

1 The Impact of Small and Medium-Sized Enterprises on Economic 2 Growth in Iran

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6

7 **Abstract**

8 In the aftermath of the global financial crisis of 2008- 2009, there has been an increased
9 interest in the role of small and medium enterprises in job creation and economic growth.
10 Changing industrial structures of developing economies in recent decades, the development of
11 small and medium-sized enterprises (SMEs) were playing a critical role in industrial
12 development strategies of countries. Regarding the successful experience of newly developed
13 economies, economists believe that private sector, particularly SMEs, is a significant factor in
14 economic growth in developing countries. Researches show that these industries affect
15 economic growth by entrepreneurship, innovation, and creating new job opportunities. As a
16 result, SMEs have been concentrated in Iran in order to develop employment-making
17 activities. This research study the relationship between SMEs and economic growth in Iran
18 provinces by using mixed data during 2004- 2005 in the framework of augmented Solo growth
19 model, and panel data method. Results show a positive and significant relationship between
20 developing SMEs and economic growth, which indicates the importance of SMEs.

21

22 **Index terms**— small and medium-sized enterprises, economic growth, panel data model.

23 **1 Introduction**

24 enormous changes have been occurred in global markets in last two decades. Markets have shifted from local
25 to global environment and concurrently production orientation has shifted to customer orientation. In order to
26 optimum usage of resources, manufacturers have thought of changing in industrial structure. One of the notable
27 characteristics of this structure is the increasing development of SMEs.

28 Although SMEs have many similarities among different countries, there is no uniform definition for that. Each
29 country presents a quantitative and a qualitative definition of these types of businesses according to indicators
30 of employment, capital volume, production volume and technology. Most of these definitions are along with
31 quantitative criteria such as number of employees and turnover (Research Center of Iranian ??arliament, 2006).

32 There is no nationally accepted definition for SME. Different ministries and departments have presented
33 different definitions. The common indicator in different definitions is the number of employees (Research Center
34 of Iranian ??arliament, 2006).

35 According to the ministry of industry and mine and ministry of agriculture, SMEs are production or services
36 units (urban or rural) with less than 50 employees ??Unido, 2004). Statistical Center of Iran has divided the
37 business into four groups: businesses with 1 to 9 employees, businesses with 10 to 49 employees, businesses with
38 50 to 99 employees and businesses with more than 100 employees. Statistical Center of Iran defines SMEs as
39 businesses with less than 100 employees and large-sized Enterprises as businesses with more than 100 employees.

40 Before 1964, industry in Iran had been categorized to new large industries and old crafts which had been
41 inherited from old craftsman to their Childs. Iran industry contained handicrafts such as: weaving, spinning,
42 pottery, key and lock making, blacksmithing and above all carpet weaving The industry which was imported
43 to Iran by following industrial countries was considered as large-sized industry. The divisor between these two

3 B) ENTREPRENEURSHIP, INNOVATION AND PRODUCTIVITY IN SMEs

44 industries was an industry that had been established in the country to supply some needs of modern products
45 such as repairing garages and lathing shops that could somehow cover the need of repairing ad correcting some
46 of the machineries imported from industrial countries. Apart from these, there were slight industries which could
47 be indicated as a SME. The first step to promote and expand modern SMEs was taken in the middle of 1964. At
48 that year, the government decided to establish an organization named "the organization of industrial zones. That
49 organization became the main in charge of planning and establishing industrial zones in different parts of the
50 country and at the same time a sample industrial zone was established in Ahvaz by the help of the unitednations.

51 The experiences gained by the organization of industrial zones during several years led to a total revision
52 of the process of developing SMEs. In 1970, the government decided to replace the organization of industrial
53 zones with "the organization SMEs and industrial zones of Iran" with more responsibilities and wider activity
54 fields to perform a broad project of developing SMEs, duo to the necessity of developing SMEs and the project of
55 implementing financial supporting schedules and preparing modern facilities for factories in the form of industrial
56 zones or necessary infrastructures.

57 This action became the main factor of planning and performing multilateral supporting projects of the SMEs
58 in the country. These changes continued up to now that SMEs are working as a part of the Ministry of Industry,
59 Mine and Commerce ??Gharecheh, 1998).

