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## **Special Issue on**

Sustainability Challenges and Dilemmas for Emerging Economies

## **Guest Editors**

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## Editorial

The aim of this special issue was to broaden our understanding of various challenges and dilemmas that Emerging Economies face to achieve sustainable solutions. The major focus was put on emerging countries and regions that are fragile and detached from competitive markets. To understand the market integration, businesses development, technology and innovation enhancement, citizenship empowerment and inclusion, governmental policies undertook measures to ensure better standards of livings and sustainable development. So we put emphasis on sustainability as a challenge in emerging economies, taking into account the launch of Sustainable Development Goals (SDG). Sustainability, the key success factor for a brighter future, can be linked to societies, environment, economy, innovation, consumer well-being, digitalization, ethics, and governance, among others. Discussion about the approaches may help economies build fundamentals of *sustainable societies and related supporting policies* concept where smart targets can be set to converge and meet the standards of developed countries' sustainability frameworks. Emerging economies are experiencing many challenges such as urbanization, migration, market distortions, political imbalances, security issues, climate change and environmental destructions, instable policies relating to businesses and labor market, among others. All these barriers and obstacles negatively impact the economic development and sustainability.

Sustainable development is a complex process that requires an honest involvement of all categories of stakeholders—companies, public authorities, consumers, portfolio investors, non-governmental organizations, financial institutions. Public authorities play a central role in the metamorphosis of the world economy, which should integrate the principles of sustainable development into the all aspects. The adoption of specific legal regulations, the setup of the institutional framework, the monitoring of the application of the laws are some of the levels on which the state can be involved so that the companies have a behavior that pursues the maximization of the interests of the stakeholders and not only of the shareholders (profit maximization). Protecting the environment, supporting local communities, fighting against corruption, respecting the rights of employees are some of the central bridges that determine the reconfiguration of the business strategy. In addition to complying with legal regulations, companies voluntarily adopt certain codes of conduct or principles through which they promote social responsibility. Unfortunately, the behavior of companies is not always honest, and certain social responsibility actions only aim to cover the negative externalities they generate in the economy, being a greenwashing technique.

In this context, in the lead article, Acharjya, Kumar and Mohapatra analyze the impact of behavioral biases—anchoring, loss aversion, overconfidence, disposition and regret aversion—on investment decision making, and the mediating role of risk perception between the biases and investment decisions. Using data from over 500 retail investors trading in the stock and FOREX market, they find that the anchoring effect, availability heuristics, disposition effect, and overconfidence significantly impact investment decisions, whereas loss aversion and regret aversion have a significant adverse impact on investment decisions. Further, risk perception serves as a complete mediator between the overconfidence heuristic and investing decisions. Implication for investors is that behavioral biases can impair the quality of investment decisions, and risk perception can improve their quality and sustainability.

In the next article, Hoang and Nguyen examine how service quality and customer satisfaction play a vital role in businesses in emerging markets such as Vietnam which still needs to catch up with the Western service standards. It is even more important in service industry as it deals with people. Further, local businesses need to compete with foreign businesses due to the Foreign Direct Investments in Vietnam. So the authors test the impact of the five dimensions—*tangibility, responsiveness, reliability, assurance* and *empathy*—of the SERVQUAL on customer satisfaction in Vietnamese banking industry.

Results of their study indicate that all the five dimensions of service quality significantly impact customer satisfaction. More specifically, *Reliability* and *Empathy* most influence the customer satisfaction.

In the next insightful article by Sejdari and Banda, they determine if the Gravity Model is applicable in the Albanian economy and conforms to the economic theory. The authors offer a timeline of the historical changes that brought about the commerce liberalization and the integration of the country into organizations and trade agreements that facilitated significant growth and sustainability. The authors employed an original panel data regression of the Gravity Model, focusing on exports between Albania and its European reported trade countries during 2003-2019. The Model supports the theoretical framework and demonstrates how GDP and FTA's positively impact export, while distance negatively impacts export. They also discuss the *Mini Schengen Zone*. The Model also supports the economic theory, proving that GDP impacts positively the export flows and distance negatively. However, the impact of Free Trade Agreements (FTA) on export flows was not significant.

In another article relating to economic growth, Jaka, Wahyuni and Sutyarjoko examine the role of strategic renewal in firm performance of Micro, Small, and Medium Enterprises (SMEs) in Tourism during Covid 19 in the context of Indonesia. Using Structural Equation Modeling, their findings highlight the importance of human capital and ambidextrous capabilities in creating resilience and improving firm performance through strategic renewal. They also find that organizational resiliencies do not always positively affect strategic renewals; only a high degree of organizational resiliencies with innovative capabilities can orchestrate the strategic renewal.

In the final article, Athmay and Fantazy explore the concept of performance measurement in public sector in the context of an emerging markets such as UAE. Specifically, they focus on the critical question of what public sector managers know about performance measurement, and what they see its potential for improving the performance of their organizations. Their findings show that the overall public performance of the UAE local governments is excellent which is contributed by both financial performance and nonfinancial performance.

In the book review section, Mirela Panait reviews the book—Greenwashing: Foundations and Emerging Research on Corporate Sustainability and Deceptive Communication by Agostino Vollero. Emerald. 2022.

We do hope you would find this Special Issue useful. Please do let us know your comments and suggestions for future special issues.

Respectfully,

*Guest Editors*

*Journal of the Academy of Business and Emerging Markets*

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## Impact of behavioral biases on investment decision making and mediating effect of risk perception

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The purpose of the study is to analyze the impact of behavioral biases—anchoring, loss aversion, overconfidence, disposition and regret aversion—on investment decision making, and the mediating role of risk perception between the biases and investment decisions. Using data from over 500 retail investors trading in the stock and FOREX market, multiple hypotheses were tested. The results indicate that the anchoring effect, availability heuristics, disposition effect, and overconfidence significantly impact investment decisions, whereas loss aversion and regret aversion have a significant adverse impact on investment decisions. Further, risk perception serves as a complete mediator between the overconfidence heuristic and investing decisions. Implication for investors is that behavioral biases can impair the quality of investment decisions, and risk perception can improve their quality.

**Keywords:** anchoring effect, behavioral biases, decision-making, loss aversion, overconfidence

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### Introduction

The traditional theory focused on psychological attributes that influenced the investors' decision-making behavior. For instance, Sanfey et al. (2003) investigated and established the impact of emotions on investment decision making. Investors tended to show irrational behavior based on situations and differing perceptions. Empirical studies did not support these behavioral traits of investors. Behavioral biases are the manifestations of an individual to overestimate his/her knowledge and cognitive abilities (Bhandari & Deaves 2006). As such, human psychology plays a vital role while making investment choices. Behavioral bias can change a person from rational to irrational due to illogical decisions. An investor makes erroneous investment decisions influenced by behavioral biases leading to substantial financial sufferings. The new dimensions of behavioral biases needing further investigation are anchoring effect



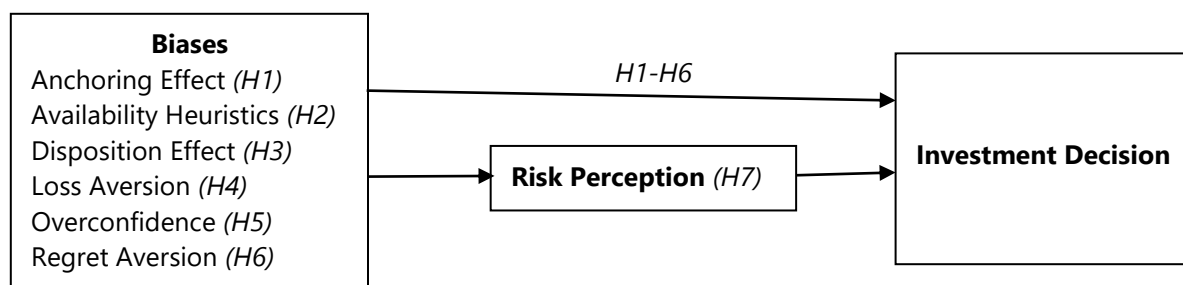
(Lin 2011), availability heuristics (Odean 1988), disposition effect (Frydman & Rangel 2014), loss aversion (Hassan et al. 2014), overconfidence (Hassan et al. 2014) and regret aversion bias (Wood & Zaichkowsky 2004). With this backdrop, the study focuses on only the behavioral preferences mainly due to anchoring effect, availability heuristics, disposition effect, loss aversion, overconfidence, and regret aversion bias.

Most people tend to forget the general principles of investment theory and take decisions guided by intuition and other criteria that conflict with the rational approach (De Bondt 1998). The accumulated investment experience of the investor seems to have no value as the number of errors still persists. Psychological research on intuitive judgment confirms that investors' predictions are optimistically biased (Armor & Taylor 2002). Over-optimism tends to overestimate the likelihood of desired outcomes on analysts' forecasts and recommendations (Ramnath et al. 2008) and investors exhibit typically overconfidence when the issues are complex (Shefrin 2008). To be a successful long-term investor, it's vital to recognize and overcome fundamental human cognitive and emotional biases that contribute to bad judgments and financial blunders. Due to cognitive biases, most investors are susceptible to oversimplification of complicated issues and become overconfident in decision-making. Understanding cognitive biases may lead to improved decision making, which is critical to minimizing risk and enhancing long-term investment results. The past researches discussed suggest that behavioral finance is mainly concerned with examining non-separable market effects and personal psychological aspects that determine treatment in financial markets. In the last decade, there has been a surge in the profits made from financial transactions, which has sparked interest in this area. This paper discusses some of the most common cognitive and emotional biases that might contribute to bad financial choices. The purpose of the study is to examine the effect of behavioral biases on financial investment decision making in stock market. This study would also analyze how risk perception acts as a moderator in investment decision making.

In what follows, the paper presents the proposed research model with supported hypotheses, methods adopted, and findings and discusses the role of different behavioral biases on investors' decision-making through risk perception.

### Theory and Hypotheses Development

The Behavioral finance, which describes how cognition and emotions influence financial decision-making, has emerged with a paradigm shift in traditional finance. There are two categories of investors regarding behavioral financial decisions based on psychological factors: rational and irrational. Rational investors make decisions based on logical reasoning and knowledge regarding the investment opportunity. Figure 1 represents the conceptual framework linking the variables and generating the hypotheses.



**Figure 1. The Conceptual Framework**

Source: the authors

Irrational investors make judgments based on heuristics that often lead to biases in investing decisions. We consider both heuristics and prospect theories as discussed earlier in various pieces of literature (Frydman & Rangel 2014, Goo et al. 2010, Hassan et al. 2014, Kahneman & Tversky 1979, Lin 2011, Odean 1998, Wood & Zaichkowsky 2004) to develop the research framework and hypotheses for this research. A brief review of some prominent biases leading to hypotheses formulation is mentioned in the next section.

### **Anchoring Effect (AE)**

As Slovic (1967) introduced and adopted by cognitive psychologists, the anchoring effect is a cognitive bias that eventually distorts an investor's decision-making capacity by considering a single and first source of information, overlooking all other sources and kinds. Subsequent decisions followed on that available piece of information lead to undue financial risks. Many studies have also proved the implication of this cognitive heuristic in the decision-making process. Kahneman and Tversky (1979) explored that investors often make wrong estimates by adopting an initially available reference value and later adjusting the weight. Research revealed that individuals failed to adapt their final assessments judiciously based on the starting point ("anchor"). Of late, researchers like Qu et al. (2008) provide evidence of the anchoring bias based on perception. Judicial decisions (Englich et al. 2006), personal injury (Chapman & Bornstein 1996), and the likelihood of diseases (Brewer et al. 2007) are some of the other areas where one can find anchoring biases. The other biases seen are performance evaluation (Latham et al. 2008), competitions (Ginsburgh & van Ours 2003), and real estate (Northcraft & Neale 1987). The analysis of the anchoring effect suggests the following hypothesis:

*H1. The anchoring effect has a positive influence on investment decisions.*

### **Availability Heuristics (AH)**

The availability heuristic propounded by Tversky and Kahneman (1973) assumes that investors make decisions based on the frequency of events by exploring the availability of instances. Investment decisions are subject to various biases and distortion (Kudryavtsev et al. 2013). Oppenheimer (2004) has already highlighted the role of availability heuristic in decision-making. However, Goodwin (2020) has tested the impact of this type of heuristic in the case of judgmental risk and viewed that investment decisions depend on balancing biases, distortions and risk. With this backdrop, it is pertinent to explore further the impact of the availability heuristic on investment behavior of investors. The reason is that the availability heuristic has important implications in most professional domains and many facets of everyday life. Every day, people make hundreds of decisions. Heuristics are crucial in making judgments and responding to information in our environment. Availability heuristic is a valuable tool, but it is vital to recognize that it may lead to inaccurate evaluations. Being aware of inherent prejudices may protect investors from erroneous thinking, unintentional discrimination, and expensive blunders in investments and commercial choices. Hence, the study proposes the following hypothesis.

*H2. Availability heuristics has a positive influence on investment decisions.*

### **Disposition Effect (DE)**

Investment decisions are complex and challenging as it involves money and can impact the quality of life. In investment decisions, the disposition effect plays a crucial role (Rubaltelli et al. 2010). Investors tend to retain financial assets that have lost their value and sell them out when the value of those assets increases. Kahneman and Tversky (1979) have explained the concept and termed it one of the most "irrational" behaviors. Later on, Jin and Scherbina (2011) tested the impact of disposition effects concerning retail investors. Besides, Rubaltelli et al. (2010) investigated the implications of the disposition effect and the

status quo bias among students in investment decision-making. The outcome was that, though there were huge choices, investors tended to stick to recent options for investment decision-making, due to which they suffered losses. Individuals who are risk-averse and invest in investment funds and investors who trade often are more likely to sell winning assets while holding on to losing ones (Oreng et al. 2021). Given these propositions, understanding the disposition effect can help investors, financial institutions, and policymakers mitigate the negative impact of this bias in investment decisions. Therefore, the objective is to gain a more comprehensive knowledge of the disposition effect and its tendencies. Thus, the inference that the effect of disposition biases impacts investors' decision-making leads to the following hypothesis:

*H3. Disposition effect bias is positively associated with investment decisions.*

### **Loss Aversion (LA)**

Investors are more prone to becoming loss averse than other individuals. Lee and Veld-Merkoulova (2016) examined that investors highly impacted by loss aversion generally have lower stock investments as they observe their stock portfolio performance too often, contributing to myopic loss aversion prevalence. Mahina et al. (2017) analyzed that loss aversion bias highly affected investment in the Rwanda stock market. Arora and Kumari (2015) examined whether investors aged 41-55 years show high impact loss aversion bias compared to individuals aged 25-40 years. The result also indicates that females had more loss aversion and regret as compared to males. The prospect theory assumes that investors tend to choose possible gain over possible loss if they decide to offer. Thus, studies suggest that loss aversion bias is related to risk aversion (Koszegi & Rabin 2006). The inference of this research is that investors do not like integrating the decision at hand with any other decision or event. Still, the attitude of loss aversion of investors affects their investment decisions in the financial market. Therefore, the next hypothesis is:

*H4. Loss aversion has a positive impact on investment decisions.*

### **Overconfidence (OC)**

Overconfidence is the unwarranted faith in intuitive reasoning, cognitive abilities, and judgment (Pompian 2011), and it creates life-cycle consumption profiles and macro-indicators consistent with the market rate of return on savings and investment (Bagchi 2011). Past research has also found the effect of optimism and overconfidence on investment decision-making. Fairchild (2005) examined the impact of overconfidence on funding decisions where there is no asymmetry of knowledge or moral hazard. Since the manager is overconfident, they believe that the market undervalues his equity. Hackbarth (2002) employed the link between management overconfidence, investment, and debt using a simple options framework with an earnings-based capital structure model. Additionally, Hackbarth (2009) followed Fairchild (2005), who discovered a positive link between management overconfidence and debt by providing two models of managerial overconfidence and capital structure. Overconfident people become too confident about their skills and knowledge while underestimating the various risks associated with the investment. Generally, overconfident investors overreact to private information signals while ignoring publicly available information. So we propose the next hypothesis:

