



ACUTE DRIVERS AND GREAT BARRIERS FOR SUCCESSFUL BLUE GROWTH IN PAKISTAN: AN INVESTMENT PERSPECTIVE UNDER CPEC

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** (This paper is the part of dissertation from the PhD thesis of Ms.Urooj Aijaz)*

ABSTRACT

The study aims to determine the drivers and barriers of blue growth success in Pakistan from the CPEC perspective. The study has collected 129 responses from the marine and CPEC officials to gain insightful knowledge and understanding of their opinion based on a seven-point Likert scale questionnaire and purposive-criterion sampling technique. The data analysis was conducted using PLS-SEM for estimating the validity and reliability of the model and hypothesis testing. The results showed that four critical barriers had been identified, including uncertainty avoidance, functional strategic focus, prioritization of the short-term growth (rather than long-term orientation), and weak



innovativeness. However, the study has also identified that sustainability for businesses, balanced approach between stakeholders and shareholders, and top management commitment/support are major drivers towards blue growth in Pakistan from the CPEC perspective. After conducting the study, it is recommended to policymakers that long-term orientation, the correctness of the strategic focus, and a balanced approach should be mainly emphasized to optimize investment opportunities in CPEC for sustainable blue growth in Pakistan. Moreover, innovativeness should be focus primarily on improving the overall efficiency of CPEC and blue growth in Pakistan in the larger perspective. CPEC is a crucial aspect for blue growth in Pakistan, and therein, a dire need has been highlighted in the literature to undergo the barriers and drivers for blue growth from the CPEC perspective.

Keywords: *Strategic Focus, Uncertainty, Innovativeness, Top Management Commitment/Support, Blue Growth, CPEC.*

INTRODUCTION

Ocean-based economic development has been identified as a renewed interest that can be termed in different ways: blue growth (BG), blue economy, and ocean economy. The term blue growth or economy refers to the enhancement of activities regarding the ocean and marine life. The aspects of blue growth have been accelerating as the importance of oceans is rising, becoming a part of the globalized discourse regarding economic growth (Bennett et al., 2021; Jouffray et al., 2020). The basic concept of blue growth refers to the economic conditions and activities of coasts, seas, and oceans. Also, it effectively covers all interlinked recognized and emerging sectors (Alharthi & Hanif, 2020). The oceans have been identified as of great importance and value to human society, and it helps develop the blue growth around the globe. The blue growth also develops environmental growth, including different sectors and maritime business (Caswell et al., 2020). Besides, the concept of BG has been rising, especially in the intergovernmental organizations that are European Union and United Nations.

However, there are specific differences or variations in the process through which initiatives of BG are developed and implemented around the world, but it effectively focuses on sustainable development and wellbeing (Bogadóttir, 2020). Various researches have emphasized the importance of BG as it allows to conduct the marine activities in a sustainable way (Van den Burg et al., 2019). Besides, Pakistan has various



coasts and seas, and its coastline has been around 990 km to 1046 km long. Baluchistan alone consists of 730 to 770 km, and it has been identified as a diverse and untapped resource that can be a vital element for the blue economy (Khan, 2020). Similarly, Pakistan contains high natural maritime geography, and it depends on the blue growth for developing its economy. Also, China-Pakistan Economic Corridor (CPEC) has been found to increase the importance of blue growth in the country, but it faces some issues to give the maximum benefits due to security and uncertainty avoidance issues (Askari et al., 2020). However, the country has been largely ambivalent or confused regarding the importance of Sea. It creates sea blindness in the development of the blue growth of Pakistan (Zafar, 2021).

Moreover, some various barriers or problems eventually resulted in the low development of blue growth; for instance, lack of technology, low confidence of investors, in technical and economic aspects of the blue growth. Also, unresolved issues of ownership of different processes regarding the involvement of stakeholders have been identified as another barrier in blue growth. The aspect of prioritizing short-term growth has been another barrier to its growth. Like, high stocks are needed to be developed in blue life but with including the environmental concerns (Buck & Langan, 2017; Dalton et al., 2019). Similarly, another barrier is the lack of functional strategies that include gaps in maritime knowledge and data, lack of research efforts, lack of geopolitical combined efforts, lack of legislation, and adequate and skilled people. The barriers to innovation have also been identified as a negative factor that could hinder the development of blue growth (Schultz-Zehden et al., 2019).

