# ANALYSING FINANCING POSSIBILITIES AND OPERATIONAL CAPACITY FOR NXCXTI CO, LTD



Bachelor's thesis

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# BACHELOR'S THESIS

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#### **ABSTRACT**



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#### ABSTRACT

This thesis is developed for a small enterprise in China, NingXiang ChangXing Tungsten Industrial Co, Ltd that has been engaging in a metal recycling business more than 10 years. The objectives of this thesis are to find out suitable financing solution for the company and possible improvement scheme for the improvement of operational capacity.

In the thesis, the main theories applied are: firstly, the supply chain management theory, which mainly focuses on the inventory management and the relationship management with suppliers and customers. Secondly, in part 5, the financing channels and methods the theory has applied. Thirdly, financing and accounting analysis theory are used in part 5 and 6 which are the fundamental of data analysis in part 7. I have mainly used the lecture materials of Tapani Hokkonen who is a lecturer in Supply Chain Management Programme in Hamk University of Applied Science. Financing channels for SMEs by Zhang Chao Yuan, as well, the third edition of financial accounting by David Alexander & Christopher Nobes, Google scholar has also been an important source.

The accounting and financing analysis are based on the financial data of NingXiang ChangXing Tungsten Industrial Co, Ltd. Part of the financing information has got from the conversation with managers and the accountants of the company. The main analysis methods are accounting analysis of the balance sheet, income statement, as well the financing analysis of operational capacity indicators. The results of the data analysis show that the current assets of this company has a average increase of 84% yearly along by the soar of revenue, while the operational capacity has been gradually dropped during the past 3 years. By analysis, some other indicators, I conclude that the possible reasons for these could be the high inventory level and the slow payment from customers.

By consideration of financing possibility and the integration of supply chain management, I propose that NingXiang ChangXing Tungsten Industrial Co,.Ltd. apply the pledge of BADs as its low cost financing method, and start to reduce and control the inventory.

**Keywords** Small and medium-sized enterprise financing, operational capacity, current asset turnover, supply chain management

**Pages** 46 p. + appendices 4 p.

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#### 1 INTRODUCTION

In general, small and medium sized enterprises have been rapidly developed and take 98% of total quantity of enterprises in China. They have significantly contributed to the domestic economy, played an important role of promoting the flourish of the market. As well they are the backbone of society stabilization. They also have incredible importance in releasing the stress of employment and optimization of economic structure. But they also are facing lots of bottlenecks which require being resolved urgently, such as the HR, information, technologies, especially the capital stress. Since 2007, Chinese SMEs are taken more stress from the soar-up of raw material prices, the increasing labour costs and RMB exchange rate increasing. What is worse, the globalized crisis and the Chinese central bank's tightened credit are severely affecting the financing of SMEs. Actually, the financing difficulties of SEMs as well exist in EU countries and other developed countries. But they have got a variety of help and support from the government to diminish these obstacles.

NingXiang ChangXing Tungsten Industrial Co, Ltd is s small enterprise engaging its business in metal recycling. During the past 3 years, the company has had a significant growth of market shares. Along with the growth, they are taking lots of capital stress. This thesis is developed based on the initial of finding financing solutions and the improvement of operational capacity. The objects of this thesis is to find out which are the suitable financing channels for NingXiang ChangXing Tungsten Industrial Co, .Ltd and also find out the disadvantages behind the capital stress by analysis the operational capacity with historical financing data. At the same time, it also seeks the possible solutions to improve the situation from the view of integrated supply chain management.

In part 2, there is a short description about the situation of the company, and those aspects it wishes to improve in order to achieve success.

In part 3, it is the general information about the metal recycling industry, the government policy towards the industry which affects the purchasing strategies and the inventory level of the company. As well, through the discussion of SME specialities in this part, it reveals the financing barriers of SEMs in general and the challenges they are facing as the expansion of their business. Small and medium sized enterprises mainly depend on the owners' owned capital to accumulate the original capital for the enterprises' development, that is internal financing is the priority financing channels. As the development and expansion of the enterprise, the capital from internal financing apparently couldn't satisfy the demanding of the capital for technology transfer, structural transformation and external investment of the enterprise. That is why it is important to seek for possible external financing channels to inject capital for them. This part also tells why it is not so easy for SEMs such as NingXiang ChangXing Tungsten Industrial Co, Ltd to find suitable financing channels.

Part 4 includes the theoretical part of supply chain management. Through the company information in part 2, we know that the general financing situation of NingXiang ChangXing Tungsten Industrial Co. .Ltd which a big amount of sales revenue from customers is bank drafts in usance payment. And the reason behind this unfavorable payment is the market strategy. In order to develop a mutual beneficial and royalty relationship instead of business transactions with suppliers, even though as small scaled enterprise, NingXiang ChangXing Tungsten Industrial Co, Ltd also has its own insist to its suppliers who normally running smaller businesses. It normally will not put capital stress on its suppliers. That is why part 4 is to talk about the relationship management with customers and suppliers in supply chain. As we know, the inventory level plays an important role in customer satisfaction and it affects the efficiency of working capital. At the same time, the depreciation of inventory has potential risk to the business. Part 4 looks at the inventory management from the aspects of customer satisfaction level and economic scale.

Part 5 is about the study of financing channels and analysis of what the requirements are. The main focus of this thesis is about getting more working capital and using the working capital in a better way. Part 6 and part 7 will surround this issue discussing the analysis of accounting and financing, as well data analysis has done to compare some indicators horizontally.

Finally, the conclusion has been made regarding the study that NingXiang ChangXing Tungsten Industrial Co, Ltd has a significant increase of the market which can be obviously seen from a soar growth of revenue during the past 3 years, 49% growth in 2009 and following another 28% growth in 2010. The current asset has also had an average yearly growth of 84%. But the current turnover ratio has slightly decreased going the opposite position of revenue. Meanwhile, the results shows 2 more negative aspects: inventory level has been in a significant high level and it has increased yearly. And the receivable turnover ratio has also declined. From the view of all the above aspects and results of data analysis, I conclude the high inventory level and slowly receiving payment from customers might be the possible causes of operational capacity reduction. And the company could improve it working capital' operational capacity by reducing the inventory level. At the same time, it is possible for NingXiang ChangXing Tungsten Industrial Co, .Ltd to expand it financing channel with the pledge of BAD.

# 2 COMPANY INFORMATION

#### 2.1 Company facts

NingXiang ChangXing Tungsten Industrial Co, Ltd is a small-sized nonferrous metal metallurgy enterprise. In 2007, NingXiang ChangXing Tungsten Industrial Co, .Ltd was established in Xiaduopu Industrial Park which is the satellite town of Changsha, capital city of Hunan Province. By recycling wasted metal material which contains tungsten and cobalt, company products tungstenic and cobaltic compounds. The main products of the company are: APT, Tungsten Oxide and Cobalt Oxide. Company takes the land of 20000m² with building area around 8000m² of which 5000m² are production workshop. It has individual APT, Tungsten oxide, Cobalt Oxide production lines, with an annual production of 300t APT and 500t Tungsten Oxide. In 2011, the revenue of the company was 94 million with a ROI of 7.6%. (Luo Zan Cun & Long Wei Yun 2012)

#### 2.2 Company history

The company has grown out of Anhua ChangXing Powder Metallurgy factory which has started its business since 1995. The factory was located in a remote area Anhua where the transportation and infrastructure is very poor. The original registered capital was only 300,000. The revenue of the first year was 2.3 million with a RIO of around 10%. In the beginning years, the factory's core business was simply separating tungsten and cobalt from the waste metal material. The products can be only provided for another company as raw material for further processing. As the development of the factory, the products have gradually upgraded which means more requirements for the manufacturing technique and production workshop. But the imperfection of the infrastructure and the geographic factors of the remote constrain the expansion of the factory. What's worse, the factory was located in the upstream of the river which have serious risk to the whole drainage basin. In 2006, the owners of the company decided to move the whole factory to an industrial Park. In the same year they invested 11 million in Xiaduopu Industrial Park for purchasing the land and building the new production base. In 2007, the new company started to operate. (Luo Zan Cun & Long Wei Yun 2012)

#### 2.3 Products information

Tungsten is a hard, rare metal, which was found by a Swedish chemist in 1781. In 1783, Spanish Chemist F.de Elhuyar isolated Tungsten Oxide by refining wolframite, then deoxidizing with carbon to made Tungsten carbide. In nature, Tungsten only exists as compounds in ores of wolframite and scheelite with a reservation of approximately 5.2 million tons. Tungsten has extremely high fusing point of 3380degree and high strengths, barely reacts with acids, oxygen. Tungsten is commonly used to make

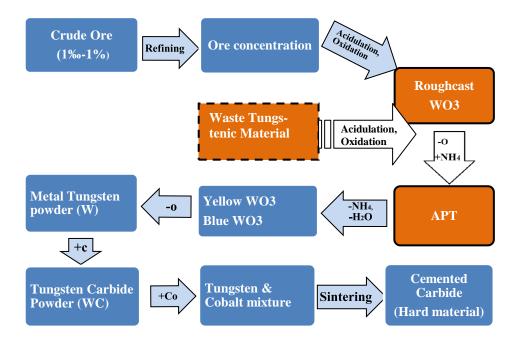
hard material known as Tungsten Carbide. Tungsten in alloys can increase strengthen of the alloys. It is also used in making tools to bear high temperature. Tungstic acid compounds are commonly used in petrochemical industry as catalyst. Tungsten also is the perfect material for electronic components due to good conductibility. At present, NingXiang Chang-Xing Tungsten Industrial Co, Ltd products NO.0 class APT and roughcast Tungsten Oxide. APT is a white crystal tungstic compound including platy APT and acicular APT. It can be used as catalyst in petrochemical industry, and it is the raw material for making further tungstic compounds, for example, APT deamination can make Blue &Yellow Tungsten (WO3). The manufacturing techniques of APT are mainly: ion exchange technique, extraction, acid decomposition – ammonia dissolution – evaporative crystallization. The technique of NingXiang Changxing Tungsten Industrial Co, Ltd is acid decomposition - ammonia dissolution - evaporative crystallization which has lower investment and relatively simply process.

The roughcast Tungsten Oxide of NingXiang ChangXing Tungsten Industrial Co, .Ltd is further processing to make APT, part of the product is used for its own APT production line, the rest has provided to other company's APT production.

In nature, tungsten only has 1‰-1% in ores, by define, purify and oxidation and deoxidize can make different compounds. The products chain of tungsten is:

Crude Ore (1‰-1%) by refining  $\rightarrow$ Ore concentration  $\rightarrow$  roughcast Tungsten Oxide  $\rightarrow$  APT  $\rightarrow$  Yellow& Blue Tungsten powder (WO3)  $\rightarrow$  Metal Tungsten powder (W)  $\rightarrow$  Tungsten Carbide Powder (WC)  $\rightarrow$  Tungsten & Cobalt mixture  $\rightarrow$  Cemented Carbide(Hard material).

Cobalt is the sub product of tungsten, at present, company only products Cobalt Oxide which is storage as future goods. Cobalt Oxide is a pink powder which can be used in ceramics industry and also can be used in dyestuff. Cobalt Oxide also can be used to make resistant and battery. (Luo Zan Cun & Long Wei Yun 2012)



#### Picture 1. The Tungsten Products Matrix

# 2.4 Current situation of the company

The sales revenue of the company in 2011 is 91 million RMB, of which 60% is received as Bank Acceptance Drafts and 40% in cash. After tax deductable, the actual paid VAT is 4.1million. With a net profit of 7.8 million, the company achieves a profitability of 8.5% in 2011. With an increase of 6.5 million during the year 2011, the inventory value reaches to 30 million by the end of the year 2011.

According to the consumption scale, the customers of the company are basically grouped into 2 categories:

The first group is the strategic importance customers who are big companies and they feed more than 60% of the supplying of NingXiang Chang-Xing Tungsten Industrial Co, .Ltd. NingXiang ChangXing Tungsten Industrial Co, .Ltd supplies products to these companies according to contracts by batch supply. The payment term normally is Bank Acceptance Drafts, meaning usance payment.