*H5. Overconfidence has a positive impact on investment decisions.*

### **Regret Aversion (RA)**

The regret theory assumes that the utility of a choice option also depends on the feelings evoked by the outcomes of rejected options. People compare the actual result with what the expected work has had a

different choice and experience emotions. People experience regret when the foregone outcome would have been better and rejoice when the foregone outcome would have been worse. Previous studies have held that people are regret averse in investment decision making. In other words, regret aversion can select either the option with the highest or the lowest risk. Lebaron (1999) examined whether investors tend to sell shares at a higher value and avoid selling those shares at a lower discount. Similarly, Fogel and Berry (2006) studied that investors often express regret holding loss prone stocks for quite a long period rather than selling them too early. Therefore, regret aversion is an emotional factor that influences investors when they are scared of losing an asset due to a wrong investment decision, thus exhibiting regret aversion. The hypothesis, therefore, is:

*H6. Regret aversion has a positive impact on investment decisions.*

### **Role of Risk Perception (RP) between the Biases and Investment Decision (ID)**

The decision-making behavior of an individual is affected by the attitude and perception toward risk and how the individual subjectively perceives the risky investment risk. Biases influence the decision-making behavior of an investor. Sitkin and Weingart (1995) discussed how taking action on risk affects risk perceptions and attitudes towards risk. Several empirical pieces of research have been conducted on this bond and concluded that the investment decision-making process, according to many investors, is majorly affected by risk perception (Weber & Hsee 1998). Chen and Tsai (2010) investigated the relationship between perception of risk and decision making of investment empirically, particularly considering individual investor factors. Investment decision-making is critical for a particular investor who requires more return with loss aversion and availability bias (Frings 2012). In behavioral finance, risk is one of the critical variables observed, measured, and analyzed. If investors are affected by available biases, the decision may be irrational (Baker & Ricciardi 2014). The earlier studies focused on the relationship between risk perception, attitude towards risk, and investment decisions. Behavioral Finance literature assumes that the decision of asset allocation depends on the risk-taking attitude of investors (Nasic & Weber 2010). The research determines the moderating role of risk perception in the relationship between behavioral biases and individual investor decision making. So the hypothesis formulated is:

*H7. Risk perception mediates the relationship between the biases and investment decisions.*

## **Methodology**

### **Measurement of Variables**

The study analyzed primary data gathered via a structured questionnaire comprising two sections with 35 questions on a five-point Likert scale. While the first section asks questions about investors' demographic details, the second seeks answers to all investment biases and decision-related questions. The scale ranged from 1 to 5, where 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree. Anchoring effect, availability heuristics, disposition effect, loss aversion, overconfidence, and regret aversion were independent factors in this study. The anchoring effect had four scale items (Lin 2011), and availability heuristics had three scale items (Goo et al. 2010). Further, the disposition effect had three scale items (Wang et al. 2010). At the same time, loss aversion had a four-item scale (Hassan et al. 2014). While overconfidence had six scale items (Simon et al. 2000), the regret aversion bias had five scale items (Wood & Zaichkowsky 2004). On the other hand, the dependent variable considered for the study was investment decision. Hira and Loibl (2008) identified five factors: investing is exciting, investing is stressful; investing is satisfying; investing is complex; and time-consuming and adopted to measure the investment decisions. These factors formed the basis for the data collection on various behavioral biases for the study.

### Data Collection

Convenient sampling techniques formed the basis for sample selection. The respondents selected were from the stock-broking firms as those having knowledge and experience in investing. A total of 579 respondents was chosen offline through various broking firms and investment banks. Besides, 105 prospective respondents were approached online through different social media blogs and postings. The researchers took the utmost care while explaining the meaning of each question item for better data access. Out of 688 samples, received responses were 563 (493 offline and 70 online) replies. However, the researchers retained 536 responses (95%), complete in all respects, used for analysis and interpretation.

### Sample Characteristics

The study gathered responses from both Indian (82%) and NRI (18%) investors having a minimum of 2 years of experience in stock and FOREX trading. Respondents included both males (74%) and females (25%) from different age groups, where young investors (less than 30=52%; between 30 and 40=35%). The education qualifications of the maximum respondents ranged from high school (22%) to graduate (61%). About 66% of the respondents desired to invest in the stock and FOREX market due to high-risk tolerance. Investors tended to invest to avoid loss (44%) or maximize profit (46%) during the COVID-19 pandemic.

### Analyses

We used multivariate technique-Structural Equation Modelling (SEM) based on the Partial Least Square (PLS) method. SEM is a suitable method in our study as detects the composite relationship between known variables. It is a blend of factor and multiple regression analyses that detects direct and indirect relationships between the variables of interests (Hair et al. 2006). The ability to deal with observed, unobserved, and hard to handle latent variables makes this method particularly useful in business applications. Before the structural path analysis, we tested the reliability and validity of the measurement model. The reliability test of all the study variables, average variance extracted (AVE), Cronbach's alpha, composite reliability (CR) and standard error (SE) is presented in Table 1. Cronbach's alpha and composite reliability values are above .7, indicating reliability of the scales. All factor loading were above .5. A variable is said to be discriminated validate if the square root of AVE is higher than its latent variable correlation with other variables. Our study meets this criterion. Further, VIF is found to be less than 2, indicating multicollinearity was not an issue for the data analysis.

**Table 1. Reliability and Validity**

<i>Variables</i>	<i>Alpha</i>	<i>CR</i>	<i>AVE</i>	<i>SE</i>
Anchoring Effects (AE)	.83	.83	.54	.11
Availability Heuristics (AH)	.74	.75	.58	.04
Disposition Effect (DE)	.76	.79	.55	.16
Loss Aversion (LA)	.75	.84	.63	.05
Overconfidence (OC)	.79	.85	.65	.00
Regret Aversion (RA)	.73	.81	.55	.07
Risk Perception (RP)	.82	.86	.58	.00
Investment Decision (ID)	.85	.87	.57	.00

Table 2 represents the Path Coefficient of all independent variables for the dependent variable. Further, it can be observed that the critical ratio being more than 1.96 in all cases the behavioral biases under study

in this research such as anchoring effect, availability bias, disposition effect, and overconfidence, loss aversion and regret aversion are significant.

**Table 2. Regression Path Coefficients**

<i>Hypothesis</i>	<i>Reg. path</i>	<i>Estimates</i>	<i>SE</i>	<i>CR</i>	<i>p</i>	<i>Result</i>
<i>H1</i>	AE → ID	.26	.05	4.38	.00	Accepted
<i>H2</i>	AH → ID	.19	.05	3.25	.00	Accepted
<i>H3</i>	DE → ID	.29	.04	5.25	.00	Accepted
<i>H4</i>	LA → ID	.26	.04	4.54	.00	Accepted
<i>H5</i>	OC → ID	.12	.03	2.51	.01	Accepted
<i>H6</i>	RA → ID	.14	.05	2.32	.00	Accepted

### Mediating Effects

Table 3 reports the mediating effects of all the independent variables towards investment decisions through risk perception. It indicates that risk perception has a partial mediating effect between anchoring effects and investment decisions, availability heuristics and investment decisions, and disposition effects and investment decisions. Similarly, risk perception does not influence on the relationship between loss aversion and investment decisions, nor does it affect regret aversion. Additionally, risk perception acts as a complete mediator between overconfidence and investing decisions. Therefore, we accept Hypothesis 7.

**Table 3. Mediating Effects (H7)**

<i>Variables</i>			<i>p</i>	<i>IV → M</i>	<i>M → DV</i>	<i>IV → DV</i>	<i>IV + M → DV</i>		<i>Mediation</i>
<i>IV</i>	<i>M</i>	<i>DV</i>					<i>IV</i>	<i>M</i>	
AE	RP	ID	.00	.43***	.34***	.31***	.19***	.36***	partial
AH	RP	ID	.00	.33**	.24**	.11**	.29*	.23**	partial
DE	RP	ID	.00	.23**	.14***	.12**	.31*	.16**	partial
LA	RP	ID	.08	.13	.01	.11	.11	.02	no
OC	RP	ID	.00	.23**	.27**	.21***	.10	.36**	full
RA	RP	ID	.09	.03	.14*	.01	.06	.13	no

IV: Independent variable, M: Mediation, DV: Dependent variable. \* $p < .05$ . \*\* $p < .01$ , \*\*\* $p < .001$

### Discussion

This study examines the role of different behavioral biases on investors' decision-making through risk perception as a mediating variable. Suppose we consider the traditional theory of finance. In that case, investors decide after evaluating and assessing all the available information relating to the stock, and then they make investments and maximize their wealth. While behavioral finance is the opposite of the traditional finance theory, it also implicates that it is impossible to have a market as rational as there is no strong form of efficiency in the market, where all the different types of investors have the same knowledge and information. Behavioral finance has identified some psychological biases and their impact on the decision-making of investors. The analysis and findings of the study give us an insight into the rapid development and progress in behavioral economics and finance compared to financial management.

The first hypothesis was accepted, where anchoring effect bias is positively associated with an investment decision. Other hypotheses concerning biases like availability heuristic, disposition effect, and overconfidence are accepted as the result shows significant positive impact on their investment decisions. Further, loss aversion and regret aversion have a significant negative influence on investment decisions. In

the financial market, the retail investors exhibit behavior what they consider most appropriate on the moment. They tend to be inflicted with such biases which lead them to generate lesser revenue.

Risk perception has a partial mediating effect between anchoring effects and investment decisions, availability heuristics and investment decisions, and disposition effects and investment decisions. Similarly, risk perception has no mediation effect between loss aversion and investment decisions and regret aversion and investment decisions. Further, risk perception has a full mediation effect between overconfidence and investment decisions. The analysis suggests that investors behave irrationally and invest more without considering the market. They suffer from behavioral biases like overconfidence, availability heuristic, anchoring, and disposition. Similarly, regret aversion bias and loss aversion make the investor step back from a sound investment decision. Their risk perceptions also get blurred and are driven to take suboptimal decisions. Investors need to take appropriate decision while investing in the stock market. Their decisions should rely on the fundamental analysis to generate profit from their investments. They need to compare stock performance with other investment avenues and channelize investment strategically.

### **Conclusion, Limitations and Direction for Future Research**

The study's objective was to explore the impact of behavioral biases such as availability heuristic, disposition effect, overconfidence, regret aversion, and loss aversion on investment decisions, with the mediating result of risk perception. The finding proved that individual investors behave irrationally due to behavioral biases supported by the adaptive market hypothesis. The study findings indicate that the anchoring effect, availability heuristics, disposition effect, and overconfidence motivate investors to make investment decisions. Further, loss aversion and regret aversion impair investment decisions. Risk perception has a full mediation effect between overconfidence and investment decision, and partial mediation between anchoring effect, availability heuristics, disposition effect and the investment decision. The study also finds that risk perception has no mediation effect between biases such as loss aversion, regret aversion and investment decisions. The current research seems to be the first of its kind, focusing on the link between heuristic-driven biases and investment decisions with a mediating role of risk perception.

All researchers have their limitations, so does this research. Since the scope of the study is confined to the small retail investors trading in the stock and FOREX market to find their behavioral biases in investment decision-making, the results have limitations in generalization. Therefore, there is a broader spectrum for the validity of the degree of behavioral biases in investment decision-making with a larger sample size from diverse backgrounds of industries and investors/potential investors from other trading markets. Future research may cover all these factors for a rigorous examination of behavioral biases and mediating factors benefitting profitable investments. Besides, the prospective researchers may include other behavioral biases and psychological factors and moderation effects of demographical factors such as gender, income, and age.

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## Service quality and customer satisfaction in the banking industry: an empirical study in Vietnam

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Service quality and customer satisfaction play a vital role in any business. But it is particularly important in emerging markets such as Vietnam which still needs to catch up with western service standards. It is even more important in service industry as it deals with people. Further, local businesses need to compete with foreign businesses due to the Foreign Direct Investments in Vietnam. In this context, the purpose of the article is to test the impact of the five dimensions—*tangibility*, *responsiveness*, *reliability*, *assurance* and *empathy*—of the SERVQUAL on customer satisfaction in Vietnamese banking industry. Results of the study indicate that all the five dimensions of service quality significantly impact customer satisfaction. More specifically, *Reliability* and *Empathy* most influence the customer satisfaction.

**Keywords:** banking industry, consumer satisfaction, service quality, SERVQUAL, Vietnam

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### Introduction

In the competitive banking industry, the survival and growth of a bank is determined via the delivery of service quality to clients, and financial organizations are equipped with a different kind of financial products and services (Hinson, Mohammed & Mensah 2006, Samli & Frohlich 1992). Customer satisfaction is a key factor to successfully build a potential and loyal customer system, and quality of provided service is a main contributor to the success of banks (Idrees & Xinping 2017). According to Parasuraman et al. (1985), service quality was the global assessment of the overall quality of service. Service quality was also considered an abstract theory. There was no agreement on conceptualizing service quality and various authors concentrated on multiple aspects of service quality. Nevertheless, it provided managers with a tool to research service quality concepts to identify quality and enhance the quality-of-service of companies to achieve customer satisfaction. Customer satisfaction has many definitions and concepts. Customer satisfaction was defined as to what extent customer needs, expectations and wishes regarding the services and products are accomplished for long-term business success (Ardakani, Ardakani & Ardakani 2015). Consumers were focused on receiving competitive benefits (Mozaheb, Alamolhodei &

Fotouchi 2015) and the long-lasting success aspect for a company's competitiveness (Garver & Gagnon 2002, Jamal & Naser 2002). So, customer satisfaction became a vital factor for the companies that delivered the services online (Ankit 2011). Anderson and Sullivan (1993) also indicated that customer satisfaction was essential to the long-run reputation of firms.

In the banking industry, several researchers showed the significant impact of service quality on customer satisfaction in different developing countries and emerging markets (Ahmed 2017, Ali & Raza 2015, Sulieman 2013). SERVQUAL model, including Tangibles, Responsiveness, Reliability, Assurance, and Empathy as dimensions of service quality, was used in these studies to examine the relationship between service quality and customer satisfaction. These five dimensions were found to have significant impact on customer satisfaction in most of the studies; however, some studies found no significant impact on some factors (Vencataya et al. 2019). Besides, most of these researches focused on a specific bank or a specific group of banks (such as Islamic banks) in a developing country; therefore, there is a lack of research on commercial banks. This study fills the gap in Vietnam.

In Vietnam, to satisfy the increasing demands of customers, investing and developing the best quality services is one of the top priority strategies of Vietnamese banks, especially Vietnamese commercial banks. The Vietnamese commercial banks have recently had outstanding progress in the capital, infrastructure quality, and technical information. According to Vietnam News (2020), some of Vietnam's commercial banks reap outstanding achievements through providing high-quality service, which conquered almost fastidious customers in Vietnam including Joint Stock Commercial Bank for Foreign Trade Vietnam (Vietcombank), Vietnam Joint Stock Commercial Bank for Industry and Trade (Vietinbank), Vietnam Technological and Commercial Joint Stock Bank (Techcombank), Bank for Investment and Development of Vietnam (BIDV), Vietnam Prosperity Joint Stock Commercial Bank (VPBank), Military Commercial Joint Stock Bank (MBBank), Vietnam Bank for Agriculture and Rural Development (Agribank), Asia Commercial Joint Stock Bank (ACB), Tien Phong Commercial Joint Stock Bank (TPBank), Ho Chi Minh City Development Joint Stock Commercial Bank (HD Bank). However, the services provided were still not synchronous and did not create fundamental utilities to be exchanged for service users due to changes in business environment (Bui & Le 2019). Domestic commercial banks had to face increasing competition with not only current foreign banks but also potential European banks who would be able to access the Vietnamese market due to the European Union-Vietnam Free Trade Agreement (EVFTA). Therefore, banks need to recognize the pros and cons of the services provided and find the appropriate development steps suitable for themselves and assessing the quality of current banking services and customer satisfaction is a necessary job.