60 Surveying the performance of SMEs in Iran economy during the third national development plan compared to
61 the duration of the second development plan indicates that the role of medium-sized enterprises in Iran industries
62 has been increased, by the relative increase of the numbers of these types of enterprises. As shown in table 1,
63 SMEs in Iran in the period of 2004-2006 have covered more than 86% of the whole industries. Because of
64 the increasing role of SMEs in development and employment, this article is to study the effects of SMEs on the
65 economic growth in Iran in six sections. The second section is about the economic importance of these enterprises.
66 The third section contains a brief literature revive and in the forth section theoretical framework of the model is
67 explained. The fifth section is about the model estimation and finally, the last section is the conclusion.

68 2 II. The Economic Importance of SMEs a) The role of SMEs 69 in employment

70 The issue of creating job opportunities in SMEs was first noticed in the USA. This issue was widely debated at
71 the end of the 1970's because of the publication of the publication of David Birch's (1987) research on SMEs.
72 He concluded that large-sized enterprises are no more the main factor in increasing employment, and most of the
73 new jobs were created by SMEs (Majidi, 2004).

74 According to Snodgrass and Biggs (1996), most of the corporations in low-income countries, are small-sized.
75 In contrast, the majority of production and employment belongs to medium-sized enterprises in medium-income
76 countries. Generally, countries with high income per-capita intend more toward large-sized enterprises.

77 Regardless of the development level of an economy, a considerable amount of SMEs are active in unofficial
78 sector. Schnider (2003) compared the share of unofficial sector in GDP in 22 developing countries (The former
79 Soviet, Central and Eastern Europe) and 21 countries among the members of the organization for economic co-
80 operation and development (OECD) during 2000-2002. He concluded that the share of unofficial sector in GDP
81 for OECD members, The Soviet, and the CEE was 16.7%, 29.2% and 44.8% respectively. Ayyagari et al (2003)
82 carried out an experimental study about 54 countries (13 low-income, 24 medium-income and 17 high-income).
83 They revealed that the share of employment in SMEs in relation to the total employment changed from 32% in
84 low-income countries to more than 65% in high-income countries. In addition, the share of SMEs in GDP had
85 an increasing mode. For example, the share of SMEs in low-income countries is about 15% while in high-income
86 countries is about 52%. These results showed that the rise in the share of SMEs in employment had caused the
87 increase in SMEs' share in GDP.

88 Considering the influence of unofficial sector in employment and GDP, it has been proved that in lowincome
89 countries the share of unofficial sector in employment and GDP is 42% and 47% respectively, compared to the
90 share of unofficial sector in employment and GDP in high-income countries which are 15% and 13% respectively.

91 According to Ayyagari et al (2003) the relative share of SME sector in employment and GDP is less than
92 that of unofficial sector in low-income countries. Therefore, in developing countries, the politics which lead to
93 separation of official sector from unofficial sector are in priority in order to strengthen poor countries to cooperate
94 in markets and thus to attract these countries to economic activities with high added-value.

95 Generally, in most of the developing countries more capital has been allocated to SMEs in order to increase
96 the role of the corporation to create job opportunities. As a result, 95% of the corporations in OECD countries
97 are SMEs that have created 60 to 70% of employment. For instance, in Ecuador 99% of corporations have 50
98 employees or less, which is equal to 55% of the employment (Dawes, 2005).

99 3 b) Entrepreneurship, Innovation and Productivity in SMEs

100 In the evolving world of today, concentration on the matter of entrepreneurship is prevalent among economists,
101 governors and ordinary people. Schumpeter (1934) in the theory of economic development paid attention to
102 the role of entrepreneur as the main actor in surveying the stage of capitalism transformation. In the school
103 of Chicago, Night (1921) emphasized on the performance of the entrepreneur not his characteristics. According

104 to Night, entrepreneur is the one who involve himself in a trade or exchange by the goal of gaining benefits.
105 Economic situations have great effects on forming the entrepreneurship activities. In case of stopping the
106 economic development that causes unemployment, workers are driven to selfdevelopment. In contrast, in the
107 time of economic development most of workers are led to establishing new businesses, because of the existence of
108 job opportunities and increase on yielding profits in different industries. SMEs do to the nature of their activities
109 on highly dependent on human resources. In fact, the core competency in SMEs is based on an innovative idea
110 and human resources (Dawes, 2005).