Furthermore, another barrier towards the BG is that not a single political party has come forward and included in the policies towards its development, resulting in a long struggle for recognition and development (Zafar, 2021). Although Pakistan has vast resources in this aspect, it has not been possible to gain total success because of reduced maritime success. So, experts have stated that when these blue resources can be utilized properly, they can lead towards effective blue growth in Pakistan (Askari et al., 2020). The lack of cooperation and coordination between value chains, lack of awareness, ineffective information exchange, and lack of access to capital are other barriers to this industry.

The lack of legislation has been identified another barrier towards the use of Sea as a multi-use that can foster the development of multiple approaches and enhance the blue growth (Van den Burg et al., 2019). Besides, blue growth can be used for environmental effects as it can help reduce climate change and develop the blue growth sector. However, economic, social, and political barriers are a significant hindrance in reducing the environmental degradation caused by different CO² emissions in these processes



(Froehlich et al., 2019). Hence, based on the identified problems and issues of blue growth, this research has raised a question to determine the drivers and barriers of blue growth success in Pakistan from the CPEC perspective.

Practical implementation and its drivers of blue growth are lacking in the literature as a consolidated framework for this process are not yet developed. So, this research can help the researcher provide practical knowledge based on the current and innovative framework. A few researchers have found a gap regarding this that could hinder the integration of blue growth within the oceans (Sadiq et al., 2021). Similarly, another gap in this topic is the lack of awareness regarding maritime activities, as prior research has not provided practical knowledge to fill this gap (Schultz-Zehden et al., 2019). Also, the lack of effective strategies is limited in the literature, and fulfilling this gap can help policymakers further understand the importance of blue growth (Brugère et al., 2019). Additionally, CPEC is a crucial aspect for blue growth in Pakistan, and therein, a dire need has been highlighted in the literature to undergo the barriers and drivers for blue growth from the CPEC perspective. The paper follows the literature review, methodology, results, and implications of the study while also providing keen and vital future research directions.

LITERATURE REVIEW

Potential Barriers to Blue Growth

The concept of blue growth has been rising around the globe as it can develop the oceans' life and decrease environmental degradation. However, specific barriers hinder this process and the development of blue growth as a whole (Van den Burg et al., 2019). Like, uncertainty avoidance has been a significant barrier in this process as it refers to the concept that the people are aware of regarding the lack of blue growth but considers it acceptable anyhow. This construct is related to Hofstede's cultural dimension theory which states the role of culture on different activities (Guijarro-García et al., 2020). Uncertainty avoidance has been identified as a significant factor in being a barrier to blue growth. The development of blue growth has been termed highly uncertain in different oceans and Seas as when the rules and principles are not well defined, it can lead to industry degradation (Schultz-Zehden et al., 2019).

Furthermore, functional strategy (FS) has been identified as another barrier to blue growth that can hinder its growth. The basic concept of FS can be identified as practical strategies that are not being implemented, resulting in low blue growth due to ineffective planning (Kyvelou & Ierapetritis, 2019). Also, as the practical strategies might be



effective towards building the blue growth, it is necessary to examine and reflect their actual meanings and what these strategies entail in this industry. The strategies can also identify the further possibility of development in BG (Leposa, 2020). However, the fundamental strategic aspect and its intentions do not directly influence the actual blue growth, and there is a certain lack of practical strategies in the planning processes. Similarly, it has been identified that different regional strategies are lacking concrete ideas and are not broad for supporting the blue growth. Sustainable development in BG has been identified as a most significant challenge in which the strategies are not implemented adequately towards its effectiveness (Katila et al., 2019).

The prioritizing of short-term growth has been identified as one of the significant barriers to blue growth as it focuses on developing a high number of products without considering its long-term effect on blue growth (Brent et al., 2020). According to Schultz-Zehden et al. (2019), this production must not be included in marine life as it might help gain socioeconomic gains but can cause a negative influence on nature and people as well. Additionally, weak innovativeness can be termed a strategic failure in which there are no new ideas or collaborative working to solve environmental problems (Schultz-Zehden et al., 2019). The role of innovation can be a significant factor in blue growth as it can reinvent the processes based on new ideas and technologies. Its concept is based on adequate strategies, solutions, and ideas for the betterment of environmental and social problems with the collaboration of different actors. The success of this process depends on pure collaboration and trust between different actors or stakeholders (Eikeset et al., 2018). A theoretical linkage can further develop this factor lack of innovativeness with disruptive innovation theory in which it focuses on design-driven innovation in the blue ocean strategies. For instance, new values can be created based on the shared value concept based on a value regeneration strategy. The aspects above have shown a high need for innovation in the services and products for creating a competitive edge for blue growth (KOCA & SAĞSAN, 2020). Hence, based on the above discussions this study has hypothesized that:

H1a: Uncertainty avoidance has a significant effect on blue growth.