Several studies use SERVQUAL model to examine service quality and customer's satisfaction in Vietnamese banks (Nguyen et al. 2021, Tran, Nguyen & Chang 2015). These researches showed that all five dimensions—Tangibles, Responsiveness, Reliability, Assurance, and Empathy—that have a significant impact on customer satisfaction and they also contributed that SERVQUAL model is applicable in Vietnam. Tran, Nguyen and Chang (2015) studied in Vietnam banking industry but the authors just focused on the quality of deposit services. Other studies were conducted in a specific bank or branch (Nguyen et al. 2021). Therefore, the purpose of the study is to research in a broader context of general service quality (not just deposit services) of Vietnamese commercial banks (not just a brand or branch) in order to see how service quality influences customer satisfaction. Specifically, the paper aims at answering the following research questions: What are the impacts of service quality on customer satisfaction in Vietnamese commercial banks? Which factor has the most influence? The answers may help bank managers increase customer satisfaction by improving service quality. In this paper, literature review is first presented, followed by conceptual framework, hypotheses development and methodology. Then results are described and analyzed for discussion and implications for managers.

## Literature Review

### Service Quality

Service quality has been studied by different researchers to examine perceptions of quality of service in the context of both tangible and intangible characteristics (Aldlaigan & Buttle 2002, Cronin & Taylor 1992, Parasuraman et al. 1988). The ordinary meaning that most authors agree with was proved by Parasuraman et al. (1988) when they evaluated service quality with the SERVQUAL model and described service quality as the size of the difference between the expectations and perception of customers. Parasuraman et al. (1988) depicted service quality as the distinction between the customer's expectations of service and the delivered factor. Five dimensions including Tangibility, Responsiveness, Reliability, Empathy, and Assurance were widely used to estimate service quality. This is the best model to measure service quality in the banking industry in different countries (Hussaien et al. 2020, Rijwani et al. 2017, Vencataya et al. 2019). This is acceptable in the banking industry in which the service quality relies on the degree it satisfies the expectation or demands of customers (Tran & Nguyen 2020). Tran, Nguyen and Chang (2015) also argued that SERVQUAL model can be used to examine service quality of the whole system in banking industry and that it is important for Vietnamese banks to improve the quality of service to compete effectively.

### The Relationship between Service Quality and Customer Satisfaction

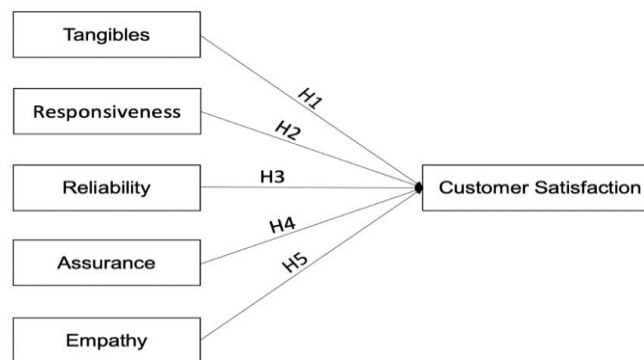
About the link between customer satisfaction and service quality, Oliver (1993) first proposed that service quality would exist earlier than customer satisfaction irrespective of whether these concepts were collective or transaction-specific. Some studies discovered practical support for the statement presented above (Wang & Shieh 2006), where customer satisfaction was based on an outcome of service quality. In connecting service quality and customer satisfaction, investigators had been more accurate about the definition and evaluations of satisfaction and service quality. Service quality and customer satisfaction had in common. However, satisfaction was typically a larger concept, while service quality concentrates particularly on service features (Wilson et al. 2008). Even though it was declared that other factors such as the price or quality of a product could impact customer satisfaction, made-out service quality was a part of customer satisfaction (Zeithaml, Bitner & Gremler 2006). This concept was similar to the statement of Wilson et al. (2008) and proved by the conception of customer satisfaction submitted by other studies.

There were several studies on the relationship between service quality and customer satisfaction in banking industry in different context, especially in developing countries. The quantitative methods and SERVQUAL model were used in most of these studies with Tangibility, Responsiveness, Reliability, Empathy, and Assurance as independent variables and customer satisfaction as the dependent variable. The results mostly showed that all the five dimensions had significant influence on customer satisfaction. Specifically, Suliman (2003) studied banking quality service in Jordanian context. Vencataya et al. (2019) examined Maritius banks and found that Empathy had the most influence on customer satisfaction. Meanwhile, studies of Felix (2017) in Rwanda, Magoma et al. (2019) in Tanzania, and Hussaien et al. (2020) in Sri Lanka showed that Reliability was the strongest factor that influences customer satisfaction toward service quality of banks. Rijwani et al. (2017) studied Indian banks and found that Assurance was the strongest factor. Besides, Ali and Raza (2017) studied Islamic banks in Pakistan and added *compliance* as a factor to the model. It also had the greatest positive influence on customer satisfaction, followed by responsiveness and other factors, whereas the results of Vencataya et al. (2019) reflected no significant impact of responsiveness on customer satisfaction towards service quality in banking industry. The mentioned studies focused on a specific bank (Sulimen 2013), or both public and private banks (Hussaien et al. 2020), quality of a specific bank service (Magoma 2019) or conducted in different context outside Vietnam. That is why this paper aims at finding which factors of service quality have significant impact and which factor has the most impact on customer satisfaction in Vietnamese commercial banks.

In the context of Vietnamese banks, some researchers also used SERVQUAL model to examine service quality and found that customer's satisfaction was positively influenced by the five dimensions. Results of Tran, Nguyen and Chang (2015) showed that Tangibility had the strongest influence while the greatest influence factor on customer satisfaction was Empathy in studies of Tran and Nguyen (2020) and Nguyen et al. (2021). Tran, Nguyen and Chang (2015) also studied Vietnamese commercial banks, but in Hanoi city and there were only 150 respondents participated in this study, and the authors just focused on the quality of deposit services, whereas study of Tran and Nguyen (2020) was conducted in a branch of Techcombank and Nguyen et al. (2021) examined a specific bank (Bac A bank). Therefore, this study is attempting to research a broader context of service quality of Vietnamese commercial banks.

### The Conceptual Framework

The SERVQUAL model is considered the best model to measure service quality since the five scales embrace service quality (Wilson et al. 2008). As illustrated in the research question, a question has been concerned about the impact of service quality on customer satisfaction. To find the answer to this question, the SERVQUAL model is used to evaluate customer satisfaction. Ladhari (2009) recommends using the SERVQUAL model because it is the best scale to utilize when estimating the quality of service in particularly diverse industries. In addition, the SERVQUAL model is also fitting to select the most significant factor of this model that suits specific service being estimated to ensure reliable and valid outcomes. In this study, the model below tests the effect of service quality dimensions on customer satisfaction.



**Figure 1. The Conceptual Framework**

*Source: Parasuraman et al. (1988)*

Figure 1 shows that the five dimensions of service quality have a connection with customer satisfaction. Suppose customers feel satisfied with the service quality. In that case, these service quality dimensions will have a strong relationships with customer satisfaction. Then, a relationship can be determined between service quality and customer satisfaction. This model is adequate to the demand of this research. Each dimension refers to customers' feelings, reflecting the level of satisfaction from customers' perceptions. Banks' customers are the people who focus exceptionally on services, such as the attitude of the staff or the speed of the bank's response to their requirements. It is shown to be reliable in the context of Vietnamese banks (Nguyen et al. 2021, Tran Nguyen & Chang 2015, Tran & Nguyen 2020).

### Hypotheses Development

The connection between customer satisfaction and service quality in Sweden banking is analyzed and it is

found that combining tangible and intangible components of high quality in provided services and products may form long-term association with their clients (Zineldin 2005). As mentioned above, SERVQUAL model with five dimensions of service quality were widely used in general and in banking industry in particular.

Parasuraman et al. (1985) defined tangibility as the image of the equipment, machines, behavior of staffs, manuals, materials, and information systems of the bank. Similarly, tangibility relates to the physical facility, personnel, and communication materials on customers (Sureshchandar, Rajendran & Anantharaman 2001). Scholars have found significant impact of tangibles on customer satisfaction in banking industry (Felix 2017, Magoma et al. 2019). In the study of Tran, Nguyen & Chang (2015) in Vietnam, tangibles had the strongest impact on the customer satisfaction. Interestingly, it was found that Tangibles had no significant impact on customer satisfaction in study of Khan and Fasih (2014) in Pakistan. In this study, the authors hypothesize that the Tangibles significantly affect customer satisfaction in the Vietnam banking context. Our first hypothesis is:

*H1. Tangibles have a positive influence on customer satisfaction.*

Responsiveness, which helps quickly estimate the ability to deal with the problem soon, handles customers' complaints, supports clients, and satisfies the client's requirements (Parasuraman et al. 1988). When employees respond to the problems of customers, their satisfaction will increase (Pakurar et al. 2019). Responsiveness also impacted significantly customer satisfaction in banking industry (Lay & Marimuthu 2016). However, Munusamy et al. (2010) studied banking sector in Malaysia and showed that responsiveness had no significant effect on customer satisfaction. In Vietnam, a positive influence of responsiveness on customer satisfaction was also found in Bac A bank (Nguyen et al. 2021). Therefore, it was expected to have a positive influence of responsiveness on customer satisfaction of Vietnamese commercial banks in this study as responding or giving feedback to customers is important.

*H2. Responsiveness has a positive influence on customer satisfaction.*

Reliability represented the capability to supply services correctly and timely (Parasuraman et al. 1985). This factor depends on the stability in the application of services and respects commitments, and keeps promises to customers. It was proven that reliability strongly impacted customer satisfaction in banking industry in studies of previous authors such as Felix (2017), Vencataya et al. (2019). However, Sanjuq (2014) showed a negative relationship between reliability and customer satisfaction, but no significant impact. In Vietnam, reliability was proved to have a positive relationship with bank services and quality of Vietnamese commercial banks (Phan & Phan 2021). Thus, we wish to test if reliability influences customer satisfaction in Vietnam.

*H3. Reliability has a positive influence on customer satisfaction.*

Assurance refers to the safety that customers feel when using services or it is also about the protection customers from harm or risks (Tran 2018). In some countries, studies showed a significant impact of assurance on customer satisfaction in banking industry. Nevertheless, assurance did not have significant impact on customer satisfaction of banks in Saudi Arabia (Sanjuq 2014). In general, this factor plays an important role because it relates to the safety and financial resources of customers. The above studies in Vietnam showed a positive influence of reliability on customer satisfaction. So in this study, we formulate our next hypothesis to test a positive influence of assurance on customer satisfaction with banking services of Vietnamese commercial banks.



*H4. Assurance has a positive influence on customer satisfaction.*

Empathy is the thoughtful, sympathy and the best preparation for customers and raises belief in customers, which is proven from professional services, outstanding technical knowledge, attitude, politeness, and excellent communication skills when serving customers (Parasuraman 1988). Studies have shown that empathy significantly influenced customer satisfaction in banking industry. However, Munusamy, Cselliah & Hor (2010) found that empathy did not have significant impact on satisfying customers in Malaysia. In Vietnam, for customer satisfaction with deposit services, empathy had the greatest influence. In addition, as this factor can make customers believe in bank services, we develop next hypothesis to examine it in the context of Vietnamese commercial banks.

*H5. Empathy has a positive influence on customer satisfaction*

## Methodology

### Questionnaire Design

We used the SERVQUAL scale developed by Parasuraman et al. (1988). However, to fit the research objective of the study about the relationship between five service quality dimensions and customer satisfaction, the customer satisfaction scale was also added to the survey. In addition, the questionnaire based on Parasuraman's theory was rephrased to make it compatible with Vietnamese culture and to confirm its validity. All the survey questions were in the form of multiple-choice for personal information and close-ended questions to rate their experience, based on the constructed questions of Parasuraman et al. (1988), including four items for each of the five variables: Tangibles, Responsiveness, Reliability, Assurance, and Empathy. The total measurements are 20. Questions about the five independent variables comprised of the questions from 1 to 20 (Nguyen et al. 2021, Parasuraman et al. 1988). For the inquiries related to dependent variables - Customer Satisfaction, the questions were about evaluating the level of satisfaction with overall services quality, assessing the level customer will continue using services, and measuring the level customer will introduce services Vietnam bank industry to other people. It is a 5-point Likert scale. More specifically, the respondents answered the questions by choosing the correct number that presents the size they agreed with an opinion. The scale used in the survey questions is from 1 to 5. These numbers were stated as number 1=very dissatisfied, 2=dissatisfied, 3=neutral, 4=satisfied, and 5=very satisfied.

### Sample Characteristics

The sample was chosen from the customers of Techcombank, MB Bank, VP Bank, ACB, Vietcombank, Vietinbank, Agribank, BIDV, HD Bank, and TP Bank who have been using different bank services such as ATM, Internet banking, mobile banking, etc. Two hundred seventy questionnaires were given to selected banks' customers after meeting them in the lobby of those selected banks to collect data. We received 250 completed questionnaires. Most of the customers who responded to the surveys were between 46 and 65 accounted for 31%. Meanwhile, 26% of those were in the range of from 25 to 45 and over 65. Thirty-six percent of the respondents were male and 64% female. The academic level of respondents is almost equal among groups of high school (23%), Bachelor (25%), Master (26%) and others (25%). Seventy-four percent of them used services of Vietnamese commercial banks more than 50 times per month while customers who used less than 50 times accounted for 26%.

### Reliability and Validity

The value of Cronbach's Alpha of all SERVQUAL dimensions confirmed to proceed with the Exploratory Factor Analysis. Tangibles has a Cronbach's alpha is .79. Considering the Responsiveness dimension, the

measure of the Responsiveness has an alpha of .74, which is elevated and can be applied to perform exploratory factor analysis. Moreover, Cronbach's alpha analysis results indicate that the Reliability, Empathy, and Assurance dimensions are .73, .86, and .86, respectively. Therefore, they are accepted for the next step of analysis. Further, for the factor analysis of the five dimensions, the results illustrate that KMO has a value of  $.71 > .5$ , making factor analysis acceptable. The cumulative total variance of the five dimensions is 64.20%, Bartlett's Sig.  $< .05$ , Eigenvalues  $> 1$ , which meets EFA requirements (Hair et al. 2010). All the conditions are satisfied, so these 20 variables were kept for further tests.

### Analysis and Results

Based on the regression coefficients in Table 1, Reliability has the highest impact on customer satisfaction with Standardized Beta coefficient=.37, followed by Empathy with Standardized Beta coefficient=.33, then Assurance and Tangibles with Standardized Beta coefficient in turn equal to .30 and .29, the lowest is Responsiveness with Standardized Beta coefficient=.27,  $p < .05$ . Therefore, all five dimensions have a positive impact on customer satisfaction. The results also present that the VIF coefficients of the independent variables are all less than 2, so there is no multicollinearity phenomenon between the independent variables. Adjusted  $R^2 = .58$  indicates the appropriateness of the model. Durbin-Watson coefficient is 1.73.

**Table 1. Regression Analysis**

<i>Dependent Variable: CUS (Customer Satisfaction)</i>								
Model	Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
(Constant)		-.16	.19		-.81	.41		
TAN	Tangibility	.24	.03	.29	6.98	.00	.93	1.07
RES	Responsiveness	.19	.03	.27	6.60	.00	.95	1.05
REL	Reliability	.18	.02	.37	9.16	.00	.98	1.02
EMP	Empathy	.24	.03	.33	8.06	.00	.96	1.04
ASS	Assurance	.18	.02	.30	7.33	.00	.94	1.05

H1 (accepted): Tangibles have a positive ( $b = .29$ ,  $p < .00$ ) influence on customer satisfaction. H2 (accepted): Responsiveness has a positive ( $b = .27$ ,  $p < .00$ ) influence on customer satisfaction. H3 (accepted): Reliability has a positive ( $b = .37$ ,  $p < .00$ ) influence on customer satisfaction. H4 (accepted): Assurance has a positive ( $b = .30$ ,  $p < .00$ ) influence on customer satisfaction. H5 (accepted) Empathy has a positive ( $b = .33$ ,  $p < .00$ ) relationship with customer satisfaction.