The second group is the retail customers who are small companies or private personnel. The purchasing habit of these customers is that they buy small amount each time frequently. The sales revenue to these customers takes around 40% of total. Most of the time, the payment of these customers are received after arrival of goods or cash on delivery (COD) which means the customers pays against receives. The trade will be completed as the customers are satisfied the goods and then following the payment. And it also rarely happens of settle date payment. That is, the company and its customer settle a date by which the customer should pay. These only happen between some customers who have had a long term business relationship between each other and good reputation has been built between, and strong trust have been built. Meanwhile, the payment from these customers is always in cash instead of any drafts.

For the Bank Acceptance Drafts, the company's strategy is keeping them as long as possible till the due date for bank acceptance. Only if the liquidity is in a shortage and the capital demanding is in emergency, BAD will be considered to be discounting. The discounting of BAD needs to pay for certain amount of interest to bank which is synchronous to the same period's deposit interest rate. The big amount of BAD not only slow down the liquidity, also well, it increases the financing cost. The problem is that the willing of accept BAD is set as the strategy to win market, meaning the situation that the company received 60% of sale revenue by BAD will not consider to change, and the receiving amount will not be reduced.

Secondly, the liquidity assets is not enough for the current business, and the utilization ratio of working capital is not so high, as the cost of discounting of BAD is quite high. (Luo Zan Cun & Long Wei Yun 2012)

#### 2.5 Aims

The aim this thesis is finding possible financing channels for NingXiang ChangXing Tungsten Industrial Co, .Ltd, and improves the operational capacity with the integrated supply chain.

The key accounts (KA, means the important clients) take a big proportion of the profitability and they are significant to the company, so that the changes towards them will not be possible. Meanwhile, even though the small scaled customers are not as importance as the first group, they are taken lots of stress due to be in the downstream of the supply chain, consideration the sustainability development of business relationship, it should not reduce the benefit of them in order to maximum self benefit. The company targets to speed up the liquidity and optima the financing structure without scarify the customer value.

# 3 BACKGROUND INFORMATION

#### 3.1 Industrial information

According to Chinese Industrial & Information Bureau's statistic, the revenue metal metallurgy was 3300 billion, and the net margin was 219.3 billion, with an average rate of profit of 6.65%. As the impact of worldwide economy recession, since the 3<sup>rd</sup> season of 2008, the manufacturing has sharply decline which lead to the reduction of raw materials. The declining demand directly results in the prices of the materials such as plastic, metal shrinks. It has severely impact the iron and steel industry, non-ferrous industry, paper mills and plastic industry. Some of the material's prices have shrunk deeply to 50%. Price plummeted, demanding declined and with severe competition, such unfavorable factors made half of the enterprises go out of business. It has an estimation of 70% declining in quantity of renewable resources. The recycle business is facing unprecedented challenges currently.

#### 3.2 Government policy towards the industry

Metal products are non-renewable resources. The sustainable usage of these kinds of resources is supported by the movement. During the tenth "five year" (between 2000-2005), Chinese has recycled more than 400 million resources, annual average of 80 million tons with a average annual increase of 12%. The total value created is about 650 billion, and the annual increase rate is around 20%. In 2005, in a TV speech by Prime Minister Wenjiabao about building a conservation-oriented society, he indicated that energy resource, minerals, water, land and other nature resources are the fundamental substance of the sustainable development of socioeconomic, as well the guarantee of sustainable development. China has made a magnificent achievement in the economy. At the same time, we have paid a heavy price for this success. And China will still continue to be in a rapidly expansion of industrialization and urbanization period during the next 15 years which leads to more consumption of resources. There are severe challenges from the increasing population, resources constrains, environmental stress. In this speech, he also pointed out that resources conservation and building a conservation-oriented society is a significant important strategic decision. According to macro-economic control policy, based on the principle of reducing quantity, recycling, reclamation, the government will highly advocate the developing of cycle economy. In reality, the government has had a preferential policy towards recyclable industry, such as the reduction of taxation rate. In reality, we can see this support from the taxation policy. According to Finance & taxation [2001]78, number 78 document, since 1 May, 2001 all the recycling units will be exempt from VAT of the trading wasted materials. And it will have a 10% deduction of inputting tax when purchasing wasted material was raw material. In Finance & taxation [2008] No.157 document, the previous policy in Finance & taxation [2001]78 has been called off from 1, May, 2011on. But the government will compensation 70% VAT which was contributed by 2009, 50% of 2010 back to the taxpayers. (hppt://www.chinesetax.com.cn 2008)

#### 3.3 SMEs specialties

According to EU standards, SMEs are the enterprises which have the annual turnover less than 50 million Euros, balance sheet less than 43 million Euros, and head accounts less than 250. According to Chinese standard, the judgment of an enterprise belongs to SMEs or not, is based on the field it is in. The annual turnover, head accounts and the registered capital are the criteria. In general, the industrial enterprise which has asset under 40 million RMB or annual turnover of less than 300million RMB, and head accounts less than 300, is SME category. The development of any kind of economies is closely related to SMEs. In EU, SMEs take over more than 90% of the total amount enterprises, providing 90million job positions. According to GuangMing Daily, the statistic from Industrial & information Ministry, China now has more than 10 million registered SMEs and 20million more private business. The quantity of SMEs takes 98% of all the registered enterprises' totals. The output of the SMEs has contributed to 60% of the GDP, 57% of revenue, 40% of national tax, and 70% of export volume. 80% of job positions in towns and cities have been provided by SMEs. Even though China has huge group of SMEs, survey statistic shows that the average life cycle of Chinese enterprises is only 2. 9 years. Every year, there are closely 1million of them shut the business. By comparison, this of Japan and EU are 12, 5 years, 8,2 in the US.

Compared with big enterprises, SMEs have their specialities. Mostly, SMEs are small scale with simplified structure and high operation efficiency. Because of concentrated decision-making authority, SMEs are quick at decision making which makes them rapidly response to the market changes. Mean while, opportunities and challenges are along with Chinese SMEs. Small and medium sized enterprises only own small sized capital source which they use for creating maximum benefits, so that they cannot invest too much as fixed asset, for example it is not possible to diversify the production lines. Although, this kind of single-product strategy increases the risk, they can focus on specific market segment, even possible of monopoly. As the SMEs have taken most of the risk and stress of the industry chain, they are first to bear the brunt when comes the recession. Especially, Chinese SMEs have been vigorously developed under the high pressure of employment and bloom domestic demanding which means entirely being lack of technology. And most of the development relies on the intensive cheap labour. In general, the bottlenecks for the development and survival of Chinese SMEs are the following four:

Firstly, there is a lack of strategy. Most of the SMEs do not have a clear strategy. Basically, they are going with the stream, following the steps of the enterprises which are doing well in the same field, repeating whatever they do. These directly lead to in a market segment being full of competitors, and over capability, so that the competition has no longer in products themselves, but in price advantage. According to statistics, 80% of Chi-

nese SMEs are a family owned business. So-called family enterprises are where the capital or equity stake is mainly owned by a family, and family members have taken the main leadership of the enterprise. America scholar Krikkin thinks that judging an enterprise as a family firm or not, is not if it is named by family or the ratio of top management is taken by family members, but it is the ownership of the firm. Chinese scholar also thinks the key evidence to judge the enterprise is a family firm or not is its ownership's belonging. He also thinks that family firm is surrounded by the managerial authority. If a single family or several directly domin the managerial authority of the enterprise, it is a family firm. Family firms have most of the management consisting of family members. Members of the same family always have the similar ideology. And it limits the creative.

Secondly, there is a lack of sufficient management. In China, the private ownership of SMEs is mainly operated as family business whose operation model is individual-centred or family-oriented. The charisma of the entrepreneur is the main source of cohesion. Family enterprise is a kind of old but short form of enterprise organization. It has a very short life cycle. It has shown by an America research that 70% of the family firms have not passed to the next generation, 88% could not reach the 3<sup>rd</sup> generation, while, and only 3% of them have gone further than 4<sup>th</sup> generation. In China, the average life cycle of family firms is 24 years. Thirty percent of them have passed to the  $2^{nd}$  generation. No more than two out of three have been able move to the  $3^{rd}$  generation. At the beginning period of the family firm, family members can be bundled together by natural affection which not only can improve the internal communication. Also, information sharing can reduce the risk of enterprise disintegration. Meanwhile, family members participate in the operation and management of the business, and dominate the surplus benefit of the business which inspires the motivation of them. The family members groups and communicate frequently reduces the cost of coordinating internal contradictions. As being bundled by blood relationship, there has highly sense of identity between family members with a sacred responsibility, family members will try their best to contribute to their positions without comparison the ratios of their work to the payoff. As the development and enlarge of the enterprise, the defect of the management will gradually exposure, then better management is required.

The human resource competition is the key of an enterprise. The increase requirement of the human resources is far more than what the family can furnish. Human resource reservation is an important factor of constraining the sustainable development of the enterprise. As it is known, Chinese SMEs are being in lack of competent personnel. The problems of SMEs are high liquidity, lack of inter-disciplinary talent. After seed capital accumulation has been done by the labour intensive period, enterprises start to reform in order to update. Then being lack of talent is the biggest challenge they are facing. The reasons that talent are not willing to stay in SMEs are comprehensive. For example, big companies have abundance sources for opportunities of training and renewing knowledge. The business circumstances of big companies are steadier and risk resistance capacity is strong, especially during the crises time. The perfected internal

structure of the big company always offers a more transparency and justice promotional system. While in SMEs, it is hard for employees to see their opportunity so that the motivation is hard to be inspired.

Thirdly, there is a lack of capital. In 1993, the average capital of SMEs which have independent accountability, are only 230,000RMB. Due to limited capital sources, most of the SMEs invest backward traditional technique, so that the products have little added value with low the technology content. The direct financing is activity that the capital provider and the demander directly forms obligatory right or stock right with the support of financing tools such as obligatory, stock. But the current situation direct financing for SMEs is not satisfaction at all. The priorities of debt financing are assigned to the projects of agriculture, energy, transportation and city public infrastructure. Then, it is about the limitation of circulation which makes the SMEs usually do not have the strength or not easy to get capital by directly financing. Then, the credit and loan is another difficulty. Banks or financial organizations discriminate SMEs when facing their lending proposition. Even thought, the implementation of some government policy in acceleration development of SMEs in 2003, the biggest 4 state-owned commercial banks still have their strategy of supporting the big sized state-owned enterprises. Accrued basis on the big enterprises have been fed to appetite, banks will consider to the requirement of SMEs. Apparently, they don't pay too much attention to SMEs. Statistic of World Bank's survey of Chinese investment environment shows that only 12% of the operational capital has been provided by bank. Except the previous reason, another important factor is from the unpredictable operational risk of SMEs. SMEs do not have steady resume, and this definitely increases the credit risk.

Last but not least, being lack of supportive policy. Small and medium sized enterprises they are the mainly GDP contributors, while the quantity of small and medium sized company is too huge but the average contribution of each enterprise is not as big as of what the big scaled enterprises. Individually, a big company absolutely has more importance to the development of the region, such as to economic and social wealth. In order to attract and tie the big enterprises to settle up their business in the region, local government always sets lots of preferential policies towards them, such as the taxation deduction, land usage. Meanwhile, small and medium sized enterprises are not pampers, instead, there are lots of unfavourable restriction limiting their growth. Big companies, especially state-owned enterprises, get lots of loan offerings even more than their demanding from banks and from government grants. (Guarantee Agency of China Industrial & information Bureau 2009)

#### 4 SUPPLY CHAIN MANAGEMENT

Supply chain is a series of companies and organizations linked as network with each other by the flow of materials, services, finances and information in order to delivery values to end user of the products or services from a source.

Supply chain management is the management of the upstream and downstream of a supply chain by consideration the benefit of suppliers and customers as a whole. On the premise of satisfying customer demand, supply chain management is the management of each single node of the supply chain such as the supplier, manufacture, distributor, retail and end user or consumer in order to achieve the minimum sum cost for the whole supply chain.

It means each single enterprise and organization will work corporately with the related organizations in order to management, control and improve the information and material flows so that they could deliver the maximum value to the end user, as well it will create the all win to each party of the whole supply chain. According to the definition of Council of Supply Chain Management Professionals (CSCMP), supply chain management is the integration of supply and demand management within and across companies and organizations. The management of supply chain is about the values in a whole. Every signal supply chain links to the design, planning, execution, control and monitoring of supply chain activities with the initial of value added and competitiveness built. And these supply chain activities include the products design, purchasing, inventory, manufacturing, and transportation, order processing and marketing. the management of supply chain is engaged in the planning of procure and monitoring the orders with the perspective of satisfying the production demanding, meanwhile optimizing of inventory so that efficiency would be improved with lower cost, lower risks.(Christopher, M. 1998. Poirier, C.C. Wu, Q.Y. 2009.)