H1b: Functional strategy has a significant effect on blue growth.

H1c: Prioritizing short-term growth has a significant effect on blue growth.

H1d: Weak innovativeness has a significant effect on blue growth.

Potential Drivers of Blue Growth

Furthermore, specific drivers can develop the blue growth and its development as well. Like, they value business sustainability has been termed a significant driver as it focuses



on creating a sustainable business and providing practical value. The presence of a sustainable business can significantly influence the effective development of blue growth. For instance, when the production processes are promoted as efficient, clean, and controlled, it brings environmental sustainability (Bogadóttir, 2020). Besides, the business model should be sustainable, and its related business plans can help develop an influential milestone for blue growth.

Similarly, for this process, environmental concerns are highlighted since the beginning as they can create sustainability in business for the proposed system or industry (Lagasco et al., 2019). Also, business sustainability has termed a demand for production but with high quality, certifications, and innovative techniques to better the industry and environment (Saviolidis et al., 2020). In this study, the researcher has taken business sustainability for valuing business sustainability.

Moreover, a balanced approach has been identified as another driver for blue growth as it refers towards having a balance between costs and benefits of the production for sustainable production in the blue growth. Similarly, when the production processes are balanced with the environmental sustainability as well as with the benefits, then helps policymakers interacting with better policies creation (Klinger et al., 2018). The blue growth also focuses on prioritizing the balanced approach to balance sustainable and socioeconomic management of the natural resources. Efficient use of aquaculture, livelihoods, food systems, trade, and ecosystem services can significantly influence blue growth (FAO, 2015). The core of this process is to identify and recognize the dynamic balance between resources and the environment. These aspects can be helpful towards integrating a balanced approach of growth and sustainability of the environment (Wenhai et al., 2019).

Additionally, top management support or commitment has been identified as another driver for blue growth as it focuses on practical management or support for the benefits of aquaculture activities and eventually the blue growth (Van den Burg et al., 2019). The top management can significantly influence the blue growth by conducting proper actions towards minimizing the presence of any barriers and countering it. Similarly, blue growth can be developed through a holistic management approach regarding marine life and its social-ecological systems (Kyvelou & Ierapetritis, 2019). Also, the betterment of blue growth and its economy can help the people as it can provide practical resources through effective management, support, and innovation (Bethel et al., 2021). In addition, enabling innovation structure has been termed another driver for blue growth as it focuses on integrating strategic vision within the Sea to develop innovative techniques for better growth. The presence of innovation has been identified as an essential factor for the

development of blue growth as it can engage in its growth with sustainability (Recalde, 2019). The blue growth can be developed innovatively by identifying innovative specialization concepts that include efficient resource use, greener resources, a competitive economy, and high employment that provide socio-territorial cohesion (Schultz-Zehden et al., 2019). In this study, the researcher has taken enabling innovation structure as innovation. Hence, based on the above discussions this study has hypothesized that:

H2a: Valuing business sustainability has a significant effect on blue growth.

H2b: Balanced approach has a significant effect on blue growth.

H2c: Top management support/commitment has a significant effect on blue growth.

H2d: Enabling innovation structure has a significant effect on blue growth.

