

Cuadernos de Investigación

COMPARATIVE ANALYSES OF POLICIES, LEGAL BASIS AND REALITY OF SME FINANCING IN CHINA AND COLOMBIA

MARLENY CARDONA A.
ISABEL CRISTINA MONTES G.
CARLOS ANDRÉS CANO G.
BEI GAO

Grupo de Estudios Sectoriales y Territoriales –ESYT–
Departamento de Economía
Escuela de Administración

ISSN 1692-0694. Medellín. Julio de 2008. Documento 66 - 072008

La Universidad EAFIT aspira a ser reconocida nacional e internacionalmente por sus logros académicos e investigativos.

Para ello desarrolla la capacidad intelectual de sus alumnos y profesores en todos los programas académicos, con la investigación como soporte básico.

-De la visión institucional-

Edición
Dirección de Investigación y Docencia
Universidad EAFIT
Medellín, Colombia

Director Félix Londoño González

Los contenidos de este documento son responsabilidad de los autores.

Se autoriza la reproducción total o parcial de este material para fines educativos siempre y cuando se cite la fuente.

Serie Cuadernos de Investigación

Carrera 49 7 sur 50 Teléfono (574) 261 95 40 www.eafit.edu.co/investigacion

TABLA DE CONTENIDO

			Página
AC	RONY	MS AND ABBREVIATIONS	
AU ⁻	THOR	S	
ABS	STRAG	CT. RESUMEN	
1.	INTF	RODUCTION	1
2.	BAC	KGROUND OF THE TWO COUNTRIES	2
	2.1	The banking system of the two countries:	2
	2.2	Investment environmentin China and Colombia	4
		2.2.1 Innovation	4
		2.2.2 Labour	4
		2.2.3 Trade	5
3.	LEG	AL BASIS	6
	3.1	The most important laws and regulations on SMEs in two countries:	6
		3.1.1 SME laws and regulations in China:	6
		3.1.2 Laws regulating SMEs in Colombia:	7
		3.1.3 Common problems	8
	3.2	The definitions of SMEs in two countries:	10
		3.2.1 Defining SME in China	10
		3.2.2 Defining SME in Colombia	11
		3.2.3 Comparison of the definitions of SMEs in two countries	12
	3.3	Credit recording	13
		3.3.1 Credit reporting in China: still at infancy stage	13
		3.3.2 Credit reporting in Colombia: better but not sound	13
		3.3.3 Credit reporting: Much to be improved	14
	3.4	Fair play: A fairer playground for SMEs	15
		3.4.1 The difficult situation in China	15
		3.4.2 The case in Colombia: Comparatively better	15
		3.4.3 How to improve: Will promotion policy work?	16
	3.5	The interest rate dilemma: a ceiling or not?	17

4.	ORG	ANIZATIONS SUPPORTING SMES FINANCIALLY	18		
	4.1	The Export-Import Bank of China (EXIM) vs. Bancoldex	18		
	4.2	IFC SME in China vs. Proexport	19		
5.	SME	FINANCING	22		
	5.1	Present situation of SME financing: problems and causes	22		
		5.1.1 Difficulty in access to finance and high finance cost	22		
		5.1.2 The main problems related to SME access to finance	22		
	5.2	The financial policies of banks and the way of loan releasing	26		
		5.2.1 Why banks are cautious about SME loans?	26		
		5.2.2 The characteristics of bank loans in China and Colombia	27		
		5.2.3 The way in which banks estimate the risk of SME loans	28		
	5.3	Informal finance and SMEs	28		
		5.3.1 Incentives for informal finance	28		
		5.3.2 The size of informal finance	29		
		5.3.3 The forms of informal finance	30		
		5.3.4 Informal finance-future financial institutions focusing on SMEs	30		
6.	REC	OMMENDATIONS	31		
	6.1	Prerequisites for sound and healthy SME Development	31		
	6.2	What kind of financial support do SMEs need?	32		
		6.2.1 Long-term loans	32		
		6.2.2 Mezzanine financing	32		
		6.2.3 Equity capital	32		
		6.2.4 Consulting services	32		
	6.3	Colombia Experience: Loan-Seekers from the banks	33		
	6.4	.4 Chinese experience			
	6.5	Conclusion	34		
REF	ERFI	NCES	35		

ACRONYMS AND ABBREVIATIONS

SME Small and Medium-sized Enterprises SOE State-Owned Enterprises **SETC** State Economic and Trade Commission CGS Credit Guarantee System for Small and Medium Enterprises promulgated by the SETC on June 14, 1999 CGC Commercial Guarantee Company CGA Credit Guarantee Agency Export and Import Bank of China **EXIM** Bancoldex Colombian Foreign Trade Bank

ABSTRACT

This article is a comparison of the financial situation of the Small and Medium-Sized Enterprises (SMEs) in China and Colombia, the related policies regulating SME financing, the organizations supporting SMEs and variety of previous research as well as experience gained by the two countries are analyzed in this paper. The methodology employed in this paper is a comparison of data from various sources and theoretical analyses of former studies.

Keywords

SMEs, Financial constraints, Informal finance, financial system. JEL: G2, G21, G28, G38.

RESUMEN

Este artículo realiza una comparación de la situación financiera de las Pequeñas y Empresas Medianas (PyMEs) en China y Colombia, las políticas relacionadas que regulan el financiamiento de las PyMEs y las organizaciones que promueven las PyMEs. La metodología empleada se basa en comparar datos de varias fuentes y analizar estudios precedentes.

Palabras Claves

PyMEs, restricciones financieras, finanzas informales, Sistema financiero. JEL: G2, G21, G28, G38.

AUTHORS

MARLENY CARDONA ACEVEDO

Economist Universidad de Antioquia.

Specialist in Urban and Regional Planning. Universidad Nacional.

PhD in Social Science. Colegio de la Frontera Norte de México.

Professor in Economics Department -Universidad EAFIT

E-mail: marca@eafit.edu.co

CARLOS ANDRÉS CANO GAMBOA

Master in Economics in Universidad de Antioquia

Economist Universidad EAFIT.

E-mail: ccanogam@eafit.edu.co

ISABEL CRISTINA MONTES GUTIÉRREZ

Economist Universidad EAFIT.

Email: imontesg@eafit.edu.co

BEI GAO

East China Normal University, Undergraduate student of Finance, Shanghai, People's Republic of China.

E-mail: gaobei.ecnu@gmail.comLa hoja de vida y la del grupo se puede consultar en la siguiente dirección de COLCIENCIAS: http://pamplonita.colciencias.gov.co:8081/scienti/html/index.html.

1. INTRODUCTION

Small and Medium-Sized Enterprises (SMEs) now are regarded as the engine of economy, especially in developing countries where poverty and unemployment are still paralyzing the society and torturing people. SMEs are significantly important in creating employment, export promotion and tax income increase. In China, Small and Medium-sized companies account for 99% of all enterprises, 60% of the total output, 40% of the total profit, 60% of the total export value and 75% of the total employment opportunities¹. Besides, they generate nearly half of total gross value added and are now serving as the basis for dynamic and intensive competition as the backbone of structural change. In Colombia, SMEs especially the micro enterprises are the majority of employment providers which are crucial to mitigate poverty and other social problems that may make the society unstable.

Nevertheless, important as they are, SMEs suffer from considerable constraints in many respects, especially in access to financial resources. Compared to large-sized enterprises, they rarely have direct access to the capital market due to their limited size of capital. They have a weak bargaining position with banks and generally have difficulty in applying for loans. Besides, other financial tools such as bonds are generally the privilege of large enterprises with a good reputation and sufficient registered capital. When internal finance is viewed, we find the ones that can operate well with self-accumulated capital still face much uncertainty of their future and may encounter with a financial bottle-neck if their capital chain breaks², not to mention those profit-stripped ones which are always struggling on the edge of bankruptcy. These constraints, which are common in almost every developing country as well as in some developed

This paper focuses on the financial difficulties of SMEs in China and Colombia and tries to find out the similarities and differences between the two countries. Through the comparison in various respects, constructive suggestions such as feasible policies, well-functioning practice and advanced ideas can be found and hopefully are applied to other countries with a similar situation. Due to the differences in the data and lack of systematical surveys, more theoretical and describable methods are employed in this paper than the quantitative methods.

Since this paper is a comparison of the SME finance in China and Colombia, a general background will be first presented to provide a basic understanding of the two countries. The information includes the basic economic information and the comparison of the investment environment of China and Colombia. The second part of the paper discusses the legal basis of SMEs finance in both countries which first cites the most important laws regulating SMEs in the two countries and then compares the related policies and their effects on SMEs. In the discussion of laws, the regulation of collateral and the use and administration of SME funds are emphasized, while in the regulation and policy part, the interest rate's limit and the tax policy toward SMEs are the most important points. The third part is a comparison of organizations supporting SME financing in the two countries. A good effort has been made to search the organization in Colombia and its counterpart in China.

However, still, not every organization in Colombia has a similar one in China and so some suggestions are proposed to establish such organizations and programs that function well in one country. Then comes the comparison of SME financing in China and Colombia. The SME financial condition is introduced and the financial difficulties are listed with analyses. Informal finance as an important financial source for SMEs is discussed in detail as well as financial policies of banks

countries, greatly limit the development of SMEs and hinder their further growth.

Source: A remarks by Jiang Qinggui, Vice Commissioner of State Economic and Trade Commission, on November 2, 2001.

That could easily happen if the payment of down-stream enterprises is not made in time or the sales decrease suddenly.

and SME financing risk and risk control. After that, the experience of Colombia and China as well as International experience is cited and analyzed for further application in other countries in the SME finance field. Also several recommendations are proposed based on the reality of the situation in the two countries and possibly, to other countries which share similar situations with China and Colombia.

2. BACKGROUND OF THE TWO COUNTRIES

In this part, the banking system which is the main source of financial assistance to SMEs in both China and Colombia will be introduced. Then the investment climate which is crucial to the existence and development of SMEs will be analyzed and compared. Through this part, a general picture of the macroeconomic environment of the two countries can be formed.

2.1 THE BANKING SYSTEM OF THE TWO COUNTRIES

The banking system is the most important part in the financial system in these two countries. SMEs in both China and Colombia largely rely on the financial assistance from the banking system³ rather than the security market or other financial sources. Therefore, it is highly necessary to have a general look at the banking system in these two countries before further analysis.

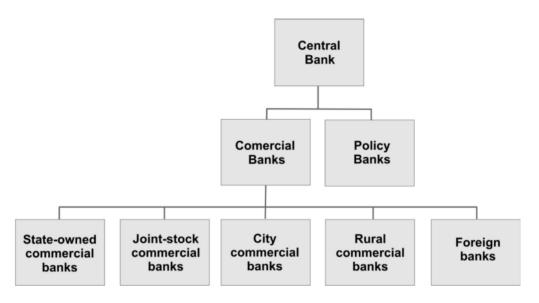
In China, the banking system is composed by three parts: the central bank, commercial banks, and policy banks. The People's Bank of China is the central bank which manages the function of the whole banking system and stabilizes the currency. The commercial banks include the state-owned commercial banks, joint-stock commercial banks, city commercial banks, rural commercial banks and foreign banks. The major commercial banks include the State-Owned Commercial Banks (SOCBs) and the Joint Stock Commercial Banks (JSCBs)⁴. In addition, there are three policy banks which have different missions and serve different clients. They are: The Export-Import Bank of China (See Part 5.1), The Agricultural Development Bank of China and China Development Bank.

The banking system of Colombia is made up of three different levels. The central bank is the Republic Bank of Colombia which became an independent institution in 1991 and is responsible for the monetary stability of the country. Three second-floor banks include Bancoldex, Findeter and Finagro, and each of them has different particular functions. Bancoldex focuses on commerce promotion and SME finance supporting. It cannot receive deposits from individuals or enterprises, and it can only release loans to SMEs rather than individuals and other kind of enterprises. The first-floor banks are the commercial banks which have the similar functions as commercial banks in other places. They receive loans from the second-floor banks and lend them to particular individuals and enterprises. For instance, the loans from Bancoldex are released to SMEs through the first-floor banks.

³ See Part 5.1 The main problems of SME assess to finance, Graph 9.

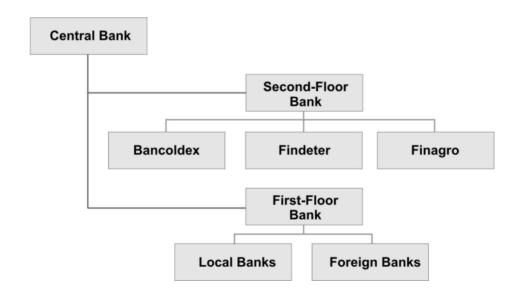
⁴ The SOCBs include the Industrial and Commercial Bank of China (ICBC), the Agricultural Bank of China (ABC), the Bank of China (BOC), the China Construction Bank (CCB) and Bank of Communications (BOCOM). The JSCBs include CITIC Industrial Bank, Everbright Bank of China, Huaxia Bank, Guangdong Development Bank, Shenzhen Development Bank, China Merchants Bank, Shanghai Pudong Development Bank, Industrial Bank, China Minsheng Banking Co., Evergrowing Bank, China Zheshang Bank and China Bohai Bank.

GRAPH 1
The banking system of China



Source: The People's Bank of China

GRAPH 2
The Banking System of Colombia



Source: The Public Bank of Colombia

2.2 Investment environment⁵ in China and Colombia⁶

The development of SMEs is closely related to the out environment such as the macro economy, financial system, promotion of innovation, human capital as well as trading environment etc. The investment climate survey conducted by the World Bank includes many aspects that may influence the development of enterprises, hereby we cite three: innovation, labor and trade to figure out a general picture of the investment climate in China and Colombia while we put the legal environment and financial conditions in the other parts for a detailed discussion.

2.2.1 Innovation

Innovation is one of the most important factors in developing enterprises and increasing productivity. For less-developed countries, innovation can be described as one of the most crucial factors that can accelerate the economy and bridge the gap between developed countries and developing countries. Therefore, for SMEs in both China and Colombia, innovation plays a crucial role in SME developing process.

