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IDENTIFICATION OF KEY ENABLERS AND ASSESSMENT OF THE INTER-RELATIONSHIPS OF HOUSEHOLD FINANCIAL RESILIENCE IN SOUTHWEST ASIAN NATIONS

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Abstract

The current research was taken up to identify and assess the key enablers of household financial resilience in Southwest Asian nations. The research technique used was Interpretive Structural Modeling. We identified twelve enablers which impact household financial resilience which we then used to try to explore financial resilience in South-West Asian households. The aim of the study was to identify the key enablers that influence urban households' financial resilience in Southwest Asian nations, evaluate the contextual relations between the identified enablers and develop a hierarchical framework of enablers of urban households' financial resilience in South-West Asian nations. The findings of the research disclosed that financial security was the most crucial enabler for household financial resilience followed by financial cushion at level two. However, education level and financial literacy were the foundation stones of the proposed model.

JEL classification: M40, M41

Keywords: Financial Resilience, Financial Security, Financial Cushion, Preparedness, Financial Literacy

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Introduction

During periods of financial difficulty, individuals and households face numerous challenges related to recovering from prolonged debt and the endurance of significant financial hardships. The ability to confront such challenges of negative income and expenditure shocks to recover quickly from adverse situations is known as financial resilience (McKnight & Rucci, 2020). It is the process of recovering from financial challenges, which may arise due to events such as job loss or the illness of a family member, relationship breakdown, damage to household possessions or because of natural calamities such as flood, earthquake, etc. (Klapper & Lusardi, 2020).

This concept is particularly important in developing countries, where financial exclusion is predominant, and can contribute to economic development (Salignac, 2021). However, the current definition of financial exclusion fails to consider the context and choice of individuals, leading to a need for a more holistic approach (Salignac, 2015). According to Cnaan et al. (2012), approximately 70% of adults in developing countries and 20% in developed countries face financial exclusion. Initiating with the knowledge of the vulnerabilities resulting from risk exposure and lack of resources helps in building financial resilience (Salignac et al., 2019). Hussain et al. (2019) suggested that to improve financial resilience, individuals need to be involve d in identifying their financial behaviors to become financially resilient. Sakyi-Nyarko et al. (2022) studied the concept of financial resilience and found that financial inclusion and savings contributes in building household financial resilience.

The Covid-19 pandemic has also significantly impacted financial resilience across various sectors. In the corporate finance realm, firms with greater adaptability and robustness, as well as higher financial reserves, have demonstrated superior performance (Rafailov, 2023). Yao and Zhang (2023) found that households with employment disruptions due to the pandemic, such as illness or fear of Covid-19, were the least financially resilient (Pomeroy et al., 2020). Because of the Covid pandemic, organizations were undergoing financial shocks, due to delays in payment processing leading to change in financial planning and making them uncertain.

In the context of Southwest Asian nations, households face increasing vulnerabilities due to economic volatility, geopolitical tensions, and rapid socio-demographic shifts. Financial resilience, defined as the ability of households to withstand and recover from economic shocks, is critical for sustaining livelihoods and promoting economic stability in these regions. Despite the significance of financial resilience, there is limited understanding of its key enablers in the literature and how these enablers interrelate to shape household outcomes. The diversity in socio-economic structures, cultural norms, and financial systems across Southwest Asia further complicates the development of effective strategies to enhance financial resilience. The lack of comprehensive frameworks that identify and evaluate the interconnections among determinants of financial resilience leaves policymakers and stakeholders ill-equipped to design interventions that address the unique challenges faced by households in this region.

Salignac et al. (2021) stressed the importance of becoming financially resilient focusing specifically on the developing nations. Upadhaya et al. (2020) highlights the importance of financial resilience in Southwest Asian nations by suggesting a gap towards governments' responses to disasters or economic instability. There have been studies in the past literature about financial resilience, but the present study is providing different dimensions and enablers that affect the financial resilience of an individual. For instance, Lusardi and Mitchell (2014) claimed that existing research has explored the concept of financial resilience but past literature has not discussed the individual responses towards economic shocks or crises. In the present dynamic and uncertain business outlook, organizations need to focus on such factors to sustain and grow. To address such issues, studies are focusing on the concept of financial resilience and well-being. Therefore, the current study focuses on identifying the key enablers of "financial resilience" in Southwest Asian nations- Oman, Saudi Arabia, Qatar, Kuwait, and the United Arab Emirates. These five countries were chosen because they represent key players in the Southwest Asian region with rapidly evolving industries, particularly in the domains of technology, innovation, and business.

The purpose of this study is to identify and assess the key enablers of household financial resilience in Southwest Asian nations; to analyze the inter-relationships among these factors. By integrating quantitative and qualitative methods, this research aims to develop a holistic framework that captures the multi-faceted nature of financial resilience. Specifically, the study seeks to examine the socio-economic, cultural, and institutional factors that influence household financial resilience in the context of Southwest Asia. The study also seeks to explore the dynamic interdependencies among these determinants to identify critical pathways that enhance or undermine resilience to answer the research questions which are as follows:

RQ_1: Which are the key enablers that influence urban households' financial resilience in Southwest

Asian Nations?