### Discussion

*Reliability* has significant impact on customer satisfaction at Vietnamese commercial banks. This result is in line with previous researches of Marković and Janković (2013), and Rijiwani et al. (2017). Specially, Reliability has the strongest impact on customer satisfaction with standardized beta coefficient value of .37. However, the results contradict (Munusamy, Cselliah & Hor 2010, Sanjuq 2014). Besides, while researches of Tran and Nguyen (2020) in a branch and Nguyen et al. (2021) in a specific bank showed that Empathy was the strongest factor, in this research of broader context in Vietnam, Reliability has the greatest impact on customer satisfaction. Therefore, the result shows that customers in Vietnam paid much attention to accurate and timely banking services.

*Empathy* has the second greatest positive impact on customer satisfaction. Although this result is different from the findings of Munusamy Cselliah and Hor (2010), it is supported by Magoma et al. (2019). Especially, studies of Sulliman (2013), Vencataya et al. (2019) in other countries showed the impact of Empathy on customer satisfaction with high value of beta coefficient. It implies that customers in Vietnam may be more satisfied if they are taken care and their needs are understood.

*Assurance* also has positive significant impact on customer satisfaction. This is aligned with the results of Vencataya et al. (2019). In Vietnam, it is also in conformity with results of Tran and Nguyen (2020), as secured and safe information technology and services are important to banks' customers. In contrast, this result is different to findings of Sanjuq (2014) about insignificant effect of assurance on customer satisfaction in banking industry. For customers in Vietnam, it can be seen that this factor is also important, because of customers' low uncertainty avoidance preferences.

*Tangibles* also significant influence customer satisfaction. This result also strengthens the arguments of Tran et al. (2015) that Tangibles was the strongest factor as authors focused on deposit services of banks. However, this is contrast to findings that Tangibles had no significant impact on customer satisfaction in the study of Khan and Fasih (2014). Certainly, facilities, equipment, materials, and appearance of banks can also lead to customer satisfaction in Vietnam, as some of them prefer visiting banks' offices and branches to transact.

*Responsiveness* has significant influence on customer satisfaction. The result is different to the study of Munusamy et al. (2010) with no significant impact of Responsiveness on customer satisfaction; however, it is in line with Hussaien et al. (2020). It can be seen from the result that willingness to help and reacting to Vietnamese customers' feedback is also important to increase their satisfaction. If banks want to increase customers' satisfaction, they need to respond to customers' requests more quickly and effectively.

## Conclusion

We examined the impact of service quality on customer satisfaction in Vietnamese commercial banks. The five dimensions of SERVQUAL model—Tangibles, Responsiveness, Reliability, Assurance, and Empathy—were used as independent variables and customer satisfaction as dependent variable. We also consolidated the SERVQUAL model fit in the context of Vietnamese commercial banks. We accepted all the hypotheses as all of them had a positive impact on customer satisfaction. Further, Reliability contributed most to satisfaction, followed by Empathy, Assurance, Tangibles and Responsiveness. Hence, Vietnamese commercial banks should concentrate on developing Reliability and remaining factors to improve customer satisfaction to be more competitive. It means the more outstanding quality of service is, the greater the customer satisfaction. In conclusion, service quality has a positive significant impact on customer satisfaction in Vietnamese commercial banks.

## Implications for Managers

To improve Reliability, Vietnamese commercial banks should gain the bank's reputation by keeping accurate and reliable records (Pakurar et al. 2019). Moreover, Vietnamese commercial banks should keep up-to-date accurate information to improve customers' trust while processing the transaction by answering the customers' doubts and complaints (Nguyen et al. 2021). According to Tran et al. (2015), penetrating the customers' needs, making customers find confidence and safety when performing the bank's service is important. Therefore, Vietnamese commercial banks should also offer their staff training courses in communication skills and client care which also helps improve Empathy. Then, it is important to reinforce customer care, consultancy and have a better customer relationship management (Nguyen et al. 2021) as they wish to be respected by banks' staff (Munusamy et al. 2010). Moreover, banks' employees should attempt to remember the individual customer's name that makes each customer feel respectful.

Being appreciated and listened to meet personal needs make customers feel satisfied (Tran & Nguyen, 2020). Regarding Assurance, keeping secured online and offline transaction, confidential personal information and physical safety in the bank is necessary to increase customer satisfaction (Talavera 2020). The Tangibles and Responsiveness dimensions have the least impact on customer satisfaction. Banks are recommended to enhance service quality through feedback from customers and invest in physical facilities such as redesigning the appearance of offices, counters, and equipment.

### Limitations and Directions for Future Research

We only used questionnaires with a close-ended form of questions for data collection from the bank's customers, so there is lack of opinions from customers to reflect why they were satisfied or unsatisfied. Future study can combine quantitative and qualitative methods to have more detailed information. Second, there were only five dimensions in SERVQUAL; some more factors can be considered for inclusion in future studies such as compliance (Ali & Raza 2017), employees' competence and access (Pakurar et al. 2019).

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## Is the Gravity Model applicable in Albania and the Mini Schengen Zone?

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The purpose of the study is to determine if the Gravity Model is applicable in the Albanian Economy and conforms to the economic theory. This study offers a timeline of the historical changes that brought about the commerce liberalization and the integration of the country into organizations and trade agreements that have facilitated significant growth. This study employs an original panel data regression of the Gravity Model focusing on exports between Albania and its European reported trade countries during 2003-2019. The Model supports the theoretical framework and demonstrates how GDP and FTA's positively impact export, while distance negatively impacts export. In addition, this study also discusses the *Mini Schengen Zone*. The Model also supports the economic theory, proving that GDP impacts positively the export flows and distance negatively. However, the impact of Free Trade Agreements (FTA) on export flows was not significant.

**Keywords:** exports, Gravity Model, Mini Schengen Zone, trade

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## Introduction

Trade is as ancient of a concept as the birth of civilizations. Scholars have contributed to the field of international trade, through the creation of many theories that address, analyze the mechanisms and reasons for these relations among countries (Akira1972, Leamer & Levinsohn 1995). For instance, Voica et al. (2021) concludes that the FDI's impact of foreign trade of the host country depends on the type of investment and absorptive capacity of the receiver, the economic development of host and home countries, and not every type of FDI leads to more trade. This is in line with the findings of other studies (Hysa & Mansi 2021, Iacovoiu & Panait 2014, Panait & Voica 2019). One of these theories that has gained traction in the last few decades is the Gravity Model of International Trade.

Gravity models, stemmed from Newton's law of universal gravitation (1687), are defined as 'Newton's law of gravitation, statement that any particle of matter in the universe attracts any other with a force varying directly as the product of the masses and inversely as the square of the distance between them.' These models are utilized in diagnosing socio-economic phenomena. The gravity model has also been applied to analyze tourism (Khadaroo & Seetanah 2008), agriculture (Atif, Haiyun & Mahmood 2017), transportations (Christie 2002), territorial analysis (Crooks & Schuurman 2012), and migration



(Vanderkamp 1977), among others. However, we wish to examine the model in the context of international trade.

In economics, the Gravity Model has been beneficial in addressing bilateral flows, its determinants ranging from tariffs, non-tariff obstacles to trade agreements that played a role in establishing an influx of these flows. However, these are not the only influences, which can be accounted for. "Unconventional" determinants such as cultural ties or disparities, diversities in languages spoken, historical links, bureaucratic challenges, contrasting technologies etc. have also proven to impact these flows. As a theory, stemming from Newtonian concepts, the size of the economies and distances, are the two central factors expressed in the gravity equation (Anderson 1979). Although, previous research has touched upon such issues, Albania is yet to conduct an in-depth study utilizing the Gravity Model.

Albania is an ideal setting to test the Model as it has faced its fair share of trials and tribulations relating to international trade. After being marked by a long period of communist regime and restricted trade policies, it implemented a set of more unconstrained economic policies in 1990s which initiated the transition that impacted foreign trade. The country's foreign trade policies are considered to be liberal. These policies do not encompass quotas and large-scale constraint and they do not require special licensing. Further, the country relies on an uncomplicated system of customs taxes unlike other nations in the territory. Kraja and Sejdini (2014) have demonstrated that international trade is more contingent on limitations of domestic supply, rather than by external ones. It would be interesting to address the inconsistencies relating to domestic producers to assess the trade obstacles.

The purpose of the study is to test if Albania conforms to the economic theory of the Gravity Model using the European export data, and determine factors that support Free Trade Agreements. Further, due to the many initiatives (bilateral agreements with Balkan countries) undertaken by the Government of Albania to further incentivize and promote trade flows and relations in the Western Balkan area—*Mini Schengen Zone*—this study also aims to evaluate whether the added regional economic integration adds value to international trade.

### Literature Review

The Gravity Model states, "Interaction between large economic clusters is strong between smaller ones, and nearby clusters attract each other more than far-off ones" (Bergeijk & Brakman 2010). The notion does lend itself to ambiguity, and for the longest of times as a theory, it had been largely disregarded by scholars due to its lack of strong theoretical roots. However, this has not halted its rise into becoming the go-to theory in international trade studies. The majority of the empirical studies has employed the model to interpret and forecast bilateral commerce. Tinbergen (1962) and Póyhönen (1963) fused the model in international trade, followed by Linnemann (1966). However, its reputation among academics did start to wane during the 1970's and 1980's primarily due to its vagueness, especially in microeconomics. In a self-contradictory manner though, scholars were able to deduce this theory even from previously well-established economic theories such as the Heckscher-Ohlin model, the increasing returns to scale, and Ricardian models, among others, which in turn did provide an assurance to policy makers (Leamer & Levinsohn 1995).

The applicability of gravity model can easily be justified in terms of international trade. The model proposes that the quantity among two nations is proportionate to their economic size (can be the case of domestic earnings) and inversely related to the distance. As a result, it makes the prediction that nations which are financially prosperous and in proximity geographically will tend to trade more with each other than with other nations. The gravity model's dominance relates to its empirical robustness when employing it to studies. It is especially adept in the explanation of the variation in bilateral trade (Linders & De Groot 2006). Essentially it articulates that the volume of commerce among nations is expected to be rising in their sizes, as calculated when taking into accounts their domestic earnings, and declining in the

expenses of transportation among them (Braha & Qineti 2017). Policy makers discussed how the gravity equation was sturdy in relation to economic notions. In 1090's, it was utilized to examine the large shifts in the world trade system after the fall of the Iron Curtain and subsequently used by policy institutions to conduct empiric studies on this policy related dilemma.

The early 1990s marks the initiation of Albania's market economy transition. This passage from communism into a free market system was an unprecedented event that came with trials and tribulations. The reforms undertook at the early stages of this change promoted a sweeping reform resembling that of shock therapy, leading the country's economy to extreme and intense fundamental transformations. Price regulations were revoked, markets were deregulated and the privatization procedures began. A noticeable economic growth, spurred by these reforms, was observed within 1993 and 1996 (with some of the topmost growth rates in comparison to all other transition economies). Nevertheless, the 1997 crisis brought about by the burgeoning financial pyramid schemes collapsed the systems either political and/or economic. Albania observed the disintegration of pyramid investment schemes. The latter proved to be bigger (compared to the economy's size) than any preceding schemes of this sort (Korovilas 1999). Thus, the country plummeted into an unprecedented profound economic crisis. The above-mentioned consequences produced riots and civil anarchy which lead the nation to the brink of civil conflict. The episodes became lessons on the calamity of market and institutional decline. The 2000s brought about a constant economic growth, which is also credited to the integration into international markets (Hysa & Hodo 2016). The advancement in trading links and the boost of foreign capital investments within the national economy sustained the expansion prospects of Albania. These new trade links paved the way for increased cooperation regionally and other more distant partners.

Cooperation, collaboration and unification among the countries of the Western Balkan is a crucial element to consider when considering economic and trade relations among them. Therefore, the heads of state of Albania, Serbia and Macedonia have come to the agreement to promote and ameliorate their liaisons and advance the liberal movement of people and merchandise throughout the territory, by creating a *Mini Schengen Zone*. Moreover, the state representatives have sent a unified message of cooperation to other regional leaders, emphasizing the evidence that the future of the Western Balkans is dependent upon the mutual efforts of all the countries of the area. Especially, inviting Bosnia-Herzegovina, Montenegro and Kosovo to join them as soon as possible and move forward to the project (Shaqiri 2014). The declaration states as a first step the abolishment of border controls and other obstacles to free movement in the region as soon as possible and no later than 2021. In the next section, we formulate three hypotheses relating to the impact of GDP, Distance and Free Trade Agreement (FTA) on Export flows.

### Hypotheses Development

Different scholars have used different methods to test the relationship between same variables eg Panel Estimated Generalized Least Square (Feruni & Hysa 2020), Ordinary Least Squares (OLS) method (Kraja & Sejdini 2014), PPP methods (Pere & Ninka 2017). The fundamental repressors are GDP (of Albania and partner countries), Distance (between Albania and partner country) as well as a variable either describing Free Trade Agreements as a whole or focusing more specifically on CEFTA. Kraja and Sejdini (2014) expands on the topic by adding variables such as common border, the GDP per capita for each respective country as well as the difference between these variables is also included. Pere and Ninka (2017) have furthermore broadened the scope by incorporating variables on the industrial development of partner countries, Albania's and the partner countries purchasing power parity, the share of imports to GDP of these countries as well as dummy variables on similar languages whether part of the EU or not.

However, when comparing outcomes of these studies, they observe a direct positive relationship between exports and GDP (be it either GDP per capita, GDP of either country), likewise between exports and FTA or CEFTA. This positive impact on exports extends also to the common language and common

borders, European Union, and large and highly industrialized countries. Unanimously, they report a direct negative relationship between exports and distance of varying magnitudes depending on the methods used.

### **GDP and Export Flows**

Export is an important factor for economic growth, as measured by Gross Domestic Products (GDP) as it directly affects the level of production of goods. The removal of the foreign exchange constraint also affects export (McKinnon 1964) in addition to the availability of the technical information (Grossman & Helpman 1991) and the simplification of the exploitation of economies of scale (Helpman & Krugman 1989). Usually, international trade (exports, imports) is a major element in the economic growth, chiefly for the developing countries with small open economy such as Albania. Over the recent years, Albania made some institutional changes such as the membership to the World Trade Organization (WTO) along with signing various bilateral agreements of free trade with the countries in the region. Consistent with past studies that found a positive link between export and GDP (Feruni & Hysa 2020, Kraja & Sejdiu 2014, Pere & Ninka 2017), we hypothesize that the relationship should also hold true in the context of Albanian economy and recent changes to its economic policies. So we propose to test our first hypothesis as follows:

*H1. GDP has a positive impact on the export flows.*

### **Distance and Export Flows**

Export flows between two nations are precisely comparable to economic *size* and negatively comparable to the square of distance among them (Isard 1975). However, contrary perspectives also exist regarding the relation between distance and exports. Based on the literature of the internationalization process, various activities of the international businesses are affected negatively by the distance, especially the ones which have a primary activity of exporting. According to Ellis (2008), the gained knowledge through international experience leads to increased or decreased in physical distance. Hence, it could be inferred that the experience aids to bridge the gap by diminishing the overestimations and underestimations of the differences. Thus, by addressing the influence of the international experience in the proper way, the relation between these variables could be easily defined. In the case when the perceived differences are high and when firms have a lack of experience on how to adapt with the foreign environment or uncertainty, then the export flows should be affected negatively by the distance. Albania as a developing country with a small open economy with low export intensity, export flows is negatively affected by the distance. Our second hypothesis is:

*H2. Distance has a negative impact on the export flows.*

### **Free Trade Agreements and Export Flows**

Previously Albania had a centralized economy where assets were publicly owned. Free Trade Agreements contribute to international trade and export. In general, the trade barriers are being removed and the economies opened up for the free flow of capital, labor, goods and services among the countries. As a developing country and embracing a free market economy, Albania adopted trade liberalization policies to attract trade and foreign direct investment (FDI). Over the years, it has signed various bilateral and multilateral trade agreements operates under World Trade Organization (WTO), Stabilization and Association Agreement (SAA) with the European Union (EU), and Turkey, among others. Because of the trade liberalization and the lower trade barriers and regulations, the level of exports will be decreased. In the context of Albania given its small size, import may be a better choice due to the low taxes, tariffs and

quotas than producing and exporting at higher costs. Thus, we hypothesize that Free Trade Agreement and export flows have a negative relation.

