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IMPACT OF SYNDICATED LOANS ON CORPORATE GROWTH IN NIGERIA; A STUDY OF THE NIGERIAN OIL AND GAS SECTOR

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ABSTRACT

This study investigates the impact of syndicated loans on corporate growth in Nigeria's oil and gas sector over the period 2020–2025. Using an ex-post facto research design, the study draws on secondary panel data hand-extracted from the audited annual reports and accounts of seven purposively selected companies listed on the oil and gas sector of the Nigerian Exchange Limited (NGX) Seplat Energy Plc, Oando Plc, Conoil Plc, Eterna Plc, MRS Oil Nigeria Plc, TotalEnergies Marketing Nigeria Plc and Japaul Gold & Ventures Plc yielding 36 usable firm-year observations. Two firms considered at the design stage, Ardova Plc and Aradel Holdings Plc, were excluded after verification showed that Ardova delisted from the NGX in July 2023 and Aradel Holdings was listed on the NGX only from October 2024 (having previously traded on the NASD OTC market), so that neither met the study's continuous-listing criterion for the full 2020–2025 window. The study is anchored on the Pecking Order, Trade-Off and Agency Cost theories, and data are analysed using descriptive statistics, Pearson correlation and panel regression (Pooled OLS, Fixed Effects and Random Effects, with Hausman specification testing). The verification underlying this study's data collection is itself an important finding: a genuine, disclosed syndicated (multi-lender) loan facility could be confirmed in only 4 of the 36 firm-year observations, concentrated in two firms Oando Plc's 2024 Afreximbank-arranged financing for its acquisition of NAOC's assets and its 2025 upsized reserve-based lending facility, and Seplat Energy Plc's Westport reserve-based lending facility in 2022 and 2025. This concentration produces severe multicollinearity between Syndicated Loan Ratio (SLR) and Syndicated Loan Intensity (SLI) ($r = 0.995$, VIF > 300), so the two variables cannot be reliably estimated together; the study's preferred specification therefore retains Syndicated Loan Volume (SLV) and SLI only, with SLR reported separately as a bivariate correlation. In this specification, Syndicated Loan Intensity shows a positive and statistically significant association with asset growth ($p = 0.003$, Pooled/Random Effects), while Syndicated Loan Volume shows a negative and marginally significant association ($p = 0.043$) — the opposite sign to the a priori expectation. A Hausman test ($\chi^2 = 0.71$, $p = 0.871$) and an F-test for poolability ($p = 0.982$) both indicate that firm-specific effects are not statistically significant in this sample, so a Random Effects or Pooled specification, not Fixed Effects, is the appropriate estimator. Because these results are driven by only four firm-year observations concentrated in two firms' acquisition- and refinancing-related transactions, they should be read as suggestive evidence about the financing behaviour of the largest, most internationally connected sampled firms rather than as generalisable evidence for the sector as a whole. The study concludes that syndicated lending currently functions in the Nigerian oil and gas sector mainly as event-driven financing for major acquisitions and refinancings among the largest listed firms, rather than as a broad-based, incremental growth-financing tool, and recommends that regulators encourage more granular and standardised disclosure of syndicated facility terms in listed firms' annual reports to support more statistically powerful future research.

Keywords: *Syndicated Loans; Loan Volume; Loan Ratio; Loan Intensity; Corporate Growth; Asset Growth; Oil and Gas; Nigeria*

1.0. BACKGROUND OF THE STUDY

Corporate growth is a central preoccupation of firm managers, shareholders and policymakers, this is because it signals a firm's capacity to expand its productive base, create employment, and generate future earnings streams. Growth, however, is rarely self-financing, particularly in capital-intensive industries such as oil and gas exploration, production, refining and distribution, where investments in exploration wells, processing plants, pipelines and terminals often run into hundreds of millions, and sometimes billions, of United States dollars. Because internally generated funds are typically insufficient to finance projects of this magnitude, firms turn to external financing, of which debt and particularly large-ticket debt plays a decisive role (Pinto, 2021). Among the various debt

instruments available to large corporations, the syndicated loan has emerged as one of the most important mechanisms through which capital-intensive firms mobilise long-term funds that a single lender would be unwilling or unable to provide alone (Dennis & Mullineaux, 2000; Binitie, 2019).

A syndicated loan is a credit facility extended to a single borrower by a group of lenders commonly banks, development finance institutions and, increasingly, non-bank institutional investors who pool resources under a common facility agreement, typically coordinated by one or more lead arrangers or mandated lead arrangers. Syndication allows lenders to diversify credit risk across the group while allowing the borrower to access a volume of funding, and a maturity profile, that would otherwise be unattainable through a single bilateral loan. Globally, syndicated lending has grown into a multi-trillion-dollar market and is especially prominent in extractive and infrastructure industries, where project economics require patient, large-ticket capital.

In Nigeria, syndicated lending has become an increasingly visible feature of corporate and sovereign-linked financing in the oil and gas sector. Notable transactions in the period under review include the Nigerian National Petroleum Company Limited (NNPC)-sponsored Project Gazelle, a US$3.3 billion crude-oil prepayment facility arranged by the African Export-Import Bank (Afreximbank) and disbursed in tranches between late 2023 and 2024, which Afreximbank described as one of the largest syndicated loans raised in Africa in that period; the US$1.4 billion Project Panther facility signed in November 2022 by Northern Hydrocarbon Funding Limited (a joint venture between NNPC and Chevron Nigeria Limited) with a syndicate of banks to finance the Kolmani oil field development; and the multi-billion-dollar syndicated facilities that supported the construction of the Ajaokuta-Kaduna-Kano (AKK) gas pipeline (African Export-Import Bank, 2024; AidData, 2024). Beyond these headline sovereign-linked deals, listed indigenous oil and gas companies such as Seplat Energy Plc have also relied on syndicated reserve-based lending (RBL) facilities to fund field development, working capital and, in Seplat's case, major asset acquisitions such as the purchase of Mobil Producing Nigeria Unlimited (Seplat Energy Plc, 2025); and Oando Plc financed its 2024 acquisition of NAOC's onshore/shallow-water assets partly through a US$650 million facility arranged by Afreximbank together with Indorama Eleme Petrochemicals and Mercuria Energy Group. The visibility and scale of these transactions raise an important empirical question: does access to syndicated loan financing actually translate into measurable growth in the operating base proxied by total assets of the borrowing firms, or does it merely substitute for other forms of debt without a discernible growth dividend, and — as the data-collection exercise underlying this study found how common is genuine syndicated financing among listed oil and gas firms outside these few headline transactions?

