Financial Analysis of CK-Life Science Company

Student: Xiaomin Li
Supervisor of the bachelor thesis: Ing. Josef Novotný

Ostrava, 2013
VŠB - Technical University of Ostrava
Faculty of Economics
Department of Finance

Bachelor Thesis Assignment

Student: Xiaomin Li
Study Programme: B6202 Economic Policy and Administration
Study Branch: 6202R010 Finance
Specialization: 01 Finance
Title: Finanční analýza vybrané společnosti
Financial Analysis of Selected Company

Description:
1. Introduction
2. Description of the financial analysis methodology
3. Financial characteristics of selected company
4. Financial analysis of selected company
5. Conclusion
Bibliography
List of Abbreviations
Declaration of Utilization of Results from the Bachelor Thesis
List of Annexes
Annexes

References:

Extent and terms of a thesis are specified in directions for its elaboration that are opened to the public on the web sites of the faculty.

Supervisor: Ing. Josef Novotný

Date of issue: 23.11.2012
Date of submission: 10.05.2013

Ing. Iveta Ratmanová, Ph.D.  Head of Department
prof. Dr. Ing. Dana Dluhošová  Dean of Faculty
The declaration
“Herewith I declare that elaborated the entire thesis, including all annexes, independently”

Ostrava dated: 6. 5. 2013

Xiaomin Li
## Contents:

1 **Introduction** ............................................................................................................. 5

2 **Description of the financial analysis methodology** .............................................. 7

   2.1 Common-size analysis.............................................................................................. 7
       2.1.1 Vertical common-size analysis......................................................................... 7
       2.1.2 Horizontal common-size analysis.................................................................. 8

   2.2 Financial ratio analysis............................................................................................ 9
       2.2.1 Activity ratios................................................................................................. 9
       2.2.2 Liquidity ratios.............................................................................................. 13
       2.2.3 Solvency ratios.............................................................................................. 14
       2.2.4 Profitability ratios.......................................................................................... 16
       2.2.5 The DuPont analysis...................................................................................... 18

3 **Company or Financial characteristics of selected company** ...................... 20

   3.1 Generally Information........................................................................................... 20

   3.2 History of CK Life Sciences Company................................................................. 20

   3.3 Business overview of the CK Life Sciences....................................................... 22
       3.3.1 Agriculture-related business.......................................................................... 22
       3.3.2 Pharmaceutical business................................................................................ 24
       3.3.3 Nutraceutical business................................................................................... 25

   3.4 Common-size Analysis........................................................................................... 26
       3.4.1 Vertical common-size analysis on balance sheet............................................. 27
       3.4.2 Vertical common-size analysis of Income statement...................................... 31
       3.4.3 Horizontal common-size analysis of balance sheet....................................... 32
       3.4.4 Horizontal common-size analysis of income statement.................................. 34

4 **Financial analysis of selected Company** .......................................................... 37

   4.1 Activity ratios......................................................................................................... 37

   4.2 Liquidity ratios....................................................................................................... 42
4.3 Solvency ratios ................................................................. 46
4.4 Profitability ratios ............................................................. 50
4.5 Summary ........................................................................ 54

5 CONCLUSIONS .................................................................. 55

Bibliography ......................................................................... 56

List of Abbreviations ............................................................. 57

Declaration of Utilization of Results from the Bachelor Thesis

List of Annexes

Annexes
1 INTRODUCTION

The topic of bachelor thesis is financial analysis of selected company. As we know the finance situation of a company refer to many aspects, in order to assess it effectively, there are some methods to analysis profitability, stability and progress ability of a enterprise.

The aim of the thesis is assessment of financial health of CK Life Science from 2007 to 2011, there are five chapters constitute the thesis, the first and last chapter is introduction and conclusion, the second chapter is description of financial analysis methodology, the third chapter is introduction of CK Life Science, the fourth chapter is application of financial methods.

In chapter two, I will introduce some methodologies of financial analysis, including common-size analysis, financial ratios and DuPond analysis. There are two types of common-size analysis, vertical common-size and horizontal common-size. And in financial ratio analysis part, I will introduce activity ratio, liquidity ratio, solvency ratio and profitability ratio. Besides, the DuPond analysis is a famous method of pyramidal decomposition.

