family SD**	**Difference**	**t-stat**
Leverage	0.382	0.114	0.354	0.098	0.028	6.757
Debt maturity	0.236	0.118	0.251	0.117	-0.015	-3.363
Profitability	0.031	0.019	0.031	0.019	-0.000	-0.391
Size	14.414	0.593	14.461	0.570	-0.047	-2.102
Tangibility	0.140	0.116	0.143	0.119	-0.003	-0.612
Growth	-0.002	0.151	-0.001	0.150	-0.000	-0.064
Innovation intensity	0.016	0.021	0.015	0.020	0.001	1.832
Panel C. SEW indicators (family firms).						
Variable	**Mean**	**Median**	**SD**	**Min**	**Max**	**N**
SEW control (F)	0.640	0.666	0.193	0.130	1.000	1350
SEW identity (I)	0.496	0.490	0.140	0.076	0.968	1350
SEW attachment (E)	0.498	0.493	0.140	0.080	0.972	1350
Family ownership	0.505	0.511	0.292	0.001	0.998	1350
Family governance involvement	0.553	0.554	0.142	0.301	0.799	1350
Family management	0.787	1.000	0.409	0.000	1.000	1350
Panel D. Proportions of binary indicators.						
Indicator	**Proportion**					
Identity dummy	0.461					
Family CEO/chair dummy	0.787					
COVID (2020–2021)	0.133					
Rate-hike (2022–2023)	0.133					

Notes: Panel A reports summary statistics for the full sample. Panel B reports differences in means between family and matched non-family firms; t-statistics are from two-sample tests. Panel C reports SEW components in the family-firm subsample. Panel D reports proportions. Leverage = interest-bearing debt/assets; Debt maturity = long-term financial debt/total financial debt (defined when total debt > 0; LT = 0 retained). Profitability = EBIT/assets; Size = ln(total assets); Tangibility = PPE/assets; Growth = Δ ln assets; Innovation intensity = R&D/assets. SEW indices are scaled to [0,1]. Continuous variables are winsorized within year (p1-p99). Sample: 2010–2024.

In brief, the text-based measures follow five steps: (1) collect leadership narratives for each firm-year; (2) convert PDF/HTML filings to plain text and link to SIREN; (3) clean, tokenize, and lemmatize French text while preserving negations; (4) compute term frequencies normalized by document length; and (5) winsorize and standardize scores within year (then lag Attachment by one year in maturity regressions).

Following dictionary-based SEW measurement (Berrone et al., 2012; Zellweger et al., 2012), we compute E_raw = ($T^+ - T^-$)/Words × 1,000 and use its one-year lag in regressions. Identity combines eponymy (family surname in the legal/commercial name) with family-name signaling in narratives (frequency of surname references), standardized within year. All SEW indices are scaled to the [0,1] interval for interpretability; results are unchanged when using z-scores.

We validate the text measures via (i) manual coding of a stratified narrative subsample (two coders; high agreement), (ii) placebo sections (accounting notes/statutory disclosures), (iii) convergent patterns with relational-capital proxies (e.g., lender concentration), and (iv) alternative dictionaries/parsers. Supplementary Appendix B details the protocol and diagnostics. Appendix Table A2 provides a compact overview of these validation and falsification exercises and their interpretation.

Manual coding and placebo tests support construct validity. In an independently coded subset of leadership narratives, the automated SEW identity and attachment scores correlate strongly with coder assessments (Pearson r = 0.68 and 0.72), with substantial agreement (Cohen's κ = 0.76 and 0.78). In contrast, placebo scores computed from SEW-neutral accounting-note sections are not predictive of debt maturity (p = 0.61 and 0.58; Supplementary Appendix B, Table B2).

3.3.3. Innovation, shocks, and controls

Innovation intensity is measured as R&D expenditure divided by total assets when disclosed; when R&D is unavailable, we use an intangibles-to-assets proxy validated in prior work and corroborate results using patent-based indicators. We define a high-innovation indicator equal to one if innovation intensity exceeds the yearly median. To study stress periods, we define a COVID-19 dummy equal to one in 2020–2021 and a monetary-tightening dummy equal to one in 2022–2023.

Control variables follow the capital-structure literature (Frank and Goyal, 2009): profitability (EBIT/assets), firm size (log assets), tangibility (PPE/assets), and growth (annual change in log assets). In maturity models we additionally control for leverage to separate maturity choice from leverage levels.

3.4. Empirical strategy and identification

3.4.1. Baseline fixed-effects models

We begin with within-firm estimators that absorb time-invariant unobservables. For leverage (H1), we estimate two-way fixed-effects models with firm and year effects:

$$Leverage_{it} = \beta_1 F_{it} + \gamma' X_{it} + \alpha_i + \tau_t + \epsilon_{it}.$$

1

For debt maturity (H2-H4), we absorb industry×year fixed effects to net out sector-specific credit shocks that vary over time, while retaining firm fixed effects:

$$Maturity_{it} = \theta_1 I_{it} + \theta_2 E_{i,t-1} + \delta' X_{it} + \alpha_i + \psi_{industry \times year} + u_{it}.$$

2

3.4.2. Crisis moderation and innovation complementarity

To test H3, we interact lagged attachment with crisis indicators. Because industry×year effects absorb the level effect of economy-wide shocks, identification comes from differential responses of more versus less attached firms within the same industry-year:

$$Maturity_{it} = \theta_1 I_{it} + \theta_2 E_{i,t-1} + \theta_3 (E_{i,t-1} \times COVID_t) + \theta_4 (E_{i,t-1} \times Hike_t) + \delta' X_{it} + \alpha_i + \psi_{industry \times year} + u_{it}.$$

3

To test H4, we interact identity and attachment with innovation intensity, using both continuous and high-innovation specifications:

$$Maturity_{it} = \theta_1 I_{it} + \theta_2 E_{i,t-1} + \theta_7 Innov_{it} + \theta_5 (E_{i,t-1} \times Innov_{it}) + \theta_6 (I_{it} \times Innov_{it}) + \delta' X_{it} + \alpha_i + \psi_{industry \times year} + u_{it}.$$

4

3.4.3. Dynamic specification: System-GMM

Leverage is persistent and may be jointly determined with ownership and performance. As a dynamic robustness check, we estimate a two-step System-GMM model with lagged leverage and lagged regressors, instrumented with deeper lags and a collapsed instrument set to avoid

proliferation (Arellano and Bond, 1991; Blundell and Bond, 1998; Roodman, 2009). We report AR(1)/AR(2) tests, Hansen tests of overidentifying restrictions, and instrument counts. As an additional sensitivity check, Supplementary Appendix C, Table C8 further restricts the lag depth to reduce the instrument count.

$$Leverage_{it} = \rho\ Leverage_{i,t-1} + \beta_1 F_{it} + \gamma'\ X_{it} + \alpha_i + \tau_t + \epsilon_{it}.$$

5

3.5. Quasi-experimental designs

3.5.1. Succession-based DiD and event studies

To strengthen causal interpretation, we exploit leadership successions as discrete governance events that can shift SEW salience and financing preferences. We define a treatment indicator for firm-years following a succession and compare treated firms to a matched set of never-treated controls using a DiD design with firm and industry×year fixed effects. We complement DiD with event-study specifications that estimate dynamic effects in a ± 4-year window and test for pre-trends. In the family panel, we identify multiple such successions between 2010 and 2024.

