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Factors Influencing Electric Vehicle Purchase Intention in Indonesia: Ownership Cost, Fiscal Incentives, and Credit Accessibility

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Abstract: Electric vehicle (EV) adoption in Indonesia continues to face affordability challenges despite growing policy support. This study investigates EV Purchase Intention by integrating behavioral, economic, policy, and financing perspectives. The model examines Attitude, Subjective Norm, Perceived Behavioral Control, Fiscal Incentives, and Ownership Cost as explanatory variables, with Credit Accessibility tested as a moderator of the relationship between Ownership Cost and EV Purchase Intention. Data from 270 potential EV consumers in the JABODETABEK area were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The results show that Ownership Cost has a significant positive association with EV Purchase Intention ($\beta = 0.415$, $p = 0.001$). Meanwhile, Attitude, Subjective Norm, Perceived Behavioral Control, Fiscal Incentives, and Credit Accessibility have no significant direct associations. Credit Accessibility also does not significantly moderate the relationship between Ownership Cost and EV Purchase Intention ($\beta = -0.012$, $p = 0.822$). These findings indicate that respondents' coded perceptions of ownership-related economic considerations were positively associated with EV Purchase Intention in the present sample. The study provides implications for understanding EV ownership costs, financing schemes, and policy development in Indonesia.

Keywords: Electric Vehicle, Purchase Intention, Ownership Cost, Fiscal Incentives, Credit Accessibility

INTRODUCTION

The shift toward cleaner mobility has become an important part of efforts to address the environmental consequences of greenhouse gas (GHG) emissions. Carbon dioxide (CO_2) and methane are among the emissions associated with the broader climate challenge, creating pressure to move from conventional energy-dependent transportation toward more sustainable alternatives (Yuniza et al., 2021). In this context, electric vehicles (EVs) have gained increasing attention as a means of reducing emissions generated by road transportation. Although EV sales have expanded in Europe, transportation continues to represent a substantial source of GHG

emissions (Pamidimukkala et al., 2024). Indonesia faces a related mobility challenge because private motorized vehicles remain widely relied upon, whereas public transportation has not yet become the primary choice for many consumers (Laksmana & Mahadwartha, 2024). The Indonesian Government has responded by introducing policy support and incentives for EV development through regulations established in 2019 (Yuniza et al., 2021). These circumstances underline the need to understand the conditions that shape consumers' willingness to consider EV ownership.

Indonesia has also established quantitative targets to support the transition toward electric mobility. Through the Ministry of Industry, the government has targeted a 16% market share for four-wheeled EVs by 2030, together with production targets of 400,000 units in 2025 and 600,000 units in 2030 (Ariyani et al., 2025). Nevertheless, the expansion of the domestic EV market continues to encounter an affordability challenge because EV prices remain relatively high compared with the purchasing capacity of the broader population (Yuniza et al., 2021). The financial burden at the acquisition stage is particularly relevant, as high upfront expenditure has been identified as a major obstacle to consumers' willingness to purchase EVs (Fathoni et al., 2025). The existing pattern of EV ownership also reflects this constraint: approximately 70% of EV transactions have been made through cash payments, and current purchasers are largely concentrated in the middle- and high-income segments (Fathoni et al., 2025). Consequently, expanding access to suitable financing may represent one avenue for making EV ownership more attainable for a wider consumer base. The potential importance of this avenue is reflected in the reported 23% year-on-year increase in credit funding for EV ownership (PT Bank BCA Syariah, 2024).

Consumer decisions concerning EV adoption cannot, however, be explained solely by financial considerations. Prior studies have identified a combination of psychological, social, economic, and policy-related factors associated with EV Purchase Intention (Ivanova & Moreira, 2023; Pamidimukkala et al., 2024; Sasongko et al., 2024). The present study therefore draws on the Theory of Planned Behavior (TPB) to examine how behavioral evaluation, perceived social expectations, and perceived control relate to consumers' intention to purchase an EV (Ajzen, 1991, 2011, 2020). Previous EV research has also demonstrated the applicability of TPB in explaining Purchase Intention (Pailwar & Srinivasan, 2022). Within this framework, Attitude represents consumers' evaluation of EV ownership, Subjective Norm captures perceived social pressure or expectations, and Perceived Behavioral Control reflects the extent to which consumers believe they can overcome barriers to purchasing an EV. Purchase Intention is consequently treated as the immediate behavioral outcome preceding an actual transaction. Even when consumers acknowledge the environmental and efficiency advantages of EVs, their willingness to purchase may still be constrained by acquisition costs, charging infrastructure limitations, and technological uncertainty (Fathoni et al., 2025; Thwe et al., 2025; Yuniza et al., 2021). The TPB provides a behavioral foundation for explaining intention through these three core determinants, while recognizing that the relative importance of these determinants may vary across behaviors and contexts (Ajzen, 2020).

Although TPB provides a strong behavioral foundation for explaining Purchase Intention, its core constructs primarily capture individuals' psychological evaluations, perceived social expectations, and perceived control over behavior. In the context of EV adoption, however, purchase decisions also involve economic and financing conditions that may shape whether behavioral intention can be translated into a feasible purchasing decision. Therefore, this study extends the application of TPB by incorporating economic, policy, and financing considerations as complementary dimensions rather than substitutes for the original TPB constructs. Ownership Cost represents consumers' economic assessment of the resources and expenditures associated with EV ownership, thereby complementing Attitude by capturing the financial dimension of the purchase evaluation. Fiscal Incentives represent policy-related economic conditions that may reduce the financial burden of EV adoption and thus introduce

an external contextual dimension beyond the individual-level determinants emphasized in TPB. Credit Accessibility is positioned differently from these direct explanatory factors because it represents a financing condition that may influence whether consumers can act upon their assessment of ownership costs. Accordingly, Credit Accessibility is conceptualized as a moderator of the Ownership Cost-Purchase Intention relationship, allowing the study to examine whether access to financing changes the extent to which ownership-cost considerations are translated into Purchase Intention. Through this extension, the study connects the behavioral logic of TPB with the economic, policy, and financing conditions surrounding EV acquisition. This approach is consistent with the broader flexibility of TPB to incorporate additional predictors when they provide theoretically relevant information beyond the core determinants of intention (Ajzen, 2020).

Within this extended framework, Ownership Cost and Fiscal Incentives capture economic and policy-related conditions surrounding EV ownership. Ownership Cost extends beyond the initial vehicle price and encompasses expenses associated with acquisition, maintenance, energy consumption, and related household energy requirements; previous evidence identifies these costs as relevant barriers to EV adoption (Ejeh et al., 2023). Fiscal measures, including tax exemptions and reductions in import duties, may lower some of the financial burden associated with acquiring and operating an EV (Kondev et al., 2023). Credit Accessibility, meanwhile, has received comparatively less attention in the EV literature (Candra, 2022; Ndiaye, 2025). Rather than treating financing access simply as another direct determinant of Purchase Intention, this study conceptualizes Credit Accessibility as a moderating condition that may change the strength of the relationship between Ownership Cost and EV Purchase Intention. The underlying rationale is that consumers' perceptions of ownership affordability may have different implications depending on whether appropriate financing is accessible. Limited access to suitable credit may therefore constrain consumers' ability to translate their assessment of EV ownership costs into Purchase Intention, even when fiscal incentives are available (Fathoni et al., 2025; Ivanova & Moreira, 2023; Yuniza et al., 2021).