TABLE 1
Comparison of Innovation in China and Colombia

Innovation	ISO certification ownership (%)	Spending on R&D (% sales)
China	35.92	2.10
Colombia	5.88	3.85
East Asia & Pacific Region	23.69	2.01
Latin America & Caribbean Region	13.11	2.40
All countries	13.61	1.35

Source: The Investment Climate Survey China (2003), The Investment Climate Survey Colombia (2006), World Bank

As a developing country, China spends a lot of energy on the innovation, 35.92% of enterprises in China have ISO certification ownership which is about 12% higher than the level of East Asia & Pacific Region and 22% higher than the level of all countries. And the spending on R&D of sales is 0.75% higher than the level in all countries. Colombia also pays a lot of attention to R&D development and its spending on R&D is much higher than the level of all countries and the regional level, although it has a comparatively low level of ISO certification ownership. From this comparison, we can see the determination of government to promote innovation in both countries.

2.2.2 Labour

Jobs are the main source of income for people- and the main pathway out of poverty for the poor. A sound investment climate contributes to the creation of employment opportunities, investment in the workforce, increases in wages, and, ultimately, a more productive and prosperous society.

⁵ The data of this part comes from the Investment Climate Survey conducted by the World Bank and IMF.

⁶ China belongs to East Asia & Pacific region with a population of 1,304,500,000; and the GNI per capital of 2003 is 1,740 US\$. Colombia belongs to Latin America & Caribbean region with a population of 45,600,244; and the GNI per capita of 2006 is 2,290 US\$. Both China and Colombia are in the rank of Lower middle income countries.

TABLE 2
Comparison of Labour in China and Colombia

Jobs	Firms offering formal training (%)	Permanent skilled workers receiving training (%)	Employment growth over the last 3 years (%)
China	84.78	47.66	8.30
Colombia	39.48	7	43.01
East Asia & Pacific Region	45.17	33.90	24.54
Latin America & Caribbean Region	46.77	26.93	28.32
All countries	43.49	23.62	48.30

Source: The Investment Climate Survey China (2003), The Investment Climate Survey Colombia (2006), World Bank

From Table 2, we can see that the firms in China generally offer formal training to the employees, and the rate of formal training is much higher than the region and the level of all countries. Comparably, Colombia needs to improve this sector since the percentage of firms offering formal training is below the regional level as well as the level of all countries. And when it comes to the employment growth over the last three years, Colombia has done an excellent job with an increase rate of 43.01%. This high increase could result in the booming economy during the three years and the level of all countries is also guite high.

2.2.3 Trade

Open markets allow firms to expand and force greater efficiencies on exporters who must compete internationally, while the ability to import cheaper supplies from abroad enables firms to minimize costs. Competitive pressures may subsequently build within local economies and compel all firms to improve productivity as well. However, trading also exposes the firm to additional constraints when dealing with customs and trade regulations, such as export and import license requirements and the possibility of bribes⁸.

TABLE 3
Comparison of Trade in China and Colombia

Trade	China	Colombia	East Asia & Pacific Region	Latin America & Caribbean Region	All
Average time to clear direct exports through customs (days)	6.86	7.12	3.72	5.90	4.68
Longest time to clear direct exports through customs (days)	7.20	9.38	7.20	10.50	8.64
Average time to claim imports from customs (days)	8.40	12.09	4.95	11.71	7.50
Longest time to claim imports from customs (days)	12.28	19.70	9.32	23.58	22.06
Firms that export directly (%)	17.77	10.36	37.38	21.64	23.57

Source: The Investment Climate Survey China (2003), The Investment Climate Survey Colombia (2006), World Bank

⁷ Statistics with fewer than five firms are displayed with an "n.a." to maintain confidentiality and should be distinguished from "..." which represents missing values. (Investment Climate Environment Survey conducted by World Bank and IMF).

Investment Climate Survey Draft Country Profile, China (2003) Survey Taken from http://rru.worldbank.org/InvestmentClimate

When we compare whether it is convenient to trade in the two countries, we can find that both countries take a longer time than all countries. Colombia seems less efficient than China. Of more interest is the fact that time spent in trading in Latin America & Caribbean Region is longer than that in East Asia & Pacific Region, so it may be better explained culturally than technologically. As we know, Latin America culture is more leisurely than Asian, and people in Latin America tend to be less punctual in daily life. When it comes to business and trade, more delays are likely to happen.

3. LEGAL BASIS

In this part, the policies and laws on SME regulation will be discussed to provide an understanding of the legal basis of SME financing both in China and Colombia. Firstly, the most important laws in the two countries will be introduced with a brief explanation as well as analyses of problems existing in both countries. Then the definition of SMEs in the two countries will be compared because the definition serves as the basis of other SME related regulations. After that three issues on SME financing regulations are analyzed which, as we found out, are stand-forward problems in both countries. They are: credit recording, fair play and the interest rate dilemma.

3.1 THE MOST IMPORTANT LAWS AND REGULATIONS ON SMES IN TWO COUNTRIES

Laws are the manifestation of government purpose in restriction of the behavior of individuals and organizations. Hereby we select three laws in each country to represent the policies towards SMEs in China and Colombia.

3.1.1 SME laws and regulations in China

There are numerous laws and regulations on SMEs in China but here we choose three which are considered closely related to SME financing. They are, as listed in Graph 3, the Guarantee Law which was enacted on October 1st, 1995; SME Promoting Law on January 1st, 2003 and Companies Law of the PRC on July 1st, 1994.

China has a set of reasonable laws regulating and protecting business operations. People are increasingly relying on the courts to resolve commercial disputes but the enforcement of court rulings is weak. Below some data of the legal atmosphere in China is cited to provide recognition of the legal situation in China.

TABLE 4
The legal atmosphere in China

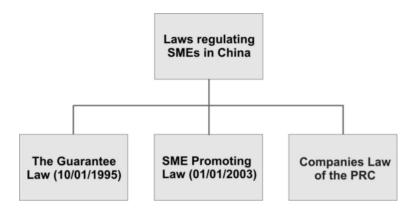
Courts	China	Region ⁹	All countries
Confidence level in the judiciary system (%)	82.45	69.83	58.53
Time spent resolving a dispute (weeks)	10.11	13.04	13.99
No resolutions in courts for overdue payments (%)	75.08	60.79	49.72

Source: The Investment Climate Survey China (2003), World Bank

From Table 4 we could see that people in China have greater confidence in the judiciary system than in East Asia and the Pacific Region and in the level of all countries. More and more people are aware that they can use the weapon of law when their legal rights are violated. The time spent resolving a dispute is about 10 weeks, which is lower than the regional level and the level of all countries. However, when we take a look at the percentage of no resolutions in court for overdue payments, we see a surprisingly high figure-75%, which indicates that three fourths of the overdue payments

⁹ Note: Here "Regional" refers to the East Asia and Pacific Region, see the complete note of the survey.

GRAPH 3
Laws regulating SMEs in China



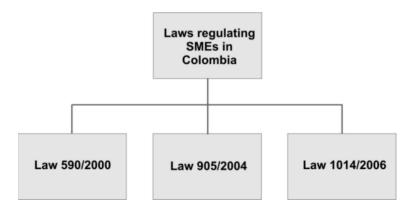
Source: The Ministry of Commerce of People's Republic of China

still remain unpaid even though the lenders win the case. This figure is about 25% higher than the level of all countries and about 15% higher than the regional level.

3.1.2 Laws regulating SMEs in Colombia

In Colombia, the most important laws regulating SMEs are Law 590 (Ley 590 de 2000), which was enacted on July 10th, 2000 Law 905 (Ley 905 de 2004) which was put into effect on January the 26th, 2004 and Law 1014 (Ley 1014 de 2004) enacted on August 2nd, 2006 (See Graph 4). Each law states the definition of SMEs, financial, human capital and technology assistance to be supplied to SMEs.

GRAPH 4
Laws regulating SMEs in Colombia



Source: Law 590/2000 (July 10), Law 1014/2006 (January 26), Law 905/2004 (August 2).

All three laws in Colombia have been released after 2000 (one in 2000, in 2004 and the latest one in 2006), while two of the three laws in China have been released in late 90s of last century. From the high frequency of law drafting, we can indicate that the Colombian government has put more effort on SME regulation in recent years. When we scrutinize the contents of laws, we find the laws in Colombia are more detailed than in China. Every aspect related to SMEs such as technology development, financial assistance, human resource support and trading promotion, etc is regulated at great lengths. However, the laws in China although more specific in just one aspect like Guarantee Law, do not contain the important elements for carrying out the laws. Moreover, sometimes the regulations of different laws conflict with each other, which make it impossible for SMEs to comply.

3.1.3 Common problems

TABLE 5 Bureaucracy

Bureaucracy	Senior management time spent dealing with requirements of government regulation (%)	Consistency/predictability of officials' interpretations of regulations affecting the firm	
China	18.52	66.31	
Colombia	14.27	48.32	
East Asia & Pacific Region	6.95	58.51	
Latin America & Caribbean Region	11.14	41.30	
All countries	7.24	47.35	

Source: The Investment Climate Survey China (2003), The Investment Climate Survey Colombia (2006), World Bank.

As shown in Table 5, from the figure of hours that senior management spent dealing with requirements of government regulation, it is indicated that bureaucracy is quite a problem in China compared to Colombia and East Asia & Pacific Region which outnumbers four percent of Colombia and 11.5 percent of East Asia & the Pacific Region respectively. When we consider the consistency of officials' interpretation of regulations affecting the firm, China also has a higher percent which is about 20% higher than that of Colombia and 8% higher than East Asia & Pacific Region level. This figure indicates that enterprises in China need to have more consistent policies since the operations of the firms are greatly affected by the policies. Because there is usually a timelag between the inaction of a policy and its real effect in managing the practice of enterprises, a long-term policy would be easier for enterprises to follow and thus function better.

Take the regulatory approval requirements for instance. Firm registration used to be time-consuming and costly

because it took a long time to get approvals and licenses from numerous departments of government. Moreover, there were inconsistencies in the requirements. A firm is required to get its name approved before it could open a bank account, but without a bank account it could not register a name. Besides, the costs of capital registration, travel, and other spending were high because these different departments were located in different districts, and one enterprise in a county may have to go to the government of the province which the county belongs to in order to get certain kind of permission. So sometimes the costs of registration could amount to 10% of registered capital, which was a great waste of resources. Fortunately, the government now realizes these problems in the regulation and makes some initiatives to streamline firm registration. A more convenient way of firm-registration has been devised and named "Onestop Shopping", where related government agencies are placed in one big lobby. This method could greatly save the time and effort that entrepreneurs spend on registration.

Bureaucracy is an outstanding problem in China which exists in almost every field. When it comes to the operation of laws and regulations, it is even more serious. The bureaucracy can be described in three forms. First, the number of approvals required from different government departments is incredibly huge. For example, from the approval process for the use of land to the handover of the house to a customer, more than one hundred approvals are needed. It can be inferred

how much time the entrepreneurs have to spend to just get all these approvals through formal channels, not to mention informal channels if the application is suspended. Second, the time and difficulty of obtaining approval and third, there is little honesty or transparency of regulatory approvals. Entrepreneurs have to make informal payments and give gifts to get things done more quickly.

TABLE 6
Gifts and unofficial payments

Unofficial payments for	Firms expected to give	Value of gift expected
typical firm to get things	gifts in meetings with	to secure government
done (% of sales)	tax inspectors (%)	contract (% of contract)
1.62	38.74	1.83
0.81	0.95	0.44
1.70	33.78	1.60
1.40	6.71	2.53
1 42	29 77	2 29
	typical firm to get things done (% of sales) 1.62 0.81 1.70	typical firm to get things done (% of sales) 1.62 0.81 1.70 33.78 1.40 gifts in meetings with tax inspectors (%) 38.74 0.95 33.78

Source: The Investment Climate Survey China (2003), The Investment Climate Survey Colombia (2006), World Bank

For the unofficial payments for an average firm to get things done and gifts in meeting with tax inspectors, the figure of China is much higher than that of Colombia. The unofficial payments for a typical firm to get things done are 1.62% of sales, which doubles that of Colombia. And 38.74% of firms are expected to give gifts in meeting with tax inspectors while only 0.95% of firms are expected to do so in Colombia. Besides, the firms in China have to give gifts valuing 1.83% of contract to secure government contracts, while this figure in Colombia is only 0.44%, much lower than the Latin America & Caribbean Region (2.53%) and all countries (2.29%).

TABLE 7
Corruption in tax

Corruption	Average time firms spent in meetings with tax officials (days)	
China	14.40	
Colombia	0.63	
East Asia & Pacific Region	5.38	
Latin America & Caribbean Region	2.59	
All countries	3.76	

Source: The Investment Climate Survey China (2003), The Investment Climate Survey Colombia (2006), World Bank

The comparison of the average time firms spent in meetings with tax officials is quite impressive. The average figure of all countries is 3.76 days and while East Asia & Pacific Region is much higher than that of Latin America & Caribbean Region (5.38 to 2.59). The figure of China is extremely high, which is almost 23 times that of Colombia.

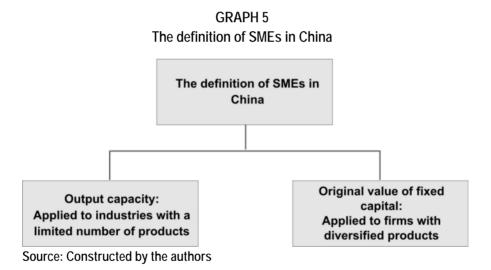
3.2 THE DEFINITIONS OF SMES IN TWO COUNTRIES

The statistical definition of SMEs varies by country, and it is usually based on the number of employees, capital, or the value of assets and sales volume. China and Colombia vary a lot on the definition of SMEs with different criteria. First the SME defining in two countries are described and then a general comparison on the

distinct standards employed in two countries is provided as well as some possible suggestions for clarifying and improving the definition.

3.2.1 Defining SME in China

China adopts a rather complicated classification system, with at least two kinds of classification methods. The first method is based on output capacity and is applied to industries with a limited number of products. For example, in the electricity sector, small is defined as an annual production capability of fewer than 50,000 kilowatts, medium is between 50,000 and 300,000 kilowatts, and large is over 300,000 kilowatts¹⁰. The second method is based on the original value of fixed capital and is applied to firms with diversified products. However, the definition of what constitutes an SME differs in different sectors.



According to the Chinese Government, SMEs are roughly characterized as having less than 200 employees (with the exception of 3000 employee for the construction industry), with sales value lower than 300 million Yuan¹¹ or capital value lower than 400 million Yuan.

¹⁰ Source: The New Tentative Classification Standards on the Small and Medium-Sized Enterprises (SMEs), National Bureau of Statistics of China (2003).

¹¹ Yuan is the unit of Chinese currency-RMB (Ren Min Bi), presently; the exchange rate of RMB to US Dollar is about 7.5 RMB to 1 US dollar.