Because successions are staggered, two-way fixed effects (TWFE) difference-in-differences (DiD) can be biased under heterogeneous effects (Goodman-Bacon, 2021). We therefore report interaction-weighted event studies (Sun & Abraham, 2021) and group-time average treatment effects (Callaway & Sant'Anna, 2021). Successions are CEO/chair transitions salient to SEW (family-to-family or family-to-nonfamily), dated using Pappers/BODACC filings; sensitivity checks exclude transitions coinciding with distress signals.

Operationally, we date successions using Pappers/BODACC filings and focus on CEO/chair transitions that are salient to family influence. We record whether the transition keeps leadership within the family (family-to-family) or brings in a nonfamily leader (family-to-nonfamily), as these cases can reflect different shifts in SEW salience (dynastic renewal versus professionalization). While successions may coincide with other strategic changes, our event-study design directly tests for pre-trends, and our sensitivity checks exclude transitions that overlap with distress signals or major legal events likely to trigger financing renegotiations.

Treatment construction and multiple events. We define the event year as the first fiscal year in which the incoming CEO/chair is in office at the annual-report date (based on Pappers/BODACC filing dates); Post_it = 1 for all years t ≥ event year. Firms with no succession during 2010–2024 serve as never-treated controls. Because some firms experience multiple successions, our baseline DiD and event-study analyses use the first observed succession per firm to define treatment timing (subsequent successions do not re-set event time and are absorbed into the post period). Appendix Table A3 summarizes the number of successions, the number of treated firms, and the breakdown by transition type (family-to-family vs family-to-nonfamily). Robustness checks (reported in the Supplementary Material) (i) exclude multi-event firms and (ii) estimate effects separately for family-to-family and family-to-nonfamily transitions.

3.5.2. Matching and matched DiD

We combine PSM with DiD by first matching treated and control firms on pre-event characteristics and then estimating the DiD on the matched sample. This approach reduces imbalance in observables while retaining within-firm identification. We report balance statistics and graphical diagnostics for the matching stage.

4. Empirical results

Reader guide. H1 is tested in Table 3 (baseline firm and year fixed effects) and Table 8 (dynamic System-GMM). H2 is tested in Table 4 (maturity models with firm and industry×year fixed effects). H3 is tested in Table 5 (stress interactions), with an exclusion check for 2020–2021 and additional robustness in the Supplementary Material. H4 is tested in Table 6 (SEW×innovation interactions), with alternative innovation measures in the Supplementary Material. Mechanism and portfolio-coherence evidence appears in Table 7 and in Supplementary Appendix C. Quasi-experimental evidence around leadership successions is reported in Tables 9–10, and matching-based comparisons in Tables 11–13.

Table 3

Family control and leverage (H1). *Dependent variable: Leverage (Interest-bearing debt / assets)*

Variables	(1) Full - controls	(2) Family - controls	(3) Non-family - controls	(4) Family - + SEW (F,I,E)	(5) Full - + SEW (F,I,E)
SEW control (F)				0.018***	0.010**
				(0.006)	*(0.005)*
SEW identity (I)				0.002	0.001
				(0.004)	*(0.003)*
SEW attachment (E, t-1)				0.001	0.000
				(0.003)	*(0.003)*
Profitability (ROA)	-0.120***	-0.145***	-0.098**	-0.142***	-0.121***
	(0.040)	*(0.055)*	*(0.048)*	*(0.055)*	*(0.040)*
Size (ln assets)	0.012***	0.014***	0.010***	0.014***	0.012***
	(0.003)	*(0.004)*	*(0.004)*	*(0.004)*	*(0.003)*
Tangibility (PPE/assets)	0.085***	0.092***	0.073**	0.091***	0.086***
	(0.025)	*(0.033)*	*(0.032)*	*(0.033)*	*(0.025)*
Growth (Δ ln assets)	-0.018*	-0.020*	-0.015	-0.019*	-0.018*
	(0.010)	*(0.014)*	*(0.013)*	*(0.014)*	*(0.010)*
Firm FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Obs.	2700	1350	1350	1260	2520
R^2	0.590	0.570	0.550	0.580	0.590
Within R^2	0.050	0.060	0.040	0.060	0.050

Notes: Standard errors are clustered at the firm level. Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.10. Specifications including lagged attachment start in 2011, so sample sizes vary across columns.

Table 4

Identity, attachment, and debt maturity (H2). *Dependent variable: Debt maturity (Long-term financial debt / total financial debt)*

Variables	(1) Family - controls	(2) + Identity	(3) + Attachment	(4) + I & E + F	(5) Full - + I & E + F
SEW control (F)				0.003	0.002
				(0.005)	*(0.004)*
SEW identity (I)		0.030***		0.028***	0.020**
		(0.010)		*(0.010)*	*(0.008)*
SEW attachment (E), lagged			0.025***	0.022**	0.016**
			(0.009)	*(0.009)*	*(0.007)*
Leverage	0.120***	0.118***	0.121***	0.115***	0.090***
	(0.040)	*(0.040)*	*(0.040)*	*(0.039)*	*(0.030)*
Profitability (ROA)	-0.060**	-0.058**	-0.055**	-0.054**	-0.045**
	(0.025)	*(0.025)*	*(0.024)*	*(0.024)*	*(0.020)*
Size (ln assets)	0.015***	0.014***	0.015***	0.014***	0.012***
	(0.004)	*(0.004)*	*(0.004)*	*(0.004)*	*(0.003)*
Tangibility (PPE/assets)	0.070**	0.069**	0.071**	0.069**	0.060**
	(0.028)	*(0.028)*	*(0.028)*	*(0.028)*	*(0.022)*
Growth (Δ ln assets)	-0.010	-0.010	-0.011	-0.011	-0.009
	(0.008)	*(0.008)*	*(0.008)*	*(0.008)*	*(0.006)*
Innovation intensity	0.040***	0.039**	0.041***	0.040***	0.035***
	(0.015)	*(0.015)*	*(0.015)*	*(0.015)*	*(0.012)*
Firm FE	Yes	Yes	Yes	Yes	Yes
Industry×Year FE	Yes	Yes	Yes	Yes	Yes
Obs.	1350	1350	1260	1260	2520
R^2	0.610	0.620	0.620	0.630	0.580
Within R^2	0.070	0.080	0.080	0.090	0.060

Notes: Industry×year fixed effects absorb sector-specific credit conditions. Standard errors are clustered at the firm level. Columns including lagged attachment start in 2011, so sample sizes differ slightly. Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.10.

Table 6

SEW-innovation complementarity (H4). *Dependent variable: Debt maturity (Long-term financial debt / total financial debt)*

Variables	(1) Family - baseline	(2) + Innov	(3) + E×Innov	(4) + I×Innov	(5) Full - interactions
SEW identity (I)	0.027***	0.025**	0.024**	0.022**	0.017**
	(0.010)	*(0.010)*	*(0.010)*	*(0.010)*	*(0.008)*
SEW attachment (E), lagged	0.016*	0.015*	0.012	0.013	0.010
	(0.009)	*(0.009)*	*(0.009)*	*(0.009)*	*(0.007)*
Innovation intensity	0.040***	0.035**	0.028**	0.030**	0.026**
	(0.015)	*(0.015)*	*(0.014)*	*(0.014)*	*(0.012)*
E × Innovation			0.060***		0.045**
			(0.020)		*(0.018)*
I × Innovation				0.050***	0.038**
				(0.018)	*(0.016)*
Leverage	0.111***	0.110***	0.109***	0.109***	0.087***
	(0.039)	*(0.039)*	*(0.039)*	*(0.039)*	*(0.030)*
Profitability (ROA)	-0.051**	-0.050**	-0.049**	-0.049**	-0.042**
	(0.024)	*(0.024)*	*(0.024)*	*(0.024)*	*(0.020)*
Size (ln assets)	0.014***	0.014***	0.014***	0.014***	0.012***
	(0.004)	*(0.004)*	*(0.004)*	*(0.004)*	*(0.003)*
Tangibility (PPE/assets)	0.068**	0.068**	0.067**	0.067**	0.060**
	(0.028)	*(0.028)*	*(0.028)*	*(0.028)*	*(0.022)*
Growth (Δ ln assets)	-0.011	-0.011	-0.011	-0.011	-0.009
	(0.008)	*(0.008)*	*(0.008)*	*(0.008)*	*(0.006)*
Firm FE	Yes	Yes	Yes	Yes	Yes
Industry×Year FE	Yes	Yes	Yes	Yes	Yes
Obs.	1260	1260	1260	1260	2520
R^2	0.650	0.660	0.670	0.670	0.620
Within R^2	0.110	0.120	0.140	0.140	0.090

Notes: Interaction terms test whether SEW and innovation are complements in shaping maturity. Standard errors clustered by firm. Attachment is lagged, so the estimation window starts in 2011. Standard errors are in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.10.