To establish the research gap, a systematic literature review (SLR) was conducted using the Scopus database. The initial search produced 224 publications based on combinations of the terms Purchase Intention, Ownership Cost, Fiscal Incentives, Financial Inclusion, Credit Accessibility, and electric vehicle. The screening was subsequently restricted to studies published during 2021-2026, relevant subject areas, English-language journal articles, and final-stage publications. Application of the PRISMA 2020 procedure resulted in 22 studies being retained for synthesis. The reviewed literature demonstrates that EV adoption and Purchase Intention have been investigated from perspectives including ownership cost, fiscal support, behavioral determinants, affordability, and economic constraints. Ivanova & Moreira (2023) highlighted consumer characteristics, EV characteristics, and government policies, while Candra (2022) and Kurniawan et al. (2025) emphasized purchase costs, charging infrastructure, and government incentives. Sasongko et al. (2024) identified ownership costs and regulatory complexity as relevant considerations, while Ramadhan (2024) emphasized the role of financial incentives. Despite these contributions, Credit Accessibility remains relatively underexamined, particularly as a mechanism that may moderate the effect of Ownership Cost on EV Purchase Intention. Existing studies have generally examined cost, affordability, financial readiness, or financing as separate considerations, while limited evidence is available regarding whether access to credit changes the relationship between Ownership Cost and Purchase Intention.

This unresolved issue provides the basis for the theoretical and empirical contribution of the present study. The study integrates the core behavioral dimensions of TPB Attitude, Subjective Norm, and Perceived Behavioral Control with complementary economic, policy, and financing conditions relevant to EV acquisition. Specifically, Ownership Cost and Fiscal

Incentives are incorporated to capture economic and policy considerations that are not explicitly represented as distinct constructs in the original TPB framework, while Credit Accessibility is introduced as a moderator of the Ownership Cost-Purchase Intention relationship. This specification extends the application of TPB by recognizing that consumers' Purchase Intention may be shaped not only by behavioral evaluations, social expectations, and perceived behavioral control, but also by the economic feasibility and financing context surrounding EV ownership. Empirically, the study addresses the limited evidence concerning whether access to credit changes the relationship between Ownership Cost and EV Purchase Intention, particularly among potential EV consumers in Indonesia. Accordingly, the study examines Attitude, Subjective Norm, Perceived Behavioral Control, Fiscal Incentives, and Ownership Cost in relation to EV Purchase Intention, while introducing Credit Accessibility as a moderator of the Ownership Cost-Purchase Intention relationship. From a practical perspective, the findings are expected to provide evidence that can assist policymakers and industry stakeholders in designing EV adoption strategies that address ownership affordability, fiscal support, and financing accessibility.

METHODS

This research adopts a quantitative methodology to investigate the determinants associated with electric vehicle (EV) Purchase Intention in Indonesia. The empirical framework combines behavioral, economic, and financing considerations, while the research process integrates a systematic literature review with a cross-sectional survey. Primary information was obtained from potential EV buyers in the JABODETABEK area, and the resulting dataset was examined using Partial Least Squares Structural Equation Modeling (PLS-SEM). The methodological stages comprise literature identification and screening, development of the research framework, operationalization of the constructs, questionnaire administration, data screening, and statistical evaluation.

Systematic Literature Review

A systematic review of the literature was conducted to develop the theoretical and empirical basis of the study and to identify unresolved issues related to EV Purchase Intention. Scopus was used as the primary database for retrieving relevant academic publications. The search procedure combined the following keywords: Purchase Intention (PI), Ownership Cost (OC), Fiscal Incentives (FI), Financial Inclusion, Credit Accessibility (CA), and electric vehicle (EV). The search was limited to publications released between 2021 and 2026 and was further filtered based on relevant subject areas, English-language journal articles, and publications classified at the final publication stage.

The initial search generated 224 publications. These records were subsequently evaluated against the predefined inclusion and screening criteria, resulting in 22 studies being retained for further analysis. The study selection procedure followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 framework. The selected publications were then reviewed to identify how behavioral, economic, policy, and financing dimensions have been examined in relation to EV Purchase Intention. Particular attention was given to studies addressing Ownership Cost and Credit Accessibility in order to determine the extent to which these variables have been incorporated into previous EV research.

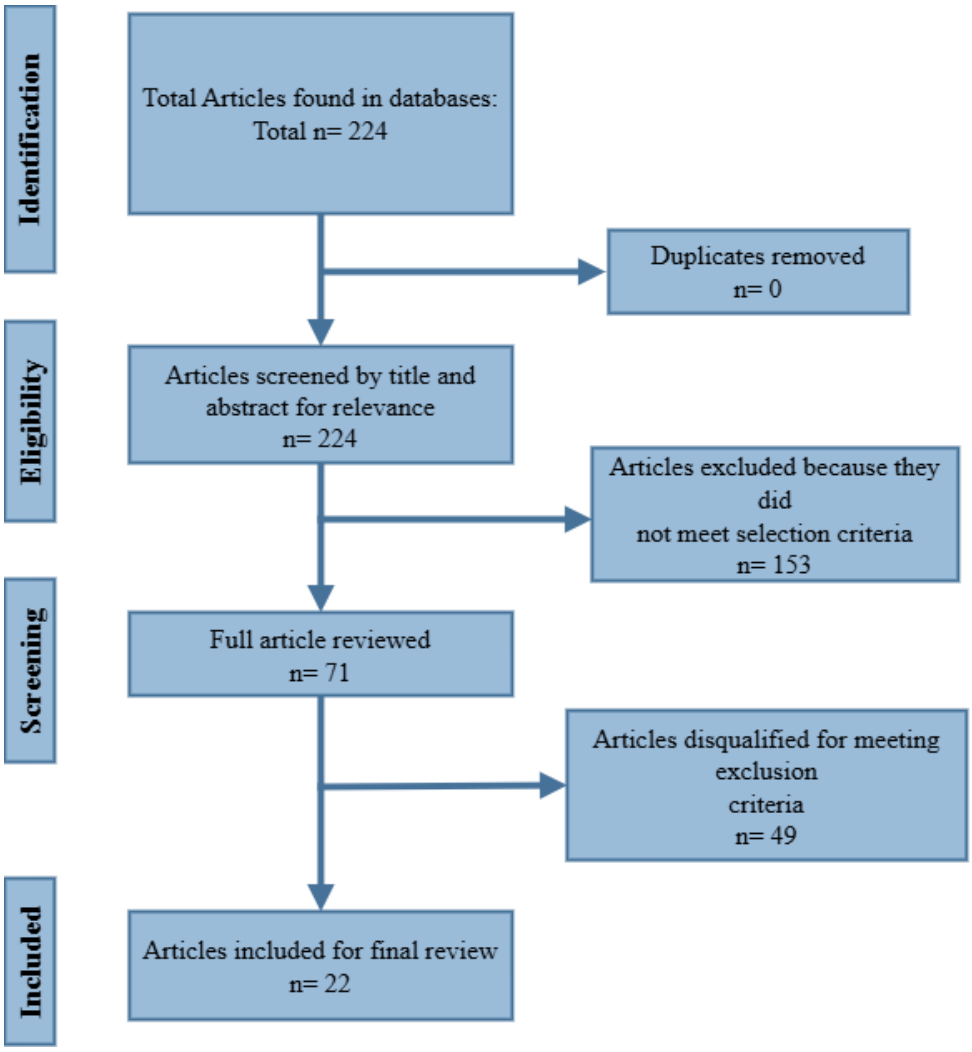

Figure 1. PRISMA flow chart

Following the screening and eligibility assessment, 22 publications were identified as meeting the established criteria and were included in the literature synthesis. Collectively, these studies address a range of factors associated with EV Purchase Intention, including behavioral characteristics, ownership-related expenditure, fiscal policy, affordability, and broader economic constraints. The synthesis further indicates that Credit Accessibility has received comparatively limited attention in the existing literature. More specifically, evidence remains limited regarding its potential role in influencing the relationship between Ownership Cost and EV Purchase Intention, particularly when Credit Accessibility is positioned as a moderating variable.