TABLE 8
The classification of SMEs

Sector	Variable	Unit	Medium	Small
	Payroll	Population	300-2000	Under 300
Industry	Annual revenue	Million yuan	3000-30000	Under 3000
	Total assets	Million yuan	4000-40000	Under 4000
	Payroll	Population	600-3000	Under 600
Construction	Annual revenue	Million yuan	3000-30000	Under 3000
	Total assets	Million yuan	4000-40000	Under 4000
	Dovroll	Population	100-200	Under 100
Wholesale	Payroll Annual revenue	Population	3000-30000	Under 3000
	Annual revenue	Million yuan	100-500	Under 100
Retail	Payroll	Population	3000-30000	Under 3000
Retail	Annual revenue	Million yuan	1000-15000	Under 1000
Transportation	Payroll	Population	500-3000	Under 500
Transportation	Annual revenue	Million yuan	3000-30000	Under 3000
Doct	Payroll	Population	400-1000	Under 400
Post	Annual revenue	Million yuan	3000-30000	Under 3000
Hotel and restaurant	Payroll	Population	400-800	Under 400
noter and restaurant	Annual revenue	Million yuan	3000-15000	Under 3000

Source: National Bureau of Statistics of China, http://www.stats.gov.cn/

Large & Medium: Large and medium sized enterprises, defined by the current criteria of size classification (By this criteria, there are only 7864 large companies in China, comparing with 7.93 million firms in total)¹². It is reasonable to combine the large and medium sized enterprises with the current criterion in 22,200 which is very close to 22,700, the number of enterprises with annual sales greater than CNY 50 million, which is defined as large firms in this project.

3.2.2 Defining SME in Colombia

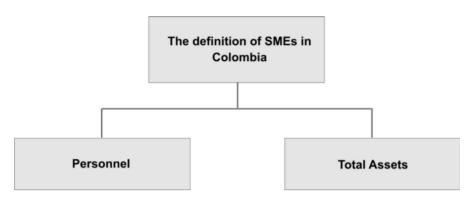
Compared with China, the definition of SMEs in Colombia is much clearer. According to the three laws regulating SMEs (they are Law 590/2000, Law 905/2004, and Law 1014/2006), there are two standards of defining the size of an enterprise. The first standard is the number of employees or the personnel and the second criterion is the amount of total assets.

The standards of SME defining in Colombia are quite distinct from that in China, but these standards are employed universally in many other countries. Instead of using the original value of fixed assets, total assets can better reflect the real situation of an enterprise. However, if the enterprise is a listed one, its total assets mostly depend on its share price and sometimes will fluctuate greatly. Another difference is the standard of personnel rather than output capacity. Obviously, this standard is more convenient for statistical surveys and administration and thus may be more suitable for SMEs.

In Colombia, there are only two criteria for SME defining: personnel and total assets. Enterprises with personnel between 51 and 200 are defined as Medium-sized enterprises, while enterprises with personnel between eleven and fifty are ranked as small business. Microbusinesses are the ones with personnel of no more than ten. Another set of definitions is the total assets; the interesting thing is that the amount of total assets is measured by the legal monthly minimum wage in force, which may change accordingly when the legal monthly minimum wage increases.

¹² National Bureau of Statistics of China, http://www.stats.gov.cn/

GRAPH 6
The definition of SMEs in Colombia



Source: Constructed by the authors

TABLE 9
The definition of SMEs in Colombia

Size of Business	Colombia		
	a) Plants of personnel between fifty-one (51) and two hundred (200) industrious;		
Medium Business	b) Total Assets by value between five thousand one (5.001) and fifteen thousand (15.000) legal monthly minimum wage in force.		
	a) Plants of personnel between eleven (11) and fifty (50) industrious;		
Small Business	b) Total Assets by value between five hundred one (501) and less than five thousand (5.001) legal monthly minimum wage in force.		
	a) Plants of personnel not over the ten (10) industrious;		
Micro-business	b) Total Assets by lower value to five hundred one (501) legal monthly minimum wages in force.		

Source: Law 590/2000, Law 1014/2006, Law 905/2004, The Congress of Colombia.

3.2.3 Comparison of the definitions of SMEs in two countries

From the different definitions of SMEs in the two countries, we can arrive at some interesting conclusions. Firstly, in China, there is not a clear definition of micro enterprises, and the standard of small enterprises is quite high. Just take the wholesale industry for instance, an enterprise with a payroll under 100 can be defined

as a small enterprise. However, such an enterprise in Colombia can be a medium-sized enterprise instead of a small enterprise. The reason for these comparatively high standards may be the large Chinese population and the residency of concept from state-owned enterprises, which used to be large and have thousands of employees. Secondly, Colombia does not have different standards of definitions of SMEs as China does.

This could clarify the definitions and avoid inconsistency or even confusion. However, on the other hand, some industries naturally need a larger size personnel or capital than others such as the oil, construction, and steel industry. The difference in the definition may be that the Chinese lawmakers believe every industry has its own small, medium-sized and large enterprises, and since the nature and features of industries vary greatly, it is necessary to have different criteria according to different industries. The Colombian lawmakers, on the other hand, regard it is more important to have a unique standard of the size of enterprises in order to exercise more efficient administration. The two sets of definitions both have merits and disadvantages, but probably. China is in need of a more united set of definitions while Colombia could take the different characteristics into account.

3.3 CREDIT RECORDING

The development of a country's financial information infrastructure (FII) contributes to three important development objectives: economic growth, sound and sustainable financial institutions and greater access to credit. Research by the World Bank and others has shown a relationship between the extent of development of credit reporting in an economy and private credit to GDP¹³. Research has also shown that firms are more credit constrained in economies with less developed credit information systems¹⁴. Moreover, the sharing of credit information generates significant externalities for the lack of information sharing and coordination failure due to the existence of conflicts of interests (and information costs) as well as the intermediaries' unwillingness to cooperate which can lead to "sub-optimal" equilibrium in the organizational arrangements which affect the system's reliability and efficiency. These are the reasons why in

many countries the authorities` involvement in the credit reporting area is an integral component of their overall mandate to ensure stability of the financial system and access to financial services.

3.3.1 Credit reporting in China: still at infancy stage

In China, credit rating has a very short history and the credit reporting system is extremely limited, covering only a couple of cities and provinces. Since there are few credit rating assessments for SMEs in China, and consequently, banks have little information about SME's credit reputation as no one assesses their business credit situation and whether they honor loan contracts or not does not make much difference in their future borrowing. This has caused poor quality of the loans to SMEs and made banks more reluctant to extend loans to SMEs. A vicious cycle has thus formed for SME financing.

In order to dismantle this vicious cycle, the government proposed establishing a nationwide credit assessment system for SMEs on April 26, 2001. This credit assessment system is designed to collect, assess, and report the credit situation of SMEs. However, this system is still in its infancy stage and only covers very limited regions with well advanced commerce and economy. For the vast countryside and less developed regions, SMEs still lack credit recording which greatly constrains their accessibility to financial assistance such as bank loans.

3.3.2 Credit reporting in Colombia: better but not sound

Over the past 25 years, Colombia has developed a private credit reporting industry, a public credit registry in the Superintendent of Banks and a variety of other important financial and commercial data in both the public and private sectors. Lenders and businesses have come to rely upon credit reports to evaluate customer risk. There are still many types of financially relevant data, however, which remain incomplete, underdeveloped and/or inaccessible. Tools to analyze the data, such as credit scoring programs, have only recently begun to be adopted by any but the largest and most sophisticated

¹³ See Djankov, McLiesh and Schleiffer (2005), "Private Credit in 129 Countries".

See Love and Mylenko (2003) "Credit Reporting and Financing Constraints" World Bank Policy Research Working paper No. 3142, October and Galindo and Miler (2002), "Can Credit Registries Reduce Credit Constraints? Empirical Evidence on the Role of Credit Registries in Firm Investment Decisions", Paper Prepared for the Annual Meetings of the IADB, Santiago, Chile, March.

banks and firms. Credit reporting is also viewed negatively by many Colombians. Popular perception of the industry is that of black list that limits opportunities for credit or business rather than a valuable tool to document good payment behavior and facilitate credit and trade.

The absence of an effective legal framework makes the further development of credit information especially vulnerable. Legal reform is only one aspect, however, of the policy agenda for credit reporting and financial information. Other issues include developing credit data on a broader subset of the population (esp. micro and small enterprises and low-income consumers) so they

too benefit from credit histories, strengthening data in the public sector, such as court records and collateral registers, improving access to firm-level financial and payment data, and promoting expanded analysis and use of credit and financial data including via the implementation of automated decision tools such as credit scoring. Finally, education and outreach activities will be critical for creating support for a reform agenda in key constituencies (consumers, bankers, lawmakers, journalists, etc.) and public acceptance of increased transparency and responsible information sharing by lenders and firms¹⁵.

TABLE 10
Elements of Financial Information Infrastructure

1. Institutions	Institutions and firms which collect and distribute credit information (i.e. private credit bureaus, public credit registries, business credit information suppliers, etc)	
Legal and regulatory framework	Legal and regulatory framework that allows for sharing credit data and other data relevant for predicting risk while respecting privacy issues.	
Banking supervision & market oversight	Use of credit information in banking supervision, broader policy considerations related to development and use of credit and related data (effect on competition for the financial system, competition in the market for credit reports, access, etc.)	
4. Tools	Analytical tools which facilitate the analysis of financial data, such as credit scoring	
5. Public sector data	Public databases which are important for predicting risk and which can contribute to credit reports (i.e., collateral registries, court records, corporate registries, etc)	
6. Technical infrastructure	Telecommunications, MIS and data processing capabilities, quality of data security, etc.	
7. Public perception & support	Understanding and support for credit reporting by consumers, business associations, press, legislators, etc.	

Source: Credit Reporting and Financial Information Infrastructure in Colombia: An Action Plan. The World Bank Group, Finance, Private Sector and Infrastructure Latin America and the Caribbean Region, Margaret Miller and Mario Guadamillas, May 2006.

3.3.3 Credit reporting: Much to be improved

According to the research on credit recording by World Bank, further development of credit recording should be done in financial information infrastructure, public perception as well as legal framework etc.

¹⁵ The World Bank Group, Finance, Private Sector and Infrastructure Latin America and the Caribbean Region, Credit Reporting and Financial Information Infrastructure in Colombia: An Action Plan, Margaret Miller and Mario Guadamillas

As displayed in Table 10, financial Information Infrastructure (FII) is the broader context in which the credit reporting systems, and private credit bureaus, operate. Thus, the analysis of the FII in a country needs to go beyond the private credit bureaus, and include other private and public institutions which provide credit and financial data on firms and individual consumers. There are also public data sources, such as court records, identifications information, collateral registries and corporate registries, which are vital sources of data for private sector credit reporting firms. In addition, understanding the legal, regulatory, supervisory and, in general, institutional environment in which these systems are operating is vital to a sound approach to their development. The technical infrastructure, including telecommunications infrastructure, state of computerization and automation by providers and users of the data and the level of development of tools to use the data, such as credit scoring technologies, are also elements of FII. Last, but not at all least, public perception, understanding and support of credit reporting and FII are critical inputs to the development of these systems¹⁶.

3.4 Fair play: A fairer playground for SMEs

SMEs need a fair playground to compete with large enterprises and state-owned enterprises granted by related laws and regulations. Unfortunately, however, SMEs in both China and Colombia seem to face a difficult situation in getting access to financial resources, taxation treatment, etc. In this part, the real situation of SMEs in the two countries will be first presented and compared while the possible solutions in policy improvement will be suggested.

3.4.1 The difficult situation in China

In the past decades, state-owned enterprises always have priority over non state-owned enterprises with

more favorable policies and looser environment for bank loans, especially from state-owned banks. However, since 1978, the Open and Reform strategy of China gives better opportunities for foreign enterprises in order to attract foreign investment. Foreign firms, for instance, can enjoy special tax exemption programs, where they get exemptions for two years after the first year that they register profits. Private firms instead are subject to a 33% income tax plus a 20% individual adjustment tax. The SMEs are subjected to a 33% income tax plus a 20% individual income tax. So the actual income rate for entrepreneurs is 46.4%¹⁷. Therefore, the local enterprises, especially the small and medium-sized ones, can neither benefit from tax vacation nor sound financial support from state-owned banks although they are the most important elements in national economy.

And when it comes to the accessibility of bank loans as well as other forms of financial support, SMEs are the category with worst conditions. The state-owned enterprises are still holding a huge number of employees which makes the government feel it is necessary to keep them in operation with large amount of financial help although some of the enterprises cannot make profits themselves. And foreign enterprises in China are generally of large size and good credit background which enable them to be easily accessible to bank loans or other financial resources. Comparably, private local SMEs do not have strong relationship with state-owned banks, neither with outstanding reputation or credit record¹⁸, so they generally find it more difficult to get loans from banks than state-owned enterprises or foreign enterprises.

3.4.2 The case in Colombia: Comparatively better

Comparably, the situation of SMEs in Colombia is quite different and is, to some extent much better than that

The World Bank Group: Finance, Private sector and infrastructure Latin America and the Caribbean region. Credit Reporting and Financial Information Incrustation in Colombia: An action plan Margaret Miller and Mario Guadamillas, May, 2006.

Actual income alter taxation is 1*(1-33%)*(1-20%)=0.536 So the actual tax rate for entrepreneurs is 1-0.536 = 0.464.

That is not because the SMEs have a bad credit record with bank loans, but because in China, the credit reporting system is not sound, or is fairly limited, so many SMEs do not have a comprehensible credit record.

in China. First, the tax policy is generally the same for all enterprises, without discrimination towards size or ownership, so the SMEs can at least have an equal position of taxation with large and foreign enterprises. Second, in Colombia does not have the priority towards state-owned enterprises and all the first-floor banks are private, so for bank loans, discrimination against ownership is not a major problem. However, that does not mean the SMEs have easy access to bank loans. On the contrary, they also have a lot of difficulty in obtaining financial assistance from the bank as well as other financial sources.

3.4.3 How to improve: Will promotion policy work?

Both the governments of China and Colombia have realized the inferior situation of SMEs and have drafted plans to change this situation. SME is a dominant sector in the industrial area so it has the potential to distort resource allocation in the economy as a whole. Therefore, policies regulating the SME should be carefully designed. But the fact is that policies cause many problems for economic resource allocation.

Throughout the progress of reform in recent years, China is now placing more and more emphasis on the issue of supporting SME development. But problems still remain. First, China lacks a long-term, systematic, unified and relatively independent SME development strategy and policy system. Second, the SME management system and relevant policies are inconsistent, and basic management is weak. Third, the design of the social service system is severely behind the times, so the burden of taxation and quotas is comparatively heavy. And last, SME development is considerably limited without sufficient financial support.

