Assessing the forward-looking policies of entrepreneurship development in Iran

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Abstract

Purpose – Entrepreneurship development is known as a key enabler of economic development, hence it has been contemplated in the strategic plans of various countries. Iran is no exception in that regard, since developing entrepreneurship has been emphasized in the country's third and fourth development plans, in order to tackle the increasing rate of population growth and unemployment. Now, as the fourth development plan has come to its end, it is necessary to evaluate the policies and programs related to entrepreneurship. The purpose of this paper is to assess the entrepreneurial development plans of this important Middle East country to provide a benchmark of influential policies on entrepreneurship development at both macro and micro level and to evaluate them accordingly.

Design/methodology/approach – Quantitative methods, namely survey and questionnaire distribution among experts dealing with entrepreneurship subjects have been used as the main method for data collection.

Findings – The results reveal that influential entrepreneurship policies at both macro and micro levels are not generally forward-looking and supportive of entrepreneurship development. Therefore, some suggestions have been provided to develop these policies.

Originality/value – The paper presents findings of research which come from a rapidly-growing, developing country, which can provide better insights from a less-explored context and further add to the body of knowledge.

Keywords Iran, Business development, Entrepreneurialism, Government policy, Entrepreneurship development policies, Macro policies, Entrepreneurship

Paper type Research paper

Introduction

The level of entrepreneurial activities of people in the society depends on different factors including people's desire to be an entrepreneur as their career (motivation), knowledge and abilities (skills), and the supports to establish one's business, like eases of access to financial resources, consultation services and other motivations in a desirable legal and political environment (opportunities) (Lundstrom and Stevenson, 2005). The results from the Organization for European Economic Co-operation on identifying the determinant factors for entrepreneurship development indicate that the entrepreneurship development factors could be categorized into macro and micro policy groups. Micro policies are often performed by lower levels in government.

Whereas macro polices, made at the top decision-making levels, improve the business environment. In general, macro policies are more effective than micro ones in developing entrepreneurship. Some examples of the macro policies include: inflation control, low interest rate, economic security; efficient taxing system; competitive and anti monopoly policies in accessing the financial resources; trade rules; and the implementation method of policies and regulations by the government. And micro policies include: financial assistance to train the managers and employees of small- and medium-sized enterprises (SMEs); enhancement of research and development (R&D) in SMEs; improving entrepreneurship capacities; creating entrepreneurial culture; and improving entrepreneurs' access to financial resources (OECD, 2007a). It should be mentioned that macro policies have their roots in business environment subjects, while micro policies are considered for entrepreneurship development models. Despite some efforts to improve entrepreneurship in Iran in the recent years, there have been problems and major challenges in the increasing of entrepreneurship rate and developing of small enterprises. The reasons for some of these problems could be traced in micro and macro policies that have been taken to develop entrepreneurship in the country. Therefore, this study seeks to analyze and explore this problem. Considering the main purpose of the study on assessing the macro and micro entrepreneurship policies in the country, the following research study questions are raised:

(1)   Are the macro entrepreneurship policies in Iran encouraging/desirable?

(2)   Are the micro entrepreneurship policies in Iran encouraging/desirable?

(3)   Is the weightage (average) of different dimensions of macro policies equal?

(4)   Is the weightage (average) of different dimensions of micro policies equal?

Research theory
As this study aims to investigate the role of macro and micro policies in developing entrepreneurship in Iran, the research theory is divided into two sections: macro policies and micro policies.

Macro policy models in order to improve the business environment
Hernando de Soto, a popular Peruvian economist believes that one of the major reasons that stop the third world countries from development is the administrative barriers which forces the private sector toward underground, unofficial and unproductive economy. In such an unfavorable business situation, macro policies, entrepreneurship development and developing minor and intermediate enterprises would face problem (De Soto, 2000). Business environment is defined as a group of policies, and legal, institutional and legitimate rules, governing the business activities (DCED, 2008). In another definition, business environment is considered as a set of influential factors imposed on enterprises that have little to do with the manager, company owner or the entrepreneur. They include the quality of economical infrastructures, rate of administrative corruption, social security, economical policy stability, rules and regulations, quality of judiciary system, etc., which have direct impact on enterprises' performance whose alternation is beyond the authority of the business managers and entrepreneurs (Midari and Gundjani, 2008). It should be noticed that improving business environment is the result of the right policy making and effective

implementation of macro policies. There are various frameworks and models in business environment or macro policies, some of which are published as annual reports whereby different countries are compared to one another. Some of these models are as it follows.

