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Revisiting the Quiet-Life Hypothesis in the Banking Sector: Do CEOs' Personalities Matter?

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Abstract: This study investigates the relationship between market power and bank profitability, and the impacts of CEOs' personality traits, in Vietnam from 2007 to 2020. The analysis of CEOs' signatures is used to determine their characteristics. The findings support the quiet-life hypothesis, which suggests that the negative relationship between market power and bank profitability may depend on CEOs' characteristics. More specifically, the results show that conscientious CEOs with market power tend to reduce bank profitability, and this effect is more pronounced for foreign-owned banks. Therefore, our findings have critical implications for bank management.

Keywords: quiet-life hypothesis; chief executive officer (CEO); personalities; Vietnamese banks; profitability; generalized method of moments (GMM)

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1. Introduction

The banking system is undoubtedly essential in all economies worldwide, especially in bank-based countries. Over recent decades, the challenges many banking systems face have attracted more attention to the analysis of several industrial organization topics. Among different perspectives on the banking system that could be investigated, bank profitability is one of the most highly focused. The health and sustainability of profitability are used to predict potential financial distress and banking crises (Demirgüç-Kunt and Detragiache 2000). The banking literature examines some industrial organization topics associated with the structure–conduct performance (SCP) and efficient structure (ES) hypotheses. SCP suggests that market structure influences the conduct of banking firms, which in turn affects their performance, while ES posits that efficient market outcomes are driven by market structures that promote competition and efficiency. Because the evidence for the ES hypothesis is relatively weak (Färe et al. 2015), most empirical studies have focused more on the relationship between banking competition and profitability to test the SCP paradigm (Alhassan et al. 2016; Yuanita 2019). The SCP hypothesis argues that banks with greater market power (i.e., the ability to influence the market) tend to collude with each other to charge higher rates on loans and higher fees for non-traditional activities, while setting lower deposit rates for savers, thus generating higher profits (Dietrich and Wanzenried 2014; Saona 2016). The quiet-life hypothesis, however, proposes that the greater the market power, the lower the effort made by managers to maximize returns. Thus, a negative relationship exists between market power and bank profitability (Berger and Hannan 1998). There seems to be a missing link to whether all managers will exhibit the quiet-life hypothesis similarly, since their personalities characterize their behaviors. As a Chief Executive Officer (CEO) is responsible for managing and running the organization, the literature on corporate governance suggests that bank performance is also affected by their CEOs' personality characteristics (Akstinaite et al. 2020). This raises the

research question of whether the relationship between market power and bank profitability under the quiet-life hypothesis may depend on CEOs' characteristics. Therefore, our study revisits this issue in the unique setting of the Vietnamese banking system.

Vietnam boasts one of the fastest growing economies worldwide, with an annual economic growth of 6.01% between 2007 and 2020 (WB 2021). The banking system is critical in achieving this remarkable growth, so it is the backbone of the Vietnamese economy. The banking system is dominated by state-owned commercial banks (SOCBs) and privately owned commercial banks (POCBs). SOCBs have operated nationally and primarily focused on serving state-owned firms, while POCBs have been more market-oriented and offered customers universal banking services in multi-regional markets. POCBs have gradually acquired a more significant market share of deposits and lending. Since 2007, the banking system has witnessed an increasing penetration of foreign banks into the market. An increasingly competitive banking environment may ultimately affect the profitability of domestic banks. The evidence for market concentration and bank profitability in Vietnam is mixed (Ngoc Nguyen and Stewart 2013; Le 2020a, 2020b). As part of sustainable growth, banks have focused more on improving their corporate governance practices to attract investors because investors have been willing to pay a premium of up to 25% for a well-governed company (Barton et al. 2004). The literature suggests that a firm's performance is affected by its CEO's qualities and abilities (Akstinaite et al. 2020) and the CEO's personality (Le et al. 2023). Given the diverse market structure of the Vietnamese banking system, this context provides an interesting case to examine the role of CEO characteristics in explaining the relationship between market power and bank profitability.

This study contributes to the literature in a couple of ways. First, most studies examine the link between market power and banking performance under the quiet-life hypothesis (Koetter et al. 2012; Färe et al. 2015) but without considering bank managers' personalities. We revisit the quiet-life hypothesis in the banking sector by testing market power and bank profitability, while examining whether CEOs' characteristics significantly affect bank profitability (Liu and Jiang 2020; Wang and Chen 2020). Our study contends that the relationship between market power and bank profitability under the quiet-life hypothesis may depend on CEOs' characteristics because CEOs take responsibility for operating banking businesses. To the best of our knowledge, this is the first attempt to look at this matter. Therefore, this study will add new evidence to the extant literature on emerging markets, especially in the Asia–Pacific region. Second, we investigate whether the joint effect of market power and CEOs' personality traits on bank profitability may vary among different bank ownership types. Hence, our study will have significant implications for practitioners and policymakers.

The remainder of this paper is organized as follows: Section 2 provides a brief review of the relevant literature; Section 3 presents the methodology and data used in this research; Section 4 reports and discusses the findings, while Section 5 concludes.