The Chinese government has enacted a series of policies to promote SMEs since late 1970s and these policies have had great impact on SMEs. Below some most important policies are listed.

- a. In 1978, for state-owned SMEs, "decentralize authority to release benefits" (fangquan rangli) was put into effect and these SMEs could enjoy more benefits than before since they could keep part of the profits instead of handing in all to the government. This policy greatly increased the productivity of stateowned SMEs.
- b. In the third Plenary Session of the 14th Central Committee in 1995, "grasp the large and let go of the small" (zhuada fangxiao) was enacted and millions of state-owned became private owned while the large sized ones are still under the control of government. This policy increased the number of SMEs remarkably and had important meaning in stimulating the development of SMEs as well as encouraging competition.
- c. In the mid-1990s, "deregulation to render agile" (fangkai gaohuo) and privatization policy for small-sized state-owned enterprises. Many state-owned and collective SMEs reinforced their competitive activities through reform and "privatization", which transformed the system of property rights and management. From then on, the management of enterprises began to change and new theories were introduced to China. As for non-state-owned SMEs, China mainly adopted policies of relaxing policy restrictions, granting political acceptance and financial support, and gradually established a market environment of fair competition and legal protection.

For Colombia, the policies have already leaned towards SMEs in many respects. The three laws (Ley 1014 de 2006, Ley 590 de 2000 and Ley 905 de 2004) in promoting SMEs are very good examples. In these laws, principles and detailed methods are listed in inter institutional framework, creation of education system and labor competence as well as financial assistance etc. Take the financial assistance for instance; SMEs can enjoy a lower interest rate from second-floor banks than large sized enterprises. There are other policies such as exemption of collateral of loans towards micro

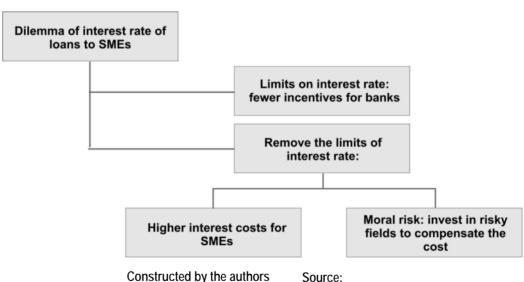
enterprises and loan-seekers to help micro enterprises to get access to financial help from banks.

Therefore, considering the situation of SMEs in the two countries, several conclusions on policy-making can be drawn. Firstly, both countries have to be frank with the reality of SMEs and to make detailed policies in every respect so that they can help rather than restrict the development of SMEs. China has piles of laws and regulations on SME developing and administration, but almost no one can actually provide useful reference in practice to solve the real problems that SMEs encounter. Comparably, Colombia does better in law making, but there is still space for improvement. Second, government should leave no effort to support SMEs in different ways in order to create a better environment for fair play. The Chinese government plays a stronger role in administrating economic life than Colombian government, but on the other hand, too much interfere from the government may also hamper the free development of SMEs.

3.5 THE INTEREST RATE DILEMMA: A CEILING OR NOT?

Before, the Chinese government made a ceiling of interest rate when the commercial release loans to SMEs. in order to reduce the finance expenditures of SMEs. This policy had merits and could help SMEs to some degree if the interest of loans used to be a heavy loan for them because most SMEs especially these laborintensive industries do not make good profits. However, this policy had negative effect on the commercial banks since they become more reluctant to provide capital to SMEs without the incentives of a higher interest. But if the limit of interest rate is removed, the SMEs will have to shoulder a higher cost of interest for the loans, moreover, they may tend to invest in risky industries or make riskier management decisions in order to recover the high cost of the capital. That is a kind of moral risk. Thus we face a dilemma of weather to remove the ceiling of interest rate (See Graph 7).

GRAPH 7
Dilemma of interest rate of loans to SMEs



In Colombia, the interest rate to enterprises from the first floor banks can be as high as 32% ¹⁹ per year, and the interest rate of informal finance such as individual lending can be even higher. The interest rate of loans is different from bank to bank, but is around 32% or so. However, SMEs can get a favorable interest rate from the second-floor bank-Bancoldex,

¹⁹ This interest rate may change at different time, but presently it is 32%, See www.bancoldex.com

which focuses on offering special loans to SMEs. The interest rate of loans from Bancoldex is about 9%²⁰, which is much lower than the usual standard of enterprise loans from commercial banks. The Ministry of Commerce, Industry and Tourism (Ministerio de Comercio, Industria y Turismo) finances Bancoldex for these special loans and Bancoldex recredits the loans to first-floor banks only for releasing loans to SMEs. This method greatly helps SMEs in reducing financial costs and makes it possible to survive and make profits. The capital flow of special SME loans is illustrated in Graph 8.

GRAPH 8
The capital flow of SME loans



Source: Constructed by the author

Considering the case of Colombia, different interest rate standards may serve as a good method to solve the interest rate dilemma. Because SMEs are not in favorable position when competing with large enterprises, they need special policies to cultivate them in their infancy. Therefore, the central bank or the Ministry of Finance in China may establish special funds for SMEs to offer them a special interest rate. And those policy banks can release loans to SMEs directly using the funds or through commercial banks in the form of recredits.

4. ORGANIZATIONS SUPPORTING SMES FINANCIALLY

SMEs need close cooperation and strong support of finance from outside organizations in order to develop. Therefore, it is almost impossible to separate the related SME organizations and SME finance. In this part, we select several organizations which provide important financial support for SMEs in China and Colombia and, try to compare the function of each organization with its counterpart in the other country.

4.1 THE EXPORT-IMPORT BANK OF CHINA (EXIM) VS. BANCOLDEX

The economy in both China and Colombia heavily relies on export, especially for SMEs in labor-intensive

industries. Thus organizations aimed at export-promotion are significantly important for SMEs in both countries. In this part, we select EXIM and Bancoldex to reflect the organizations promoting export and providing financial support for SMEs.

Introduction of EXIM21

The export -Import bank of China was founded in 1994. It is a fully government-owned policy bank under the direct leadership of the State Council of China. It has developed into a key channel of policy financing for both Chinese export of mechanic and electronic products, complete set of equipment, and high- and new-tech products and undertaking of offshore construction contracts and overseas investment projects. Meanwhile, the Bank is also the major on lending bank of foreign government loans and the sole lending bank for Chinese Government Concessional Loan entrusted by the Chinese Government.

The main mandate of the Bank is to implement the state policies in industry, foreign trade and economy and finance to provide policy financial support so as to promote the export of Chinese mechanical and electronic products and high- and new-tech products, to support

This interest rate may change at different time, but presently it is 32%, See www.bancoldex.com

²¹ Source: http://english.eximbank.gov.cn/profile/introduction.jsp

Chinese companies with comparative advantages to "go global" for offshore construction contracts and overseas investment projects, to develop and strengthen relations with foreign countries, and to enhance Sinoforeign economic and technological cooperation and exchanges.

Introduction of Bancoldex²⁰

Started in on January 1st, 1992, the Colombian Foreign Trade Bank -Bancoldex is defined as a mixed economy corporation. At the time of initiating its activities, the Bank assumed all the rights and liabilities from PROEXPO with respect to all kinds of goods, within operation of the law. To provide development multi-bank integral solutions in order to help modernize companies in the fields of commerce, industry and tourism, giving priority to Small and Medium Size Enterprises.

MIPYME Guarantee

To facilitate credit access to micro, small and medium size export companies "MIPYMES" by means of issuing instantaneous or semi-automatic guaranties by the National Guaranty Fund –FNG– or by the regional funds in order to decrease the credit risk level to the bank in a determined percentage of the credit requested using Bancoldex resources.

Comparison of the two banks

When we compare these two banks, it is easy to find that both banks were founded by the government in early 90s of last century to promote export of the enterprises. However, with a closer look we can still find obvious differences between them. Besides providing the common International service of a bank, Bancoldex also plays the role of a corporation promoter and, especially for the SMEs. It has a special program to facilitate the access of finance of SMEs and it also takes part in the commercial promotion activities.

However, EXIM as a fully government-owned policy bank works as policy bank and it shoulders more responsibilities to provide financial support for the country than simply for companies. It releases the Chinese Government Concessional Loan, International inter-bank loans, and also organizes or participates in international and domestic syndicated loans. Moreover, it is also an important part of the financial monetary system through Renminbi inter-bank borrowing and lending and bond repurchase. It implements the state policies in industry, foreign trade and economy and finance through different policies of financial assistance towards enterprises.

Both these organizations function as a promoter of formation of enterprises and a trainer for individuals. They are both non-profit organizations supported by the International Labour Organization (ILO). However, SIYB also receives facilitation from the Ministry of Labour and Social Security (MOLSS) and financial assistance from the British Department for International Development (DFID) as well as the Japanese Ministry of Health, Welfare and Labour, while ACOPI is the result of the joint initiative of the organized workers, entrepreneurs. the Catholic Church. And for the functions, SMEO focuses on Poverty alleviation and employment creation through facilitation of access to the product family of SIYB business management training packages to encourage the unemployed to start their own business and to create quality jobs for others. ACOPI, although functions similarly in the employment formation and support to the entrepreneurial development, it also provides technological services to the productive sector, and support to innovation projects, technological development and competitiveness.

4.2 IFC SME IN CHINA VS. PROEXPORT

Besides banks, there are other organizations that provide special financial assistance for SMEs. Among them we find IFC SME and Proexport have a lot in common in functions.

²² Source: http://www.bancoldex.com/ingles/ing_mision.php

TABLE 11
Compare Bancoldex and EXIM

Name of organizations		Bancoldex	EXIM
The ownership of equity		A mixed economy corporation	A fully government-owned policy bank
Main function		Multi-bank integral solutions to develop companies, giving priority to SMEs	policy financing for both export and overseas investment projects; government loans
Business scope	Similar	 Supplier post shipment International banking operation service Fixed investment 	 Export Credit International and domestic settlement, loans, guarantee Loans to Overseas Investment Projects
	Different	 Working capital Debt consolidation Transportation infrastructure Liquidex pesos – dollars Creation,Acquisition and Capitalization of companies 	 Chinese Government Concessional Loan Fund raising in capital and money markets Foreign exchange dealing Renminbi inter-bank borrowing and lending and bond repurchases
Year of foundation		1992	1994
The current Standard & Poor's international risk rating		BB+/stable	А

Source: Constructed by the author

Introduction of IMF SME in China²³

IFC supports small and medium-sized enterprises (SMEs) through investments and advisory work. Promoting the growth of SMEs in developing countries is an important part of the mission of private sector development. There are four main ways in which IFC SME supports SMEs financially.

a. Banking IFC uses both investments and technical assistance to help to build local financial intermediaries` ability and willingness to lend to SMEs. Investments made by IFC in financial intermediaries focusing on SME lending have included equity investments, loans, revolving credit lines, and risk mitigation facilities.

- b. Leasing in emerging economies, SME sector development is often hindered by the lack of access to long-term finance required for capital investment. The development of leasing as a complementary tool to bank loans provides an alternative solution that can significantly expand access to capital for these businesses.
- c. Microfinance IFC encourages market-priced microfinance products rather than subsidized lending. This market focus leads to more financially sustainable institutions that can in turn offer their clients better access to financial services.
- d. Private Equity and Investment Funds, The International Finance Corporation, the private sector arm of the World Bank Group, has built up a portfolio of

²³ Source: http://www.ifc.org/sme/

investments in emerging market investment funds representing a commitment of \$1 billion in about 100 funds, over 80 percent of which are private equity. IFC also has stakes in about 25 fund management companies.

IFC operations in China are focused on:

- Encouraging the development of China's local private sector, including small and medium sized enterprises.
- Investing in the financial sector to develop competitive institutions that will meet international corporate governance and operating standards.
- Supporting the development of China's western and interior provinces.

Introduction of Proexport¹

Proexport is the institution in charge of promoting Colombian non-traditional exports, international tourism and foreign investment to Colombia. It provides domestic companies with support and integral advisory services for their international trade activities, facilitating the design and execution of their internationalization strategies, looking for the generation, development and closing of business opportunities.

The mission of Proexport is to increase Colombian non-traditional exports, international tourism and foreign investment to Colombia, through a systematic sales process and a partnership work relationship with companies to enable the generation, follow-up and closing of business opportunities in international markets. And its quality policy is to maintain an excellent level of quality in the provision of services to current and potential exporters, in accordance with Government export promotion policy guidelines. To this end, we have a highly qualified human resource committed to the continuous improvement process.

TABLE 12
The comparison of IMF China and Proexport

	IMF China	Proexport
Organization	International Organization	National organization
Focus	Financial assistance	Export promotion
Mission	 To encourage local private sector and SMEs To invest in financial institutions to develop competitive institutions To Promote private investment in the infrastructure, social services and environmental industries. 	 To create short and mid-term marketing strategies to promote export To advise and assist companies in the design and execution of their export projects To create alliances with various institutions and to develop and improve the institution's service.

Source: Constructed by the authors

²⁴ Source:http://www.proexport.com.co/VBeContent/home.asp?language=SP&idcompany=16

The two institutions focus on support to SMEs through financial and technological assistance, but Proexport seems to do more in the strategy-making for companies, since it identifies market opportunities, designs market penetration strategies, internationalizes companies, assists in the design of action plans, contacts with both sellers and buyers, and provides specialized services to foreign companies interested in acquiring Colombian goods and services. On the contrary, IMF SME focuses more on policy financial support and tends to promote export indirectly through favourable policies for SMEs. It encourages the development of China's local private sector, invests in the financial sector to develop competitive institutions qualified and it promotes private investment in the infrastructure, social services and environmental industries

5. SME FINANCING

In this part, the financial situation of SMEs in China and Colombia will be presented and the problems existing be discussed. Seven constraints are listed as the main obstacles for SME financing. After that, more effort will be made on the analysis of bank loans: why banks generally have discrimination against SMEs, the characteristics of SME loans and how the loan applications are examined.

Thus several suggestions can be proposed to help SMEs do better in obtaining loans from banks. After the complete discussion of formal finance, the informal finance, as an important substitute of formal finance and a kind of widely use financial source for SMEs, will be analyzed with detail. The incentives of informal finance, its size and forms as well as its provision will be accounted. We arrive at a shocking conclusion that informal finance could serve as future financial institutions specialized in SME financing. In the end, risk in SME financing will be mentioned and the methods of risk control will be supposed. It is hoped that a fairly sound understanding of SME financing in these two countries could be reached in this part.

