



## Identifying and prioritizing the factors affecting the financing of social businesses through the banking industry

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### ABSTRACT

Due to the importance of financial structure in various fields, recognizing the major factors that affect the financing of projects and firms, is significant and important so that each company can take into account those determining and effective factors and the extent of impact. Each should plan and decide on their financial structure. The present study has identified and categorized the factors affecting the financing of social businesses through the banking industry. This research is applied and methodologically mixed. In the qualitative stage; the data collection tool was a qualitative and in-depth interview with experts. The statistical population included banking industry experts with a sample size of 15 people by purposeful judgment sampling to reach the theoretical saturation point. Findings were analyzed using data foundation theory. In a quantitative step; the data collection tool was a researcher-made questionnaire and the statistical sample of the research included 150 bank managers in the country. Data analysis was performed by using structural equation modeling, SPSS and Smart PLS software. Then, using the obtained factors as sub-criteria and main components as pairwise comparison criteria, the ranking of social business financing instruments by AHP method according to the opinions of experts was shown so that the highest rank in terms of the factors required to finance social businesses through the banking industry is related to the factor of consequences and then respectively to the strategies, the pivotal phenomenon, the intervening conditions, the grounding conditions and finally the causal conditions.

**Keywords:** Identification, Prioritization, Financing, Social Business, Banking Industry



## 1. Introduction

Economic development as one of the most basic social goals has always been one of the main priorities of nations to achieve growth and prosperity. But how to achieve this goal is one of the central questions. Throughout history, land and labor were considered the most important factors of economic development, but over time and with the advent of the Industrial Revolution, the role of productive capital as the engine of development was considered and financial capital became important to provide productive capital. Today, the development of social business as a social and humanitarian mission is considered as one of the solutions to solve some social problems and harms. International financing and domestic financing of social businesses are completely different (Ekbali, 2019). Banking financing system is one of the subsystems of the national innovation system whose primary responsibility is to finance the technology development of countries. Technology financing is defined as the process of financing innovative businesses. Financing business technology activities with appropriate forms of financial support is an issue that governments face (Shawardi, 2019). Choosing how to finance is one of the most important decisions made by business managers (Jones, 2017). Social businesses lead to job creation and play an important role in the country's economy. Undoubtedly, social business has a very key role in the economic and sustainable development of all societies. Today it is one of the indicators of development in developing countries. Social business is the most important source of innovation, job creation and development. The development of small and medium-sized businesses is the key to the economic development of the next decade. Studies have shown that social businesses affect the global economy through four channels: entrepreneurship, innovation and technology change, industry dynamics, and ultimately job creation and income growth. In the last two decades, there have been many changes in content and quality in global markets; and the nature of social business has undergone fundamental changes; in parallel, the production-oriented period has come to an end and the customer-centric period is shaping (Mortezaniz, 2019). In social business, they are recognized in most countries as important elements in socio-economic development. These businesses are especially important in creating job opportunities with low

investment, regional development, organizational development of companies based on the principles of technology, product innovation and the creation of new methods (Lyon, 2019). A look at the socio-economic system in many developed and newly developed countries of the world shows that creating and supporting social businesses is one of the main priorities in the economic development programs of these countries. Although these enterprises need less investment, they are more profitable and play an important role in creating employment and a favorable environment for innovation and inventions, and increasing exports in these countries. However, despite the great importance of social businesses in economic development, many studies have not yet been conducted on how to finance these businesses and research in this area seems necessary.

## 2. Theoretical framework of the study

### Financing

In Anostopedia's specialized dictionary, financing is referred as the provision of funds for business, purchasing or investment activities. The business of financial institutions and banks is financing; so that they provide the capital needed by businesses, consumers and investors to achieve their goals. The use of financing is essential in any economic system; because it provides an opportunity for businesses and companies to carry out their activities with speed and easier mechanism.. The amount of capital and human resources are the most important support for entrepreneurs. The discussion of choosing financial resources and justifying the choice of the best capital structure in different business conditions, has opened the ground for examining the management's attitude in the selection and proper distribution of financial resources in the financial literature (Etemadi, 2014). Financing is the art and science of cash management. The purpose of financing is investment, profitability, risk reduction and meeting the economic and social needs of business (Azizi, 2017).

### Social business

A social entrepreneur is a person who seeks social or public benefit through entrepreneurial behavior instead of gaining personal wealth (Rahimian, 2013). Just as profit entrepreneurs are recognized as agents of change in business and society, social entrepreneurs also act as

agents of social change and take advantage of opportunities that are overlooked by others to grow society with new approaches and creative solutions work to improve their situation (Dies, 2001). Therefore, the process of identifying, discovering, creating, evaluating and exploiting opportunities only to solve social problems and concerns without expecting personal material interests is called social entrepreneurship. Motivated by a new kind of pragmatic, innovative and far-sighted activities and their networks, social business is inspired by a mix of business, philanthropy and social movement models to find solutions to social problems and Provide a new and sustainable social value (Nichols, 2006). The most important characteristics of social entrepreneurs are: 1. They are the agents of change in the social sector, 2. They define values for the creation and maintenance of a social mission, 3. These people diligently seek to discover and pursue new opportunities to achieve the goal, 4. They are constantly involved in the process of innovation, learning and adaptation; 5. They work fearlessly and without being limited by the resources available; and 6. They are accountable to their audience.