The Nigerian oil and gas sector is a particularly suitable setting in which to examine this question. First, the sector accounts for a disproportionate share of the country's foreign exchange earnings and government revenue, making the financing choices of sector participants a matter of macroeconomic, not merely firm-level, significance. Second, the sector is capital-intensive and cyclical, with firms routinely facing financing gaps that domestic capital markets constrained by shallow bond markets and single-obligor lending limits imposed on individual banks by the Central Bank of Nigeria (CBN) cannot close alone, making syndication a natural financing response. Third, the period 2020–2025 is analytically rich: it spans the COVID-19 oil price collapse of 2020, the naira devaluations and foreign-exchange reforms of 2023–2024, the removal of petroleum subsidies, and a wave of divestments by international oil companies (IOCs) to indigenous players, several of which including Seplat's acquisition of Mobil Producing Nigeria Unlimited and Oando's acquisition of NAOC's assets were substantially funded through syndicated debt. These structural shifts make it timely to ask whether the growing recourse to syndicated financing by Nigerian oil and gas firms has been associated with a corresponding growth in their asset base.

1.1 Statement of the Problem

Despite the growing prominence of syndicated loans in financing Nigerian oil and gas operations, the empirical link between syndicated borrowing and firm-level growth outcomes remains under-examined in the Nigerian finance literature. Much of the existing Nigerian literature on loan syndication is descriptive or legal in orientation, focusing on the mechanics, documentation and macroeconomic rationale for syndication (see, for example, Echekoba & Okonkwo, 2015; Binitie, 2019), rather than on firm-level empirical testing of its growth effects using structured panel data and

multiple financing proxies. Where empirical capital-structure studies exist for Nigerian firms, they tend to use aggregate leverage ratios rather than disaggregating debt into syndicated and non-syndicated components, thereby obscuring whatever distinct effect of syndicated debt with its unique risk-sharing, monitoring and signalling characteristics, that may have on growth relative to other debt forms. This creates a gap: it is not clear from existing Nigerian evidence whether the volume of syndicated loans obtained, the proportion of total debt that is syndicated, or the intensity with which syndicated debt is deployed relative to total assets, meaningfully predicts subsequent asset growth among oil and gas firms. A further, more basic gap one this study's data-collection process exposed directly is that it is not even well established how common genuine, disclosed syndicated financing actually is among NGX-listed oil and gas firms beyond the small number of headline transactions noted above. Left unresolved, this gap limits the ability of corporate treasurers to justify syndication as a growth-enhancing financing strategy, and limits the ability of regulators and lenders to calibrate syndication frameworks to support productive, rather than merely substitutive, borrowing. This study addresses this gap by empirically examining the effect of three distinct syndicated loan proxies Syndicated Loan Volume, Syndicated Loan Ratio and Syndicated Loan Intensity on asset growth among listed Nigerian oil and gas firms between 2020 and 2025, using genuinely hand-extracted, source-verified data.

The broad objective of this study is to examine the impact of syndicated loans on corporate growth in the Nigerian oil and gas sector. The specific objectives are to: examine the effect of Syndicated Loan Volume (SLV) on the asset growth of listed oil and gas firms in Nigeria; assess the effect of Syndicated Loan Ratio (SLR) on the asset growth of listed oil and gas firms in Nigeria; and evaluate the effect of Syndicated Loan Intensity (SLI) on the asset growth of listed oil and gas firms in Nigeria.

This study seeks to answer these questions: What is the impact of Syndicated Loan Volume on the asset growth of listed oil and gas firms in Nigeria? What is the impact of Syndicated Loan Ratio on the asset growth of listed oil and gas firms in Nigeria? What is the impact of Syndicated Loan Intensity on the asset growth of listed oil and gas firms in Nigeria?

The following hypotheses, stated in null form, guide the study: H01: Syndicated Loan Volume has no significant effect on the asset growth of listed oil and gas firms in Nigeria. H02: Syndicated Loan Ratio has no significant effect on the asset growth of listed oil and gas firms in Nigeria. H03: Syndicated Loan Intensity has no significant effect on the asset growth of listed oil and gas firms in Nigeria.

The findings of this study are of value to several categories of stakeholders. For corporate finance managers and treasurers in the oil and gas sector, the study provides evidence-based guidance on whether, and to what degree, syndicated borrowing should form part of the firm's growth-financing strategy. For deposit money banks and syndicate arrangers, the findings offer insight into the growth outcomes associated with facilities they structure, which can inform credit appraisal and pricing. For regulators, including the Central Bank of Nigeria, the Securities and Exchange Commission and the Nigerian Upstream Petroleum Regulatory Commission, the study offers empirical grounding — including on the current state of syndicated-loan disclosure practice — for policies intended to deepen the syndicated loan market as a channel for productive investment in the energy sector. For the academic community, the study extends the capital-structure and corporate-growth literature by disaggregating debt into syndicated-specific proxies (volume, ratio and intensity) rather than relying on generic leverage measures, and by focusing on a sector-specific panel that captures a period of significant structural change in the Nigerian oil and gas industry. Finally, investors and analysts may find the study useful in interpreting firms' debt disclosures and in assessing the extent to which reported syndicated borrowing is being converted into asset growth.

The study is delimited in content to three independent variables Syndicated Loan Volume, Syndicated Loan Ratio and Syndicated Loan Intensity and one dependent variable, asset growth, as the proxy for corporate growth. Geographically, the study is restricted to companies operating in the oil and gas sector of the Nigerian economy that are listed on the Nigerian Exchange Limited (NGX). The study covers the period from the 2019/2020 to the 2025 financial year-ends (2019 figures being used solely as the base year for computing 2020 asset growth), a period chosen because it captures the COVID-19 oil-price shock, the 2023–2024 foreign-exchange reforms, and the wave of IOC divestments substantially financed through syndicated debt, all of which make the period analytically rich for examining the syndicated loan–growth relationship.

2.0. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 The Concept of Corporate Growth

Corporate growth refers to the expansion of a firm's scale of operations, and may be proxied variously by growth in sales revenue, market capitalisation, employment, profitability, or total assets. Asset growth is the year-on-year percentage change in total assets; it is one of the most widely used proxies in corporate finance research because it directly reflects the expansion of the productive resource base that a firm controls, is available from audited financial statements for virtually all listed firms, and is less susceptible to short-term earnings management than profit-based measures (Lang, Ofek & Stulz, 1996; Aivazian, Ge & Qiu, 2005). In capital-intensive sectors such as oil and gas, where growth is substantially embodied in physical assets such as producing wells, reserves, processing plants, pipelines and terminals, asset growth is an appropriate proxy for corporate growth, since it captures the tangible expansion of the firm's productive capacity that follows major capital expenditure programmes, many of which are financed by debt.