Table 7

Portfolio coherence: relational lending, payout, and liquidity. *Dependent variable: Various (see columns)*

Variables	(1) Bank concentration	(2) Payout ratio	(3) Cash slack
SEW control (F)	0.020**	0.060***	0.010**
	(0.008)	*(0.020)*	*(0.004)*
SEW identity (I)	0.015**	0.010	0.008*
	(0.007)	*(0.018)*	*(0.004)*
SEW attachment (E), lagged	0.030***	-0.025**	0.020***
	(0.010)	*(0.012)*	*(0.005)*
Profitability (ROA)	0.005	0.120***	0.030**
	(0.006)	*(0.040)*	*(0.012)*
Size (ln assets)	-0.010***	0.020**	-0.015***
	(0.003)	*(0.010)*	*(0.004)*
Tangibility (PPE/assets)	0.012	-0.010	-0.020**
	(0.010)	*(0.015)*	*(0.008)*
Growth (Δ ln assets)	-0.005	-0.030**	0.010
	(0.004)	*(0.012)*	*(0.006)*
Firm FE	Yes	Yes	Yes
Industry×Year FE	Yes	Yes	Yes
Obs.	1260	1260	1260
R^2	0.410	0.350	0.440
Within R^2	0.060	0.040	0.070

Notes: Bank concentration is the HHI of lender debt shares ($\Sigma\ s_ijt^2$); when unavailable, we use the top-1 lender share. Payout ratio = dividends/net income (0 when income ≤ 0; capped at 1.25). Cash slack = cash/assets. Firm and industry×year FE included; SE clustered by firm. Standard errors are in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.10.

Table 8

Dynamic model (System-GMM) for leverage. *Dependent variable: Leverage (Interest-bearing debt / assets)*

Variables	(1) Full sample	(2) Family sample
L1 leverage	0.620***	0.650***
	(0.050)	*(0.060)*
SEW control (F)	0.012**	0.020***
	(0.005)	*(0.007)*
Profitability (ROA)	-0.090**	-0.110**
	(0.040)	*(0.055)*
Size (ln assets)	0.010***	0.012***
	(0.003)	*(0.004)*
Tangibility (PPE/assets)	0.070***	0.075**
	(0.025)	*(0.033)*
Growth (Δ ln assets)	-0.015	-0.018
	(0.010)	*(0.014)*
Firms	180	90
Obs.	2700	1350
Instruments	145	78
AR(1) p-value	0.000	0.000
AR(2) p-value	0.240	0.310
Hansen p-value	0.210	0.190

Notes: Two-step System-GMM with Windmeijer-corrected SE. Leverage and control are treated as endogenous and instrumented with deeper lags; instruments are collapsed (Roodman, 2009). AR tests and Hansen test reported; year FE included. Standard errors are clustered by firm and reported in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.10.

Table 9

Leadership succession and debt maturity: Difference-in-differences estimates (baseline TWFE; staggered DiD results reported in Table 10 **and Appendix).** *Dependent variable: Debt maturity (col 1) and leverage (col 2)*

Variables	(1) Debt maturity	(2) Leverage
Post-succession	0.020**	-0.005
	(0.008)	*(0.004)*
Post-succession × Attachment	0.015***	0.002
	(0.006)	*(0.003)*
Post-succession × Identity	0.012**	0.001
	(0.005)	*(0.003)*
Firm FE	Yes	Yes
Industry×Year FE	Yes	Yes
Obs.	980	980
R^2	0.660	0.600
Controls	Yes	Yes

Notes: Treatment is a CEO/chair succession event dated from Pappers/BODACC filings. Baseline analyses use the first observed succession per firm to define treatment timing (event year = first fiscal year with the new leader in place); Post_it = 1 for firm-years t > = event year. Firms with no succession during 2010–2024 serve as never-treated controls. Appendix Table A3 reports event counts, transition types (family-to-family vs family-to-nonfamily), and robustness samples excluding multi-event firms. Standard errors are clustered at the firm level. Standard errors are in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.10.

Table 10

Event-study around succession using the Sun and Abraham (2021**) interaction-weighted estimator (dependent variable: debt maturity).** *Notes: Coefficients are relative to the omitted pre-event year (k = -1), which is the normalization category and is not reported in the table. Standard errors are clustered by firm. Pre-trend coefficients (k ≤ -2) test the parallel-trends assumption. Event time is defined relative to the first observed succession per firm; subsequent successions do not re-set event time in baseline (see Appendix Table A3).*

Event time (t = k)	Coef. (Debt maturity)	Std. Err.	p-value
k=-4	-0.002	0.006	0.750
k=-3	-0.001	0.006	0.850
k=-2	0.000	0.005	0.990
k = 0	0.004	0.006	0.480
k = 1	0.010	0.006	0.100
k = 2	0.016	0.007	0.020
k = 3	0.020	0.008	0.010
k = 4	0.022	0.009	0.015

Table 11

Propensity score matching estimates (ATT). *Notes: Nearest-neighbor matching within caliper; common support imposed. ATT compares family firms to matched non-family firms.*

Outcome	ATT (Family - matched non-family)	Std. Err.	t-stat
Leverage	0.015	0.006	2.500
Debt maturity	0.028	0.010	2.800
Bank concentration	0.022	0.009	2.444
Payout ratio	-0.010	0.006	-1.667
Cash slack	0.018	0.007	2.571

Table 12

Matching balance diagnostics (standardized mean differences). *Notes: Values closer to zero indicate better balance. A common rule of thumb is SMD < 0.10 after matching.*

Covariate	SMD Before	SMD After
Size	0.35	0.04
ROA	0.22	0.03
Tangibility	0.18	0.05
Growth	0.15	0.02
Innovation	0.20	0.04
Industry dummies	0.40	0.00

Table 13

Matched difference-in-differences (family vs matched non-family). *Dependent variable: Debt maturity (col 1) and leverage (col 2)*

Variables	(1) Debt maturity	(2) Leverage
Family × Post	0.018**	0.010**
	(0.007)	*(0.005)*
Firm FE	Yes	Yes
Industry×Year FE	Yes	Yes
Obs.	1800	1800
R^2	0.630	0.590
Controls	Yes	Yes

Notes: The coefficient on Family×Post captures the differential post-period change in outcomes for family firms relative to matched non-family controls. Standard errors are clustered by firm and reported in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.10.

