
FROM MACROECONOMY TO THE FIRM LEVEL:
REVISITING THE RESOURCE CURSE HYPOTHESIS IN VIETNAMESE
LISTED COMPANIES

Trinh Minh Ngoc✉

Accounting and Auditing Department
VNU University of Economics and Business, Hà Nội, Vietnam
Email: ngocmt@vnu.edu.vn

DOI: <https://doi.org/10.46880/methonomi.Vol12No1.pp93-106>

ABSTRACT

This study examines whether the resource curse hypothesis, originally formulated at the country level, also manifests among individual firms in a resource-dependent economy. The analysis employs a panel dataset of 11,937 firm-year observations from 1,406 non-financial companies listed on the Vietnamese stock market over the period 2015 to 2023. A time invariant resource sector indicator is constructed using industry classification codes and verified against corporate names. Profitability, measured by return on assets, and asset growth serve as the dependent variables, with firm size, leverage, tangibility, and year fixed effects included as controls. To ensure robust inference, all models are re-estimated using firm, clustered standard errors and a random effects estimator. When the resource indicator is defined broadly to encompass oil and gas, coal, and mineral extraction, it exhibits no statistically significant association with profitability. The coefficient on return on assets is 0.00491 and remains insignificant under both clustered standard errors and random effects. In sharp contrast, restricting the indicator to the oil and gas subsector reveals a pronounced negative effect. Firms in this subsector exhibit a return on assets approximately 3.13 percentage points lower than their counterparts, with a coefficient of -0.03133 that is significant at the one percent level and remains robust to firm-level clustering. Moreover, the same subsector demonstrates significantly lower asset growth, with a coefficient of -0.08512 that is consistent across all three estimators. Collectively, these findings extend the resource curse debate to the firm level and underscore the substantive empirical implications of industry heterogeneity within the broadly defined resource sector, suggesting that the curse, if present, is not a general feature of resource-intensive industries but rather a subsector-specific phenomenon concentrated in oil and gas.

Keywords: Resource Curse, Firm Profitability, Oil and Gas Industry, Listed Companies, Vietnam.

INTRODUCTION

Natural resource abundance has long occupied an ambiguous position in the economic growth literature. On one hand, classical trade theory suggests that resource endowment should confer a comparative advantage and thereby support higher national income. On the other hand, a substantial body of empirical work initiated by Auty (1993) and subsequently formalized by Sachs and Warner (2001) has documented a persistent negative association between resource dependence and long run economic growth, a phenomenon commonly labeled the resource curse. Explanations for this paradox have evolved over time, moving from macroeconomic mechanisms such as the Dutch disease, whereby a resource boom appreciates the real exchange rate and erodes the competitiveness of tradable manufacturing sectors (Corden & Neary, 1982), toward institutional explanations emphasizing rent seeking, weak governance, and the crowding out of investment in human capital and innovation (Gylfason, 2001; Mehlum, Moene, & Torvik, 2006).

Although the resource curse literature has generated a rich body of cross country evidence, considerably less attention has been directed toward testing the hypothesis using disaggregated, firm level data. This gap is notable because the mechanisms proposed to explain the resource curse, including rent extraction, underinvestment, and exposure to commodity price volatility, ultimately operate through the behavior and performance of individual economic agents, including firms. Evidence from firm level studies, such as the reexamination of ownership structures in oil producing economies by Khanna (2017) and the review of subnational and local level resource impacts by Cust and Poelhekke (2015), indicates that the aggregate country level relationship can mask considerable heterogeneity once the unit of analysis is shifted downward. Testing the resource curse hypothesis directly at the corporate level therefore offers a complementary and arguably more precise lens through which the phenomenon can be understood.

Vietnam presents a relevant and underexplored setting for this inquiry. As a middle income economy with a sizable extractive sector encompassing oil and gas, coal, and mineral mining, alongside a rapidly maturing stock market, Vietnam allows researchers to observe how firms operating in resource intensive industries perform relative to their nonresource counterparts once standard financial characteristics are held constant. Prior Vietnamese studies of firm profitability, including Nguyen and Nguyen (2020) and Bui and Nguyen (2021), have identified firm size, leverage, and liquidity as important determinants of return on assets among listed companies, yet none of these studies has explicitly tested whether membership in a resource based industry carries an independent profitability penalty or premium after controlling for these characteristics.