5.1 PRESENT SITUATION OF SME FINANCING: PROBLEMS AND CAUSES

SMEs face financial constraints almost everywhere in the world, but this case gets worse in China as well as Colombia. Both as developing countries, China and Colombia benefit a lot from the rapid growth of SMEs in the contribution to national economy, employment as well as fiscal revenues. However, despite the contributions they make, SMEs still have numerous obstacles in accessibility to finance, which greatly hinder their further development. Firstly, we shall have a look at the Investment Climate Survey conducted by World Bank to see the real problems of SME finance. Then the main sorts of obstacles will be generalized and analyzed.

5.1.1 Difficulty in access to finance and high finance cost

Difficulty in access to finance is always a problem for enterprises, especially for small and medium-sized enterprises around the world, and the situation can be more serious in developing countries than in developed countries. And the availability of financial access declines with the size of enterprises as well as the GDP of the country. SMEs in both China and Colombia suffer from financial difficulties and financial constraints are proved to be one of the greatest obstacles for them.

The investment climate survey (2003) indicates that 22.8% of enterprises in China consider access to finance as major constraint, which is 8% higher than the level of East Asia and Pacific region. And about 22% of firms identify cost of finance as major constraint, which is also higher than the level of East Asia and Pacific region by two percent. As for the lower-middle-income countries, 27% of the firms regard access to finance as major constraint while 34% have difficulty in shouldering the cost of finance.

The case of Colombia is quite similar as China. While about 23% of firms have difficulty in access to finance,

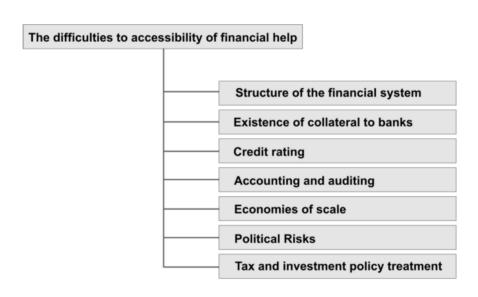
which almost equals to the level of Latin America and Caribbean Region and a bit lower than the Middle -and-Low-income group, about 56% of firms in Colombia report finance cost is a major constraint, which is much higher than the level of the region as well as the middle and low income group.

5.1.2 The main problems related to SME access to finance

Based on previous research on SME financing, the main obstacles of accessibility to financial help can be generalized into seven kinds. The first is the structure of

the financial system which determines the channels of SME finance. The second is the existence of collateral to banks which greatly limits the accessibility of bank loans to SMEs. The third is the insufficient system of credit rating, which makes bank loans more difficult without a sound credit record. The fourth is the problem with auditing and accounting without an equal standard so it is highly difficult for banks to evaluate the credit of enterprises. The fifth obstacle is economies of scale which increase the costs of loans and thus render banks more reluctant to release loans to SMEs. Moreover, political risks as well as investment policy treatment serve as the last two obstacles (See Graph 9).

GRAPH 9
The difficulties of accessibility to financial help



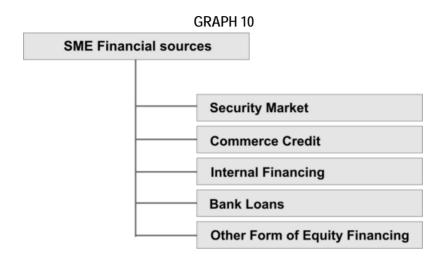
Source: Constructed by the authors

a. Structure of the financial system

China lacks an adequate credit system for SMEs, composed of the appropriate financial-service institutions. Large state-owned commercial banks have a very high market share of deposits and loans. The rating requirements for loans are quite high and are not met by SMEs, or the minimum amount that banks will lend vastly exceeds the demands for SMEs. City and rural credit cooperatives cannot fill this gap due to their own structural limitations.

The incomplete structure of financial system with underdeveloped financial markets unavoidably limits the kinds of financial sources, and thus makes SME financing more difficult. Generally speaking, there are five sources for SME financing: security market, bank loans, commerce credit, internal financing and other forms of equity financing such

as risk investment (See Graph 10). However, these sources cannot serve SMEs well neither in China nor Colombia.



Source: Constructed by the author

For SMEs in China, it is highly difficult to get listed on the stock market and the bond market is much less well developed. Banks, especially stated-owned banks tend to lend money to stated-owned enterprises. The risk avert lending behavior of the banking sector encourages SMEs to look for alternative sources since they are usually more risky than big companies. And for internal financing, the preposition is that the enterprise has a healthy financing situation and a well-functioning capital chain. But not all SMEs are able to reach that healthy level and most of them need financial assistance for working capital and daily operation. Therefore, SMEs have to seek alternative sources of finance besides the usual four kinds, that is, informal finance.

When we look at the source of finance for firms, we may consider that the financial difficulty is more crucial. Only 20% use bank loans while 15% comes from internal funds, 7% from informal sources and only 2% from trade credit, while 55% from other sources. The internal funds of East Asia and the Pacific region increase to 34% and an extremely high level of 63% of Middle and low

income country group while the percent of other sources decreases to 31% and 9% respectively. This observation makes it necessary to conduct a further analysis of finance sources.

The source of finance in Colombia is quite different from that in China. We notice that about 42% of finance investment comes from banks while 32% is internal funds, and the finance investment from the other sources is only 14%, which is about 40% lower than that in China. This high percent of finance investment from the bank indicates that it may be easier to get loans from banks in Colombia than in China, but consider the high finance costs; the loans may not be affordable for many SMEs. Another point that needs our attention is that in Latin America and Caribbean region the internal funds make quite a high percent of the finance investment of firms and is about 25% higher than the East Asia and the Pacific region.

b. Existence of collateral to banks

The most common mechanism to reduce informational problems in financing SMEs is the use of appropriate

collateral. In general it is easier to assess the value of assets instead of the value of expected future cash-flows. In the United States, for instance, 92 percent of SME debt is secured by appropriate collateral and 52 percent of debt is guaranteed by the owners of the firms (Berger and Udell 1998). The most common form of collateral is accounts receivable or inventory.²

According to the Article 34 of the Guarantee Law of the people's Republic of China(1995), the main categories of the eligible collaterals are: (1) properties owed by the borrower or whoever else pledges; (2)equipment or transportation vehicles owned by the borrower; (3) the right to the use of state-owned land and properties which are at the disposal of the borrower; (4)state-owned equipment or transportation vehicles which are at the disposal of the borrower; (5)the right to the use of the undeveloped land contracted to the borrower with the permission from the contractor.

The percent of firms that have bank loans indicates the accessibility of loans from the bank. In China, this figure is 23.3%, which is higher than the figure of East Asia and Pacific region (19.6%) and is almost the same with the level of lower middle income countries. And for the value of collateral compared with loan value, China is a little higher than the East Asia and Pacific region but is much lower than the level of lower middle income countries (80.8% to 143.4%).³

Colombia has quite a different picture in the bank loan and collateral from China (table 6). It has quite a high rate of bank loans (49.8%), which indicates it is easier to get loans from the bank in Colombia than in China. But at the same time, the collateral loan value is 106.1%, which is much higher than that of China. If we combine the finance costs of bank loans which were discussed before, the bank loans are still not so accessible for

firms, especially for small and medium-sized enterprises due to heavy interest and high percent of collateral.

c. Credit rating

There is a lack of credit rating assessments for SMEs in China, together with low incentives for SMEs to build a credit reputation since it does not have a direct effect on future borrowing. This negatively affects the quality of loans and further decreases the credit rating of SMEs. A nationwide credit assessment system for SMEs was proposed in 2001. This credit assessment system was intended to improve the information processing and transmission of the credit situation of SMEs.

d. Accounting and auditing

The financial structure of the private firm is often opaque. There is a lack of transparent, audited financial records. There are restrictions in the registration under different forms of incorporation that gives incentives to firms to misrepresent financial flows, total employees, stocks of assets, and other aspects of the accounting and financial structure of firms. The tax system also can be circumvented partially by misreporting, usually under recording. As in other countries where incentives for true reporting are weak, firms are said to keep different accounting books: one for the government, one for banks and the last one for themselves (International Financial Corporation 2003).

e. Economies of Scale

There are important economies of scale in the activity related to borrowing by banks. These economies of scale cannot be exploited at the typical borrowing scale of SMEs, and consequently banks will prefer large loans which can only be demanded by larger enterprises.

Since the transaction costs of small-amount loans rarely differ from large-amount ones, the banks do not have many incentives to release small or even micro loans to SMEs. However, what the SMEs usually need are the very small-amount loans as working capital for daily

Source: Investment Climate Surveys Draft Country Profile China (2006)

³ Source: Investment Climate Surveys Draft Country Profile Colombia (2006)

production or operation. Therefore, the commercial banks find large company customers more attractive.

f. Political risks

According to Mu (2002), since most SMEs are non-state enterprises, the risks involved in performing bad loans is higher than for larger firms where there are still more state owned enterprises.

Moreover, for the financial constraints, they can be classified into two kinds: internal and external. Internal constraints stem mainly from informational asymmetries, leading to credit rationing on the part of bank lenders such as differential financial treatment due to ownership, region, size and industry, the relatively low levels of accountability of credit, compounded by false accounting and bookkeeping records, the absence of credible collaterals, a lack of transparency, weak corporate governance and management skills in the SME sector, and risks that arise due to the specific markets that SMEs operate in. External constraints derive from the failure of bank competition, cost-effectiveness of loans to SMEs, underdeveloped and socialist mindsets. Since the SMEs cannot finance directly from the stock market, they uneventfully have to borrow money from the financial intermediaries-the banks and other financial institutions. The problem is the financial system is still too limited for the SMEs to get the financial resources easily, which greatly constrain further development of SMEs.

5.2 THE FINANCIAL POLICIES OF BANKS AND THE WAY OF LOAN RELEASING

Since SMEs are universally thirsty for financial assistance and bank loans seem more available to them compared with other forms of financial resources, it is highly necessary to know how banks review the loan applications of SMEs so that certain suggestions can be made to help SMEs get a loan more easily. In this part, we first try to trace the reasons for the cautious attitude of banks towards SME loans, and then to generalize

the characteristics of SME loans as well as the sorts of discrimination from banks.

5.2.1 Why banks are cautious about SME loans?

Generally, the banks have two sources of capital accessible for lending. The first one is to lend their private and institutional customers' deposits. The second one is to lend their shareholders' equity. According to the Banking Business Act, banks are only allowed to lend up to 12.5 times of their equity and have to follow the risk control regulations for commercial banks.

The high frequency and short-term nature of SME loans, unfamiliar markets and complicated ownership structure, and lack of sufficient operational and financial data for loan appraisal have resulted in higher business development and administration costs for banks. The long process of recognition, registration, and evaluation of collateral presented by SME borrowers cannot meet their frequent and seasonal demand. To reduce nonperforming loans (NPLs), many commercial banks have adopted a policy of permanently aligning the responsibility of loan performance to the loan officers. This has resulted in acute risk averseness at the sub-branch and loan officer level, thus curtailing the number of loans to SMEs.

The credit assessment model consists of three theoretical categories: risk assessment, risk alignment and risk shifting. This model links these categories to eight characteristics that influence the borrower's risk of default. On one hand, the three categories are factors used by banks in order to deal with the risks of lending money to SMEs. On the other hand the eight characteristics of the borrowing SMEs affect the probability of success when requesting a loan. These eight characteristics are: risk-taking proclivity, competence within the business project, CEO tenure, strategic planning, past performance, share of investment, financial standing and collateral.

They are assumed to have an impact on the lending officer's decision making and are important for the result of a credit assessment. Studies also show that these factors

are exhaustive in describing lending officers' assessment of growing SMEs. Each factor is represented in one of the three categories. Moreover, the model shows that there is a category and the risk-taking proclivity of the SME during a credit assessment. Therefore the model is used to examine what factors affect the lending officer's

banks.

decision making for a company's loan application.

5.2.2 The characteristics of bank loans in China and Colombia

Generally, banks are all more prudent towards SME loans because of higher risk and administration costs, but when we go deeper into the characteristics of SME loans in China and Colombia, we may still find various differences which may cause the discrimination by

TABLE 13
Characteristics of bank loans in China and Colombia

Comparison	China	Colombia
Discrimination existing in banks	 Prefer state-owned In developed regions Of larger size Special industries 	No special discrimination toward ownership Prefer enterprises with a large amount of sales
The interest rate of the loans	Different interest rates, but generally higher than state- owned enterprises ²⁷	Different interest rates of different banks, but are generally at about 32% ²⁸ one year of the first-floor banks
The period of the loans	Short, often less than 6 months	Short and seasonal
The amount of the loans	Small, usually below five million yuan	Small, for many micro enterprises can be even as low as 1'000'000 pesos
The accessibility of loans from banks	Very difficult, especially for starting a new firm	Comparably easy, but the interest rate is high
The financial reports required	Annual financial reports, Past credit recording, Tax records	Annual financial reports, and past credit recording
If collateral is required	Generally yes, especially for small and micro enterprises	For special loans to micro enterprises released by loan-seekers, the collateral can be exempted

Source: Constructed by the author

As inferred in Table 13, banks in China discriminate against SMEs in various ways. They generally prefer state-owned

Presently, the interest rate of loan within six months is 6.48% per year and from six months to one year is 7.29% per year. Source: The People's Bank of China, http://www.pbc.gov.cn/detail.asp?col=460&ID=1576

⁵ Source: The Republic Bank of Colombia

enterprises because if the loans released cannot be repaid by the enterprises, banks can finally get compensation from the government. Since the economic development in China is geographically unbalanced. SMEs in the eastern provinces such as Jiangsu and Zhejiang can get access to bank loans much easier than their counterparts in western provinces where the economic development lags behind. Moreover, small enterprises are often more difficult to borrow from banks than large ones. Finally, since the biggest banks in China are state-owned, the industrial policies are applied through bank loans to restrict certain industries while encouraging others: banks have to discriminate against some industries due to the pressure from the government. For Colombia. there is no special discrimination towards ownership since the majority of enterprises are private, but there are indeed preferences toward large-sized enterprises which manifest as a preference towards enterprises with a large turnover and sales.

As for interest rate, in both countries the interest rate of loans differs from bank to bank. But in China, the banks still do not have much freedom on the decision of interest rates and they have to accept the interest rate range decided by the central bank⁶. Banks in Colombia generally can decide the interest rate themselves, but the interest rate from first-floor banks can be as high as 32% per year, which is definitely difficult for most SMEs to afford⁷.