#### 4.1 Customer and supplier relationship management

The relation of business refers to a series of interactions between parties both unilateral or bidirectional over time. For example, if a customer goes to shop for purchasing a product, it is only a transaction. But if this customer feel like the product from this shop is good and he or she would like to go and buy it again, then it is the so-called relationship. The core of relationship is trust. The development of trust for a relationship will have the long-term payoff. In order to develop the trust, information needed to be shared between the parties, because of which the risk and confusion will be reduced. And the trust can be categorized into 3 different levels. During the early period of the relationship, the reason for the cooperative party to trust the other one is that the relationship does make it gaining. This is called calculus-based trust. The second one is knowledge-based trust. This kind of trust is based on the understanding of the interactive history of each other. The party built so trust is relies on the experience and sub-

jective feeling. The deepest trust is the identification-based trust which exists based on the mutual understanding reaching to certain level and the parties even are like substitutes. In business, relationship exists as customer relationship and supplier relationship. The management of relationship in business is for driving value by lower cost in a more efficiency manner with the reduction of risks for the interact parties.

Whether for customer relationship management or supplier relationship management, the mutual benefits is the intention. (Buttle,F. 2009)

#### 4.1.1 Customer relationship management.

Reasons why companies wish to build customer relationship are basically about the benefits either short-term or long-term. Customers can exit the relationship for many reasons, such as the requirement of the products changes, the repeating failure services that is the breakage of the trust customers towards the suppliers.

Through the communication with customers, it will lead to better awareness of customer requirements so that the improvement of services and products can be done. Even customized service and products can be developed for specific customer group.

By sorting the customers, companies find it easier to identify and acquire different customer requirements, so that they can make specific tactics to satisfy the customers and retain profitable customers. But not all the relationship can be maintained. When the cost-to-serve is significant high, and the loyty of customer torwards the supplier is low such as frequently shifting supplier, then, this kinds of customers are not targeted to keep a relationship with.

By the management of customer tenure and customer behaviours, companies can have better understanding of customer requirement and better customer satsfaction can be created in order to fill the expectation. At the same time, customers can also start to realise what value their suppliers can provide to them. Hence, a better customer insight is significantly necessary. It is broadly that companies develop a certain model to catograize and analysis the customers. According to the position customers are, the customer value ladder model is buit. Customers are devided into 7 groups during the tenure. First is the suspect, who is doubt whether these customers are the protential targets market. The second one is the prospect, who is the target group and is being appraoching for the first time. The thhird one is the first-time customer. Next stage is the majority group, who has considered that you are the significant partner. The following one is the loyal customers who have a strong trust towards and positively believe that the business between each other are reliable, at the same time, they will not consider of switching supplier. The deepest relationship customers are the advocate, who are the follower of the supplier, they have a significat strong sentive of trust to supplier and they will always advocat to others positively. This group of customers

contribute to generate more profit and better reputation for supplying companies. For different customer groups in each customer jounery stage, the revenue and costs have very large differences. In order to get the prospect customers to the first customer, companies may invest a lot and the payoff will take long time. While, as the relationship is deepened, the cost will start to be low as the trust and acquaintance increases. (Buttle,F. 2009)

# 4.1.2 Supplier relationship management.

Supplier relationship management is similar with customer relationship management as it is for improving the relationship between suppliers and customers. Similarly, supplier relationship management and customer relationship management are both about delivery value. The perspective is the improving of efficiency, lower cost, reducing risks and accessing to innovative.

Supplier relationship management is for building a well relationship strategically by the aim of development a long-term relationship between both the supplying and demanding sides in a supply chain. It focuses on developing a bi-directional and mutual beneficial relationship with the key supplier so that higher level of innovative and more value will be delivered to the buying enterprise, at the same time higher level of efficiency will be achieved. The advantage and competitiveness through the supplier relationship management would be obviously greater that the traditional transactional purchasing.

By sharing information with each other, supplier and customer can increase their competitiveness so that the market share could be expand, costs of the early stages can be reduced and the win-win model can be achieved.

In order to increase the profitability, there are only two ways: one is reducing the cost and the other way is increase the revenue. But it is not so easy to have significant improvement in sale revenue, and reducing purchasing cost is putting in the priority position. Suppliers' benefit is squeezed. While, suppliers are the providers of the raw material, components and services which will have direct impacts on the quality of products and service towards customers.

As we know, supplier can directly affect the financial performance of the purchasing enterprise by payment term etc. It impacts the profitability of the purchasing enterprise by effecting the products development cost, purchasing price. What's more, suppliers also have the influence to the inventory level, the delivery schedule impacts the manufacturing schedule, hence it indirectly affects the customer relationship of purchasing enterprise. It is absolutely necessary for enterprises also to build and develop supplier relationship.

Lower price than the competitors is definitely attractiveness, while, nowadays the low price is not the only thing that customers are looking for. If the suppliers can't survival their business, it will affect the source and inventory of the purchasing enterprise. Especially for B2B, it not only considers buying and selling behaviors as a simply onetime deal and it is not only a onetime benefit either, instead long-term cooperation is something that both sides would appreciate. That is, they are looking for a relationship that will provide unique value which would be beneficial in the long run.

Generally, there are several of reasons why the customers want to build relationship with suppliers:

**Firstly,** it is for improving of efficiency by cooperation with suppliers. With the help of supplier relationship management software, the management of supplier relationship can significantly improve the efficiency. In retail industry, retailers have variety items in inventory and each item has different units in stock based on the demanding and the supplying lead time, too high inventory level will need not only inventory space also the inventory costs will devour the profit, in order to reduce the cost, inventory level should be as low as possible, then the risk of customer backlog increase if the inventory level is too low, so that the inventory control becomes significantly important. Under these kinds of situation, cooperation with the supplier by sharing information plays significant importance for the buying enterprise. The planning of procurement, the item delivery lead time, monitoring of purchasing order all helps to control the item inventory level. For buying enterprise, inventory could be optimized so that the goal of lower cost and more value could be achieved without sacrificing customer satisfaction.

**Secondly,** it is for satisfaction of customer demanding. Sometimes customers will have requirements about the raw material or components where have been purchased or from which enterprise has been supplied. Especially in electronic industry, customers cares about the origin of the components very much, and they may require specific origins. Potential customers may consider if enterprise has a competitive or stabilized supplying channel from their suppliers so that enterprise will be able to secure the supplying from them. Also, by sharing some of the information, enterprise will be easier to manage the customer purchase orders and plan the delivery, so that the visibility and transparency of goods moves will be increased.

**Thirdly,** it is for developing partner relationship with vendor in order to gain competitiveness for both sides, as well—the integration of supply chain by contribute additional value for the whole supply chain could be achieved. The cooperation between supplying enterprise and buying enterprise will avoid the overlapped cost and the partner relationship contributes significantly for the development of products and services. More than 50% of total costs are from purchasing, so that reducing the purchasing costs is considered strategically as an important method of cutting the total cost in order to create bigger profitability. Quite many big companies

such as GM (General Motor) are very famous for pressure its suppliers to offer low prices for getting the purchasing order. Bigger companies due to the attractiveness of bulk purchasing make the suppliers comprise to the lower price. For the short term, the buying enterprises do benefits from the lower cost purchasing, but the pressure of low profitability for the supplying enterprise may lead them to transfer the pressure to the upper suppliers, which will come into to a vicious circle step by step. Purchasing enterprises will lose the loyalty and trust from their suppliers. The consequences will start to emerge during the supplying shortage period, suppliers will not try to satisfy the supplying any more, and instead they even will sell the items to the competitors of the buying enterprises. It is significant important for the CPO to realize that it is better to select a small amount of qualified suppliers to build a partnership rather than benefits from the price war between quantity of suppliers.

Last but not least, supplier relationship management affects the financial performance of buying enterprise. Supplier relationship can affect the cost of the buying company which is the profitability. Through the management of supplier relationship, the payment term to the supplier can also affect the financial performance of buying company. There are several kinds of payment according to the order of payment and shipment, they can be payment against delivery, full payment in advance, usance payment etc, and the payment also can be cash or bank drafts. Hence, to negotiate with the supplier that what kind of payment agreed between enterprise and their suppliers can real affect the cash flow of their finance. Taking the usance payment for example, usance payment is for releasing the capital stress of the buying enterprise, it at the same time promotes the sales of the supplying enterprise. For the selling enterprises, it is an important marketing strategy to increase the market shares on the severe competition. Buttle,F. 2009

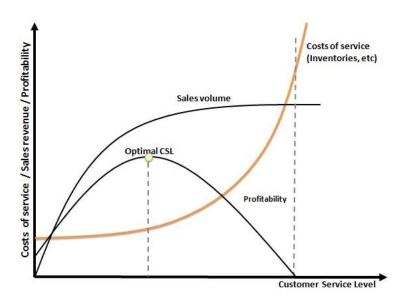
#### 4.2 Inventory management

An inventory includes the raw materials, WIP, final products. Inventory management is about keeping certain amount of each item in storage mainly, also about the arrangement of these items' storage location etc. Inventory is always storage in warehouse, which not only acts as storage space, as it has some other functions such as distributor centre, fulfil centre that is for receiving, picking and delivers orders. Part of inventory also could be put in somewhere nearby production line for the convenience of production. All of the items in inventory can all belong to the enterprise itself, and also the supplier or customer can own some particular items. For example, the KanBan inventory belongs and is taken care of by the item supplier.

By taking care of the planning and purchasing procedures, as well as the purchasing order following-ups, supply chain management also expect to optimize the stock in warehouse which firstly should be able to meet the demand driving by customer demand and market plan, based on this, it should try to low the item stock mostly.

In the other hand, if the customers cannot get the items they need, it might lead to 2 potentials situation: one is customers will wait till they get the items which means order backlog, company will not lose the current order from customer, but in the future, customers might change their purchase to other companies. The second one is that the customer directly shifts their business to other suppliers, and company lose the market share. The satisfaction of customer has a directly impact to the market share. In order to satisfy the customer demand, the inventory level should be able to meet the demanding of customers at least, which cannot be figured out in an accurate figure as it is a forecast based on the historical and current orders information. In another word, inventory should be kept in a certain high level. Meanwhile, higher inventory level means higher cost. If only consider of maintenance of the higher level customer satisfaction, some of items might cost more that its sales, and it makes negative profit, in this situation, there is not necessary to keep the customer satisfaction too high if they do not contribute to the company's profitability or do not have any potential profitability. Then, grouping the products into different class and employ different purchasing strategy would be help for the inventory optimization for different products categories.

The relationship of the customer service level, sales, cost and profitability is showing in the following picture:



As we can see from the picture above, higher customer service level definitely mean higher service costs, a slightly increase of sales, the profitability is firstly increase but then start to reduce. The inventory management is about the balance of the cost and profitability.

Even though there are lots of variables in certainty or uncertainty needed to consider for the reduction of inventory level, it still has some effective technique to achieve it in some level. For all the items, it has a safety stock level, when the inventory is more than it, the precast customer satisfaction can be achieved. The satisfaction of customer is evaluated by customer service level, the higher CSL mean the higher inventory and higher inven-

tory carrying cost. The inventory level is high relies on which kinds of customer service level want to have. Based on the CSL goal, the safety stock level, reorder point can be figured out.

# **Safety Stock Level** = $Z * STD * \sqrt{L}$

(Z stands for safety factor, STD stands for standard deviation, and L is lead time)

**Reorder Point** = L \* AVG + Safety Stock Level (L stands for lead time, and AVG is average demand of retailer)

# **Order quantity** = $\sqrt{2K * AVG/h}$

(K stands for ordering cost per order, AVG is average demand for retailer, and h is inventory carrying cost per item). (Hokanen, T.2010)

#### 4.3 Risk management

Risk is from the uncertainty. It is the probability that a unexpected outcome might be. Risk management is about avoiding of these kinds of probability within minimum cost to guaranty benefits. It firstly needs to find out where and what is the uncertainty and define it, and then it needs to be assessed after which the suitable operations will be assigned in order to reduce the hazard. For an enterprise, risks are from the failure of project, the development of new products, the innovation, the uncertain market, legal liability, natural disaster etc.

