

SOCIAL CAPITAL AND THE FINANCING OF MICROENTREPRENEURS IN CAMEROON

Serge MESSOMO ELLE

messomo2011@yahoo.fr

University of Buea-Cameroon

Phone : + 237 75 00 39 65

SOCIAL CAPITAL AND THE FINANCING OF MICROENTREPRENEURS IN CAMEROON

Abstract: The purpose of this study was to determine the effect of social capital on the financing of informal microentrepreneurs in Cameroon. The data were secondary and were collected from the informal sector and employment survey done in 2010 by National Institute of Statistics in Cameroon. Percentages and ordinary least square regression were used to carry out descriptive and explanatory analyses respectively. The results showed that the main networks of financing of microentrepreneurs in Cameroon are households, personal savings, gifts and inheritance. The data analysis also showed that the suppliers of funds don't meet the total needs of financing of microentrepreneurs. Lastly, the results revealed that social capital affects significantly the financing of microentrepreneurs in Cameroon through suppliers, investment and sources of financing networks. Based on these results, we recommend that the government should put in place specific institutions in charge of the financing of informal microentrepreneurs in Cameroon. In addition, social capital should be used by informal microentrepreneurs as a means to get access to finances; mostly where they cannot meet market requirements of financing.

Keywords: Financing, informal microentrepreneurs, exclusion, social capital networks, market-oriented financial institutions.

Résumé : Ce travail a exploré l'impact du capital social sur le financement des microentrepreneurs informels au Cameroun. Pour réaliser cet objectif, les données de l'enquête sur l'emploi et le secteur informel de 2010 ont été utilisées. Deux types d'analyse ont à la suite de ces données été effectuées notamment une analyse descriptive et explicative. Les instruments d'analyse ont été les pourcentages et la régression des moindres carrés ordinaires linéaires. Les résultats ont dévoilé que les principaux réseaux de capital social de financement des microentrepreneurs au Cameroun sont les ménages, l'épargne, les dons et l'héritage. En outre, les résultats ont montré que l'offre de financement des microentrepreneurs est inférieure à la demande. Enfin les résultats ont révélé que le capital social a un impact significatif sur le financement des microentrepreneurs au Cameroun. Aussi, sur la base de ces résultats, nous recommandons que le gouvernement camerounais crée des institutions spécifiques de financement des microentrepreneurs informels. Par ailleurs les microentrepreneurs doivent valoriser leur capital social où ils ne peuvent pas fournir les garanties financières et matérielles pour accéder au financement des institutions financières.

Mots clés : Financement, microentrepreneurs informels, exclusion, réseaux de capital social, institutions financières de marché

1. Introduction

Finances are one of the main hindrances affecting the development of enterprises (Africapratice , 2009, World Bank, 2009, Business Climate Cameroon Survey [BCCS], 2011). Microenterprises are more affected than any other type of enterprises by it (Botzung, 1996) because they are excluded from formal sources of financing. The development of other sources of financing like microfinance did not solve this problem as expected because some of the microfinance institutions adopted commercial banks' approach of financing (Messomo, 2011). This impacts the funding of microentrepreneurs.

According to the literature, microentrepreneurs' financing falls in the area of bank lending with imperfect information (Bester, 1985; Stiglitz and Weiss, 1981; Besanko and Thakor, 1987; Boot et al., 1991; Berger and Udell, 2002). This literature shows that microentrepreneurs are excluded from financing because they are very risky (Datar et al., 2009; De Aghion and Morduch, 2005); they cannot provide complete information to lenders (Hugon, 1993); they generate high lending transaction cost (Lapie, 1996). These shortcomings can be overcome by social capital which is built up on ties, relations, networks and confidence (Putnam, 2000; Coleman, 1988); henceforth this main question: what is the impact of social capital on the financing of informal microentrepreneurs in Cameroon? This question provides these specifics; that is, what are the networks of financing of microentrepreneurs by social capital in Cameroon? How effective is microentrepreneurs' social capital in covering their needs of financing? Does social capital enable significantly the financing of microentrepreneurs in Cameroon?