This study addresses that gap by constructing a firm level panel covering 1,406 nonfinancial companies listed on the Vietnamese stock exchanges between 2015 and 2023, drawn directly from audited financial statement data. A binary resource indicator is assigned to each firm based on its Industry Classification

Benchmark sector, specifically the oil and gas sector, together with a name based verification procedure identifying companies engaged in coal and mineral extraction. This indicator is time invariant and derived from objective classification criteria rather than from estimated or self reported measures, which reduces the risk of measurement error relative to proxies commonly used in prior research. The contribution of the present study is therefore twofold. First, it relocates the resource curse debate from the macroeconomic level to the level of the individual listed firm within a single emerging market. Second, it demonstrates, through a robustness test that narrows the resource indicator to the oil and gas subsector, that industry heterogeneity within the broad resource category carries meaningful empirical consequences that a single undifferentiated resource indicator would otherwise conceal.

The central objective of this study is to establish, at the firm level, whether operating in a resource-based industry is associated with an independent profitability penalty once firm size, leverage, and tangibility are held constant. A second objective is to determine whether any such penalty is concentrated in the oil-and-gas subsector rather than spread evenly across all resource-intensive industries. By pursuing these two objectives on a large panel of listed firms, the study provides direct firm-level evidence on a hypothesis that has, until now, been tested mainly at the level of the national economy.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The theoretical foundation of the resource curse hypothesis rests on the observation that countries endowed with abundant natural resources have, on average, grown more slowly than resource poor economies over extended periods (Auty, 1993; Sachs & Warner, 2001). Early explanations centered on the Dutch disease mechanism, in which a resource export boom generates an inflow of foreign currency that appreciates the real exchange rate, thereby reducing the price competitiveness of other tradable sectors, most notably manufacturing (Corden & Neary, 1982). As tradable manufacturing contracts, an economy loses the learning by doing externalities and productivity spillovers typically associated with industrial development, which in turn constrains long run growth (Gylfason, 2001). A subsequent stream of research has emphasized institutional quality as a moderating factor. Mehlum, Moene, and Torvik (2006) demonstrate that resource abundance is associated with slower growth primarily in countries with weak institutions that fail to constrain rent seeking behavior, whereas resource rich countries with strong institutions do not exhibit the same growth penalty. This institutional channel is consistent with the findings of Boschini, Pettersson, and Roine (2007), who show that the type of resource, together with the strength of property rights, jointly determines whether resource wealth translates into a curse or a source of prosperity. Apergis and Payne (2014) extend this line of inquiry to oil exporting economies in the Middle East and North Africa, finding that

institutional quality significantly conditions the relationship between oil dependence and growth. Van der Ploeg (2011) provides a comprehensive synthesis of the mechanisms proposed in the literature, including price volatility, revenue mismanagement, and conflict over resource rents, while Frankel (2010) and Badeeb, Lean, and Clark (2017) survey the evolution of the resource curse thesis and note that empirical support for the hypothesis is considerably more mixed once heterogeneity across resource types, time periods, and levels of analysis is taken into account. Kolstad and Wiig (2009) similarly argue that the political economy of resource rents, rather than resource abundance per se, ultimately determines whether the curse materializes in a given context.

Because the mechanisms underlying the resource curse operate through the decisions and performance of individual firms, several scholars have argued that the hypothesis should also be testable using firm level data. Cust and Poelhekke (2015) review evidence on the local and subnational impacts of resource extraction and conclude that within country variation in resource exposure often produces effects that differ substantially from those implied by cross country regressions. Khanna (2017) revisits the oil curse using firm and project level ownership data and finds that the relationship between oil abundance and growth is contingent on ownership structure, a result that would be obscured in a purely country level analysis. Within the Vietnamese context specifically, Nguyen and Nguyen (2020) examine 1,343 Vietnamese listed companies across six industries between 2014 and 2017 and find that firm size, liquidity, and leverage are significant determinants of return on assets, return on equity, and return on sales. Bui and Nguyen (2021) focus specifically on 29 oil and gas companies listed on the Vietnamese stock market between 2012 and 2018 and report that leverage and liquidity are significantly associated with profitability within this subsector, although their study does not benchmark oil and gas firms against a broader sample of nonresource firms. The corporate finance literature has additionally established that firm size, capital structure, and asset composition are robust determinants of profitability. Leverage has typically been found to be negatively associated with profitability, consistent with the trade off theory of capital structure and the empirical evidence presented by Rajan and Zingales (1995) and Titman and Wessels (1988), reflecting the higher fixed financing costs and constrained financial flexibility faced by more heavily indebted firms, while asset tangibility is often associated with greater collateral capacity and easier access to external financing, particularly in capital intensive industries such as resource extraction.