Table 1. Summary of previous studies on electric vehicle purchase intention

Study	Country	Research Focus	Method	Main Variables	Main Finding	Research Gap
Ejeh et al. (2023)	United Kingdom	Techno-economic feasibility of EV adoption	Optimization model	Ownership Cost	Ownership cost strongly influences EV economic feasibility.	Purchase Intention and Credit Accessibility were not examined.
Kondev et al. (2023)	Kyrgyzstan	Financial and policy drivers of EV diffusion	Review & interviews	Fiscal Incentives, Ownership Cost	Fiscal incentives can reduce	Behavioral intention and Credit Accessibility

Study	Country	Research Focus	Method	Main Variables	Main Finding	Research Gap
					barriers to EV adoption.	were not addressed.
Guo (2022)	Ireland	Comparison of EV and ICE ownership costs	Comparative assessment	Ownership Cost	EV ownership costs remain relatively high during the early adoption stage.	Purchase Intention and moderation effects were not investigated.
Pailwar & Srinivasan (2022)	India	Determinants of EV Purchase Intention	SEM	Purchase Intention, Perceived Ownership Cost	Perceived cost negatively affects Purchase Intention.	Credit Accessibility was not examined as a moderator.
Figenbaum (2022)	Norway	Total cost of EV ownership	TCO comparison	Ownership Cost	Policy support contributes to lowering long-term EV ownership costs.	Consumer purchase intention was not the main focus.
Liao & Wu (2024)	China	Economic and behavioral factors in EV adoption	Experimental interviews	Ownership Cost, Economic Factors	Financial burden reduces willingness to adopt EVs.	Purchase Intention was not explicitly modeled.
Suvittawat (2024)	Thailand	EV Purchase Intention using TPB/TAM	SEM	Purchase Intention, Perceived Ownership Cost	Attitude and cost perception are associated with Purchase Intention.	Credit Accessibility was not included.
Hidayat & Cowie (2023)	Indonesia	EV transition from a multilevel perspective	MLP / policy analysis	Policy, Economic Context	Financial and regulatory support are important for EV transition.	The Ownership Cost-Purchase Intention relationship was not tested.
Ivanova & Moreira (2023)	China	Determinants of EV adoption	Systematic literature review	Ownership Cost, Fiscal Incentives	Financial cost is frequently identified as an adoption barrier.	No empirical moderation analysis was conducted.
Candra (2022)	Indonesia	Barriers to EV adoption	Grey Ordinal Priority Approach	Adoption Barriers, Economic Factors	Economic and other adoption barriers can constrain EV adoption.	Does not test Credit Accessibility as a moderator of Ownership Cost and Purchase Intention.
Fathoni et al. (2025)	Indonesia	Barriers to EV transition	Interviews	Economic Readiness	Financial readiness is relevant to EV adoption.	Qualitative evidence; no Purchase Intention model.
Lim et al. (2024)	Malaysia	EV adoption intention	Push-Pull-Mooring	Purchase Intention,	Cost functions as an important	Credit Accessibility was not

Study	Country	Research Focus	Method	Main Variables	Main Finding	Research Gap
				Ownership Cost	push-pull consideration.	examined as a moderator.
Laksmana & Mahadwartha (2024)	Indonesia	Determinants of EV Purchase Intention	SEM	Purchase Intention, Economic Factors	Economic considerations significantly influence Purchase Intention.	Ownership Cost was not treated as the central construct.
Yuniza et al. (2021)	Indonesia	Public acceptance of EVs	Survey	Price Sensitivity, Purchase Intention	Higher price sensitivity is associated with lower adoption.	Credit-related factors were not considered.
Laksmana & Mahadwartha (2024)	Indonesia	Financial behavior and EV intention	SEM	Purchase Intention, Perceived Ownership Cost	Cost awareness influences Purchase Intention.	Moderating effects were not examined.
Febrianto et al. (2025)	Indonesia	Factors influencing EV adoption intention	SEM	Purchase Intention, Cost Factors	Cost represents an important barrier to EV adoption.	Credit Accessibility was not included.
Fathoni et al. (2025)	Indonesia	Financial readiness for EV adoption	Survey	Economic Constraints	Financial constraints can limit EV adoption.	Behavioral Purchase Intention was not examined.
Ariyani et al. (2025)	Indonesia	Determinants of EV Purchase Intention	Regression	Purchase Intention, Affordability	Affordability significantly influences Purchase Intention.	Credit Accessibility was not tested as a moderator.
Ramadhan (2024)	Indonesia	Willingness to adopt EVs	Survey	Cost, Purchase Intention	Cost concerns reduce willingness to adopt EVs.	No moderating variable was tested.
Lim et al. (2024)	Malaysia	EV adoption behavior	SEM	Purchase Intention, Economic Concern	Economic concerns influence EV intention.	Credit Accessibility was not considered.
Sasongko et al. (2024)	Indonesia	EV Purchase Intention	SEM	Purchase Intention, Ownership Cost	Ownership Cost has a negative association with Purchase Intention.	Moderating effects were not investigated.
Pamidimukkala et al. (2024)	United States, Texas	EV adoption intention using extended TPB	Quantitative survey (n = 743)	Attitude, Subjective Norm, PBC, Moral Norms, Price Value, Monetary & Non-monetary Incentives, Adoption Intention	Attitude, Subjective Norm, PBC, and monetary incentives significantly influence adoption intention, whereas non-monetary incentives are insignificant.	Does not examine the Ownership Cost × Credit Accessibility relationship.

Table 1 synthesizes 22 studies addressing different dimensions of electric vehicle adoption and Purchase Intention. The reviewed literature covers four major areas: behavioral determinants, ownership economics, fiscal and policy support, and financial constraints. Studies examining Ownership Cost generally indicate that consumers' economic assessment of EV ownership is an important consideration in adoption decisions (Ejeh et al., 2023; Guo, 2022; Pailwar & Srinivasan, 2022; Sasongko et al., 2024). Fiscal and policy-oriented studies further indicate that government support can contribute to reducing barriers associated with EV adoption (Hidayat & Cowie, 2023; Kondev et al., 2023; Yuniza et al., 2021). Meanwhile, behavioral research highlights the relevance of Attitude, Subjective Norm, and Perceived Behavioral Control in explaining consumers' intention to adopt EVs (Pailwar & Srinivasan, 2022; Pamidimukkala et al., 2024; Suvittawat, 2024).

Despite these contributions, the reviewed literature reveals a limited examination of Credit Accessibility within an integrated model of EV Purchase Intention. Existing studies have predominantly considered cost, affordability, financial readiness, or financing as separate factors. Evidence is particularly limited regarding whether access to credit changes the relationship between Ownership Cost and Purchase Intention. This gap is important because EV acquisition requires a substantial financial commitment, making both the perceived cost of ownership and the availability of appropriate financing potentially relevant to consumers' decisions.