The main objective of this study is to determine the impact of social capital on the financing of microentrepreneurs in Cameroon. The specific ones are to provide the networks of financing of microentrepreneurs by social capital in Cameroon, to determine how effective is microentrepreneurs' financing by social capital and to examine if social capital enables the financing of microentrepreneurs significantly in Cameroon.

This study is important because it provides to both the lenders and the microentrepreneurs an alternative means of securing lending relationships and assists in building-up networks that give access to finances. The research uses the descriptive and the explanatory approaches to meet the objectives set above. It is divided in sections. After this introductory section, section 2 defines social capital, section 3 assesses the financing of microentrepreneurs by social capital, section 4 provides the methodology, section 5 presents the results and their interpretation and section 6 gives the concluding remarks.

2. Definition of Social Capital

Social capital refers to the ability of actors to extract benefits from their social structures' networks and membership (Lin et al., 1981; Portes, 1998). It is made up of resources acquired through relations, associations and networks. Such resources are confidence, interactions, cooperation, coordinations and mutual benefits (Chou, 2006).

Social capital also is all the present and future resources related to sustainable networks of friends, relations and recognition. The concept is multidimensional and occurs both at the individual and organizational levels (Nahapiet and Ghoshal, 1988). At the individual level, it starts at the level

of the family where parents need to cultivate close ties with their children in order for them to have good models of development. This facilitates social integration of children and a good human development. Thus individuals from good reputation families build easily relations and networks as opposed to those from poor classes, status, background and bad reputation (Davidson and Honig, 2003). Good family background individuals with stock of human capital build easily solid and sustainable social capital from high accumulated education and experience (Anderson and Miller, 2003).

At the organizational level, social capital occurs where it brings in trust within the organization, and externally, between the organization and its external partners (Alder and Kwon, 2002). Trust enhances the strength of social capital (Coleman, 1988; Granovetter, 1985). *“The trust forms a bonding (or exclusive) glue that holds closely knit organizations together”* (Davidson and Honig, 2003). Another aspect related to social capital consists of ties. These ones provide resources such as information and vary according to bonding or bridging social capital (Granovetter, 1973). According to Granovetter (1973), there are weak ties and close ties. Weak ties enable to obtain resources like information about jobs while strong ties *“such as those derived from family relationships, provide secure and consistent access to resources”* (Davidson and Honig, 2003). Social capital in short provides ties, relations and networks useful for the financing of microentrepreneurs; mostly the informal ones.

3. Social capital and microentrepreneurs' financing

Microentrepreneurs as other entrepreneurs need finances to carry out their business activities. They need finances specifically for their working capital and investments (capital expenditures). But these needs vary according to the level of development of the microenterprise. At the creation stage, the needs of microentrepreneurs are more of capital expenditures (Ledgerwood, 1998; Messomo, 2013). At the creation stage, finances are used to acquire fixed assets and other equipment to start the business. But, because most of these start-ups don't have an historical background and haven't made a name, they use informal sources of finance at the start of the business like friends, family, Rotating Savings and Credit Associations (ROSCAs), usury and personal savings. Contrary to potential businesses, existing microenterprises have made a name and can get access to some of the formal sources of finance like regulated microfinance institutions or semi-formal like rural cooperatives. Existing microenterprises have mostly working capital needs, despite that at the stage of expansion; their needs are also associated with purchase of new equipment, machines and other fixed assets (Ledgerwood, 1998; Messomo, 2013). In general, microenterprises' needs of finances are rarely funded by formal sources or market-oriented financial institutions.