*H3. Free Trade Agreements (FTA) have a negative impact on the export flows.*

### Methodology

The models employed to analyze the export flows among Albania and the countries it trades with, are both Random Effects Models (REM) based on the Gravity Model equation. This equation demonstrates the positive relation that GDP and GNI have when accounting for these trade flows, and the negative relation that the distance between nations represents. The gravitational rule is represented mathematically as follows.

$$F_{ij} = G \frac{GDP_i GDP_j}{D_{ij}}$$

Based on the stated equation,  $F_{ij}$  represents the export flows among Albania and the countries accounted for and  $G$  accounts for a constant. The predicted equations from both regression models are expected to exhibit this form:

$$\text{Log (Exports)} = \beta_0 + \beta_1 \log (\text{GDP}) + \beta_2 \text{Distance} + \beta_3 \text{FTA}$$

### Data Specification and Analyses

In this section, we illustrate the econometric model using Gravity Model for Albania which has 32 trading partners from Europe. These countries are all included in the data provided by INSTAT on the European export partner countries. The division and the creation of two sets of models was done to assess whether the volume of exports is impacted by the size of the GDP of the partner countries, the distance between them or by the implementation of FTAs to facilitate trade. We also created a separate specific model for the *Mini Schengen Zone*.

We utilized panel data from 2003 till 2019 (Feruni & Hysa 2020). Exports ( $X_{ij}$ ) between Albania and the 32 countries were considered as the dependent variable (for the first study) and Albania and five countries, while  $GDP$  (Gross Domestic Product of partner country),  $DISTANCE$  (Distance between Albania and partner country) and  $FTA$  (a qualitative variable, considered a dummy taking on only values of 0 and 1). We used E-views10 software to estimate regression equations. GDP in USD were taken from the World Bank Open Data sources, EXPORT from UN COMTRADE, and DISTANCE in kilometer from DistanceCalculator.net.

The Unit Root Test is the first test necessary to assess the stationarity of the dependent and independent variables, with the exemption of dummy and distance among nations, as it remains constant and does not vary throughout time ( $p < .05$ ). For both regressions in Tables 1 and 2, following the Unit Root Test, the p-values for log Exports and log GDP are  $p < .05$ , signifying that they are stationary in level form. Hausman Test also indicated that Random Effects Model is correct to utilize. To detect serial correlation, we captured the auto-correlation in the residual series. For the first model, the differentiated residual series is  $p < .05$ . While this indicates that the model does suffer from serial correlation, this problem was tackled through the adjustment of the covariance method from Ordinary to White Cross-Section. For the second regression model, the differentiated residual series is  $p < .05$ , indicating the presence of serial correlation in the residual series. It was tackled by changing the covariance method to White Cross-Section. Next, we conducted the Heteroscedasticity Test in both the models using the manual version of the Breusch–Pagan test. For the first regression,  $p < .05$  indicated inconsistency in the model. However, it was corrected with the adjustment of the covariance to White Cross-Section. The second model did not ( $p > .05$ ) suffer from heteroscedasticity.

**Table 1. Albania's Gravity Model on Exports, Panel Data***Dependent Variable: LEXPORTS; Method: Panel EGLS (Cross-section random effects)*

Swamy and Arora estimator of component variances

White cross-section standard errors &amp; covariance (df corrected)

<i>Variable</i>	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-Statistic</i>	<i>Prob.</i>
C	11.84	.85	13.90	.00
LGDP	1.26	.17	7.58	.00
DISTANCE	-.00	.00	-7.20	.00
FTA	1.62	.22	7.25	.00
Effects Specification				
			S.D.	Rho
Cross-section random			1.38	.52
Idiosyncratic random			1.33	.48
Weighted Statistics				
$R^2$	.36	Mean dependent variance		3.55
<i>Adj. R<sup>2</sup></i>	.36	S.D. dependent variance		1.69
Std Error	1.34	Sum squared residual		895.41
F-statistic	95.06	Durbin-Watson stat		.88
P	.00			
Unweighted Statistics				
$R^2$	.55	Mean dependent var		15.13
Sum squared residual	1768	Durbin-Watson stat		.44

**Table 2. Mini Schengen Zone's Gravity Model on Exports, Panel Data***Dependent Variable: LEXPORTS; Method: Panel EGLS (Cross-section random effects)*

Swamy and Arora estimator of component variances

White cross-section standard errors &amp; covariance (df corrected)

<i>Variable</i>	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-Statistic</i>	<i>Prob.</i>
C	-63.00	17.36	-3.63	.00
LGDP	3.70	.82	4.53	.00
DISTANCE	-.03	.01	-3.80	.00
FTA	.1	.35	.29	.78
Specification				
			S.D.	Rho
Cross-section random			.47	.40
Idiosyncratic random			.58	.60
Weighted Statistics				
$R^2$	.63	Mean dependent variance		5.39
<i>Adj. R<sup>2</sup></i>	.61	S.D. dependent variance		1.46
Std. Error	.66	Sum squared residual		25.50
F-statistic	33.03	Durbin-Watson stat		.88
P	.00			
Unweighted Statistics				
$R^2$	.51	Mean dependent variance		16.90
Sum squared residual	86.78	Durbin-Watson stat		.26

## Results

Overall both models presented in Tables 1 and 2 are significant ( $p < .05$ ). The Gravity Models for Albania and its European partner countries, and *Mini Schengen Zone* have an overall explanatory power of 36 percent and 63 percent, respectively. Specifically, the estimated equations are

$$\text{Albania: } \log(\text{Exports}) = 11.84 + 1.26^* \log(\text{GDP}) - .00^* \text{Distance} + 1.62^* \text{FTA}$$

$$\text{Mini Schengen Zone: } \log(\text{Exports}) = -63 + 3.7^* \log(\text{GDP}) - .03^* \text{Distance} + .1 \text{FTA}$$

\*= $p < .05$ )

The results indicate that Exports Flow is (1) positive related to GDP (*H1* accepted both), (2) negative related to distance (*H2* accepted both), and (3) positively related to FTA (*H3* rejected ( $p < .05$ ) for Albania but inconclusive ( $p > .05$ ) for *Mini Schengen Zone*) though the direction is still positive.

Our *H3* relating to FTA is rejected for Albania but inconclusive for *Mini Schengen Zone*. This result is inconsistent with some past findings. Some studies that supported this negative correlation among the two variables were from Krugman (2018) and Tinbergen (1962). According to the estimations of our model, Free Trade Agreements (FTA) is insignificant in case of *Mini Schengen Zone* regardless of its positive effect on export flows in Albania. It mainly reduces and tries to eliminate the tariffs, helps in minimizing the trade barriers and encourages investment. Free Trade Agreements (FTA) leads to many benefits in an economy. An advantage for the consumers is that the foreign products could be more available at lower prices. Consequently, the growth that trade and sales will gain, definitely will bring a higher number of employment. Different studies have led to various results whether it is a negative impact or a positive one. In our literature, all the mentioned authors stated the same result which was the negative relation among these variables. Meanwhile, in our model, it resulted a positive impact. Table 3 presents summary of the hypotheses.

**Table 3. Expected Impact of Each Variable and Confirmation of the Hypotheses**

<i>Hypotheses</i>	<i>Expected sign</i>	<i>Expected direction</i>	<i>Results</i>
<i>H1. GDP has a positive impact on the export flows</i>	Positive (+): (Grossman & Helpman, 1991), (Helpman & Krugman 1985)	Positive (+)	Accepted
<i>H2. Distance has a negative impact on the export flows</i>	Negative (-): Isard (1975)	Negative (-)	Accepted
<i>H3. Free Trade Agreements (FTA) have a negative impact on the export flows</i>	Negative (-): (Krugman 2018, Tinbergen 1962)	Negative (-)	Rejected

## Conclusion

This study offers an empirical synopsis of the Gravity Model and its applicability in Albania and its European trading partners and the burgeoning *Mini Schengen Zone*. The Albania Gravity Model was found to be significant. All the variables included in the model appeared to exhibit the expected direction of relation as emphasized by the literature. GDP shared a positive relationship with Exports, while Distance shared a negative relation with Exports. FTA, conformed to the orthodox notion of facilitating trade, and was found in this model to be positively related to Exports. The countries in the European continent are

the main trading partners of Albania with the majority of its export activities being oriented towards European countries. This model further emphasizes the importance of maintaining and strengthening these relations. As an aspiring country on the path towards the European Union, Albania's economy has the potential to additionally expand its export volumes, in turn creating a positive ripple effect throughout all sectors.

The second model concerning the *Mini Schengen Zone* was also significant. The GDP and Distance, as in the first model, had a significant positive effect on the export volumes. However, the FTA in this model was insignificant. This result was to be expected as the countries included in this analysis follow the CEFTA agreement. The *Mini Schengen Zone* with its intent to mimic the European Union's economic cooperation is yet to be well defined and integrated. There are some factors that need to be accounted for that do explain why the creation of this economic zone might not have a successful effect. According to the Gravity Theory, a country with a larger size of the GDP is bound to trade more with countries of a relative smaller GDP size. In the Western Balkan six countries, from the data we can observe that most of them share nearly the same size of the GDP.

Furthermore, when examining the fabric of their economies, and the products that each country tends to produce and export, there is a lack of diversity in the types of products which are often times only differentiated through the different price points. Another obstacle to the success of this economic region is the lack of the fully integrated customs, eliminating once and for all the need for borders when concerned with trading activities. These are concerns that have not yet been considered by policy makers. Nevertheless, this economic zone could be useful if utilized as a direct trading partner with the European Union. The Western Balkan six could potentially cooperate with each other to create a streamlined path for their shared products to enter and comply with the European markets. Such an endeavor has the potential to create a significant economic growth for the whole region.

### **Implication for Policy Makers**

Given our findings, policymakers should develop policies that influence the growth of gross domestic product (GDP). So the production of domestic products would be increased. Secondly, the distance which is the other used variable is negatively related to export flows. An increase in the physical distance decreases exports. The Free Trade Agreement resulted an insignificant though had a positive impact on export flow. The recommendations are also applicable in *Mini Schengen Zone*. There are some concerns which should be addressed. For example, when analyzing, we found that a lack of diversity in the exported products. Customs should be integrated as well.

### **Directions for Future Research and Limitations of the Study**

The lack of available data for the region of the Balkans is a challenge amongst scholars. This article also dealt with this problem. However, it would be beneficial for the region if future studies could examine the potential of the *Mini Schengen Zone* to assess the advantages and disadvantages that it would bring to each of the countries of this region regarding trade relations and the expansion of their respective export potentials.

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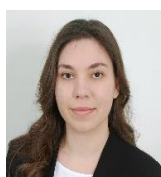


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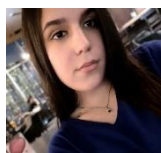
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## Impact of organizational resilience, ambidexterity capability, and strategic renewal during Covid-19 on firm performance

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This study examines the role of strategic renewal in the firm performance of Micro, Small, and Medium Enterprises (SMEs) in Tourism during Covid 19 in the context of Indonesia. Using Structural Equation Modeling, the findings highlight the importance of human capital and ambidextrous capabilities in creating resilience and improving firm performance through strategic renewal. We also find that organizational resiliencies do not always positively affect strategic renewals. We suspect that only a high degree of organizational resiliencies with innovative capabilities can orchestrate the strategic renewal. The innovative capabilities are mainly dependent on the quality of human capital. Therefore, SMEs in the tourism industry need to improve their human capital to achieve innovative capabilities to survive in crises and have a competitive advantage to keep up with the changes in the tourism industry.

**Keywords:** ambidexterity capabilities, human capital, organizational resilience, renewal strategy, organizational performance

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### Introduction

A crisis refers to a sudden and unexpected event that disrupts an organization's operations and poses a threat to the organization's sustainability (Alves et al. 2020). It can damage a business as it erodes trust, destroys organizational value, threatens business objectives, puts pressure on management by providing management with limited time to respond, and can even lead to business failure (Litheko & Potgieter 2021). Small organizations may be more vulnerable to crisis events due to the lack of preparedness, resource constraints, relatively weak market positions, and high dependency on government and local agencies (Herbane 2013). Covid-19 had a negative impact on the global economy (Lund et al. 2021). By April 2020, about 27m workers lost their jobs, and global stocks fell by over 25 percent (Eggers 2020). In times of economic crisis, SMEs face significant threats to their financial performance and survival due to

reduced sales volume, inability to meet contractual requirements, cash flow difficulties, staff reductions, and business closures during or after a crisis event (Alves et al. 2020). Further, a crisis can also cause emotional and psychological stress for SME employees and managers (Leung et al. 2005). Studies on crisis management show that sudden and unexpected events force SMEs to meet their business objectives and pressure management to take immediate action to save the business (Litheko & Potgieter 2021). At the organizational level, crisis management requires decision-makers to quickly develop strategies that minimize financial losses and increase the organization's resilience. From the perspective of internal and external stakeholders, organizations need to understand the impact of the crisis on learning, social evaluation and performance. Indeed, crisis management is how organizations adopt strategies to deal with disruptive and unexpected events that threaten to harm the organization or its stakeholders.

One aspect of learning is people's capability. Human capital with relevant skills is an essential resource to form an organization's resilience in a dynamic environment (Barasa, Mbau & Gilson 2018). Organizations with a high level of employee involvement usually have high employee dedication and commitment that focus on organizational needs during the crisis (Felićio, Couto & Caiado 2014). The other aspect is the organization's ability to carry out ambidextrous activities. Ambidexterity is an organization's ability to manage exploitation and exploration activities efficiently. In the context of SMEs, ambidexterity is a dynamic capability that affects the resilience of SMEs. Therefore, SMEs with ambidexterity capabilities have a better ability to identify opportunities and recover from crises (Iborra, Safon & Dolz 2020). The routines of SMEs in responding to crises have been found to precede dynamic capabilities (Herbane 2013). In line with that routines, there is an inseparable relationship between organizational resilience and formal strategic planning related to responsiveness, innovation, competition, uncertainty, and renewal, forming a notion of strategic renewal. Strategic renewal involves organizational strategies, structural rearrangements, and other systemic changes (Zahra 1993). It can occur when organizations develop new strategies and improve or maintain competitiveness through the improved implementation of specific strategies (Klammer et al. 2017). Strategic renewal is related to organizational performance, growth, and profitability (Covin & Miles 1999).

In Indonesia, the Ministry of Cooperatives and SMEs reports that SMEs account for 99.99 percent of the total businesses, and large businesses about .01 percent or around 5400 units. In contrast, Large Enterprises absorb about 3.58m people, or about three percent of the total national workforce, which means that SMEs absorb around 97 percent of the national workforce. The observation indicates that SMEs in Indonesia play an extraordinary role in building the country's economy, making our study an ideal setting to test our model and hypotheses. The government of Indonesia launched a social distancing policy that disrupts the production activities of SMEs. Some companies have adopted a *Work-From-Home* policy; some have decided to lay off some of their employees, and others to carry out mass layoffs. There were layoffs of 1.5m people, including 1.24m formal workers and 265 thousand informal workers. In a period of economic and environmental turmoil, it has become increasingly clear that organizations face very high levels of market volatility and a high degree of business uncertainties that necessitate organizations to act on the changes. SMEs in the tourism sector are one of the business actors most affected by the Covid-19 (Crystal & Rambocas 2022). The government's policy of calling for strict health protocols forces everyone to avoid crowds and maintain social distancing. In addition, the government's policy to limit foreign tourists has significantly impacted tourists' visits to Indonesia.

The lack of SMEs' knowledge of good business management practices in the event of crisis causes difficulties for SMEs to maintain and grow their business. Therefore, particularly during the crisis, strategic renewal is critical for SMEs to compete in the uncertain market, including in the tourism sector. The study aims to examine the role of strategic renewal in enhancing the firm performance of SMEs in the tourism industry. In the next section, we present our framework and develop and test hypotheses empirically, followed by results, discussion, and implications for managers.