Business environment assessing model for the World Bank. Every year, World Bank compares the countries business environment in a report comprising of ten indices (World Bank, 2008, 2009, 2010):

(1) enterprise registration or business establishment;

(2) receiving the necessary licenses for establishing a business;

(3) employing and firing the staff;

(4) registering the assets;

(5) obtaining credits and facilities;

(6) supporting the investors;

(7) paying tax;

(8) foreign trade;

(9) judiciary system efficiency in necessitating the contracts; and

(10) bankruptcy announcement and business closure.

Competitiveness model of the World Economic Forum. The purpose of this report is to offer modeling rules in order to compare the macro policies of the countries, and to identify and remove the existing barriers. This model includes three dimensions and 12 pillars. First dimension encompasses basic factors including institutions, infrastructures, healthcare and elementary educations. Second dimension refers to the enabling factors such as academic education and training the staff, product market efficiency, market efficiency, financial market development rate, technology preparation and market size. Lastly, third dimension is on innovating factors like the rate of business advancement and innovation (World Economic Forum, 2009).

Model of business environment snapshot
The framework tries to offer a better vision of the macro and micro policies and business environment. The main eight dimensions of this framework are economical freedom index, political risk rate, country credit rate for investment, business environment index, business environment quality rate, corruption index and the quality of regulations' formation and business environment rank (International Finance Corporation, 2009).

Micro policy models for entrepreneurship development
In this part, some of the micro policy models to develop entrepreneurship are introduced. It should be pointed that the new entrepreneurship development models consider the macro policies as well, so in other words, there is an overlap between macro and micro policies in the new models.

Global entrepreneurship watch model. In this model a generic definition is used to define the concept of entrepreneurship (Kang and Uhlenbruck, 2006; Koster and Rai, 2008). Both macro policies for encouraging business environment (public international framework condition) and micro policies are pointed out in this model, in order to

develop entrepreneurship (special entrepreneurship condition). Micro policies include government's financial support in providing loans and other financial resources to entrepreneurs; providing trainings about new businesses methods to the managers; conducting research and studies to create new commercial opportunities; developing professional and commercial infrastructures like accounting and legal services; reducing barriers to enter the market; accessing the physical and communicational infrastructures; creating a true business culture; developing governmental programs to help the growth of new enterprises at national and regional levels; and other governmental policies such as taxing policies (Orford *et al.*, 2005).

It should be mentioned that this model has been edited in 2008. The edited elements of the overall model are:

(1) Policies and programs for encouraging the basic needs like institutions' encouragement, macro economy stability, healthcare and basic trainings.

(2) Policies and programs for encouraging the developing factors including higher and simultaneous educations, production market efficiency, job market efficiency, financial market development, technology preparation and market size.

(3) Innovation and entrepreneurship enhancement policies and programs including financial helps for entrepreneurs, teaching entrepreneurship, transferring R&D results, legal and commercial infrastructure of entrepreneurship and the rules for establishing a business (Bosma and Levie, 2010).

Eurostat pattern – economical development cooperations institute. According to this model, entrepreneurship rate increases by facilitating the access to opportunities, skills and resources.

The access to the resources includes the rate of access to the capital, research results and development and technology outputs which are important for entrepreneurs. Capabilities, abilities and the skills necessary for being an entrepreneur are called skills. Accessing the resources and skills do not guarantee the entrepreneurship, but the necessary opportunities in the market and legal conditions for entrepreneurs should be provided so that the potential entrepreneur could create something valuable by producing a product, process or a new market. It should be mentioned that the society culture affects all the other parts of this model (Ahmad and Hoffman, 2007; OECD, 2007b).

UNCTAD entrepreneurship development policies model. In this model the macro economical factors effective on economical activities (macro policies or business environment) like macro economy stability, job market, local infrastructures and tax rates, etc., have been differentiated with the influential entrepreneurship policies. The entrepreneurship development policy making areas of this model are: increasing access to financial resources (bank loan guarantee for the entrepreneurs), facilitating enterprise entry and exit (reducing the requirements for establishing and dissolution of companies) and government supportive programs (like concentrating on small and intermediate enterprises and special groups like women) (UNCTAD, 2005).