111 According to ??eck et al (2005) SMEs are able to innovate in different levels of products by using a small
112 amount of investment in R&D; because these corporations could easily gain achievements of academic researches
113 and the outcomes of large-sized enterprises' R&Ds. In fact, there is a great motivation for innovation and creating
114 new methods in SMEs. Because of the lack of power and capital for starting a large-scale production plan, there
115 is a heavy competition among these types of enterprises. So, they try to improve the old processes and methods
116 with posing an innovative idea in production. They increase their outcomes or introduce new products so that
117 they could get a suitable market share for existing products or to create a new market for their new products.

118 Generally, entrepreneurship and creativity are the essence and the source of SMEs' activities and are considered
119 to be main part of the properties of these enterprises. So, one of the most important policies to develop and
120 reinforce SMEs is concentration on everlasting training and promoting employees' knowledge (Majidi, 2004).

121 According to researches of OECD (2000) the maximum share of SMEs growth in whole industries was 5 to
122 10 percent, which had played an important role in economic development. These enterprises have proved their
123 priority by the use of new comers who are exceptional administrators in creating jobs and innovations, though
124 the employment rate in SMEs is more than large-sized enterprises in most of the countries.

125 Although ??oseenberg (1976 ??oseenberg (, 1986) and Baumol (1993) pointed that imported technologies
126 effective drive for technological improvement in developing countries, the important role of SMEs via innovation
127 in developing countries is under debate. However, most of SMEs are not pioneers of innovation and mostly have
128 mixed old technologies. In most of the cases these enterprises are more innovative than large-sized enterprises. For
129 example, analysis show that small-sized enterprises are higher in innovation rate in high-technology industries such
130 as computer. In contrast, larger corporations are more innovative in capital-intensive low-technology industries
131 such as chemistry and food industry (Biggs, 2002). But, some researches (e.g. Pagano and Schivardi, 2001)
132 put emphasis on the benefits of largesized industries and they challenge the hypothesis of the supporters of the
133 growth of SMEs. They believe that large-sized enterprises could easily cover R&D costs by economies of scale.

134 4 III.

135 Literature Review Beck et al (2002), have done a research entitled "SMEs, development and poverty" about the
136 effects of SMEs on economic growth and decreasing poverty in 45 countries. Their results showed that there is a
137 positive and strong relation between developing SMEs and economic growth. Gebremeedhin et al (2004) found
138 out that there is a positive relation between the relative rate of activities and economic growth, and there is a
139 negative relation between the relative rate of small businesses and the existence of poverty. The results approved
140 that the relation between the development of small businesses, economic growth and decrease in poverty.

141 Winston Dawes (2005) investigated the effects of SMEs on economic growth and decrease of poverty in the
142 period of 1990 to 2000 in Latin America and Caribbean district. The results showed that SMEs have not positive
143 and strong effects on economic growth decrease in poverty in Latin America and Caribbean district. Results
144 of that research also revealed that the economic power of SMEs in Latin America and Caribbean district could
145 increase by improvement in businesses' environment and decrease of incomes' inequality.

146 Mohamadi (2004) compared the function of SMEs with large-sized enterprises on industrial development in Iran
147 and also compared the effects of SMEs on Iran economic growth with large-sized enterprises. He concluded that
148 SMEs in Iran had weak effect on growth in most of indicators, despite the dominant number of their companies
149 and employees. Furthermore, the results showed that the growth of both SMEs and large-sized enterprises have
150 a positive effect on economic growth of Iran while the effect of largesized enterprises had been more.