The processes of risk management including 4 steps, the definition of risk in the first, following the assessment of risk, how should we do to reduce the risk and how do the methods performance, whether they really work as expected or not.

- 1) **Risk definition,** this is the most important step of risk management. During the definition of risk, enterprise starts to figure out where the risk at is and what they are. And they can be put into specific categories depending on the characters. Only if we know what the risks are, can we know how to management them.
- 2) **Risk assessment.** Base on the first step, hug amount of information will be collected, after which statistic and analysis will be done so that the frequency or probability of the happening of these risks will be and how much damage they will lead to.
- 3) **Risk management methods** which aim to avoid the probability of happening or reduce the grade of hazard and negative affections.
- 4) The evaluation of the performance risk management. It is to analysis the applied risk management mechanism. And then by comparison it to the expectation, it will show the level of goals reached, so that the realistic, the applicability of these methods can be known. This has significant importance guidance the future. (Xu, X.Y. 2009)

# 5 FINANCING CHANNELS

It is well known that capital is the blood of enterprise. Sufficient liquidity capital promotes the sustainable development of enterprise. In China, There is more than 10 million of small and medium sized enterprise. And the average life cycle of small and medium sized enterprises is only 2.9. And there are lots of newly-born small or macro enterprises every year, while no more than 30% of them can survive. Lack of capital is ones of the most important reasons. And lack of financing channels is the constraint of capital sourcing. (Zhang,C.Y.& Liang,Y. 2008)

#### 5.1 Financing channels categories and structures

Basically, the financing channels is divided into 2 categories, external financing and internal financing according to the source of the capital. Internal financing by using the owned property for satisfy the demanding, includes retained earnings, sell off idle assets. For build a new enterprise, the initial capital normally belongs to the owner of the entrepreneur or the owner of the enterprises or, and the initial capital is internal financing. Internal financing is the initial accumulation of the enterprise. It has autonomy, low financing cost and anti-risk ability. External financing is that the capital is from outside the enterprise such as from investors, loans from bank etc. It is a significant source of capital. As the development of the enterprise and expansion of the business, the internal financing is not able to satisfy the capital demanding, so that enterprises need to seek for injections from outside. It has relatively higher financing cost and higher risk. External financing is an important way of getting capital for and enterprise and it could be either equity right or debit right financing according to the obligatory or equity right relationship created. External financing also can be divided into direct financing and indirect financing by the creation of debit and credit relation either with the intervention of intermediaries or not. (Guo,Z.X & Yang,J.C. 2009.)

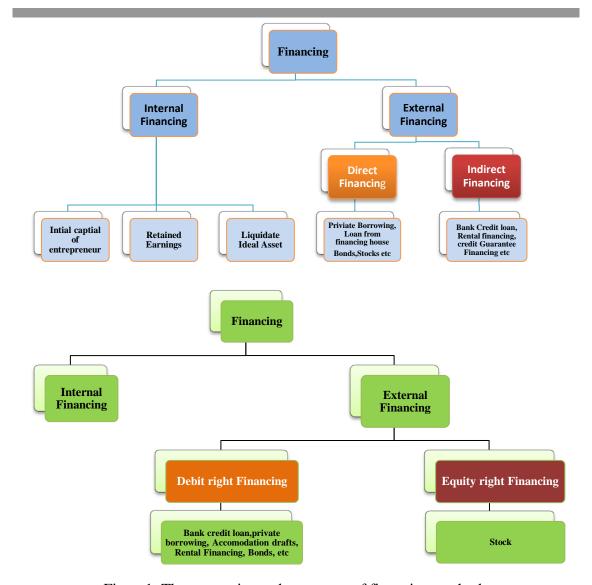


Figure 1. The categories and structures of financing methods

#### 5.2 Direct financing

The direct channels are such that credit and debit relationship has made directly between the debtor and the owner of the money. The borrower has the ownership of the capital. The direct financing can be either equity right or debt right financing. In China, the direct financing channels include staffs of the enterprise raise funds, private borrowing, callable loan, investment from some other enterprises etc. (Guo,Z.X & Yang,J.C. 2009.)

#### 5.3 Indirect financing

The indirect financing channels are the financing activities that credit and debt relationship are made between the capital providers and demanders with the intervention of the intermediaries such as banks lending the money which belongs to depositors to the capital demanders. The bank is acting as an intermediary. The ownership of the money actually belongs to

depositors. Some other indirectly financing channels are estate trust financing, guarantee financing etc. (Guo,Z.X & Yang,J.C. 2009.)

#### 5.4 Debit right financing

Debit right financing is that the obligatory relationship is related to the debit right. The debtor has the right to perform duties and pay off the debit back to the lender according to the agreement.

The debit right financing channels are bank credit financing, financing rental, accommodation drafts financing, bounds financing, private borrowing financing etc.

#### 5.4.1 Bank loan financing

Bank loan is the most common credit financing method which is provided by most of the commercial banks. It is that the bank lends the money to the capital demander with a certain interest rate, for certain duration, with certain terms of repayment and the debtor provide certain mortgage, most likely is real estate, such as the usage right of land.

Because of low financial cost and low risk, mortgage bank loan takes the highest ratio compared to other financial channels. The other advantage of it is that the interest rate of the loan can be pointed as the cost, and it can be used to deduct the tax.

Banks, for the consideration of the risk of their capital, have a series of auditing to ensure that the applicant meets the criterion for the loan, and it is time costly, so that it is always not possible to solve the urgent capital demanding problems. If an enterprise wants to get the loan from bank, it should provide guarantee for it, such as the real estate mortgage, pledge and credit support. When using real estate mortgages such as building property right, land use right, production equipment, the mortgage rate normally is less than 70%. The pledge means using the movable property to security the repayment of the loan with a pledge rate of no more than 90%. While credit support is that the debtor provides an third party to guarantee the commitment, at the same time, the third party should have ability to take the responsibility to pay off the loan if the debtor breaks the contract. By the loan duration, it can be divided into short-term and long-term loan.

#### 1) Short-term loan

A short-term loan means the duration of the loan is no more than 1 year, and it usually is used for debtor's liquid capital demanding of manufacturing and operation activities. It has many kinds of forms, for example, overdraw account for the legal person of the enterprise, enterprise can get the total amount of the loan in one time and pays back in several times, or enterprise can get the loan in several times and pay back as well in several times etc. Normally, short-term loan is able to expand the duration one

more time once it is expired. However, the new loan duration cannot exceed the original duration. The interest rate is quite low which mean low financial cost for debtors. The interest rate of short-term loan fluctuates corresponding to the interest rate policy. But the interest rate of a loan during the loan duration is decided by interest rate when the contract is made and it is not going to fluctuate correlating to the actual time interest rate. There are also slight differences between difference banks. The problem of short-term loan is that it is for solving the short-term liquid capital issues and it can't provide capital for the long-term demand of enterprise.

#### 2) Medium and long term loan

Medium and long-term loan is so-called project loan, and is for the usage of investment in building or expansion of fixed asset for duration of more than 1 year. Long term loan means the duration is more than 5 years. Enterprises use the medium and long term loan for their projects, building infrastructure and technique improvement etc.

Compared with some other loans, medium and long term loan has its differences. When the bank issues a medium and long term loan, they will take the consideration of enterprise' owned capital as project fund, which means not including the liability. And the percentage of project found depends on the industry and field the enterprise is in. As the medium and long term loan is granted as whole package for many years and divide into several times to put out during the duration. It is known that the interest rate is fluctuated all the time. Then, it comes out the problem of the interest rate of the medium and long-term loan: How actually do they define and calculate the interest rate for medium and short-term interest rate? The interest rate for it is calculated with year interest rate. While, in the contact of the loan between bank and enterprise, the interest rate is the starting year's interest rate. In actual, the interest rate of medium and long term loan will be adjusted every year.

Enterprises who want to take the medium and long-term loan should fulfill a series of conditions in order to satisfy banks' loan assess. For example, first of all, they should have a certain percentage of starting capital for the project. It requires also that the borrower should have very well credit status with preferred credit historical recoding. Secondly, the borrower enterprise should have ability of paying back the loan according to the contract date. As well, the borrower should have quite very well management system etc. (Wang,Z.J. 2007)

#### 5.4.1.1. Bank Loan Against Collateral

Bank loan against collateral is the most common bank loan that debtor use its property such as the real estate to convince they repayment of the loan. The mortgage rate is no more than 70%, and differently depending on the categories of the mortgage. For loan against collateral, Debtor transfers the ownership of the property to the debtee legally without occupying the property. Debtor still keeps the property during the loan duration. Only if the debtor enterprise does not have the abil-

ity to carry out the repayment of the loan for example bankrupt, bank will have the right to deal with the property with intervention of court justice. Bank has the priority to get compensation compared with other debtee of this enterprise.

#### 5.4.1.2. Bank Loan by Pledge

Bank loan by pledge is a way of getting the loan that the debtor secures the repayment of the loan by using moveable property or legal right as pledge. Debtor should repay the loan to the creditor by the due date. Otherwise, the creditor has the right to sell the pledge as the compensation of the loan. There are some differences between pledge and mortgage. For pledge, debtor should give the movable property such as goods to debtee. The debtee keeps the pledge. At the end of the contract, if debtor repays the loan back to debtee, the pledge will be sent back to the debtor. Otherwise, the ownership of the pledge will belong to debtee as the compensation of the loan. Another difference is that mortgage is affected only if the registration has done, but the pledge affects without requiring of registration as long as the pledge has moved to the debtee side. When the debtor is not able to fulfill the repayment of the loan, the transferring ownership of the mortgage will be carried out by the court of justice. But for pledge, debtee can just handle the pledge by themselves such as directly sell the pledge. The pledge can be moveable property such as commodity, it also can be right, for example the Accounts Receivable and Equity right of the enterprise.

#### 1) Assigning of Receivables (A/R Pledge).

It is a financing method that enterprises pledge their Receivable Account (A/R) to bank in order to get a loan. As the payment from debtor of A/R, the loan can be write-down the correspond amount. When bank issues the A/R pledge loan, there are several things needed to be checked-up. First, it is to check validity of A/R.

Valid A/R= Total value of A/R – Invalid A/R The highest Loan = Valid A/R\*85%

Then, it is to make sure that the payer will pay the money to the designated account which has open in this loan issuing bank. And bank also checks the reliability of the payer.

As the intensity of competition in market, purchaser becomes superiority than seller. More stress is assigned to seller behaving in the payment term of payable at usance. It is quite common that purchasing enterprise will pay in a short-term credit of several months. According to statistics, A/R and inventory takes around 60% of asset in Chinese SMEs. The payable at usance not only affects the selling enterprises' capital liquidity, but also has potential risk due to insolvency coming from the purchasing enterprises. By the Assigning of Receivables, if the purchasing enterprise refuses to pay the A/R or is insolvency, bank has the right to recourse from

the purchasing enterprise. Hence, the risk from purchasing enterprise's reneging has split and spread to bank.

Assigning of receivables also efficiently transfers liability and improves the Assets Liabilities Ratio and asset structure. Enterprise gets capital without the increasing of liability.

#### 2) Equity right pledge.

It is the rights pledge that pledgor uses the equity right as the pledge to guaranty the repayment. When the due date of the loan comes, if debtor is not able to carry out the agreement, then debtee can evaluate the equity right into capital as the loan compensation. For pledge the equity right, the pledgor needs to submit application first, also financial statements such as the last season's Liability Statement, Profitability Statement are needed, meanwhile, pledgee will also need to check up the previous year' asset evaluation report. After the agreement is dealt, registration to the administrative department of industry and commerce is needed. It starts to effect since the registration date. The equity right pledge is a newly developed financing channel for SMEs. It expands the bank credit financing for SMEs.