Theoretical summary and formulating the research conceptual model. Conceptual model and questionnaire of the study were formulated by the offered models and their composition. This model is designed using the two main macro policies concepts (with eight dimensions) and micro policies (with four dimensions). In formulating the conceptual model, models 1-3 of the Table I were mostly applied for macro policies and

Model	Main dimensions
Enterprise registration, license obtain, employ and fire employees, asset registration, obtaining facilities and credit, supporting investors, foreign trade, judiciary and bankruptcy system efficiency	(1) Business environment of the world bank (2010)
Institutions, infrastructures, healthcare and elementary educations product market, job market, financial market development, technology preparation, market size, business advancement, innovation	(2) Comparativeness of the world economic forum (2009)
Economical freedom index, political risk rate, country credit rate for investment, business environment index, business environment quality rate, corruption index and rule formulation quality, business environment rate	(3) Business environment vision (2009)
Encouraging the public condition and special entrepreneurship conditions	(4) Global entrepreneurship watch (2005)
Develop entrepreneurship including removing basic needs programs, policies and programs linked with efficiency developing factors and innovating and entrepreneurship policies	(5) Edited global entrepreneurship watch (2008)
Determining entrepreneurship, entrepreneur performance and entrepreneurship consequences	(6) Eurostat entrepreneurship development (2007)
Increasing access to financial resources, facilitating entry and exit of firms (enterprises) and government supportive programs	7) Developing anecdote entrepreneurship (2004)

Table I.
Theoretical model comparison

models 4 and 7 were used for micro policies. The shape and elements of conceptual model is shown in Figure 1.

Macro policies. Such policies assist for a better business environment of the small and intermediate enterprises. These policies include official institutional factors or institutional orders like political, judiciary, tax, career rules, etc. (Bruton *et al.*, 2010; Nkya, 2003), macro economy stability (inflation rate, interest rate), human resource development (overall rate of elementary and academic educations), financial market (absence of limitations in financial and capital market of country, etc.), hard and
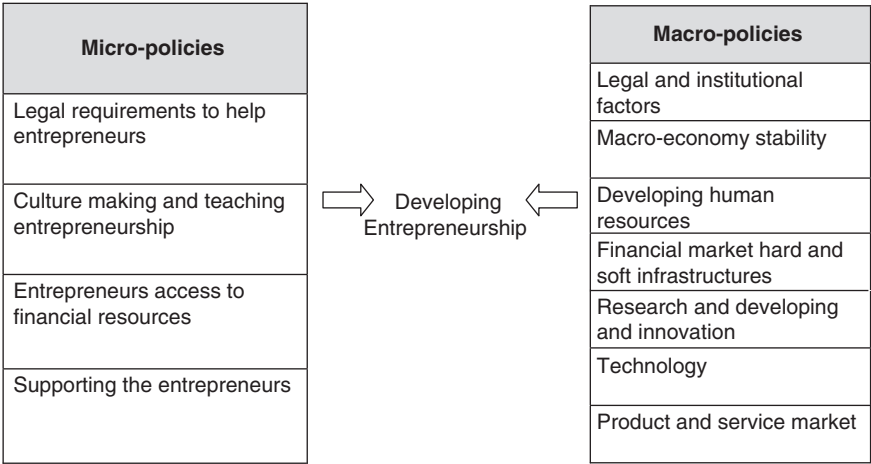
Figure 1.
Conceptual model

soft infrastructures (transport, energy and communication, R&D, etc.), technology (government support of modern technologies, etc.) and product and service market (local and foreign market size).

Micro policies. These policies are entrepreneurship specific and include the legal requirements to help the entrepreneurs (administrative and legal requirements to assist the enterprise establishment and their growth, etc.), culture making, entrepreneurship training, entrepreneurs access to financial resources (as the significant problem for entrepreneurs; Kuzilwa, 2005), supporting the entrepreneurs in creating clusters and industrial complexes, educational and research services, etc.