2.1.2 The Concept of Syndicated Loans

A syndicated loan is a single credit facility provided jointly by a group of lenders to one borrower, under a single set of loan documentation administered by one or more arranging banks acting on behalf of the syndicate (Loan Market Association, as cited in Ogbonnaya, 2022). Syndication arises principally from the need to spread large credit exposures across multiple institutions, thereby respecting single-obligor lending limits, diversifying credit risk, and enabling participation by lenders that may lack the origination capacity or sector expertise to structure the facility independently. In the Nigerian context, syndicated facilities frequently combine local deposit money banks with international lenders and multilateral or regional development finance institutions such as Afreximbank, the African Development Bank and the Africa Finance Corporation, reflecting both the scale of financing required by capital-intensive projects and the limited single-obligor capacity of individual Nigerian banks relative to jumbo transaction sizes (Binitie, 2019; Ofodum, 2025).

For purposes of this study, syndicated loan financing is disaggregated into three complementary proxies. Syndicated Loan Volume (SLV) captures the magnitude of syndicated financing accessed by a firm in a given year. Syndicated Loan Ratio (SLR) captures the composition of the firm's debt stack, indicating what proportion of total debt is sourced through syndication rather than bilateral loans, bonds, or other credit lines. Syndicated Loan Intensity (SLI) captures the extent to which the firm's asset base itself is financed by syndicated debt, linking the financing side of the balance sheet directly to the asset side. Together, these three proxies allow the study to distinguish the scale effect (SLV), the debt-composition effect (SLR) and the balance-sheet-leverage effect (SLI) of syndicated borrowing on growth, rather than treating syndicated debt as a single undifferentiated construct. As documented in Section 3.3 below, the process of hand-extracting these three proxies from real annual reports also revealed how rarely a facility meeting the definition of 'syndicated' is actually disclosed by NGX-listed oil and gas firms outside the largest two sampled firms — a finding that itself bears on how the three proxies behave statistically in Section 4.

2.2 Empirical Review

2.2.1 Asset Growth as a Measure of Corporate Growth

Myers (1977) provided the foundational theoretical link between debt financing and firm growth by demonstrating that a firm's investment opportunities interact with its capital structure, since high leverage can either finance valuable growth options or, where debt overhang exists, deter them, a tension that motivates careful empirical attention on how specific debt instruments, such as syndicated loans, relate to asset growth rather than assuming a uniform effect. Lang, Ofek and Stulz (1996) examined the relationship between leverage and firm growth among large U.S. corporations and found a robust negative relationship between leverage and growth for firms with poor investment opportunities, but no such negative relationship and in some specifications a positive one for firms with

strong investment opportunities, underscoring that the sign of the debt–growth relationship is sector- and firm-specific rather than universal, which is directly relevant to a capital-intensive, high-investment-opportunity sector such as Nigerian oil and gas. Aivazian, Ge and Qiu (2005), using Canadian panel data, found that leverage had a significant negative effect on investment for firms with low growth opportunities but a much weaker or insignificant effect for firms with high growth opportunities, reinforcing the view that in growth-rich, asset-intensive industries, well-structured debt, including syndicated debt used for defined capital projects that need not depress growth. These studies collectively justify the use of asset growth as the dependent variable in this study and provide the theoretical expectation that, in a capital-intensive, investment-opportunity-rich sector such as oil and gas, syndicated debt financing proxies should be positively, rather than negatively, associated with asset growth.

2.2.2 Syndicated Loan Volume (SLV) and Corporate Growth

Sufi (2007) examined the structure of syndicated loan facilities among U.S. corporate borrowers and found that the volume of syndicated credit a firm could access was strongly conditioned by information availability, with firms possessing more transparent accounting information able to syndicate larger facilities at finer pricing, and that access to larger syndicated volumes was associated with firms' subsequent ability to fund larger-scale investment programmes. Ivashina (2009) studied syndicated loan pricing and found that larger syndicated volumes, when originated by lead arrangers with material retained exposure, were associated with better-monitored, better-performing borrowers, implying that the scale of syndicated financing obtained is linked to the credibility and growth capacity of the borrowing firm. More recently, Giannetti and Jang (2025) and Giannetti and Meisenzahl (2021) examined lender behaviour in the international syndicated loan market and found that the willingness of syndicate participants to extend and maintain large facilities is itself sensitive to lender-side balance-sheet conditions and to the ownership concentration of the syndicate, underscoring that the volume of syndicated credit available to a borrower reflects lender-side capacity as well as borrower demand. In the Nigerian context, Echekoba and Okonkwo (2015), examining the impact of loan syndication on the growth of the Nigerian economy, found that the volume of funds mobilised through syndication enabled Nigerian corporates and government-related entities to undertake large-ticket infrastructure and industrial projects that would otherwise have been financially infeasible, concluding that loan syndication volume was positively associated with real-sector expansion. Collectively, this body of work suggests a positive association between the magnitude of syndicated loans accessed and the scale of subsequent corporate expansion, providing the empirical basis for hypothesising a positive SLV–asset growth relationship in this study, although, as Section 4 shows, this study's own real-data test of that hypothesis does not find support for a positive relationship.

2.2.3 Syndicated Loan Ratio (SLR) and Corporate Growth

Dennis and Mullineaux (2000) investigated the determinants of loan syndication among U.S. borrowers and found that firms with higher information transparency and stronger credit quality tended to syndicate a larger share of their total borrowing, and that a higher proportion of syndicated relative to bilateral debt was associated with lower financing costs, which in turn supported reinvestment and expansion. Lee and Mullineaux (2004) analysed syndicate structure and found that the composition of a firm's debt specifically the share financed through syndication rather than concentrated bilateral lending which affected the flexibility and cost of subsequent refinancing, with a higher syndicated share generally associated with greater capacity to renegotiate terms in support of continued investment. Ofodum (2025), examining loan cost and the pricing of syndicated loans in Nigeria, found that a higher share of syndicated relative to total debt was generally associated with access to larger capital pools and more customisable repayment structures, which borrowers used to support capital projects, although the study also cautioned that higher syndicated shares could raise average borrowing costs where pricing was not competitively negotiated. On balance, the literature suggests that a higher Syndicated Loan Ratio is generally, though not uniformly, associated with enhanced capacity for growth-oriented investment, motivating the hypothesised positive relationship between SLR and asset growth in this study; Section 4 reports a positive and significant simple correlation consistent with this expectation,

though, as explained there, the real data do not permit SLR to be tested in a properly controlled multivariate model alongside SLI.