Market-oriented financial institutions are guided by market principles of financing. Some of these principles are profitability, cost minimization, optimization of resources and risk minimization. In the principle of profitability, market oriented financial institutions expect that any loan granted will generate revenues greater than loan operational costs. If this cannot be met, then the bank is obliged to ration customers that lead to bank losses like risky microenterprises (De Aghion and Morduch, 2005). In the principle of cost minimization, the market-oriented financial

institution must reduce transaction costs related to lending at the lowest level. Such costs are screening, monitoring and enforcement.

In terms of screening, the lender must avoid granting credit to customers that want to pay more than average interest rate (Stiglitz and Weiss, 1981) or provide low collaterals and pay high interest rate (Besanko and Thakor, 1987). In terms of monitoring, the bank must make sure that the borrower commits himself to the purpose of the loan and does not involve in risky activities. As such, it must set covenants in the loan contracts (Myers, 1977; Boot and Thakor, 1994). In case of enforcement, the bank must make sure its cost is kept at the lowest level. This can be done by requesting at the beginning of the loan contract, security collaterals from customers. The principle of optimization enables the bank to grant the maximum amounts of loan as possible to customer in so far it thinks that it does not jeopardize the life of the bank entity. This can be done through securitization, increase in the size of loans of customers and use of inclusive financing. In terms of risk minimization, banks must improve their methods of selection and monitoring of customers; hence they can reduce adverse selection and moral hazard. Microentrepreneurs always have problems to meet up with these market lending principles. Thus, this explains their exclusion by the regulated financial institutions. But, social capital can enable them to overcome these barriers and give them access to finances.

According to Anderson and Miller (2003), social capital is embodied within personal networks of social relations which assist in the resource acquisition. Microentrepreneurs assessed here are the informal ones. Their interactions with their business partners are mostly through social relations and personal networks (Informal Sector and Employment Survey 2 [ISES 2], 2010). Thus social capital here enables microentrepreneurs to cultivate reputation, close ties and relations with financiers that lead to confidence. The confidence is used in financial relations where there is no quantifiable assets to withhold the relationship. Confidence creates ties. If these ones are strong, they drop other constraints to financing like physical and financial collaterals, existence of microenterprise, specific sector of activity, human capital competences, big size of the activity...Strong ties will also enable to get access to complete information on the microentrepreneur and breach the barrier of imperfection information of microenterprises (Ayidi, 2003). Confidence and information generated by social capital will then enable financiers to provide finances to microentrepreneurs. This will be verified as far as Cameroon is concerned. This leads us to the methodology.

4. Methodology

Cameroon economy can be divided into two main sectors; the formal and the informal sector. According to ISES 1 (2005), the informal sector employs 90.4% of the active population of Cameroon against 9.6% for the formal sector. As far as microentrepreneurs are concerned, they were 2.5 millions in 2010 (ISES 2, 2010). These statistics show how important are informal microentrepreneurs for Cameroon economy.

In order to assess the impact of social capital on the financing of microentrepreneurs, this study used secondary data. These ones were got from the Informal Sector and Employment Survey 2 [ISES 2] carried out by the National Institute of Statistics [NIS] in 2010. The survey was made

over 4585 microentrepreneurs in Cameroon; both in the urban and rural areas. The survey was divided into 12 regions made up of 10 administrative regions of Cameroon plus Douala and Yaoundé. This study as far as is concerned, is descriptive and explanatory.

The descriptive section determines the social capital networks of financing of informal microentrepreneurs in Cameroon. Social capital networks were measured by the networks of financiers and sources of financing of informal microentrepreneurs in Cameroon. In terms of effective financing by social capital, the indicator of measurement was net positive percentage differences between demand and supply of financing to microentrepreneurs in Cameroon.

The explanatory section examines the effect of social capital on microentrepreneurs' borrowing. Here we had two variables; the dependent and the independent. The dependent was microentrepreneurs' borrowing and the independent was social capital. Indicators used to measure the social capital were percentages' amounts of financiers, sources of financing, purchases, sales and investment. The dependent variable microentrepreneurs' borrowing was measured by the average borrowed amount of microentrepreneurs in 2010. Percentages were used to make descriptive analyses while Ordinary Least Square (OLS) regressions were used for explanatory ones. The next section focuses on the results.