### **3. Literature review**

Shahrabi (2019) studied the modeling of factors affecting the financing of start-ups with the Dimtel technique. In this study, the factors affecting the financing of startups with Fuzzy Delphi approach, 6 components with sub-criteria were identified and extracted. Then, using Dimtel technique, in addition to prioritization between components, causal relationships between the main components effective in financing startups have been determined. Finally, out of the 6 main components in financing these firms, 4 components are the risk factors in the idea, market specificity, idea specificity and financial specificity as the cause, respectively, and 2 legal factors and infrastructure features along with each subset as the effects of the financing of startups have been identified. By investigating the effective factors in financing the debt-to-equity ratio of petrochemical companies; Julla (2019) considered before and during the currency crisis. The findings of this research indicate that the factors affecting financing such as annual growth of total assets, total asset logarithm, rate of return on assets, share of fixed assets in total assets, share of depreciation of total assets, share of income

tax on total assets, income fluctuations and rates of Currency have a meaningful relationship with the capital structure component of the debt-to-equity ratio. In addition, the debt-to-equity ratio has a negative and meaningful relationship with the rate of return on assets, taxes due to financial expenses, income fluctuations and exchange rate fluctuations. Daei (2018) gave a comprehensive overview of the concepts, goals, methods and factors affecting corporate financing.. Akbolau (2019) examined models for financing social businesses. In order to achieve this goal, methods of logical analysis, expert evaluation, appropriate methods and system analysis, composition, induction and analogy were used. In addition, he analyzed the research literature of the social entrepreneurship development issues. Approaches to the definition of social entrepreneurship and its differences from expert organizations and traditional businesses were also described. In addition, a comparative analysis of European and American models of social business financing was presented. The surveys of financial support for social businesses at all levels of government were more active than that of the United States. As a result, the transparency of the investment of such businesses with an open accounting system should be accompanied by the future development of social businesses. Zhang (2019) examined the financing of the social business research and development sector in China. By using the specific and new data sets from Chinese private companies, the present study examines how private companies access bank loans to finance their innovative activities. The results show that political affiliation, not membership in a state-owned business association, largely determines the innovations of private companies by providing access to bank loans. The study showed that the Chinese government needs to continue to promote a favorable financing environment and support innovative activities. Lyon (2019) examined the financing of social businesses and the demand for social investment. In this article, he argues that social investors are offering increasing amounts of financing for social businesses that share common social and business goals. Of course, social businesses are still seeking funding from banks, arguing that social investors need to focus on the market gap that is happening for smaller start-up businesses. Sicarino (2019) conducted a study entitled "Social Innovation and the Entrepreneurial Process" using the typology of

startups through Younes' social business model. The purpose of this study was to identify the similarities and differences between the characteristics of typologies and the reality of social businesses and also to deepen the identification of characteristics and motivations in this entrepreneurial process. Social business, according to Mohammad Younes (the Nobel Peace Prize winner in 2006 for the creation of the Grameen Bank), forms a single business model of positive effects on the social environment and economic and financial sustainability, without the distribution of dividends. These are for the expansion of their own businesses or new initiatives of the same nature. Thus, social trades limit the maximization of social wealth and the concentration of individual income. The results obtained in the field of social business show more results following the social constructive type. This study helps entrepreneurs and investors gain a better understanding of social business by aligning the business models of the people who want to be supported and the evaluators' decisions about what jobs they want to invest. Fianto (2019) examined the determination of non-executive financing factors in Islamic micro-financing businesses. The aim of this study was to determine the factors of non-executive financing factors in micro-financing businesses in Indonesia. Using logistic regression, this study obtained data from 140 clients, of which 90 were in good financing position and 50 were in poor financing position. The results showed that age, gender, occupation and type of contract affect the non-performance of Islamic business owners in Indonesia. Possible regression confirmed these results. Mortezaiz (2019) examined the limitations of financing in developing countries. In this study, the World Bank business level data was used to investigate the effect of the severity of family relationships on the financing of individual businesses in 13 developing countries. Financing constraints reflect the research inference of businesses in terms of access to finance. The strength of family ties shows the extent of the relationship between relatives and family and affects the choice of company between formal and informal financing. Of course, family financing is also associated with benefits and costs and reflects social preferences. These results suggest that stronger family ties are associated with financing constraints for most firms in developing countries, but it is quite clear that they have beneficial effects on financing constraints in

smaller countries with smaller companies and in densely populated countries. Shawardi (2019) examined a multi-objective probability model for optimizing the technology portfolio with respect to social impact and different types of financing. Due to limited financial resources, the priority of technology fields for financing is an important issue for government organizations. Innovation and development of technology, as a cornerstone of economic development of countries, requires decisions to provide the optimal form of financial resources by the government. The results show that choosing small and medium-sized businesses for financing is the best option when increasing employment. Jones (2017) examined external financing and the role of financial friction on businesses. In his article, he noted that there are substantial cross-cutting changes in the use of foreign financing by businesses.