2.2.4 Syndicated Loan Intensity (SLI) and Corporate Growth

Bharath, Dahiya, Saunders and Srinivasan (2011) studied lending relationships in the syndicated loan market and found that firms with deeper, more intensive syndicated borrowing relationships obtained more favourable pricing and larger facility sizes relative to their asset base over time, which was associated with sustained capital expenditure and asset expansion. Esty (2001) examined project-finance-style syndicated lending in the oil and gas and infrastructure sectors specifically, finding that where syndicated debt constituted a substantial share of total project assets, the structuring discipline imposed by the syndicate including reserve-based lending covenants tied to proven reserves supported disciplined but sustained asset growth, since draw-downs were explicitly linked to the development of additional productive assets. Adegbite (2021), studying syndicated loans and corporate borrowing in Nigeria, found that firms whose syndicated borrowing constituted a larger proportion of total assets exhibited correspondingly higher rates of fixed-asset formation, particularly in capital-intensive sectors, suggesting an intensity-linked growth effect. These studies collectively support the hypothesis that Syndicated Loan Intensity is positively associated with asset growth, since intensity by construction reflects the extent to which the balance sheet itself has already been built up using syndicated capital; Section 4 finds real-data support for this relationship, though concentrated in the two firms for which genuine syndicated financing could be confirmed.

2.3 Gap in Literature

The reviewed literature demonstrates a well-established international evidence base linking syndicated loan characteristics to firm-level financing and investment outcomes (Sufi, 2007; Dennis & Mullineaux, 2000; Ivashina, 2009; Bharath et al., 2011; Esty, 2001), and a smaller but growing Nigerian literature describing the mechanics, cost structure and macroeconomic rationale for syndicated lending (Echekoba & Okonkwo, 2015; Binitie, 2019; Ofodum, 2025). However, gaps remain. First, existing Nigerian studies are predominantly descriptive, legal or macro-economy-focused rather than firm-level and quantitative. Second, no identified Nigerian study disaggregates syndicated debt into volume, ratio and intensity proxies simultaneously to isolate their distinct effects on growth, as this study attempts to do. Third, no identified study restricts its empirical panel specifically to the Nigerian oil and gas sector over the 2020–2025 period, a period characterised by major divestment-driven syndicated financings and macroeconomic reform. Fourth and this is a gap this study's own data-collection process surfaced rather than one identified in advance — no identified Nigerian study has documented how rare genuine, disclosed syndicated (as opposed to ordinary bilateral) borrowing actually is among NGX-listed oil and gas firms; that documentation is itself offered here as a contribution to the literature.

2.4 Theoretical Review

2.4.1 Pecking Order Theory

The Pecking Order Theory, developed by Myers (1984) and Myers and Majluf (1984), posits that firms follow a hierarchical preference in financing new investment: internal funds (retained earnings) first, followed by debt, and equity only as a last resort, owing to information asymmetry between managers and outside investors that makes external financing progressively more costly as one moves from debt to equity. Within this framework, syndicated loans occupy an intermediate position as debt, and therefore preferred to equity, but because syndication requires disclosure to, and due diligence by, multiple lenders, syndicated debt also functions as a partial certification of the borrower's information quality, which can reduce the information-asymmetry costs associated with the facility relative to other debt forms. The theory predicts that as internally generated funds fall short of investment needs, a common condition in the capital-intensive, cyclical oil and gas sector, firms will increasingly draw on syndicated debt to close the financing gap and fund asset growth, providing theoretical support for a positive relationship between syndicated loan proxies and asset growth.

2.4.2 Trade-Off Theory

The Trade-Off Theory, associated with Kraus and Litzenberger (1973) and later Myers (1984), holds that firms choose their optimal capital structure by balancing the tax benefits of debt (interest tax shields) against the costs of financial distress and bankruptcy that rise with leverage. Applied to syndicated lending, the theory suggests that firms will syndicate loans up to the point where the marginal tax and liquidity benefits of additional syndicated debt are offset by the marginal increase in distress risk and covenant-related constraints imposed by the syndicate. Because syndicated facilities in the oil and gas sector are frequently structured as reserve-based lending, with draw-downs tied to proven and probable reserves, the trade-off is partly self-correcting: the syndicate itself limits over-borrowing relative to asset backing, which should, in principle, keep syndicated debt within a range that supports rather than undermines asset growth. This theory underpins the expectation that Syndicated Loan Intensity — the ratio of syndicated debt to total assets — will show a positive but bounded relationship with asset growth, consistent with an optimal-leverage logic.

2.4.3 Agency Cost Theory

Jensen and Meckling (1976) introduced the Agency Cost Theory, which explains how conflicts of interest between managers, shareholders and debtholders generate costs that influence financing choices. Debt, including syndicated debt, can mitigate agency costs of free cash flow (Jensen, 1986) by imposing repayment obligations and covenant discipline that constrain managerial discretion over surplus cash, thereby channelling funds toward value-adding investment rather than wasteful expenditure. Syndication intensifies this monitoring effect because multiple lenders, coordinated through a lead arranger, jointly monitor covenant compliance, reducing the moral hazard that might otherwise arise under a single, less scrutinised bilateral facility. This theoretical strand supports the expectation that syndicated loans, precisely because of the multi-lender monitoring they entail, are more likely to be deployed toward productive, growth-generating uses than would be the case for less-monitored debt forms.

This study adopts the Pecking Order Theory as its primary theoretical anchor, complemented by the Trade-Off Theory and Agency Cost Theory as supporting frameworks. The Pecking Order Theory best explains why capital-intensive, cash-flow-constrained oil and gas firms turn to syndicated debt to bridge the gap between internally generated funds and the substantial capital expenditure required for exploration, development and acquisition activity, while the Trade-Off and Agency Cost theories jointly explain why the monitoring and reserve-based structuring inherent in syndication should, in principle, channel that debt toward productive asset growth rather than value-destroying overexpansion. Together, these three theories provide the conceptual justification for hypothesising a positive relationship between each of the three syndicated loan proxies (SLV, SLR and SLI) and asset growth among the sampled firms; Section 4 reports the extent to which the real, verified data support that expectation.

3.0. METHODOLOGY

3.1 Research Design

This study adopts the ex-post facto research design, which is appropriate because the variables of interest, syndicated loan financing and asset growth, had already occurred and were recorded in firms' audited financial statements prior to the commencement of the study, leaving the researcher no ability to manipulate the independent variables. The design is quantitative and correlational, relying on panel (longitudinal, cross-sectional) secondary data to test the hypothesised relationships between the syndicated loan proxies and asset growth.

3.2 Population and Sample of the Study

The population of the study comprises all companies operating in the oil and gas sector that are listed on the Nigerian Exchange Limited (NGX). The study originally set out, using a purposive sampling technique, to select eight companies on the basis of (a) continuous listing on the NGX Main Board throughout the 2020–2025 period, (b) availability of complete audited annual reports for all

relevant financial years, and (c) explicit disclosure of syndicated loan balances, or of loan facilities identifiable as syndicated from the notes to the financial statements, during the period.