2. Literature Review

2.1. Market Power and Bank Profitability

Under the SCP framework, the market power (MP) hypothesis postulates that firms with market power may collude with each other to charge higher interests and fees on loans and their products/services, while offering customers lower deposit rates, thus increasing their profitability. Early studies support the MP hypothesis that banks with high market power tend to offer lower deposit rates (Berger and Hannan 1998) and generate higher profitability (Molyneux and Forbes 1995). The same results are found in developing markets (Chirwa 2003; Yuanita 2019). However, other studies show the opposite findings. Fu and Heffernan (2009) suggest the existence of the relative market power hypothesis, which contends that the transmission mechanism from market structure to performance arises via enhanced service quality and differentiated products, which is often related to dominant banks rather than collusive behavior. Their results are in line with those of Chortareas et al.

(2011), Alhassan et al. (2016), and Williams (2012). The mixed findings raise a concern about whether the market power hypothesis still holds in the Vietnamese banking system.

2.2. CEO Characteristics and Bank Profitability

The upper echelons theory contends that a firm's outcomes derive from the values of top managers and their cognitive abilities (Hambrick and Mason 1984). Several studies have attempted to examine how CEOs' characteristics affect firms. Zhao et al. (2020) discovered a positive relationship between ethical CEOs and creativity. Fang et al. (2023) showed that CEO overconfidence significantly decreases firms' profitability, while others have revealed the positive effect of CEOs' education and experiences on firm performance via their strategic choices (Kaur and Singh 2018; Saidu 2019).

Despite the fact that the effect of CEOs' characteristics has attracted much attention from academics and practitioners, there is scant empirical evidence for the relationship between CEO personality traits and firm performance, which is due to the difficulty of employing reliable research methods. The psychology literature suggests that personality and value constructs can be accurately and reliably measured by the Big Five personality model (BFPM) (John et al. 2008). The five dimensions of the BFPM (extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience) can be predicted through the analysis of human facial images (Jones et al. 2012; Hu et al. 2017) or graphology analysis (e.g., handwriting and signatures) (Djamal et al. 2013a; Kedar and Bormane 2015; Lokhande and Gawali 2017; Maliki and Sidik 2020). Using these new techniques, Wang and Chen (2020) showed that cost efficiency and profitability are positively associated with CEO extraversion, agreeableness, and emotional stability and negatively related to CEO conscientiousness. Also, CEO openness to experience is found to affect profitability negatively. Harrison et al. (2019), however, indicated no direct effect of CEOs' characteristics on firm performance.

Although several studies in different industries have examined the relationship between CEO personality traits and firm performance, the evidence from the banking system is very limited. Most studies have considered the effect of several characteristics, such as CEO narcissism (Buyl et al. 2017), and CEO age and tenure (Gupta and Mahakud 2020). Notably, Le et al. (2023) is a pioneering study investigating CEOs' personality traits and bank performance according to the BFPM. We further assess whether CEOs' characteristics affect the relationship between market power and banking performance.

2.3. The Joint Effect of Market Power and CEO Characteristics on Bank Profitability

The quiet-life hypothesis suggests a negative correlation between market power and bank profitability. Alternatively, bank CEOs with higher market power may have less incentive to pursue profitability growth. The literature on corporate governance also suggests that CEOs' behaviors and attitudes will be determined by their personality traits. We, therefore, argue that CEOs with different personality traits may have different incentives relating to the quiet-life hypothesis. Hence, it is argued that the relationship between market power and bank profitability may depend on CEOs' personality traits. Our hypothesis is formed as follows:

H_0: *Different personality traits of CEOs with market power have no impact on bank profitability.*

3. Methodology and Data

3.1. Methodology

Our study uses a generalized method of moments estimator (GMM) which can address unobserved heterogeneity and endogeneity issues and assess the persistence of bank profitability in the case of panel-data (Le and Ngo 2020). Regarding endogenous matters, the more profitable banks are, the more high-quality capital ratios they hold via retained earnings. Successful banks also increase their size and increase operating expenses, thus affecting bank profitability. Conversely, more profitable banks may recruit more experienced and professional employees, thereby increasing their efficiency. These relationships,

however, may depend on the characteristics of the CEOs responsible for running the banks (Srivastav et al. 2017). Bank owners or shareholders may select CEOs with personalities that comply with their organizational culture and strategies.

Following Arellano and Bover (1995), all regressors will be instrumented except those that are exogenous. Strictly exogenous regressors are assumed to not correlate with the individual effects, while endogenous regressors are predetermined. Furthermore, the Arellano–Bond autocorrelation (AR) and over-identifying restrictions tests are used to identify the number of lags. For diagnosis tests, the instruments satisfy the orthogonality conditions required when accepting the null hypothesis of the Hansen test. When serial correlations of idiosyncratic errors arise, the moment conditions are said to be invalid. Accepting the null hypothesis at the second-order autocorrelation (AR2) indicates the validity of the moment conditions.

Our dynamic model of bank profitability is formed as

$$\begin{aligned} Perf_{i,t} = \alpha_{i,t} + \beta_1 Perf_{i,t-1} + \beta_2 MP_{i,t} + \beta_3 CEOPER_{i,t} + \beta_4 X_{i,t} \\ + \beta_5 Y_{i,t} + \beta_6 MACRO_t + \mu_i + \varepsilon_{i,t} \end{aligned} \quad (1)$$

where bank profitability ($Perf$) is measured by net interest margin (NIM), return on assets (ROA), and return on equity (ROE), respectively (Saona 2016; Le and Ngo 2020). Note that the (pre-tax) ROA and ROE are considered more comprehensive measures than NIM to account for operational efficiency and loan loss provisions. Since bank equity is relatively low and has suffered artificial changes due to cross-ownership issues and recapitalization pressure, ROE is less appropriate than ROA in the Vietnamese context. Consequently, ROA will be used as our primary variable, allowing comparison with prior studies in Vietnam and other nations. We also use pre-provision profit (PPP) to account for the ad hoc provisioning policy that most Vietnamese banks have adopted over recent years.