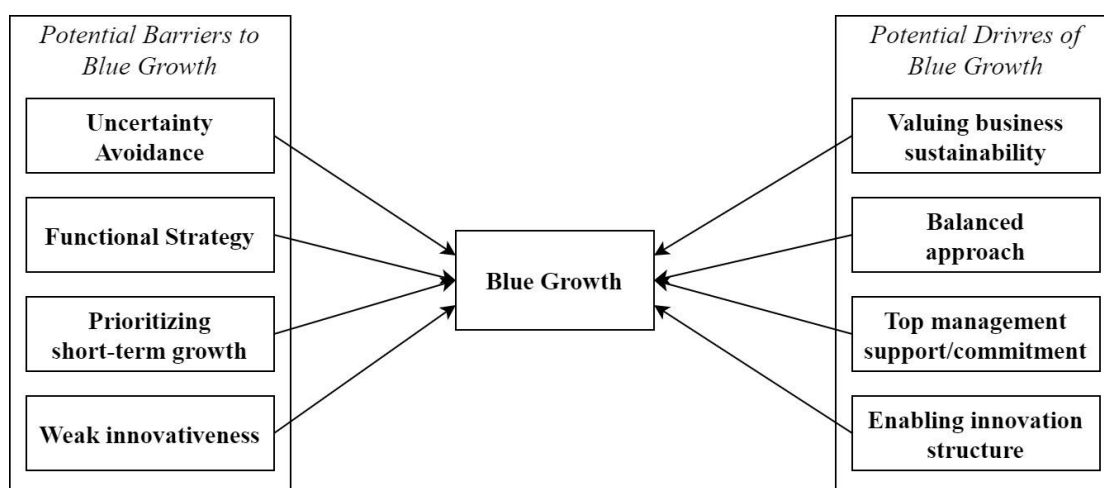


Figure 1: Research Framework

METHODOLOGY

Research design

The quantitative-deductive approach has enabled the study to test the hypothesis based on theoretical underpinnings explaining the barriers and drivers of blue growth in Pakistan (Creswell & Creswell, 2017). In the same line, the study has used a positivistic philosophical approach to extend the knowledge about blue growth in Pakistan in the natural environment based on individuals' opinions, knowledge, and experience (Newman & Benz, 1998). Further, the study has enabled the theoretical and practical



findings to enrich practitioners, theorists, and academicians about the blue economy and growth in Pakistan (Scott & Garner, 2013); therefore, the study was based on a non-experimental causal design.

Sampling design

The study has collected data at a single point of time, and so a cross-sectional time horizon has been used (Sekaran & Bougie, 2010) while the responses were collected from the marine and CPEC officials of Pakistan; therefore, individuals were the unit of analysis in the study (Sekaran & Bougie, 2016). Conversely, the study has used the *N10* formula for estimating minimum responses from the sample population, wherein *N* refers to the number of constructs in the model (Hair et al., 2011). Therein, 129 responses have been collected for data analysis using a structured five-point Likert scale instrument. Lastly, the study has collected responses from the predetermined units of the sample population; however, the size of the sample population was unknown (Cochran, 2007; Vehovar et al., 2016) and, therefore, nonprobability purposive- criterion sampling technique has been used.

The following table 1 provides the demographic profile of the respondents.

Table 1:

Profile of the Respondents (n = 129)

		Frequency	Percent
Gender	Male	68	52.7
	Female	61	47.3
Age Group	30 and Under	32	24.8
	31 - 40 Years	30	23.3
	41 - 50 Years	34	26.4
	51 and Above Years	33	25.6
Sector Type	Public	68	52.7
	Private	61	47.3
Experience	Less than 3 Years	27	20.9
	3 - 5 Years	17	13.2
	6 - 8 Years	25	19.4
	9 - 11 Years	27	20.9
	11 and More	33	25.6



Instrument

There are 9 variables in this research. The uncertainty avoidance has been based on 4 items adopted from Jung and Kellaris (2004). Like, *“Blue growth economy does not like ambiguous situations”*. The functional strategy has been based on 5 items adopted from Ramakrishnan (2010). For instance, *“Competitors prices are not being monitored by blue growth firms”*. The prioritizing short-term growth has been based on 7 items adopted from Grinyer et al. (1998); Marston and Craven (1998); Segelod (2000). For example, *“Due to internal factors it is easier to prioritize short-term blue growth”*. The weak innovativeness has been based on 8 items adopted from Muñoz-van den Eynde et al. (2015). Like, *“Blue growth does not focus on creativity, having new ideas”*. The valuing business sustainability has been based on 5 items adopted from Chow and Chen (2012). For instance, *“Blue growth firm reduced wastes and emissions from operations”*. The balanced approach has been based on 4 items adopted from Malbašić et al. (2015). For example, *“The development values in blue growth aimed at differentiating and continuously improving the company (e.g., innovation, creativity, learning, and continuous improvement)”*. The top management support/commitment has been based on 6 items adopted from Chu et al. (2017). For example, *“Top managers recognize the importance of blue growth practices”*. The enabling innovation structure has been based on 5 items adopted from Yıldız et al. (2014). For instance, *“Our process in blue growth often implements fresh ideas”*. The blue growth has been based on 7 items adopted from Saviolidis et al. (2020). Like, *“The industry has developed during last few years”*.

Data analysis

Among the 2nd generation statistical techniques, there is a widespread scholarly discussion on the use of CB-SEM and PLS-SEM (Hair et al., 2016). However, numerous researchers have explicitly discussed the applicability of PLS-SEM with specific criteria (Hair et al., 2019). For instance, Hair et al. (2011) suggested that PLS-SEM applies to causal studies, and therein, the study has a causal design. Further, Hair et al. (2013) recommended that PLS-SEM can apply to studies with a small sample size ($n < 250$), and therein, the study has collected 129 responses from the sample population. In addition, the study has an exploratory model; therefore, Hair et al. (2017) suggested that exploratory studies lead to theory development and therein, predictive-orientation has been focused in the current study.