Recent scholarship has begun to test these mechanisms with firm-level and subnational data, and this literature directly motivates the present study. Ross (2015) reviews two decades of evidence and concludes that the adverse effects of resource wealth are concentrated in petroleum rather than in mineral wealth in general, which suggests that the curse should be strongest in oil-and-gas activities. In a similar spirit, Funk, Treviño, and Oriaifo (2021) show that resource curse

dynamics shape the co-evolution of institutions and firm behaviour in emerging economies, and therefore operate at the level of the individual enterprise. Szturo, Włodarczyk, Burchi, Miciuła, and Szturo (2021) likewise frame the curse as a firm-level problem that depends on the relationship between the state and resource-based enterprises. Evidence from Vietnam points in the same direction. Vuong and Napier (2014) examine the Vietnamese corporate sector and find that heavy reliance on capital and physical-resource endowments is associated with weaker innovation and performance, a pattern they describe as destructive creation. In addition, Breul and Nguyen (2022) show that extractive industries constrain regional diversification within Vietnam, which indicates that resource dependence produces uneven effects below the national level. At the same time, the institutional literature cautions that these effects are conditional. Andersen and Aslaksen (2008) demonstrate that constitutional arrangements determine whether resource wealth reduces growth, while Tang, Irfan, Razzaq, and Dagar (2022) report that business regulation shapes the financial resource curse across ASEAN countries, a region that includes Vietnam.

Taken together, this body of work implies that a firm-level test of the resource curse should distinguish between resource subsectors rather than treat all resource-intensive industries as equivalent. It further implies that oil-and-gas firms are the most likely to display a profitability penalty, because they are exposed to volatile world commodity prices, they require large and long-lived capital investments, and they are frequently tied to concentrated or state-linked ownership. The present study addresses this expectation directly and, in doing so, complements emerging work on how governance and sustainability policies might mitigate the curse for resource-based business (Yadav, Samadhiya, Kumar, Pandey, Luthra, and Mohapatra, 2026).

Drawing on this theoretical discussion, the study tests the hypothesis that firms operating in resource based industries exhibit systematically different profitability relative to firms operating in nonresource industries, after controlling for firm size, leverage, tangibility, and common macroeconomic shocks captured through year fixed effects. Because prior literature indicates that the resource curse, where present, tends to be concentrated within specific resource subsectors rather than distributed uniformly across all resource intensive industries (Boschini et al., 2007), the study further examines whether the relationship differs when the resource indicator is narrowed from a broad definition, encompassing oil and gas, coal, and minerals, to a narrow definition restricted to the oil and gas subsector alone.

On the basis of this discussion, the study tests two hypotheses.

- H1. Firms operating in resource-based industries exhibit significantly different profitability from firms in non-resource industries, after controlling for firm size, leverage, and tangibility.

H2. The resource curse effect, where present, is concentrated in the oil-and-gas subsector rather than distributed evenly across resource-intensive industries.

RESEARCH METHODS

The empirical analysis uses a firm year panel constructed from audited financial statements of nonfinancial companies listed on the Vietnamese stock exchanges over the period from 2015 to 2023. Following standard practice in the corporate finance literature, financial institutions are excluded because their balance sheet structure and regulatory environment differ fundamentally from those of nonfinancial firms. After applying this filter, the resulting sample comprises 1,406 companies, yielding 11,937 firm year observations for the profitability model and 11,926 firm year observations for the asset growth model, the latter figure being marginally lower due to the requirement of a prior year asset value for growth calculation. All variables are computed directly from reported financial statement items, without reliance on estimated or imputed measures, which limits missing data to a negligible proportion of the sample.