151 5 IV. Theoretical Framework and Model Generation a) Pre- 152 presenting the model

153 To study the effect of SMEs on economic growth, Solo-swan neoclassic model of development is used in this
154 research: (1) In which Y represents product, K is physical capital, L is labor, A is the level of technology, and
155 ? is the production elasticity of capital input and is in range of 0 to 1. Labor and technology grow with the
156 constant rate of n and g respectively. By dividing both sides to AL, the equation (??) could be written as:

157 (2)

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159 In which $y = Y/AL$ is the production of any effective element unit of labor, and $k = K/AL$ is the capital of any
160 effective element unit of labor. Solo growth model could be deduced from the equation (2) (Rumer, 2006; Dawes,
161 2005). By all means, this model had some shortages that the completed Solow model was recommended to
162 remove those deficiencies. This model contain human and physical capital as well. Experimental studies showed

8 MODEL ESTIMATION AND RESULTS

163 that the "Augmented Solow growth model" presents a well interpretation of the sectional data of the countries.
164 The Augmented Solow model is as:(3)

165 In which H is for human capital, A if the level of technology and L represent the saving of labor. The equation
166 (??) in the form of the effective capita is:(4)

167 Now, on the basis of the law of Dynamics of H and K :

168 In which s_k and s_h are percentage of production that is invested in K and H . A and L grow in the extrinsic
169 rates of g and n respectively. The depreciation rate of H and K equals to δ_h and δ_k and are extrinsic. According
170 to the theory of descending efficiency of production factors, any economy gains the values of in their constant
171 levels of A and L , and at this level δ_h . So to put h and k equal to zero, the value of the basic variables in constant
172 level are achieved. By replacing the A in the production function and taking logarithm, the growth equation (??)
173 is achieved that shows production depends on the growth of population and accumulation of human and
174 Physical capital: ?? is used in experimental studies: (6) In which y_t is the logarithm of the real production
175 per capita and the left side is economic growth. SME i is the number of the SMEs of each province according to
176 the number of employees, X_i is a set of control variables, containing the credits (credits given to each province),
177 training (high-school students of the given province) infrastructures (number of phone lines in each province) and
178 province's inflation rate. β is the obstruction segment.

179 6 b) Presenting data

180 One of the explanatory variables of the present research is the number of SMEs in terms of the number of
181 employees. This variable had a descending trend from 2004 to 2005 and 2006 (14368, 14036, 14008 respectively).

182 One of the main reasons for this descending trend could be the increase of the share of these enterprises in credits.

183 The share of SMEs in credits in 2005 and 2006 compare to 2004 had increased 4% and 1% respectively.

184 The majority of SMEs are concentrated on the province of Tehran (with the share of 27.8%) and the province
185 of Isfahan with the share of 15.11% is following Tehran. While the province of Ilam with the share of 0.22%
186 and the province of Kohgiluye with the share of 0.24 owned the least shares. The highest share of credit in the
187 whole country credit in 2004 was received by Tehran with the share of 51.97% and then Isfahan with the share
188 of 6.85%. The lowest share of credit reception had been for Kohgiluye with the share of 0.39%.

189 In 2005 the number of SMEs was 14036. The share of Tehran with a little decrease in comparison to the
190 previous year was 26.81 % and Isfahan with a little increase got the share of 15.8% which were the highest shares.
191 The province of Ilam and Kohgiluye with the less share compare to the previous year had 0.19% and 0.20% of
192 all share and were at the lowest row. Also, the highest share of credit reception (in the whole country credit) in
193 2005, the same as 2004, had been for Tehran and Isfahan and the least share was for Kohgiluye.

194 In 2006, the number of the number of these enterprises decreased to 14008. The share of Tehran with a
195 little increase in comparison with the previous year was 27.75% and is somehow equal to 2004. But, the share
196 of Isfahan with a little decrease compared to 2004 and 2005 was 14.57% which had been the highest share
197 respectively. While, the share of

198 7 B

199 highest rate respectively with the share of 18.68% and 6.75%. While Semnan with the share of 0.85% had the
200 lowest share. In 2005 Tehran and Isfahan were in the highest row as well, while Semnan and Kohgiluye had the
201 lowest share. In 2006, was still at the top and Fars province was following Tehran, while Semnan had the lowest
202 share.