Based on this synthesis, the present study integrates behavioral, economic, and policy perspectives by incorporating Attitude, Subjective Norm, Perceived Behavioral Control, Fiscal Incentives, and Ownership Cost as explanatory variables. Credit Accessibility is subsequently positioned as a moderating variable to examine whether financing access changes the relationship between Ownership Cost and EV Purchase Intention. This framework provides the empirical basis for testing the proposed relationships among potential EV consumers in Indonesia.

Research Design

This study employed a quantitative, cross-sectional survey design to examine consumers' intention to purchase electric vehicles (EVs) in Indonesia. The proposed model integrates behavioral, economic, policy, and financing considerations. Attitude, Subjective Norm, Perceived Behavioral Control, Fiscal Incentives, and Ownership Cost were specified as explanatory variables, while EV Purchase Intention served as the dependent variable. Credit Accessibility was incorporated as a moderating variable to assess whether access to credit changes the relationship between Ownership Cost and EV Purchase Intention.

A structured questionnaire was used to obtain information regarding respondents' perceptions and purchase intentions. The cross-sectional design was selected because all observations were collected during a single period, thereby reflecting respondents' perceptions under the prevailing market and policy conditions for EVs. The unit of analysis was the individual potential EV consumer. This consumer-level approach is consistent with previous research examining EV adoption and purchase intention (Candra, 2022; Ramadhan, 2024; Riyanto et al., 2019; Veza et al., 2022).

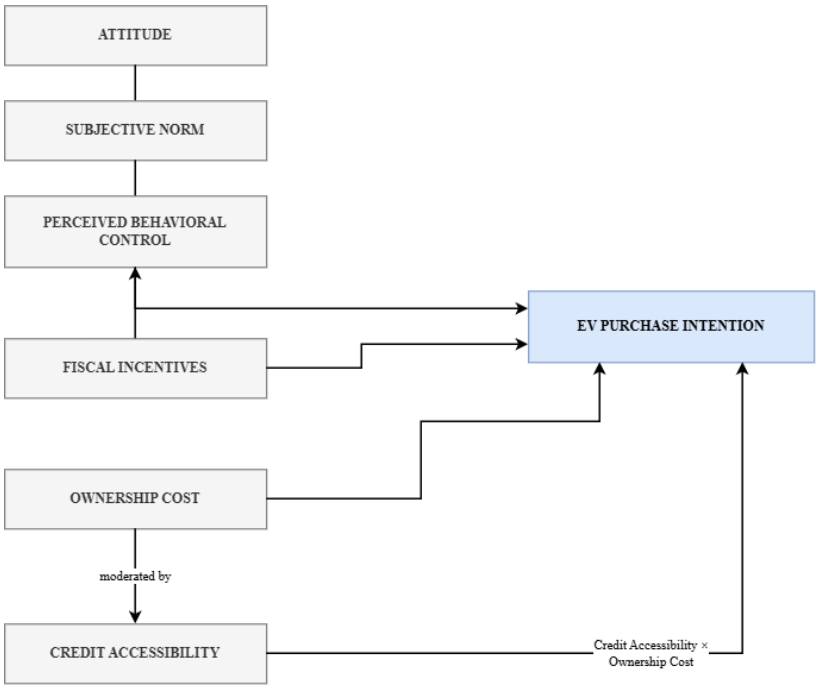

Figure 2. Theoretical Framework and Proposed Moderating Relationship

Figure 2 presents the theoretical framework underlying the proposed relationships in the study. EV Purchase Intention is specified as the dependent variable, while Attitude, Subjective Norm, Perceived Behavioral Control, Fiscal Incentives, Ownership Cost, and Credit Accessibility represent the explanatory constructs. In addition, Credit Accessibility is specified as a moderating variable that may alter the strength of the relationship between Ownership Cost and EV Purchase Intention. Accordingly, the framework includes both the direct effect of Credit Accessibility on EV Purchase Intention and the interaction effect between Credit Accessibility and Ownership Cost. The proposed relationships provide the basis for testing the direct and moderating effects through PLS-SEM.

Population and Sampling

The target population consisted of individuals in the JABODETABEK area who represented potential EV buyers. To ensure that respondents were relevant to the research objectives, several eligibility conditions were established. Participants were required to live and work within the study area, fall within the age range of 22-55 years, have a stable source of income as employees or entrepreneurs, and express an intention to consider purchasing an EV within the subsequent six months. These requirements were intended to ensure that participants possessed sufficient exposure to the purchasing context and were able to provide relevant assessments of EV Purchase Intention (Ivanova & Moreira, 2023; Lavieri & Oliveira, 2023; Pailwar & Srinivasan, 2022; Purwanto et al., 2025).

Because a comprehensive sampling frame of potential EV buyers was not available, respondent selection was conducted using purposive sampling. Snowball sampling was subsequently employed to extend recruitment to additional participants who satisfied the specified criteria. Responses that failed to meet the eligibility requirements or were considered unsuitable for the study context were removed before statistical analysis (Yeğin & Ikram, 2022).

The adequacy of the sample size was assessed using an a priori statistical power analysis rather than relying solely on the 10-times rule. Because the structural model includes six direct predictors of EV Purchase Intention—Attitude, Subjective Norm, Perceived Behavioral Control, Fiscal Incentives, Ownership Cost, and Credit Accessibility—and one interaction term between Credit Accessibility and Ownership Cost, the power analysis was specified with seven

predictors. Assuming a medium effect size ($f^2 = 0.15$), a significance level of 5% ($\alpha = 0.05$), and statistical power of 80% ($1 - \beta = 0.80$), the analysis indicated a minimum required sample of 103 respondents. The study obtained 270 valid observations, substantially exceeding the minimum required sample of 103 respondents under the specified power-analysis assumptions. The achieved sample size therefore provides a sufficient basis for estimating and testing the proposed structural relationships. The 10-times rule is therefore not used as the primary basis for determining sample adequacy.

Research Instrument and Data Collection

The questionnaire was developed by adapting measurement instruments from previous studies. It consisted of three main sections. The first section collected respondents' demographic information. The second section measured the factors considered in electric vehicle (EV) purchasing decisions, while the third section assessed respondents' intention to purchase an EV. The explanatory constructs comprised Attitude, Perceived Behavioral Control, Subjective Norm, Fiscal Incentives, Ownership Cost, and Credit Accessibility, with EV Purchase Intention specified as the dependent construct.\

The initial instrument consisted of 34 measurement items. All construct indicators were measured using a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. The indicators for Attitude, Perceived Behavioral Control, Subjective Norm, and Purchase Intention were adapted from Yeğin and Ikram (2022). Fiscal Incentives were measured using indicators adapted from Pailwar and Srinivasan (2022). Ownership Cost was measured using indicators adapted from Sasongko et al. (2024), Afraah et al. (2021), Rezvani et al. (2015), and Phuthong et al. (2024). Credit Accessibility was operationalized using indicators adapted from Ndiaye (2025) and Bronson et al. (2018).

The initial 34 indicators were distributed across the constructs as follows: five indicators for Attitude, six for Perceived Behavioral Control, five for Subjective Norm, four for Fiscal Incentives, seven for Ownership Cost, four for Credit Accessibility, and three for Purchase Intention. The measurement constructs, initial number of indicators, response scale, coding direction, and sources are presented in Table 2.