The third chapter is financial characteristics of CK Life Science company, this chapter contain information of the company and brief business overview. The financial analysis will in the light of the business activities, the common-size analysis method will be use in this chapter, help to explain financial characteristics directly.

The most important part is chapter four, according to the methods in chapter two, and the ratios will be compared over five years with four different purpose. The activity ratio can be used to measure the relative efficiency of a enterprise according to the total assets, leverage or others balance sheet items. Liquidity ratio can assessment how fast of the current assets. Solvency ratio is to be measure the ability to meet long-term obligations and profitable ratio

So every chapter is separate but connect. Before I write thesis, I just have elementary knowledge about financial analysis, after choose topic and company, I
have read the whole annual report of CK Life Science company, more than year 2007-2011, so I made three table are respectively balance sheet, income statement and cash flow of the nearest five years. The data from chapter four is base on these three tables. The three tables will be add on the list of annexes at final of thesis.
2 DESCRIPTION OF THE FINANCIAL ANALYSIS

METHODOLOGY

This chapter is description of financial analysis methodology what will be apply in fourth chapter. It’s prelude of whole thesis, and foundation of financial analysis. I separated this chapter to three parts. The first part is common-size analysis, second part is financial ratio analysis, and the third one is DuPont analysis.

Main sources or publications of this chapter are the book *International Financial Statement Analysis*, which was written by Thomas R. Robinson 2008 and online reading *Corporate Finance: A Practical Approach*, which was written by Michelle R. Clayman 2011.

2.1 Common-size analysis

If we want research statements over years of a company. There are many barriers, just like the scale of the company’s accounts change over time due to inflation, growth, and compare financial statements of companies of different sizes. A technique the use to control for the scale effect is common-size analysis.

There are two types of common-size analysis: Vertical common-size analysis and Horizontal common-size analysis.

2.1.1 Vertical common-size analysis

Vertical common-size analysis is a technique for evaluating financial statement data that expresses each item in a financial statement as a percent of a base amount.

Each line item on the income statement should be presented as a percentage of net sales, the benchmark is revenues. For a given period, each item in the income statement is restated as a percentage of total assets and each line item on the balance sheet should be presented as a percentage of total assets or total liabilities and stock equity. These percentages should be investigated for differences either across years in
the same company or in the same year across different companies. The vertical
analysis ($V_i$) can be define as:

$$V_i = \frac{P_i}{\sum P_i}, \quad (2.1)$$

the $P_i$ is selected item, $\sum P_i$ is sum of selected column.

The analysis can compare these proportions across time and across the
company’s industry then, firstly compare the same company in different years allows
us to focus on changes in the composition of accounts or expenses over time, secondly
compare with competitors’ vertical common-size statements for the same year allows
us to examine differences in the makeup of accounts for similar companies. Lastly
comparison of the company’s vertical common-size statements with competitors’
common-size statements over time allows the analyst to compare shifts in accounts
over time.

### 2.1.2 Horizontal common-size analysis

Another form of common-size analysis is horizontal common-size analysis, in
which use the account in a given period as the benchmark or base period and restate
every account in subsequent periods as a percentage of the base period’s same account.
Horizontal common-size analysis is a time-series analysis and a useful for identifying
trends and growth in account over time. Comparative financial statements should be
prepared over at least two years, with the first year reported being the base year.
Changes in each line item relative to the base year should be presented both by amount
and by percentage.

Absolutely comparison is one way of horizontal analysis is comparing the
absolute numbers of some items over the selected period. It can be define as:

$$\Delta X = S_t - S_{t-1}, \quad (2.2)$$
$\Delta X$ is the number of change, the $S_t$ is actual number of an indicator of the analysis period, $S_{t-1}$ is the number of early year:

The second method of horizontal analysis, is relative comparison in certain items are compared over the selected period.

$$\%\Delta = \frac{\Delta X}{S_{t-1}} \cdot 100.$$  \hspace{1cm} (2.3)

A much smaller company, we can apply vertical common-size analysis to scale the assets in the balance sheet for each company.

### 2.2 Financial ratio analysis

There are many relationships between financial accounts and between expected relationships from one point in time to another. Ratio analysis is a useful way of expressing these relationships. Ratios express one quantity in relation to another.