RQ_2: What are the contextual relations between the identified enablers?

RQ_3: What is the hierarchical framework of enablers urban households' financial resilience in Southwest Asian Nations?

Thus, the aim of the study is to provide evidence-based recommendations for policymakers, financial institutions, and community organizations to strengthen household financial resilience and promote inclusive economic development. In this study, the Interpretive Structural Modeling (ISM) approach is utilized to analyze the inter-relationships among the determinants of household financial resilience. The ISM method is particularly suited for this research as it enables the systematic identification of complex interdependencies and hierarchical structures among factors, providing a clear understanding of their relative influence and critical pathways. This approach is well-aligned with the study's objective of developing a holistic framework for financial resilience in Southwest Asian nations.

The manuscript is structured into 6 key sections to ensure a coherent and comprehensive presentation of the research. The introduction outlines the background, research problem, and objectives, setting the stage for the study. A detailed literature review follows, synthesizing existing knowledge relevant to household financial resilience in Southwest Asian nations. The methodology section explains the research design, data collection, and analytical approaches employed to achieve the study's objectives. The results section presents the findings, highlighting the key determinants and their interrelationships. This is followed by a discussion that interprets the findings considering existing literature and theoretical frameworks. The conclusion summarizes the study's contributions, implications for policy and practice, and directions for future research.

Literature review

According to Coaffee (2013), the concept of resilience originates from the Latin word "resilient," meaning to return to an initial status or revert to a previous state. Abbott-Chapman et al. (2008) defined resilience as "the ability of individuals to bounce back after adverse events and experiences, to adapt to changing circumstances and to deal with environmental stress". Financial resilience assesses individuals' ability to survive financial shocks, like unexpected expenses or income loss. Research often links financial resilience to individual financial indicators, such as financial literacy, savings, and debt levels (Erdem & Rojahn, 2022).

Existing literature has identified four channels by which financial inclusion can build resilience, the first is utilization of financial services for investments in face of risk (Cole et al., 2016) the second is investments in face of risk (Cole et al., 2016) the second is investments in risk mitigation (Brune et al., 2016), third is preparedness for shocks (Dupas et al., 2019; El-Zoghbi et al., 2017) and the last one is financial services for adverse events (Jack & Suri, 2014; Kass-Hanna et al., 2020). As per the recent research, there are four distinct approaches that affect financial resilience. Infrastructure, the institutional setting, social, financial, and economic factors are these approaches (Clark et al., 2024). Kakde et al. (2024) further explores the determinants of financial resilience-income stability, savings habits, and access to resources-as well as the influence of behavioural and financial literacy in identifying how people react to economic difficulties. Clark and Mitchell (2022) suggested that the households have a plan and strategy to bounce back against financial shocks in case of any crisis. Mcknight and Rucci (2020) identified lesser savings, more debt, and inefficient management of the household budget as reasons for less financial resilience. They also suggested that the household be financially literate and stable o help cope with any crises or financial shocks.

Key enablers of financial resilience

Nassuna et al. (2023) studied the role of financial resilience to sustain business during adversity and claimed that economic resources and financial knowledge are the important elements to remain financially resilient. Salignac et al. (2019) also supports the results of this study claiming Economic resources along with adequate knowledge of financial planning will help overcome difficult situations like the Covid-19 pandemic. Erdem and Rojahn (2022) surveyed European countries to validate the role of Financial Literacy in building financial resilience. The authors suggested improving financial literacy to fight against crises in the future. Hassan et al. (2018) also pointed out that to face any economic disturbance, financial literacy plays an important role in financial resilience. Liu et al. (2024) also agreed to the findings that financial literacy can reduce the negative consequences of any economic crises. Bottazzi and Oggero (2023) proved that people with higher financial literacy are more financially stable and resilient. Hamid et al. (2023) surveyed consumers in Malaysia and identified socio-demographic factors, financial cushion and financial knowledge and inclusion as the key determinants of financial resilience. Kaur et al. (2022) also supported the results by 'Socio Demography' as key enablers of financial resilience and well-being. Setiadi and Frederika (2022) stated that financial planning helps the household to identify a better preparedness framework for financial well-being. Such planning models will help the households to face the vulnerabilities or economic disaster. Adekola and Clelland (2020) found the establishment of preparedness among the vulnerable groups useful in preparing, re-

responding, and recovering from economic emergencies. Orhan (2016) also supported 'Preparedness' as a key enabler of financial resilience.