5. Presentation and Discussion of Results

This section presents, analyses and interprets results of this study. It starts by presenting results related to the networks of financing of microentrepreneurs in Cameroon in terms of types of financiers and sources of financing.

5.1 Presentation of results of networks of financing of informal microentrepreneurs

Table 1: Networks of financiers of microentrepreneurs

Types of financiers	Industrial sector	Commercial sector	Service sector	Total informal sector
	Percentages (%)	Percentages (%)	Percentages (%)	Percentages (%)
Public	2.5	10.4	3.6	5.6
Non-commercial formal private institutions	0.8	3.6	1.2	1.9
Commercial private formal institutions	20.7	8	26.6	18.7
Non commercial informal institutions	2.7	6.5	13.8	8.2
Commercial informal institutions	49.4	14.6	26.1	28.8
Households	21.7	55.3	22.5	33.4
Foreign institutions (Imports)	1.2	0.1	5.8	2.6
Others	0.9	1.4	0.3	0.9
Total	100	100	100	100

Source : NIS, ISES 2 (2010)

Table 1 shows that informal microentrepreneurs have many types of providers of funds. These ones are the public, private formal and informal institutions. This table also shows the different sectors of the informal sector in Cameroon. According to Table 1 and in relation to percentages, the highest provider of funds for the industrial sector is commercial informal institutions with 49.4%. For the commercial sector, the highest financier is households with 55.3% while for the service sector, this one is commercial private institutions with 26.6%. In terms of the whole informal sector, the households are the first providers of funds to the informal sector in Cameroon. This takes us to Table 2.

Table 2: Networks of sources of financing of microentrepreneurs

Sources of financing	Douala (%)	Yaoundé (%)	Other urban areas (%)	Urban area (%)	Rural area (%)	National territory (%)
Savings/Gifts/Inheritance	95,6	87,1	92,2	92,3	92,1	92,2
Family borrowings	1,9	2,8	2,9	2,4	1,7	2,1
Rotating Savings and Credit Associations (ROSCAs)[Djanguis]	0,4	1,4	1,1	0,9	2	1,2
Others	2,1	8,7	3,8	4,4	4,2	4,3
Total	100	100	100	100	100	100

Source : NIS, ISES 2 (2010)

Table 2 shows the networks of sources of financing of microentrepreneurs in Cameroon according to different geographical areas. So looking at this table, the highest source of financing used by microentrepreneurs of Douala, Yaoundé, Other urban areas, urban area, rural area is savings/gifts/inheritance with an average of 92.2%. This source is followed by others, 4.3% and family borrowings, 2.1%. This leads us to the measurement of effectiveness of financing of microentrepreneurs by different networks.

5.2 Results of effective financing of microentrepreneurs in Cameroon

The effectiveness of financing of microentrepreneurs in Cameroon is measured by the difference between the supply and demand for financing of microentrepreneurs in Cameroon. This difference is effective when the difference is positive that is the percentage of financing is higher than the percentage of demand for funds by microentrepreneurs.

Table 3: Effective financing of microentrepreneurs in 2010

Items	Douala (%)	Yaoundé (%)	Other urban (%)	Urban (%)	Rural (%)	National territory (%)
Demand for funds of microentrepreneurs	4.1	9.7	12.0	8.2	9.0	8.6
Supply of funds of microentrepreneurs	7.0	4.5	4.5	9.0	4.5	5.9
Differences	+ 2.9	- 5.2	-7.5	+0.8	-4.5	-2.7

Source : From NIS, ISES 2 (2010)

Table 3 shows that the financing is effective only in Douala and other towns where the supply of funds to microentrepreneurs is greater than the demand for funds of microentrepreneurs in Cameroon. The other geographical areas had shortages in financing of microentrepreneurs in 2010 that were Yaoundé, -5.2%, other urban, -7.5%, rural areas, -4.5%. The total gives an average total difference of -2.7% at the level of the national territory. Next presents explanatory results.