The period of loans of SMEs is short in both countries, normally less than one year or even six months because the usage of bank loans is not for equipment purchasing or R&D, but usually for working capital. Many of the loans are seasonal, which is somewhat difficult for banks to balance their deposits and loans because deposits are generally steady all year round. Therefore, banks have to shoulder a higher management cost for SME loans.

Besides, the amount of loans is usually small compared with large-sized enterprises. For micro enterprises in Colombia, a loan can be as small as 1,000,000 pesos, which is only five hundred US dollars. However, the non-interest cost of a small loan is almost the same with a large one, which reduces

5.2.3 The way in which banks estimate the risk of SME loans

One of the traditional risk evaluations is constituted by the five Cs-expert systems and is a type of credit risk assessment. The Five Cs-expert systems depend mostly on the expertise of the bank's employees. These employees have to evaluate different factors that can affect the lending of a credit. In addition, they have to decide what interest rate would be profitable for the bank and decide whether credit can be granted or not. The model is mainly based on the bank's employees and that is why it is called the expert system. Expert systems have established several key factors which have to be considered during the credit risk assessment but the most common is "the five Cs" which contain five factors.

The analysis of some of these factors is based on financial data and can therefore be objective whereas others can be more subjective and intangible. By analysing the customer's character, the credit officer looks at the reputation of the potential client and his or her payment behaviour. While the payment behaviour can be analysed based on financial data, the reputation on the other hand can hardly be calculated objectively. Thus, the expert systems are based on individual evaluation. Despite the five Cs, there are other expert systems that banks have developed to determine a risk and evaluate a company. Some institutions orientate on the five Cs, add some factors or remove some issues. However, there are other banks that have developed a new and individual approach, which cannot be compared to the five Cs model8.

⁶ See Commercial Bank Law of PRC (2003), Chapter 4, Article 38, http://www.pbc.gov.cn/detail.asp?col=310&ID=16

⁷ There are special loans for SMEs with a lower interest rate provided from a second-floor bank, Bancoldex. See Part 4.5 Interest rate dilemma

⁸ Ibid, p. 567-569

5.3 INFORMAL FINANCE AND SMES

From the Investment Climate Survey by World Bank, we can see that in both countries informal finance is widely used as a substitution of formal finance due to the wide gap of the demand and supply of capital for SMEs. But the most difficult point of analyzing this phenomenon is that surveys and researches on informal finance are very limited in both countries, and they are also generally not available in other parts of the world because of the nature of informal finance. Therefore, doing interviews and surveys are not very possible because most of the contracts are done secretly or, there

The Customer's character

The customer's capacity to pay

The customer's capital

The collateral provided by the customer

The condition of the customer's business

The Five Cs-expert System

Source: Ibid, pp. 567-569

are no contracts between the lenders and the borrowers at all. Without reliable statistics, the only way to make analysis of the phenomenon is to do it in a describable way.

5.3.1 Incentives for Informal Finance

As discussed before, the formal finance sources like the stock market, bank loans, and bond market are not generally accessible to the majority of SMEs and thus informal finance prospers. However, there are other incentives for SMEs to use informal finance.

First, the demanding restrictions of loans from the bank force some SMEs to seek a comparable easier channel of finance. When SMEs apply for loans from the banks, they are required to hand in financial reports, tax records, and other documents to demonstrate their ability to repay the loans. However, many SMEs do not have a systematic record and cannot wait for the long

and complicated process of loan examination by the bank. The informal finance, such as individual lending, however, can be done in a few days or in mere hours and the lenders usually do not ask for formal records of the borrowers. Second, the informal finance to some degree can mitigate the information gap in the market since the lenders are usually more familiar with the borrowers and thus can save the costs of searching information that banks unavoidably have to shoulder. Therefore, both the lenders and the borrowers can benefit from the reduction of transaction costs. Third, the interest rate of deposits in banks is too low for SMEs, so enterprises with a surplus of capital tend to seek other forms of investment to compensate the capital costs and sometimes they become the sources of informal finance.

5.3.2 The size of informal finance

Admittedly, it is extremely difficult to figure out the size of informal finance although it widely exists in channelling

capital to SMEs both in China and Colombia. The nationwide survey by the Central Finance University of China is the first attempt to estimate the size of the informal financial sector at the end of 2003 stood between CNY 740-830 billion or equivalent to 31-35% of corporate borrowing from the formal banking sector or 5.5-6.2% of GDP in that year.9 And from the results of many surveys and researches, one general conclusion is that the usage of informal financial is significantly related with the regions. The percent of usage of informal finance increases in less-developed regions where financial institutions can barely satisfy the needs of SMEs. Therefore, in the east costal regions of China, with comparably developed financial systems, the SMEs can get access to financial resources more easily than their counterparts in middle or western China where the financial environment is not soundly-built and informal finance prospers.

And for Colombia, according to the researcher in ESYT (Group de Investigación en Estudios Sectoriales y Territoriales) which focuses on research and studies of SMEs, surveys on informal finance in Colombia are not available so little information can be found on the size of informal finance. But as described by one researcher who has done lots of interviews with banks about SME finance, informal finance is also popular among SMEs, especially the micro enterprises which do not have access to banks or are not aware that they can make use of the financial resources from banks. Moreover, the interest rate of loans is extremely high so the lenders grab most parts of the little profits that micro enterprises make.

5.3.3 The forms of informal finance

The form of informal finance varies widely and OECD in 2005 provides a summary of the major informal financing types which include lending by individual money lenders,

enterprise mutual lending networks, pawnshops or underground financial organizations.

In China, the most common form of informal finance is individual money lending especially at the establishment stage of an enterprise. As long as the interest rate is no more than four times that of bank loans, individual lending is protected by law. In Colombia, individual lending is also popular among micro enterprises and the interest rate is extremely high. Besides individual lending, in China, underground financial organizations also play an active loan in SME financing, such as public funding without the permission from government. These funds attract a lot of individual deposits because of the comparative high interest rate. But public funding can be highly dangerous and sometimes the depositors even fail to get back the principals when the investment of funding goes wrong, not to mention the interest.

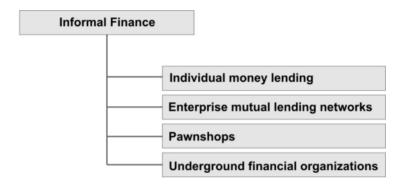
5.3.4 Informal finance-future financial institutions focusing on SMEs

Already we see the fact that informal finance is a common way of getting financial resources both in China and Colombia as well as the incentives for informal finance, a quite unusual conclusion can be reached due to the nature of informal finance and the functions it serves: it is necessary to formalize informal financial institutions and make them to serve SMEs particularly.

Although this conclusion sounds a little shocking, it actually fits the facts of SME financing. As widely used as it is, informal finance actually is now serving as an important kind of financial source for SMEs. Unlike most banks which focus on big enterprise customers, informal finance naturally attracts SMEs especially micro enterprises. Because of the familiarity between borrowers and lenders, informational asymmetries could be greatly reduced and so are the transaction costs. These characteristics of informal finance make it more suitable for SMEs. Therefore, instead of discouraging or even banning informal finance, a better way is to regulate it and so that it can serve SMEs better.

What is different about monitoring by informal financial institutions? – Finance of Private firms in China, Margit Molnar and Kensuke Tanaka, March 2007, Opening and Innovation Financial Emerging Markets

However, it is not easy to "formalize" informal finance and a series of conditions are required to make this kind of transition successful. First of all, more advanced management should be applied to informal finance to help it function better, such as establishing a better data base of customer information. Secondly, related laws should be drafted to regulate the operation of informal finance as well as to provide the necessary legal reference for it. With few exceptions, informal finance lacks legal protection and easily causes different interpretation of the agreements that are difficult to settle. So it is highly necessary to use the law instead of other ways to protect the rights of participators. Thirdly, since informal finance is generally related to illegal trading or financial crimes, governors should devise effective methods to differentiate legal transactions and illegal ones. Finally, fair social recognition is needed to provide informal finance in a suitable environment to develop. Informal finance, once correctly regulated and managed, is not inferior to formal finance and, in some situations such as the loans to micro enterprises may even outperform banks and other financial institutions. Therefore, informal finance needs the acceptance of the society and a positive image and the government could do something to help establish this image.



Source: OECD, Informal Finance

6. RECOMMENDATIONS

Based on all the discussions above, we hereby try to advance several suggestions for SME financing development. Part 6.1 states the conditions needed for sound and healthy SME development which include five elements in different aspects. Then Part 6.2 provides a conclusion on the financial support that SMEs really need. They are long-term loans, mezzanine finance, equity capital and consulting services. Finally, experience from Colombia, China and international practice is cited.

6.1 PREREQUISITES FOR SOUND AND HEALTHY SME DEVELOPMENT

Through all these analyses above, we now can summarize the most important elements for SMEs to develop healthily. Granted these elements differ among countries according to the specific conditions but they tend to be universal in most situations. The first and most important factor is active enterprises and investors. As we know, entrepreneurship is one of the key motivations for investment. Secondly, as discussed before, the banking system serves as the main source for SME finance, so a functioning banking system which can grant loans according to SME needs is high crucial. Thirdly, a stable and sound legal environment is needed to encourage investment. Fourthly, a fairer competition environment with equal tax policies, investment treatment, etc is highly necessary. Only on an equal playground can SMEs compete with state-owned and foreign enterprises.

Finally, social compatibility is desirable for further development of SMEs. The SMEs should be recognized as an effective tool to create prosperity, to mitigate property, to increase employment and tax income rather than so-called `` the inferior entities``. The public should understand the significance of SMEs to national economy and be aware that SMEs are closely related to their living standards.

6.2 WHAT KIND OF FINANCIAL SUPPORT DO SMES NEED?

What kind of financial support is indeed necessary for SMEs? What kinds of bank loans are suitable for the small-amount, high-frequency and seasonal needs? What kind of investment is feasible at the establishment stage with high risk? In this part, we are going to mention three kinds of financial support: long-term loans, mezzanine financing and equity capital.

6.2.1. Long-term loans

According to the characteristics of SME loans, a more systematic form of loans should be provided for their establishment, growth and further development. Therefore, long-term loans are significantly important for these SMEs to purchase necessary equipment, to enroll qualified personnel, as well as to devote more to research and devices for better productivity. However, the bank loans to SMEs are usually of short term in consideration of risk control. Although these loans can mitigate the financial difficulties with working capital and daily operation, they can barely help SMEs to make remarkable improvement with technology, human capital or equipment purchasing.

What they really need is stable financial assistance until they gain the ability to make profits themselves. Unfortunately, however, these kinds of long-term loans can rarely be provided by banks due to profit consideration so SME funding may be a better choice. Both China and Colombia are now making good efforts to establish and manage SME funding to make it more

available to SMEs. Nevertheless, this issue cannot be separated from government support, social participation and legal consolation. Only with consolidated efforts from these related sides, can SME funding serve as the most important financial help for SMEs.

6.2.2. Mezzanine financing

Mezzanine is a kind of provision of finance for a company after the start-up finance has been provided. Mezzanine financing is less risky than start-up finance, since the company has usually already started trading; this type of finance is aimed at consolidating the company's trading position before it is floated on a stock exchange.

Since SMEs are usually more risky than large-sized enterprises at the establishment stage and not many investors are interested in investing in SMEs for start-up finance due to the high risk. What is more, most SMEs cannot meet the high expectation of return. Therefore, mezzanine can be a good form of investment for SMEs for their further development.

6.2.3. Equity capital

With a few exceptions, banks in China have not been willing to loan to SMEs. Banks are concerned about the cost of making and monitoring small loans, and feel that the interest they can receive from the borrower does not compensate them for the risk of possible loss should the loan not be repaid. Consequently, most loans to SMEs have come from informal sources that offer no legal protection.

Long term objectives should have more sources of equity finance. It is necessary to wean these enterprises off their debts until they are able to show rational market practices themselves. Since financial institutions have reasonable financial reporting and internal management skills, it is possible to support either debt or equity financing.

6.2.4. Consulting services

Besides more available financial resources, consulting

services are also crucial for SME financing since a good percent of SMEs do not possess sound knowledge of finance to make the most of their financial resources. Therefore, professional services on finance should be provided by banks and other financial institutions as well as organizations supporting SMEs in the fields of corporate finance, taxation and management skills to help them optimize the usage of the precious financial resources.

6.3 COLOMBIA EXPERIENCE: LOAN-SEEKERS FROM THE BANKS

Since the owners of micro enterprises generally are unaware of the possibility that they can get financial assistance from the bank, banks in Colombia are now adapting a new way to attract more SMEs especially micro enterprise customers. There is a new kind of staff named "Asesores Financieros" who go out to knock on the door of micro enterprises and ask them if they need loans from the banks. They are responsible for the loans released and a part of their income is a kind of commission linked with the rate of loans returned. The staff is divided into groups of different neighborhoods according to their residence. Since the staff is usually more familiar with the borrowers in their neighborhood and it is easier for them to track the operation during the life time of loans, the rate of bad loans can be greatly reduced.

This method has several merits in reducing the credit risk of borrowers. First, it can to some degree mitigate informational asymmetries. The loan-seekers will try to find the customers that they know well in order to reduce the possibility of bad loans. Second, it reduces the costs of banks in examining the application of loans which used to be a large amount of the non-interest costs of loans. Third, the link between the rate of bad loans and the income of loan-seekers will be an effective incentive for them to try their best to make every loan returned. Fourth, it is especially helpful for micro enterprises since most of the loans do not require collateral and thus can be more accessible to those micro enterprises.

However, there are several prerequisites for applying this method. The first condition is that there is a large amount of potential loan demand from banks but they will not become real demands unless there is an effort of promotion. If bank loans are the main financial tool for those micro enterprises, the potential demand equals real demand and no new demand can be created. The second is that the banks have incentives in developing customers of micro enterprises. Some banks tend to focus on high-ranking customers like large enterprises and high-income individuals, so they will be reluctant to develop this service. The third condition is the environment to assure a high rate of loan payment. Since no collateral is required for the loan, the main factor to ensure the payment of loans is credit. So a sound credit record system and a trust-worthy atmosphere is highly important for the adoption of this method.

Compared with Colombia, the bank staff in China has high political risk for the loans. Generally they are responsible for the non-performing loans or bad loans and may face juridical punishment if the amount of loan is large. Commercial bank credit officers may have to bear more personal responsibilities for default or non-performing loans if they are made to SMEs as SMEs are mostly non-state-owned enterprises without any government backing. So hopefully, Loan-seeker can be applied in China to release the political risk and to reduce the rate of bad loans of SMEs. But since China now does not have a sound credit record system and a trust-encouraging atmosphere to cultivate a high rate of loan payments, it will take several years to make the preparation for this method.