Kakde et al. (2024) analyzed data from a diversified sample and identified stable income, saving behavior and access to finance as the key factors that determine financial resilience when households face any economic uncertainty. Hamid et al. (2024) also proposed control of money and financial cushion as the enablers linked to financial resilience. The research claims that better money control and financial planning helps the household in becoming more financially resilient. According to Sharma (2022) managing money is a crucial and important measure for financial literacy which helps the individuals in becoming financially resilient, hence 'Control of Money' is the crucial enabler of financial resilience. Studies demonstrate that improving financial resilience requires Financial Planning (Setyorini et al., 2021). This is particularly evident when financial planning and financial literacy are combined, the relationship is mediated by household behavior (Setyorini et al., 2021). 'Financial cushion' has also been proposed in the literature as a critical component that supports financial resilience. According to Hamid et al. (2023), several sociodemographic traits and financial literacy were important factors that determined financial resilience in Malaysia. The study conducted by Białowolski et al. (2022) focused on the preventative function of financial literacy in safeguarding financial resilience in middle-aged and older adults, specifically it intended to prevent the drop in financial resilience. Kass-Hanna et al. (2020) demonstrated that 'Digital Literacy' helps the household in becoming more financially resilient. Lyons and Kaas-Hanna (2021) claimed that conventional financial literacy is not sufficient for the households to access digital services. Therefore, the authors suggested creating awareness and become knowledgeable enough to utilize digital services to become more financially resilient.

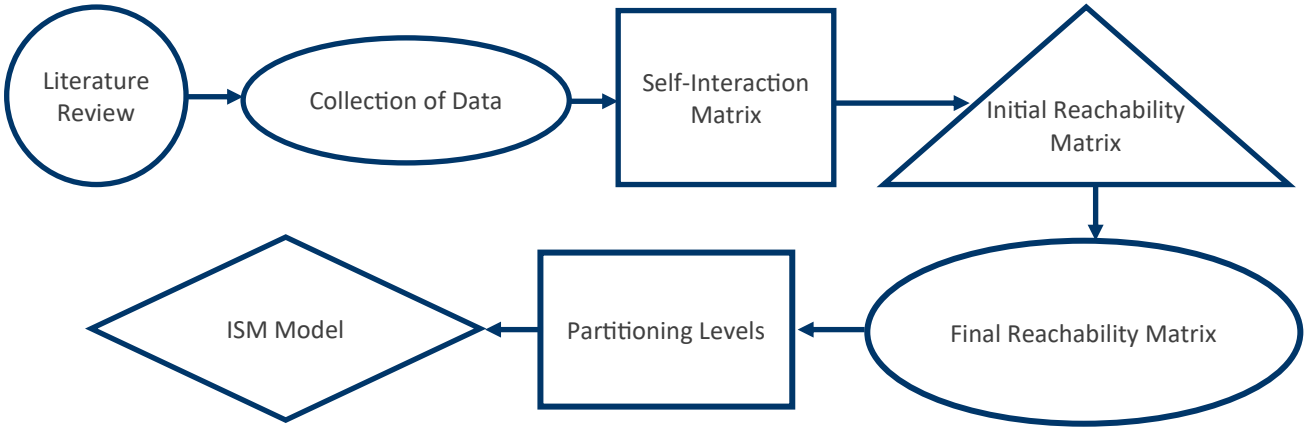
Belayeth Hussain et al. (2019) identified that 'Financial Inclusion' can favor the individuals with better financial resilience among those who are more vulnerable. Chitimira and Warikandwa (2023) studied the concept of digital financial inclusion and claimed that digital financial inclusion offers more prospects for rural women who do not have access to financial services. 'Financial Security' is also an important contributor to financial resilience as it highlights the significance of security protocols during any financial trade (Rohilla, 2024). Yap et al. (2023) claimed that households having access to financial services have better financial security and privacy. Daud et al. (2024) identified financial literacy and education as the significant elements of financial resilience. Also, Zhou et al. (2023) established a strong association between higher educational level and stronger financial literacy. Chatter and Makhtari (2023) supported the conclusion that financial education helps the small businesses to become more successful. Hence 'Education Level' is a key enabler of financial resilience. Past literature has focused on the use of wise financial practices to become financially resilient. Sharma (2022) also supports that control over money is an important contributor of financial literacy that supports financial resilience. Hamid et al. (2023) suggests having better financial inclusivity, literacy, and control of money as wise financial practices to become more resilient; justifying 'Financial Practices' as an important enabler of financial resilience.

Research methodology

Interpretive Structural Modeling (ISM) approach was used as the research methodology in this study. ISM can model the variables associated with the issue by capturing the inter-relationships among the variables. Interpretive Structural Modeling (ISM) utilizes practical knowledge and experience of respondents to develop a logical hierarchical structure of positioned variables (Rana, et al., 2022; Rana et al., 2019). Interpretive Structural Modeling (ISM) is a mainly used for recognizing and evaluating the relationships between a set of variables, especially in complicated systems where the connections between elements are not obvious. It is frequently employed in problem-solving, decision-making, and strategic planning processes, specifically in conditions where the connections amid elements need to be known systematically.