#### **4. Research methodology and data analysis**

The overall purpose of this study is to design a financing model for social businesses through the banking industry. The present study is based on the objectives of the research, of an applied type; the method of doing it is descriptive survey; and the method of data collection was of field and library one. The research was conducted within the framework of a qualitative approach and using the data based theory method. Thus, the analysis begins with "open coding" (identification of categories, characteristics, and dimensions), continues with "axial coding" (examining conditions, strategies, and consequences), and with "selective coding" (shaping theory around a category) (Cresswell, 1998). The statistical population of this study is the experts of the country's banking industry in 2010 who have been considered for interview. In the first phase, the main factors and indicators of social business financing were extracted through the banking industry and the structure of the model was explained in general. In the second phase, which was performed to test the model, the results were analyzed using exploratory and confirmatory factor analysis with a sample of 150 bank managers. In the third phase, after identifying the important factors and indicators of social business financing through the banking industry / prioritization and the importance of model variables was done through an AHP questionnaire which was

designed with a sample of 15 bank managers. To finance social businesses through the banking industry, it will use the Analytic Hierarchy Process (AHP) technique. In this technique, after constructing the hierarchy of the decision problem, a questionnaire (pairwise comparisons) including a number of questions according to the hierarchical structure was prepared and provided to the sample. The basis of this technique is based on the matrix of pairwise comparisons in which the sample people compare the criteria in pairs and express their judgment regarding the degree of preference over each other by having the numbers 1 to 9. The questionnaires were designed according to the hierarchical structure. The target level in this questionnaire is "ranking the components of financing social businesses through the banking industry". For the validity and reliability of AHP questionnaires, the inconsistency rate (Cr) must be calculated in relation to each matrix and in case of inconsistency within the allowable limit ( $Cr < 0.1$ ), the questionnaire must be returned to the relevant statistical community to request comment and re-comment and correction. This continues until the mismatch rate for each pairwise comparison matrix is within the allowable range. In order to perform pairwise comparisons and identify and rank the required indicators, to finance social businesses through the banking industry, a pair of questionnaires were designed to compare the indicators and sub-indicators, which were introduced in the following study.

### **Encoding qualitative data**

In this research, based on the initial, open, central and selective coding (selective), and the indicators related to the financing of social businesses through the banking industry, a model in this field has been designed. It should be noted that, in this research the process of data collection and analysis has been of zigzagging and simultaneous one. Data collection has continued until the researcher reaches the point of saturation in the data and the concepts related to the financing of social businesses through the banking industry have been repeated by various interviewees and no new material has been added to the model. Partial data analysis, questioning and comparative analysis are the main methods of analysis in data theory. To develop a theoretical model of branding in

the insurance industry, the researcher has continuously and purposefully moved between open and central coding during the data analysis process. concepts.

### **5. Research results and findings**

To improve the process of classifying codes into categories, the theoretical comparison tool proposed by Strauss and Corbin in 1989 has been used. Based on this, the final extracted codes were classified into 120 concepts, 24 categories and 6 main axes. The categories that were analyzed in the early stages created views, thoughts, and ideas in the mind of the researcher to raise them in later questions and interviews. By conducting these interviews and analyzing the data, the researcher gained a deeper perspective and understanding of the interviewees' experience. Then, reciprocating motion is performed between the categories and features identified in the initial stage of open coding. New concepts identified in recent interviews were added to the identified categories until the categories reached theoretical saturation. If necessary, some categories were renamed and connections were made between different categories and subcategories. Classification and selection of categories and axes were done with the cooperation of experts in the field of marketing and insurance. Each of the experts did this independently. The researcher then summarized their views and finalized the cases.

**Table 1. Final Implications (Extracted from Interviews)**

Category type	Category	Concepts
causal conditions	revenue generating	revenue from production, sales and distribution, market development, time and place of sale, reputation and credibility of the company
	Legal obligations of banks and financial diversification	Interest rates and banks' ability to collect deposits, optimal allocation of social business resources, innovation of financial instrument
	Investment and competitive environment in the banking network	Personal financing of the employer, board of trustees, public support and candidates for various types of financing, domestic participation bonds, foreign participation bonds, Islamic bonds (sukuk), foreign exchange reserve fund, banks' attention to customer needs assessment, banks' need to attract deposits
Pivotal phenomenon	Individual entrepreneurial capacity	Education, work experience, entrepreneurial experience, entrepreneurial thinking
	Business platform building	Improving the country's economic situation, helping to transfer knowledge and technology from abroad, removing profits and revenues from the intermediate and intermediary sector
	Sustainable social business	Collective financing, micro-borrowing, social business (no dividends)
	Maximizing benefits	Reduction of production costs, profit incentives
Strategies (actions and interactions)	Social mechanisms of value creation	Direct investment for sustainable businesses, access to the investment market in social business, responsible investment in the field of environment, strengthening the working group in the banking network, social media in designing new products on the development of banking services
	Agile banking executive system	Establishment of an independent banking supply unit in the banking network, dynamic planning, increase of rating agencies
	Implementation of an integrated banking control and supervision system	Continuous monitoring of performance reports in social businesses, organizing development projects and directing them to the banking network
	Attracting investors	Use sponsor for new projects, involve people with high capital in new projects by accepting risk
	Sale of shares	Selling part of the company as shares, forming a consortium for economic projects by selling shares
grounding factors	Informal institutions in the banking network	Tendency to take risks, collectivism (common economic system)
	The position of financing in banking policies	Perspectives of senior bank managers, continuous view of business financing, coordination in the rules of financing in the banking network
	Environmental constraints	Risk and return, rules and regulations, compliance with banking rules
	Awareness and expertise of bank employees	Awareness of bank employees on information, instructions and methods of financing businesses
Intervening factors	Enterprise features	Geographical location of the company, company life, company history, company size
	Political laws	Paying attention to the principles of resistance economy, political conditions of the country
	Sanctions	International restrictions, financial restrictions, comprehensive sanctions, impossibility of transfer
Consequences	Economic sustainability	Product performance, production volume, market fluctuations, access to production facilities and resources, development of fintechs in the social field by the banking industry, development of social banking infrastructure, development of digital infrastructure in the banking industry
	Economic growth and development	Employment, creating added value, improving productivity, maximizing economic benefits
	social stability	Trust in competitors and other businesses, social communication, development of social banking infrastructure, development of banking ecosystem and participatory typology model, creation of a culture of responsibility between banks, development of banking information security in the field and social. Quality of service, general satisfaction, individual efficiency.
	Environmental sustainability	Improving energy consumption, environmental protection, environmental risk management of projects
	Grounding the realization of the social mission and growth of the banking industry	Improving the social responsibility of the banking network, expanding the allocation of resources of banks, easy access of applicants for facilities