Market power (MP) is measured by the Lerner index. The literature suggests that the Lerner index is more precise than the market concentration and H-statistic methods, as it can simultaneously consider banks' pricing power, market competition, and revenue (Coccorese 2014). Thus, the efficiency-adjusted Lerner index, as presented in Appendix A, is used to measure market power at the bank-year level to address the bias problems of the small sample size (Koetter et al. 2012). The Lerner index lies between 0 and 1, meaning that a higher value of the index represents greater market power.

For CEOs' personality traits ($CEOPER_{i,t}$), there is no best approach to measure personalities. The first strand uses personality test scores related to respondents' self-ratings, while also employing other methods of measuring the same traits. One may prefer test scores associated with respondent ratings of the trait by familiar peers, utilizing the same or different inventories (Paunonen 2003; Kalshoven et al. 2011). Because the BFPM is the most common approach to human behavior prediction (Goldberg 1990), CEOs' personalities can also be measured via conversations and written texts (Mairesse et al. 2007) or CEOs' posts on Twitter and Facebook (Wang and Chen 2020). The second strand employs signature analysis to predict a person's characteristics because a signature is seen as a manifestation of personality traits caused by a neurological model in the human brain. Gavrilescu and Vizireanu (2018), predicting personality traits from handwriting, found that the neural network method is more accurate and less time-consuming than questionnaires or psychological interview approaches. Their findings imply the potential of using machine learning and artificial intelligence to identify the BFPM dimensions of an individual by using different types of handwriting, such as signatures. According to graphology theory, a signature may determine traits, attitudes, qualities, postures, or sentiments (Djamal et al. 2013b); thus, the structural signature reflects personality category (Lokhande and Gawali 2017). Le et al. (2023) first attempted to classify CEOs' personalities through their signatures in a banking study. Following their procedure, we first analyze all possible features in each signature. Each element will present a unique aspect of personality. Therefore, one signature may indicate more than one personality trait. Thereafter, we compare all possible personality traits of that person with the personality dimensions of the BFPM. This thus

allows us to recognize the CEO's personality, which may fall into any of five categories, as Appendix B illustrates.

Following the contentions above, Equation (1) is modified to investigate the joint effect of market power and CEO characteristics on bank profitability by including the interaction term as follows:

$$\begin{aligned} Perf_{i,t} = \quad & \alpha_{i,t} + \beta_1 Perf_{i,t-1} + \beta_2 MP_{i,t} + \beta_3 CEOPER_{i,t} + \beta_7 MP_{i,t} \\ & * CEOPER_{i,t} + \beta_4 X_{i,t} + \beta_5 Y_{i,t} + \beta_6 MACRO_t + \mu_i \\ & + \varepsilon_{i,t} \end{aligned} \quad (2)$$

where $X_{i,t}$ is a vector of bank ownership ($SOCB$), listing status ($LIST$), and foreign ownership (FOR) (Le 2021). Other bank characteristics, $Y_{i,t}$, include bank efficiency (EFF); bank capitalization (CAP); bank size ($LNTA$); and credit risk (LLP). $MACRO_t$ is a vector of macroeconomic conditions, including the annual economic growth rate (GDP) and the inflation rate (INF) (Le et al. 2019; Le 2021).

We performed the Breusch–Pagan test for heteroscedasticity, which may arise if one or more independent variables are endogenous. In Table 1, the low p-values suggest that the model suffers high heteroscedasticity and, thus, the GMM approach is recommended to overcome this problem.

Table 1. The results of the Breusch–Pagan test.

The Null Hypothesis of Homoscedasticity	ROA	PPP
Chi-square (χ^2)	504.69	226.37
p-value	0.000	0.000

3.2. Data

Our data were collected from three primary sources. Macroeconomic variables were gathered from the World Bank database. Financial information was collected from Le et al. (2022)'s database covering the period from 2007 to 2020, in which their financial information reports were comprehensively published. Also, foreign affiliates/branches, joint-venture banks, and wholly owned foreign banks were excluded from our analysis because of their limited activities in the Vietnamese banking system and substantial missing information. The data on CEOs' signatures were hand-collected from various sources, including annual reports, prospectuses, resolutions of yearly shareholders' meeting reports, and other published documents. Our prudent analysis shows that Vietnamese bank CEOs' personality traits primarily fall into three of the five categories: agreeableness ($AGRE$), conscientiousness ($CONS$), and extraversion ($EXTRA$). This is consistent with the suggestion of Curşeu et al. (2019), who emphasized that those three personality dimensions are most relevant to teamwork and a firm's productivity.