Two aspects of ratio analysis are very important, the one is the computed ratio is not “the answer.” The ratio is an indicator of some aspect of a company’s performance, to show what happened not why it happened. The another one is that differences in accounting policies (across companies and across time) can distort ratios, and a meaningful comparison way, therefore, involve adjusts to the financial data.

There are four main ratio types: activity ratios, liquidity ratios, solvency ratios and profitability ratios.

#### 2.2.1 Activity ratios

Activity ratios are also known as asset utilization ratios or operating efficiency ratios. This scope is intended to measure how well a company manages various activities, particularly how efficiently it manages its various assets. Activity ratios are analyzed as indicators of ongoing operational performance, how effectively assets are used by a company. This ratio reflects the efficient management of both working capital and long-term assets.
Activity ratios calculate how efficiently the company utilizes assets. They generally combine information from the income statement in the numerator with balance sheet items in the denominator. Because the income statement measures what was happened during the period the balance sheet shows the condition only at the end. Average balance sheet data are uses for consistency normally.

Activity ratios can be computed for any annual or interim period, but care must be taken in the interpretation and contrast across period.

There are nine types of activity ratios:

**Inventory turnover** indicates the money occupy in inventory. Inventory is the sum of goods or materials amount contained in a store or factory at any period. A high inventory turnover ratio relative to industry standard might indicate highly effective inventory management. The analysis can compare the company’s revenue growth with that of the industry. Slower growth combined with high inventory turnover could indicate bad inventory level. On the contrary a low inventory turnover ratio relative to the rest of the industry could be an indicator of slow moving inventory. The Inventory turnover can be defined as:

\[
\text{Inventory Turnover} = \frac{\text{Cost of goods sold}}{\text{Average inventory}}. \tag{2.4}
\]

**Days of inventory on hand (DOH)** means how long the inventory had be held. The good situation is inventory going up, so the period that inventory held should be shorter, and the DOH is lower. But in general, inventory turnover and DOH is related on industry standard. And the DOH is defined as:

\[
\text{DOH} = \frac{\text{Number of days in period}}{\text{Inventory turnover}}. \tag{2.5}
\]

If the inventory turnover ratio and DOH is high, it’s means the company does not carry suitable inventory, and it will destroy the revenue. And in the other hand, if the inventory and DOH is low, it means the inventory carry slow.
The definition of **Days of sales outstanding (DOS)** is the go down between a sale and cash collection, indicate the term of company collects revenue to offer the credit. It can be define as:

$$DSO = \frac{\text{Number of days in period}}{\text{Receivables turnover}},$$  \hspace{5em} (2.6)

if the DOS is low, but in same time the receivable turnover is high show the situation is high credit of efficient and collection. the same explanation in receivables turnover.

We can use **number of days of inventory** formula to determine how long is the period of one company salt all of inventories. The ratio can be defined as:

$$\text{Number of days of inventory} = \frac{\text{Inventory}}{\text{Average day’s cost of goods sold}},$$  \hspace{5em} (2.7)

if the number of days small, it means more quick from inventory turn into cash, in another condition if the number is large, it indicate lack liquidity of inventories.

Same to number of days of inventory, we can also calculate **number of days of receivables**, this is ratio is from receivable and revenue, it can be defined as:

$$\text{Number of days of receivable} = \frac{\text{Accounts receivable}}{\text{Average day’s revenue}}.$$

**Number of days of payables** also important, we can use this ratio to get a result of how long from payable to paying, it can be defined as:

$$\text{Number of days of payables} = \frac{\text{Accounts payable}}{\text{Average day’s purchases}}.$$  \hspace{5em} (2.9)

**Receivables turnover** report how fast the company collects cash from customs is offers credit, even limiting the numerator to sale made on credit would be more appropriate, credit sales information is not always available to analysis, A high receivables turnover ratio might indicate highly efficient credit and collection, a high receivables turnover ratio could show that the company’s credit or collection policies
are too strict. On opposite a relatively low receivables turnover ratio would up the questions about the efficiency of the company’s credit and collections procedures. And the Receivables turnover can be defined as:

\[
\text{Receivables Turnover} = \frac{\text{Total \ revenue}}{\text{Receivables}}.
\]  

(2.10)

As with inventory management, comparison of the company’s sales growth relative to the industry can help the analyst assess whether sales are being lost due to strict credit policies.