#### 5.4.1.3. Bank Loan by Credit Guarantee

Bank loan by credit guarantee is that bank issues a loan with the intervention of a third party for credit guarantee of it. The credit guarantee party is an intermediary and plays the role as a guarantee for enterprise to secure the repayment of the loan. As redound, enterprise pays certain amount of commission fee. The risk for the credit guarantee organization is if the enterprise breaks the promise and doesn't pay off the loan to bank as agreed, and then the credit guarantee organization will take the responsibility of paying. Definitely, before taking the responsibility of guarantee for an enterprise to get loan from bank, the credit guarantee organization checks up several things. First of all, the credit guarantee organization will check up the ability of its counter guarantee, that is, does the enterprise really have the ability of repaying the loan? This doesn't only consider of the tangible assets, also intangible assets such as trade mark right, the entrepreneur's other assets etc. And the credit guarantee organization also checks and makes sure that the liability takes a reasonable ratio of the total asset, as well, they also check that does the enterprise have continuous profitability. With the help of credit guarantee organization, enterprise is able to get a loan of maximum 50% of its assets, maximum 10million RMB for construction projects and 5 million for others kinds of enterprises. The credit guarantee organization actually is the potential obligee of the enterprise, so it always supervise the enterprise' operation activities, sometimes even intervenes to it.

The development of the small and medium sized enterprises always meet problem in capital shortage. And bank loan is always considered as the top number one choice if possible, because of low risk and low financing cost. But taking loan from bank has too much restriction of enterprise' credit status due to potential risk. Even though some of enterprises who have very well operational situation and strong competitiveness in market, it is still not so easy for them to get the loan from bank. If they cannot provide sufficient property as collateral to guaranty the loan, then the intervention of credit guarantee organization helps to build bank's credit trust towards enterprises. It is win-win for both bank and enterprise. For the bank side, bank feels more confidence for giving loan to enterprise, because the credit guarantee organization splits the risk and part of risk has shifted to the credit guarantee. For the enterprise side, they can get the loan more easily with paying some percentage of commission to the credit guarantee organization. Especially for those enterprises that can't satisfy the bank's collateral requirement while they actually have strong ability of paying off loan. The credit guarantee organization expands the credit loan financing channel for them.

By using their owned property to guaranty loans, credit guarantee organization has built a bridge for cooperation between bank and enterprises. It not only reduces the requirement of issuing loans, also increases the possibility of getting a loan from bank. According to Chinese Industrial &information Bureau's statistic, till end of 2008, China has more than 4000 of credit guarantee originations that have helped more than 900,000 enterprises for getting totally 1, 75 trillion loans from banks.

In general, there are 4 kinds of modes for credit guarantee organizations.

#### 1) Commercial guaranty.

The commercial guaranty organizations are private owned and run for gaining profitability. The commercial guaranty organizations take around 4% of all the credit guaranty organizations.

#### 2) Credit guaranty organization.

For credit guaranty organizations, the source of guaranty capital comes from the government, so that they are supervised by government. The intention of these organizations is not for profitability.

#### 3) Association guaranty organization.

It is a combination of commercial guaranty and credit guaranty. The local Finance Bureau government cooperates with credit guarantee companies and the guaranty capital comes from both sides. The local Finance Bureau takes the guaranty for enterprise to get loan, while the credit guarantee companies only handle the procedures.

#### 4) Mutual aid guaranty organization.

Mutual aid guaranty is that a group of enterprises set up a credit guarantee organization and raise a fund from the members which is used as guaranty capital to service the members. In some situation, local government also offers supportive fund as part of the guaranty capital. These kinds of organizations don't aim for making profit, and they don't serve public but only the members.

The credit guarantee can be divided into 3 categories:

#### 1) Credit guarantee for liquidity loan.

When the enterprise doest have enough liquidity for its operation, a loan is needed for replenishment. The period for a liquidity loan is less than 1 year, and it has low financing cost with high speed of revolving. The credit guarantee organization helps them to get loans if they don't have enough property for pledge or mortgage.

#### 2) Credit guarantee for comprehensive credit line.

Comprehensive credit line includes acceptance of Bank Acceptance Drafts and discounting of Bank Acceptance Drafts, guarantee for commercial drafts, international settlement etc. Credit guarantee for comprehensive credit line service for several or a signal of them. By credit guarantee for comprehensive credit line, enterprise gets the amount of credit from the bank during a period. Enterprise can combine several kinds of loan forms together in order to improve the capital usage efficiency.

#### 3) Credit guarantee for construction project.

It is make a promise to guaranty the benefiter by a Letter of Guaranty.

#### 5.4.2 Accommodation drafts financing

Accommodation draft financing also is an important tool of credit financing. It means banks issue a loan by purchasing commercial drafts before the due date of the drafts. Commercial drafts are the paper which is issued by the drawer who points a drawee to pay the certain amount of money to the remittee or the bill holder by the specific date unconditionally. There are two kinds of commercial drafts: Commercial Acceptance drafts and Banker's Acceptance Drafts depending on the acceptor.

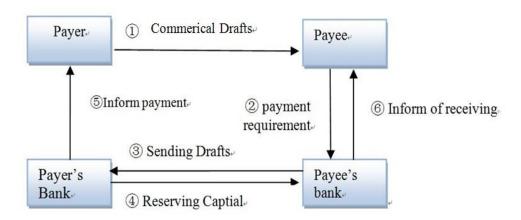


Figure 2. The settlement procedure of commercial drafts-

Figure 1 The settlement procedure of commercial drafts

#### 1) CAD

Commercial Acceptance Drafts (CAD) is a kind of commercial draft that is issued by drawer such as enterprise, and it delegates a payer such as bank to settle the payment unconditionally on the due date. The acceptor of the CAD is originations except bank. The drawer of CAD is the debtor.

Drawer assigns its opening bank as its delegation bank. When the due date of the CAD comes, the CAD holder can handle the CAD to the delegation bank and get the capital.

The Commercial Acceptance Drafts is suitable only to those organizations or enterprises that have relievable capital resource in order to pay for the CAD, the capital liquid is sufficient and have extraordinary high credit worthiness. CAD's payment term is no more than 6 months and it is negotiability that is the CAD holder can assign the endorsement, and then the endorsee will have the ownership of the CAD.

**CAD Settlement**: The payment procedure of the CAD is: the CAD's drawer receives the notification of payment and informs the payment when the opening bank gets the CAD, at the same time, the opening bank of the CAD drawer will keep the CAD. As the drawer of CAD receives the notification from its opening bank, the drawer should notify the payment during the same date as it gets the notification of receiving from the opening bank. Otherwise, the payment of the CAD will be executed by the bank in 3 work days with the deposit in its account if no notification has been sent by the drawer.

CAD Discounting: The CAD holder can discount the CAD before the due date by paying interest rate of the remaining due date. The interest rate is fluctuating to the deposit rate while it is no higher than the interest rate of the same day's bank loan. The discounting of CAD has low financing cost. It has also lower commission charges by comparison with Bank Acceptance Drafts. While, the using of CAD in China is not so common, enterprises are not so willing to get CAD from customers. The capital amount of CAD only takes 10% of all the commercial drafts. CADs are mainly used in some monopolized industry, state owned enterprises or international giants such as petroleum, electricity, iron and energy enterprises.

In general, CADs are used between the enterprises that are located in the same city. The enterprises who have received CADs are either waiting for the due or discount the CAD. It is not so common to negotiate endorsement. By consideration of risk, most likely, enterprises do not accept CADs, which has had negotiable endorsement.

#### 2) Bankers' Acceptance drafts (BAD)

It is a draft that is issued warranty by an enterprise in its deposit bank, and bank is the acceptor as well plays the role as delegation of the payment. First, enterprise provides application of BAD. After the bank's check-up to agree for acceptance, BAD will be created for the payee and the bank promise to pay for the BAD to the payee with certain amount of money in the certain due date. The sum of a BAD can reach to maximum 100million RMB in paper BAD and 1 billion RMB in electronics BAD. The duration of a BAD is not more than 6 months. The holder of BAD can either inform of payment when the due date of BAD comes or discount the BAD before the due date with paying certain amount of interest rate.

**BAD settlement:** As the drawee receives BAD, the endorsement will be assigned to it. And the notification of BAD should be sent to bank with showing the BAD to the issuing bank in order to get the payment from it. And the BAD holder should inform the bank for the payment at least 10days before the due date and then the bank will start to issue and pay the money to the BAD holder at the due date of it unconditionally if there are no disputes. The payment of the BAD is cash, not any other kinds of property. Payment of BAD is the way of relieving bill relation. As the payment of the BAD has done, the debit and credit relationship between the related drawer, endorser and BAD holder are cleaned up.

**BAD Discounting:** Discounting of BAD is a financing activity that BAD holder applies for assignment of a BAD to the bank before the due date of the BAD. The discounting of BAD is due to the capital demanding. BAD holder can get the amount of cash marking in the BAD by minus the interest for the remaining period of due date and 5% commission charge. The interest rate of discounting of BAD is fluctuated to the same period's deposit interest rate.

The discounting value and interest are calculated as such:

Discounting value = Value in the BAD- discounting interest – commission fee

Discounting Interest= Value in the BAD\*discounting days\*discounting interest rate/30

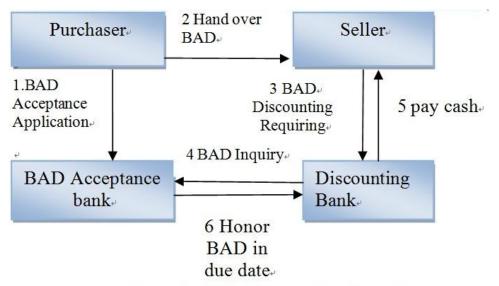


Figure 3. BAD Discounting Procedure.

Figure 2 BAD Discounting Procedure

The acceptance of a BAD for drawer is based on the credit worthiness the bank towards the drawer. For the BAD, the drawer delegates the bank to finish the payment to the drawee by the certain due date and there is order-to-pay relationship between the acceptance bank and drawer. To be acceptance of BAD for an enterprise, the bank will charge 5‰ of commission. Nowadays, BAD takes around 90% of all the commercial drafts. And it is a very important method of accommodation bills financing. The issu-

ing of BAD is convenience with simple procedures and flexible, also the financing cost is low. The BAD can be assigned to other enterprise or organization. Even the lost of an acceptance BAD can be paid by notifying the acceptance bank. There are also many other advantages of using BAD for both supplier and purchasing sides. For the purchasing side, the use of BAD means payable at a usance. The payment term of BAD reduces the occupancy of operation capital. It is the same as that they get a free loan for a period. For the sales side, because of payment term of BAD, they will get more preferable from the purchasing enterprise. The sales revenues and market share may increase due to the payable at usance. Hence they gain competitiveness compared with other competitors. BAD financing (discounting BAD) has lower financial cost compared with bank loans. Even though enterprises using BAD for settlement has so much advantages, not every enterprise has the ability of drawing a BAD. The conditions for the bank to accept the enterprise's application of being acceptance bank is very strict. In order to be accepted as the BAD acceptance bank, firstly, enterprise should have very well credit and debit relationship with the bank, and there should not be any overdue loan in history record. Secondly, the enterprise should have sufficient payment ability and good records of settlement etc. That's why the usage of BAD is only commonly between big companies and other companies who have strong capital liquidity.

#### 5.4.3 Private borrowing and borrowing form finance house financing

Private borrowing financing is that enterprises borrow money directly from personal. As it is agreed by the debtor and borrower, since the relationship of borrowing is built, the capital starts to be in effect. The terms of the debit, such as the interest rate, the duration or any possible pledge if there is, are agreed by verbal agreement mostly or paper agreement. Private borrowing is the oldest way of financing. Traditionally, it was between personal to help friends or relatives when they met money demanding. And it was not for profitability purpose. Nowadays, private borrowing becomes more popular and commercialization. The trust of private borrowing most likely depends on the debtor' reputation and the enterprise's profitability trust worthy. The private borrowing is flexible with a simply process. Without miserable procedures and conditions, private borrowing also can satisfy SMES that has their capital demanding of urgently, short-term and frequently. Normally, no pledge is needed. And only around 10% of private borrowing has had pledge.

A private financing house is a kind of enterprises who is doing business of such as lending its capital to other enterprises or personal. It is function similar as bank, but the smaller scale. The capital sources of private financing house are from the enterprises' owned capital, share capital of the shareholders. It may also be from the banks which should take no more than 50% of total net asset and be from no more than 2 banks. The services of private financing houses can be not only capital lending, but also can be guarantee for bank loan etc. It is the private financing house that has made the possibility of MBO (Management Buyout) in many cases.

Nowadays, the private borrow and the services of private financing houses become varieties. It can be lending money to the demander, credit guarantee for the demander, entrust loan and so on.