4.1. Descriptive statistics and correlations

Table 1 reports descriptive statistics for the main variables. Consistent with prior work on capital structure, leverage exhibits substantial cross-sectional dispersion, with a mean of 0.368 and a standard deviation of 0.107, reflecting heterogeneity in firms' financing policies and risk profiles (Rajan & Zingales, 1995; Frank & Goyal, 2009). Debt maturity also varies widely across firms, with an average long-term debt share of 0.243 (SD = 0.118), consistent with differences in refinancing needs, asset maturity, and access to long-term credit (Barclay & Smith, 1995; Stohs & Mauer, 1996).

Table 2 presents pairwise correlations among key variables. Leverage and debt maturity are strongly and positively correlated ($\rho = 0.726$), in line with evidence that firms relying more heavily on debt tend to secure longer maturities to mitigate rollover risk (Guedes & Opler, 1996). Innovation intensity, which averages 1.5% of assets (mean = 0.015; SD = 0.021), is strongly negatively correlated with leverage ($\rho = -0.612$), consistent with innovative firms relying more on equity-like financing and internal funds due to higher uncertainty and information asymmetries (Myers & Majluf, 1984; Manso, 2011).

Table 2

Correlation matrix. Notes: Correlations are computed using pairwise complete observations. *** p < 0.01, ** p < 0.05, * p < 0.10.

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1. Leverage	1.000											
2. Debt maturity	.726***	1.000										
3. Profitability	− .025	.049**	1.000									
4. Size	.032*	− .018	.208***	1.000								
5. Tangibility	.249***	.408***	.046**	− .003	1.000							
6. Growth	− .026	− .010	.051***	− .011	− .019	1.000						
7. Innovation intensity	− .612***	− .573***	− .050***	− .009	− .160***	− .010	1.000					
8. SEW control (F)	.119***	− .049**	− .324***	.173***	− .043**	− .124***	.027	1.000				
9. SEW identity (I)	.058***	− .001	− .090***	.021	.046**	− .032*	− .001	.141***	1.000			
10. SEW attachment (E)	.061***	.008	− .039**	.049**	− .006	− .034*	− .008	.177***	.054***	1.000		
11. COVID dummy	.004	− .004	− .023	.002	− .013	.020	− .001	.004	.023	.038**	1.000	
12. Rate-hike dummy	− .004	− .001	.013	− .003	.002	.028	− .007	.000	− .008	.007	− .154***	1.000

4.2. Family control and leverage (H1)

Table 3 reports the baseline leverage regressions. Consistent with H1, the SEW control index is positively associated with leverage in both the family-only and full-sample specifications with firm and year fixed effects. This finding aligns with the control-preservation view according to which debt represents a non-dilutive financing instrument for controlling families (Gómez-Mejía et al., 2007; Miller & Le Breton-Miller, 2005). Importantly, when Identity and Attachment are included alongside Control in the same specification (a “horse-race” within Table 3), the Control coefficient remains stable, while the Identity and Attachment proxies are economically small and statistically insignificant. This pattern supports our mapping argument that control-related SEW is the primary socioemotional margin associated with leverage choices, whereas identity- and attachment-related concerns operate through other financing channels rather than leverage levels (Berrone et al., 2012). This inference is unchanged under selection-adjusted estimators and stricter dynamic-instrument restrictions reported in the Supplementary Material (Supplementary Appendix C, Tables C1 and C8).

Economic magnitudes are modest in level but meaningful relative to within-firm variation. Using the dispersion of the control index reported in Table 1 (SD ≈ 0.19; interquartile range ≈ 0.26 under a normal approximation), the family-sample estimate implies that moving from the 25th to the 75th percentile of family control increases leverage by approximately 0.47 percentage points (0.26 × 0.018). Given the strong persistence of leverage documented in the capital-structure literature (Frank & Goyal, 2009), and the absorption of much of its variation by firm fixed effects, this magnitude represents a non-trivial share of within-firm variation and is comparable to the effects of typical year-to-year changes in profitability and growth. To translate into an intuitive scale, a 0.5 percentage-point change in leverage corresponds to roughly EUR 0.5 million of additional debt per EUR 100 million of assets.

Consistent with H1, the family-control index is positively associated with leverage in the family subsample. A one-standard-deviation increase in family control is therefore associated with an economically meaningful increase in leverage, holding firm fundamentals and fixed effects constant. By contrast, the effect is weaker and statistically less precise in the pooled sample, consistent with prior evidence that the leverage implications of ownership concentration differ between family and non-family firms (Anderson, Mansi, & Reeb, 2003; Sraer & Thesmar, 2007)

4.3. Identity, attachment, and debt maturity (H2)

Table 4 examines debt maturity. We absorb industry×year fixed effects to account for common credit-supply shocks at the sector level and include leverage as a control to address the joint determination of leverage and maturity, as standard in the debt-maturity literature (Barclay &

Smith, 1995; Stohs & Mauer, 1996). Consistent with H2, both Identity and lagged Attachment are positively associated with debt maturity, indicating that identity-related and affective SEW concerns translate into a preference for stable, long-horizon financing arrangements that reduce exposure to rollover risk (Guedes & Opler, 1996; Berrone et al., 2012). When the Control dimension is added to the joint (I + E) specification, its coefficient is small and statistically indistinguishable from zero, while the Identity and Attachment coefficients remain positive and significant. This pattern reinforces the interpretation that maturity choices primarily reflect identity- and attachment-related SEW, rather than control preservation per se. The dimension-to-margin mapping is reinforced by horse-race specifications including all SEW dimensions simultaneously and is robust to alternative maturity measures and fractional-response estimators (Supplementary Appendix C, Tables C2 and C4).

To gauge economic significance, consider an interquartile increase in identity or attachment. With a standard deviation of approximately 0.14 for both measures (Table 1) and an implied interquartile range of about 0.19, the family-sample estimates imply an increase in the long-term debt share of roughly 0.5 percentage points for identity (0.19 × 0.028) and 0.4 percentage points for attachment (0.19 × 0.022). These effects are economically meaningful given an average maturity ratio of about 0.24 in the sample and correspond to incremental reductions in rollover exposure rather than discrete shifts in capital-structure regimes (Guedes & Opler, 1996). Expressed differently, the implied changes amount to approximately 2–3% variation in the long-term debt share, which is modest in levels but material for firms' refinancing risk and financing stability. Because maturity is a share, a 0.5 percentage-point increase means shifting 0.5% of total financial debt from short-term to long-term; for a firm with EUR 50 million in total financial debt, this is about EUR 0.25 million.

4.4. Attachment as a buffer during stress (H3)

Table 5 tests whether emotional attachment mitigates crisis-induced maturity shortening by interacting lagged attachment with stress-period indicators. The interaction terms are positive, indicating that more attached family firms maintain longer debt maturities during the COVID-19 period (2020–2021) and during the subsequent monetary-tightening episode (2022–2023). These results are consistent with the view that emotionally attached owners prioritize continuity and draw on relational capital with core lenders to stabilize financing when refinancing risk increases (Berrone et al., 2012; Petersen & Rajan, 1994; Berger & Udell, 1995). Results are robust to alternative shock windows and to excluding fiscal years 2020–2021 to neutralize policy-driven maturity effects from state-guaranteed loans (PGE) (Supplementary Appendix C, Table C7).