### Measurement model fit (confirmatory factor analysis)

The measurement model relates to a part of the general model that includes a variable with related questions. The following figures show the measurement models of the variables of the present research model. In fitting measurement models, one of the goals is to check the appropriateness of the

factor loads of the questions in each questionnaire. Basically, factor loads with a standardized value of more than 0.5 are good. This case shows that the item under study has a significant effect on the measurement of the relevant variable. If the factor load of items is less than 0.5, it is excluded from the analysis process.

**Table 2. Factor load and meaningful number of items**

variable	feature	factor load	meaningful number
causal conditions	revenue generating	0.78	20.55
	Legal obligations of banks and financial innovation	0.82	34.13
	Financial innovation in order to provide facilities	0.66	10.35
	Investment	0.74	29.31
pivotal phenomenon	Individual entrepreneurial capacity	0.61	12.04
	The economic situation of the country and business platform	0.75	26.81
	Sustainable social business	0.83	52.47
	Reducing production costs	0.60	13.03
	Maximizing benefits	0.82	44.82
Strategies (actions and interactions)	Social mechanisms	0.78	42.14
	Establishment of an independent banking supply unit in the banking network	0.68	19.25
	Organizing development plans and directing them to the banking network	0.70	20.83
	Using a sponsor for new projects	0.70	23.93
	Selling part of the company as shares	0.60	16.27
grounding factors	Common economic system	0.61	15.93
	The position of financing in banking policies	0.75	38.64
	Risk and return on financing	0.80	41.50
	Banking rules and regulations	0.73	19.25
	Instructions and methods of financing	0.82	40.66
Intervening factors	Company life, (company history)	0.78	39.53
	size of the company	0.82	48.54
	Political situation of the country	0.72	25.25
	Sanctions	0.67	16.90
Consequences	Economic sustainability	0.89	71.49
	Economic growth and development	0.87	83.79
	social stability	0.82	48.31
	Environmental sustainability	0.67	17.83
	Expanding the allocation of resources to banks	0.76	28.13

It can be seen that the factor load of all items related to structures is appropriate and more than 0.5. Also, the meaningful number related to all items is greater

than 1.96, so it is concluded that all items related to variables have a meaningful impact on their measurement.

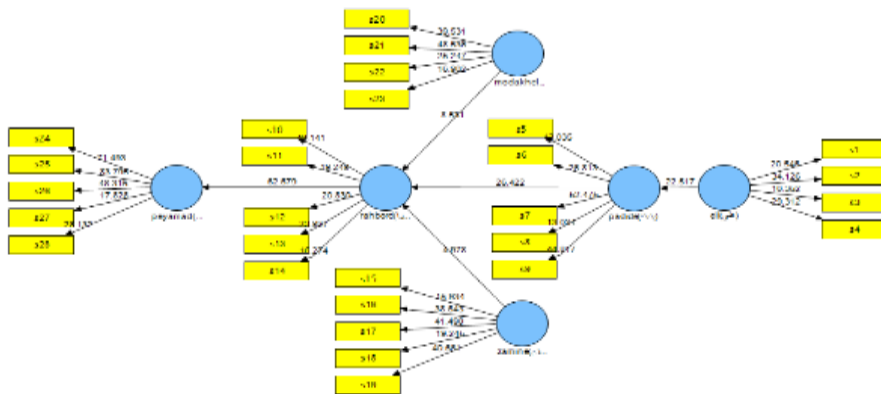


figure 1. Measurement model in a meaningful way

The GOF criterion is used to determine the overall quality of the model. This criterion is related to the general part of structural equation models, which means that by this criterion, the researcher can control the general part fit after examining the fit of the measurement part and the structural part of his general research model. The GOF value is calculated by using the following formula :

$$GOF = \sqrt{\text{Communalities} \times R^2}$$

**Relationship(1)**

Where in, the communality criterion, which measures the degree of variability of indices by their respective structure, is obtained by averaging the second-order values of the impact of the index and the related structure, which is the factor load. If the value of the GOF index is more than or equal to 0.01, it indicates that the quality of the measurement model is poor, if the GOF index is greater than or equal to 0.25 it indicates that the model is of average quality, and if the value of this index is

greater than or equal to 0.35, it indicates that the model has a strong quality. The value of GOF index for the research model is calculated to be 0.615, which is greater than 0.45 and indicates the strong quality of the overall model, and it can be said that the structural equation model has a strong quality. According to the results, the quality of the measurement model, structural model and general model are confirmed.