There are mainly 3 forms of private borrowing:

# 1) Low interest rate with the intention of helping each other.

The intention of this kind of borrowing is not for profitability. Some time it is only for help others to solve the urgently shortage. The borrowing happened between friends and relatives temporally. The borrow duration is in a random, most of time is short period, some time can be long time.

#### 2) High interest rate with profitability purpose.

The personal or private financing houses lend the money to the capital demand with a quite high interest rate. Legally, the interest rate is no more than 4 times of the same period's bank interest rate. It is the most common form of private borrowing.

#### 3) Capital rising by enterprises.

It is the enterprises collecting money from its employees or stockholders for its capital demanding. Sometimes, it is by requiring the employees to pledge their property for a bank loan to enterprise. And the enterprise will pay for the interest rate to bank, at the same time pays some amount of interest rate to the employee. It also can be raise guarantee capital from each employee. This means that the enterprise asks each employee to deposit a certain amount of money to the enterprise to guarantee they will work there as agreed in the contract. This not only makes sure that the employees will work there as agreed; it also achieves the purpose of financing. This is "guarantee capital" and used to be very popular in labour-intensive manufacturers. As the improvement of Labour Law, it gradually diminishes, as it is not allowed legally.

Private borrowing becomes a significant important financing channel for promoting the flourish of market. Especially, in Yangtze River Delta region, Perl River Delta region, the economy is brisk so that the capital liquidity is very strong with high demanding of capital. And the private borrowing activities are blooming. Since 2007, the stress from the soaring of raw material prices, the labour cost increasing, the central bank's credit tighten policy and the RMB exchange rate increasing all leads to the hard operations of SMEs. According to information of Chinese National Development and Reform Commission, there are more than 67,000 scaled SMEs went bankrupt. The common and most effective reason was the financing difficulties. Because for these kinds of large-scaled SMEs, they mainly depend on the bank loan as their priority credit loan financing channel cannot satisfy the urgently demand for capital.

As the tremendous market and profit of private borrowing business, there is a form of illegal capital rising emerged with the born of private financing houses. The illegal capital riser collects money from public with a significant high interest rate and then lends the money to personals or enterprises whoever needs with an extremely interest rate. The purpose of ille-

gal capital rising is for usury. And the interest rate is always higher than the legal level.

# 5.4.4 Rental financing

Rental financing is that enterprises do not invest money for new equipment to maintain or expansion of their operation. Instead they rent needed equipment from leasing company in order to fulfill their business. Essentially, rental financing is similar as the lessee enterprise pays off the periodical loans back to the leasing enterprise who have invested for the lessee's equipment. Started from 1952 in US, the rental financing ranks the second biggest financing channel after credit financing. At present, approximately 1/3 of investment has been done not to their own fixed asset, but by rental equipment. According to statistic, more than 6000 of Chinese enterprises have made the use of rental financing for their technique transformation with a total value of more than 27 billion RMB. In coastal area of China such as Zhejiang, there are lots of ODM and OEM manufacturers. For them, production ability is significant advantage, while the investment of equipment is also high. The rental financing has contributed to the expansion and development of them. Some enterprises such as Ghillie have used rental financing during the beginning period. So far, Chinese Civil Aviation System has already got more than 300 of aircrafts by rental financing with a total sum of 15 billion US dollar. And the telecommunication equipment by rental financing has reached to 2 billion of US dollar.

As we know, the fixed asset not only take liquidate, also the value of it is hard to evaluate. Only during the usage of fixed asset can create value and make profit for the enterprise but not owning it. So nowadays, it is more and more common that enterprises require for rental equipments from the leasing company. The lessee provides the requirement of the equipment and the leasing company will take the responsibility of financing and purchasing of the equipment. After it is ready, the leasing company will bring the equipment to use to the lessee. At the same time, the lessee pays rental for it according to the agreement or contract. When the due date of rental arrives, the lessee has the option of stopping rent, continuous rent or purchasing the equipment by the price of the remaining value of it.

The rental financing is that the fixed asset user and the owner make a kind of contract which is not possible to stop during the duration of the contract. The ownership of the equipment belongs to the leaser is only for the purpose of control of the risk, and when the contract ends, it could be transferred to the lessee with a quite low price. The responsibility of maintain during the contract period is taken by the lease.

Because all the equipment is customized according to the lease's requirement, once the contract of leasing is made and the leasing relationship is built, both sides do not have the right to stop it. Also, the rent is defined when the contract is made, so that none reason can be signed for increasing the rent. Actually, the leaser can get back all the investment which it has put for the equipment plus the certain amount of profit and the rent takes a big percentage of what it has invested, for example 80-90%.

There are lots of advantages of rental financing. It is very suitable for small sized enterprises that don't have preferred financial system. First, rental financing does not have too much requirement about the leasing enterprise's credit status and it does not care too much about it historical liability, as long as enterprise is able to afford the rent. Secondly, rental financing doesn't need any kinds of pledge to secure. The ownership of the equipment takes the role of pledge. These 2 reasons make the small enterprise solve the problem of getting financing without extra guaranty and pledge which they are lack in actual.

Then, it is the benefit of the cost and tax deduction. Rental can accelerate the depreciation period of the equipment compared with actual depreciation. And this depreciation will be shifted to period cost, so the part of the VAT during the period will be deducted which equals the lease get the benefit of tax payment postponing

Another advantage is from the technique. Normally, the small and medium sized enterprise can't afford too much fixed asset investment. And they are commonly using some old, traditional techniques and old-fashioned even obsolete equipment, which not only limit the improvement of the products' quality, also it is a waste of energy and sources.

### 5.4.5 Bounds financing

Bonds financing is a financing method that organization get the external finance by bond issue. And it is a kind of valuable paper which is issued legally to investors. The bonds issue are approved under the supervision of government authorities. Meanwhile, it has set up the period that the interest rate and principle may be paid. In China, there are 2 kinds of bonds, government bonds which take most of them, and the enterprise bonds. Normally, the government bonds have quite high credit worthiness and the risk is relatively lower, so that the interest rate also is lower leads to the low financing cost. The small and medium sized enterprises have low credit worthiness, the high invest risk decides it should have high investment return, so the interest rate of the small and medium sized enterprises' bonds are very high. The financing cost is quite high. Because the profitability of the company is the security for the investor that they have the ability of paying the interest rate and principle, the risk of bonds is directly connected to the operations of the enterprises. Hence, during the check-up of a new bond issue, they authorities should make sure that enterprises have property for pledge in order to protect the investors' benefit.

The duration of the bonds is another element to decide the interest rate of it. The longer period bonds have higher interest rate.

Bonds has some differences and advantages compared with another direct financing method, stock financing. In US enterprises, bonds financing takes around 30% and the equity financing is no more than 4%. Bonds financing is to one of the main direct financing methods. The interest rate of bonds is directly assigned to the cost which may deduct the taxation, while

equity financing is paying doubled tax that is enterprise's income tax and investors' income tax. The investors of the bonds are the debtor of the enterprise. The company pays the interest rate and principles back to them according to the bonds period. Bonds investors don't have ownership of the enterprise. And they don't have the right of intervention the company's operation and decision-making. Stock is an equity valuable paper, and it doesn't have duration. The stock holders can transfer the stock and they have the right of sharing the surplus property if the enterprise goes to bankrupt. The interest rate of a bond is fixed, of which the stock is fluctuate. So compared with stock, the risk is relatively lower.

The quality of bonds is assessed with bond credit level. The credit level affects both the bond issue enterprise and investors. It is a synthesize appraisal about if the enterprise uses the bond fund rationally and whether it has the capability of repayment. To investors, the credit level tells them the risk level of the bond, so that they can make choices according to it. Bonds with higher credit level, also has relatively lower benefit in low risk. No pains no gain. The credit level lower ones with higher risk ones but also have better profit. To the bond issue enterprise, higher credit level means more invest attraction and lower financing cost.

The credit level of bond not only shows the quality of the bond, but also it show the ability of enterprise' repayment and the risk of the bonds. In addition, they are divided into 3 classes with 9 categories, class A, class B and class C. AAA is the highest level and the CCC is the lowest level. Only the enterprises that have class A credit level is allowed by the authorities for bond issue.

Even though bonds issue a main direct financing method, in China most of bonds belong to government and big companies. Bonds issue for small and medium sized enterprises is limited. Small and medium sized enterprise due to low credit worthiness and the credit level normally cannot reach to class A, which restricts the bond financing for them. And it is not possible for a single small enterprise to issue bond due to credit worthiness and scale of it. Even though it can issue bond, the scale is too small and it will not be easy to attract investors. Started from 2007, in Chinese bond market, there was a new concept, small and medium sized enterprise aggregated bond financing. It is that several small enterprises bundle together and use a common name to issue bond. With stacking credit level, they become more attractive for investors. And the credit guarantee organization will guarantee for it, the sale of the bond is taken by bank or securities agency. Small and medium sized enterprise aggregated bond financing as a invention of credit guarantee organizations business innovation, it not only expands the direct financing channel for small and medium sized enterprises, also it has split the risk of financing for enterprises with low financing cost.

There are some conditions for bond issue. First, there is lower limit of net asset. For the Corporate enterprises, the net asset should not less than 30miliion RMB, and 60 million for Limited liability enterprises. Second, there is a quantity limit of the bond. The bond released is no more than 40% of the enterprise' net asset. Third, the enterprise should evaluate the

recently 3 years' profitability situation. And the average profit of the recent 3 year should afford bond interest rate for at least one year. Then, it is about the interest rate. The interest rate is not higher than 40% of the deposit interest rate for the same period and duration.

## 5.5 Equity financing

Equity financing is that the equity right of the enterprise is coupled to the debit and credit. The creditor owns the correlation equity right of the enterprise that is ownership of the enterprise according to the quantity of the debit. And enterprise does not pay interest rate for the capital. Instead, the new shareholders will have the right of sharing the profitability of enterprise.

Equity financing is direct financing from capital suppliers. Asset of an enterprise is the sum of liability and equity. Public offering is selling equity of enterprise to investors. Hence the equity ratio rises up. It also means reducing the liability ratio of enterprise. Equity financing advertises enterprise, and it promotes popularity and credit worthiness of enterprise.

By the target investors, equity financing is divided into 2 groups: Public Offerings and Private Placement.

#### 1) Private Placement

It aims to attract the Accredited Investors and targets investors are no more than 35. Accredited Investors are the investors who have at least 1 million \$ of net asset with an annual income of no less than 200,000 \$. At the same time, the transaction of the investment should be at least 150,000 \$ to but less than 20% of the total asset.

#### 2) Public offerings.

It means that enterprises release stocks for public. Public offering of Chinese SMEs means releasing stocks in A Shares which is the so-called RMB Common stock. Enterprises that have already released stocks can also release additional shares or rationed shares or convertible bond. The releasing of additional shares and rationed shares means the dilution of old shares and the control power also descends.

The capital gathered by public offering has permanence, so that it does not have due date and no need for repayment. Once equity has been sold, it cannot be returned, it can only be resold to other investors in stock market. The resell of the stocks will not affect the asset of the enterprise and only means the change of shareholders. It will not have impact to the enterprise's capital sources.

For equity financing enterprise, there is no fixed return of investment (RIO) to the investors, the profitability of the stocks are depending on the profitability and operational demand of enterprise. But if the profitability doesn't reach investors' expectation, stock price will go down and it will affect the long term development of the enterprise.

In China, public offerings in A-stock are either in Main Board or SMEs Board. SMEs Boards was open in 2004. It is targets for Pre-IPO (pre-pared-Initial Public Offering) SMEs that have significantly high growth, and high-tech content. Enterprises in SMEs Boards are those that are engaged in business of high-tech, high growth, high additional value, new economic and business model, new energy and materials, or new biotechnology, new agriculture.

There are a series of requirements for enterprises that wish to release shares in stock market. For example, there are requirements of financial historical record, asset, public offering percentage, and the transparency of information. For the public offering in Main Board, enterprise should have a continuous profitability during recently passed 3 years, and enterprise should be reached an asset scale of 50 million with a net asset of no less than 30%. For the SMEs Boards, enterprises should have net asset of no less than 20 million and total equity value of no less than 30 million after the releasing. For the highly profitable SMEs targeting SMEs Boards, they should have an accumulated profitability of more than 10 million for the recently 2 years. Also it should be continuously growing. If enterprises have significantly high growth, they are required to have a yearly profitable recorder of no less than 5 million and the recently year's annual revenue shouldn't be less than 50 million.