Table 1. Definition and Construction of Variables

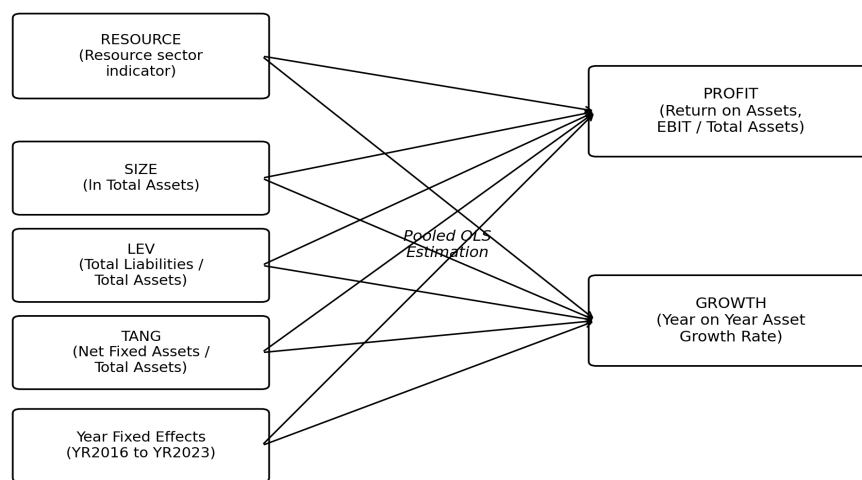
Variable	Definition and measurement
PROFIT	Return on assets, calculated as earnings before interest and tax divided by total assets. Primary dependent variable.
GROWTH	Year on year growth rate of total assets. Alternative dependent variable used for robustness.
RESOURCE	Binary indicator equal to one if the firm belongs to the oil and gas sector under the Industry Classification Benchmark, or if the firm name indicates coal or mineral extraction activity, and zero otherwise. Time invariant.
RESOURCE_NARROW	Binary indicator equal to one only for firms classified under the oil and gas sector, excluding coal and mineral firms. Used in the robustness test.
SIZE	Natural logarithm of total assets.
LEV	Total liabilities divided by total assets.
TANG	Net tangible fixed assets divided by total assets.
YR2016 to YR2023	Set of year dummy variables, with 2015 as the reference year, controlling for macroeconomic and market wide shocks common to all firms in a given year.

Source: Author's construction based on audited financial statement data of listed Vietnamese nonfinancial firms, 2015 to 2023.

The baseline empirical model takes the following form.

$$PROFIT_{it} = \beta_0 + \beta_1 RESOURCE_i + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_4 TANG_{it} + \sum \delta_t YR_t + \varepsilon_{it}$$

where the subscript i denotes the firm, the subscript t denotes the year, and ε_{it} is the idiosyncratic error term. The same specification is estimated with GROWTH substituted as the dependent variable in order to assess whether the results are sensitive to the choice of profitability measure. Because RESOURCE is a time invariant firm characteristic, a firm fixed effects estimator would be inappropriate, as it would remove all identifying variation in the variable of primary interest through perfect collinearity with the firm specific intercept. The model is therefore estimated using pooled ordinary least squares, with year fixed effects included to absorb shocks that are common to all firms within a given year, such as macroeconomic cycles and market wide regulatory changes. Figure 1 summarizes the conceptual structure of the empirical model.



Source: Author's compilation.

Figure 1. Conceptual structure of the empirical model

RESULTS AND DISCUSSION

Table 2 reports descriptive statistics comparing resource based firms, defined broadly to include oil and gas, coal, and mineral companies, with all other listed nonfinancial firms in the sample. On an unconditional basis, resource based firms display a higher average return on assets and a larger average firm size than nonresource firms, while exhibiting lower average leverage. All three differences are statistically significant at conventional levels based on Welch t statistics. The unconditional difference in asset growth and tangibility between the two groups is not statistically distinguishable.

Table 2. Descriptive Statistics: Resource Firms versus Nonresource Firms

Variable	N (Resource)	Mean (Resource)	N (Nonresource)	Mean (Nonresource)	Welch t-statistic (p-value)
PROFIT (ROA)	420	0.0626	11,517	0.0526	2.462** (0.014)

Variable	N (Resource)	Mean (Resource)	N (Nonresource)	Mean (Nonresource)	Welch t-statistic (p-value)
GROWTH	420	0.0820	11,517	0.0659	1.041 (0.299)
SIZE	420	27.407	11,517	26.910	5.409*** (0.000)
LEV	420	0.5010	11,517	0.5295	-2.303** (0.022)
TANG	420	0.2498	11,517	0.2442	0.595 (0.552)

Source: Author's calculation from the panel dataset of Vietnamese listed nonfinancial firms, 2015 to 2023.