**Ranking of required criteria and indicators, financing of social businesses through the banking industry using AHP technique**

The Analytic Hierarchy Process (AHP) requires breaking a decision problem with multiple indicators into a hierarchical set of levels. The first level represents the main goals of the decision-making process. The second level represents the major indicators (which may be broken down into sub-indicators at a later level). The last level provides decision options.

**Table 3. Factors needed to finance social businesses through the banking industry**

The purpose of the decision Financing social businesses through the banking industry						
main criteria	consequences	strategies	grounding conditions	pivotal phenomena	intervening factors	causal conditions
Sub-criteria	1. Economic sustainability. 2. Economic growth and development 3. social stability 4. Environmental sustainability.	1. Social mechanisms of value creation. 2. Agile banking executive system. 3. Implementation of integrated control system	1. Investment and competitive environment in the banking network. 2. revenue generating 3. environmental	1. Individual entrepreneurial capacity. 2. business platform. 3. Sustainable social business. 4. Maximizing	1. Sanctions. 2. Political laws. 3. enterprise features.	1. Legal obligations of banks and financial innovation. 2. Investment and competitive environment in



The purpose of the decision Financing social businesses through the banking industry						
main criteria	consequenes	strategies	grounding conditions	pivital phenomenn	intervening factors	causal conditions
	5.Laying the groundwork for the fulfillment of the mission	4.Attracting an investor. 5 Sale of shares	constraints 4.Knowledge and expertise of bank employees.	benefits.		the banking network. 3.revenue generating

**Integrating (normalizing) the questionnaire**

At this stage of the research, before performing pairwise comparisons and obtaining the relative weight of the indicators, we must first integrate 10 collected AHP questionnaires to obtain only one questionnaire. For this purpose, we take the geometric mean of the

matrices, which is the final questionnaire of the normalized matrix or matrix D, which is specified below (all digits up to four decimal places are written). To form the pairwise comparison matrix of the indices, we must first add the columns of the integrated values of the above tables.

**Table 4. Normalized matrix related to the factors needed to finance social businesses through the banking industry**

normalized matrix(D)	consequences	strategies	grounding conditions	pivital phenomenon	intervening factors	causal conditions
Consequences	1	2.5852	2.5416	0.7708	0.7708	5.9759
Strategies	0.3868	1	3.8199	1.1953	1.1953	3.3866
Grounding conditions	0.3934	0.2618	1	1.7139	1.7139	2.5017
Pivotal phenomenon	0.6350	0.4955	0.8060	1	2.1151	2.7923
Intervening factors	1.2973	0.8366	0.5835	1	1	2.0180
Causal conditions	0.1673	0.2953	0.3997	0.4955	0.4955	1

**Table 5. The normalized matrix related to the consequence factor**

normalized matrix(D)	economic sustainability	economic growth and development	social stability	grounding for the realization of the banking mission	environmental sustainability
Economic sustainability	1	1.4422	1.7904	1.7904	0.7980
Economic growth and development	0.6934	1	2.0056	2.0056	1.0095
Social stability	0.5585	0.4986	1	0.6371	1.5697
Grounding for the realization of the banking mission	0.5584	0.4986	0.6371	1	1.5696
Environmental sustainability	1.2532	0.9906	0.6371	0.6371	1

**Table 6. The normalized matrix related to the Strategies**

normalized matrix(D)	social mechanisms of value creation	agile banking executive system	implementation of an integrated banking control and supervision system	attracting an investor	sale of shares
Social mechanisms of value creation	1	0.4670	5.3566	5.5555	5.5554
Agile banking executive system	2.1411	1	7.0168	6.9035	6.9035
Implementation of an integrated	0.1867	0.1425	1	2.3305	2.3305
Sale of shares	0.1801	0.1449	0.4291	1	2.3305
Attracting an investor	0.1800	0.1449	0.4291	2.3305	1

Table 7. The normalized matrix related to the underlying condition factor

normalized matrix(D)	investment and competitive environment in the banking network	revenue generating	environmental constraints	knowledge and expertise of bank employees
Investment and competitive environment in the banking network	1	0.8599	0.4413	0.5132
Revenue generating	1.1629	1	2.2731	0.8291
Environmental constraints	2.2660	0.4399	1	0.9642
Knowledge and expertise of bank employees	1.9486	1.2061	1.0371	1

Table 8. The normalized matrix corresponds to the axial phenomenon factor

normalized matrix(D)	individual entrepreneurial capacity	business platform building	sustainable social business	maximizing benefits
Individual entrepreneurial capacity	1	1.3636	1.5747	0.9603
Business platform building	0.7334	1	0.7059	1.1953
Sustainable social business	0.6350	1.4166	1	1.2227
Maximizing benefits	1.0414	0.8366	0.8179	1