Even though there are so many financing channels from direct financing to indirectly financing, debit right financing to equity financing, in reality, the financing channels for small and medium sized enterprises are far less than theoretical. By the constraints of the specialties of small and medium sized enterprises themselves, SMEs mainly relies on direct financing of private borrowing, especially for those who don't have sufficiently profitability and are lack of anti-risk ability. As the development, enterprise become bigger and stronger, banks or other financial organizations have more trustworthy of its refund ability, indirect financing start to play its roles instead of direct financing channels. For the stronger competitiveness SMEs who have stabilized profitability, direct financing equity and credit right financing channels are available for them and consider as their priority. (Guo,Z.X & Yang,J.C. 2009.)

## 6 ACCOUNTING AND FINANCIAL ANALYSIS

#### 6.1 Accounting analysis

#### 6.1.1 Financial statements

Financial statements are the documents in which enterprise describes its capital performance and cash flow during a certain period. Financial statements have a significant importance for shareholders as they could know the financial situation of the enterprise. And the financial statements show what the structure of finance is and how the operation performance is, as well the cash flow situation of the enterprise. Financial statements tell where the capital is from and where does it go.

For any enterprises, financial statements always include balance sheet, income statement, equity statement, cash flow statement etc.

## 1) Balance sheet and its appendices

The balance sheet statement shows how much assets the enterprise owns currently and how much debit it has, as well the obligation to share holders. It is a static report indicating a financial position of certain time. The assets show where the capital goes and what kinds of investment it is. And the debit which includes current debit and non-debit shows how much obligations the debtor is taken. The equity is the source of capital and this shows how much the net asset the shareholders are having. In addition, the appendices always are about the more detailed information of the columns in the balance sheet.

The formulation of balance sheet is: Asset = Liability + Equity.

In balance sheet it shows that the asset of enterprise is the sum of share-holders' equity and liabilities which includes current liability and non-current liabilities

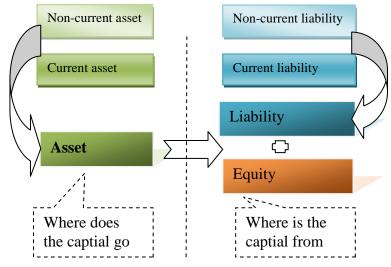


Figure 3 The balance sheet

#### 2) Income statement

Income statement shows the outcome of an enterprise' activities. Different with the income statement of showing financial position, income statement is a dynamic report which indicates the flow of revenues and expenses. The income statement actually is a summarized report of all the transaction during certain period. What' more, it shows the result of these transactions that is the revenue, the expense and the profitability can be seen obviously from the income statement. The formulation of income statement is:

Profit = Revenue - cost.

#### 3) Cash flow statement

Cash flow statement is about the flow in and flow-out of cash or cash equivalents which can be turned into cash immediately. It provides information about the capital of enterprise, through the cash flow statement, the reader can acquaintance the ins and outs of capital. It is a significant important indicates of evaluating the earning power.

The input cash minus the output cash is the net cash flow. According to the character of activities, the net cash flow has been categorized into net cash flow from operational activities, net cash flow from investments activities, and net cash flow from financing activities.

#### 4) Equity Statement

Equity statement is a report about the changing of shareholder equity during a certain period. Compared with the equity related columns in balance sheet, equity statement shows detailed information about the changing of equity such as the reduction or rising amount, the reasons of this etc.

(Alexander, D. & Nobe, C. 2007. Stephen, H. P. 2001)

#### 6.1.2 Inventory counting and evaluation

When enterprises purchase items at different times with different quantity and different unit prices, meanwhile, the products could also be sold at different prices during different time, it comes out the problem about the evaluation of cost per unit, the evaluation the inventory and the gross profit. Example in following:

#### **Buying:**

1 Jan 1000€/ton, 10 ton 1 Feb 1100€/ton, 5 ton 1March 1150/ton, 15ton

#### Sales:

10 Feb 1200€/ ton, 5 ton 1April 1250€/ ton, 5 ton 1 May 13500€/ton, 5 ton

The closing inventory would be 15 ton, the sale revenue is 19,000, the total purchasing cost was 32,750€. How will be inventory evaluated so that the gross profit can be calculated out.

In balance sheet, the valuation of inventory includes counting and valuation. The inventory counting can be perpetual counting and periodic inventory counting. While, there are many methods for inventory evaluation, for example FIFO, FILO, Weighted average, unit cost, standard units cost and base inventory methods etc:

**FIFO** (first in and first out), the earlier purchased one will assign the priority to the earlier

**FILO** (first in and last out), this similar as FIFO, the items which are moved is recognized as the ones that moved in latest.

Weighted average, the cost of the inventory is calculated by the weight average. It is quite common that during a period, the average cost is taken as approximately weighted average cost.

**Base inventory,** it is for the safety stock. It is often that company will keep the quantity of item above a certain minimum level and the inventory is calculated exception of these minimum units. And the evaluation of the inventory will used any of the above method to calculate. For example, in the above example, if the company just starts its business on 1 January and the management set that the minimum inventory is 10 tons, and then, after the purchasing on 1 Jan, the inventory quantity is still zero. (Alexander, D& Nobe, C 2007. Stephen. P. 2001)

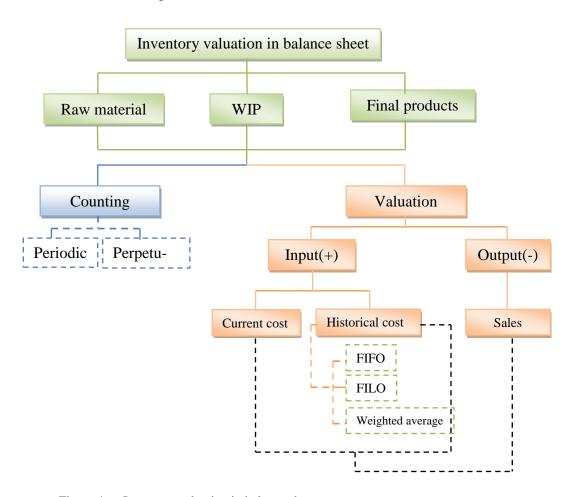


Figure 4 Inventory valuation in balance sheet

## 6.2 Financial analysis

## 6.2.1 Operational capacity analysis

Operational capacity shows the capability of profitability. It also indicates the efficiency of management, operational and marketing strategies. The analysis of operational capacity is necessary as it can be known the working capital ratio, the capital turnover of enterprise, so that the improvement about these can be done relatively.

## 1) Analysis of turnover of working capital

Working capital also as so-called current asset is the most liquidity assets. The flow of cash to commodity then turns into cash again, it finishes one time of turnover and the higher turnover ratio means faster movement and higher operational efficiency. The mainly indicators of working capital turnover rate are:

Receivable turnover ratio = Sales revenue/Average Receivable

Receivable turnover days = 365/RTR

Inventory turnover ratio =Sales revenue/average inventory

Inventory turnover days = 365/ITR

Current asset turnover ratio = Sales revenue/Average current asset

Current asset turnover days = 365/ CAR

## 2) Analysis of turnover of fixed assets

 $Fixed\ asset\ turnover\ ratio = Sales\ revenue/Average\ fixed\ asset$ 

Fixed asset turnover days = 365/FTR

## 3) Analysis of turnover of total assets

Total asset turnover ratio = Sales revenue/Average total asset

Total asset turnover days = 365/TTR

(Chi, G.H. & Wang, Y. H. & Xu, J. 2010)

## 7 STATISTIC RESEARCH AND ANALYSIS

During the data research for this thesis, the recently 3 years' financial data were studied. Based on the financial data from the finance department of NingXiang ChangXing Tungsten Industrial Co, .Ltd, a summarized key data were sorted out and these data was used to calculate the values in table 1. And more specific research results can be seen in Table 2.

In Table 1, which contents the results of data analysis, shows the figures of current asset, noncurrent asset and total asset. The average value is the weighted mean of beginning value and closing value.

In Table 2, it shows the results of turn over ratios and turnover days which are calculated with the figured from Table 1 based on the formulas of part 6.

Figure 5, 6, 7, 8, 9 are the statistic graphs which are made according to the data in the table 1 and table 2. From the graphs, they show the tendency of each evaluated subject.

Column1	FSY	2009	FSY2010	FSY2011		
Sales Revenue	\$	47,607,032	\$ 71,070,356	\$	90,958,272	
Avg.Receivable	\$	262,500	\$ 2,055,365	\$	3,330,013	
Avg.Inventory	\$	9,857,563	\$ 13,681,116	\$	26,802,487	
Avg. Current asset	\$	11,473,595	\$ 25,069,667	\$	37,296,371	
Avg. Fixed asset	\$	2,937,043	\$ 4,459,500	\$	4,427,133	
Avg. Total Asset	\$	16,560,638	\$ 33,800,500	\$	45,926,754	

Table 1

Column1	FSY2009	FSY2010	FSY2011
Receivable Turnover Ratio	181.4	34.6	27.3
Receivable Turnover Days	2	10.6	13.4
Inventory turnover ratio	4.8	5.2	3.4
Inventory Turnover Days	75.6	70.3	107.6
Current Asset Turnover Ratio	4.1	2.8	2.4
Current Asset Turnover Days	88	128.8	149.7
Fixed Asset Turnover Ratio	16.2	15.9	20.5
Fixed Asset Turnover Days	22.5	22.9	17.8
Total Asset Turnover Ratio	2.9	2.1	2
Total Asset Turnover days	127	173.6	184.3

Table 2

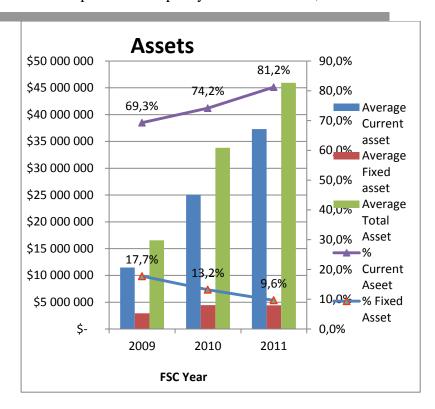


Figure 5

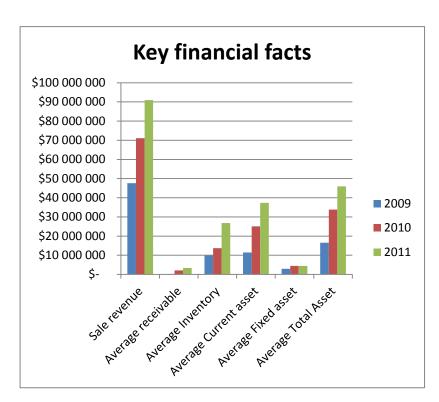


Figure 6

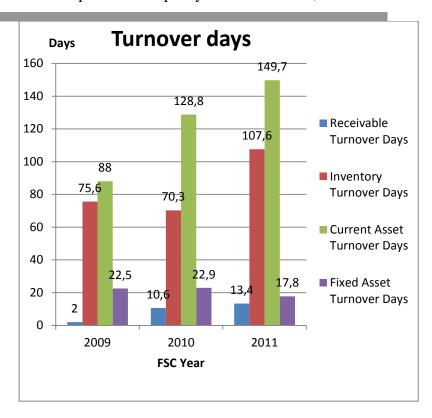


Figure 7

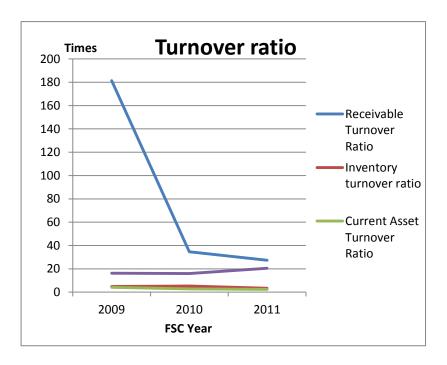


Figure 8

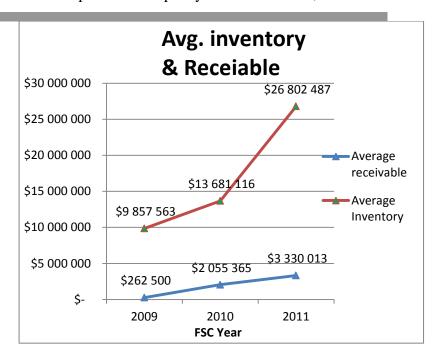


Figure 9

According to Table 1, the sales revenue of NingXiang ChangXing Tungsten Industrial Co, Ltd has increased significantly which means the market share has gained significantly. Meanwhile, the inventory of the company has climb up with a staircase tendency.