RESULTS



Measurement model

PLS-SEM analysis has the initial estimation of measurement model that refers to the examining the relationship between indicators and constructs that are related with each other in the theoretical perspective. This analysis provides keen validation and reliability of the indicators and constructs based on factor loadings and their statistical significance, reliability estimations such as Cronbach's alpha, and composite reliability (CR) and the inter-correlation between indicators to present their latent construct in the model based on average variance extracted (AVE). The following table 2 provides the result of measurement model comprehensively.



Table 2:
Measurement Model using PLS Algorithm

Latent Constructs	Indicators	Loadings	Prob.	Alpha	CR	AVE
Balanced Approach	BA1	0.910	0.000	0.810	0.876	0.640
	BA2	0.780	0.000			
	BA3	0.776	0.000			
	BA4	0.721	0.000			
Blue Growth	BG2	0.749	0.000	0.885	0.915	0.648
	BG3	0.923	0.000			
	BG4	0.930	0.000			
	BG5	0.891	0.000			
Enabling Innovation Structure	BG6	0.741	0.000	0.924	0.945	0.813
	BG7	0.521	0.000			
	EIS1	0.972	0.000			
	EIS3	0.901	0.000			
Functional Strategy	EIS4	0.823	0.000	0.893	0.918	0.738
	EIS5	0.904	0.000			
	FS2	0.744	0.000			
	FS3	0.943	0.000			
Prioritizing Short-Term Growth	FS4	0.882	0.000	0.875	0.923	0.802
	FS5	0.856	0.000			
	PSTG3	0.937	0.000			
	PSTG4	0.935	0.000			
Top Management Support/Commitment	PSTG5	0.808	0.000	0.911	0.934	0.738
	TMSC1	0.758	0.000			
	TMSC2	0.839	0.000			
	TMSC4	0.915	0.000			
Uncertainty Avoidance	TMSC5	0.914	0.000	0.973	0.979	0.921
	TMSC6	0.861	0.000			
	UA1	0.985	0.000			
	UA2	0.912	0.000			
Valuing Business Sustainability	UA3	0.983	0.000	0.941	0.962	0.893
	UA4	0.956	0.000			
	VBS1	0.918	0.000			
	VBS2	0.958	0.000			
Weak Innovativeness	VBS3	0.959	0.000	0.891	0.924	0.752
	WI1	0.832	0.000			
	WI2	0.914	0.000			
	WI3	0.863	0.000			
	WI7	0.858	0.000			



Table 2 provided that indicators have reliability higher than the recommended cut-off values of 0.50 (Hair et al., 2016) and found statistically significant at 5 percent level. Therefore, indicators have contributed substantially for appropriate construct development. Furthermore, latent constructs have achieved higher degree of internal consistency and convergence based on Cronbach's alpha, CR and AVE respectively. The acceptable cut-off value of alpha was 0.70 (Nunnally & Bernstein, 1994), construct should be considered substantially consistency in case of CR higher than 0.80 (Hair et al., 2011; Hair et al., 2019) and AVE higher than 0.50 represents substantial degree of convergence between indicators and constructs (Hair et al., 2017; Hair et al., 2016; Hair et al., 2011). Herein, constructs have achieved convergent validity based on alpha, CR and AVE.

Discriminant validity

The discriminant validity focuses on identifying the discriminant between variables. Like, it represents that the items of each construct highly supports their own constructs only as compared with other constructs (Hair et al., 2016). The HTMT ratio has been termed as a new approach for examining the validity in variance-based SEM. This test focuses on assessing the correlations in indicators within the same construct. HTMT has been termed as a relatively more advanced test for assessing the discriminant as it builds on the measures and data that are available and does not required calculation of construct scores (Henseler et al., 2015). In this regards, following table 3 shows that all constructs have HTMT ratio less than the recommended cut-off value of 0.90 (Henseler et al., 2015). The highest value is 0.890 and therefore, discriminant validity had been achieved using HTMT ratio.