In this research work, the following steps were taken (Figure 1): (i) A literature review was done. (ii) Variables were identified that were linked to the topic of the current research. (iii) Twelve key enablers of financial resilience of urban households were determined. (iv) Data was collected from the respondents (v) A structural self-interaction matrix was constructed to demonstrate the pair-wise interactions. (vi) Initial reachability matrix was constructed using the structural self-interaction matrix. (vii) The initial reachability matrix was then transformed into the final reachability matrix. (viii) Of the levels were partitioned using the final reachability matrix. (ix) The ISM model was created.

Figure 1: ISM process used in this study



Source: Author's own work.

Variables selection

An extensive literature review was done to identify the variables. EBSCO, Google Scholar, Scopus and Web of science databases were used. The key words used in the current study are 'financial resilience,' 'factor impacting,' 'financial resilience,' 'enablers of financial resilience of urban households,' 'enablers of financial resilience of urban households in developing economies,' 'financial resilience in Asian nations' etc. An initial search was done for research articles using the abstract and title of the research article. Sixty-one articles were identified that looked relevant and of use in the current study.

After an initial search, we engaged in a detailed reading of each article. The aim was to remove irrelevant and duplicate content. After removing the duplicate content, we were left with fifty articles. Finally, we found twelve factors that looked crucial in attaining financial resilience. We then validated these factors with experts in the domain of 'Financial well-being.' These included veteran academicians and researchers in the area of 'Financial Behavior.' Once these experts validated the factors, we started creating the matrix for the collection of data for this study. Given below is the matrix that was used for data collection (Table 1).

Table 1: Matrix for data collection

Code i/j	Enabler	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12
E1	Economic resources	■											
E2	Financial literacy		■										
E3	Socio demography			■									
E4	Preparedness				■								
E5	Control of money					■							
E6	Financial planning						■						
E7	Financial cushion							■					
E8	Digital literacy								■				
E9	Financial inclusion									■			
E10	Financial security										■		
E11	Education level											■	
E12	Financial practices												■

Source: Author's own work.

Sample selection

The convenience sampling method was used to reach out to thirty individuals using our known sources in the given five Southwest Asian nations. These people resided in the large cities of Oman, Kuwait, UAE, Saudi Arabia, and Qatar. These were mainly people who were either self-employed and had small businesses or people who were working in organizations such as banks, hospitals, logistics companies, construction companies, oil companies, and technology companies. Out of thirty people whom we tried to connect with, eleven people expressed their lack of interest and non-availability for being part of the current study, so finally, we had consent from nineteen respondents who were willing to interact and contribute to the study.

We tried to identify people who knew English so that we could use the English language for conducting our interviews. From a total of nineteen respondents, three respondents resided in Oman, three respondents belonged to Kuwait, six respondents were from the UAE, five respondents resided in Saudi Arabia, and two respondents were from Qatar. These respondents had a family size of five to seven people. Their annual family income ranged between USD 45,000 to USD 65,000. Their education level included a bachelor's degree in engineering, a bachelor's degree in commerce and other technical qualifications. These respondents were in the age bracket of forty years to sixty years. Their work experience ranged between fifteen years to thirty-five years.

Data collection

As the respondents resided across five different countries in the Southwest Asian nations, Zoom sessions were attempted as a medium for data collection. Each session lasted approximately thirty minutes, involving 3-4 participants. Multiple zoom meetings were conducted. The initial two meetings were conducted to vet the chosen variables and subsequently seven meetings were conducted to understand from the respondent the pair wise influence of the enablers. The two meetings done for data collection were not quite successful as the respondents could not understand the data collection process and had significant difficulty in deliberations and discussions. We decided not to include the data from those meetings for the research analysis. We then conducted a mock drill over Zoom using four participants from India and asked the respondents to observe the interaction. This exercise made it easy for the respondents to understand the whole process. Thereafter, we conducted five subsequent meetings, one for each country. All five meetings were quite successful. These were long meetings as the significance of each pair of enablers was deliberated and concluded after reaching a consensus of the respondents over the deliberated pair of enablers. Collective opinions were subsequently recorded as a matrix shown above (Table 1).

Results

The results of the Interpretive Structural Modeling are presented through- Self-Structured Interaction Matrix, Initial Reachability Matrix, Final Reachability Matrix, Partitioning of Levels and the ISM Model.

Self-Structured Interaction Matrix

After finalizing the enablers financial resilience of urban households in Southwest Asian nations, a self-structured interaction matrix (SSIM) was prepared to represent the contextual relationships between each pair of enablers as communicated by the respondents (Bakshi et al., 2023; Agrawal & Yadav, 2024; Bakshi et al., 2024). Four symbols were used to represent the contextual relationship among the given pair of enablers. Table 2 was constructed to demonstrate the direction of interaction between the pair of chosen key enablers of financial resilience of urban households in South-West Asian nations.