Table 2 shows that 22.8% of the remaining commercial banks had CEOs with an agreeable personality. The number of commercial banks managed by conscientious and extraverted CEOs was 57.9% and 10.1%, respectively. The sample means for ROA and PPP were 0.9% and 23.3%, respectively, with low standard deviations. The average Lerner index (MP) was 80.2%, suggesting that some banks have a significantly greater market power in some years. Regarding bank characteristics, the numbers for $SOCB$, $LIST$, and FOR were on average 15.4%, 34.8%, and 41%, respectively. The mean of 0.114 suggests that total equity accounted for 11.4% of the total assets (CAP) of the average bank in Vietnam, while the average ratio of operating expenses to total assets (EFF) was 2%. The ratio of loan loss provision to total loans was averaged at 1.2%. Also, the average inflation rate (INF) and annual GDP growth rate (GDP) were 7.2% and 6%, respectively.

Table 2. Descriptive statistics of variables used in this study.

Variable	Definition	N	Mean	SD	Min	Max
ROA	The (pre-tax) return on average assets	356	0.009	0.008	−0.055	0.06
PPP	Pre-provisioning profits	356	0.233	0.133	−0.558	0.861
MP	The Lerner Index	354	0.802	0.037	0.506	0.93
AGRE	A dummy variable that takes a value of 1 for a bank that was managed by an agreeable CEO, and 0 otherwise	356	0.228	0.42	0	1
CONS	A dummy variable that takes a value of 1 for a bank that was managed by a conscientious CEO, and 0 otherwise	356	0.579	0.494	0	1
EXTRA	A dummy variable that takes a value of 1 for a bank that is managed by an extraverted CEO, and 0 otherwise	356	0.101	0.302	0	1
SOCB	A dummy variable that takes a value of 1 for a state-owned commercial bank, and 0 otherwise	356	0.154	0.362	0	1
LIST	A dummy variable that takes a value of 1 for a listed bank, and 0 otherwise	356	0.348	0.477	0	1
FOR	A dummy variable that takes a value of 1 for a foreign-owned bank, and 0 otherwise	356	0.41	0.493	0	1
CAP	Total equity over total assets	356	0.114	0.274	0.001	0.508
EFF	Operating expenses over total assets	354	0.02	0.032	0.0001	0.458
LLP	Loan loss provisions over total loans	356	0.012	0.005	0.001	0.037
LNTA	The natural logarithm of total assets	356	32.156	1.335	28.42	34.989
GDP	The annual economic growth	356	0.06	0.011	0.029	0.071
INF	The inflation rate	356	0.072	0.062	0.006	0.231

4. Empirical Findings and Discussion

4.1. The Results of the Baseline Regression Model

Table 3 indicates that bank profitability is positively associated with $CONS$ and negatively related to $AGRE$, while the effects of $EXTRA$ are mixed, and no strong correlations among explanatory variables are detected. Due to potential endogeneity among regressors, the system GMM method is recommended.

In terms of model validity, as shown in Table 4, the null hypothesis of the Hansen test cannot be rejected due to the statistical insignificance of the p-value. This implies no over-identifying restrictions. Although the null hypothesis of the non-existence of AR1 is rejected, the statistically insignificant p-value of AR2 suggests that the moment conditions of the model are still met (Arellano and Bover 1995).

Several regression models are performed, with the positive coefficients of $Perf_{t-1}$ indicating the persistence of bank profits over time. The positive coefficients on MP also suggest that banks with greater market power earn higher profits, thus supporting the market power hypothesis. This is in line with the findings of Saona (2016). When including the quadratic term of the Lerner index ($MPSQ$) in the model, the coefficient of $MPSQ$ is negative, though statistically insignificant.[1] Thus, we do not find evidence of the U-shaped relationship between market power and bank profitability in Vietnam.

In Model 1 (the baseline model), ROA is positively associated with $EXTRA$ and $AGRE$, suggesting that agreeable and extraverted CEOs tend to improve bank profitability. This finding partially supports Wang and Chen (2020)'s argument that extraverted and agreeable CEOs can improve staff productivity and cost efficiency, thereby boosting bank profitability. Extraversion includes gregariousness, assertiveness, talkativeness, sociability, and dominance (McCrae and Costa 1987). Extraverted CEOs can access and utilize external resources, lowering operating costs (Nadkarni and Herrmann 2010). Additionally, extraverted CEOs are more assertive and effective in conveying their opinions and decisions to their staff, whose productivity profoundly depends on the clarity of commands and communication efficiency from their managers (Judge et al. 2002). Furthermore, agreeableness is characterized by cooperation orientation, trust and acceptance of others, and personal warmth (McCrae and Costa 1987). As agreeable CEOs share similar characteristics with their extraverted counterparts (Derue et al. 2011), they can acquire broader social

relationships internally and externally and access more external resources—thus reducing cost inefficiency (Wang and Chen 2020).

Table 3. Correlation matrix of variables used.

ROA													
0.76 ***	PPP												
0.59 ***	0.66 ***	MP											
−0.02	−0.01	0.01	AGRE										
0.11 **	0.08	0.05	−0.64 ***	CONS									
−0.01	0.03	0.08	−0.18 ***	−0.39 ***	EXTRA								
−0.02	0.23 ***	−0.14 ***	0.14 ***	−0.19 ***	0.09 *	SOCB							
0.12 **	0.18 ***	0.15 ***	−0.06	0.12 **	−0.01	0.19 ***	LIST						
0.09 *	0.19 ***	0.21 ***	0.09 *	−0.01	0.10 *	−0.01	0.46 ***	FOR					
0.34 ***	0.08	0.10 **	−0.04	0.06	−0.02	−0.09	0.01	0.02	CAP				
0.03	0.04	−0.02	−0.09 *	−0.05	0.22 ***	0.11 **	0.07	0.10 *	−0.01	EFF			
−0.08	0.07	−0.12 **	0.09 *	−0.08	0.06	0.43 ***	0.03	0.01	−0.07	0.06	LLP		
−0.10 *	0.20 ***	−0.11 **	0.04	0.06	0.03	0.59 ***	0.51 ***	0.39 ***	−0.30 ***	0.09 *	0.41 ***	LNTA	
−0.12 **	0.01	0.12 **	0.02	−0.02	−0.01	−0.01	−0.04	−0.02 **	−0.20 ***	−0.30 ***	−0.04	−0.01	GDP
0.17 ***	−0.14 ***	−0.18 ***	0.08	−0.12 **	−0.05	0.01	−0.23 ***	−0.13 **	0.03	−0.04	−0.01	−0.30 ***	−0.06	INF