The crisis interactions are also economically meaningful. In Table 5, the marginal effect of attachment on debt maturity increases by approximately 0.02–0.03 during COVID-19 and by a similar magnitude during the monetary-tightening episode. Using an interquartile shift in attachment of about 0.19 (Table 1), the incremental increase in the long-term debt share attributable to the interaction terms amounts to roughly 0.4–0.6 percentage points. Combining baseline and crisis slopes implies that highly attached firms extend debt maturity by close to one percentage point more than low-attachment firms when refinancing risk is elevated. These magnitudes are non-trivial given an average maturity ratio of around 0.24 in the sample and are consistent with crisis-period rollover-risk management rather than discrete changes in leverage policy (Guedes & Opler, 1996). In intuitive terms, a one-percentage-point higher long-term debt share corresponds to shifting EUR 1 million of debt from short-term to long-term for each EUR 100 million of total financial debt.

4.5. Complementarity with innovation (H4)

Table 6 examines whether socioemotional wealth (SEW) and innovation are complements in shaping debt-maturity choices. The interaction terms between Identity and Attachment and innovation intensity are positive, indicating that SEW is more strongly associated with maturity extension among more innovative firms. This pattern is consistent with theories emphasizing the continuation value of innovative projects and the role of financing stability in sustaining exploration under uncertainty (Manso, 2011; Mitkov, 2024). This complementarity remains when innovation is proxied by lagged R&D, high-innovation indicators, patent intensity, and an R&D-observed subsample (Supplementary Appendix C, Table C5).

Because innovation intensity is small in level (mean ≈ 1.5% of assets; Table 1), interpreting continuous interactions requires translating coefficients into economically meaningful marginal effects. We therefore complement the continuous specifications with a high-innovation indicator and compute predicted maturity profiles at representative innovation levels (p25, p50, p75, and p90). The resulting patterns indicate that the maturity-extending role of attachment is most pronounced among highly innovative firms, whereas it is economically modest at low levels of innovation. This heterogeneity is consistent with the view that long-term financing protects experimentation and shields innovative investment from short-term refinancing pressure (Manso, 2011; Mitkov, 2024).

4.6. Portfolio coherence of financial policies

Beyond leverage and debt maturity, Table 7 evaluates whether socioemotional wealth (SEW) is associated with a coherent bundle of financial policies. We examine relationship-lending intensity (bank concentration), payout policy, and cash slack. Identity and emotional attachment are positively associated with relationship lending and liquidity buffers. Specifically, Identity is associated with higher bank concentration ($\beta = 0.015$, $p < 0.05$) and higher cash slack ($\beta = 0.008$, $p < 0.10$), while lagged Attachment shows an even stronger association with bank concentration ($\beta =$

0.030, p < 0.01) and cash slack (β = 0.020, p < 0.01). These magnitudes indicate that firms with stronger identity and attachment rely more on concentrated banking relationships and precautionary liquidity, consistent with relational contracting and rollover-risk management.

By contrast, family control is primarily associated with payout behavior. Higher control is linked to higher payout ratios (β = 0.060, p < 0.01), while its association with bank concentration (β = 0.020, p < 0.05) and cash slack (β = 0.010, p < 0.05) is economically smaller. Taken together, the estimates in Table 7 support a portfolio-coherence interpretation: identity and attachment map into maturity-consistent policies that emphasize relationship lending and liquidity buffers, whereas control is more closely related to payout choices consistent with discretion and control retention.

4.7. Dynamic robustness: System-GMM

Table 8 reports System-GMM estimates for leverage. Leverage is highly persistent, as indicated by the strong and statistically significant coefficient on lagged leverage (β = 0.620, p < 0.01 in the full sample; β = 0.650, p < 0.01 in the family subsample). Consistent with a control-preservation motive, the SEW control index remains positively associated with leverage in both specifications (β = 0.012, p < 0.05 in the full sample; β = 0.020, p < 0.01 in the family sample), confirming that the control–leverage link is robust to dynamic adjustment and potential endogeneity.

Standard diagnostic tests support the validity of the System-GMM specification. The AR(1) test rejects the null of no first-order serial correlation (p = 0.000), as expected in first-differenced equations, while the AR(2) test does not indicate second-order serial correlation (p = 0.240 in the full sample; p = 0.310 in the family sample). The Hansen test of overidentifying restrictions does not reject instrument validity (p = 0.210 and p = 0.190, respectively). To mitigate instrument proliferation, we collapse the instrument matrix and restrict lag depth; the resulting instrument count remains below the number of firms in both samples.

4.8. Robustness and quasi-experimental evidence

4.8.1. Alternative definitions and measurement robustness

We conduct a comprehensive set of robustness checks to assess whether the results depend on variable definitions, measurement choices, or sample composition. First, we vary the definition of family control by changing voting-right thresholds (20%, 25%, and 33%) and by adopting alternative governance criteria, such as requiring a family CEO or chair. This addresses concerns that the results may be driven by a particular ownership cutoff or governance configuration (Anderson et al., 2003; Berrone et al., 2012). Second, we re-estimate leverage using net debt and alternative debt definitions that exclude lease liabilities to account for potential distortions introduced by IFRS 16 capitalization, following standard practice in recent capital-structure studies (Frank & Goyal, 2009). Third, we consider alternative measures of debt maturity, including the logarithm of the long-term to short-term debt ratio and indicators for long-term debt issuance, to ensure that the maturity results are not specific to a single operationalization (Barclay & Smith, 1995; Stohs & Mauer, 1996). A compact cross-design robustness summary is reported in Supplementary Table S8.

For crisis interactions, we assess sensitivity to the timing window and sectoral exposure. We redefine the COVID period using both narrower (2020 only) and broader windows (2020–2022), and we adjust the monetary-tightening period using alternative start and end dates aligned with euro-area interest-rate hike cycles. Across specifications, the interaction between emotional attachment and crisis indicators remains positive and statistically significant, indicating that the crisis-moderation effect is not driven by a particular dating choice. To further probe heterogeneity, we estimate models that allow effects to vary across broad industry groups and confirm that the results are strongest in sectors with higher refinancing needs, consistent with theories linking maturity choices to rollover risk under stress (Guedes & Opler, 1996). We also replicate the baseline maturity specification after dropping 2020–2021 (PGE/COVID) and obtain similar coefficients (Supplementary Appendix C, Table C7).

4.8.2. Validation and falsification tests for SEW proxies

We implement placebo tests to assess the validity of the causal interpretation of the succession-based designs. Assigning pseudo-events to non-succession years and re-estimating the DiD and event-study specifications yields estimated placebo effects that are economically small and statistically insignificant. In the event-study models, pre-treatment coefficients ($k \leq -2$) are close to zero and statistically indistinguishable from zero (p-values > 0.70 across leads), supporting the parallel-trends assumption underlying the DiD framework.

We further conduct falsification and validation exercises tailored to the text-based SEW measures. First, when the attachment dictionary is applied to SEW-neutral sections of corporate disclosures (accounting notes and statutory filings), the resulting placebo scores have no explanatory power for debt maturity (p = 0.61 for attachment; p = 0.58 for identity), whereas the leadership-narrative scores retain strong predictive content. Second, in a manual validation exercise based on a stratified subsample of narratives, the automated SEW measures closely track independent coder assessments: correlations with manual coding are high (Pearson r = 0.68 for Identity and r = 0.72 for Attachment), and intercoder reliability is substantial (Cohen's κ = 0.76 and 0.78, respectively), supporting construct validity. Construct-validity diagnostics and placebo tests are reported in Supplementary Appendix B, Table B2.

Third, we verify that the identity proxy behaves in theoretically consistent ways. Identity scores are strongly associated with eponymous firm naming and persistent family branding, but not with generic marketing language. Finally, re-estimating the main specifications using alternative dictionaries and sentiment parsers yields coefficients of similar sign and magnitude to the baseline estimates, indicating that the results are not driven by a particular lexicon or text-processing pipeline.