Let`s say, the pair of enablers is represented with i and j, then the basic rule used was as follows: if enabler i impacted enabler j, then we represented it with symbol V; if enabler j impacted enabler i, then we represented it with symbol A; if enabler i and enabler j both impacted each other, then we represented it with symbol X and if enabler i and enabler j did not impact each other, then we represented it with symbol O. Through the respondent interaction and using the above four notations, SSIM for the enabler's financial resilience of urban households in Southwest Asian nations shown in Table 2 was constructed.

Table 2: SSIM

Code i/j	Enabler	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12
E1	Economic resources		A	A	V	O	X	A	O	V	V	A	A
E2	Financial literacy			O	V	V	V	V	V	V	V	A	V
E3	Socio demography				V	V	V	O	O	O	O	O	O
E4	Preparedness					V	X	V	A	A	V	A	A
E5	Control of money						V	V	O	O	V	A	V
E6	Financial planning							V	A	V	V	A	V
E7	Financial cushion								O	A	V	A	A
E8	Digital literacy									V	V	A	V
E9	Financial inclusion										V	A	V
E10	Financial security											A	A
E11	Education level												V
E12	Financial practices												

Source: Author's own work.

Initial reachability matrix

The subsequent step was that the Self-Structured Interaction Matrix (SSIM), shown in Table 2, was further converted into the Initial Reachability Matrix (IRM), shown in Table 3. IRM helps in capturing the direct influence relationships between elements in the system. It acts as the initial step before figuring transitive relationships (indirect influences) in the system. It sets the foundation for recognizing the hierarchical structure by discovering which elements influence which others. For constructing IRM (shown in Table 3) we used binary numbers (0 and 1) that replaced the four symbols V, A, X and O represented in SSIM. The basic rule used for replacing symbols with binary digits is given below: if SSIM had a relationship represented with symbol V that was replaced with 1 in (i, j) entry and 0 in (j, i) entry; if SSIM had a relationship represented with symbol A that was replaced with 0 in (i, j) entry and 1 in (j, i) entry; if SSIM had a relationship represented with symbol X that was replaced with 1 in (i, j) entry as well as (j, i) entry; if SSIM had a relationship represented with symbol O that was replaced with 0 in (i, j) entry as well as (j, i) entry.

Table 3: IRM

Code i/j	Enabler	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12
E1	Economic resources		0	0	1	0	1	0	0	1	1	0	0
E2	Financial literacy	1		0	1	1	1	1	1	1	1	0	1
E3	Socio demography	1	0		1	1	1	0	0	0	0	0	0
E4	Preparedness	0	0	0		1	1	1	0	0	1	0	0
E5	Control of money	0	0	0	0		1	1	0	0	1	0	1
E6	Financial planning	1	0	0	1	0		1	0	1	1	0	1
E7	Financial cushion	1	0	0	0	0	0		0	0	1	0	0
E8	Digital literacy	0	0	0	1	0	1	0		1	1	0	1
E9	Financial inclusion	0	0	0	1	0	0	1	0		1	0	1
E10	Financial security	0	0	0	0	0	0	0	0	0		0	0
E11	Education level	1	1	0	1	1	1	1	1	1	1		1
E12	Financial practices	1	0	0	1	0	0	1	0	0	1	0	

Source: Author's own work.

Final reachability matrix

After making the initial reachability matrix, the transitivity relations among the chosen enablers' financial resilience of urban households in Southwest Asian nations was measured and using that, the final reachability matrix (Table 4) was created. Transitivity explains the way interactions amid elements in a system can be expanded indirectly. In easier terms, if component A influences component B, and component B influences component C, then transitivity would infer that component A indirectly influences component C. Mathematically, transitivity can be communicated as: If A → B (A influences B) and B → C (B influences C), then it means that A → C (A influences C indirectly). In this study, in all the places where we found transitive relationship between two variables, we replaced the existing value 0 with 1*. We were able to identify twenty-six such incidents where a transitive relationship exists between two variables.

Table 4: FRM

Code i/j	Enabler	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12
E1	Economic resources		0	0	1	1*	1	1*	0	1	1	0	1*
E2	Financial literacy	1		0	1	1	1	1	1	1	1	0	1
E3	Socio demography	1	0		1	1	1	1*	0	1*	1*	0	1*
E4	Preparedness	1*	0	0		1	1	1	0	1*	1	0	1*
E5	Control of money	1*	0	0	1*		1	1	0	1*	1	0	1
E6	Financial planning	1	0	0	1	1*		1	0	1	1	0	1
E7	Financial cushion	1	0	0	1*	0	1*		0	1*	1	0	0
E8	Digital literacy	1*	0	0	1	1*	1	1*		1	1	0	1
E9	Financial inclusion	1*	0	0	1	1*	1*	1	0		1	0	1
E10	Financial security	0	0	0	0	0	0	0	0	0		0	0
E11	Education level	1	1	0	1	1	1	1	1	1	1		1
E12	Financial practices	1	0	0	1	1*	1*	1	0	1*	1	0	

Source: Author's own work.