Table 9. The normalized matrix related to the intervening condition factor

normalized matrix(D)	sanctions	political laws	enterprise features
Sanctions	1	1.2957	2.4595
Political laws	0.7718	1	1.4626
Enterprise features	0.4066	0.6837	1

Table 10. The normalized matrix related to the factor conditions

normalized matrix(D)	investment and competitive environment in the banking network	legal obligations of banks and financial innovation	revenue generating
Legal obligations of banks and financial innovation	1.8949	1	0.829
Investment and competitive environment in the banking network	1	0.5277	0.3628
Revenue generating	2.7564	1.2061	1

Table 11. Paired comparison matrix related to the consequence factor

paired comparison matrix	economic sustainability	economic growth and development	social stability	environmental sustainability	grounding for the realization of the banking mission
Economic sustainability	1	1.4422	1.7904	0.7980	1.7903
Economic growth and development	0.6934	1	2.0056	1.0095	2.0055
Social stability	0.5585	0.4986	1	1.5697	0.6370
Environmental sustainability	1.2532	0.9906	0.6371	1	0.6370
Grounding for the realization of the banking mission	.5532	0.4906	0.6371	1.5697	1
total	3.9314	3.9314	5.4330	4.3772	5.4329

**Table 12. Paired comparison matrix related to strategies**

paired comparison matrix	social mechanisms of value creation	agile banking executive system	implementation of an integrated banking control and supervision system	attracting an investor	sale of shares
Social mechanisms of value creation	1	0.4670	5.3566	5.5555	5.5555
Agile banking executive system	2.1411	1	7.0168	6.9035	6.9035
Implementation of an integrated banking control and supervision system	0.1867	0.1425	1	2.3305	2.3305
Sale of shares	0.1801	0.1448	0.4291	1	2.3305
Attracting an investor	0.1800	0.1449	0.4291	2.3305	1
total	3.5078	1.7544	13.8025	15.7895	15.78955

**Table 13. Paired comparison matrix related to the grounding condition factor**

Paired comparison matrix	investment and competitive environment in the banking	revenue generating	environmental constraints	knowledge and expertise of bank employees
Investment and competitive Environment in the banking	1	0.8599	0.4413	0.5132
Revenue generating	1.1629	1	2.2731	0.8291
environmental constraints	2.2660	0.4399	1	0.9642
Knowledge and expertise of bank employees	1.9486	1.2061	1.0371	1
total	6.3774	3.5059	4.7515	3.3065

**Table 14. Paired comparison matrix related to the pivotal phenomenon factor**

paired comparison matrix	individual entrepreneurial capacity	business platform building	sustainable social business	maximizing benefits
Individual entrepreneurial capacity	1	1.3636	1.5747	0.9603
Business platform building	0.7334	1	0.7059	1.1953
Sustainable social business	0.6350	1.4166	1	1.2227
Maximizing benefits	1.0414	0.8366	0.8179	1
total	4.9176	5.1735	5.2683	5.0326

**Table 15. Paired comparison matrix related to the intervening condition factor**

paired comparison matrix	sanctions	political laws	enterprise features
Sanctions	1	1.2957	2.4595
Political laws	0.7718	1	1.4626
Enterprise features	0.4066	0.6837	1
total	3.4417	4.1486	6.2802

**Table 16. Paired comparison matrix related to causal conditions**

paired comparison matrix	legal obligations of banks and financial innovation	investment and competitive environment in the banking network	revenue generating
Legal obligations of banks and financial innovation	1	1.8949	0.8291
Investment and competitive environment in the banking network	0.5277	1	0.3628
Revenue generating	1.2061	2.7564	1
total	3.1714	5.9547	2.7051

After forming a matrix of pairwise comparison of indicators, we normalize its values. For this purpose, we divide each matrix value by the sum of the corresponding column. To calculate the relative weight of each index, we calculate the arithmetic mean of each row. The results of the calculations are as follows.

According to the table above and the average of the factors, the highest rank regarding the factors required to finance social businesses through the banking industry related to the factor of consequences and then strategies, pivotal phenomenon, intervening conditions, contextual conditions are respectively placed and finally the factor condition is placed.

**Table 17. The normalized matrix of the factors needed to finance social business through the banking industry**

normalized matrix(D)	consequences	strategies	grounding conditions	pivotal phenomenon	intervening factors	causal conditions
Consequences	0.2577	0.4722	0.2778	0.2363	0.1057	0.3381
Strategies	0.0997	0.1827	0.4174	0.3028	0.1639	0.1916
grounding conditions	0.1014	0.0478	0.1093	0.1862	0.2351	0.1415
Pivotal phenomenon	0.1637	0.0905	0.0881	0.1501	0.2901	0.1580
Intervening factors	0.3344	0.1528	0.0638	0.0709	0.1372	0.1142
Causal conditions	0.0431	0.0539	0.0437	0.0537	0.0680	0.0566

**Table 18. Priorities of indicators related to the factors needed to finance social businesses through the banking industry**

indicators	final scores	priorities
Consequences	0.2813	first
Strategies	0.2264	second
Grounding conditions	0.1369	fifth
Pivotal phenomenon	0.1567	third
Intervening factors	0.1455	forth
Causal conditions	0.0532	sixth