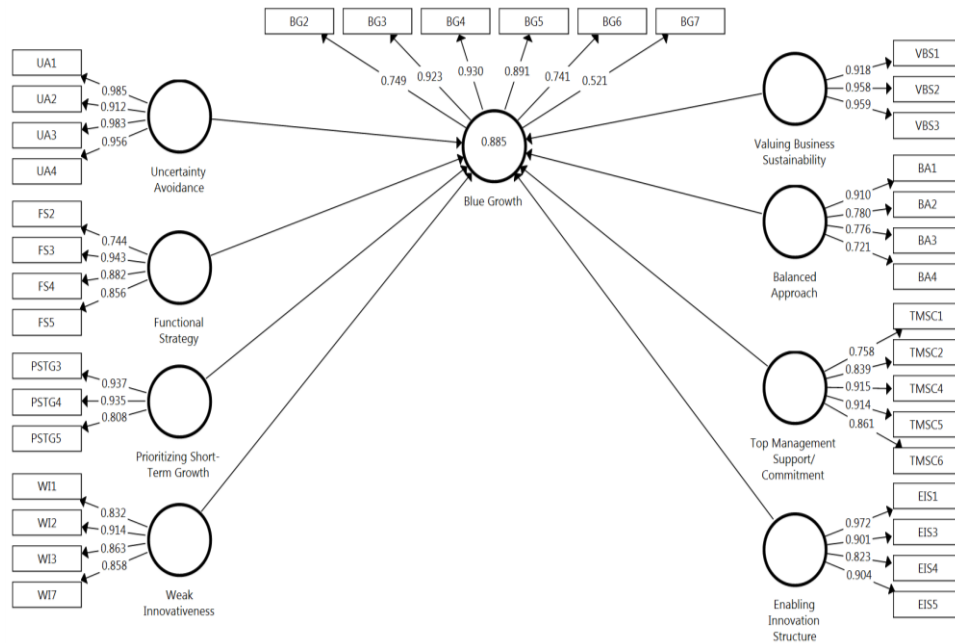


Figure 2: PLS Algorithm using Smart PLS v3.2.9

Table 3:

Discriminant Validity using HTMT Ratio

	BA	BG	EIS	FS	PSTG	TMSC	UA	VBS	WI
Balanced Approach									
Blue Growth	0.872								
Enabling Innovation Structure	0.453	0.589							
Functional Strategy	0.513	0.621	0.800						
Prioritizing Short-Term Growth	0.500	0.778	0.438	0.522					
Top Management Support/Commitment	0.774	0.848	0.759	0.688	0.890				
Uncertainty Avoidance	0.220	0.309	0.328	0.864	0.244	0.239			
Valuing Business Sustainability	0.603	0.723	0.885	0.780	0.376	0.797	0.334		
Weak Innovativeness	0.713	0.856	0.66	0.668	0.741	0.774	0.379	0.573	

BA = Balanced Approach; BG = Blue Growth; EIS = Enabling Innovation Structure; FS = Functional Strategy; PSTG = Prioritizing Short-Term Growth; TMSC = Top Management Support/Commitment; UA = Uncertainty Avoidance; VBS = Valuing Business Sustainability; WI = Weak Innovativeness



Structural model

The structural model also known as an inner model used for hypothesis-testing to generate main results of the research. The objectivity of the structural model is to examine the hypothesized relationship between latent constructs in the model framework. The results in table 4 showed that uncertainty avoidance ($\beta = -0.331$, $p < 0.05$) has a negatively significant effect on blue growth. Functional strategy ($\beta = -0.764$, $p < 0.01$) has a negatively significant effect on blue growth. Prioritizing short-term growth ($\beta = -0.591$, $p < 0.01$) has a negatively significant effect on blue growth. Weak innovativeness ($\beta = -0.274$, $p < 0.01$) has a negatively significant effect on blue growth. These results showed that functional strategy is one of the key barriers of blue growth in Pakistan followed by management myopic perspective of short-termism while least importantly, weak innovativeness found as a weak barrier to blue growth in Pakistan. Furthermore, valuing business sustainability ($\beta = 0.724$, $p < 0.01$) has a positively significant effect on blue growth. Balanced approach ($\beta = 0.420$, $p < 0.01$) has a positively significant effect on blue growth. Top management support/commitment ($\beta = 0.260$, $p < 0.01$) has a positively significant effect on blue growth. However, enabling innovation ($\beta = 0.060$, $p > 0.05$) has no effect on blue growth. This provided that valuing business sustainability is one of the key drivers of blue growth in Pakistan followed by balanced approach between stakeholders and shareholders and least importantly, top management commitment and support towards blue growth in Pakistan. Lastly, blue growth has been predicted up to 88.5 percent in the modeling framework based on PLS algorithm estimations while its cross-redundancy validation has been found as 55.8 percent that is higher than zero (Hair et al., 2016); based on Geisser (1975); Stone (1974) technique.