Table 2 presents descriptive statistics comparing resource firms and nonresource firms in the sample. The resource group, comprising 50 firms with 420 firm year observations, exhibits higher mean profitability than the nonresource group (0.0626 versus 0.0526), larger firm size (27.407 versus 26.910), and lower leverage (0.5010 versus 0.5295), while growth and tangibility are comparable across the two groups. The univariate gaps are statistically significant for profitability, size, and leverage, with p values of 0.014, below 0.001, and 0.022 respectively, but not for growth or tangibility, with p values of 0.299 and 0.552. Beyond these group means, the full sample distribution shows moderate dispersion, with a standard deviation of 0.082 for return on assets and 0.264 for asset growth. Because the resource group contains only 50 firms and 420 firm year observations against 11,517 observations for the remaining firms, these unconditional differences should be interpreted as descriptive rather than causal. Table 3 reports the correlations among all variables. All pairwise correlations among the regressors are low, the largest in absolute value being 0.081 between size and tangibility, indicating that multicollinearity is unlikely to affect the estimates.

Table 3. Pearson Correlation Matrix

Variable	(1)	(2)	(3)	(4)	(5)	(6)
(1) PROFIT (ROA)	1.00					
(2) GROWTH	0.174*	1.00				
(3) RESOURCE	0.022*	0.011	1.00			
(4) SIZE	0.105*	0.113*	0.058*	1.00		
(5) LEV	-0.280*	-0.035*	-0.015	0.046*	1.00	
(6) TANG	0.102*	-0.121*	0.005	0.081*	0.017	1.00

* $p < 0.05$. $n = 11,937$.

Because these unconditional comparisons do not account for differences in firm size, leverage, or macroeconomic conditions across years, Table 2 should be interpreted only as a preliminary description of the data rather than as evidence of a causal relationship between resource sector membership and firm performance.

Table 4 reports the estimation results of the baseline pooled ordinary least squares model for both dependent variables. After controlling for firm size, leverage, tangibility, and year fixed effects, the coefficient on the broadly defined RESOURCE indicator is positive but not statistically significant in either the profitability equation or the growth equation. This result indicates that the higher unconditional profitability observed for resource firms in Table 2 is largely attributable to differences in firm size and capital structure rather than to an inherent characteristic of the resource sector itself. Among the control variables, SIZE is positively and significantly associated with both profitability and growth, LEV is negatively and significantly associated with both outcomes, consistent with the trade off theory of capital structure discussed by Rajan and Zingales (1995), and TANG is positively associated with profitability but negatively associated with growth.

Table 4. Baseline Model

Variable	DV = PROFIT (ROA)	DV = GROWTH
RESOURCE	0.00491 (0.00387)	0.00541 (0.01287)
SIZE	0.00597*** (0.00045)	0.02172*** (0.00150)
LEV	-0.06616*** (0.00198)	-0.03026*** (0.00660)
TANG	0.03349*** (0.00308)	-0.15251*** (0.01026)
Year fixed effects	Included	Included
N	11,937	11,926
R squared	0.111	0.042

*Source: Author's estimation. Standard errors in parentheses. *** denotes significance at the one percent level. Coefficients for the year dummy variables are omitted from the table for brevity.*

Given the theoretical expectation that resource curse effects may be concentrated within specific resource subsectors, Table 5 reports the results of a robustness test in which the resource indicator is narrowed to include only firms classified under the oil and gas sector, excluding coal and mineral companies. The coefficient on RESOURCE_NARROW becomes negative and statistically significant, indicating that oil and gas firms exhibit significantly lower profitability than otherwise comparable firms operating in nonresource industries, once firm size, leverage, and tangibility are held constant. The magnitude and significance of the control variables remain broadly consistent with the baseline specification, suggesting that the reversal in the sign and significance of the resource coefficient is attributable to the change in industry composition of the resource group rather than to a change in model specification.

Table 5. Robustness Check: Narrow Resource Indicator Restricted to The Oil and Gas Subsector

Variable	DV = PROFIT (ROA)
RESOURCE_NARROW	-0.03133*** (0.00783)
SIZE	0.00623*** (0.00045)
LEV	-0.06632*** (0.00198)
TANG	0.03317*** (0.00308)
Year fixed effects	Included
N	11,937

*Source: Author's estimation. Standard errors in parentheses. *** denotes significance at the one percent level.*

Table 5 presents a robustness check in which the resource intensity measure is restricted to firms operating exclusively in the oil and gas subsector. The coefficient on RESOURCE_NARROW remains negative and statistically significant at the 1% level ($\beta = -0.03133$, $p < 0.01$), confirming that the baseline negative relationship is not driven by the broader definition of resource dependence. Among the control variables, firm size (SIZE) and tangibility (TANG) exhibit positive associations with profitability, whereas leverage (LEV) shows a strong negative effect, all at conventional significance levels.