Notes: The definitions of variables are presented in Table 1. *, **, and *** denote the significances at the 10, 5, and 1% levels, respectively.

Additionally, according to Table 4, SOCBs tend to outperform POCBs, aligning with the findings of Le and Nguyen (2020) in Vietnam. Depositors may accept lower interest rates paid by SOCBs, since they are considered safer due to their government ownership, thus earning greater returns (Le et al. 2019). The positive coefficients on $LIST$ indicate that listed banks are more profitable than non-listed banks, suggesting that listed banks may attract more depositors and investors—lowering the cost of borrowing funds—thus improving their profitability (Le 2020b). The negative coefficients on FOR imply that foreign-owned banks are less profitable than their domestic peers. Because of seeking growth opportunities, they may prefer taking higher risk investments (Naaborg and Lensink 2008). Regarding control variables, Models 1-3 indicate that bank profitability is significantly affected by bank efficiency (EFF) (Berger and DeYoung 1997), bank capitalization (CAP) (Berger and Bonaccorsi di Patti 2006), credit risk (LLP) (Figlewski et al. 2012), and inflation (INF) (Pervan et al. 2015).

Considering the level of market power, one may argue whether CEOs will act on behalf of shareholders to maximize bank profitability. When observing the interaction terms between MP and CEOs' personalities ($AGRE$, $CONS$, and $EXTRA$), as indicated in Model 4 of Table 5, the negative coefficient $for\ MP * CONS$ suggests that conscientious CEOs of banks with more significant market power tend to generate lower profitability. Conscientious CEOs are often seen as task-focused rather than relationship-focused (McCrae and Costa 1987). They tend to prefer to pursue their goal by themselves rather than relying

on others. Consequently, their companies will bear the highest operating costs. Higher bank market power may induce conscientious CEOs to engage more in expense-preference behaviour to accomplish their goals, thus increasing bank costs and lowering profitability. Because conscientious CEOs are less likely to take actions that are not consistent with their past experiences, and seek rigorous feedback on the move, they cannot handle the proper steps to deal with market changes and suspend incorrect strategies when negative signs appear (Eisenhardt and Martin 2000; Shimizu and Hitt 2004). Greater market power may tempt conscientious CEOs to opt for a quiet life by making safe investments with lower returns and less focus on business expansion in different markets, thus reducing bank profitability. This is partially consistent with the findings of Nadkarni and Herrmann (2010) and Wang and Chen (2020). Nonetheless, the null hypothesis H_0 is rejected.

Table 4. The results of the baseline models.

Perf	ROA (Model 1)	ROA (Model 2)	PPP (Model 3)
e_{t-1}	0.387 ** (0.175)	0.312 * (0.169)	0.291 *** (0.055)
MP	0.00003 ** (0.00001)	0.0001 (0.0001)	0.0005 *** (0.0001)
MPSQ		−0.000 (0.000)	
AGRE	0.017 ** (0.007)	0.022 *** (0.007)	0.105 *** (0.018)
CONS	0.011 (0.007)	0.015 ** (0.006)	0.099 *** (0.018)
EXTRA	0.017 ** (0.007)	0.018 *** (0.006)	0.124 *** (0.028)
SOCB	−0.008 (0.005)	−0.008 (0.006)	0.079 * (0.042)
LIST	0.005 ** (0.002)	0.006 ** (0.003)	0.015 (0.015)
FOR	−0.006 *** (0.002)	−0.005 * (0.002)	0.017 (0.021)
CAP	0.08 ** (0.029)	0.068 * (0.038)	0.558 *** (0.179)
EFF	0.051 ** (0.025)	0.053 ** (0.025)	0.136 (0.387)
LLP	−0.004 (0.342)	−0.133 (0.39)	2.777 ** (1.276)
LNTA	0.002 (0.001)	0.002 (0.002)	−0.009 (0.011)
GDP	0.041 (0.031)	0.009 (0.048)	−0.093 (0.382)
INF	0.016 (0.011)	0.019 (0.013)	−0.492 *** (0.1)
Constant	−0.076 * (0.038)	−0.088 * (0.048)	0.213 (0.348)
No. Obs	327	327	327
No. Groups	26	26	26
AR1 (*p*-value)	0.059	0.020	0.081
AR2 (*p*-value)	0.123	0.144	0.094
Hansen test (*p*-value)	0.841	0.857	0.258

Notes: The definitions of variables are presented in Table 1. Variables in italics are instrumented through the GMM procedure following Arellano and Bover (1995). Robust standard errors are in parentheses. *, **, and *** denote the significances at the 10, 5, and 1% levels, respectively.