6.4 CHINESE EXPERIENCE

In the practical experience of rural financing in China, one policy may be suitable for Colombia, especially for the massive micro enterprises. In the western provinces of China, peasants used to find it extremely difficult to borrow money from banks due to the lack of collateral. However, without the capital to purchase equipment to

start small businesses like food processing or handicrafts, the peasants can hardly escape from poverty through sole cultivation.

On the other hand, the banks do not dare lend money to peasants in less developed regions for fear that the loans may not be repaid. If a peasant fortunately succeeds in obtaining a loan from the bank, the interest rate is usually much higher than the normal standard which proves to be a heavy loan for the peasant. One policy successfully solves this problem. Peasants are divided into groups according to their residency, and each group includes five or ten families. When the five or ten families apply for loans from the bank, they are required to guarantee each other's loan. If one family in the group fails to repay the loan, the interest rate for other families will increase. Therefore, each family keeps an eye on their group partner in daily production or work to make sure that all the members can get good harvest to pay the loan.

This policy has three main merits. Firstly, it significantly reduces the risk of bank loans. These group members live together, usually in the same village so they know whether each other is doing well or not. If a member is seen not working industrially, other group members, out of the mutual interest in a lower interest rate, will probably warn this member. Since in China, criticism by society has a great influence on people, this warning will usually have an effect and the lazy member will work as hard as other group members. Secondly, the costs of banks can be lowered since most of the administration of capital using is conducted by the group members, the banks do not need to place a great effort on loan monitoring to control risk, and the administration costs can be greatly reduced, moreover, the interest rate can be affordable for these peasants. Thirdly, although this method mainly focuses on financial risk control, in the meantime, it also increases productivity of the peasants. The loan group to some degree serves as an association of production as well, which encourages hard working, supporting and experience sharing. It creates excellent atmosphere for "getting rich together". And once the productivity increases, the peasants' ability to repay loans increases

accordingly. This policy could be applied to the massive micro enterprises in Colombia and, since the potation of micro enterprises in Colombia is higher than that of China¹⁰, many more micro enterprises may benefit from this policy.

6.5 CONCLUSIONS

SME financing is such a complicated issue with similar problems globally but also with different characteristics under specific circumstances. Although China and Colombia are both developing countries with similar GDP per capita and a close level of economic development, there are still numerous distinct differences.

Firstly, SMEs in China face more unjust treatment than their counterparts in Colombia. As we know, China is a communist country and the proportion of state-owned enterprises (SOE) is still high although its percent has declined rapidly in recent years. Therefore, in China, the policy environment for SOEs is undoubtedly more favorable than that for private-owned SMEs (and we have to realize that the majority of SMEs are privately owned). SMEs in China are naturally in an inferior position in competition with SOEs to get access to financial resources, tax policy, and other related fields. Since late 1970s, China has adopted the "Open and Reform Policy" to attract foreign investment and take part in global economy, and more and more foreign investors have established enterprises in China because of the immense consumption market, the cheap working force, and the beneficial policy environment. Again, local SMEs encounter unfair treatment in every aspect compared with these multinational companies. However, for Colombia, the case is remarkably different. It does not have a high

According to a survey of 532,000 enterprises (representing 9% of the total enterprises in Colombia), 81.2% are micro enterprises, 7.5% are small, only 1.5% are medium-sized and 1.1% are large-sized ones. FUNDES (2007) "La realidad de la PYME Colombiana – Desafío para el desarrollo". La Red de Soluciones Empresariales

proportion of state-owned enterprises which enjoy better policy treatment over privately owned ones. Neither does it have an obvious favorable policy environment, if there is any minor difference, towards foreign enterprises. Therefore, SMEs, especially the privately owned ones have a comparably fairer playground to compete with large, foreign ones.

Secondly, the government plays a stronger role in administration and interfering banks in China than in Colombia, which hampers the efficiency which the role of market rule plays in distributing financial resources. Since the largest banks are all state-owned, the banking system in China is heavily influenced by the government and banks themselves do not have much freedom in the decision of the operation. Loans are released to state-owned enterprises to keep these profitmargined enterprises in operation so that the present employees could be maintained. Otherwise, they will face unemployment and for the majority of employees who are in their forties or fifties, it is extremely difficult for them to find another job. These loans, however, may become non-performed loans or even bad loans and banks may thus face great loss. On the other hand, for those SMEs who need capital badly and have the ability to repay the loans, they usually cannot be accessible to financial assistance from banks. Therefore, the financial resources are not distributed efficiently due to a lack of market-oriented operation. Fortunately, in Colombia, the banking system is more independent and the operation largely depends on the owners themselves. Except the three second-floor banks, all first-floor banks are privately owned which definitely grants their independence from government interference and a profit-making rather than government-serving purpose. In that way, capital can flow to the department with a high return and as long as a SME performs well, it can easily get financial resources.

Thirdly, SMEs in China suffer from more discrimination against regions compared with those in Colombia, thus making those SMEs in less-developed regions less accessible to financial resources, especially the financial resources in banks. The economic development in China

is geographically unbalanced with highly developed southeast coastal regions, and less developed in middle and west. The geographical-economic difference also reflects well in the financial field. For instance, the two stock markets on the mainland are the Shanghai Stock Exchange Market and the Shenzhen Stock Exchange Market, and both are located on the southeast coasts. There are many more bank branches in the southeast coastal regions than in middle and west China. Worse still, there is a common belief among banks that enterprises in the middle and west are less capable in making profits and thus are inferior to those in southeast. So it is obviously more difficult for SMEs in middle and west regions to obtain financial assistance from banks. In Colombia, the second largest country in Latin America, there is also a wide gap in the economic development between different regions. But the discrimination against regions from banks is not so serious as that of China. As long as there is a bank branch in the region, the possibility of getting a loan from the bank is almost the same in all regions.

Fourthly, the SMEs in Colombia enjoy a friendlier legal environment than those SMEs in China. The SMEs related laws in Colombia are well-defined, detailed oriented and easy to obey. In contrast, the definition of SMEs in China is ambiguous, inconsistent, and to some degree outdated. These not so feasible regulations can easily cause misunderstanding in administration of SMEs in practice. Therefore, it is highly necessary for the Chinese government to increase efforts to create a better legal environment for the development of SMEs.

REFERENCES

BARONA, Bernardo Z (2004) "Microcrédito en Colombia". Estudios Gerenciales. Revista Facultad de Ciencias Administrativas y Económicas, Universidad ICESI, matayta@icesi.edu.co, ISSN: 0123-5923, pp. 79-102.

CARDONA ACEVEDO, Marleny, Carlos Andrés

Cano Gamboa, Carlos Julio Ramírez Arboleda and Jahir Alexander Gutiérrez Ossa (2007) "Tecnologías, organización y políticas: Mundos de producción de las PyMEs en Colombia en el periodo 1990-2002". Capítulo 3: Políticas de la producción: territorialidad, institucionalidad y convenciones sociales, page 171-239.

CARDONA ACEVEDO, Marleny and CANO GAMBOA, Carlos Andrés (2007) Políticas gubernamentales para el desarrollo de las PyMEs en Colombia. Revisión de los planes de desarrollo de la última década.

FUNDES (2007) "La realidad de la PYME Colombiana. Desafío para el desarrollo". La Red de Soluciones Empresariales.

DING, Jianping (2001) "Financing of Chinese SMEs: Difficulties and Further Reforms". Number 5, 2001, China & World Economy, Shanghai University of Finance and Economics.

LI, Kai and Jiancheng Pan (2001) "Developmental Challenges to Small and Medium Scale Industrial Enterprises in the People's Republic of China: Results of a 2001 National Sample Survey".

LIU, Xiaochuan (2002) "Reducing the Financial Gap in China's SMEs". USA-China Business Review, New York City, USA, Jan. 2002, Volume 2, No.1 (Series 2) ISSN-1536-9048.

MARGIT, Molar and Kensuke Tanaka (2007) "What is Different about Monitoring by Informal Financial Institutions? -Financing of Private Firms in China". March 2007, Opening and Innovation on Financial Emerging Markets.

MILLER, Margaret and Mario Guadamillas (2006) "Credit

Reporting and Financial Information Infrastructure in Colombia: An Action Plan". The World Bank Group, Finance, Private Sector and Infrastructure Latin America and the Caribbean Region, May, 2006.

MU, Yibin (2002) "Impediments to SME Access to Finance and Credit Guarantee Schemes in China". Financial Economist, Financial Sector Operation and Policy Department, the World Bank, December 18, 2002.

QIAN, Ying (2004) "Technical Assistance to the People 's Republic of China for the Development of Small and Medium-Sized Enterprise Credit Guarantee Companies". Governance, Finance and Trade Division, East and Central Asia Department, Asian Development Bank, TAR: PRC 36024, June, 2004.

STILLMAN, Robert D. (2002) "Beijing Forum on SME Financing: International Best Practices". Final Report TA 3534-PRC May 30, 2002.

TOSHIKI, Kanamori and Zhijun Zhao (2004) "Private Sector Development in the People's Republic of China". Asian Development Bank Institute, September 2004.

TOSHIKI, Kanamori, Jamus Jerome Lim and Tracy Yang YANG (2006) "China's SME Development Strategies in the Context of a National Innovation System" September 14, 2006.

WANG, Yanzhong (2004) "Financing difficulities and Structral Characteristics of SMEs in China". China & World Economy, 34-49. Vol.12, No. 2, 2004.

WALTER, Garcia-Fontes (2005) "Small and medium enterprises financing in China". November 2005. Universitat Pompeu Fabra.

YAO, Yang (2003) "SMEs in China: Current Status and Constraints". China Center for Economic Research, Peking University.

TÍTULOS PUBLICADOS EN ESTA COLECCIÓN

Copia disponible en: www.eafit.edu.co/investigacion

Cuaderno 1 - Marzo 2002

SECTOR BANCARIO Y COYUNTURA ECONÓMICA EL CASO COLOMBIANO 1990 – 2000

Alberto Jaramillo, Adriana Ángel Jiménez, Andrea Restrepo Ramírez, Ana Serrano Domínguez y Juan Sebastián Maya Arango

Cuaderno 2 – Julio 2002

CUERPOS Y CONTROLES, FORMAS DE

REGULACIÓN CIVIL. DISCURSOS Y PRÁCTICAS

EN MEDELLÍN 1948 – 1952

Cruz Elena Espinal Pérez

Cuaderno 3 – Agosto 2002 *UNA INTRODUCCIÓN AL USO DE LAPACK* Carlos E. Mejía, Tomás Restrepo y Christian Trefftz

Cuaderno 4 – Septiembre 2002

LAS MARCAS PROPIAS DESDE

LA PERSPECTIVA DEL FABRICANTE

Belisario Cabrejos Doig

Cuaderno 5 – Septiembre 2002

INFERENCIA VISUAL PARA LOS SISTEMAS

DEDUCTIVOS LBPCO, LBPC Y LBPO

Manuel Sierra Aristizábal

Cuaderno 6 – Noviembre 2002 LO COLECTIVO EN LA CONSTITUCIÓN DE 1991 Ana Victoria Vásquez Cárdenas, Mario Alberto Montoya Brand Cuaderno 7 - Febrero 2003

ANÁLISIS DE VARIANZA DE LOS BENEFICIOS DE LAS EMPRESAS MANUFACTURERAS EN COLOMBIA.

1995 - 2000

Alberto Jaramillo (Coordinador), Juan Sebastián Maya Arango, Hermilson Velásquez Ceballos, Javier Santiago Ortiz, Lina Marcela Cardona Sosa

Cuaderno 8 – Marzo 2003 LOS DILEMAS DEL RECTOR: EL CASO DE LA UNIVERSIDAD EAFIT Álvaro Pineda Botero

Cuaderno 9 – Abril 2003

INFORME DE COYUNTURA: ABRIL DE 2003

Grupo de Análisis de Coyuntura Económica

Cuaderno 10 – Mayo 2003

GRUPOS DE INVESTIGACIÓN

Escuela de Administración

Dirección de Investigación y Docencia

Cuaderno 11 – Junio 2003

GRUPOS DE INVESTIGACIÓN ESCUELA DE
CIENCIAS Y HUMANIDADES, ESCUELA DE
DERECHO, CENTRO DE IDIOMAS Y
DEPARTAMENTO DE DESARROLLO ESTUDIANTIL
Dirección de Investigación y Docencia

Cuaderno 12 – Junio 2003

GRUPOS DE INVESTIGACIÓN –

ESCUELA DE INGENIERÍA

Dirección de Investigación y Docencia

Cuaderno 13 – Julio 2003

PROGRAMA JÓVENES INVESTIGADORES –

COLCIENCIAS: EL ÁREA DE LIBRE COMERCIO DE

LAS AMÉRICAS Y

LAS NEGOCIACIONES DE SERVICIOS

Grupo de Estudios en Economía y Empresa

Cuaderno 14 – Noviembre 2003 BIBLIOGRAFÍA DE LA NOVELA COLOMBIANA Álvaro Pineda Botero, Sandra Isabel Pérez, María del Carmen Rosero y María Graciela Calle

Cuaderno 15 – Febrero 2004

PUBLICACIONES Y PONENCIA 2003

Dirección de Investigación y Docencia

Nicolás Ossa Betancur

Cuaderno 16 – Marzo 2004

LA APLICACIÓN DEL DERECHO EN LOS SISTEMAS

JURÍDICOS CONSTITUCIONALIZADOS

Gloria Patricia Lopera Mesa

Cuaderno 17 – Mayo 2004 PRODUCTOS Y SERVICIOS FINANCIEROS A GRAN ESCALA PARA LA MICROEMPRESA: HACIA UN MODELO VIABLE

Cuaderno 18 – Mayo 2004

ARTÍCULOS RESULTADO DE LOS PROYECTOS DE

GRADO REALIZADOS POR LOS ESTUDIANTES

DE INGENIERÍA DE PRODUCCIÓN QUE SE

GRADUARON EN EL 2003

Cuaderno 19 – Junio 2004 ARTÍCULOS DE LOS PROYECTOS DE GRADO REALIZADOS POR LOS ESTUDIANTES DE INGENIERÍA MECÁNICA QUE SE GRADUARON EN EL AÑO 2003