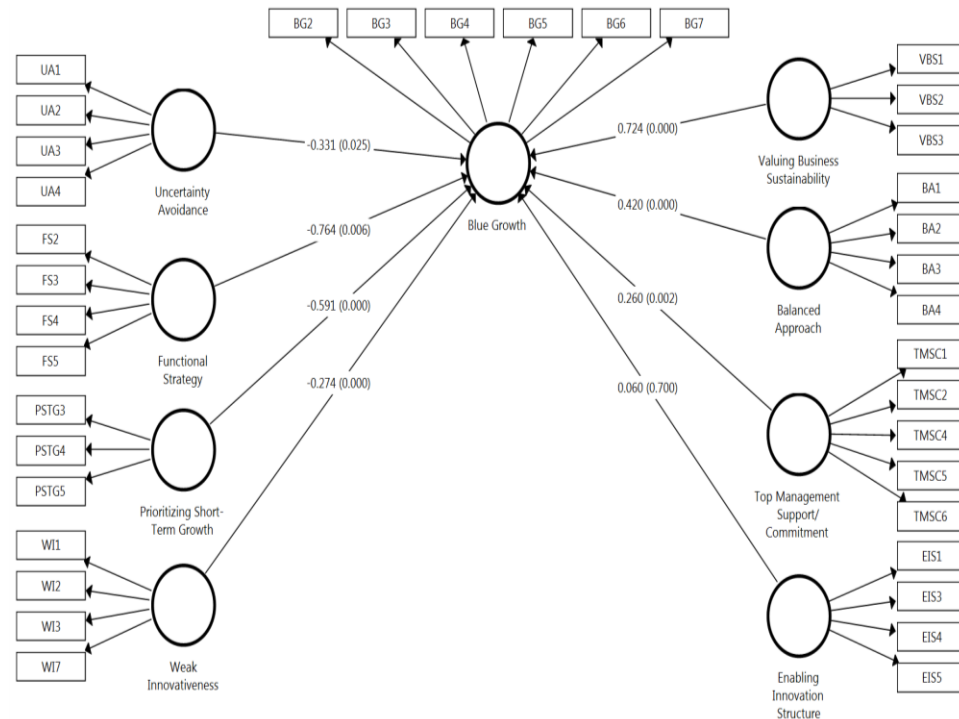


Figure 3: PLS Bootstrapping using Smart PLS v3.2.9

Table 3:
Hypothesis-testing using PLS path modeling

Path Relationships	Estimate	T-Stats	Prob.	Decision
<i>Potential Barriers</i>				
H1a: Uncertainty Avoidance -> Blue Growth	-0.331	2.236	0.025	Accepted
H1b: Functional Strategy -> Blue Growth	-0.764	2.750	0.006	Accepted
H1c: Prioritizing Short-Term Growth -> Blue Growth	-0.591	7.856	0.000	Accepted
H1d: Weak Innovativeness -> Blue Growth	-0.274	4.147	0.000	Accepted
<i>Potential Drivers</i>				
H2a: Valuing Business Sustainability -> Blue Growth	0.724	6.143	0.000	Accepted
H2b: Balanced Approach -> Blue Growth	0.420	5.415	0.000	Accepted
H2c: Top Management Support/Commitment -> Blue Growth	0.260	3.084	0.002	Accepted
H2d: Enabling Innovation Structure -> Blue Growth	0.060	0.385	0.700	Rejected

Predictive Relevance of Blue Growth: *R-Square* = 0.885; *Q-Square* = 0.558



Discussions

As far as potential barriers to blue growth are concerned, the present study found a that there is a significant relationship between uncertainty avoidance and blue growth which is also supported by Kamalia (2020). However, in contrast with the current findings a study found an insignificant relationship between uncertainty avoidance and blue growth Schultz-Zehden et al. (2019). Furthermore, the study also identified a significant influence of functional strategy on blue growth. This finding is also supported by Wenhai et al. (2019). In contrast with the study's findings an insignificant effect of functional strategy on blue growth Eikeset et al. (2018). Moreover, the study found that there is a negative and significant relationship between prioritizing short term growth and blue growth which is also consistent with Hussain et al. (2017). However, in contrast to the current findings a study found that there is an insignificant relationship between prioritizing short term growth and blue growth Daly et al. (2021). Similarly, the study found that there is a significant relationship between weak innovativeness and blue growth. This result is also in line with Hossain et al. (2020) . Besides, another study found that there is an insignificant relationship between weak innovativeness and blue growth Pauli (2010).