Verification of criterion (a) against each firm's actual NGX listing history undertaken as part of this revision, in direct response to the reviewer's request that the sampling and data-collection process be independently verifiable showed that two of the originally intended eight firms do not meet it. Ardova Plc (formerly Forte Oil Plc) delisted from the NGX in July 2023 and has not filed NGX-format audited accounts since; and Aradel Holdings Plc (formerly Niger Delta Exploration & Production Plc) was listed on the NGX Main Board only from 14 October 2024, having traded before that on the NASD OTC Securities Exchange, a separate, unlisted-securities market. Neither firm was, in fact, continuously NGX-listed across 2020–2025, so both were dropped from the sample. The remaining NGX Oil & Gas-classified universe was checked for replacement candidates; Capital Oil & Gas Industries Plc was excluded because it was delisted in 2025 for failing to file financial statements (the same non-disclosure problem the sample criterion is designed to screen out), and RAK Unity Petroleum Company Plc was excluded because it traded on the NGX's Alternative Securities Market rather than the Main Board and was wound up during 2020–2023. Japaul Gold & Ventures Plc (formerly Japaul Oil & Maritime Services Plc) was identified as a defensible eighth candidate it appears in NGX's own Oil & Gas sector groupings and has complete, continuously-listed audited accounts for the period and is included in the final sample, with the caveat, disclosed here for transparency, that the firm has diversified toward mining activities since 2021 and so is a less pure 'oil and gas' play than the other six firms. A further candidate, Caverton Offshore Support Group Plc (an oilfield logistics-services firm), was considered but excluded: its FY2019–FY2021 financial statements could not be located within the scope of this study's research, and its classification as 'oil and gas' rather than 'oilfield services' is itself contestable. No fully clean eighth replacement could accordingly be identified, and the final sample comprises seven firms: Seplat Energy Plc, Oando Plc, Conoil Plc, Eterna Plc, MRS Oil Nigeria Plc, TotalEnergies Marketing Nigeria Plc, and Japaul Gold & Ventures Plc.

With up to six financial years (2020–2025) of data for each of the seven firms, the study's design target was 42 firm-year observations. The realised panel is unbalanced at 36 firm-year observations (Section 3.3 and Section 5.4 explain the specific exclusions), reflecting MRS Oil Nigeria Plc's delisting from the NGX in July 2025 (no FY2025 observation), the exclusion of Japaul Gold & Ventures Plc's FY2025 observation (its total-asset figure for that year could only be sourced as a low-confidence summary figure rather than from a verifiable statement of financial position), and the exclusion of firm-years for which the existence of a syndicated facility could not be confirmed against a specific, source-verified year-end balance.

3.3 Sources and Method of Data Collection

Data are entirely secondary, hand-extracted from the audited annual reports and accounts, financial statements and notes to the accounts of the sampled firms, filed with the Nigerian Exchange Limited's corporate disclosure repository (doclib.ngxgroup.com) or published on the firms' own investor-relations websites, for the financial years spanning 2019 (used only as the base year for computing 2020 asset growth) to 2025. Table 3.2 lists, for each firm, the primary source documents used and the confidence level attached to each figure, so that every reported number in Section 4 can be traced to a specific filing.

A firm-year's borrowings note was classified as disclosing a syndicated facility only where the facility was explicitly described as being provided by a consortium, syndicate, or group of banks/DFIs acting under a single facility agreement, or as being led by a named lead arranger, mandated lead arranger, global coordinator or bookrunner consistent with the definitional approach adopted by Binitie (2019) and Ofodum (2025) and applied here strictly rather than inferred from the mere presence of a 'term loan' or 'revolving credit facility' label. Applying this test across all seven firms' filings for 2019–2025, a qualifying syndicated facility was confirmed in only four firm-years: Seplat Energy Plc's Westport Senior Reserve-Based Lending (RBL) facility, confirmed as multi-lender ('supported by three lenders' in FY2024, 'four lenders' in FY2025) with a standalone year-end balance separately verifiable in FY2022 (US$8.2 million) and FY2025 (US$53.5 million); and Oando Plc's 2024 Afreximbank-arranged, Afreximbank/Indorama Eleme Petrochemicals/Mercuria Energy Group-financed US$650 million facility for its acquisition of NAOC's assets, and its 2025 upsized (to US$375 million)

Afreximbank-led Reserve-Based Lending 2 (RBL2) facility. For the remaining 32 firm-year observations across all seven firms, no facility meeting this definition was found in the accessible notes to the financial statements; borrowings in those firm-years consist of ordinary bank overdrafts, single-bank term loans, revolving credit lines, or (for Ardova-type comparators generally, though not the final sample) corporate bonds none of which is a syndicated bank facility. This is reported as a substantive finding of the study (see Sections 4 and 5), not merely a data limitation.

Because Oando Plc's two confirmed syndicated facilities are denominated in US Dollars while its financial statements are prepared in Naira, they were converted to Naira, for the sole purpose of computing the Syndicated Loan Ratio and Syndicated Loan Intensity variables, using indicative exchange rates of ₦1,650/US$1 (December 2024) and ₦1,600/US$1 (December 2025), consistent with the broadly reported post-unification trading range for those dates. A precise, source-verified CBN/NAFEM closing rate for the exact statement dates could not be obtained within the scope of this study, so these two firm-years' SLR and SLI figures for Oando should be treated as indicative pending confirmation against the exact official closing rate. No such conversion was required for any other firm-year, and none was required for Seplat Energy Plc, whose accounts (and confirmed syndicated balances) are entirely US Dollar-denominated, so that variable comparisons for Seplat across time are internally consistent regardless of exchange-rate movements.

Table 3.1: Sample Firms and Primary Data Sources

Firm	Years Covered	Primary Source(s)
Seplat Energy Plc	2019–2025	FY2019–FY2023 audited financial statements and NGX filings; FY2022/2024/2025 total assets from a secondary aggregator, flagged in Section 5.4
Oando Plc	2019–2025	Oando Plc audited financial statements 2019–2025 (company website); Afreximbank/press coverage for facility structure
Conoil Plc	2019–2025	NGX doclib audited financial statements, FY2020–FY2025
Eterna Plc	2019–2025	Eterna Plc audited financial statements, 2019–2025 (company website)
MRS Oil Nigeria Plc	2019–2024 (delisted July 2025)	NGX doclib audited financial statements, FY2019–FY2024
TotalEnergies Marketing Nigeria Plc	2019–2025	NGX doclib audited/interim financial statements, cross-validated across overlapping filings
Japaul Gold & Ventures Plc	2019–2024 (FY2025 excluded — low-confidence figure only)	NGX doclib audited financial statements, FY2019–FY2024

Source: Author's compilation from NGX corporate disclosure filings and company investor-relations disclosures, 2026.

3.4 Variable Measurement

Table 3.2 presents the operationalisation of the dependent and independent variables.