Ownership Cost was operationalized as a perceived ownership-cost construct rather than as an objective monetary measure of Total Cost of Ownership (TCO). The construct captures respondents' perceptions and evaluations of economic considerations associated with owning an EV. The initial Ownership Cost measurement consisted of seven indicators (OC1–OC7), adapted from previous studies. All indicators were measured using a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree, with higher scores indicating stronger agreement with the respective statements. Therefore, the construct reflects respondents' coded perceptions of ownership-related economic considerations rather than the actual monetary amount of EV ownership expenditure. The interpretation of the structural coefficient consequently follows the wording and coding direction of the measurement indicators. The positive structural coefficient for Ownership Cost should therefore be interpreted as a statistical association between respondents' coded perceptions of ownership-related economic considerations and EV Purchase Intention, rather than as evidence that consumers prefer higher actual ownership expenditures.

Following the iterative measurement-model assessment, four Ownership Cost indicators (OC1, OC2, OC6, and OC7) were retained in the final measurement model. Their outer loadings were 0.785, 0.779, 0.515, and 0.693, respectively. Although OC6 and OC7 were below the conventional 0.70 loading level, both exceeded the adopted minimum screening criterion of 0.50 and were retained after considering construct-level reliability, convergent validity, and the conceptual coverage of the Ownership Cost construct. The final Ownership Cost construct demonstrated Composite Reliability (rho_c) of 0.794 and an Average Variance Extracted (AVE) of 0.500, indicating acceptable internal consistency and convergent validity.

Prior to the main data collection, the questionnaire was pilot-tested with 31 respondents. The pilot stage was conducted to identify potential problems in the wording and structure of the instrument and to refine the questionnaire before its wider distribution. Following the pilot test, the revised questionnaire was administered online through Google Forms. The study employed purposive sampling, with snowball sampling used as a supplementary recruitment technique to expand respondent reach because a complete sampling frame of potential EV consumers was unavailable. After the returned questionnaires were screened for eligibility and response consistency, 270 valid observations were retained for the main analysis.

Table 2. Measurement of Research Variables and Questionnaire Items

Section	Variable	Indicator Codes	Initial Items	Scale and Coding Direction	Sources
A	Demographic Profiles	-	8 items	Nominal/ordinal according to response categories	-
B	Attitude	AT1-AT5	5 items	1 = Strongly disagree; 2 = Disagree; 3 = Neither agree nor disagree; 4 = Agree; 5 = Strongly agree	Yeğin & Ikram (2022)
B	Perceived Behavioral Control	PBC1-PBC6	6 items	1 = Strongly disagree; 2 = Disagree; 3 = Neither agree nor disagree; 4 = Agree; 5 = Strongly agree	Yeğin & Ikram (2022)
B	Subjective Norm	SN1-SN5	5 items	1 = Strongly disagree; 2 = Disagree; 3 = Neither agree nor disagree; 4 = Agree; 5 = Strongly agree	Yeğin & Ikram (2022)
B	Fiscal Incentives	FI1-FI4	4 items	1 = Strongly disagree; 2 = Disagree; 3 = Neither agree nor disagree; 4 = Agree; 5 = Strongly agree	Pailwar & Srinivasan (2022)
B	Ownership Cost	OC1-OC7	7 items	5-point Likert scale: 1 = Strongly disagree; 2 = Disagree; 3 = Neither agree nor disagree; 4 = Agree; 5 = Strongly agree. Higher scores indicate stronger agreement with the corresponding Ownership Cost statements. The construct represents perceived ownership-cost considerations rather than an objective monetary measure of Total Cost of Ownership (TCO).	Sasongko et al. (2024); Afraah et al. (2021); Rezvani et al. (2015); Phuthong et al. (2024)
B	Credit Accessibility	CA1-CA4	4 items	1 = Strongly disagree; 2 = Disagree; 3 = Neither agree nor disagree; 4 = Agree; 5 = Strongly agree	Ndiaye (2025); Bronson et al. (2018)
C	Purchase Intention	PI1-PI3	3 items	1 = Strongly disagree; 2 = Disagree; 3 = Neither agree nor disagree; 4 = Agree; 5 = Strongly agree	Yeğin & Ikram (2022)

Prior to the main data collection, the questionnaire was pilot-tested with 31 respondents. The pilot stage was conducted to identify potential problems in the wording and structure of the instrument and to refine the questionnaire before its wider distribution. Following the pilot test, the revised questionnaire was administered online through Google Forms. Participant recruitment continued through snowball sampling because no complete population list of eligible EV consumers was available. After the returned questionnaires were screened for eligibility and response consistency, 270 valid observations were retained for the main analysis.

Data Analysis

The empirical analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM). The analysis consisted of two sequential stages: assessment of the measurement model and evaluation of the structural model. The measurement model was assessed to examine indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. The structural model was subsequently evaluated to assess

collinearity, explanatory power, effect sizes, and the hypothesized direct and moderating relationships.

Indicator reliability was evaluated using standardized outer loadings. Following Hair et al. (2022), outer loadings of approximately 0.70 or higher are generally considered desirable because they indicate that the construct explains at least 50% of the indicator's variance. However, indicators with loadings between 0.40 and 0.70 should not be automatically removed; their deletion should be considered in relation to Composite Reliability (CR), Average Variance Extracted (AVE), and the content validity of the construct. Indicators with loadings below 0.40 are generally considered candidates for removal.

In the present study, a loading of 0.50 was used as a minimum screening criterion during the iterative model-refinement process rather than as a universal threshold for indicator reliability. Indicators below 0.50 were reviewed individually, and their removal was considered in conjunction with the overall reliability, convergent validity, and conceptual coverage of the corresponding construct. This approach was adopted because the measurement instruments were adapted from previous studies and incorporated constructs representing behavioral, economic, fiscal, and financing considerations. The final measurement model was retained after the remaining indicators were assessed based on their indicator loadings, construct-level reliability, convergent validity, and conceptual coverage.

Internal consistency reliability was evaluated using Cronbach's Alpha and Composite Reliability (CR), with values above 0.70 considered indicative of acceptable reliability. Convergent validity was assessed using the Average Variance Extracted (AVE), with a minimum value of 0.50. Discriminant validity was assessed using both the Fornell-Larcker criterion and the Heterotrait-Monotrait ratio (HTMT). HTMT values were examined to identify potential overlap between conceptually distinct constructs. Following commonly used guidelines, values below 0.90 were considered indicative of acceptable discriminant validity, while values exceeding this threshold were treated as signals of potential discriminant validity concerns. The HTMT results were therefore interpreted together with the Fornell-Larcker criterion rather than relying on a single diagnostic.

The measurement-model results indicated a limitation in convergent validity for two constructs. The Average Variance Extracted (AVE) values for Perceived Behavioral Control (0.419) and Subjective Norm (0.484) were below the conventional minimum threshold of 0.50. However, their Composite Reliability values remained above 0.70, indicating acceptable internal consistency reliability. The two constructs were therefore retained because the measurement assessment considered indicator-level performance, internal consistency reliability, convergent validity, and conceptual coverage collectively rather than applying a single statistical threshold mechanically. Nevertheless, the AVE values below 0.50 indicate that convergent validity for Perceived Behavioral Control and Subjective Norm should be interpreted with caution.

For the structural model, collinearity was assessed using the Variance Inflation Factor (VIF) before interpreting the structural relationships. VIF values were examined for the predictor constructs and the interaction term to identify potential multicollinearity that could affect the estimation of the structural paths. The explanatory power of the structural model was assessed using the coefficient of determination (R^2), which indicates the proportion of variance in the endogenous construct explained by the predictor variables. The effect size (f^2) was assessed to determine the substantive contribution of each exogenous construct to the explained variance of the endogenous construct.