Given the significant joint effect of market power and conscientious CEOs, we further explore whether this joint effect may vary among bank ownership types by including the interaction term between $MP * CONS$ and bank ownership type ($SOCB$, $LIST$, and FOR) in the original model. In Model 5, the negative coefficient on $MP * CONS * FOR$ implies that foreign-owned banks with greater market power managed by conscientious CEOs tend to generate lower profitability. Although foreign ownership is expected to transfer knowledge and better managerial skills to domestic counterparts (Le 2021), the different cultures on the board may raise conflicts. If this problem escalates, the bank's finances and reputation may suffer, and staff morale will diminish. As previously said, conscientious CEOs are less likely to be relationship-focused, which may exacerbate this conflict. Meanwhile, greater market power may induce conscientious CEOs to choose a quiet life, thus contrasting with what foreign partners expect.

Table 5. The results with interaction terms.

Perf	ROA (Model 4)	ROA (Model 5)	PPP (Model 6)
Perf $_{t-1}$	0.383 ** (0.146)	0.295 ** (0.127)	0.224 ** (0.09)
MP	0.0003 ** (0.0002)	0.0001 *** (0.00003)	0.0004 (0.002)
AGRE	0.022 * (0.013)	−0.00003 (0.006)	−0.117 (0.122)
CONS	0.027 * (0.014)	0.001 (0.005)	0.059 (0.159)
EXTRA	0.008 (0.015)	0.001 (0.006)	−0.291 (0.175)
SOCB	0.007 (0.015)	0.013 (0.012)	0.3 (0.178)
LIST	0.003 (0.002)	−0.002 (0.005)	0.02 (0.03)
FOR	0.001 (0.005)	−0.005 (0.006)	0.04 (0.052)
MP*AGRE	−0.0003 (0.0002)		0.001 (0.002)
MP*CONS	−0.0003 * (0.0002)	−0.00003 (0.00003)	−0.0001 (0.002)
MP*EXTRA	−0.0002 (0.0002)		0.003 (0.002)
MP*CONS*SOCB		0.0001 (0.0002)	
MP*CONS*LISTED		0.00002 (0.00003)	
MP*CONS*FOR		−0.0001 * (0.00003)	
Constant	−0.079 (0.053)	−0.146 ** (0.064)	0.689 (0.849)
Control variables	Yes	Yes	Yes
No. Obs	327	327	327
No. Groups	26	26	26
AR1 (*p*-value)	0.098	0.180	0.077
AR2 (*p*-value)	0.269	0.259	0.408
Hansen test (*p*-value)	0.999	0.953	0.982

Notes: The definitions of variables are presented in Table 1. Following the exact procedure as above, the same set of control variables in Equations (1) and (2) is used. Variables in italics are instrumented through the GMM procedure following Arellano and Bover (1995). Robust standard errors are in parentheses. *, **, and *** denote the significances at the 10, 5, and 1% levels, respectively.

4.2. Robustness Checks

First, we use three different measures of bank profitability, including return on equity (*ROE*), risk-adjusted returns on assets (RAR_{ROA}), and risk-adjusted returns on equity (RAR_{ROE}). $RAR_{ROA_{i,t}} = \frac{ROA_{i,t}}{\sigma_{ROA_i}}$; $RAR_{ROE_{i,t}} = \frac{ROE_{i,t}}{\sigma_{ROE_i}}$ where ROA and ROE are the ratio of pre-tax profits to total assets, and the ratio of pre-tax profits to equity, respectively; and σ_{ROA} and σ_{ROE} are the standard deviation of returns on assets and equity over the examined period, respectively (Le et al. 2019). Table 6 shows that bank profitability is positively associated with *MP* and *AGRE*. Therefore, our above findings are confirmed. The results show that their coefficients are negative but statistically insignificant when including interaction terms between *MP* and CEO personality (*AGRE*, *CONS*, and *EXTRA*) (not reported here).

Table 6. The results of using alternative measures of bank profitability.

Perf	ROE (Model 7)	RAR_{ROA} (Model 8)	RAR_{ROE} (Model 9)	ROA (Model 10)
Perf $_{t-1}$	0.135 * (0.071)	0.384 *** (0.084)	0.415 *** (0.044)	0.439 *** (0.098)
MP	0.001 *** (0.00004)	0.007 *** (0.001)	0.0006 *** (0.0001)	0.0003 (0.0002)
AGRE	0.057 ** (0.027)	0.669 ** (0.308)	0.051 ** (0.02)	0.02 (0.016)
CONS	0.01 (0.019)	0.27 (0.284)	0.049 *** (0.013)	0.019 (0.014)
EXTRA	0.037 (0.035)	−0.006 (0.395)	0.008 (0.03)	0.043 ** (0.017)
MP*AGRE				−0.0002 (0.0002)
MP*CONS				−0.0002 (0.0002)
MP*EXTRA				−0.0004 (0.0002)
CRISIS				−0.001 (0.002)
Constant	−0.822 * (0.427)	−6.476 (7.786)	−0.903 ** (0.327)	−0.08 (0.081)
Control variables	Yes	Yes	Yes	Yes
No. Obs	327	327	327	327
No. Groups	26	26	26	26

Table 6. *Cont.*

Perf	ROE (Model 7)	RAR_{ROA} (Model 8)	RAR_{ROE} (Model 9)	ROA (Model 10)
AR1 (*p*-value)	0.265	0.043	0.040	0.092
AR2 (*p*-value)	0.341	0.623	0.137	0.503
Hansen test (*p*-value)	0.820	0.627	0.286	0.785

Notes: The definitions of variables are presented in Table 1. *CRISIS*—a dummy variable that takes a value of 1 for the period 2007-09, and 0 otherwise (Le and Nguyen 2021). Following the exact procedure as above, the same set of control variables in Equations (1) and (2) is used. Variables in italics are instrumented through the GMM procedure following Arellano and Bover (1995). Robust standard errors are in parentheses. *, **, and *** denote the significances at the 10, 5, and 1% levels, respectively.