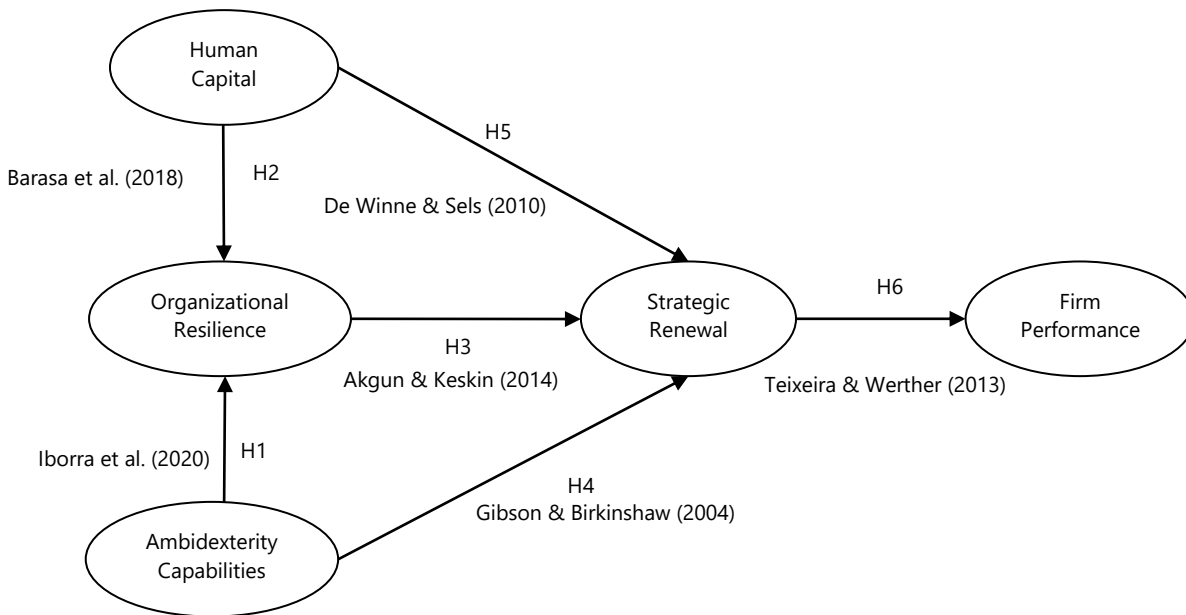
### Theoretical Framework

Studies indicate that strategic renewal is linked to ambidexterity, human capital, and organizational resilience. The ambidextrous strategy refers to orchestrated activities that synchronize the organization's exploration and exploitation activities by merging or separating sub-units of the organization. Each sub-unit specializes in exploration or exploitation activities by carrying out both activities simultaneously (O'Reilly & Tushman 2008). Organizations with an ambidextrous nature can have an advantage because the organization will be able to recognize opportunities, link those opportunities with resource competencies, and synergies exploration and exploitation activities (Junni et al. 2013). When the organization focuses only on exploitation activities, it will result in a competency trap that is not ready to respond to environmental changes. Conversely, when an organization focuses only on exploratory activities, it will be trapped in a cycle of knowledge-seeking that never stops, leading to changes without adequate business results. (Volberda & Lewin 2003). The process of exploration and exploitation will compete for organizational resources, so balancing the resources will be the key to any organization's success in navigating a crisis. Ambidextrous capability is defined as an organization's ability to efficiently manage its business through exploitation, environmental, and exploration orientation (Iborra, Safón & Dolz 2020).

Human capital combines individuals' knowledge, skills, and other abilities (Barasa, Mbau & Gilson 2018). It is also defined as human capital in the form of intellectual capital, which combines various attributes such as knowledge, skills, attitudes, mental relationships, and individual actions (Yusoff, Jantan & Ibrahim 2004). Human capital is also knowledge and skills acquired by individuals, influenced by various factors (Singh & Nayak 2016). Further, talents, skills, abilities, and ideas are found to form human capital (Stewart & Ruckdeschel 1998). Human capital also includes creativity and innovation (Barasa et al. 2018). It is based on the ability, knowledge, talent, education, skills, and experience of individuals within the organization (Bontis, Keow & Richardson 2000). Resilience is resistance to shock without showing disintegration (Paton & Johnston 2001). It is about accepting change, turning unfavorable conditions into advantages, and finding ways to deal with them. Therefore, resilience is not just adaptation but also solution-oriented, creative, and proactive (Karl 1993). Organizational resilience is the capacity of the organization to anticipate and react to change, not only to maintain the life of the organization but also for the organization's development (Singh & Nayak 2016). Resilience is essential in dealing with unexpected threats and crises (Lengnick-Hall, Beck & Lengnick-Hall 2011). A crisis is an unusual event that causes considerable disruption to ongoing organizational activities. Resilience is a trait; i.e. an individual fixed attribute, a contextually salient and moldable capacity, or a process; ie experiencing a positive outcome after exposure to an adverse event (Gucciardi et al. 2018). Therefore, resilience in the organizational context is defined as a positive adaptation to adversity to encourage organizations to achieve success. Organizations realize setbacks can be a part of their business journey by increasing the organization's ability to have a chance to survive and bounce back (van Gelderen 2012). Organizational resilience is also a resource to protect organizations from disturbances due to environmental changes (Danes et al. 2009).

Strategic renewal is reflected in the organization's strategy, structure, systems, and culture (Agarwal & Helfat 2009). Strategic renewal efforts can be described as organizational transformations that combine the organization's strategies, business activities, and products or services to compete during rapid and dramatic environmental change. Fluctuations in the internal and external environment create opportunities and threats for the organization. Customer expectations and demands, innovative competitors, new technologies, new markets, or shifting workforce demographics force organizations to adjust or update their organizational strategies to deal with possible strategic declines and secure or regain a sustainable competitive advantage (Klammer et al. 2017). The strategic renewal includes substitute organizations' process, content, and outcome attributes that substantially influence their long-

term effects (Agarwal & Helfat 2009). It is a revitalization of the organization's strategy. Strategic updates enable organizations to respond to various external dynamics that can reduce the organization's capacity to compete (Ravasi & Lojcono 2005). Previous studies have demonstrated product innovation, business development, or business activity, implying that innovation is defined by continuous innovation (Shamsie, Martin & Miller 2009). Therefore, strategic renewal capabilities require the organizational ability to perform ambidextrous activities, adapt to the changing environment, and have human capital capable of performing such activities and adaptations, which is reflected in the Conceptual Model of this study presented in Figure 1.



**Figure 1. The Conceptual Model**

*Source: the authors*

### **Ambidextrous Capability and Organizational Resilience**

Ambidexterity capabilities and human capital on organizational resilience are positively related (Barasa et al. 2018, Iborra et al. 2020). Other hypotheses relating to ambidexterity capability, human capital, organizational resilience, and strategic renewal are also found to be positively related in literature (Akgun & Keskin 2014, De Winne & Sels 2010, Gibson & Birkinshaw 2004). The ambidextrous capability is an organization's ability to manage its business (ie efficiently. Exploitation orientation, environmental changes (ie. exploration orientation), and dynamic capability that requires sensing, acquisition, and transformation activities, play a vital role in integrating the demands of exploration and exploitation in the context of SMEs (Lubatkin et al. 2006). In line with this argument, the ambidexterity of SMEs is a dynamic capability that affects their resilience of SMEs. Organizational resilience will increase when SMEs successfully acquire the ability to explore and exploit. The organization's strategic consistency facilitates organizational resilience in continuously improving and developing organizational capabilities (Iborra et al. 2020). Consistency in allocating exploration and exploitation resources to SMEs will show the direction and stability of SME's business (Lubatkin et al. 2006). Based on the explanation above, we present our first hypothesis.

*H1. The ambidextrous capability has a positive effect on organizational resilience.*

### **Human Capital and Organizational Resilience**

Human capital is an essential resource in organizational resilience to face challenges in a dynamic environment. Human resources with good skills are cited as critical contributors to organizational resilience (Barasa et al. 2018). Human capital is represented by the aggregation of investments made by organizations in education, health, training, and migration to increase individuals' productivity (Laroche, Merette & Ruggeri 2000). Organizational resilience was also enhanced by prioritizing employee welfare (Colic-Peisker & Walker 2003). Employee welfare is created through a positive social environment where employees are free to share information and actively listen to employee needs. Organizations with a high level of employee involvement will increase employee dedication and commitment to focus on organizational needs even in crisis conditions (Felićio et al. 2014). The explanation above leads us to formulate our second hypothesis:

*H2. Human capital has a positive effect on the formation of organizational resilience.*

### **Organizational Resilience and Strategic Renewal**

Strategic renewal refers to the entrepreneurial phenomenon requiring changes in strategy and organization (Klammer et al. 2017). It can involve ongoing organizational strategy reforms related to restructuring and system changes (Zahra 1993). Strategic renewal can occur when organizations develop new strategies and try to improve or maintain competitiveness by implementing specific strategies. Organizations can grow in crises with different organizational resilience perspectives if they combine defensive and offensive views (Burnard & Tsinopoulos 2018). Through this combination, organizational resilience is defined as the organization's ability to effectively anticipate potential threats and adverse events to adapt to changing organizational environmental conditions. These capabilities are critical to organizational success (Coutu 2002). Organizational resilience reflects the organization's dynamic process of change and evolution to increase product innovation (Akgün & Keskin 2014). Organizational resilience is developing product outcomes so that organizational routines, practices, and values enable the organization to bounce back from adversity and assist the organization in creating new opportunities (Vogus & Sutcliffe 2007). Based on the explanation above, we expect the following hypothesis:

*H3. Organizational resilience has a positive effect on strategic renewal.*

### **Ambidextrous Capability and Strategic Renewal**

The need and awareness to maintain a balance between exploration and exploitation is the basis for forming an ambidexterity strategy. Organizations with ambidexterity can excel because they recognize opportunities, linkages, and synergies between exploration and exploitation activities (Sidhu, Commandeur & Volberda 2007). Organizational ambiguity is described as managing two contradictory activities that differ in time and managerial ability to generate innovation (Gibson & Birkinshaw 2004). The concept of ambidexterity has been developed to explain organizational efforts to manage evolutionary and revolutionary change processes (Tushman & O'Reilly 1996). Organizational ambiguity is also related to strategic renewal wherein carrying out strategic renewal. It is necessary to exploit existing and explore new competencies (Gibson & Birkinshaw 2004). The organization's exploitation and exploration process identifies the planned strategic renewal actions (Kwee 2009). Given the explanation above, we present our fourth hypothesis:

*H4. The ambidextrous capability has a positive effect on strategic renewal.*

### **Human Capital and Strategic Renewal**

SMEs need to be competitive through innovation and creativity (Halim et al. 2017). Innovation is a

function of new knowledge; therefore, it takes some level of knowledge to develop organizational innovation (Smith, Voß & Grin 2010). The human capital framework suggests that individuals acquire more skills through cognition and experience (Barasa et al. 2018). Personal knowledge and skills are obtained through education, training, and experience (Felicio et al. 2014). Therefore, organizational innovation capability is positively influenced by human capital (Subramaniam & Youndt 2005). Acquiring more knowledge enriches human capital, intellectual capital, and market value (Vidotto & Aisenberg 2017). Organizations that employ higher levels of employee human capital should be more innovative than those with lower levels of human capital. In summary, the quality of human capital is a source of innovation and strategic renewal capability (de Winne & Sels 2010). Based on the explanation above, our fifth hypothesis is as follows:

*H5. Human capital has a positive effect on strategic renewal.*

### **Strategic Renewal and Firm Performance**

A firm's strategic renewal relates to firm performance, growth, and profitability (Covin & Miles 1999). There is a positive relationship between strategic renewal and performance in first-mover earnings (Lieberman & Montgomery 1988). During a crisis, strategic innovation and renewal drive organizations to stay ahead of their competitors by gaining a competitive advantage that leads to superior performance (Teixeira & Werther 2013). During a crisis, strategic renewal is essential for organizational success. Several researchers identified vital elements to explain organizational success by considering organizational success for the long term. Organizations that tend to be conservative in the financing, sensitive, have identity awareness, and have a tolerance for new ideas already have critical factors for organizational success (Klammer et al. 2017). Organizations should first exploit and then explore because by going through this process, the organization can diversify its portfolio and introspect before making changes (Kwee 2009). These success factors form a vital element of the strategic renewal process that can improve organizational performance and competitive advantage. However, the relationship between strategic renewal and organizational performance could be ambiguous when their environmental changes are more benign (Sáez-Martínez & González-Moreno 2011). Strategic collaboration and renewal impact on business performance was found to be less beneficial in low technology-intensive sectors, where the environmental pressure is less, especially when the organization cooperates with other organizations. Based on the explanation above, our final hypothesis is as follows:

*H6. During a crisis, organizational strategic renewal positively affects firm performance.*

### **Methodology and Results**

We implement qualitative and quantitative methods with Tourism SMEs in Indonesia as our sampling frame. Data collection was done by using survey methods via google form and interviews. Tourism is everything related to tourism, including developing tourist objects and attractions and other productive activities and economic value, such as lodging, tour guide, culinary, vehicle rental, and souvenir businesses. The unit analysis of this study is 82 SME owners. This study used an instrument in the form of a questionnaire using 6-point Likert scales to avoid neutral answers from respondents. We use Structural Equation Modeling (SEM) as a method of analysis. SEM analysis aims to confirm the research model based on empirical data. The evaluation of the SEM model is divided into the measurement model and the structural model. The measurement model describes the relationship between the variables and their measurement items, while the structural model describes the influence between variables.

Table 1 reports the results. The evaluation criteria are Loading Factor ( $LF=.50$ ), Composite Reliability ( $CR=.70$ ), Average Variance Extracted ( $AVE=.50$ ), and Discriminant validity with the Fornell Lacker Criterion

where the AVE root of the variable is greater than the correlation between variables.

**Table 1. Variable Measurements**

<i>Variables</i>	<i>Dimension</i>	<i>Loadings</i>	<i>t-value</i>	<i>p-value</i>	<i>AVE</i>	<i>CR</i>
<i>Human Capital</i> ( $\alpha=.87$ ) (Mubarik et al. 2018)	Ability (#3 items)	.94	65.79	.00	.79	.92
	Skills (#3)	.89	46.13	.00		
	Training (#3)	.82	23.23	.00		
<i>Amb. Cap.</i> ( $\alpha=.84$ ) (Cao et al. 2009)	Balance (#3)	.97	143.33	.00	.94	.97
	Combination (#3)	.97	175.51	.00		
<i>Strategic Renewal</i> ( $\alpha=.85$ ) (Kwee 2009)	Content (#3)	.91	50.36	.00	.81	.93
	Context (#3)	.83	18.30	.00		
	Process (#3)	.96	126.30	.00		
<i>Orgn Resi</i> ( $\alpha=.90$ ) (Lengnick-Hall et al. 2011)	Behavior (#4)	.93	66.30	.00	.83	.94
	Cognitive (#3)	.91	77.00	.00		
	Contextual (#4)	.87	26.81	.00		
<i>Firm Performance</i> ( $\alpha=.82$ ) (Ng et al. 2017)	Financial (#5)	.76	10.83	.00	.68	.86
	Innovation (#3)	.80	17.20	.00		
	Operation (#3)	.90	37.10	.00		

The human capital variable is measured by three dimensions, where the three dimensions are valid with LF above .50. The three relative dimensions have a high LF, but the ability dimension has the highest LF (.94). This indicates that human capital is more dominantly reflected in inability. Variable Ambidexterity Capabilities has two valid dimensions with the same LF, which shows that Ambidexterity Capabilities will run well in companies by running balance and combination. The Strategic Renewal variable has three valid dimensions with a very high LF.