Research methodology

The current study uses the survey method to investigate the current situation. Data gathering tool, questionnaires and using the five-point Likert scale option rate (appropriate to inappropriate). To analyze the data SPSS and LISREL softwares are used. The population of the study consists of individuals from the Ministry of Industry, Science and Economy Experts who have been working in areas like entrepreneurship, small and intermediate enterprises, commercializing and business environments. The data has been calculated by $n = (Z^2 pq)/S^2 e$ formula with a correlation of 10 percent for 96 people which was acquired after questionnaires were distributed and 158 of them were gathered.

In this study, the experts' points of view on conceptual model and the research questionnaire were studied to assess the model validity. The study revealed that the conceptual model was considered appropriate by these experts, but some indices should have been corrected. After applying the corrections, the questionnaires were distributed. Furthermore, in order to study the technological measuring tools, Cronbach's α test and confirmatory factor analysis were used. The results of studying the measuring tools as shown in Table II represent the reliability and validity of the questionnaire. It should be noticed that the study measurement model for standard estimation reveals that among macro policy elements, the R&D, technology and institutional factors are the most important ones, respectively. Among micro and macro supportive policies, accessing the financial resources and making culture and education are the most important ones.

(1) Dimension average and major research concepts

As can be seen in Table III, among macro policies, infrastructures and macro economy stabilities have the most and least average, respectively. Among the micro policies dimensions, rules and legal requirements assisting the entrepreneurs and their access to financial resources have got the most and least importance, respectively.

Value on average	Validity criterion	Statistics
1.27	< 4	X^2/df
0.057	< 0.08	RMSEA
0.95	> 0.9	NFI
0.98	> 0.9	NNFI

Notes: Average study result in *t* state: all coefficiencies are > 1.96 and significant; Cronbach's α for macro policies questionnaire – 0.90; Cronbach's α for micro policies questionnaire – 0.88

Table II.
Measurement model in
standard estimate

Concept	Dimension	Average	Concept	Dimension	Average
Macro policies	Legal and institutional factors	2.32	Micro policies	Legal requirements to help entrepreneurs	2.52
	Macro economy stability	1.98		Making culture and education	2.32
	Developing human resources	2.98		Accessing financial resources	1.96
	Financial markets	2.38		Support	2.12
	Infrastructures	2.96		Macro policies	2.46
	Research and development	2.09		Micro policies	2.23
	Technology	2.41			
	Production market	2.58			

Table III.
Average dimensions of macro and micro policies

(2) Studying the results of one sample t-test

To study the first and second questions of the research (studying the encouraging or appropriateness of macro and micro policies) one sample *t*-test is used with a cut-off point of 3. The method of decision making about validating or rejecting H_0 which is according to the common rules in *t*-tests, is as follow.

For 95 percent reliability while the significance level is larger than correlation (0.05), H_0 is accepted, and if significance level is less than correlation rate, H_0 is rejected and H_1 is validated. As this test has got two domains, in order to give a better suggestion on research dimension appropriateness according to higher and lower differences ($\mu_1 - \mu_2$) in confidence level of 95 percent it could be discussed that:

- If the higher and lower rates are both positive, the studies policy has a suitable or encouraging level.

- If the higher and lower rates are both negative, the studied policy has undesirable or deterrent level.

- If the lower level is negative and higher level is positive, the studies policy is in an intermediate or neutral state.

In reliability rate 95 percent considering Table IV results and decision rules we can say the following: macro policies including legal and institutional factors, macro economy stability, financial market, R&D and innovation and product and service market are in an unsuitable or deterrent condition and the two hard and soft infrastructure and human source factors are in intermediate or neutral condition. In addition all micro entrepreneurship developing policies including legal requirements to help the entrepreneurs' culture making, entrepreneurship training and entrepreneurs' access to financial resources and supporting the entrepreneurs is in an unsuitable or deterrent condition.

(3) The results for one-way ANOVA analysis

In order to answer the third and fourth questions in study (studying equality of weight or average of macro and micro policies dimensions in form of inner group) one-way ANOVA analysis is used.