Furthermore, when it comes to potential drivers to blue growth, the current study found a significant influence of valuing business strategy on blue growth. This outcome is also in line with Humayun and Zafar (2014). Moreover, another study found an insignificant influence of valuing business strategy on blue growth Reinertsen and Asdal (2019). Besides, the study found a significant influence of balanced approach on blue growth which is also supported by Lin and Cheng (2020). Also, another study found an insignificant influence of balanced approach on blue growth Lopes et al. (2019). Similarly, the study indicates that there is a significant influence of top management support/commitment on blue growth which is also supported by Kyvelou and Ierapetritis (2019). Also, a contrasting result indicates that there is an insignificant influence of top management support/commitment on blue growth Mayén Cañavate et al. (2019). Additionally, the study identified that there is an insignificant effect of enabling innovation structure on blue growth. This result is also supported by Saviolidis et al. (2020) that when the management does not properly develop innovation structure than it cannot help to enhance their blue growth. Lastly, a contrasting result identified that there is an insignificant effect of enabling innovation structure on blue growth Barbesgaard (2018).

IMPLICATIONS AND FUTURE RESEARCH



Implications

Policymakers are suggested to develop strategies that may allow the country to understand Uncertainty Avoidance better to reduce it as much as possible. By doing so, they may simulate uncertainty avoidance that may allow overcoming this barrier for blue growth to take place more efficiently. Additionally, to reduce risk and uncertainty while increasing efficiency, policymakers should develop and implement policies that encourage industries to assess risk mitigation and maximize the use of functional capabilities by establishing clear functional boundaries and defining the three vital functionalities, which are functional responsibility, functional accountability, and functional authority all of which are essential for blue growth.

Policymakers are suggested to develop policies that will make industries resource their respective companies. By implementing such policies, it may encourage organizations to focus on long-term growth instead of short-term growth. Moreover, policymakers are suggested to reassess the resource return policies. The resource usage period may be extended that may encourage companies to focus on long-term growth. Finally, policymakers should emphasize standard procedures mandatory in their policies for industries. As a result of which, organizations shift their focus towards standard procedures while also neglecting the need for innovation that are relatively tend to be weak and act as a significant obstacle for the blue growth to take place.

Policymakers should develop and implement policies that encourage the use of eco-friendly procedures by industries in order for them to make a good reputation socially, maintain themselves as environmentally friendly and maintain a competitive edge economically, all of which hold positive value for any organization to improve their long-term business viability. Furthermore, Policymakers are suggested to implement a policy that makes organizations carry out their operations while also reducing the potentially hazardous impacts on the environment, both of which are mandatory. By implementing such policy, organizations will seek alternative methods to produce their goods that reduce any pollution generated, which as a consequence improve blue growth.

Policymakers are suggested to implement mandatory policies for top management to facilitate employee authorization and value-added stages of job satisfaction through its leadership and commitment to total quality management. Providing necessary tools to employees should also be added as a mandatory procedure in the policy as well. Another policy should be added that reserves all rights of employee wellbeing on account of top management. Furthermore, policymakers are advised to implement a policy that



encourages industries to overcome bureaucratic issues and a lack of cross-functional collaboration, resulting in innovation structures that can occur and be funded.

Limitations and future research

Indeed, there are some limitations and boundaries of the study, like other researches. For instance, the study has used a quantitative-deductive approach to understand and explain the barriers and drivers of blue growth in Pakistan. However, future studies should explain the determinants of blue growth in other developing countries like Bangladesh, Nepal, and the Maldives. Furthermore, the study has collected data from the marine and CPEC officials linked with Pakistan's blue economy perspective. However, government officials, ministry personnel, and NGO officials were not considered to specify the research horizon. In this line, the study has recommended to future research that government perspective and external stakeholders like importers can be considered to enrich the understanding of blue economy growth and development in the broader perspective. In addition, the study has collected 129 responses due to lack of accessibility to respondents and large-scale data collection during the COVID-19 pandemic. However, it is recommended that future studies increase the responses to gain more insightful knowledge and information about the blue economy growth. Lastly, the study has used the PLS-SEM technique for data analysis with some statistical limitations like lack of considerations to data distribution assumptions and theory development rather than theory confirmation; therefore, future studies should estimate the findings based on CB-SEM theory confirmation and confirmatory factor analysis (CFA).



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