203 In 2004, in terms of infrastructures the highest share belonged to Tehran with 26.04% following by Khorasan
204 with the share of 11.15%. The lowest share belonged to Chaharmahal and Ilam with 0.66% and 0.67% respectively.
205 In 2005, in terms of infrastructures again the highest share belonged to Tehran and Khorasan and the lowest
206 was for Chaharmahal and Ilam. In 2006, the highest share in infrastructures belonged to Tehran and East
207 Azarbayjan. The share of Tehran had had no change compared to 2005, but had a decrease compared to 2004
208 and got the share of 20.27%. The province of East Azarbayjan with the share of 6.09% was at the second row.
209 In contrast, the provinces of Ilam and Chaharmahal were at the lowest row.

210 In terms of inflation in the years of 2004, 2005 and 2006, Fars (19.3%), Kohgiluye (15.3%) and Ilam and
211 Khorasan (15.4%) had the highest share respectively; while during these years Gilan (11.3%), East Azarbayjan
212 (9.3%) and Bushehr (9.6%) had the lowest inflation rate.

213 V.

214 8 Model Estimation and Results

215 In this section, the experimental model presented in the previous section is estimated and analyzed. Again, we
216 emphasize that in present research SME indicates the number of small and medium-sized enterprises in each
217 province of Iran in terms of number of their employees. As the analyzed data belong to the provinces of Iran and
218 in the period of 2004-2006, we face cross-sectional data and time series.

219 At first step, to distinguish whether this model is a model with fixed effect or random effect, we use Chow test
220 and Lagrange coefficient test. If the results of these two tests were different, then we use Hausman test.

221 In chow test, H 0 means the existence of mixed data in which the ordinary least square (OLS) method is
222 used to estimate the model. Rejecting H 0 means the presence of fixed effect model and least square dummy
223 variable (LSDV) is used to estimate this. The results of Chow test showed in table 2 confirm the rejection of H0
224 hypothesis and the presence of fixed effect model.

225 **9 Table 2 : Results of Chow, Lagrange and Hausman**

226 In Lagrange coefficient test, H 0 means the existence of panel data and its rejection means the existence of
227 random effect model. The results express non-rejection of H 0 hypothesis.

228 As shown in table ??, the results of these two tests vary. So, there appears a question: how to choose one
229 model from mixed model and fixed model? This problem is solved by using Hausman test. According to Hausman
230 test, H 0 hypothesis means the presence of random effect model and rejecting H 0 means the presence of fixed
231 effect model. As the results of this test can be seen in table 2, H 0 is rejected, so we have a fixed effect model.
232 Therefore, the model surveyed with OLS was fitted by dummy variables (LSDV). The results are presented in
233 table 3. According to the results, the coefficient of SMEs by the number of 0.008 shows the positive and significant
234 effect of this variable on economic growth in different provinces of the country. The cause of the positive effect
235 is relevant to high motivation for innovation and creating new production methods in these enterprises; because
236 these enterprises have not enough power and capital to start a large production project, so there is an intense
237 competition among them. So, the owners of these enterprises try to increase their efficiency by presenting a new
238 production method in order to gain more market share or to create a new market for their products; and the
239 result is economic growth of the country. Also, these enterprises could transform the structure and composition
240 of employment in the country by creating high range of job opportunities.

241 According to growth model, credits are one of the most important sources to increase economic growth.
242 As shown in table 3, the relation between credit and economic growth is positive and significant. It could be
243 interpreted as one increase in the share of whole credits, causes 0.0005% increase in economic growth. This positive
244 relation has been verified by other researches. According to ??cKinnon and Shaw (1973) the credits is important
245 in two aspects: first, it leads savings toward investment, which in turn causes production development. Second,
246 according to King and Levine (1993), developing "credits" effects on all productivity factors such as technology
247 level, which in turn causes more production growth in long-term. One of the patterns that caused a serious change
248 in the literature of economic growth and development since early 1980's, emphasizes on human development and
249 investment in people abilities. Forecasting such patterns is due to paying attention to the fact that just countries
250 that had invested on developing people abilities, especially on training, could got to an acceptable level of
251 development. The importance of this key element is that the foundations of production are transformed through
252 the process of socio-economic development. The most important factor in this transformation is the new science
253 and technologies. As results shown, there is a positive and significant relation between investment on training
254 and economic growth which is 0.0003. It means that increasing each high-school student will leads to increasing
255 economic growth by 0.0003%. In the growth literature, negative relation between inflation and economic growth
256 is usually emphasized. In those contexts, that relation is usually investigated by two methods: first, the inflation
257 rate; second, the inflation variability. Regarding first method, it is said that inflation is considered as the tax
258 of investment. So, the high inflation rate, decrease the profitability required to perform an investment project.
259 In general, it has a negative effect on accumulation of financial capital and economic growth. In contrast, some
260 researchers noted that inflation rate increase the cost of money preservation. Its effect on replacement of money
261 with other properties makes changes in the people portfolio stock, and leads to increase in trading durable goods
262 and their prices, and increase in interest rate.