Concept	Dimension	t	Significant level	Low variation rate	High variation rate	Result
Macro policies	Legal and institutional factors	−10.82	0.00	−0.81	−0.56	Reject H_0
	Macro economy stability	−15.80	0.00	−1.15	−0.89	Reject H_0
	Human resource development	−0.21	0.84	−0.17	0.14	Validated H_0
	Financial market	−7.99	0.00	−0.78	−0.47	Reject H_0
	Hard and soft infrastructures	−0.54	0.59	−0.20	0.11	Validated H_0
	Research, development and innovation	−11.05	0.00	−1.08	−0.75	Reject H_0
	Technology	−8.46	0.00	−0.73	−0.45	Reject H_0
	Product and service market	−7.29	0.00	−0.54	−0.31	Reject H_0
Micro policies	Legal requirements to help entrepreneurs	−6.02	0.00	−0.64	−0.32	Reject H_0
	Culture making and teaching entrepreneurship	−8.78	0.00	−0.83	−0.53	Reject H_0
	Entrepreneurs access to financial markets	−13.02	0.00	−1.20	−0.88	Reject H_0
	Supporting the entrepreneurs	−12.68	0.00	−1.01	−0.74	Reject H_0

Table IV.
The results of single
data t-test

As it can be observed, in reliability rate of 95 percent both tests of H_0 are rejected and H_1 is validated. In other words, macro and micro political dimensions do not have an equal weight (average). Then multiple comparative Tukey test is applied. The results revealed that we can put 95 percent reliability in the following groups. It should be mentioned that the second to fourth groups have got an average less than (low weight or less desirability) the first group (Tables V and VI).

Discussion and conclusion
This study intends to assess the macro and micro policies to formulate a model of entrepreneurship policies. Accordingly, the macro and micro policies of seven existing models are assessed and a conceptual model is then developed after a comparative analysis.

In order to collect data, a questionnaire has been used. Descriptive results of the questionnaire represented that all macro and micro political dimensions have got an average of <3. In addition among macro policies, soft and hard infrastructures and macro economy stability received the most and least mean scores, respectively. Also among micro policies dimension, legal requirements to help entrepreneurs and their access to financial resources have got the most and the least mean scores, respectively. The t-test results represented a sample in which only two macro policies including hard

H_0	Statistic F	Significant level	Error rate	Test result
The average of macro policy dimensions do not have a significant difference	25.87	0.00	0.05	Reject H_0
The average of micro policy dimensions do not have a significant difference	9.99	0.00	0.05	Reject H_0

Table V.
Results of one-way
variant

and soft infrastructures and developing human sources were in intermediate or neutral condition, while all other macro polices and all the micro policies were in a deterrent or inappropriate situation. The results of one-way ANOVA analysis test clarified that among macro policies, infrastructures and human sources have a better situation, but R&D and innovation and economical stability have less desirability in comparison to other macro policies dimensions. Among micro policies legal requirements to help entrepreneurs dimension and culture making and training have a better condition but entrepreneurs' access to financial resources have less desirability in comparison to other micro policies dimensions. Overall, as could be seen the statistical results of the study are similar and confirm each other and they are internally convergent.

To compare the study results with the data present in this area we have referred to internationally published reports. World Bank assessment in business ease represents that Iran has unsuitable condition in comparison to other countries. In 2008 Iran was 135 among 178 countries and in 2009 among 181 countries this rate was 142 and in 2010 it was 137 among 183 countries (World Bank, 2008, 2009, 2010). Assessing the business environment framework snapshot shows that Iran has unsuitable condition in comparison to other countries and this status is observable as a process in three years from 2006 to 2009 (International Finance Corporation, 2009). The surveys in the country also confirm unsuitable condition of business environment in the country. For instance Iran's industry renovation company in 1,384 has done a survey on business environment. This survey revealed that Iran's rank among 70 countries was 65 and it has environmental deterrent (Congress Research Centre, 2009). Therefore we can conclude that the study results have an external convergence with local and international surveys. Considering the results of this study and international reports we cannot be optimistic toward the results from macro and micro policies in developing entrepreneurship, quick impact companies and employment in the country. Because deterrent elements for micro programs have negative effect on entrepreneurship and could even reduce the number of people active in business and they grow negatively. Therefore considering the macro policies in improving the business environment and omitting entrepreneurship deterrent elements seems necessary.