Departamento de Ingeniería Mecánica

Departamento de Ingeniería de Producción

Cuaderno 20 – Junio 2004 ARTÍCULOS RESULTADO DE LOS PROYECTOS DE GRADO REALIZADOS POR LOS ESTUDIANTES DE INGENIERÍA DE PROCESOS QUE SE GRADUARON EN EL 2003

Departamento de Ingeniería de Procesos

Michel Hermelin

Cuaderno 21 – Agosto 2004

ASPECTOS GEOMORFOLÓGICOS DE LA AVENIDA

TORRENCIAL DEL 31 DE ENERO DE 1994 EN LA

CUENCA DEL RÍO FRAILE Y

SUS FENÓMENOS ASOCIADOS

Juan Luis González, Omar Alberto Chavez,

Cuaderno 22 – Agosto 2004

DIFERENCIAS Y SIMILITUDES EN LAS TEORÍAS

DEL CRECIMIENTO ECONÓMICO

Marleny Cardona Acevedo, Francisco Zuluaga Díaz,

Carlos Andrés Cano Gamboa,

Carolina Gómez Alvis

Cuaderno 23 – Agosto 2004

GUIDELINES FOR ORAL ASSESSMENT

Grupo de investigación Centro de Idiomas

Cuaderno 24 – Octubre 2004

REFLEXIONES SOBRE LA INVESTIGACIÓN

DESDE EAFIT

Dirección de investigación y Docencia

Cuaderno 25 – Septiembre 2004

LAS MARCAS PROPIAS DESDE

LA PERSPECTIVA DEL CONSUMIDOR FINAL

Belisario Cabrejos Doig

Cuaderno 26 – Febrero 2005 PUBLICACIONES Y PONENCIAS -2004-Dirección de Investigación y Docencia Cuaderno 27 – Marzo 2005 *EL MERCADEO EN LA INDUSTRIA DE LA CONFECCIÓN – 15 AÑOS DESPUÉS -*Belisario Cabrejos Doig

Cuaderno 28 – Abril 2005 LA SOCIOLOGÍA FRENTE A LOS ESPEJOS DEL TIEMPO: MODERNIDAD, POSTMODERNIDAD Y GLOBALIZACIÓN

Cuaderno 29 – Abril 2005 "OXIDACIÓN FOTOCATALÍTICA DE CIANURO" Grupo de Investigación Procesos Ambientales y Biotecnológicos -GIPAB-

Miguel Ángel Beltrán, Marleny Cardona Acevedo

Cuaderno 30 – Mayo 2005

EVALUACIÓN A ESCALA DE PLANTA PILOTO DEL PROCESO INDUSTRIAL PARA LA OBTENCIÓN DE ACEITE ESENCIAL DE CARDAMOMO,

BAJO LA FILOSOFÍA "CERO EMISIONES"

Grupo de Investigación Procesos Ambientales y Biotecnológicos -GIPAB-

Cuaderno 31 – Junio 2005 *LA DEMANDA POR FORMACIÓN PERMANENTE Y CONSULTORÍA UNIVERSITARIA* Enrique Barriga Manrique

Cuaderno 32 – Junio 2005 ARTÍCULOS DE LOS PROYECTOS DE GRADO REALIZADOS POR LOS ESTUDIANTES DE INGENIERÍA MECÁNICA QUE SE GRADUARON EN EL AÑO 2004

Escuela de Ingeniería
Departamento de Ingeniería Mecánica

Cuaderno 33 – Julio 2005

PULVERIZACIÓN DE COLORANTES

NATURALES POR SECADO POR AUTOMIZACIÓN

Grupo de Investigación Desarrollo y

Diseño de Procesos -DDP
Departamento de Ingeniería de Procesos

Cuaderno 34 – Julio 2005

"FOTODEGRADACIÓN DE SOLUCIONES DE
CLOROFENOL-CROMO Y TOLUENO-BENCENO
UTILIZANDO COMO CATALIZADOR MEZCLA
DE DIÓXIDO DE TITANIO (TIO2),
BENTONITA Y CENIZA VOLANTE"

Grupo de Investigación Procesos Ambientales y
Biotecnológicos -GIPABEdison Gil Pavas

Cuaderno 35 – Septiembre 2005

HACIA UN MODELO DE FORMACIÓN CONTINUADA

DE DOCENTES DE EDUCACIÓN SUPERIOR EN EL

USO PEDAGÓGICO DE LAS TECNOLOGÍAS DE

INFORMACIÓN Y COMUNICACIÓN

Claudia María Zea R., María del Rosario Atuesta V.,

Gustavo Adolfo Villegas L., Patricia Toro P.,

Beatriz Nicholls E., Natalia Foronda V.

Cuaderno 36 – Septiembre 2005 ELABORACIÓN DE UN INSTRUMENTO PARA EL ESTUDIO DE LOS PROCESOS DE CAMBIO ASOCIADOS CON LA IMPLANTACIÓN DEL TPM EN COLOMBIA

Grupos de Investigación: Grupo de Estudios de la Gerencia en Colombia Grupo de Estudios en Mantenimiento Industrial (GEMI)

Cuaderno 37 – Septiembre 2005 PRODUCTOS Y SERVICIOS FINANCIEROS A GRAN ESCALA PARA LA MICROEMPRESA COLOMBIANA Nicolás Ossa Betancur Grupo de Investigación en Finanzas y Banca

Área Microfinanzas

Biotecnológicos -GIPAB-

Cuaderno 38 – Noviembre 2005

PROCESO "ACOPLADO" FÍSICO-QUÍMICO Y BIOTECNOLÓGICO PARA EL TRATAMIENTO DE AGUAS
RESIDUALES CONTAMINADAS CON CIANURO
Grupo de Investigación Procesos Ambientales y

39

Cuaderno 39 – Febrero 2006

LECTURE NOTES ON NUMERICAL ANALYSIS

Manuel Julio García R.

Department of Mechanical Engineering

Cuaderno 40 – Febrero 2006

MÉTODOS DIRECTOS PARA LA SOLUCIÓN

DE SISTEMAS DE ECUACIONES LINEALES

SIMÉTRICOS, INDEFINIDOS, DISPERSOS Y

DE GRAN DIMENSIÓN

Juan David Jaramillo Jaramillo, Antonio M. Vidal Maciá, Francisco José Correa Zabala

Cuaderno 41- Marzo 2006

PUBLICACIONES, PONENCIAS, PATENTES

Y REGISTROS 2005

Dirección de Investigación y Docencia

Cuaderno 42- Mayo 2006 A PROPÓSITO DE LA DISCUSIÓN SOBRE EL DERECHO PENAL "MODERNO" Y LA SOCIEDAD DEL RIESGO

Diana Patricia Arias Holguín Grupo de Estudios Penales (GEP)

Cuaderno 43- Junio 2006

ARTÍCULOS DE LOS PROYECTOS DE GRADO
REALIZADOS POR LOS ESTUDIANTES DE
INGENIERÍA MECÁNICA QUE SE GRADUARON EN
EL AÑO 2005

Departamento de Ingeniería Mecánica Escuela de Ingeniería

Cuaderno 44- Junio 2006 EL "ACTUAR EN LUGAR DE OTRO" EN EL CÓDIGO PENAL COLOMBIANO, ÁMBITO DE APLICACIÓN Y PROBLEMAS MÁS RELEVANTES DE LA FÓRMULA DEL ART. 29 INCISO 3

Susana Escobar Vélez

Grupo de Estudios Penales (GEP)

Cuaderno 45- Septiembre 2006

ARTÍCULOS DE LOS PROYECTOS DE GRADO

REALIZADOS POR LOS ESTUDIANTES DE

INGENIERÍA DE DISEÑO DE PRODUCTO QUE SE

GRADUARON EN EL AÑO 2004 Y EN EL 2005-1

Departamento de Ingeniería de Diseño de Producto

Escuela de Ingeniería

Cuaderno 46- Octubre 2006

COMENTARIOS A VISIÓN COLOMBIA

II CENTENARIO: 2019

Andrés Ramírez H., Mauricio Ramírez Gómez y

Marleny Cardona Acevedo

Profesores del Departamento de Economía

Antonio Barboza V., Gloria Patricia Lopera M.,

José David Posada B. y José A. Toro V.

Profesores del Departamento de Derecho

Carolina Ariza Z. – Estudiante de Derecho

Saúl Echavarría Yepes-Departamento de Humanidades

Cuaderno 47- Octubre 2006

LA DELINCUENCIA EN LA EMPRESA:

PROBLEMAS DE AUTORÍA Y PARTICIPACIÓN
EN DELITOS COMUNES

Grupo de Estudios Penales (GEP)

Maximiliano A. Aramburo C.

Cuaderno 48 – Octubre 2006

GUIDELINES FOR TEACHING AND

ASSESSING WRITING

Grupo de Investigación – Centro de Idiomas (GICI)

Ana Muñoz, Sandra Gaviria, Marcela Palacio

Cuaderno 49 – Noviembre 2006

APLICACIÓN DE LOS SISTEMAS

FOTOCATALÍTICOS PARA LA DESTRUCCIÓN DE

COMPUESTOS ORGÁNICOS Y OTRAS SUSTANCIAS

EN FUENTES HÍDRICAS

Grupo de Investigación Procesos Ambientales y

Biotecnológicos -GIPAB-

Edison Gil Pavas, Kevin Molina Tirado

Cuaderno 50 – Noviembre 2006

PROPUESTAS METODOLÓGICAS EN

LA CONSTRUCCIÓN DE CAMPOS

PROBLEMÁTICOS DESDE EL CICLO DE VIDA DE

LAS FIRMAS Y EL CRECIMIENTO INDUSTRIAL DE

LAS MIPYMES

Grupo de Estudios Sectoriales y Territoriales Departamento de Economía Escuela de Administración Marleny Cardona Acevedo Carlos Andrés Cano Gamboa

Cuaderno 51 – Enero 2007 PRODUCTO DE TELEPRESENCIA PARA LA EDUCACIÓN SUPERIOR EN EL ÁMBITO NACIONAL

Departamento de Ingeniería de Sistemas Departamento de Ciencias Básicas

Helmuth Treftz Gómez,

Pedro Vicente Esteban Duarte Andrés Quiroz Hernández Faber Giraldo Velásquez Edgar Villegas Iriarte

Cuaderno 52 – Febrero 2007

PATRONES DE COMPRA Y USO DE VESTUARIO

MASCULINO Y FEMENINO EN

LA CIUDAD DE MEDELLÍN

Departamento de Mercadeo

Belisario Cabrejos

Cuaderno 53 – Febrero 2007 EL DEBATE SOBRE LA MODERNIZACIÓN

DEL DERECHO PENAL

Materiales de investigación Grupo de Investigación

Grupo de Estudios Penales (GEP) Juan Oberto Sotomayor Acosta Diana María Restrepo Rodríguez Cuaderno 54 - Marzo 2007

ASPECTOS NORMATIVOS DE LA INVERSIÓN EXTRANJERA EN COLOMBIA: Una mirada a la luz de las teorías de las Relaciones Internacionales

Pilar Victoria Cerón Zapata y

Grupo de Investigación en Inversión Extranjera: Sabina Argáez, Lina Arbeláez y Luisa Victoria Euse

Cuaderno 55 – Abril 2007

PUBLICACIONES, PONENCIAS,

PATENTES Y REGISTROS 2006

Dirección de Investigación y Docencia

Cuaderno 56 – Abril 2007 CAPITAL HUMANO: UNA MIRADA DESDE LA EDUCACIÓN Y LA EXPERIENCIA LABORAL

Marleny Cardona Acevedo Isabel Cristina Montes Gutiérrez Juan José Vásquez Maya María Natalia Villegas González

Tatiana Brito Mejía

Semillero de Investigación en Economía de EAFIT

-SIEDE-

Grupo de Estudios Sectoriales y Territoriales

-ESyT-

Cuaderno 57 – Mayo 2007 ESTADO DEL ARTE EN EL ESTUDIO DE LA NEGOCIACIÓN INTERNACIONAL

Maria Alejandra Calle

Departamento de Negocios Internacionales

Escuela de Administración

Cuaderno 58 – Agosto 2007 ARTÍCULOS DE LOS PROYECTOS DE GRADO REALIZADOS POR LOS ESTUDIANTES DE INGENIERÍA MECÁNICA QUE SE GRADUARON EN EL AÑO 2006

Escuela de Ingeniería

Departamento de Ingeniería Mecánica

Cuaderno 59- Octubre 2007

DESARROLLO DE NUEVOS PRODUCTOS (DNP)

Jorge E. Devia Pineda, Ph.D.

Grupo de Investigación Desarrollo y Diseño de

Procesos y Productos -DDP-

Departamento de Ingeniería de Procesos

Cuaderno 60- Marzo 2008

ARTÍCULOS DE PROYECTOS DE GRADO

REALIZADOS POR LOS ESTUDIANTES DE

INGENIERÍA DE DISEÑO DE PRODUCTO QUE SE

GRADUARON DESDE EL 2005-2 HASTA EL 2007-1

Grupo de Investigación en Ingeniería de Diseño

Cuaderno 61- Marzo 2008 MEMORIAS CÁTEDRA ABIERTA TEORÍA ECONÓMICA

Marleny Cardona Acevedo Danny Múnera Barrera Alberto Jaramillo Jaramillo Germán Darío Valencia Agudelo Sol Bibiana Mora Rendón

Cuaderno 62- Abril 2008

PUBLICACIONES, PONENCIAS, PATENTES

Y REGISTROS - 2007

Dirección de Investigación y Docencia

Cuaderno 63- Junio 2008 PROYECTOS DE INVESTIGACIÓN 2006 Departamento de Ingeniería de Procesos Escuela de Ingeniería

Cuaderno 64- Julio 2008 PROYECTOS DE GRADO INGENIERÍA DE SISTEMAS 2006-2007 Ingeniería de Sistemas

Cuaderno 65- Julio 2008

APLICACIÓN DE LA ELECTROQUÍMICA EN

EL TRATAMIENTO DE AGUAS RESIDUALES

Grupo de Investigación en Procesos Ambientales y
Biotecnológicos. GIPAB

Edison GilPavas

Línea de Investigación: Procesos Avanzados de

Oxidación

Cuaderno 66- Julio 2008

COMPARATIVE ANALYSES OF POLICIES, LEGAL

BASIS AND REALITY OF SME FINANCING IN CHINA
AND COLOMBIA

Marleny Cardona A.

Isabel Cristina Montes G.

Carlos Andrés Cano G.

Bei Gao

Grupo de Estudios Sectoriales y Territoriales –ESYT–