Second, we include *CRISIS* in the model to investigate whether the joint effect of market power and CEOs' personality traits still holds. Model 10 indicates that the Vietnamese banking system was insignificantly affected by the global financial crisis since the Vietnamese financial market was not integrated globally yet. Also, the coefficients for the interaction terms between market power and CEOs' personalities are negative, though statistically insignificant. Furthermore, we do not find evidence of the significant impact of the COVID-19 turmoil (*COVID*)[2] on the Vietnamese banking system. This result needs interpreting with caution because of the relatively small sample size and short examination period.

Third, we further control for the effect of board characteristics, including board size (*BODSIZE*), board independence (*BODINTE*), and the effect of audit quality (*BIG4*) (Abdul Gafoor et al. 2018). Table 7 (Model 11) indicates that *ROA* is positively associated with *MP* and *AGRE*, confirming our above results. However, it is observed that board size, board independence, and audit quality hardly have any impact on bank profitability in Vietnam.

Table 7. The results of using an alternative measure of market power.

Perf	ROA (Model 11)	ROA (Model 12)	ROA (Model 13)	ROA (Model 14)
$Perf_{t-1}$	0.225 *** (0.043)	0.349 * (0.179)	0.425 ** (0.15)	0.602 *** (0.164)
MP	0.00003 *** (0.0000)			
AMP		0.00003 ** (0.00001)	0.0003 ** (0.0001)	0.00004 (0.00003)
AGRE	0.006 ** (0.003)	0.016 ** (0.006)	0.025 * (0.013)	0.01 * (0.005)
CONS	0.004 (0.002)	0.01 (0.006)	0.024 * (0.013)	0.001 (0.004)
EXTRA	0.002 (0.003)	0.015 ** (0.007)	0.009 (0.014)	0.001 (0.003)
BIG4	0.001 (0.003)			
BODSIZE	0.0004 (0.0003)			
BODINDE	−0.0002 (0.001)			
AMP*AGRE			−0.0003 (0.0002)	
AMP*CONS			−0.0003 * (0.0001)	0.00004 (0.00003)
AMP*EXTRA			−0.0002 (0.0001)	
AMP*CONS*SOCB				0.0001 (0.0002)
AMP*CONS*LIST				−0.00002 (0.00002)
AMP*CONS*FOR				−0.00005 * (0.00003)
Constant	0.008 (0.033)	−0.071 * (0.038)	−0.048 (0.048)	−0.084 * (0.044)
Control variables	Yes	Yes	Yes	Yes
No. Obs	327	327	327	327
No. Groups	26	26	26	26
AR1 (*p*-value)	0.208	0.065	0.096	0.205
AR2 (*p*-value)	0.252	0.125	0.334	0.272
Hansen test (*p*-value)	0.843	0.844	0.999	0.471

Notes: The definitions of variables are presented in Table 1. *BODSIZE*—the number of board of directors in the bank; *BODINTE*—the percentage of independent directors over the board size; *BIG4*—a dummy variable that takes a value of 1 if a bank is audited by one of Big Four accounting firms, and 0 otherwise. Following the exact procedure as above, the same set of control variables in Equations (1) and (2) is used. Variables in italics are instrumented through the GMM procedure following Arellano and Bover (1995). Robust standard errors are in parentheses. *, **, and *** denote the significances at the 10, 5, and 1% levels, respectively.

Last, we also use the conventional Lerner index as an alternative proxy for market power (AMP). Models 12–14 of Table 7 show a positive relationship between market power and bank profitability, while agreeable and extraverted CEOs positively affect bank profitability. Given the degree of market power, banks that are controlled by conscientious CEOs tend to generate lower returns. This is true in the case of foreign-owned banks. Nonetheless, our above findings are robust.

5. Conclusions

The quiet-life hypothesis argues that a higher level of market power of managers can lower their efforts to maximize the returns and profitability of their businesses (Hicks 1935). There is no study, however, analyzing if different types of managers or CEOs (characterized by their personalities) can exhibit the quiet-life hypothesis differently. Our study is the first to incorporate the Big Five personality dimensions to revisit this issue using a case study from the Vietnamese banking system (2007–2020).