Partitioning of levels

Five iterations were performed to do portioning of levels (Table 5 and Table 6). We divided the Final Reachability Matrix into various levels (importance levels) for the development of hierarchical structure of the enablers of financial wellbeing of urban households in Southwest Asia. To attain various levels, we formed reachability set, antecedent set and intersection set. The reachability set was composed of the enabler itself and the other enabler influenced by it. The antecedent set was composed of the enabler itself and another enabler that affected it. The combination of the reachability set and antecedent set reveals the intersection set.

Table 5: Partitioning of the levels

Code i/j	Enabler	Reachability Set (RS)	Antecedent Set (AS)	RS ∩ AS	Level
E1	Economic resources	5,12	2,3,5,8,11,12	5,12	III
E2	Financial literacy	2	2,11	2	V
E3	Socio demography	3	3	3	IV
E4	Preparedness	5,12	2,3,5,8,11,12	5,12	III
E5	Control of money	5,12	2,3, 5,8,11,12	5,12	III
E6	Financial planning	5,12	2,3,5,8,11,12	5,12	III
E7	Financial cushion	1,4,6,7,9	1,2,3,4,5,6,7,8,9,11,12	1,4,6,7,9	II
E8	Digital literacy	8	2,8,11	8	IV
E9	Financial inclusion	5,12	2,3,5,8,11,12	5,12	III
E10	Financial security	10	1,2,3,4,5,6,7,8,9,10,11,12	10	I
E11	Education level	2,11	11	11	V
E12	Financial practices	5,12	2,3,5,8,11,12	5,12	III

Source: Author's own work.

The creation of levels has taken place based on the common factor in the reachability as well as intersection sets. For instance, Financial Security was assigned level 1, Financial Cushion was assigned level 2, Economic Resources, Preparedness, Control of Money, Financial Planning, Financial Inclusion and Financial Practices were assigned level 3, Socio Demography and Digital Literacy were assigned level 4, Financial Literacy and Education level were assigned level 5, as shown in Table 6. All the iterations have been demonstrated in the annexures.

Table 6: Levels assigned to enablers of Financial Resilience in urban households

Iteration Number	Level	Enabler
1st	I	Financial security (E10)
2nd	II	Financial cushion (E7)
3rd	III	Economic resources (E1)
		Preparedness (E4)
		Control of money (E5)
		Financial planning (E6)
		Financial inclusion (E9)
		Financial practices (E12)
4th	IV	Socio demography (E3)
		Digital literacy (E8)
5th	V	Financial literacy (E2)
		Education level (E11)

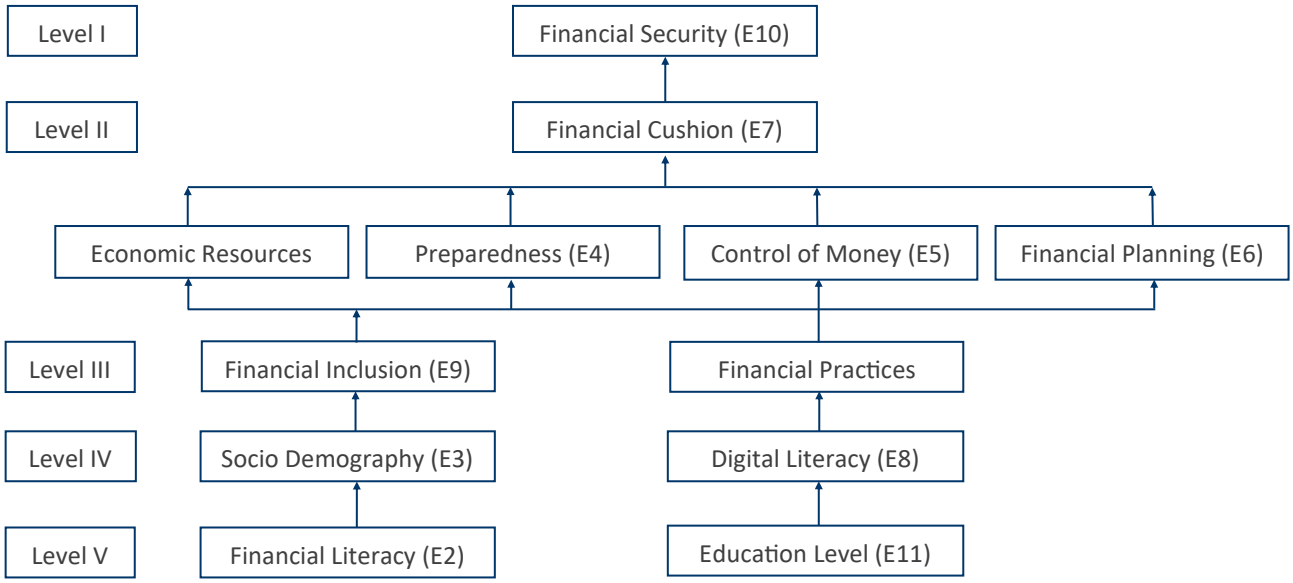
Source: Author's own work.