## 6. Conclusion and discussion

In this study, by reviewing the procedures, theories and conceptual models of financing social businesses, the factors affecting the improvement of entrepreneurs' access to financial resources were explained and the results of surveys conducted in the banking industry. Proper financing is one of the most difficult and complex elements in the process of starting an

entrepreneurial business, which plays a very important role in starting and developing an entrepreneurial business. Mechanisms such as monitoring, selection and guarantee are among the issues that small entrepreneurs always face. There is a problem in accessing investments in establishing more efficient social enterprises. In this research, using a semi-open interview, the paradigm model of financing social

businesses through the banking industry is presented. Based on the data paradigm model, 120 items and 24 main categories have been identified and they have been structured in six dimensions. Revenue generation, legal obligations of banks and financial innovation, investment and competitive environment in the banking network as "causal conditions", characteristics of the firm, political laws and sanctions as "intervening conditions", informal institutions in the banking network, place of supply in banking policies, environmental constraints, awareness and expertise of bank employees as "grounding conditions", social mechanisms of value creation, agile banking executive system, implementation of integrated banking control and supervision system, attracting investors, selling shares as an "interactive dimension", individual entrepreneurial capacity, business platform making, sustainable social business, Maximizing benefits as a "pivotal phenomenon", "economic sustainability, economic growth and development, social stability, environmental sustainability, the realization of social mission and the growth of the banking industry" consequence dimension "have been identified. Finally, based on the analysis of the extracted data and the inference of the results by the researcher, the financing model of social businesses was extracted through the banking industry.

This study, after analyzing the qualitative findings of the descriptive part, in order to evaluate the fit of the social business financing model through the banking industry, the financing model was fitted using PLS software. GOF criterion was used to determine the overall quality of the model. The value of GOF index for the research model is calculated to be 0.615, which is greater than 0.45 and indicates the strong quality of the overall model, and it can be said that the structural equation model has a strong quality. According to the results, the quality of the measurement model, structural model and general model are confirmed, and by fitting the general model, we will examine the relationships.

Considering that the test statistic related to the path of causal conditions to the axial phenomenon is estimated to be 22.52, which is greater than 1.96, and also the coefficient of this path is estimated to be 0.72, which is a positive value, It can be said that causal conditions have a direct and significant effect on the central phenomenon of the financing model in the social businesses of the banking industry. The

intervention conditions for the strategies are estimated to be 8.53 and the coefficient for this path is 0.28, which is a positive value. Therefore, intervening conditions have a direct and significant impact on financing model strategies in the social businesses of the banking industry. The grounding conditions for the strategies are estimated to be 4.98 and the coefficient of this path is estimated to be 0.17, so the grounding conditions have a direct and significant impact on the financing model strategies in the social businesses of the banking industry. The pivotal phenomenon to the strategies is estimated to be 26.42 and the coefficient of this path is estimated to be 0.57. The pivotal phenomenon can have a direct and significant effect on the financing model strategies in the social businesses of the banking industry. The test related to the path of strategies to outcomes is estimated to be 62.68, which is greater than 1.96, and also the coefficient of this path is estimated to be 0.87, it can be said that strategies have a direct and significant impact on the consequences of the financing model in social businesses of banking.

Causal conditions are indirectly positively and significantly related to the consequences and strategies of the financing model in the social businesses of the banking industry. Interventional conditions, pivotal phenomena and grounding conditions have also indirectly had a positive effect on the consequences of the financing model in the social businesses of the banking industry. Therefore, the results of the quantitative section confirm the findings of the qualitative section.

To perform pairwise comparisons and identify and rank the required indicators, to finance social businesses through the banking industry, pairwise questionnaires were designed to compare indicators and sub-indicators. Ranking of the factors affecting the financing model using AHP analysis showed that the highest ranking of the factors required to finance social businesses through the banking industry related to the factor of consequences and then strategies, pivotal phenomenon, interventional conditions is the grounding condition and ultimately the causal condition.

In the last stage, using the opinions of 15 elites and the method of structural equations of interpretation, the factors affecting financing have been leveled. After identifying and extracting the effective and influential factors on the financing model in the social businesses

of the banking industry, at this stage, first, the structural matrix of internal relations (self-interaction), stability factors (SSIM) (to determine the relationships between factors in terms of impact and effectiveness) were completed through a questionnaire by experts. Relationships that attracted more than 70% of the experts are considered as possible relationships and have a value of 1 in this matrix. Other relationships, which account for less than 70% of experts, are considered insignificant and account for zero in the initial achievement matrix. Using the leveling, a diagram called ISM developed model was drawn to improve the financing pattern. In this way, the outcome measures, known as the first level, are placed at the first level of the diagram, and so are the other criteria specified at the diagram levels. This diagram is presented in the figure. According to the criteria, the factors affecting the financing pattern are in four levels. The results of this section showed that the consequences are in the first level, the pivotal phenomenon and strategies in the second level, the contextual and intervening conditions in the third level and the causal conditions in the fourth level.