**Table 2. Hypotheses Results**

<i>Hypotheses</i>	<i>Path</i>	<i>Coefficient</i>	<i>t-value</i>	<i>p-value</i>
<i>H1 (Accepted)</i>	Ambidexterity Capability → Organizational Resilience (+)	.29**	2.66	.00
<i>H2 (Accepted)</i>	Human Capital → Organizational Resilience (+)	.50**	5.05	.00
<i>H3 (Rejected)</i>	Organizational resilience → Strategic Renewal (+)	.06	.52	.60
<i>H4 (Accepted)</i>	Ambidexterity Capability → Strategic Renewal (+)	.37**	3.07	.00
<i>H5 (Accepted)</i>	Human capital → Strategic Renewal (+)	.47**	5.02	.00
<i>H6 (Accepted)</i>	Strategic Renewal → Firm performance (+)	.67**	11.67	.00

The process dimension is the dimension with the highest LF (.96). This dimension is the first dimension that the company should maintain. Meanwhile, the context dimension still needs improvement even though the calculated LF is quite good ( $LF=.83$ ). Organizational Resilience has three valid dimensions, where the highest LF is in the behavior dimension, which shows that company resilience is how the company's behavior is carried out. The firm performance variable is most strongly reflected in the operational dimension with the highest LF (.90) despite the other two dimensions.



## Discussion

Hypothesis 1 that ambidexterity capabilities affect organizational resilience positively ( $\beta=.29, p<.00$ ) is accepted. It supports the research conducted by Iborra et al. (2020) that the ambidexterity of SMEs is a dynamic capability that affects their resilience of SMEs. Organizational resilience increases when SMEs gain the ability to explore and exploit. The ability of SMEs to combine and balance the exploitation and exploration process is essential to shape the organizational resilience of SMEs. The current environmental dynamism encourages SMEs to adapt more quickly. The ability to balance exploitation and exploration is needed to increase the resilience of SMEs, considering that the current economic condition is unstable due to the Covid19. Tourism SMEs affected by the Covid-19 are encouraged to optimize the exploitation process in production efficiency and operational patterns and, simultaneously, conduct product or service exploration processes tailored to the needs and current market conditions. With a limited budget, SMEs tend to prioritize productivity and efficiency.

Our second hypothesis that human capital affects organizational resilience positively ( $\beta=.50, p<.00$ ) is also accepted. Our findings support the research conducted by Barasa et al. (2018) that human capital is an essential resource in organizational resilience to face organizational challenges in a dynamic environment. We find that the training dimension of human capital strongly influences human capital to form organizational resilience. In the tourism industry, the role of human resources is crucial for the survival of SMEs, because the creativities, abilities, and skills of the workers play a significant role in maintaining the quality of service. Training budget allocation shows the weakest variable, which could be due to the limited capital resources, and if the SMEs have excess cash, it will be prioritized for the expenses in improving the existing or developing new products. Indeed, training is vital to receive new knowledge as the foundation for SMEs to build organizational resilience.

However, hypothesis 3 that organizational resilience has a positive ( $\beta=.06, p>.05$ ) Influence on a strategic renewal is rejected. Organizational resilience does not affect the strategic renewal of SMEs. We suspect that the resources owned by SMEs in the tourism sector are not equally capable of building rapid organizational adaptation and innovation capabilities during the Covid-19. It is found that SMEs with the highest resilience (i.e., high adaptation and innovation capabilities) can affect the strategic renewal. SMEs that do not have—though with some degree of resilience—will not be able to reflect their resilience into their strategic renewal. One of the common obstacles of SMEs in Indonesia is the human resources ability and capital resources for business development. Resources are needed to achieve organizational resilience to carry out strategic renewal. Without these resources, SMEs will be limited to adapt and innovate when the business environment changes. In the current crisis, more radical innovations are needed from SMEs in the tourism sector to develop new ideas to increase the resilience of their organizations. We suspect that the training investment by SMEs has not been running optimally. It is perhaps necessary to improve the quality training tailored to the needs of the current business industry trends, such as those related to digital knowledge or new skills that are radically different from the previous skills.

Hypothesis 4 that ambidexterity capability positively ( $\beta=.37, p<.00$ ) affects strategic renewal is accepted. This study confirms the research conducted by Gibson and Birkinshaw (2004). The statistical results show that new product development is the highest dimension of ambidexterity that could influence strategic renewal. By combining legacy knowledge and new knowledge SMEs can positively impact quality products or services development. It needs to be done because, in a crisis, SMEs should adapt optimally to survive. It takes the exploitation of legacy knowledge combined with the exploration of new knowledge so that the strategic renewal process that is carried out successfully improves firm performance.

We also found that hypothesis 5 that human capital positively ( $\beta=.47, p<.00$ ) affects strategic renewal is accepted. Our finding is consistent with De Winne and Sels (2010) finding, in which the quality of

human resources is a source of innovation and strategic renewal. Human capital positively influences organizational innovation capability (Subramaniam & Youndt 2005). We find that the training dimension contributes significantly to human capital development, affecting strategic renewal. Sufficient skills and knowledge are required to increase the optimal exploitation and exploration capabilities. Developing skills and knowledge will follow the times so that new skills and knowledge are needed in the current crisis.

Our final hypothesis 6 is also accepted, indicating that strategic renewal positively ( $\beta=.67$ ,  $p<.00$ ) affects firm performance. This result supports the study by Teixeira and Werther (2013), where strategic innovation and renewal encourage organizations to stay ahead of their competitors by gaining a competitive advantage that leads to superior firm performance. In the current crisis, SMEs are forced to determine and decide on the right business strategy because the impact of the Covid-19 has reduced SME sales in the tourism sector as a whole. The health protocol policy is undoubtedly detrimental to SMEs in the tourism sector economically. Still, this choice cannot be avoided to suppress the growth rate of the Covid-19 pandemic in Indonesia. SMEs must remain proactive in developing the tourism sector, seeking new information and knowledge relevant to the tourism sector. Whether developing new products or markets or efficient operational patterns, obtaining information and knowledge can be used to improve the firm performance of SMEs, which has declined since the Covid-19.

### Conclusions and Implications for Managers

This study conveys the importance of ambidexterity capability, human capital, and strategic renewal on the firm performance of Tourism SMEs in Indonesia. In crisis conditions due to the Covid-19, SMEs with those capabilities can deliver the expected performance. This study explains that Tourism SMEs in Indonesia have a delicate level of resilience when there is pressure in a crisis such as the Covid-19. Currently, Tourism SMEs are not ready to face this pressure, which can be due to the lack of resources owned by Tourism SMEs in building capacity. Human resources is a source of innovation and strategic renewal because increasing the ability of optimal exploitation and exploration requires sufficient skills and knowledge. SMEs should invest in either training activities or productive employees to keep with the changes in the tourism industry. Strategic renewal is fundamental to improving firm performance because carrying out the process of exploitation and exploration correctly and adequately affects SMEs' performance. It takes the exploitation of legacy knowledge combined with an investigation of new knowledge so that the strategic renewal process that is carried out successfully improves performance. SMEs should remain proactive in developing the tourism sector industry, seeking new information and knowledge related to SMEs' tourism sector. The limitation of this study is that it was only conducted on 82 SMEs in Western and Central Indonesia. Each company or industry has a different character where several unique factors support different strategies. Future research hopefully could fulfill this gap by using more SMEs from other geographical locations. This study has limitations of time and place since most of the communication was conducted online.

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## Performance measurement in the public sector: United Arab Emirates' (UAE) state of the art

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There is an interest in the literature and among practitioners in the idea that public sector organizations should be managed for performance, but there is no clear agreement as to how this might be done. It is also unclear how the idea of *performance* can be measured. This article focuses on the critical question of what public sector managers know about performance measurement (PM), and how they perceive its potential for improving the performance of their organizations. The findings show that the overall public performance of the UAE local governments is excellent which is contributed by both financial and nonfinancial performance. Specifically, the purpose of the study is to review the performance management within the UAE public sector to assess the *state of the art*, and determine the present level of knowledge of PM among public managers. Finally, we suggest recommendations for managers and provide conclusions and research directions.

**Keywords:** management, measurement, performance, public organization, UAE

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### Introduction

In recent years, managing and measuring performance has been one of the key drivers in the reform of public sector. It is one of the central grounds of the “reinventing government” movement (Gianakis 2002). Performance measurement (PM) is an important tool for increasing accountability, as it may provide data on how effectively and efficiently public sectors are managed. Much has been written in recent years about why governments should measure their performance regularly and why it ought to share it with the public. The focus was on identifying improvement areas in services that would meet people’ expectations of getting best value for their money (Halachmi 2005). The literature identifies two perspectives with respect to the evaluation of the pros and cons of PM. One perspective consists of those who advocate for PM. Under the headline of results-oriented governments, some researchers advocate the power of PM and argue the benefits of PM for private sectors (Osborne & Gaebler 1992). The other perspective consists of those who regard PM with uncertainty (Gianakis 2002).



The role of PM has been one of the most widely studied topics in public management literature in the past decades (Broadbent & Guthrie 2008). It has received attention as public organizations try to implement new measurement systems to support their goals (Cavalluzzo & Ittner 2004). Therefore, managers are interested in designing, implementing, and updating PM in public organizations in both developed and developing countries (Ohemeng et al. 2018). However, few public organizations have developed PM, and even fewer use these systems to improve decisions (Julnes & Holzer 2001). Therefore, many researchers have focused on factors that influence PM application in public organizations. Several factors were found in previous literature such as organizational and technical factors (Sofyani et al. 2018), organizational culture (Henri 2006), and competition and organizational performance (Lee & Yang 2011), among others.

The role of PM in a developing country and emerging markets is relevant to explore, as governments in developing countries face various economic and institutional challenges (Farashahi & Hafsi 2009). They experience unstable business environment and face tough competition in addition to corruption, power shortages, and political instability (Hussain et al. 2012). Public sectors need to develop their capabilities to effectively tackle challenges while operating in global business environment (Singh 2018). There is a need for context specific studies in developing countries and emerging markets given the structural and cultural variations (Nakagawa & Sosaki 2021). Few countries have required government entities to implement PM in their operations and to mandate them to include performance indicators in their annual accounting reports. Therefore, we attempt to address this gap and examine the role of PM in a developing country such as the UAE.

The article is structured as follows: following the introduction, the literature review on PM in public sector is presented. Based on this background, the methodology and research design are presented before we report the results. A discussion of the results completes the presentation of the performance management in the UAE public sector: state of the art. Then recommendations and lessons learned from the current UAE public performance management are highlighted. The article closes with conclusion and further research.

### **Literature Review**

Performance management and PM have often been used synonymously in the literature because they are closely related concepts (Goh 2012). But it is important to distinguish between the two processes. Performance management is viewed more broadly as a management tool that seeks to improve the performance of an organization. In contrast, PM focuses more narrowly on the metrics used to determine how an organization is performing. PM is, therefore, seen as an essential and important tool of performance management (Fantazy & Mukerji 2021). In this paper, the term PM is used when discussing these concepts. Although the practice of performance management is not new, it has been rejuvenated with the advent of new public management, which, amongst other things, advocated managerial freedom based on output control (Van De Walle & Van Dooren, 2008). In exchange for more autonomy and flexibility in the use of allocated resources and in choosing the means and methods, many public organizations had to accept more rigid performance management systems (Lægreid, Roness & Rubecksen 2008). Despite the importance of performance management, it has historically been rated by employees, managers, and the HR as one of the least effective and understood HR practices. In the early 1990s, the *state of the art* evolved in organizations developing performance indicators and targets. Since then, performance management has become increasingly systematic, specialized, professionalized, institutionalized and state of the art in the public sector (Van Dooren 2006).

The public sector is focused on PM as a tool to assess performance and demonstrate accountability through performance reporting of program activities. There is a wide range of application that has been reported in the literature, including its use in measuring performance in healthcare delivery such as wait times (Kelman & Friedman 2009), measuring the level of citizen satisfaction of services provided by

government agencies (Wichowsky & Moynihan 2008), the efficiency and effectiveness of programs such as education and other services at the municipal level such as policing (Sanger 2008). PM information is used for performance improvement, learning and change. The argument is that if PM information is not utilized as a tool for positive improvements in performance, it defeats the purpose of developing measures of performance (Thomas 2007). Although, it can be argued that the use of PM has many interpretations, in this article, we argue that managers and leaders in organizations should use the performance information to formulate strategies for future performance improvement and in decision-making. This is not simple as it involves many other supporting mechanisms such as rewards and positive incentives to encourage and recognize learning and improvement. However, it is essential to identify the key supporting aspects and conditions that will allow for performance improvement and obstacles to performance improvement.

## Methodology

### Data Collection

This study adopts descriptive research methodology. Descriptive research is conclusive in nature, as opposed to exploratory. This means that descriptive research gathers quantifiable information that can be used for statistical inference through data analysis. Therefore, this type of research takes the form of closed-ended questions, which focus on their ability to provide insights. The goal of descriptive research is to describe a phenomenon and its characteristics. This research is more concerned with what rather than how or why something has happened. Therefore, observation and survey tools are often used to gather data (Gall, Gall & Borg 2007). In such research, the data may be collected qualitatively, but it is often analyzed quantitatively, using frequencies, percentages, averages, or other statistical analyses to determine relationships. Qualitative research, however, is more holistic and often involves a rich collection of data from various sources to gain a deeper understanding of individual participants, including their opinions, perspectives, and attitudes (Nassaji 2015).

A structured questionnaire containing open and close response questions was administered face-to-face to random sample of middle and senior level public managers on some selected public sector organizations. Directors at the departmental level or equivalent position classifications were chosen. We approached 110 public sector organizations and received 87 complete responses. They were chosen from three Emirates, namely: Abu Dhabi, Dubai, and Sharjah. The three emirates were chosen because it was easy to contact them, and these are the three biggest emirates in the UAE. This survey took place during April-June 2019. The questionnaire was directly administered by a research assistant. A five-point Likert scale was utilized to measure respondents' views on the applicability of PM in public sector organizations. A pilot study was already carried out with a few managers to validate the items in presented in Tables 2 and 3.

### Sample Characteristics

Table 1 reports respondents' demographic details. The sample consists of 87 middle and senior level public managers. Female managers are (76%); between 30-49 years old are 52%; almost half of the middle and senior public managers have 5-10 years of experience and 86% of them have university degree. All respondents have a minimum income of AED 24,000.



**Table 1. Sample Characteristics**

<i>Social-demographic profile</i>	<i>N=87</i>	<i>Percent</i>
Gender	Female (64)	73.6
	Male (23)	26.4
Age (years)	20-29	4.6
	30-39	52.9
	40-49	42.5
Qualification	Diploma	1.1
	Degree	86.2
	Postgraduate	12.6
Position	Director	16.1
	Deputy Director	80.5
	Supervisor	3.4
Experience (years)	<5	10.3
	5-10	48.3
	>10	41.4

### Analyses and Results

To determine the present level of knowledge of PM among public managers, they were asked questions (Tables 2 and 3) to indicate the importance of PM to accomplish their objectives, using a five-point scale with endpoints *agree* (1) and *strongly agree* (5). Managers who scored 3 on average or more within a specific PMs were considered content with PM. The managers answered questions about the importance and the difficulty in the development and implementation of a PM system. The managers believe that determining long-term goals and objectives is important but difficult to implement. Further, participants believed that matching the objectives of programs with the general objectives of government was important but difficult to implement. Table 2 reports mean, standard deviation, and Chi-square statistics with associated p-value for each item.

**Table 2. PM Among Public Managers**

<i>Items</i>	<i>Mean (SD)</i>	<i>Chi-Square (p)</i>
PM encourages behavior that is good for the organization	4.94 (.23)	68.14 (.00)
Designing and implementing PM systems shows that public organizations are serious about the rational allocation of public resources	4.97 (.18)	75.41 (.00)
Performance measures provide evidence to top management appraise the performance of the subdivisions of their ministries	4.95 (.21)	71.73 (.00)
Performance measure provides public managers with information that helps them improve the management of their units	4.18 (.39)	34.77 (.00)
Performance measures provide justification for corrective action by management	4.94 (.23)	68.14 (.00)
Performance measures enhance the awareness among the citizen about public sector performance	4.03 (.18)	75.41 (.00)

The managers agree that PM encourages good behavior for organizations (4.94,  $p < .00$ ). Also, designing and implementing PM systems shows that government organizations are serious about the rational allocation of public resources (4.97,  $p < .00$ ). Further, performance measures provides evidence to help top management appraise the performance of the subdivisions of their ministries (4.95,  $p < .00$ ). In fact, the performance improvement is desirable, as it relies on implementation of sophisticated strategies rather than quick fixes of simplistic solutions (Holzer & Yang 2004). Moreover, UAE managers believe that performance measures enhance the awareness among the citizen about public sector performance (4.03,  $p < .00$ ). However, managers partially agree that the performance measure provides public managers with information that helps them improve the management of their units (4.18,  $p < .00$ ) and provide justification for corrective action by management (4.03,  $p < .00$ ).