ISM Model

The Interpretive Structural Modeling (ISM) based model (Figure 2) was constructed using Table 6. The ISM based model is an extremely powerful tool which makes it possible to comprehend and manage complex issues. The ISM model offers valuable insights to the decision makers by helping in analyzing the hierarchical relationships among the studied variables. The ISM model displays that Financial Literacy (E2) and Education Level (E11) form the foundation of the model and

influence all other enablers. The most prominent enabler is Financial Security (E10) at level 1 followed by Financial Cushion (E7) at level II. The findings show that Financial Literacy (E2) and Education Level (E11) at level V led to Socio Demography (E3) and Digital Literacy (E8) at level IV. The E3 and E8 lead to Financial Inclusion (E9) and wise Financial Practices (E12), Economic Resources (E1), Preparedness (E4), Control of Money (E5) and Financial Planning (E6) at level III and they in turn lead to Financial Cushion (E7) and E7 led to Financial Security (E10) at level 1.

Figure 2: ISM Model



Source: Authors' own work.

Discussion

The results demonstrated (Figure 2) that Financial Security (E10), is assigned level 1 and thus is the most prominent enabler of Financial Resilience among the households of Southwest Asian countries. The result signifies its central and indispensable role in advancing long term financial sustainability among households. It serves as the foundational element without which the effective implementation of other contributing factors such as financial inclusion and financial planning becomes challenging. Financial security has the potential to catalyze other contributing factors and elements in the ISM model.

Financial Cushion (E7) was assigned level 2, this formed the base for the enabler - Financial Security (E10) at level 1. It shows that "Financial Cushion" serves as the cornerstone upon which the enablers at level 1 are constructed. It shows that, financial cushion is a prerequisite for the effective execution of financial security at Level-1 that drive financial resilience among households in Southwest Asian countries.

Enablers - Economic Resources (E1), Preparedness (E4), Control of Money (E5), Financial Planning (E6), Financial Inclusion (E9) and Financial Practices (E12) are assigned level 3, thus they formed the base for level 2, which signifies their foundational role in shaping long term financial sustainability among households. These enablers collectively provide the essential support structure required for successful financial cushions and security in the context of households of Southwest Asian countries. Thus, these can be said to be the foundational elements driving financial resilience among the households in these nations. They collectively form the bedrock upon which financial resilience initiatives for long term financial sustainability within households are built, in line with the past studies such as (Setyorini et al., 2021; Sakyi-Nyarko et al., 2022).

Enablers at Level-2 such as economic resources, preparedness, control of money, financial planning, financial inclusion, and financial practices depend upon the availability of financial cushion for their successful execution. Socio Demography (E3) and Digital Literacy (E8) are assigned level 4 and formed the basis for enablers at level 3 signifies their role as a supporting and fundamental element within the ISM model. It shows that the socio-demographic profile of the households and their digital literacy level impact the enablers at level-3. They are playing an important role in financial cushioning and financial inclusion for the successful financial sustainability among the households. It implies that the financial markets, advisors, and govern-

government recognize the importance of socio demography and digital literacy of the people in enabling financial resilience among them.

Financial Literacy (E2) and Education Level (E11) assigned level 5, are high-level, comprehensive components that collectively form a holistic approach to Financial Resilience. Their position at level 5 underscores the vital nature of this approach for households to effectively engage in financial resilience practices. Assigning these two enablers to level 5 indicates that they occupy the highest and most foundational level within the ISM model. They serve as the fundamental building blocks upon which the entire Financial Resilience framework for long term financial sustainability among the households in Southwest nations of Asia is constructed.

Conclusion

It is crucial to examine the key enablers of financial resilience in the chosen Southwest countries of Asia, so that national economies may be stabilized for the long term. Findings like sound government policies, efficient resource utilization, and availability of resources have an important role in regulating the economic volatility risks and its capability to handle external shocks. Thus, stressing sustainable financial management practices allows these countries to mobilize foreign investments, develop necessary infrastructures and improve population standards. Further, it supports social inclusion and the ability to preserve resources so that development impacts are shared, and future generations are provided for. It means that a multi-colored strategy is the only way to improve the economic status of a country and bring it to the definitive stage of modernization, while the world economy continues to integrate. This study provides valuable insights for various stakeholders, including policymakers, financial service providers, and community organizations in Southwest Asian countries. By shedding light on the critical factors that contribute to household financial resilience and examining their interconnections, the research offers a foundation for designing effective strategies. Policymakers can utilize these insights to formulate policies aimed at reducing household economic vulnerabilities. Financial institutions can use the findings to develop customized financial tools and services that strengthen resilience. Additionally, community organizations can focus on educational initiatives and support programs to empower households in managing economic uncertainties, ultimately contributing to long-term economic stability and sustainable development.