**Payable turnover** is the number of days of payables reflects the average number of days the company takes to pay its suppliers, and the payables turnover ratio measures how many times per year the company theoretically pays off all its creditor. For purposes of calculating these ratios, if that the company makes all its purchases using credit. It can be computed as cost of goods sold plus ending inventory less beginning inventory. And the Payable turnover can be defined as:

\[
\text{Payable Turnover} = \frac{\text{Total \ revenues}}{\text{Account \ payables}}.
\]  

(2.11)

A problems turnover ratio that is high relative to the industry could indicate that the company is not making full use of available credit tools, it could result from a company taking advantage of early payment discounts. A low turnover ratio could indicate trouble making payment on time or alternatively.

**Total asset turnover** measures the company’s overall ability to generate revenues with given level of assets. For example, a ratio of 2 would indicate that the company is generating $2 of revenue for every $1 of average assets.

\[
\text{Total asset turnover} = \frac{\text{Total \ revenues}}{\text{Total \ assets}}.
\]  

(2.12)

A higher ratio shows greater efficiency. Because this ratio includes both fixed and current assets, inefficient working capital management can distort overall
interpretation. Help to analysis working capital and fixed-asset turnover ratios separately. On the other hand, a low asset turnover ratio can be an indicator of inefficiency or of relative capital intensity of the business. The ratio also reflects strict decisions by management. Just like the decision whether to use a more labor-intensive approach to its business or a more capital-intensive approach.

2.2.2 Liquidity ratios

Liquidity analysis which immerses in cash flows, analysis a company’s ability to meet its short-term (assets) obligations. Using this analysis methodology, Liquidity analysis measures how quickly assets are transfer to cash. It is also measure the ability to pay off short-term obligation.

The levels of liquidity are different from one industry to another one. One company’s liquidity position also was various according to the expected require for fund at any given period. Judging how about a company has suitable needs analysis of its history financing requirements, current liquidity position, expected funding requires, and options for reducing funding requires.

There are three basic types of Liquidity ratios in this section.

With the measure current ratio is calculate current assets in relation current liabilities. A higher ratio expresses a higher level of liquidity. A lower ratio indicates lower liquidity, means a greater confidence on operating cash flow and outside funding to meet short-term obligations. As we know liquidity affects the company’s power of take on debt. And the Currency ratios can be defined as:

\[
\text{Current ratios} = \frac{\text{Current assets}}{\text{Current liabilities}}.
\] (2.13)
This measure quick ratio is more limited than the current ratio, the reason is quick ratio just includes the more liquid current assets (quick assets) in relation to current liabilities. Same as current ratio, a higher quick ratio express higher liquidity.

The quick ratio reflects the fact that current asset, for example prepaid expenses, taxes, and employee expense. To be representation of the current term have been paid in advance and can not be transfer to cash. And the Quick ratio can be defined as:

\[
Quick \ ratio = \frac{Current \ assets - inventory}{Current \ liabilities}. \tag{2.14}
\]

The cash ratio of course means a reliable measure if an individual liquidity in a bad time. Only include highly marketable short-term investments and cash. Even in general market Depression, the fair value of marketable securities may decrease certain as a result of market factors, in which some cases the ratios cannot give any useful information. The cash ratio can be defined as:

\[
Cash \ ratio = \frac{Cash}{Current \ liabilities}. \tag{2.15}
\]

### 2.2.3 Solvency ratios

It is usually make use of solvency ratios to measure the financial soundness of a business or a company. This ratio determines how well the company is able to meet its debts as well as obligations, both long-term and short-term. The solvency of a company is determined using some important financial ratios, which are together known as solvency ratios.

The debt-to-assets ratio is relation between liabilities total percentage of the total assets of the company. This indicator reflects the size of the proportion of assets by creditors to provide all of the assets of the company, to reflect the risk of creditors to provide credit funds program also reflects the ability of corporate leverage. If the ratio is 0.3, it’s represent the 30% of the company’s asset are finance with debt. The debt-to-assets ratio can be define as:
The Debt-to-assets ratio is an important indicator of the measure of company debt levels and the degree of risk. It is means from the creditor's point of view, the debt-to-assets as low as possible.