4.8.3. Succession difference-in-differences

Table 9 reports DiD estimates around CEO/chair succession events (treatment timing based on the first observed succession per firm; Appendix Table A3). The post-succession indicator is associated with a shift toward longer maturity, particularly in firms where identity and attachment are strong. Table 10 reports event-study coefficients that show no pre-trends and a gradual post-event maturity increase.

Given staggered succession timing, we treat Table 9 as a baseline and rely on staggered-adoption estimators for inference. Table 10 reports event-study dynamics estimated with the interaction-weighted procedure of Sun and Abraham (2021), and Supplementary Appendix B, Table B3 reports group-time average treatment effects following Callaway and Sant'Anna (2021). Across approaches, pre-treatment coefficients are economically small and statistically indistinguishable from zero, supporting parallel trends, while post-succession effects indicate a gradual shift toward longer maturities. These patterns are consistent with an increase in continuity-oriented financial policies when leadership transitions heighten the salience of legacy preservation. Supplementary analyses exclude multi-event firms and separately consider family-to-family versus family-to-nonfamily transitions to ensure the interpretation is not driven by event multiplicity or type.

4.8.4. Propensity score matching and matched DiD

Table 9 reports difference-in-differences (DiD) estimates around CEO/chair succession events, where treatment timing is based on the first observed succession per firm (Appendix Table A3). The post-succession indicator is positively associated with debt maturity ($\beta = 0.020$, $p < 0.05$), indicating a shift toward longer maturities following leadership transitions. This effect is stronger in firms with higher identity and attachment: the interaction between post-succession and attachment is positive and statistically significant ($\beta = 0.015$, $p < 0.01$), and a similar pattern holds for identity ($\beta = 0.012$, $p < 0.05$). These magnitudes imply that, conditional on high identity or attachment, succession events are associated with economically meaningful increases in the long-term debt share.

Given staggered succession timing, we treat the TWFE DiD estimates in Table 9 as a baseline and rely on staggered-adoption estimators for inference. Table 10 reports event-study dynamics estimated using the interaction-weighted procedure of Sun and Abraham (2021). Pre-treatment coefficients ($k = -4$ to -2) are economically small and statistically indistinguishable from zero (e.g., $k = -2$: $\beta = 0.000$, $p = 0.99$), supporting the parallel-trends assumption. Post-succession coefficients display a gradual increase in debt maturity, becoming statistically significant two years after the event ($k = 2$: $\beta = 0.016$, $p < 0.05$; $k = 3$: $\beta = 0.020$, $p < 0.05$; $k = 4$: $\beta = 0.022$, $p < 0.05$).

Supplementary Appendix B, Table B3 reports group-time average treatment effects following Callaway and Sant'Anna (2021) and confirms these patterns: the average post-succession effect on debt maturity is positive (ATT = 0.012, SE = 0.004), while the corresponding effect on leverage is small and statistically insignificant (ATT = 0.003, SE = 0.002). Across approaches, the evidence consistently indicates a gradual post-succession shift toward longer maturities rather than an abrupt change.

Supplementary analyses further support this interpretation. Excluding firms with multiple succession events yields similar estimates, and separate analyses of family-to-family versus family-to-nonfamily transitions show qualitatively comparable maturity responses. Taken together, these results suggest that leadership successions heighten the salience of legacy preservation and continuity concerns, which translate into more conservative, continuity-oriented debt-maturity policies rather than changes in leverage levels.

4.8.5. Selection, measurement endogeneity, and bounded-outcome robustness

Selection into text coverage. Because our text-based measures require narrative availability, we re-estimate the core leverage and maturity models using inverse-probability weighting (IPW-FE) and a Heckman-style selection correction. The results are robust. In Supplementary Appendix C, Table C1, the Control→Leverage coefficient remains positive and statistically significant under both IPW-FE ($\beta = 0.011$, $p < 0.05$) and Heckman correction ($\beta = 0.012$, $p < 0.05$), compared with a baseline estimate of $\beta = 0.010$ ($p < 0.05$). Similarly, the maturity associations remain stable: Identity→Maturity is $\beta = 0.013$ ($p < 0.05$) under IPW-FE and $\beta = 0.012$ ($p < 0.10$) under Heckman, while lagged Attachment→Maturity equals $\beta = 0.016$ ($p < 0.01$) and $\beta = 0.014$ ($p < 0.05$), respectively. These magnitudes are close to the baseline estimates, alleviating concerns that selection into text coverage drives the main results (Heckman, 1979; Wooldridge, 2007).

Endogeneity of textual proxies. To mitigate concerns that financing conditions affect managerial tone rather than the reverse, we implement several safeguards. First, we include a "general tone" control capturing overall positivity/negativity in the same documents. As shown in Supplementary Appendix C, Table C3, the Attachment coefficient remains virtually unchanged ($\beta = 0.014$, $p < 0.01$) relative to the baseline ($\beta = 0.015$, $p < 0.01$). Second, using pre-period averages of Attachment as predetermined moderators yields a positive and significant association with maturity ($\beta = 0.013$, $p < 0.05$). Third, lead–lag placebo tests indicate no evidence of reverse causality: future Attachment does not predict

current maturity (β = 0.001, p = 0.78). Together, these patterns suggest that the maturity results are driven by the SEW-related component of language rather than generic optimism or pessimism in disclosure tone (Loughran & McDonald, 2011).

Bounded outcomes and debt selection. Since debt maturity is a fractional outcome, we complement OLS-FE with fractional-response models and alternative dependent variables that avoid conditioning on total debt. In Supplementary Appendix C, Table C4, using long-term debt scaled by assets yields a positive association for Identity (β = 0.009, p < 0.05) and Attachment (β = 0.011, p < 0.01). Fractional-response models produce similar average marginal effects (Identity: β = 0.010, p < 0.05; Attachment: β = 0.012, p < 0.01). A two-step selection model that jointly estimates the probability of using debt and maturity conditional on debt use confirms these results (Attachment: β = 0.010, p < 0.05). Overall, the core inferences for Identity and Attachment persist across bounded-outcome and debt-selection adjustments (Papke & Wooldridge, 1996)

4.8.6. Mechanism evidence: relationship lending and rollover risk

We interpret the debt-maturity effects as operating through relational contracting and the mitigation of rollover risk. Consistent with this mechanism, higher emotional attachment is associated with significantly more concentrated bank debt portfolios. Specifically, lagged Attachment is positively related to bank concentration, as measured by the Herfindahl–Hirschman Index of bank debt shares (β = 0.031, p < 0.01), indicating stronger reliance on a core lending relationship. At the same time, Attachment is associated with lower proxy borrowing costs, measured as interest expense scaled by total debt (β = −0.004, p < 0.05), and with a lower short-term debt share—our rollover-risk proxy—(β = −0.018, p < 0.05). While debt maturity is an equilibrium outcome and we cannot fully disentangle borrower demand from lender supply, the concurrent patterns for bank concentration and proxy borrowing costs are consistent with lenders accommodating (and pricing) longer maturities when relational capital is strong, rather than systematically disciplining attached firms with shorter terms.

These mechanism effects intensify during periods of heightened refinancing risk. As reported in Supplementary Appendix C, Table C6, the interaction between Attachment and the COVID period is positive for bank concentration (β = 0.014, p < 0.10) and negative for both borrowing costs (β = −0.003, p < 0.10) and the short-term debt share (β = −0.012, p < 0.10). A similar pattern emerges during the subsequent monetary-tightening cycle (Attachment × RateHike: β = 0.016, p < 0.05 for bank concentration; β = −0.003, p < 0.10 for borrowing costs; β = −0.013, p < 0.10 for the short-term debt share). Together, these estimates indicate that attachment-related SEW strengthens relationship lending and cushions rollover risk precisely when credit conditions tighten.