Table 3.2: Variable Measurement

Variable	Measurement	Description / A Priori Expectation	Source
Asset Growth (AG) Dependent	(Current Total Assets − Previous Total Assets) ÷ Previous Total Assets	Proxy for corporate growth; captures year-on-year expansion of the firm's asset base.	Aivazian, Ge and Qiu (2005); Myers (1977)
Syndicated Loan Volume (SLV)	Natural logarithm of (1 + the confirmed syndicated loan balance obtained by the firm in the financial year)	Measures the magnitude of syndicated financing accessed; the 1+ transform accommodates the many firm-years with no confirmed syndicated facility. Expected sign: positive.	Echekoba and Okonkwo (2015); Sufi (2007)
Syndicated Loan Ratio (SLR)	Confirmed syndicated loan balance ÷ Total borrowings	Indicates the proportion of total debt financed through syndication. Expected sign: positive. (Reported as a bivariate correlation only — see Section 4.3.)	Lee and Mullineaux (2004)
Syndicated Loan Intensity (SLI)	Confirmed syndicated loan balance ÷ Total assets	Measures the extent to which assets are financed through syndicated debt. Expected sign: positive.	Adegbite (2021); Bharath, Dahiya, Saunders and Srinivasan (2011)

3.5 Model Specification

To examine the effect of syndicated loans on corporate growth, the study specifies the following panel regression model, consistent with the objectives, research questions and hypotheses as stated:

$$CGit = \beta0 + \beta1SLVit + \beta2SLRit + \beta3SLIit + \varepsilon it$$

where CGit is the asset growth of firm i in year t; SLVit, SLRit and SLIit are, respectively, the Syndicated Loan Volume, Syndicated Loan Ratio and Syndicated Loan Intensity of firm i in year t; β0 is the intercept; β1–β3 are the slope coefficients to be estimated; and εit is the stochastic error term. Consistent with the theoretical review in Section 2.4, the a priori expectation is that β1, β2 and β3 are all positive and statistically significant. As Section 4.3 shows, however, SLR and SLI are severely collinear in the real, verified data (VIF far in excess of the study's own 5.0 threshold), so the three-variable model as specified cannot be reliably estimated as a whole; Section 4.4 reports the full model alongside the reduced, estimable specification actually used for hypothesis testing.

3.6 Estimation Technique

The model is estimated using panel data regression techniques. Three estimators are computed for comparison: the Pooled Ordinary Least Squares (OLS) estimator, which ignores firm heterogeneity; the Fixed Effects (FE) estimator, which controls for time-invariant, firm-specific unobserved heterogeneity; and the Random Effects (RE) estimator, which treats firm-specific effects as randomly distributed and uncorrelated with the regressors. The Hausman (1978) specification test is applied to determine whether the Fixed Effects or Random Effects estimator is more appropriate for the data, under the null hypothesis that the RE estimator is consistent and efficient. Prior to estimation, the panel is screened for multicollinearity using the Variance Inflation Factor (VIF), for heteroscedasticity using the Breusch-Pagan test, and for the presence of firm effects using an F-test for poolability. All estimations are conducted at the 5% level of statistical significance, such that a null hypothesis is rejected where the associated p-value is less than 0.05.

4.0. RESULTS AND DISCUSSION

4.1 Descriptive Statistics

Table 4.1 presents the descriptive statistics for the dependent and independent variables across the 36 real, source-verified firm-year observations described in Section 3.3.

Table 4.1: Descriptive Statistics (N = 36)

Variable	Mean	Std. Dev.	Minimum	Maximum	Obs.
Asset Growth (AG)	0.239	0.410	-0.321	1.404	36
SLV	1.692	5.176	0.000	20.793	36
SLR	0.019	0.074	0.000	0.387	36
SLI	0.007	0.031	0.000	0.167	36

The sampled firms recorded average asset growth of about 23.9% per annum over the panel, with wide dispersion (standard deviation of 41.0 percentage points) and a highly asymmetric distribution (skewness of 1.41). The maximum, 140.4%, belongs to Oando Plc in FY2024, coinciding with the consolidated recognition of assets acquired in its Afreximbank-financed NAOC transaction; the minimum, -32.1%, belongs to Japaul Gold & Ventures Plc in FY2020, consistent with the broader sector distress associated with the COVID-19 oil-price collapse. Both extremes are genuine, source-verified observations rather than artefacts of the data-construction process.

The independent variables show even more pronounced skew (SLV: 3.13; SLR: 4.42; SLI: 4.75) because, as explained in Section 3.3, a confirmed syndicated facility exists in only 4 of the 36 firm-year observations; the remaining 32 observations take a value of zero (or, for SLV, log(1) = 0) on all three syndicated-loan proxies. The mean SLR of 0.019 indicates that, across the panel as a whole, syndicated debt accounts for under 2% of the average firm-year's total borrowings, and the mean SLI of 0.007 indicates that syndicated debt finances under 1% of the average firm-year's total asset base. These means are heavily pulled down by the 32 zero-valued observations and should not be read as describing a 'typical' sampled firm with modest syndicated exposure; rather, syndicated financing in this sample is essentially a binary, rare event concentrated in two firms, and the descriptive statistics for SLV, SLR and SLI are correspondingly better interpreted alongside the raw count (4 of 36) than as a continuously varying measure across the sector.

4.2 Correlation Analysis

Table 4.2 presents the Pearson pairwise correlation matrix for the study variables, used both to examine the direction of association between variables and to screen for potential multicollinearity among the independent variables.

Table 4.2: Pearson Correlation Matrix (N = 36)

	AG	SLV	SLR	SLI
AG	1.000			
SLV	0.206	1.000		
SLR	0.388*	0.906**	1.000	
SLI	0.420*	0.865**	0.995**	1.000

*** Correlation is significant at the 1% level; * significant at the 5% level (two-tailed).*

Asset growth is positively and significantly correlated with SLR (r = 0.388, p = 0.019) and SLI (r = 0.420, p = 0.011), but not significantly correlated with SLV (r = 0.206, p = 0.227). More consequentially, the three independent variables are themselves extremely highly inter-correlated — SLV with SLR (r = 0.906) and SLI (r = 0.865), and, most acutely, SLR with SLI (r = 0.995) — all far above the conventional 0.80 threshold at which multicollinearity becomes a serious concern. This is the direct statistical signature of the concentration documented in Section 3.3: because only four firm-years have any confirmed syndicated balance at all, and those four firm-years' syndicated-to-debt and syndicated-to-asset ratios move almost in lockstep, SLR and SLI are not, in this real dataset, capturing empirically distinguishable dimensions of syndicated financing, whatever their conceptual distinctness in theory. This is confirmed formally by the Variance Inflation Factor test reported in Section 4.3, and it is the reason the full three-variable model specified in Section 3.5 cannot be reliably estimated as a whole.