The debt-to-equity ratio is a measure of the company's financial leverage indicators that show the company to establish the proportion of equity and debt funding sources of the assets, the calculation method for the company's long-term debt divided by shareholders' equity. The ratio can be used to show a company's borrowing is too high when compared with shareholders' equity. And it can be defined as:

\[
Debt – to – equity ratio = \frac{\text{Longterm debt}}{\text{Total shareholder equity}}. \tag{2.17}
\]

Debt-to-equity ratio reflects the relaitivities of the funds provided by the funds provided by creditors and shareholders, the ratio is lower, the better the long-term financial position and secure the interests of creditors. This ratio should generally be less than 1.0. Lenders such as banks are particularly sensitive to this ratio, because excessive debt-to-equity ratio will they face the risk of a loan is uncollectible.

The interest coverage ratio indicators the company's pre-tax profit of ability to pay current interest. It can be define as:

\[
\text{Interest coverage ratio} = \frac{\text{EBIT}}{\text{Interest expense}}. \tag{2.18}
\]

The EBIT in formula 2.15 is abbreviation of earn before interest and tax.

Interest coverage ratio is basically risk warning indicator, especially in the situation of company in low performance of the vulnerable period, free cash flow is more critical, it may indicate the company be able to pay interest to avoid debt risk, and whether there are financing the ability to reverse the predicament. Obviously,
when the ratio is lower than 1 means the company had been very dangerous situation, the company generated profits are not more to even pay the bank interest.

**Financial leverage ratio** measures the number of total assets occupy for each one money unit of equity. Instance as a result of 3 for this ratio indicate each $1 of equity support $3 of total asset. The higher financial shows the more leverage the company is more sensitive of using debt and other liabilities to financial assets. The ratio can defined as:

\[
Financial\ leverage\ ratio = \frac{Average\ total\ assets}{Average\ total\ equity}.
\]  

(2.19)

### 2.2.4 Profitability ratios

The ability to increase profit on capital invested the key result of company’s overall value and the principle of the securities it issues. So, a lot of equity analysis would method profitability ratios to be the point indicates of their analytical efforts. Profitability ratios reflect a competitive statue of company in the market, and the quality of its management.

**Gross profit margin** is a ratio of available and cover operation, if the margin is high it means some higher product pricing and lower product cost combine, so this ratio can inflect constrained by competitions. can be define as:

\[
Gross\ profit\ margin = \frac{Gross\ profit}{Total\ revenues}.
\]  

(2.20)

The gross margin on sales is the foundation of the sales margin, it is can’t be enough gross profit margin would not be gain able. The much higher the gross margin on sales, means the much smaller the part of company cost of sales in the net sales revenue, expenses and other running profit during certain situations, in the other hand the much higher running profit.
Operating Profit Ratio

It is a measure of business efficiency indicators reports the power to not consider the non-operating costs, business managers running profit. So the operating margin increasing faster than gross margin speed can explain rises under the operating costs control. It can be defined as;

\[
\text{Operating margin} = \frac{\text{EBIT}}{\text{Total revenues}}. \tag{2.21}
\]

A higher operating margin means more strong corporate profitability; conversely, lower ratios, weaker profitability.

**Net profit margin** is an important indicator to influence the company's profitability, it stand of the net profit margin, it means the profit after all costs (EAT), expenses, and corporate income tax. It can be define as:

\[
\text{Net profit margin} = \frac{\text{EBIT}}{\text{Total revenues}}. \tag{2.22}
\]

Net profit margin is more clearly show than the net profit. However, if there are a lots of once gains and losses net profit and non-core income, in other word is the change in income taxes, the net profit rate quality will reduce, may not reflect the profitability of the business in totally, when the operating margin or EBITDA margin indicators much better.

**Return on assets** (ROA) is a method on earned by a company on the assets. It can be define as:

\[
\text{ROA} = \frac{\text{EAT}}{\text{Average total assets}}, \tag{2.23}
\]

The EAT in the formula 2.20 is abbreviation of net profit.
Return on total capital is measure the profit of a company earns on the total capital that it employs. As with ROA (return on assets) are measured the first to take off interest on debt capital.