263 In addition, inflation is generated because of governmental, political and economic structure. This type of
264 inflation is specific to the developing countries and is known as Structural Inflation. Some reasons of inflation
265 in Iran are: the absence of economic infrastructures, usual budget deficit, expansion of services which are
266 misappropriate for the special situation of the country. Interpreting from the results, each increase in inflation
267 rate by one unit, decreases the economic growth of the country by 0.5 percent.

268 Due to the estimated model, $F = 7.49$ shows the significance of the whole regression. Also R^2 proves that
269 explanatory variables of model explain 69% of variance of economic growth variable.

270 **10 VI.**

271 **11 Conclusion**

272 One of the ways of industrial development which has been noticed in recent years in developing countries and
273 even in developed countries is minimizing industries and leaning against the expansion of SMEs as the stimulant
274 of economic and industrial development. According to Unido, the structure of industrial added value in Iran
275 during 2002-2005 had a relative well growth. This issue indicates structural changes in industry of the country
276 in recent years. Studying the activities of small, medium and large sized enterprises in Iran economy during
277 the third national development plan compare to its' previous plan period shows that by relative increase of the
278 numbers of medium enterprises, the role of these enterprises in the output of the industry has increased and this
279 could indicate the restoration of industrial structure from the view of corporation expansion pattern.

11 CONCLUSION

280 Because of the increasing importance of SMEs in growth of employment rate in the world and the country, the
281 effect of SMEs on the provincial economic growth in Iran is studied by mixed data during 2004-2006. To study,
282 the Solow augmented model and estimating method of fixed effect model have been used.

283 Results of fitting the model showed that SMEs have positive and significant effect on economic growth in the
284 provinces of Iran. This impact has its roots in high motivation for innovation and creating new job opportunities
285 and changing the structure of employment. The credits have positive and significant effect on economic growth
286 as well. This impact is due to the fact that credits leads savings toward investment from one hand, and affect
287 on the all elements of productivity such as technology level on the other hand. Training is another element that
288 affects the economic growth as well. Results show the positive and significant effect of training on economic
289 growth.

290 Inflation has different reasons in the different countries. The reasons of inflation in Iran are the absence of
291 the economic infrastructures, usual budget deficit, expansion of services which are misappropriate for the special
292 situation of the country, and the increase of cash amount without backing by production which leads to decreasing
293 economic growth. Results show that each increase in inflation rate by one unit, decreases the economic growth
294 of the country by 0.5 percent.

295 Nowadays, home businesses are in high importance. Many women and men could work at their homes. Higher
296 capability to create employment, the ability to attract limited and diffused capitals of the society, creating
297 more bases for partnership of private sector, rapid return of investment, less investment consuming, and more
298 capability to make employment, are of the benefits of SMEs. Developing small and medium-sized enterprises
299 that usually have less than 150 employees could be the healing prescription for a part of unemployment problems
300 in the country. Though small and medium-sized enterprises (that usually expand by a local perspective) do not
301 produce complicated products, they could help the economic development and employment in the country.