4.3 Diagnostic Tests

Table 4.3: Diagnostic Test Results

Test	Statistic	Decision
Variance Inflation Factor — full 3-variable model (SLV / SLR / SLI)	18.4 / 438.7 / 312.0	Severe multicollinearity for SLR and SLI (>> 5.0 threshold); SLR dropped from the primary specification (Section 4.4)
Breusch-Pagan heteroscedasticity test	LM = 0.925 (p = 0.819)	Homoscedasticity not rejected
F-test for poolability (entity/firm effects)	F(6,26) = 0.173 (p = 0.982)	No statistically significant firm-specific effects; pooled specification not rejected
Hausman specification test	$\chi^2(3) = 0.709$ (p = 0.871)	Random Effects estimator is consistent and preferred over Fixed Effects

Unlike a preliminary, since-corrected pass at this dataset, the verified diagnostics tell a consistent and much more cautious story. The VIF test — using the study's own stated threshold of 5.0 — shows that SLR and SLI cannot be included together in a single regression without producing statistically meaningless, unstable coefficient estimates; SLR is therefore dropped from the primary specification in Section 4.4 and reported there only as the bivariate correlation already given in Section 4.2. The Breusch-Pagan test does not reject homoscedasticity, so heteroscedasticity is not a material concern for the remaining two-variable model. The F-test for poolability fails to reject the null of no significant firm-specific effects (p = 0.982), and the Hausman test fails to reject the null that the Random Effects estimator is consistent (p = 0.871) — both indicating that a pooled or Random Effects specification, not Fixed Effects, is appropriate for this sample. This is the opposite conclusion from a preliminary analysis of an earlier, since-withdrawn version of this dataset, which had reported significant firm effects and a Fixed-Effects preference; the real, verified panel shows no such firm-specific structure, which is unsurprising once one recognises that five of the seven sampled firms have identically zero syndicated-loan variables across every single year in the panel — there is no firm-specific variation for a fixed-effects model to distinguish for those firms.

4.4 Regression Results

Because SLR cannot be reliably estimated alongside SLI (Section 4.3), the primary specification retains SLV and SLI only. Table 4.4 reports this reduced model under the Pooled OLS / Random Effects estimator (the Hausman and poolability tests in Section 4.3 show these two estimators are the appropriate choice, and, for this dataset, they yield numerically identical coefficient estimates).

Table 4.4: Regression Results: Asset Growth on SLV and SLI (Pooled OLS / Random Effects, N = 36)

Variable	Coef.	t-stat	p-value
Constant	0.230	3.557	0.001
SLV	-0.049	-2.107	0.043
SLI	12.897	3.243	0.003

$R^2 = 0.274$; Model F(2,33) = 6.225 (p = 0.005). As a robustness check, the same reduced model was also estimated with Fixed Effects (entity effects), yielding a consistent pattern — SLV = -0.071 (p = 0.117), SLI = 14.909 (p = 0.034), R^2 (within) = 0.192 — though Section 4.3's poolability test indicates the Fixed Effects specification is unnecessary for this sample. For completeness, the full three-variable model (SLV, SLR and SLI together) was also estimated despite the collinearity warning: none of the three coefficients is individually significant in that specification (SLV p = 0.410; SLR p = 0.884; SLI p = 0.616), which is the expected consequence of including two severely collinear regressors together rather than evidence that the underlying relationships are absent — hence the preference for the reduced model above. Considered alone (bivariate, not controlling for SLI), SLR shows a positive and statistically significant relationship with asset growth (coefficient 2.163, p = 0.019, Pooled OLS),

consistent with the simple correlation reported in Section 4.2, but this cannot be treated as a controlled estimate of SLR's independent effect.

4.5 Test of Hypotheses and Discussion of Findings

4.5.1 Syndicated Loan Volume and Asset Growth

In the preferred (SLV + SLI) specification, SLV shows a negative coefficient of -0.049, with a t-statistic of -2.107 and a p-value of 0.043, which is below the 0.05 significance threshold — but with the opposite sign to the a priori expectation stated in Section 3.5. Strictly applying the study's 5% significance criterion, the null hypothesis (H01) that Syndicated Loan Volume has no significant effect on the asset growth of listed oil and gas firms in Nigeria is rejected, but in the direction opposite to that hypothesised: the real data suggest a negative, not positive, association between the scale of syndicated financing accessed (in log terms) and same-year asset growth. This result should be interpreted with considerable caution. It is not robust to the Fixed Effects specification ($p = 0.117$), it is estimated from only four non-zero observations concentrated in two firms, and it is consistent with a specific, plausible institutional story rather than a general 'more debt, less growth' relationship: Oando's largest SLV observations (FY2024–FY2025) follow, rather than precede, its single largest one-year asset-growth event (140.4% in FY2024), so that in the subsequent year (FY2025) growth normalises to 15.7% even as the syndicated facility remains large — mechanically producing a negative slope across just two data points for that firm. This finding does not provide credible general evidence that larger syndicated facilities depress asset growth; it more plausibly reflects the mechanics of acquisition accounting in a two-firm, four-observation sample, and should not be relied upon beyond this specific dataset without a much larger sample of genuinely syndicated-borrowing firms.

4.5.2 Syndicated Loan Ratio and Asset Growth

Syndicated Loan Ratio cannot be tested in the controlled, multivariate form specified in Section 3.5, because the real, verified data show SLR to be almost perfectly collinear with SLI ($r = 0.995$; Section 4.2 and 4.3). Considered only as a simple bivariate association, SLR is positively and significantly correlated with asset growth ($r = 0.388$, $p = 0.019$) and shows a positive, significant bivariate regression coefficient (2.163, $p = 0.019$). Strictly, this bivariate result would lead to rejection of the null hypothesis (H02) that Syndicated Loan Ratio has no significant effect on asset growth; however, because SLR's variation in this sample is not statistically separable from SLI's, this study does not treat H02 as having been tested in the controlled sense the original model specification intended, and reports this as an open question for future research with a larger, less concentrated sample (Section 5.4).

4.5.3 Syndicated Loan Intensity and Asset Growth

In the preferred specification, SLI shows a positive coefficient of 12.897, with a t-statistic of 3.243 and a p-value of 0.003, well below the 0.05 threshold, and this result is robust in direction and significance under the Fixed Effects specification (coefficient 14.909, $p = 0.034$). The null hypothesis (H03) that Syndicated Loan Intensity has no significant effect on the asset growth of listed oil and gas firms in Nigeria is therefore rejected: the real data show a positive and statistically significant association between the extent to which a firm's asset base is financed by syndicated debt and its subsequent asset growth. This is the one finding of the three hypotheses that is directionally consistent with the a priori expectation set out in Section 3.5 and the theoretical review in Section 2.4, and it aligns with Bharath et al. (2011), Esty (2001) and Adegbite (2021), whose evidence on relationship-intensive and reserve-based syndicated lending showed that facilities structured as a substantial share of the asset base are associated with disciplined asset expansion. The finding should nonetheless be read narrowly: it is generated by only four firm-year observations in two firms (Oando and Seplat Energy), both undertaking large, acquisition- or refinancing-related transactions, and it says more about how syndicated project and acquisition finance behaves at the largest, most internationally connected end of the Nigerian oil and gas sector than about a general, sector-wide 'syndicated financing drives growth' relationship.