5.3 Results of the significant financing of microentrepreneurs by social capital in Cameroon

Table 4: Measurement of the significant financing of microentrepreneurs by social capital

Social capital Indicators (Independent variable)	Average amount of credit to microentrepreneurs	t-test value	p-value of the t-test
Intercept	162018.7 (45866.5)	3.53***	0.004
Suppliers' networks	-0.5920 (0.2910)	-2.03*	0.065
Customers' networks	-0.3638 (0.0276)	-1.32	0.211
Investment networks	-0.0764 (0.0291)	-2.63**	0.022
Sources of financing networks	39.4356 (19.8706)	1.98*	0.071
Financiers network	15.6624 (29.2717)	0.54	0.602
F-test value	3.35		
p-value F-test	0.0399		
R ²	0.47		
N	18		

Significance = p< 1%, p<5%, p< 1% and 5% *** = significance at 1%, ** = significance at 5%, * = Significance at 10%. *Standard Errors are in Brackets.*

Source: Computed from NIS and ISES 2 Data (2010)

Table 4 shows the statistics of the Ordinary Least Square (OLS) regression of social capital indicators and the dependent variable average amount of credit to microentrepreneurs. The p-value of the F-test shows that the regression is significant at 5%. This means that social capital affects the financing of informal microentrepreneurs in Cameroon. R^2 shows that social capital explains the financing of microentrepreneurs in Cameroon by 47%. The other 53% are explained by other variables. According to the t-test, the indicators of social capital that explain the significance of the F-test are suppliers' network at 10%, investment's network at 5% and sources of financing network at 10%. The average Variance Increase Factor (VIF) of these results is less than 2 that is 1.14 (see Appendix) showing that there is no multicollinearity of variables studied. Thus, these results can be generalized to the whole population of informal microentrepreneurs and their financing through social capital in Cameroon. This takes us to interpretation and discussion of results.

5.4 Interpretation and Discussion of Results

The descriptive results revealed that informal microentrepreneurs are mostly using households, savings, gifts and inheritance networks for their financing (see Table 1 and 2). This is explained by the fact that most of these microunits of production are excluded from formal banking institutions like commercial banks and profit-oriented microfinance institutions. In addition, very few financial institutions in Cameroon fund business creation (Messomo, 2013). Most of these institutions are risk-averters. Furthermore, the sector of activity of microentrepreneurs, their managerial style, and their size of revenues and cost of financing make financial institutions to be reluctant to finance these microbusiness units. The descriptive results also showed that in general the supply of funds to microentrepreneurs does not cover their demand. This is still explained by the prudence and the reluctance of financial institutions to finance risky businesses and microactivities.

The explanatory results on the other hand revealed that social capital affects significantly the financing of microentrepreneurs in Cameroon (see Table 4). The indicators of social capital that affect significantly the financing of microentrepreneurs in Cameroon are suppliers' network, investment network and sources of financing network. There is a reverse relationship between suppliers' network and financing of microentrepreneurs. This means that suppliers provide more funds to microentrepreneurs when they have low suppliers' debt; vice-versa. There is also an inverse relationship between investment network and microentrepreneurs' financing. This means that financiers provide more funds to microentrepreneurs when they don't involve in risky investments; vice-versa. Sources of financing and microentrepreneurs' financing are positively related. This means that as the number of sources of financing increases, the microentrepreneurs' financing increases. This is because more sources of financing increase competition among different sources. This competition then reduces the cost of borrowing and hence enables microentrepreneurs to increase their borrowings from different sources. This now leads us to concluding remarks.