Table 3 reports items relating to the difficulty in implementing the performance measurement process along with their mean, standard deviation and Chi square statistics with associated p-value.

**Table 3. The Important and Difficult of Performance Measurement Process**

<i>Items</i>	<i>Mean (SD)</i>	<i>Chi Square (p)</i>
PM is required by the government accounting process (How important)	4.24 (.43)	23.27 (.00)
PM is required by the government accounting process (How difficult to implement)	4.76 (.43)	23.27 (.00)
PM and control is considered part of the budgetary process (How important)	4.85 (.39)	111.17 (.00)
PM and control is considered part of the budgetary process (How difficult to implement)	4.76 (.57)	95.79 (.00)
Management and cost accounting is used to help government agencies develop a performance management process (How important)	3.94 (.35)	201.32 (.00)
Management and cost accounting is used to help government agencies develop a performance management process (How difficult to implement)	4.91 (.29)	57.94 (.00)

From a practical standpoint, we observe that managers perceive PM as a new strategy to be integrated into their public PM system (4.24,  $p < .00$ ). PM should transform the business strategy and service design to deliver value (Ostrom et al. 2010). So the managers might have realized the importance of their public sector PM and acknowledged the fundamental requirements of public sector integration. The recent Federal Authority for Government Human Resources (FAHR) undertook the responsibility of preparing employee performance management system (FAHR Annual Report, 2020). The performance management is the outcome that the government seeks to achieve through driving its employees to comply with the current objectives and methods. However, the performance itself is not the main objective but rather the mean through which a goal can be achieved, which is the desired outcome. From this point of view, the performance is considered as the practical application of all the planning phases set by the federal entity. In light of this fact, and in accordance with the previously mentioned federal law, the UAE Federal Government employee performance management system is designed to accomplish the highest level of PM.

The public managers responded to some questions about the ways in which their organization have to account for their performance (4.76,  $p < .00$ ). The annual report contains workload data and non-financial indicators. Efficiency is included in the current budget. In addition, PM is also helpful not only in the

budget process and efficient allocation of public sectors' resources to those activities which contribute most to the accomplishment of strategic objectives, but also in bringing early signal of the areas that need adjustments and improvements, thus allowing people to learn from their successes and failures (Baird 1998). Happiness and satisfaction is included in Customer Service Charter (CSC), though it is not used as an indicator of performance within the organization. However, there is timely response when complaints are made under the CSC. The number of complaints is a performance indicator in the organization. The participants who have stayed for less than five years in the same position mentioned that the CSC is used at a greater extent as an indicator of performance within the organization than the other participants do (not in Table).

Organizations consider training as a way of improving its performance management. Not only do these programs offer opportunities for staff to improve their skills, but also for employers to enhance employee productivity and improve public sector efficiency. Efficiency as a performance indicator is included in the current performance management. The UAE is the world leader in employee training and development programs that are essential to the success of public sector.

The UAE public sector employees, who get regular opportunities to learn, develop, and advance are more likely to stay at the leadership position. Learning and development are among the top factors in employee engagement, and employee development is the continuous effort to strengthen work performance through approaches such as coaching, training sessions, and leadership mentoring. Training is a specific event that teaches new information or skills, often provided to new or newly promoted employees. Both are key functions of corporate human resources staff, who typically are responsible for planning and implementing these efforts. A bachelor's degree in human resource management can prepare them to lead training and development programs at their organization.

### Discussion

In the UAE, local government authorities are among the public sector organizations which play an important role in the delivery of government services. As they are assigned the responsibility to deliver key public services such as primary education, local health services and other typical local public services (ADCED 2018). Local authorities have come under pressure to modernize to improve overall performance and service delivery, cost reduction, competition, and increase accountability to their stakeholders (Koornneef, Robben & Blair 2017). As part of its wider public sector modernization and reform agenda in 2021, the UAE government introduced strategies such as performance management system to public sectors including local governments for planning, implementation, monitoring, and evaluation and reporting in the public services of UAE (FAHR Annual Report 2020). The system aimed to provide quality public services to the public, improve performance of public service institutions, improve accountability and responsiveness, ensure effective and efficient use of public resources, and provide standards for providing comparisons and benchmarking within the public service institutions in UAE as well as other public service institutions across the world for continuous improvement. This resulted in a statutory duty of continuous performance improvement. In the following section, we explain the state of the art that UAE government achieved by implement the performance management in human resources, and technology sectors.

With respect to the adoption of new public performance management, the UAE has been an early starter. Although, the current study included only three emirates; Abu Dhabi, Dubai and Sharjah, all the seven emirates comprising the UAE federation also adopt the public performance management system (SCAD 2014). The government itself has been a major target of change and development in the UAE. As explained in Abu Dhabi's 2030 Vision (ADCED, 2018), the government of the UAE is committed to change and automation of its processes to achieve greater operational excellence. In 2014, the Vice President and Prime Minister of the UAE, His Highness Sheikh Mohammed bin Rashid Al Maktoum, launched an

ambitious set of plans with the overall goal of making the UAE one of the best countries in the world by 2021, the 50th anniversary of its foundation (Koornneef et al. 2017). The UAE National Agenda 2021 consists of a comprehensive set of key performance indicators (KPI) with specific targets and clear pathways for achieving those targets (Vision 2021). For example, in 2016, the UAE Government announced the appointment of a Minister of Happiness whose task it is to ensure that the UAE is ranked among the top five countries in the world according to the World Happiness Report. In fact, the government of UAE as a whole is committed to becoming one of the top five governments in the world in terms of the quality of public services provided (Bin Taher, Krotov & Silva 2015).

One of the new FAHR-funded PM projects undertook the responsibility in accordance with the federal law which requires that FAHR studies and proposes policies and legislations related to the UAE government human resources with the main objective of crafting an employee performance management system that would form a basic reference for all governments and federal entities, enabling them to efficiently manage the performance of their employees ([www.fahr.gov.ae](http://www.fahr.gov.ae)). Designing and implementing PM systems shows that public organizations are serious about the rational allocation of public resources. Performance management change requires allocation of adequate resources, especially human resources which is one of the key elements of a successful performance management project in the UAE (Davies 2011). Impacted functional units should be dedicated to assist the initiative sponsor with employees who can be made responsible for implementing the performance change in their respective units. Accordingly, assigned employees should be authorized to implement changes, use the allocated resources and request additional ones, if necessary (Carroll 2012). Assigning human resources to specific areas of performance change is necessary not only for actual implementation of these changes, but also for ensuring employee commitment to performance change. Employees, when assigned to implement performance changes, often take ownership of the new processes and advocate the same level of commitment among their peers

Due to the new PM, the UAE continues to grow rapidly in the technology space. Private and public sector players are seeking to modernize by adopting state-of-the-art solutions and catch the broader global wave of innovation, data utilization, digital transformation, technological advancement, and performance management ([www.fahr.gov.ae](http://www.fahr.gov.ae)). The UAE's desire diversifies and builds a knowledge economy in creating new opportunities. The government has set aside large parts of the budget in order to achieve the ambitious Vision 2021, Abu Dhabi Vision 2031, and UAE AI vision 2031 plans. Technology players and performance management continue to see the potential to grow their business in the UAE. Performance measures provide public managers with information that helps them improve the management of their units, and provide justification for corrective action by management.

The UAE's government performance management system includes managing the performance of national indicators of the UAE vision 2021, evaluation of government efforts to achieve the national priorities, managing the performance of government enablers indicators for customers and human resources, and those related to smart government and eGovernment strategies, and managing the corporate performance in terms of indicators of strategic objectives stated in the strategic plans of government entities. For this purpose, it created the UAE government performance management system which monitors the government performance for all federal government entities, and develops clear framework for performance to achieve UAE Vision 2021 and National Agenda. The UAE government pays attention to monitoring the sustainable development of performance and that the services provided by the entities can fulfil the peoples' needs.

The other public performance project that unveils the state of the art funded by The Ministry of Cabinet Affairs monitors the performance of government services. Another public performance project that signifies the state of the art is the healthcare system. The improvement of the health of its citizens and the performance of the healthcare system form one of seven headings of the UAE national strategy. The KPIs include population health targets, such as increasing life expectancy and reducing tobacco

consumption, as well as more structural and organizational targets, such as the regulatory requirement for all healthcare facilities to be externally accredited (Vision 2021). Overall, the UAE aims to be ranked amongst the top 20 countries in the world, according to the Legatum Prosperity Indicator. In 2019 the UAE was ranked 38th globally, an improvement from 40th place in 2018 (The Legatum Institute 2021). Given its starting point, it is remarkable what has been achieved in the UAE in the last four decades. However, since the early 2000s, the UAE has been involved in the government projects such as health system reforms, human resources, technology, and government organizations to further improve public performance services and address cost and quality challenges. These reforms have focused on the introduction of digital human resources, system legislation, partnerships, humanitarian and community initiatives and private health insurance and the growth of private health provision against a backdrop of rapid population growth in technology, and skilled labor.

### **Recommendations**

We have observed that the public PM is not straightforward and can be challenging. However, we have recommendations based on this study. We recommend PM to conduct an overall assessment to identify the type of service the public organization provides. PM encourages behavior that is good for the organization. Designing and implementing PM systems shows that public organizations are serious about the rational allocation of public resources. Evaluating the performance management results, produced by induced changes in public sector, is critical to ensuring the attainment of goals and objectives of the new performance management system (Carroll 2012), though, the UAE public organizations often lack stability and maturity to make continuous evaluations an integral part of normal operations (Yaseen & Okour 2012). Public employees require training and skills development as well as establish objectives and targets for public organization performance that will be used to evaluate service quality levels. Hence, managers should participate in training programs and workshops to enhance their skills in preparation of plans and performance management practices. Training is the identification of skill gaps among workers. Skill gaps could be in managerial, social and behavioral, sales promotion, communication and technical fields, among others. Not only do these programs offer opportunities for staff to improve their skills, but also for employers to enhance productivity and improve public sector efficiency.

To develop an effective system that adds value to the government organizations, performance management must be aligned to support the overall objectives and integrate into other systems in the organization. The most effective performance management systems involve training in using the system, established clear accountability for the people using it and are focused on capabilities. Middle and senior management involvement is essential in government organizations. Also, employee involvement through developing the PM system is important. They contribute to the input, output, outcome, performance, process and every other aspect of the organization's operations. Management commitment is a crucial factor in introducing and managing public change in the UAE (Yaseen & Okour 2012).

Successful deployment of a PM system is related to developing a successful system of accountability. Managers and employees are accountable for the PM process, which must be based on their responsibilities and authority matrix. Another important recommendation which was not directly surveyed in our study but consistently mentioned in the literature is the role of leadership in the success of public performance. The literature grapples with questions about the nature of public leadership and what makes it different from the private sector. Leadership is widely seen as an important factor in the achievement of public policy goals.

The final issue in establishing a PM system is to ensure continuous data collection and documentation. Performance measures need to be integrated based on data collection from different government organizations. Continuous records of performance measures motivate employees and improve performance by focusing employee efforts on organizational strategic objectives.

## Conclusion

Performance measure development is a lengthy and involved process that can take years to complete. The lesson for practitioners is that performance improvement requires more than simply the implementation of a PM system. For some organizations, PM may even hamper efficiency if the fundamentals are incorrect. In the UAE, the system is designed primarily to ensure policy compliance at local levels by assigning top-down, result-oriented targets to local officials and linking the officials' performance on target fulfillment to career advancement. The system created an incentive mechanism that motivated officials to develop various strategies. Future research may pay more attention to the complexity of PM and theories that can be applied to explain a limited scope of PM problems. In particular, more comparative studies of different systems, programs, institutions, policy areas, regions, and countries are necessary. More studies of the experiences and lessons in developing countries will help enhance understanding of performance management in a global context.

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## BOOK REVIEW


### Book

Greenwashing: Foundations and Emerging Research on Corporate Sustainability and Deceptive Communication

Vollero, Agostino

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### Reviewer

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The launch of the Sustainable Development Goals (SDGs) and the intensification of the efforts of international organizations to establish sustainable development principles such as the Global Compact principles launched by the United Nations have generated an increasing involvement of companies in promoting corporate social responsibility (CSR) programs and disclosure of the non-financial performance (social and environmental) as detailed as possible. The efforts of companies to get involved in CSR activities and to communicate the outcome in terms of promoting sustainable development are also generated by the pressures exerted by stakeholders, the need for social legitimacy, and the potential benefits that can be realized financially by improving economic performance. .

Given these considerations, Agostin Vollero's book, *Greenwashing: Foundations and emerging research on corporate sustainability and deceptive communication* stands out for its critical attitude towards the involvement of companies in CSR actions and communication campaigns. A careful observation of the phenomenon has noticed the intensification of companies' communication efforts regarding their activities to promote sustainable development efforts that are not always authentic.

Disclosure of specific information on non-financial performance is often voluntary, but experts are concerned about how companies make this presentation of non-financial data, given the implications for reliability of main sustainability indices available on capital markets and specific rankings. The implementation of legal regulations such as Directive 95/2014 in the European Union whereby companies have the obligation to publish certain non-financial information further complicates this situation.

The book has a five-chapter structure, the author presenting the preoccupations of the companies regarding the realization of the business and communication of the results obtained. In the crazy race to maximize profits, companies do not always behave ethically, large corporations being involved in various financial scandals fueled by corruption, being accused of exploiting the local workforce, but promoting cosmetic advertising campaigns, in which social and environmental concerns are used, exclusively for commercial purposes. The author explains that initially greenwashing has been associated with corporate environmentalism, but in the last period, an analysis of this phenomenon is observed in a wider context generated by the actions of CSR and corporate sustainability.

The author presents in detail the main facets of the greenwashing phenomenon identified through the systematic analysis of the literature (from different fields such as corporate communication, marketing, accounting, business ethics, management) from 1990-2021. The author noted the increase in the number of articles on greenwashing in the analyzed period, especially in the last five years, the most active

researchers being those from the USA, UK and Europe, and the main methods used being quantitative and content analysis. This analysis allowed the author to identify the main approaches (legitimacy theory, attribution theory, institutional theory, signaling theory, impression management theory and communicative constitution of organizations theory) and five distinct types of greenwashing: disclosure, attention deflection, decoupling, deceptive labeling, and deceptive manipulation. The theoretical approaches used in the study of greenwashing are presented in detail.

The author also presents some Case Studies, the purpose being to learn lessons to avoid the greenwashing trap. The author makes an in-depth analysis of the greenwashing situations found at Volkswagen and Nestle. The situation of Golden Agri-Resources (GAR) Ltd., a multinational company in the agrifood field, is presented in detail, considering the selection of this company in the basket of the Dow Jones Sustainability Index and the greenwashing accusations that targeted both the issuing company and RobecoSAM as a score provider of DJS index. Based on the analyses performed, the author proposes at the end of the chapter certain activities for limiting greenwashing risks and operational communication decisions. The use of non-corporate sources in communication can be a solution for greenwashing trap.

The last chapter focuses on the future of the greenwashing phenomenon, given the growing importance of stakeholders but also the management of communication for corporate sustainability. The author also presents the greenwashing strategy used by certain companies, which for fear of greenwashing accusations prefer to minimize information on sustainable initiatives. Finally, the author argues for the need to insert principles of sustainability in corporate strategies in an authentic and balanced way, communication having an essential role for establishing and maintaining a balanced relationship with stakeholders. Therefore, the relationship between companies, media, and consumers should be based on the most detailed information and knowledge, trust and continuous communication.

The critical attitude of Agostin Vollero towards the phenomenon of greenwashing and the solutions offered to avoid the phenomena are the main strengths of this book. The readers are presented with many facets of the phenomena which are identified in different countries and companies in various fields. The book calls into question the real involvement of companies in promoting SDGs.

### Reviewer



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