4.5.4 Summary of Findings

Overall, the real, verified evidence provides mixed and narrowly-based support for the study's hypotheses. Syndicated Loan Intensity is found to be a positive and statistically significant predictor of asset growth, robust across Pooled/Random Effects and Fixed Effects specifications. Syndicated Loan Volume is found to be significant but in the opposite direction to that hypothesised, a result attributable to the small number of underlying observations rather than to a credible general mechanism. Syndicated Loan Ratio could not be tested in a controlled multivariate setting because it is almost perfectly collinear with SLI in this sample, though its simple bivariate correlation with growth is positive and significant. Both the F-test for poolability and the Hausman test indicate that firm-specific effects are not a significant feature of this dataset, so the Pooled/Random Effects estimator, not Fixed Effects, is the statistically preferred specification — a materially different diagnostic conclusion from a preliminary analysis of an earlier version of this dataset. Most importantly, all of these results rest on a real, verified finding about the underlying financing landscape: genuinely disclosed syndicated lending is rare among NGX-listed oil and gas firms, confirmed in only 4 of 36 real firm-year observations and concentrated in two firms' acquisition- and refinancing-related transactions. The findings should accordingly be read as evidence about how syndicated project and acquisition finance behaves at the largest end of the Nigerian oil and gas sector, not as evidence that syndicated borrowing is a broad-based, sector-wide driver of corporate growth.

5.0. SUMMARY AND CONCLUSION

5.1 Summary

This study set out to examine the impact of syndicated loans on corporate growth in Nigeria's oil and gas sector over the 2020–2025 period, motivated by the growing prominence of large syndicated facilities such as Project Gazelle, Project Panther, Seplat Energy's reserve-based lending facility and Oando's NAOC acquisition financing, and by the absence of firm-level Nigerian evidence disaggregating syndicated debt into distinct volume, ratio and intensity dimensions. Using an ex-post facto research design and a real, source-verified, unbalanced panel of 36 firm-year observations drawn from the audited annual reports of seven NGX-listed oil and gas companies, the study modelled asset growth as a function of Syndicated Loan Volume, Syndicated Loan Ratio and Syndicated Loan Intensity, anchored on the Pecking Order, Trade-Off and Agency Cost theories. Diagnostic testing showed that Fixed Effects is not required for this sample (no significant firm-specific effects; Hausman test favours Random Effects), and that Syndicated Loan Ratio is too collinear with Syndicated Loan Intensity to be estimated jointly with it. In the resulting preferred specification, Syndicated Loan Intensity showed a statistically significant positive effect on asset growth ($p = 0.003$), Syndicated Loan Volume showed a statistically significant effect in the opposite direction to that hypothesised ($p = 0.043$), and Syndicated Loan Ratio's positive bivariate correlation with growth ($p = 0.019$) could not be confirmed as an independent effect. Underlying all of these results is a more basic finding from the data-collection process itself: a genuinely disclosed syndicated loan facility could be confirmed in only 4 of the 36 real firm-year observations, concentrated in two firms — Oando Plc and Seplat Energy Plc — around specific acquisition and refinancing transactions.

5.2 Conclusion

The study concludes that, on the real, verified evidence, syndicated lending is not yet a broad-based, incremental growth-financing tool across the Nigerian oil and gas sector: five of the seven sampled firms show no disclosed syndicated borrowing at all across the entire 2019–2025 window covered by this study. Where genuine syndicated financing does appear, it is associated with a statistically significant positive relationship between the intensity of that financing (relative to the firm's asset base) and subsequent asset growth, consistent with the theoretical expectation that reserve-based, multi-lender-monitored facilities channel borrowed capital toward productive, identifiable capital projects and acquisitions — exploration, field development, processing capacity, and, increasingly, the acquisition of divesting International Oil Companies' (IOCs) assets. However, this evidence is generated by only two firms' transactions and should not be extrapolated to the sector as a whole, and the volume-based measure (SLV) produces a result in the opposite direction to theory, most plausibly

reflecting the small number of underlying observations rather than a genuine 'more debt, less growth' mechanism. The evidence therefore supports a narrower conclusion than originally hypothesised: properly structured, project- and acquisition-linked syndicated lending appears, on the limited real evidence available, to function as a productive growth-financing channel for the small number of large, internationally connected Nigerian oil and gas firms that currently use it, rather than as a broad-based financing tool available to or used by the sector generally.

5.3 Recommendations

Corporate finance managers at the largest, most internationally connected oil and gas firms — those with the credit profile to access syndicated markets, as Oando and Seplat Energy have demonstrated — should continue to consider syndicated, reserve-based and consortium-arranged facilities for well-defined, cash-flow-generating capital projects and acquisitions, given the positive association this study finds between syndicated loan intensity and asset growth for such transactions.

Deposit money banks and syndicate arrangers should continue to structure Nigerian oil and gas syndications around reserve-based and project-linked covenants, since this discipline is consistent with converting borrowed capital into productive asset formation.

The Nigerian Exchange Limited, the Securities and Exchange Commission and the Financial Reporting Council should consider requiring more granular, standardised disclosure of loan facility terms in listed firms' notes to the financial statements — specifically, whether a facility is bilateral or syndicated, the identity of the lead arranger or lender group, and the facility's original and outstanding size. This recommendation follows directly from this study's own data-collection experience: across the seven sampled firms and their combined borrowings notes, it was frequently impossible to determine from the published financial statements alone whether a given loan was provided by one bank or several, which is precisely the ambiguity that a 'syndicated loan' construct is meant to resolve.

Boards and audit committees of oil and gas firms that do use syndicated financing should strengthen covenant-compliance monitoring and post-disbursement tracking of loan proceeds against capital-project milestones, to help sustain the positive association this study finds between syndicated loan intensity and asset growth.

Future researchers should extend this study using a larger and more statistically powerful sample — for example, by broadening beyond strictly NGX 'oil and gas'-classified firms to include oilfield-services companies, by extending the observation window backward and forward in time, or by adopting an event-study design centred specifically on the identified real syndicated transactions (Project Gazelle, Project Panther, the AKK pipeline financing, Oando's NAOC acquisition facility, and Seplat's Westport RBL) — since a firm-level panel restricted to eight or even seven NGX-listed oil and gas firms cannot generate enough genuine syndicated-loan variation to test the three-proxy model with adequate statistical power, as this study's own experience demonstrates.

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