It should be mentioned that macro policies (to improve business environment) and micro policies (to improve entrepreneurship rate) have been considered in the country

Policy types	First group	Second group	Third group	Fourth group
Macro policies	Infrastructure/ developing human resources	Product and service market, technology/ financial market	Institutional factors	Research, development and innovation/ economy stability
Micro policies	Legal requirements to help entrepreneurs/ culture making and training	Supporting entrepreneurs	Entrepreneurs access to financial resources	

Table VI.
Studying the encouragement dimensions of macro and micro policies comparatively

for following few years and something have been done. For instance, in notice of general policies of the principle 44 of the country, improving business atmosphere is clearly emphasized (Congress Research Centre, 2009). Also third and fourth development programs developing entrepreneurship and business environment is considered in various frameworks. Therefore we can be hopeful that in the coming years there will be an improvement in the current situation following these programs consequences.

References

Ahmad, N. and Hoffman, A. (2007), "A framework for addressing and measuring entrepreneurship", *Entrepreneurship Indicators Steering Group*, OECD, Paris, available at: www.oecd.org/dataoecd/21/51/39629644.pdf (accessed 20 November 2007).

Bosma, N. and Levie, J. (2010), "Global entrepreneurship monitor", 2009 Executive Report, Global Entrepreneurship Research Association (GERA), Babson Park, MA, pp. 11-12.

Bruton, G.D., Ahlstrom, D. and Li, H.L. (2010), "Institutional theory and entrepreneurship: where are we now and where do we need to move in the future?", *Journal of Entrepreneurship: Theory and Practice*, Vol. 34 No. 3, pp. 421-40.

Congress Research Centre (2009), "Studying the business environment", Report No. 39, Congress Research Centre, Tehran, pp. 28-37.

DCED (2008), "Supporting business environment reforms: practical guidance for development agencies", Donor Committee for Enterprise Development, available at: http://rru.worldbank.org/document/DonorGuidance.pdf

De Soto, H. (2000), *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*, Basic Books, New York, NY.

International Finance Corporation (2009), *Business Environment Snapshot: Methodology Note*, International Finance Corporation, Washington, DC, pp. 13-5.

Kang, E. and Uhlenbruck, K. (2006), "A process framework of entrepreneurship: from exploration, to exploitation, to exit", *Academy of Entrepreneurship Journal*, Vol. 12 No. 1, pp. 47-71.

Koster, S. and Rai, S.K. (2008), "Entrepreneurship and economic development in a developing country: a case study of India", *Journal of Entrepreneurship*, Vol. 17 No. 2, pp. 117-37.

Kuzilwa, J.A. (2005), "The role of credit for small business success: a study of the national entrepreneurship development fund in Tanzania", *Journal of Entrepreneurship*, Vol. 14 No. 2, pp. 131-61.

Lundstrom, A. and Stevenson, L.A. (2005), *Entrepreneurship Policy: Theory and Practice*, Vol. 9, No. XIV, International Studies in Entrepreneurship Springer, New York, NY.

Midari, A. and Gundjani, A. (2008), "Assess and encouragement of business environment", *Academic Jihad Journal*, Vol. 1389, pp. 1-11.

Nkya, E.J. (2003), "Institutional barriers to small-scale business development: a need for flexibility in Tanzanian tax and regulatory systems", *Journal of Entrepreneurship*, Vol. 12 No. 1, pp. 43-73.

OECD (2007a), *Framework for the Evaluation of SME and Entrepreneurship Policies and Programmes*, OECD, Paris.

OECD (2007b), "OECD entrepreneurship indicators project: overview", World Bank Seminar on Entrepreneurship and Development, Washington, DC, December 5-6, p. 12.

Orford, J., Herrington, M. and Wood, E. (2005), *Global Entrepreneurship Monitor 2004 South African Report*, UCT Center for Innovation and Entrepreneurship, pp. 50-4, available at: www.gsb.uct.ac.za/tiles/GEM2004.pdf.

UNCTAD (2005), *Entrepreneurship and Economic Development*, United Nations Conference on Trade and Development (UNCTAD), Geneva, pp. 6-14.

World Bank (2008, 2009, 2010), "Doing business", available at: www.worldbank.org (accessed January 10, 2012).

World Economic Forum (2009), *The Global Competitiveness Report, 2009-2010*, World Economic Forum, Geneva, available at: www.worldbank.org (accessed January 10, 2012).

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