The moderating role of Credit Accessibility was assessed by incorporating the Credit Accessibility × Ownership Cost (CA × OC) interaction term into the structural model as an additional predictor of EV Purchase Intention. The interaction term was used to examine whether the strength of the relationship between Ownership Cost and EV Purchase Intention varied according to the level of Credit Accessibility. The interaction effect was evaluated using

its estimated path coefficient, t-statistic, and p-value. Collinearity associated with the interaction term was assessed using its VIF value before interpreting the moderation result.

Predictive relevance was not evaluated using the Stone–Geisser Q^2 statistic because the required Q^2/Blindfolding output was not generated in the present PLS-SEM estimation. Therefore, the study does not report or interpret a Q^2 value. To avoid deriving predictive relevance from statistics that do not directly measure it, no Q^2 value was inferred from the R^2 results. The structural model was instead evaluated using collinearity (VIF), explanatory power (R^2), effect size (f^2), and bootstrapped path coefficients, t-statistics, and p-values.

RESULTS AND DISCUSSION

This section presents the empirical findings and interprets them in relation to the proposed research model. The discussion covers the characteristics of the respondents, evaluation of the measurement model, structural model and hypothesis testing, and the implications of the findings for EV Purchase Intention.

Respondent Profile

A total of 270 valid questionnaires were included in the empirical analysis. The sample was composed of 56% male respondents, with individuals aged 31-40 years representing the largest age category at 45%. Private-sector employees constituted the largest occupational group, accounting for 34% of respondents, while 36% held a bachelor's degree. In addition, 99% of the respondents reported receiving a fixed monthly income, and 66% stated that they intended to purchase an EV in the future.

The respondent characteristics indicate that the sample largely consisted of economically active individuals with relatively stable income conditions. The relatively high proportion of respondents expressing an intention to purchase an EV also indicates that the sample was relevant to the study's objective of examining potential consumers' EV Purchase Intention.

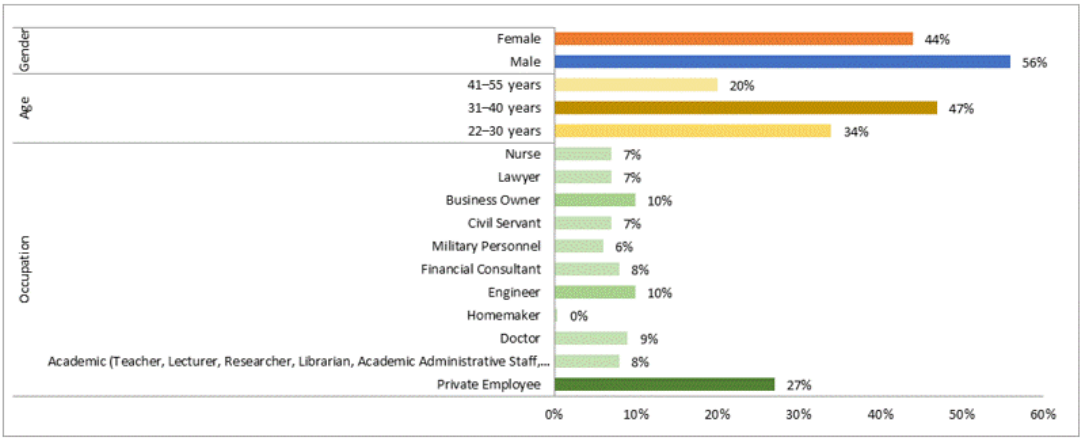

Figure 3. Respondent Demographic Characteristics (n = 270)

Figure 3 presents the main demographic characteristics of the respondents. Overall, the sample reflects a group of economically active potential consumers, as demonstrated by the high proportion reporting fixed monthly income. The presence of a substantial proportion of respondents who expressed an intention to purchase an EV further supports the relevance of the sample to the research context.

Measurement Model Assessment

Before examining the hypothesized structural relationships, the measurement model was evaluated to determine whether the indicators adequately represented their respective constructs. The initial specification comprised seven constructs and 34 indicators: Attitude (5), Perceived Behavioral Control (6), Subjective Norm (5), Ownership Cost (7), Fiscal Incentives (4), Credit Accessibility (4), and EV Purchase Intention (3).

Indicator reliability was assessed using standardized outer loadings. In accordance with Hair et al. (2022), outer loadings of approximately 0.70 or higher are generally considered desirable. However, indicators with loadings between 0.40 and 0.70 should not be automatically removed; their deletion should be considered in relation to Composite Reliability (CR), Average Variance Extracted (AVE), and the content validity of the construct. Accordingly, the present study used 0.50 as a minimum screening criterion during the iterative model-refinement process rather than as a universal threshold for indicator reliability.

The measurement model was refined through three estimation stages. In the first stage, CA1, OC3, and PBC1 were removed because their outer loadings did not meet the adopted screening criterion. The model was then re-estimated, resulting in the removal of CA2, OC5, and SN5 in the second stage. In the third stage, OC4 was removed. Thus, seven indicators were removed during the iterative refinement process, reducing the measurement model from 34 to 27 indicators.

Table 3. Indicator Deletion Process

Estimation Stage	Indicators Deleted	Construct	Final Number of Indicators
Initial model	-	All constructs	34
Stage 1	CA1, OC3, PBC1	Credit Accessibility, Ownership Cost, Perceived Behavioral Control	31
Stage 2	CA2, OC5, SN5	Credit Accessibility, Ownership Cost, Subjective Norm	28
Stage 3	OC4	Ownership Cost	27
Final model	7 indicators deleted in total	All constructs	27

Indicator deletion was not based solely on individual loading values. Each candidate indicator was reviewed as part of an iterative measurement-model refinement process, considering its outer loading together with construct-level reliability, convergent validity, and the conceptual coverage of the corresponding construct. This approach was adopted because the measurement instruments were adapted from established studies and represented behavioral, economic, fiscal, and financing dimensions. Indicators were considered for removal when their statistical performance did not satisfy the adopted screening criterion, while the potential effect of their removal on construct-level reliability, convergent validity, and conceptual representation was also considered. The model was re-estimated after each deletion stage, and the final measurement model was retained only after the remaining indicators demonstrated acceptable overall measurement properties and sufficient conceptual coverage of their respective constructs.

Table 4. Final Outer Loadings

Construct	Indicator	Outer Loading
Attitude	AT1	0.873
	AT2	0.800
	AT3	0.617
	AT4	0.709
	AT5	0.781
Credit Accessibility	CA3	0.929
	CA4	0.769
EV Purchase Intention	EVPI1	0.819
	EVPI2	0.773
	EVPI3	0.772
Fiscal Incentives	FI1	0.879
	FI2	0.859
	FI3	0.703
	FI4	0.697
Ownership Cost	OC1	0.785
	OC2	0.779

Construct	Indicator	Outer Loading
	OC6	0.515
	OC7	0.693
Perceived Behavioral Control	PBC2	0.781
	PBC3	0.608
	PBC4	0.556
	PBC5	0.608
	PBC6	0.691
Subjective Norm	SN1	0.795
	SN2	0.658
	SN3	0.688
	SN4	0.697

The retained indicators generally exceeded the adopted minimum screening criterion of 0.50. Several indicators remained below the conventional 0.70 level, including AT3 (0.617), OC6 (0.515), OC7 (0.693), PBC3 (0.608), PBC4 (0.556), PBC5 (0.608), PBC6 (0.691), SN2 (0.658), SN3 (0.688), SN4 (0.697), and FI4 (0.697). These indicators were retained because their loadings exceeded the adopted screening criterion and their retention was considered together with construct-level reliability, convergent validity, and conceptual coverage.