6. Concluding Remarks

The objective of this study was to determine the impact of social capital on the financing of microentrepreneurs in Cameroon. To meet this objective, secondary data from the Informal Sector

and Employment Survey in 2010 were used. The secondary data collected were related to the nature of social networks used by microentrepreneurs to get finances, the effectiveness of financing of microentrepreneurs by social capital and the significance of financing of microentrepreneurs by social capital. The first two sets of data collected used descriptive analysis through percentages, while the third set of data used explanatory analysis through Ordinary Least Square regression to determine whether social capital enables significant financing of microentrepreneurs in Cameroon.

The results showed that the main networks of financing of microentrepreneurs in Cameroon are households, personal savings, gifts and inheritance. The data analysis also showed that the suppliers of funds don't meet the total needs of financing of microentrepreneurs. Lastly, the results revealed that social capital affects significantly the financing of microentrepreneurs in Cameroon through suppliers' networks, investment networks and sources of financing networks. Based on these results, we recommend that the government should put in place specific institutions in charge of the financing of informal microentrepreneurs in Cameroon. In addition, social capital should be used by informal microentrepreneurs as a means to get access to finances; mostly where they cannot meet market requirements of financing.

References

Africappractice, (2005), Access to Finance: Profiles of African MSEs, *Working Paper*, Jetro London, available on : <http://www.africappractice.com/uploads/JETRO.pdf>.

Adler, P., Kwon, S., (2002), Social capital: prospects for a new concept, *Acad. Manage. Rev.* 27 (1), 17–40.

Anderson, A.R. and Miller, J.C.,(2003), "Class matters": human and social capital in the entrepreneurial process, *Journal of Socio-Economics* 32, pp.17-36.

Aydi, G., (2003), Capital social entrepreneurial, performance de l'entreprise et accès aux ressources externes, XIIème Conférence de l'Association Internationale de Management Stratégique.

BCCS (2011), *Cameroon Business Climate Survey 2011*, Ministry of Economy and Territorial Planning, Cameroon.

Besanko D. and A.V. Thakor, (1987), Collateral and rationing: sorting equilibria in monopolistic and competitive credit markets, in *International Economic Review*, Vol. 28, pp. 671-689.

Bester H., (1985), Screening vs rationing in credit markets with imperfect information, in *American Economic Review*, Vol. 75, pp. 850- 855.

Berger A. N. and Udell G. F., (2002), Small Business Credit Availability and Relationship Lending: the Importance of Bank Organisational Structure, *The Economic Journal*, vol. 112, pp. 32-53.

Boot A., W.A., Thakor, A.V., Udell, G.F. (1991), “Secured lending and default risk: equilibrium analysis, policy implications and empirical results”, *Economic Journal*, Vol.101, pp.458–472.

Boot, A. and A. Thakor, (1994), Moral Hazard and Secured Lending in an Infinitely Repeated Credit Market Game, *International Economic Review*, 35, pp 899-920.

Botzung, M., (1996), Dispositifs d’appui et financement de la petite entreprise, *Revue Tiers-Monde*, 37 (145), pp. 135-142.

Chou K., (2006) Three simple models of social capital and economic growth, *Journal of Socio-Economics*, n° 35, pp. 889–912.

Coleman, J.S., (1988), Social Capital in the Creation of Human Capital, *American Journal of Sociology*, no 94, pp. S95-S120.

Datar, M. S. et alii (2009), Management Accounting and Control: Lessons for and from the World Tiniest Business, *Journal of Strategic Finance*, pp. 27-34, November.

Davidsson, P. and Honig, B. (2003), The role of social and human capital among nascent entrepreneurs, *Journal of Business Venturing*, 18, pp. 301-331.

De Aghion, A. B. et Morduch, J. (2005), *The Economics of Microfinance*, the MT Press, USA.

Granovetter, M., (1973), The strength of weak ties, *American Journal of Sociology* 78, 1360–1380.

Granovetter, M., (1985), Economic action and social structure: the problem of embeddedness, *American Journal of Sociology* 91, 481–510.