Anheier (2005) considers investment to be the creation of long-term financial benefits through the capital and investment of the organization in various matters and according to the results of the present study, the most initial investment is to set up these businesses due to high and unprofitable risk. Being is a personal asset that he gives with a benevolent purpose. Social businesses have low returns due to high risk and humanitarian goals, hence capital investors pay little for it and use personal funds or the board of trustees' capital to set up and manage businesses. In developed countries, many social institutions are dependent on the state budget (Chavez, 2004). This dependence has increased in recent years through more services with financial aid and contracts. However, the laws of the country, including tax protections and assistance of our country go back to previous decades and the method of management and financial performance are derived from various factors (Roshandel Arbatani et al., 2015).

Considering the many benefits of social businesses for society and their lack of adequate support by government officials in accordance with the results of this study, it is suggested that at the policy planning and implementation levels of governments for the development of social entrepreneurs, including tax

incentives, insurance services, start-up grants, subsidies and contracts the necessary support should be provided. It is suggested that income generation methods for social entrepreneurs be introduced through educational and extension programs and methods such as producing goods and providing related services and selling them to the market, establishing branches and receiving membership fees. The results of this study can help entrepreneurs who are socially concerned and intend to start a social business to use different types of financing methods in setting up and managing social businesses. In addition, it helps educational institutions and universities that conduct social business courses to familiarize audiences with different types of financing methods.

## 7. References

- 1) Akbulaev, Nurkhodzha et al. (2019). Research models for financing social business: theory and practice. *Heliyon* Volume 5, Issue 5, May 2019, e01599.
- 2) Azizi, Mohammad, Malajardi, Maryam. (2017). Social entrepreneurship financing methods. *Financial Research*, 19 (1), 119 -138
- 3) Ciccarino, IDM., Malpelli, D. C., de Mello Moraes, A. B. G., do Nascimento, E. S. (2019). Social innovation and entrepreneurial process: application of typologies in startups of Yunus Social Business Brazil. *CADERNOS EBAPE.BR, EARLY VIEW*, 224.
- 4) Creswell, H.W. (1998). *Research design: Qualitative Approaches*, Thousand Oaks, CA: Sage
- 5) Daei, Majid. (2018). A Comprehensive Review of Concepts, Objectives, Methods and Factors Affecting Corporate Financing. *International Conference on Accounting Management of Modern Economics and Banking*, Tehran.
- 6) Dies, J. (2001). The Meaning of "Social Entrepreneurship". Available from: [www.Fuqua.duke.edu/center/case/leaders/resources.htm](http://www.Fuqua.duke.edu/center/case/leaders/resources.htm).
- 7) Etemadi, Hossein et al.. (2014). Timing in evaluating investment portfolio, evidence of capital market. *Financial Research*, 16 (1), 25 -36.
- 8) Fianto, Bayu Arie; H ayu Maulida, Nisful Laila (2019). Determining factors of nonperforming financing in Islamic microfinance institutions. *Heliyon* 5 (2019) e02301.15. <https://doi.org/10.1016/j.heliyon.2019.e02301>
- 9) Jones, Ariel Zetlin, Ali Shourideh (2017). External Financing and the Role of Financial Frictions over the Business Cycle: Measurement and Theory.

- Journal of Monetary Economics ,128.doi: 10.1016/j.jmoneco.2017.08.001
- 10) Julla, Jafar (2019). Investigating the effective factors in financing the debt to equity ratio of petrochemical companies; Before and during the currency crisis, the Fourth National Conference on Accounting, Management and Financial Engineering with emphasis on regional and global paradigms.
  - 11) Lyon, Fergus., Robyn Owen.(2019). Financing social enterprises and the demand for social investment. [wileyonlinelibrary.com/journal/jsc](http://wileyonlinelibrary.com/journal/jsc) .4757. DOI: 10.1002/jsc.2245
  - 12) Mertzanis, Charilaos. (2019). Family ties, institutions and financing constraints in developing countries. *Journal of Banking and Finance* 108 (2019) 105650.122.
  - 13) Mohammad yunnes, Meysam and Miley, Mohammad Reza (2006). Prioritization of Factors Affecting Financing in Iran Using Hierarchical Analysis Method, *Quarterly Journal of Financial and Economic Policies*, Second Year, No. 6, pp. 141-160.
  - 14) Mortezaniz , Saeed et al. (2019). Comparative study of business models of the world's top crowdfunding platforms, *Technology Development Management Quarterly*, Volume 3, Number 2, pp. 127 -150.
  - 15) Nicholls, A. (2006). *Social Entrepreneurship new Models of Sustainable Social Change*. Oxford University press, Hardcover, Published.
  - 16) Rahimian, Hamid et al. (2013). Identifying the causal factors affecting the formation of social entrepreneurial behavior in Iran. *Journal of Entrepreneurship Development*, 6 (1), 185- 202.
  - 17) Shahrabi, Behzad et al. (2019). Modeling the Factors Affecting the Financing of Startups (Start-up Businesses) with Demetel Technique, *Journal of Financial Management Strategy*, Year 7, No. 2, pp. 61-89.
  - 18) Shaverdi, Marzieh et al. (2019). A multiobjective robust possibilistic model for technology portfolio optimization considering social impact and different types of financing. *Applied Soft Computing Journal* . doi:<https://doi.org/10.1016/j.asoc.2019.105892>.
  - 19) Zhang, Dongyang; Yumei Guo (2019). Financing R&D in Chinese private firms: Business associations or political connection? *Economic Modelling* 79 :247–261.