Taken together, these results align with theories of relationship lending and reputational capital, which emphasize that durable borrower–lender relationships can stabilize credit supply, reduce refinancing pressure, and lower effective borrowing costs under stress (Petersen & Rajan, 1994; Berger & Udell, 1995). They also provide direct mechanism-level support for interpreting maturity extension as a deliberate rollover-risk management strategy rather than a passive by-product of balance-sheet structure.

5. Discussion

Overall, the evidence supports our hypotheses H1-H4 and underscores that socioemotional wealth (SEW) influences not only how much debt family firms use but also the maturity structure through which they manage rollover risk. These findings support a differentiated view of socioemotional wealth (SEW) in corporate finance: family control is associated with higher leverage, consistent with a control-preservation motive and with debt as a non-dilutive instrument (Gómez-Mejía et al., 2007; Berrone et al., 2012). By contrast, identity and emotional attachment are more closely linked to the maturity margin, suggesting that families express long-term orientation primarily by managing rollover risk rather than by mechanically shifting leverage. This interpretation aligns with debt-maturity theories in which shorter maturities provide discipline but increase liquidity and rollover risk (Diamond, 1991; He and Xiong, 2012; Brunnermeier and Oehmke, 2013) and with models linking maturity choice to debt overhang and continuation incentives (Diamond and He, 2014). Two mechanisms are consistent with the empirical patterns. First, relational capital with core lenders can facilitate longer maturities when information asymmetries are salient, even though relationship lending may also increase creditor bargaining power (Berger and Udell, 1995; Petersen and Rajan, 1994; Boot, 2000). Second, maturity extension is a direct hedge against refinancing risk that protects continuity and reduces the likelihood of control-threatening recapitalizations during credit tightening. The crisis-interaction results reinforce this view: attachment is associated with greater maturity resilience during COVID-19 and the 2022–2023 tightening episode.

The complementarity between SEW and innovation highlights an important boundary condition: when projects have distant, uncertain payoffs, the value of financing stability rises and SEW-related long-horizon preferences become more consequential. This is consistent with theories that link long-horizon incentives and continuation value to innovative investment and with debt-overhang arguments showing that leverage can depress investment in growth options (Myers, 1977). It is also consistent with recent work connecting debt maturity choices to innovation under incomplete contracting (Manso, 2011; Mitkov, 2024). At the same time, SEW is not unambiguously value-enhancing. Strong attachment can generate rigidity, potentially delaying restructuring in prolonged downturns. Future research could examine whether a maturity buffer becomes costly when shocks are persistent, and whether heterogeneity in generational stage or governance professionalization moderates these trade-offs (Duran et al., 2016; Miller & Le Breton-Miller, 2005).

For family owners and CFOs, the results suggest designing capital-structure policies as a coherent portfolio: control-preserving leverage decisions can be complemented by maturity structures and liquidity buffers that protect continuity and investment horizons. For lenders, SEW-related signals—especially identity and attachment cues—may help assess relationship value and rollover risk, particularly in periods of tighter credit. For policymakers, facilitating access to long-term credit for innovative family firms may support patient investment without requiring control-diluting equity issuance (Manso, 2011; Mitkov, 2024). We frame this as an implication consistent with the rollover-risk mechanism, not as a direct test of policy effectiveness.

Several limitations qualify the interpretation and point to extensions. Text-based measures inevitably trade off breadth and depth: leadership narratives offer a unique window into socioemotional objectives, but disclosure style can also reflect communication strategies and reporting norms. While we mitigate these concerns through manual validation, placebo sections, alternative dictionaries/parsers, and tone and lead–lag tests (Loughran & McDonald, 2011), measurement error may remain. Moreover, the main sample is restricted to firms for which narratives can be collected consistently, implying that external validity is strongest for mid-sized and larger firms with regular reporting; extending the mapping tests to broader datasets covering a larger share of private firms is an important avenue for future work. Finally, although succession-based designs strengthen causal interpretation, leadership transitions may still coincide with unobserved strategic changes; future research could sharpen identification using more clearly exogenous shocks and evaluate whether SEW-driven financing choices translate into long-run outcomes such as innovation quality, distress resilience, and intergenerational survival (Duran et al., 2016; Miller & Le Breton-Miller, 2005).

6. Conclusion

This paper demonstrates that socioemotional wealth (SEW) is not a monolithic driver with a single capital-structure signature. Using a matched panel of French non-financial firms observed over 2010–2024 and combining ownership structures, governance events, and narrative disclosures, we show that different SEW dimensions map into different financing margins. Family control is most closely associated with higher leverage, consistent with control preservation and debt as a non-dilutive financing instrument (Gómez-Mejía et al., 2007; Berrone et al., 2012). By contrast, identity and emotional attachment are most closely associated with the maturity structure of debt, increasing the share of long-term borrowing and thereby reducing exposure to rollover risk (Barclay & Smith, 1995; Stohs & Mauer, 1996).

These patterns become stronger precisely when financing stability is most valuable. The maturity-extending role of identity and attachment is amplified among innovative firms, where distant and uncertain cash flows raise the costs of refinancing pressure and short-horizon discipline (Manso, 2011; Mitkov, 2024). It is also more pronounced during credit stress—COVID-19 and the 2022–2023 tightening cycle—when attached families appear to preserve maturity rather than accept destabilizing short-term refinancing. Mechanism evidence is consistent with relationship-based contracting: attachment is linked to more concentrated bank relationships, lower proxy borrowing costs, and lower short-term debt exposure, suggesting that SEW can translate into relational capital and deliberate rollover-risk management (Petersen & Rajan, 1994; Berger & Udell, 1995).

Taken together, the findings help reconcile heterogeneous evidence on family ownership and corporate finance by showing that focusing only on leverage can miss a central margin through which families express long-term orientation: the term structure of liabilities. Methodologically, the consistency of results across fixed-effects models, dynamic System-GMM, matching, and succession-based quasi-experiments strengthens confidence that the mapping reflects more than time-invariant firm traits or simple selection into disclosure. For practitioners, the results imply that capital-structure policies can be designed as a coherent portfolio: control-preserving leverage decisions should be paired with maturity choices and liquidity buffers that protect continuity, especially when investment horizons are long. For policymakers and lenders, supporting access to long-term credit for innovative family firms may sustain investment without forcing control-diluting equity issuance. Future research can extend this mapping to broader datasets and other institutional settings, examine whether maturity buffers become costly under persistent shocks, and test how generational stage or governance reforms shape the trade-offs between continuity and flexibility.

Declarations

Declarations

Competing Interests

Competing InterestsThe author declares that there are competing interests as defined by Springer. Specifically, the author has professional and academic interests related to the subject of family business finance and socioemotional wealth, which may be perceived as influencing the interpretation of the results. However, these interests did not affect the study design, data analysis, interpretation of results, or the conclusions of the manuscript.

Notes

Standard errors are clustered at the firm level. Standard errors are in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.10. Specifications including lagged attachment start in 2011, so sample sizes vary across columns.

Notes

Industry×year fixed effects absorb sector-specific credit conditions. Standard errors are clustered at the firm level. Columns including lagged attachment start in 2011, so sample sizes differ slightly. Standard errors are in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.10.

Author Contribution

Author Contributions StatementF.C. was responsible for the conceptualization, methodology, data analysis, and writing of the manuscript. The author reviewed and approved the final manuscript.