Two diagnostic tests support the validity of these estimates. First, variance inflation factors (VIFs) are all at or below 1.01, indicating that multicollinearity is negligible—a finding consistent with the low pairwise correlations reported in Table 3. Second, both the Breusch-Pagan and White tests reject the null hypothesis of homoskedasticity at the 1% level for the profitability model (Breusch-Pagan $\chi^2 = 41.97$; White $\chi^2 = 997.91$). This evidence suggests that classical ordinary least squares (OLS) standard errors may be underestimated, potentially leading to overstatement of statistical significance. To address this concern, Table 6 re-estimates all specifications using firm-clustered standard errors and a random-effects estimator, thereby ensuring more reliable inference in the presence of heteroskedasticity and unobserved firm-level heterogeneity.

Table 6. Robustness: Resource Coefficient Across Estimators and Specifications

Specification	Pooled OLS	Clustered SE	Random effects
Broad indicator, ROA	0.00491 (0.00387)	0.00491 (0.00905)	0.00702 (0.00848)
Broad indicator, asset growth	0.00541 (0.01287)	0.00541 (0.01786)	0.00520 (0.01652)
Oil and gas (narrow), ROA	-0.03133*** (0.00783)	-0.03133** (0.01572)	-0.02670 (0.01711)

Oil and gas (narrow), asset growth	-0.08512*** (0.02605)	-0.08512*** (0.02229)	-0.09405*** (0.03335)
--	-----------------------	-----------------------	-----------------------

*Coefficient on the resource indicator; standard errors in parentheses. Controls (size, leverage, tangibility) and year fixed effects included. *** $p < 0.01$, ** $p < 0.05$. $n = 11,937$ (ROA) and 11,926 (growth); narrow specification based on 12 firms and 101 observations.*

Table 6 reports the coefficient estimates for the resource indicator across three estimators: pooled OLS, firm-clustered standard errors, and random effects for both profitability (ROA) and asset growth, using the broad and narrow (oil-and-gas-only) definitions of resource intensity. All specifications include the standard controls (size, leverage, tangibility) and year fixed effects.

Several patterns emerge from this robustness exercise. First, the broad resource indicator is statistically insignificant in all models and for both dependent variables. This result reinforces the conclusion that, at the firm level, there is no generalised resource curse, and is consistent with the view of Boschini, Pettersson, and Roine (2007) that resource wealth exerts conditional effects rather than a uniform negative influence across all extractive sectors. Second, for the narrow oil-and-gas indicator, the profitability coefficient is negative and significant under pooled OLS ($\beta = -0.03133$, $p < 0.01$) and remains significant at the 5% level when standard errors are clustered by firm ($\beta = -0.03133$, $p < 0.05$); however, it loses conventional significance under the random-effects estimator ($\beta = -0.02670$, $p > 0.10$). This suggests that the profitability penalty, while present, is not entirely robust to all modelling choices and should be interpreted as strong but not unconditional evidence. Third, the oil-and-gas penalty for asset growth is negative and statistically significant across all three estimators (pooled OLS: $\beta = -0.08512$, $p < 0.01$; clustered SE: $\beta = -0.08512$, $p < 0.01$; random effects: $\beta = -0.09405$, $p < 0.01$), making it the most consistent and robust finding of the study.

Taken together, these results point to a subsector-specific phenomenon rather than a broad-based resource curse, aligning with the arguments of Ross (2015) and Vuong and Napier (2014) that resource effects are often sector- and context-dependent. Nevertheless, a note of caution is warranted: the narrow oil-and-gas specification relies on only 12 firms and 101 firm-year observations. Consequently, while the evidence is suggestive and internally consistent, it should be viewed as strong but subsector-specific rather than as a generalisable property of all resource-intensive industries. Overall, the analysis supports the conclusion that a broadly defined resource sector indicator, encompassing oil and gas, coal, and minerals, does not impose a statistically significant penalty on firm profitability once observable firm characteristics and year-specific shocks are controlled for. The negative effect, where present, is confined to the oil and gas subsector, implying that the resource curse, insofar as it manifests in the Vietnamese corporate sector, is more closely associated with firms engaged in petroleum extraction than with the broader spectrum of resource-based activities.