While this study makes important contributions, certain limitations must be acknowledged. The findings are based on specific datasets and contexts within Southwest Asia, which may restrict their applicability to regions with different economic or cultural characteristics. Furthermore, the ISM approach, though useful for exploring interdependencies, involves subjective judgments that could influence the interpretation of the results. Future research could address these limitations by using diverse datasets, broadening the study's geographical scope, and employing additional analytical techniques to validate and enhance the robustness of the findings.

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Appendix

Appendix 1: Iteration 1

Code i/j	Enabler	Reachability Set (RS)	Antecedent Set (AS)	RS ∩ AS	Level
E1	Economic resources	1,4,5,6,7,9,10,12	1,2,3,4,5,6,7,8,9,11,12		
E2	Financial literacy	1,2,4,5,6,7,8,9,10,12	2,11		
E3	Socio demography	1,3,4,5,6,7,9,10,12	3		
E4	Preparedness	1,4,5,6,7,9,10,12	1,2,3,4,5,6,7,8,9,11,12		
E5	Control of money	1,4,5,6,7,9,10,12	1,2,3,4,5,6,8,9,11,12		
E6	Financial planning	1,4,5,6,7,9,10,12	1,2,3,4,5,6,7,8,9,11,12		
E7	Financial cushion	1,4,6,7,9,10	1,2,3,4,5,6,7,8,9,11,12		
E8	Digital literacy	1,4,5,6,7,8,9,10,12	2,8,11		
E9	Financial inclusion	1,4,5,6,7,9,10,12	1,2,3,4,5,6,7,8,9,11,12		
E10	Financial security	10	1,2,3,4,5,6,7,8,9,10,11,12	10	I
E11	Education level	1,2,4,5,6,7,8,9,10,11,12	11		
E12	Financial practices	1,4,5,6,7,9,10,12	1,2,3,4,5,6,8,9,11,12		

Source: Author's own work.

Appendix 2: Iteration 2

Code i/j	Enablers	Reachability Set (RS)	Antecedent Set (AS)	RS ∩ AS	Level
E1	Economic resources	1,4,5,6,7,9,12	1,2,3,4,5,6,7,8,9,11,12		
E2	Financial literacy	1,2,4,5,6,7,8,9,12	2,11		
E3	Socio demography	1,3,4,5,6,7,9,12	3		
E4	Preparedness	1,4,5,6,7,9,12	1,2,3,4,5,6,7,8,9,11,12		
E5	Control of money	1,4,5,6,7,9,12	1,2,3,4,5,6,8,9,11,12		
E6	Financial planning	1,4,5,6,7,9,12	1,2,3,4,5,6,7,8,9,11,12		
E7	Financial cushion	1,4,6,7,9	1,2,3,4,5,6,7,8,9,11,12	1,4,6,7,9	II
E8	Digital literacy	1,4,5,6,7,8,9,12	2,8,11		
E9	Financial inclusion	1,4,5,6,7,9,12	1,2,3,4,5,6,7,8,9,11,12		
E11	Education level	1,2,4,5,6,7,8,9,11,12	11		
E12	Financial practices	1,4,5,6,7,9,12	1,2,3,4,5,6,8,9,11,12		

Source: Author's own work.

Appendix 3: Iteration 3

Code i/j	Enabler	Reachability Set (RS)	Antecedent Set (AS)	RS ∩ AS	Level
E1	Economic resources	5,12	2,3,5,8,11,12	5,12	III
E2	Financial literacy	2,5,8,12	2,11		
E3	Socio demography	3,5,12	3		
E4	Preparedness	5,12	2,3,5,8,11,12	5,12	III
E5	Control of money	5,12	2,3, 5,8,11,12	5,12	III
E6	Financial planning	5,12	2,3,5,8,11,12	5,12	III
E8	Digital literacy	5,8,12	2,8,11		
E9	Financial inclusion	5,12	2,3,5,8,11,12	5,12	III
E11	Education level	2,5,8,11,12	11		
E12	Financial practices	5,12	2,3,5,8,11,12	5,12	III

Source: Author's own work.

Appendix 4: Iteration 4

Code i/j	Enabler	Reachability Set (RS)	Antecedent Set (AS)	RS ∩ AS	Level
E2	Financial literacy	2,8	2,11		
E3	Socio demography	3	3	3	IV
E8	Digital literacy	8	2,8,11	8	IV
E11	Education level	2,8,11	11		

Source: Author's own work.

Appendix 5: Iteration 5

Code i/j	Enabler	Reachability Set (RS)	Antecedent Set (AS)	RS ∩ AS	Level
E2	Financial literacy	2	2,11	2	V
E11	Education level	2,11	11	11	V

Source: Author's own work.