As we can see from Table 2, during the recently 3 year, the receivable turnover ratio has significantly decreased. And the current asset turnover ratio and total asset turnover ratio have been also slightly down. These means the company has receivable the payment from their customers slower year by year. According to this, the speed of cash flow has been gradually slow down.

As the figures shows, during the past 3 years, the sales revenue of Ning-Xiang ChangXing Tungsten Industrial Co, Ltd has significantly grown year by year. The current asset, the fixed asset of the company also has increased, while the turnover ratios have shown decreasing. At the same time, the average inventory value and the average receivable also showed increase.

Based on the financial situation of the company in part 2, it is known that NingXiang ChangXing Tungsten Industrial Co, .Ltd has received big portion of customers' payment by the terms of BAD which is correspondent to the company's strategy for gaining market. In addition, the financial strategy for handling these BADs, which is almost equality to cash but having a quite high financing cost, is trying to keep them until maturity. In another word, the fluidity of BADs is less than cash in reality. It is known that NingXiang ChangXing Tungsten Industrial Co, .Ltd has quite often being need of liquidity due to the utilization ratio of cash and cash equivalent (BAD) is not so high. Hence, possible capital injection from outside is demanded, and the company is looking which are the suitable financing channels in order to release the liquidity stress.

According to the financing channels discussion in the part 5 of this thesis, there are many amount of financing channels, different from direct financing channels to indirectly financing channels, and debit financing channels to equity financing channels. The directly channels including the financing channels which the debit and credit relationship is directly built between debtor and creditor instead any other 3 party's intermediary. The typical direct financing channel is private borrowing. The indirectly financing channels are the ones, which the debit and credit relationship is built with the assistant of an intermediary, such as bank. The most typical indirectly financing channels are debit from bank. While, the debit financing relevant to the relationship only effects the debit and credit, but the equity financing is the relationship between debtor and creditor reflects the ownership of equity right of the company. The equity financing channel is typically stock publishing which is not possible for the small scaled enterprises such as NingXiang ChangXing Tungsten Industrial Co, .Ltd.

The background information in part 3 of this thesis, it shows that small and medium sized enterprises in China are having their specialties, the financing risk of SMEs are quite high. Bank loan would be the most common way of financing, but it always requires collateral or a pledge. Moreover, the inventory value of the company has climbed for the past 3 years, and part of the inventory is kept as Futures commodity, which is not for current usage. Theoretically, it would be possible that the company could use these inventories as pledge to issue a loan from bank. But due to the evaluation of pledge is not so easy because of depreciation, no audition standard and complex auditor processes, as well, sometimes the pledge for example inventories needed warehouses for storage, banks always are not so willing to accept pledges. Normally, banks accept the real estate as collateral. NingXiang ChangXing Tungsten Industrial Co, .Ltd has been issued a loan of 5 million by commercial bank by using the real estate as collateral. The further issuing of bank loan would need other un-collateral which is not possible for the company to provide. According to this, the bank loan by collateral would not be expanded in the near future for NingXiang ChangXing Tungsten Industrial Co, .Ltd. NingXiang Chang-Xing Tungsten Industrial Co, .Ltd has received 40% of year sales revenue by BADs which would be possible to use as collateral in order to get a loan by the comprising consideration of the financing cost, the financing strategy and capital demanding. In one hand, the liquidity might increase. In the other hand, the working capital operational efficiency would also be improved.

According to the operational capacity analysis in part 6, the improvement of operational capacity turnovers are the improvement of the turnover of working capital which are the turnover of current asset, inventory, and the receivable, the turnover of fixed asset and total asset. Based on the situation of NingXiang ChangXing Tungsten Industrial Co, Ltd, the possible solutions for the operational capacity would be the improvement of turnovers of current asset and inventory.

#### 8 CONCLUSION

Based on the research of accounting analysis and financial analysis, it shows that during the past 3 year, the market shares of NingXiang ChangXing Tungsten Industrial Co, .Ltd has a soar, there was a growth of 49% between 2009 and 2010, and another 28% growth was achieved from 2010 to 2011. Meanwhile, the current asset of this company has also increased significantly to more than 38 million by comparison of less than 12million in 2009. Meanwhile, the inventory level has also been kept in a high level with a growth tendency. According to the result of operational capacity analysis in part 7, the working capital efficiency has fallen down going against the market gain in NingXiang ChangXing Tungsten Industrial Co, .Ltd.

The possible reasons could be:

Firstly, the inventory level has been too high.

Secondly, the receivable from the customers have been gotten slowly. But, the reason that the company receives payment slowly from customer is reconcile with the company's market strategy, so that solution of improvement working capital efficiency is not so possible to find from the changing of receivable situation.

By the back ground information in part 3, we know that there are lots of barriers constraint the development of small and medium sized enterprises in China as the small and medium sized enterprises own limited resources, and they are always lack of sufficiency management, as well there do not get enough support from government by comparison to these of the giants enterprises. Working capital is metaphor as the blood of any enterprise, and run out of which would severely affect the operation of enterprises. But it is commonly that SMEs are lack of working capital. Even though in part 5 has discussed so many possible financing channels from debit financing to equity financing, it is not easy for small and medium sized enterprises to find a suitable method with relatively lower cost. Bank loan which is the most common financing channel even don't have a too wide way for SEMs' due to the high financial risk to banks which causes possifinancing discrimination from banks when issuing loans to SMEs. NingXiang ChangXing Tungsten Industrial Co, Ltd as an ordinary small enterprise, facing the same problems as the others, and it has a demanding of financing injection from outside. By consider the situation that it has received lots of bank drafts from customers and the high cost of the discounting of bank drafts, as well the improvement of operational capacity, I would proposal pledge BAD to get bank loan.

## 9 SUMMARY

This thesis is developed for a Chinese small scaled enterprise NingXiang ChangXing Tungsten Industrial Co, .Ltd who has engaged in metal recycling business for more than 10 years. The aims for the development of this thesis are firstly to analysis the financial data of the recently 3 years in order to find out which are the suitable possible financing methods for the company. Secondly, by the analysis of financial data, it analysis operational capacity of these 3 years, and what the reasons behind of the reduction of operational capacity, as well how to get it improved.

The main methodologies of this thesis are informal interviews to company management. And statistic analysis has applied for the financial data. Through the conversations with the managers and accountant of the company, the financial situation information has obtained by the thesis author.

The focus of this thesis is financing channels and operational capacity. By associate the theoretical financing channels and the realistic situation of NingXiang ChangXing Tungsten Industrial Co, .Ltd, author would proposal the bank loan by pledge BADs as its main financing method in the future. This would be beneficial both for the financing and the operational capacity improvement, because it would firstly get external capital for the company, secondly improve the efficiency of BADs by speed up the circulation of current assets.

Meanwhile, the high inventory level has been noticed as another obstacle to the operational capacity improvement. Also, there is not so clear methodology applied to the inventory evaluation in the company's accounting. It would be important for NingXiang ChangXing Tungsten Industrial Co, .Ltd to standard the inventory evaluation method and also work in inventory reduction. For the future, it would be significant that inventory evaluation could be specified and further research would be beneficial.

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Appendix 1

# Assets turnover ratios and days figures

Column1	2009		2010	2011		
Average Current asset	\$	11,473,595	\$ 25,069,667	\$	37,296,371	
Average Fixed asset	\$	2,937,043	\$ 4,459,500	\$	4,427,133	
Average Total Asset	\$	16,560,638	\$ 33,800,500	\$	45,926,754	
% Current Aseet		69.3%	74.2%		81.2%	
% Fixed Asset		17.7%	13.2%		9.6%	

Column1		2009		2010	2011		
Sale revenue	\$	47,607,032	\$	71,070,356	\$	90,958,272	
Average receivable		262,500	\$	2,055,365	\$	3,330,013	
Average Inventory		9,857,563	\$	13,681,116	\$	26,802,487	
Average Current asset		11,473,595	\$	25,069,667	\$	37,296,371	
Average Fixed asset	\$	2,937,043	\$	4,459,500	\$	4,427,133	
Average Total Asset	\$	16,560,638	\$	33,800,500	\$	45,926,754	
Receivable Turnover Ratio		181.4		34.6		27.3	
Receivable Turnover Days		2		10.6		13.4	
Inventory turnover ratio		4.8		5.2		3.4	
Inventory Turnover Days		75.6		70.3		107.6	
Current Asset Turnover Ratio		4.1		2.8	2.4		
Current Asset Turnover Days		88		128.8		149.7	
Fixed Asset Turnover Ratio		16.2		15.9		20.5	
Fixed Asset Turnover Days		22.5		22.9		17.8	
Total Asset Turnover Ratio		2.9		2.1		2	
Total Asset Turnover days		127		173.6	184.3		

Appendix 2

# Financial data analysis

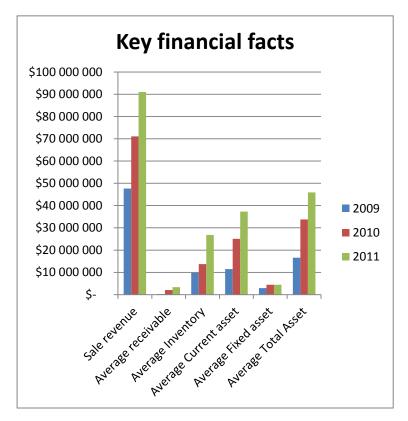


Figure 5

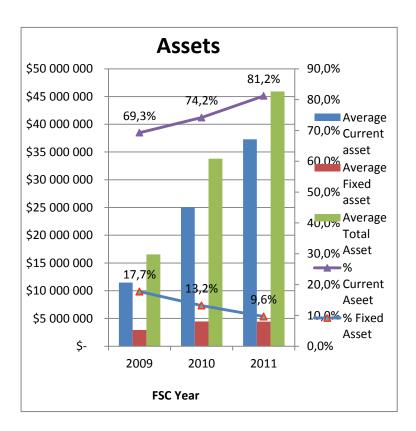


Figure 6

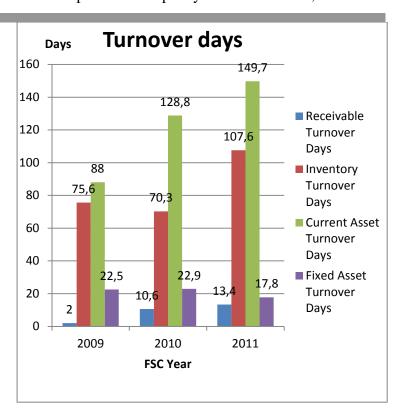


Figure 7

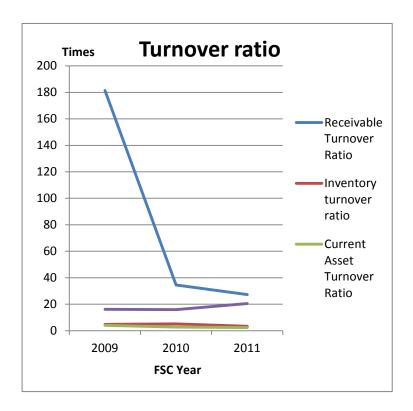


Figure 8

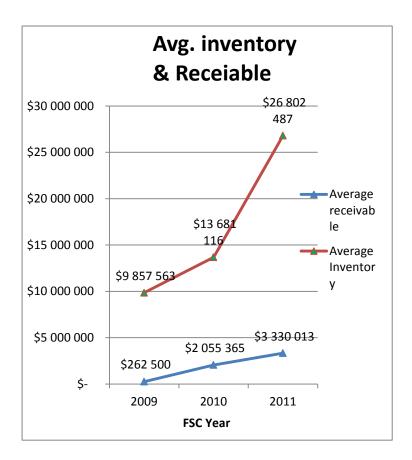


Figure 9