This pattern may be explained by several factors specific to the oil and gas subsector, including its greater exposure to global commodity price volatility, its capital intensity and long investment horizons, and the concentrated ownership structure that frequently characterizes oil and gas enterprises in transition economies, a channel highlighted by Khanna (2017) in the context of ownership and the oil curse. Because the present dataset does not include direct measures of ownership concentration, commodity price exposure, or governance quality, these explanations remain plausible interpretations rather than confirmed mechanisms, and further research incorporating such measures would be needed to establish the precise channel through which the observed profitability penalty operates. From a methodological standpoint, the contrast between the baseline and narrow specifications illustrates the importance of industry level disaggregation when testing the resource curse hypothesis using firm level data. Studies that rely on a broadly defined resource sector indicator risk masking economically meaningful heterogeneity that becomes apparent only once the resource category is disaggregated into its constituent subsectors.

These findings align closely with prior work. Ross (2015) demonstrates that petroleum, rather than mineral wealth in general, is the primary driver of adverse resource-related outcomes—a distinction that parallels the contrast between our broad and narrow indicators. Similarly, Vuong and Napier (2014) document a pattern of weak performance among resource-dependent Vietnamese firms, while Funk, Treviño, and Oriaifo (2021) and Szturo et al. (2021) trace the underlying mechanisms to the enterprise level. The capital intensity and extended investment horizons highlighted by Van der Ploeg (2011) offer a plausible explanation for why the penalty manifests not only in profitability but also in asset growth. Finally, whether governance reforms and sustainable finance instruments can mitigate this penalty, as suggested by Yadav et al. (2026) and Tang et al. (2022), remains an open and important avenue for future firm-level research in the Vietnamese context.

CONCLUSION

This study tests the resource curse hypothesis at the level of the individual firm using a panel of 1,406 listed nonfinancial companies in Vietnam observed between 2015 and 2023. The findings indicate that a broadly defined resource sector indicator is not significantly associated with firm profitability once firm size, leverage, tangibility, and year fixed effects are controlled for, whereas a narrower indicator restricted to the oil and gas subsector is associated with significantly lower profitability. These results suggest that policy attention directed toward mitigating potential resource curse effects within the Vietnamese corporate sector may be more appropriately targeted toward the oil and gas subsector specifically, rather than toward resource intensive industries in general. Industry specific diagnostic work, rather than broad sectoral classification, is likely to yield more precise guidance for interventions aimed at improving the long run competitiveness of

resource dependent firms, and closer attention to capital structure management and diversification strategies among oil and gas firms may help reduce exposure to the mechanisms associated with lower profitability in this subsector.

BIBLIOGRAPHY

- Andersen, J. J., & Aslaksen, S. (2008). Constitutions and the resource curse. *Journal of Development Economics*, 87(2), 227-246.
<https://doi.org/10.1016/j.jdeveco.2007.12.005>
- Apergis, N., & Payne, J. E. (2014). The oil curse, institutional quality, and growth in MENA countries: Evidence from non-stationary panel data. *The Journal of Economic Asymmetries*, 11, 48-56.
<https://doi.org/10.1016/j.jeca.2014.04.003>
- Auty, R. M. (1993). *Sustaining development in mineral economies: The resource curse thesis*. Routledge.
- Badeeb, R. A., Lean, H. H., & Clark, J. (2017). The evolution of the natural resource curse thesis: A critical literature survey. *Resources Policy*, 51, 123-134. <https://doi.org/10.1016/j.resourpol.2016.10.015>
- Boschini, A. D., Pettersson, J., & Roine, J. (2007). Resource curse or not: A question of appropriability. *The Scandinavian Journal of Economics*, 109(3), 593-617. <https://doi.org/10.1111/j.1467-9442.2007.00509.x>
- Breul, M., & Nguyen, T. X. T. (2022). The impact of extractive industries on regional diversification: Evidence from Vietnam. *The Extractive Industries and Society*, 11, 100982. <https://doi.org/10.1016/j.exis.2021.100982>
- Bui, M. T., & Nguyen, H. M. (2021). Determinants affecting profitability of firms: A study of oil and gas industry in Vietnam. *Journal of Asian Finance, Economics and Business*, 8(2), 599-608.
<https://doi.org/10.13106/jafeb.2021.vol8.no2.0599>
- Corden, W. M., & Neary, J. P. (1982). Booming sector and de-industrialisation in a small open economy. *The Economic Journal*, 92(368), 825-848.
<https://doi.org/10.2307/2232670>
- Cust, J., & Poelhekke, S. (2015). The local economic impacts of natural resource extraction. *Annual Review of Resource Economics*, 7, 203-235.
<https://doi.org/10.1146/annurev-resource-100814-125106>
- Frankel, J. A. (2010). *The natural resource curse: A survey (NBER Working Paper No. 15836)*. National Bureau of Economic Research.
<https://doi.org/10.3386/w15836>
- Funk, C., Treviño, L. J., & Oriáifo, J. (2021). Resource curse impacts on the co-evolution of emerging economy institutions and firm internationalization. *International Business Review*, 30(4), 101753.
<https://doi.org/10.1016/j.ibusrev.2020.101753>
- Gylfason, T. (2001). Natural resources, education, and economic development. *European Economic Review*, 45(4-6), 847-859.
[https://doi.org/10.1016/S0014-2921\(01\)00127-1](https://doi.org/10.1016/S0014-2921(01)00127-1)
- Khanna, A. A. (2017). Revisiting the oil curse: Does ownership matter? *World Development*, 99, 214-229.
<https://doi.org/10.1016/j.worlddev.2017.05.023>