Also the expansion of these businesses with consideration of regional situation of any province could ¹



5

Figure 1: (5)

$$Y = K^\alpha (AL)^{1-\alpha}$$

Figure 2:

1

sized enterprises during 2004-2006

year	2004	2005	2006
Small Enterprises	75%	76%	75%
Medium Enterprises	11%	11%	11%
Large Enterprises	14%	13%	14%

Figure 3: Table 1 :

3

				Explanatory Variables	Coefficient	Sig
				SME	0.008	0.050
				Credits	0.0005	0.001
				Logarithm of GDP	-8.080	0.061
				Infrastructures (Telephone)	0.0001	0.75
Test	type	Sig	Test	Training	0.0003	- 0.000
Chow	test	0.00	Fixed effect	Inflation	-	
Lagrange test		0.60	model	Dummy variable	0.500	0.063
0.25 ? 2	16.01	0.00		y-intercept	5.270	
Hausman test			Mixed model	R2 =	-29.88	0.000
72.67			Fixed effect			0.007

Figure 4: Table 3 :

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- 302 [Beck et al. ()] , T Beck , A Demirguc-Kunt , R Levine . 2003.
- 303 [Romer ()] *Advance Macroeconomics*, D Romer . 2011. Irwin: McGraw-Hill. (4th ed)
- 304 [Pagano and Schivardi ()] 'Firm Size Distribution and Growth'. P Pagano , F Schivardi . *The Scandinavian Journal of Economics* 2003. 105 (2) p. .
- 305
- 306 [Smes] *Growth and Poverty: Cross-Country Evidence*, Smes . Washington, DC: World Bank.
- 307 [Industrialization and the Small Firm: Patterns and policies International Center for Economic Growth]
- 308 'Industrialization and the Small Firm: Patterns and policies'. *International Center for Economic Growth*
- 309 [Khadem-Mohammadi ()] *Investigation of Small and Medium Enterprise Role in Economic Growth in Iran*, Z
- 310 Khadem-Mohammadi . 2006. (In Persian)
- 311 [Biggs ()] *Is Small Beautiful and Worthy of Subsidy? Literature Review*, T Biggs . 2002. Washington DC. (IFC
- 312 mimeo)
- 313 [Oecd (2000)] Oecd . *Small Businesses, Job Creation and Growth: Facts, Obstacles and Best Practices*. Available
- 314 in www.oecd.org. Accessed, 2000. May 2013.
- 315 [Ayyagari et al. ()] *Small and Medium Enterprises across the Globe: A New Database*, M Ayyagari , T Beck , A
- 316 Demirguc-Kunt . 2003. Washington, DC: World Bank.
- 317 [Beck et al. ()] *Small and Medium Enterprises, Growth and Poverty*, T Beck , A Demirguc-Kunt , R Levine .
- 318 2002. Washington, DC. p. 3178.
- 319 [Majidi ()] *Small Enterprise Role in Modern Economics*, J Majidi . 2004. Tehran: Rasa Publication. (In Persian)
- 320 [Ghoreche ()] *Small Enterprises and Its Role on Iran Economy. Tehran: Business Observation and Researches*
- 321 *Institution*, M Ghoreche . 1998. (In Persian)
- 322 [Kahzadi and Dehghan-Dehnavi ()] *The Credit Polices Defend Of SME for Job Creation. Tehran: Iranian Export*
- 323 *Development Bank*, N Kahzadi , M A Dehghan-Dehnavi . 2005. (In Persian)
- 324 [Dawes ()] *The Economic Impact of Small and Medium-Size Enterprise: A Cross-Country Analysis of Latin*
- 325 *America and the Caribbean*, W Dawes . 2005. Washington DC. Howard University
- 326 [Gebremariam and Gebremedhin (2004)] *The role of Small Business in Economic Growth and Poverty Alleviation*
- 327 *in West Virginia: An Empirical Analysis. Paper presented at the American Agricultural Economics Association*
- 328 *Annual Meeting*, G H Gebremariam , T G Gebremedhin , Jackson , RW . 2004. August 1-4, 2004. Denver,
- 329 Colorado.
- 330 [Schneider et al. ()] 'The Size and Development of The Shadow Economies and Shadow Economy Labor Force
- 331 of 22 Transition and 21 OECD Countries: What Do We Really Know'. F Schneider , D Snodgrass , T Biggs
- 332 . *Round Table Conference on the Informal Economy*, (Sofia, Bulgaria) 2003. April 18-20, 2002. 15. 1996.