The analysis of CEO signatures reveals that among the five personality dimensions, the CEO characteristics have mainly fallen into the following three: agreeableness, extraversion, and conscientiousness. Regarding the effect of different CEO personalities, our empirical results suggest that Vietnamese CEOs with high levels of agreeableness and extraversion have more incentives to improve bank profitability. Conversely, conscientious CEOs with greater market power are associated with lower profitability. This suggests that the quiet-life hypothesis may apply specifically to conscientious CEOs but not to CEOs with different personality traits. This finding is essential information for companies' stakeholders and policymakers. For instance, the board of directors of a bank may need to regularly monitor the behavior of its conscientious CEO more than the others, or the government may need to monitor the market power of a specific bank if its CEOs are found to be conscientious. The plausible reason is that higher market power may allow conscientious CEOs to opt for a quiet life by making safe investments with lower returns and less focus on business expansion in different markets, thus reducing bank profitability. We have also found that foreign-owned banks with greater market power managed by conscientious CEOs tend to generate lower profitability in the Vietnamese banking sector. This may be due to the cultural differences within the board; the differences may sometimes cause conflict. Besides market power and CEOs' personalities, other factors that can influence Vietnamese banks' profitability include the banks' equity, operating expenses, listed status, and inflation rates.

To further extend the findings of this study, one may look at different sectors and countries. As the quiet-life hypothesis has been examined in other non-financial industries and other emerging markets (Lee et al. 2021; Suman and Singh 2021), it would be interesting if such an extension could confirm our results and, therefore, suggest a new approach to corporate governance and management studies. On the other hand, one may also use more advanced techniques to examine CEOs' personalities, such as textual analysis (Loughran and McDonald 2020), emotional analysis (Miao et al. 2019), and big data/machine learning (Hrazdil et al. 2020). Such extensions would also help improve the accuracy of the personality assessment.

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Appendix A

The conventional Lerner index is measured as $LI_{it} = \frac{P_{it} - MC_{it}}{P_{it}}$ where P_{it} is the ratio of total operating income to total assets for bank i. MC should be calculated as follows:

$$\begin{aligned} lnTC_{it} = \quad & \alpha_0 + \alpha_1 lnQ_{it} + \tfrac{1}{2}\alpha_2 \, (lnQ_{it})^2 \\ & + \textstyle\sum_{k=1}^{3} \beta_k \mathrm{lnW_{k,it}} + \tfrac{1}{2}\sum_{k=1}^{3} \gamma_k \mathrm{lnQ_{k,it}lnW_{k,it}} \\ & + \tfrac{1}{2} \textstyle\sum_{k=1}^{3} \sum_{j=1}^{3} \delta_k \mathrm{lnW_{k,it}lnW_{j,it}} + \varphi_1 \mathrm{Trend} \\ & + \tfrac{1}{2}\varphi_2 \mathrm{Trend}^2 + \varphi_3 \mathrm{Trend\ lnQ_{it}} \\ & + \textstyle\sum_{k=1}^{3} \mu_k \mathrm{TREND\ lnW_{k,it}} + \varepsilon_{it} \end{aligned} \tag{A1}$$

where TC is the bank's total costs; Q is the bank's outputs (or total assets); W is three input prices, including labors (W_1), loanable funds (W_2), and fixed capitals (W3); and ε is an error term (Koetter et al. 2012). W_1, W_2, and W_3 are the ratio of staff costs to total assets, interest and comparable expenses to client deposits, and other operating and administrative expenses to fixed assets, respectively. TREND reflects the effect of technical change, which translates into cost function fluctuations over time.

Furthermore, MC is then determined as a first derivation of the total cost function obtained from Equation (A1) as

$$\begin{aligned} MC_{TAit} = & \frac{\partial TC_{it}}{\partial Q_{it}} \\ & = \frac{TC_{it}}{Q_{it}} \cdot \left[\alpha_1 + \alpha_2 lnQ_{it} \right. \\ & \left. + \tfrac{1}{2}\textstyle\sum_{k=1}^{3} \gamma_k lnW_{k,it} + \varphi_3 Trend\right] \end{aligned} \tag{A2}$$

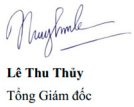
It is argued that the conventional approach may be biased since banks may take advantage of pricing opportunities derived from their market power. Consequently, Equation (A2) should be calculated using a stochastic cost frontier approach (SFA) that considers the potential cost efficiencies, known as the efficiency-adjusted Lerner index. It is assumed that $\varepsilon_{it} = \vartheta_{it} + \mu_{it}$ where ϑ_{it} is an idiosyncratic error term measuring the effects of statistical noise, assuming a traditional random variable and independent normal distribution with mean zero and variance σ_v^2; μ_{it} is a strictly non-negative random variable, which represents cost inefficiency with a half-normal distribution and variance σ_v^2. Other distributional assumptions on μ_{it} include exponential, truncated normal, and gamma distribution (Koetter et al. 2012).

Appendix B

Table A1. Examples of CEO signatures.

CEO Signature	Feature	Category of Personality According to Big Five Personality Model
	Simple, ascending, underline, ending stroke increase	Conscientiousness
	Simple, underline, ending stroke increase	Conscientiousness
	Curved start, underline, ending stroke increase	Extraversion

Table A1. *Cont.*

CEO Signature	Feature	Category of Personality According to Big Five Personality Model
	Small signature, underline	Extraversion
	Streaks disconnected, underline, ending stroke increase	Agreeableness
	Full surname, ascending, underline, ending stroke increase	Agreeableness
	Angular strokes, ascending, underline, ending stroke increase	Extraversion

Source: Adopted from Lokhande and Gawali (2017) and Le et al. (2023).

Notes

[1] The same result is still obtained when observing *PPP*.

[2] *COVID* is a dummy variable that takes a value of 1 for the year 2020 as the health crisis period, and 0 otherwise. The results are available upon request.

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