- Kolstad, I., & Wiig, A. (2009). It's the rents, stupid! The political economy of the resource curse. *Energy Policy*, 37(12), 5317-5325. <https://doi.org/10.1016/j.enpol.2009.07.055>
- Mehlum, H., Moene, K., & Torvik, R. (2006). Institutions and the resource curse. *The Economic Journal*, 116(508), 1-20. <https://doi.org/10.1111/j.1468-0297.2006.01045.x>
- Nguyen, T. N. L., & Nguyen, V. C. (2020). The determinants of profitability in listed enterprises: A study from Vietnamese stock exchange. *Journal of Asian Finance, Economics and Business*, 7(1), 47-58. <https://doi.org/10.13106/jafeb.2020.vol7.no1.47>
- Rajan, R. G., & Zingales, L. (1995). What do we know about capital structure? Some evidence from international data. *The Journal of Finance*, 50(5), 1421-1460. <https://doi.org/10.1111/j.1540-6261.1995.tb05184.x>
- Ross, M. L. (2015). What have we learned about the resource curse? *Annual Review of Political Science*, 18, 239-259. <https://doi.org/10.1146/annurev-polisci-052213-040359>
- Sachs, J. D., & Warner, A. M. (2001). The curse of natural resources. *European Economic Review*, 45(4-6), 827-838. [https://doi.org/10.1016/S0014-2921\(01\)00125-8](https://doi.org/10.1016/S0014-2921(01)00125-8)
- Szturo, M., Włodarczyk, B., Burchi, A., Miciuła, I., & Szturo, K. (2021). Improving relations between a state and a business enterprise in the context of counteracting adverse effects of the resource curse. *Sustainability*, 13(3), 1067. <https://doi.org/10.3390/su13031067>
- Tang, C., Irfan, M., Razzaq, A., & Dagar, V. (2022). Natural resources and financial development: Role of business regulations in testing the resource-curse hypothesis in ASEAN countries. *Resources Policy*, 76, 102612. <https://doi.org/10.1016/j.resourpol.2022.102612>
- Titman, S., & Wessels, R. (1988). The determinants of capital structure choice. *The Journal of Finance*, 43(1), 1-19. <https://doi.org/10.1111/j.1540-6261.1988.tb02585.x>
- Van der Ploeg, F. (2011). Natural resources: Curse or blessing? *Journal of Economic Literature*, 49(2), 366-420. <https://doi.org/10.1257/jel.49.2.366>
- Vuong, Q. H., & Napier, N. K. (2014). Resource curse or destructive creation in transition: Evidence from Vietnam's corporate sector. *Management Research Review*, 37(7), 642-657. <https://doi.org/10.1108/MRR-12-2012-0265>
- Yadav, S., Samadhiya, A., Kumar, A., Pandey, K. K., Luthra, S., & Mohapatra, A. K. (2026). Natural resources management for achieving SDGs: Do digital governance policies mitigate the resource curse for sustainable business? *Sustainable Development*. <https://doi.org/10.1002/sd.70988>