Internal consistency reliability was assessed using Cronbach's Alpha and Composite Reliability.

Table 5. Reliability and Convergent Validity

Construct	Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)	AVE
Attitude	0.813	0.818	0.874	0.582
Credit Accessibility	0.646	0.674	0.819	0.694
EV Purchase Intention	0.696	0.696	0.816	0.597
Fiscal Incentives	0.794	0.801	0.862	0.609
Ownership Cost	0.648	0.652	0.794	0.500
Perceived Behavioral Control	0.665	0.670	0.777	0.419
Subjective Norm	0.693	0.699	0.789	0.484

Internal consistency was primarily evaluated using Composite Reliability because several constructs had Cronbach's Alpha values slightly below the conventional 0.70 criterion. The Composite Reliability values ranged from 0.777 to 0.874, indicating acceptable internal consistency reliability. Cronbach's Alpha values ranged from 0.646 to 0.813.

Convergent validity was assessed using the AVE criterion of 0.50. Most constructs achieved AVE values of 0.50 or higher, including Attitude (0.582), Credit Accessibility (0.694), EV Purchase Intention (0.597), Fiscal Incentives (0.609), and Ownership Cost (0.500). However, Perceived Behavioral Control (AVE = 0.419) and Subjective Norm (AVE = 0.484) were slightly below the conventional 0.50 threshold. Therefore, convergent validity for these two constructs should be interpreted cautiously. Their Composite Reliability values remained above 0.70, indicating acceptable internal consistency despite the lower AVE values.

Discriminant validity was assessed using both the Fornell-Larcker criterion and the Heterotrait-Monotrait ratio (HTMT). The Fornell-Larcker criterion was evaluated by comparing the square root of AVE for each construct with its correlations with the other constructs.

Table 6. Fornell-Larcker Criterion

Construct	AT	CA	EVPI	FI	OC	PBC	SN
AT	0.763	-	-	-	-	-	-
CA	0.562	0.833	-	-	-	-	-
EVPI	0.568	0.421	0.773	-	-	-	-
FI	0.636	0.505	0.420	0.780	-	-	-
OC	0.595	0.477	0.623	0.493	0.707	-	-
PBC	0.620	0.566	0.553	0.563	0.585	0.647	-
SN	0.691	0.555	0.523	0.523	0.538	0.592	0.696

The Fornell-Larcker results indicate that the square root of AVE exceeded the correlations with the other constructs for most constructs. However, because the AVE values for Perceived Behavioral Control and Subjective Norm were below 0.50, their discriminant validity should be interpreted together with the HTMT results rather than relying on the Fornell-Larcker criterion alone.

Discriminant validity was further assessed using the HTMT criterion. HTMT values below 0.90 were considered indicative of acceptable discriminant validity, whereas values exceeding 0.90 indicated potential overlap between constructs.

Table 7. Heterotrait-Monotrait Ratio (HTMT)

Construct	AT	CA	EVPI	FI	OC	PBC	SN
AT	-	0.773	0.770	0.850	0.868	0.984	0.980
CA	0.773	-	0.578	0.700	0.814	0.937	0.853
EVPI	0.770	0.578	-	0.612	1.005	0.924	0.837
FI	0.850	0.700	0.612	-	0.732	0.865	0.820
OC	0.868	0.814	1.005	0.732	-	1.000	0.854
PBC	0.984	0.937	0.924	0.865	1.000	-	1.101
SN	0.980	0.853	0.837	0.820	0.854	1.101	-

The HTMT results indicated several construct pairs with values exceeding the recommended 0.90 threshold, including values above 1.00. These results indicate potential empirical overlap among several constructs, particularly among Attitude, Perceived Behavioral Control, Subjective Norm, Ownership Cost, and EV Purchase Intention. Therefore, discriminant validity cannot be regarded as fully established for all construct pairs in the present measurement model. The HTMT results were consequently interpreted together with the Fornell-Larcker criterion, construct reliability, indicator performance, and the theoretical distinctiveness of the constructs. The measurement model was retained because the constructs were theoretically specified as distinct dimensions of the proposed framework however, the observed overlap requires caution when interpreting relationships involving these constructs.

Structural Model and Hypothesis Testing

Following the assessment of the measurement model, the structural model was evaluated to assess collinearity, explanatory power, effect sizes, and the hypothesized direct and moderating relationships. Collinearity was first examined using the Variance Inflation Factor (VIF), followed by assessment of the coefficient of determination (R^2) and effect size (f^2). The hypothesized relationships were subsequently evaluated using bootstrapping with 5,000 subsamples and a two-tailed significance test at the 5% significance level.

Collinearity in the structural model was assessed using the Variance Inflation Factor (VIF) for all predictor constructs and the Credit Accessibility × Ownership Cost interaction term before interpreting the structural path coefficients. The VIF values ranged from 1.844 to 3.447, with all values below 5.00, indicating that the predictor constructs and the interaction term did not exhibit problematic multicollinearity. The highest VIF was observed for Perceived Behavioral Control (VIF = 3.447), whereas the Credit Accessibility × Ownership Cost interaction term had a VIF of 2.204. Therefore, collinearity was not considered a substantial concern in estimating the structural relationships.

Table 8. Inner Model Collinearity Statistics (VIF)

Predictor	VIF
Attitude → EVPI	3.095
Credit Accessibility → EVPI	1.844
Credit Accessibility × Ownership Cost → EVPI	2.204
Fiscal Incentives → EVPI	2.120
Ownership Cost → EVPI	2.603
Perceived Behavioral Control → EVPI	3.447
Subjective Norm → EVPI	2.874

The explanatory power of the structural model was assessed using the coefficient of determination (R^2). EV Purchase Intention obtained an R^2 value of 0.549 and an adjusted R^2 of 0.537, indicating that the predictor variables collectively explained 54.9% of the variance in EV Purchase Intention, while the adjusted R^2 indicated that 53.7% of the variance was explained after accounting for the number of predictors.

Table 9. Coefficient of Determination (R^2)

Endogenous Construct	R^2	Adjusted R^2
EV Purchase Intention	0.549	0.537

The effect size (f^2) was subsequently assessed to determine the substantive contribution of each predictor to the explained variance of EV Purchase Intention. Ownership Cost made the largest substantive contribution ($f^2 = 0.147$), whereas the other predictors demonstrated relatively small effect sizes ranging from 0.001 to 0.046. The Credit Accessibility × Ownership Cost interaction showed a negligible effect size ($f^2 = 0.001$).

Table 10. Effect Size (f^2)

Predictor	f^2
Attitude → EVPI	0.004
Credit Accessibility → EVPI	0.014
Credit Accessibility × Ownership Cost → EVPI	0.001
Fiscal Incentives → EVPI	0.001
Ownership Cost → EVPI	0.147
Perceived Behavioral Control → EVPI	0.046
Subjective Norm → EVPI	0.019

The moderating role of Credit Accessibility was assessed by incorporating the Credit Accessibility × Ownership Cost (CA × OC) interaction term into the structural model as an additional predictor of EV Purchase Intention. The interaction term was used to examine whether the strength of the relationship between Ownership Cost and EV Purchase Intention varied according to the level of Credit Accessibility. The moderation effect was evaluated within the PLS-SEM framework using the bootstrapped path coefficient, t-statistic, and p-value. The interaction term had a VIF of 2.204, indicating that its inclusion did not introduce problematic multicollinearity. The interaction effect was not statistically significant ($\beta = -0.012$, $t = 0.224$, $p = 0.822$), and its effect size was negligible ($f^2 = 0.001$). Therefore, there was insufficient statistical evidence that Credit Accessibility altered the strength of the relationship between Ownership Cost and EV Purchase Intention. Accordingly, H6 was not supported.