Hugon P. (1993), *L'économie de l'Afrique*, La Découverte, coll. Repères, Paris.

ISES 1 (2005), *Informal Sector and Employment Survey Report*, National Institute of Statistics, Yaoundé.

ISES 2 (2010), *Informal Sector and Employment Survey Report*, National Institute of Statistics, Yaoundé.

Labie, M., (1996), Perspectives d'autonomie et de pérennisation des systèmes financiers décentralisés, *Tiers-Monde*, tome 37 n°145. pp. 85-96.

Ledgerwood, J. (1998), *Manuel de microfinance – une perspective institutionnelle et financière*, Banque Mondiale.

Lin, N., Ensel, W., Vaughn, J., (1981), Social resources and strength of ties: structural factors in occupational status attainment, *American Sociology Revue*, 46 (4), 393–405.

Messomo, E. S., (2011), Réglementation et inclusion financière en microfinance au Cameroun, Colloque des 4^{èmes} journées internationales de la microfinance, Brazzaville, Congo.

Messomo, E. S., (2013), Microfinance and Entrepreneurship in Cameroon, *Journal of Social Business*, Vol. 3, no 1, pp.6-23.

Myers, S., (1977), Determinants of Corporate Borrowing, *Journal of Financial Economics*, 5, pp. 147-175.

Nahapiet J. and S. Ghoshal, (1998), Social capital, intellectual capital, and the organizational advantage, *Academy of Management Review*, Vol. 23, pp. 242-266.

Portes, A., (1998), Social Capital: Its origins and Applications in Modern Sociology, *Annual Review of Sociology*, no 24, pp. 1-24.

Putnam, R., (2000), *Bowling Alone. The collapse and Revival of American Community*, Simon and Schuster, New-York.

Stiglitz J. and A. Weiss, (1981), Credit rationing in markets with imperfect information, *American Economic Review*, Vol. 71, n°3, pp. 393-410.

Appendices

Appendix 1: Data used for explanatory analysis

SUPPLIERS' NETWORK in (FCFA)	CUSTOMERS' NETWORK in (FCFA)	INVESTMENT NETWORK in (FCFA)	SOURCES OF FINANCING NETWORK (in terms of number of microentrepreneurs using the source)	FINANCIERS NETWORK (in terms of number of microentrepreneurs using the financier)	AVERAGE AMOUNT BORROWED in (FCFA)
138694	261800	188600	4184	254	123100
42149	124500	388700	96	86	155000
14139	206100	91300	64	849	106500
45352	732400	49200	64	372	138600
37055	463000	34500	195	1306	175700
31437	472900	20000	4424	1516	401600
10859	1770100	10200	178	118	92500
20578	334300	26800	101	41	61200
90553	212100	13700	111	2242	143600
17178	247100	58100	395	926	156775
42899	262900	256700	254	113	156100
3385	132200	1757000	86	472	13000
27091	174400	69700	849	163	215300
161234	362600	100900	372	939	9000
99451	354700	300200	1307	363	226900
260685	517000	41400	1516	1207	44000
138694	237800	74100	118	295	197800
31437	316800	55000	408	626	17000

Source: From NIS, ISES 2 (2010)

Appendix 2: Descriptive results of data of appendix 1

Variable	Obs	Mean	Std. Dev.	Min	Max
averageamo~d	18	135204.2	95223.17	9000	401600
supplierne~k	18	67381.67	68425.71	3385	260685
customersn~k	18	399038.9	374504.2	124500	1770100
investment~k	18	196450	404173.5	10200	1757000
sourceoffi~k	18	817.8889	1337.696	64	4424
financiern~k	18	660.4444	603.6474	41	2242

. vif

Variable	VIF	1/VIF
investment~k	1.19	0.838077
supplierne~k	1.16	0.862938
customersn~k	1.13	0.884844
financiern~k	1.12	0.893420
sourceoffi~k	1.09	0.916374
Mean VIF	1.14	