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Figures

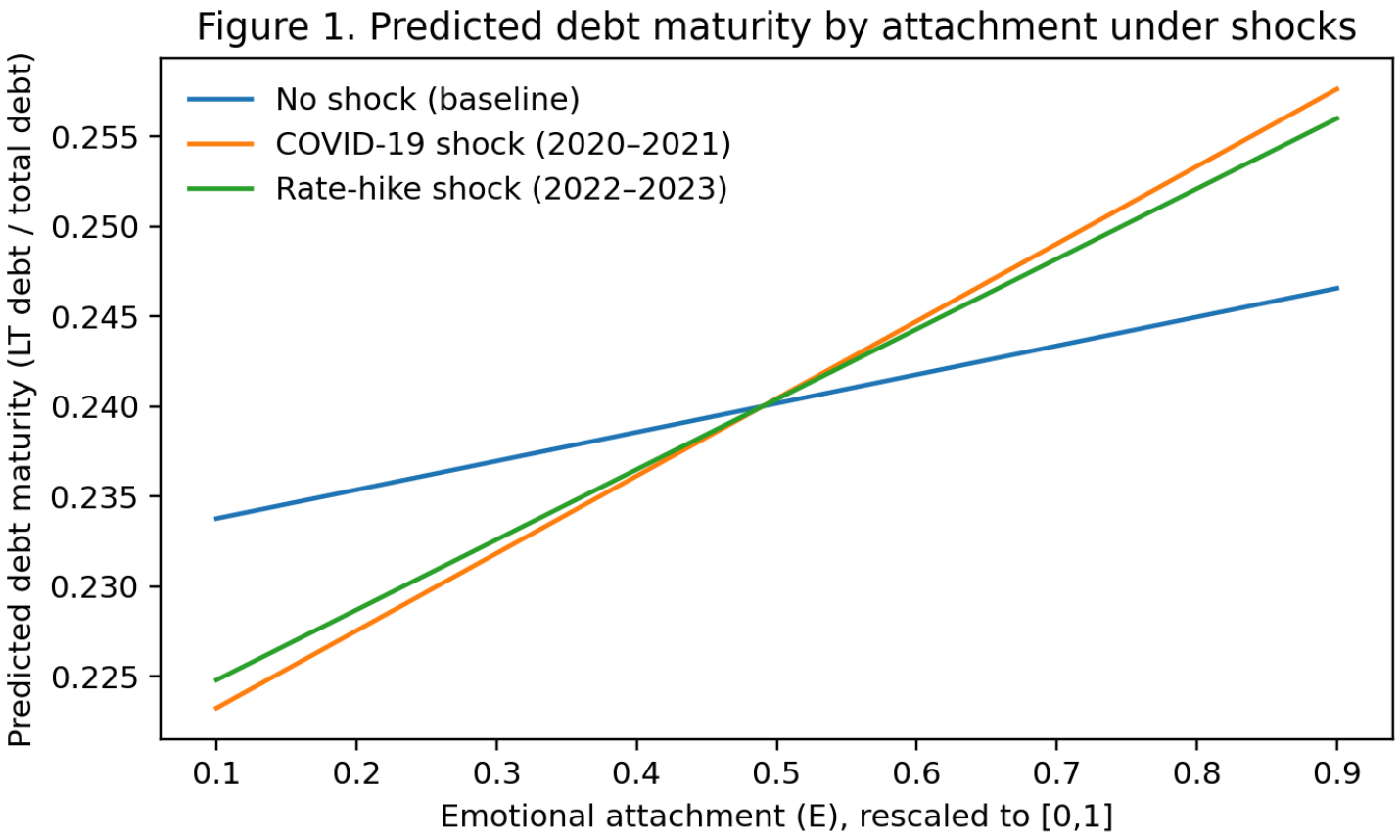


Figure 1

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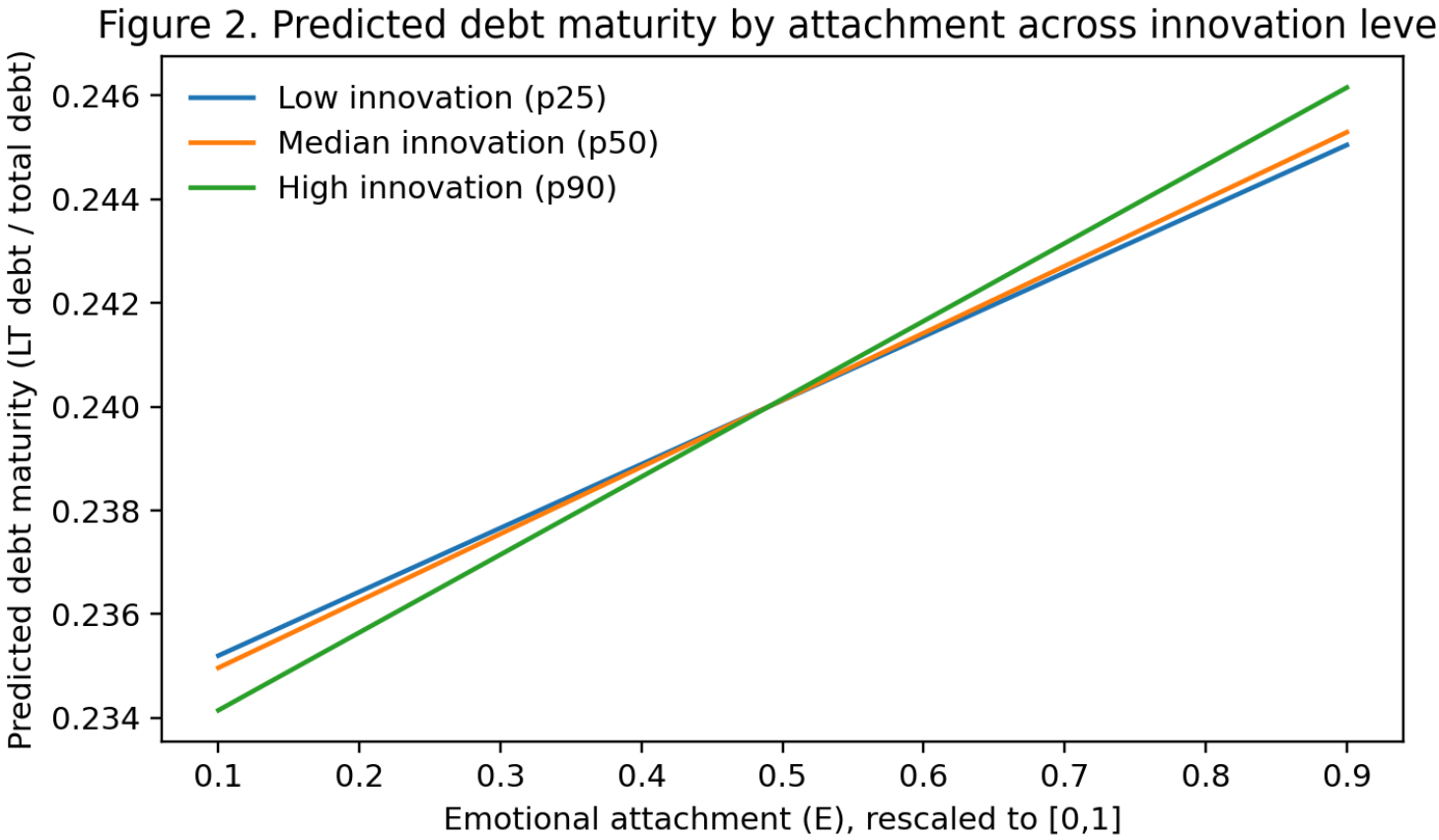


Figure 2

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