The hypothesized direct relationships were then evaluated based on the bootstrapped path coefficients, t-statistics, and p-values. Ownership Cost was the only predictor that demonstrated a statistically significant relationship with EV Purchase Intention. The relationship was positive and statistically significant ($\beta = 0.415$, $t = 3.376$, $p = 0.001$). This result indicates that higher values of the coded Ownership Cost construct were associated with higher EV Purchase Intention among the respondents. Importantly, this positive coefficient should not be interpreted as evidence that respondents prefer higher actual monetary ownership costs. Rather, it reflects the statistical association between the coded perceptions of ownership-related economic considerations and EV Purchase Intention.

This interpretation is particularly important because Ownership Cost is conceptually different from an objective Total Cost of Ownership (TCO) calculation. In this study, Ownership Cost represents respondents' perceptions of ownership-related economic considerations as captured by the questionnaire indicators. Therefore, the positive coefficient should be interpreted in relation to respondents' coded perceptions rather than as a direct statement that increasing the actual financial cost of EV ownership would increase purchase intention.

The remaining direct relationships did not reach the 5% significance threshold. Attitude produced β = 0.071, t = 0.935, and p = 0.350; Fiscal Incentives produced β = -0.035, t = 0.485, and p = 0.628; Subjective Norm produced β = 0.158, t = 1.553, and p = 0.121; Perceived Behavioral Control produced β = 0.268, t = 1.828, and p = 0.068; and Credit Accessibility produced β = -0.110, t = 1.623, and p = 0.105. Thus, these relationships were not statistically supported in the present sample.

Table 11. Hypothesis Test Results

Hypothesis	Path	Original Sample (O)	T Statistics	P Values	Decision
H1	AT → EVPI	0.071	0.935	0.350	Not Supported
H2	SN → EVPI	0.158	1.553	0.121	Not Supported
H3	PBC → EVPI	0.268	1.828	0.068	Not Supported
H4	FI → EVPI	-0.035	0.485	0.628	Not Supported
H5	OC → EVPI	0.415	3.376	0.001	Supported
H6	CA × OC → EVPI	-0.012	0.224	0.822	Not Supported

Table 11 shows that only H5 was supported by the empirical evidence. H1, H2, H3, H4, and H6 did not meet the 5% significance criterion. Accordingly, Ownership Cost was the only predictor that demonstrated a statistically significant association with EV Purchase Intention in the proposed model. The non-significant results should not be interpreted as evidence that the corresponding constructs are theoretically irrelevant; rather, they indicate that sufficient statistical evidence for the hypothesized relationships was not observed in the present sample.

Discussion of Findings

The results indicate that Ownership Cost was the only statistically significant predictor of EV Purchase Intention (β = 0.415, t = 3.376, p = 0.001), supporting H5. The positive coefficient indicates that respondents with higher coded perceptions on the Ownership Cost construct also tended to report higher EV Purchase Intention. This finding highlights the relevance of ownership-related economic considerations in consumers' EV purchasing decisions.

The positive effect of Ownership Cost on EV Purchase Intention (β = 0.415, t = 3.376, p = 0.001) requires careful interpretation because the construct does not represent an objective monetary calculation of Total Cost of Ownership (TCO). In this study, Ownership Cost was operationalized as respondents' perceived evaluation of economic considerations associated with EV ownership. The measurement used a five-point Likert scale, in which higher scores represented stronger agreement with the respective Ownership Cost statements. Therefore, the positive coefficient should not be interpreted as evidence that consumers prefer higher actual ownership expenditures. Rather, it indicates that higher values of the coded Ownership Cost construct were positively associated with EV Purchase Intention among the respondents.

This interpretation is important because an objective increase in the actual monetary cost of EV ownership would generally be expected to reduce purchase intention. The present finding instead reflects the relationship between consumers' perceptions as captured by the measurement instrument and their purchase intention. Thus, the positive coefficient should be understood within the operational definition and coding direction of the construct, rather than as evidence that higher actual ownership costs encourage EV adoption.

This distinction also helps explain why the finding differs from studies that conceptualize ownership cost primarily as a financial barrier. For example, Sasongko et al. (2024) reported a negative association between Ownership Cost and Purchase Intention. The difference may arise from differences in construct operationalization, measurement context, and coding direction. Therefore, the present finding should not be interpreted as contradicting the basic economic proposition that higher actual ownership expenditure can discourage EV adoption. Rather, it

indicates that respondents' coded perceptions and evaluations of ownership-related economic considerations were positively associated with EV Purchase Intention in the present sample.

Implications and Recommendations

The findings have practical implications for the development of electric vehicle (EV) adoption strategies in Indonesia. Since Ownership Cost was the only factor that demonstrated a statistically significant association with EV Purchase Intention, policymakers and automotive manufacturers should pay greater attention to consumers' perceptions of ownership-related economic considerations. Information provided to consumers should extend beyond the initial vehicle price and communicate the broader financial implications of ownership, including operating, maintenance, and other ownership-related expenditures.

The insignificant direct and moderating effects of Credit Accessibility indicate that increasing access to vehicle financing alone may not be sufficient to strengthen EV Purchase Intention. Financing strategies should therefore consider the conditions under which credit is provided, including interest rates, repayment periods, installment obligations, and financing flexibility. Such approaches may provide consumers with a clearer assessment of whether EV ownership is financially manageable rather than focusing solely on the availability of credit.

For future research, Credit Accessibility could be examined using more specific dimensions of financing conditions and consumer payment behavior. Comparative analysis between consumers who purchase vehicles through direct payment and those who use installment financing may provide further insight into how financing arrangements influence perceptions of affordability and ownership costs. Future studies could also examine whether the relationship between Ownership Cost and Purchase Intention differs across income groups, financing preferences, or levels of EV experience.

Overall, the findings suggest that EV adoption strategies should place greater emphasis on ownership affordability and long-term economic value rather than relying solely on financing availability. For policymakers and industry stakeholders, presenting transparent information about the broader economics of EV ownership may help consumers make more informed purchase decisions.

CONCLUSION

This study examined the determinants of electric vehicle (EV) Purchase Intention by integrating behavioral, economic, policy, and financing perspectives. Based on data from 270 potential EV consumers in the JABODETABEK area, Ownership Cost was the only variable that demonstrated a statistically significant association with EV Purchase Intention. Attitude, Subjective Norm, Perceived Behavioral Control, Fiscal Incentives, and Credit Accessibility did not demonstrate statistically significant direct relationships with EV Purchase Intention. In addition, the proposed moderating effect of Credit Accessibility on the relationship between Ownership Cost and EV Purchase Intention was not statistically supported.

Within the context of the present sample, the findings suggest that respondents' perceptions of ownership-related economic considerations were more strongly associated with EV Purchase Intention than the other factors examined in the model. However, this result should not be interpreted as evidence that behavioral factors, fiscal incentives, or financing access are generally unimportant to EV adoption. Rather, the findings reflect the statistical relationships observed among potential EV consumers in the JABODETABEK area and under the conditions of the present study.

Accordingly, the findings provide contextual evidence that ownership affordability may warrant particular attention when developing EV adoption strategies for potential consumers in the study area. Future research involving broader geographic coverage, different consumer segments, and larger or more diverse samples is needed to assess whether the observed relationships are consistent across other populations and regions in Indonesia.

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