Return on equity (ROE) meanings the return of earned by a company on its including equity capital, minority equity, preferred equity, and common equity As Previously Noted, return is measured as net income. It can be define as:

\[
ROE = \frac{EAT}{\text{Average total equity}}.
\]  

(2.24)

A change of ROE is turn back on common equity which measures the return earned by a company reflect on its equity.

Both ROA and ROE are the main methods of probability.

2.2.5 The DuPont analysis

The relationship between the use of several major financial ratios to comprehensive analysis of the financial condition of the enterprise, this analysis method was first used by DuPont in 1920s, it Mingdu Bang analysis. DuPont analysis is a method for the evaluation of a company's profitability and shareholders' equity level of return, a classic method to evaluate corporate performance from a financial point of view.

The DuPont analysis is decomposition of ROE because it was discovered originally at that company. Resolve ROE involves expressing the basic ratio as the product of form ratios, each of this forms ratios is an indicator of a clear way of a company’s performance that influence ROE.

The decomposition presented one of the most commonly used and the one found in search databases, calculate as:

\[
ROE = \frac{EAT}{E},
\]  

(2.25)
The abbreviation \textit{EAT} is net income, and the \textit{E} represent total equity.

The resolve of ROE makes use of simple algebra and illustrates the relationship between ROE and ROA, another way to expressing ROE component as:

\[
ROE = \frac{EAT}{A} \cdot \frac{A}{E}, 
\]

(2.26)

the \( A \) in this formula represent total assets.

Just as ROE can be resolves, the individual components such as ROA can be resolved as:

\[
\frac{EAT}{E} = \frac{EAT}{R} \cdot \frac{R}{A} \cdot \frac{A}{E}. 
\]

(2.27)

Among them, the \textit{EAT} is net income, the \textit{E} is average shareholders’ equity, the \textit{R} is revenue, the \textit{A} is average total assets. As same as follows.

To separate the effects of taxes and interest, the future decompose the net profit margin is:

\[
\frac{EAT}{E} = \frac{EAT}{EBT} = \frac{EBT}{EBIT} = \frac{EBIT}{R} = \frac{R}{A} = \frac{A}{E}. 
\]

(2.28)

The most detailed solvent of ROE that we have presented is a five methods. The analyst can also examine which other factors devote to these five components.
3 COMPANY OR FINANCIAL CHARACTERISTICS OF SELECTED COMPANY

This chapter is about some basic introductions of CK Life Sciences International (Holdings) Inc. Company. At the first is generally information about the company, just like mission, vision and values about the company and so on, the second part is history of CK Life Sciences Company, the third one is business overview of the company. The last but the most important one is common-size analysis about balance sheet and income statement.

3.1 Generally Information

CK Life Sciences Int'l., (Holdings) Inc. (stock code: 0775) is appeared on the Stock Exchange of Hong Kong. The mission of CK Life Sciences International (Holdings) Inc. Company is improving the quality of life, CK Life Sciences is used in the business of research and development, commercialization, marketing and sale of human healthy and products related on agriculture. CK Life Sciences pursues to be a international comprehensive and broadly-based supplier of life sciences products which will solve heavy problems of the world in human healthy and environmental lasting. And how about the values. They believe in the most quality life and fresh of environment. We believe in double wins solutions without harms.

About the Group’s corporate strategy, there are there sides to expound it. At first is Strengthen direct revenue; it means expand invasively the eco-fertilizer distribution network in main markets to add sales revenue. Then expand the kinds of intangible assets. Aim to put in patents application for all the remaining inventions in the short-term portfolio. What’s more is increase entry into the human healthy market. Speed up pre-market development and trials of nutraceutical and pharmaceutical

3.2 History of CK Life Sciences Company

I declare the following history of CK Life Sciences International (Holdings) Inc. is reference from Annual Report from 2002-2011.
• 2000- Established in Hong Kong
• 2002- Appeared on the Hong Kong Stock Exchange though Growth Enterprise Market.
• 2003- 3 Asian export market- the China, Philippines and Korea- were added for NutriSmart™. ¹
• 2004- The Group acquires an extensive set up a fertilizer production plant in Jiangsu province together with Nanjing Red Sun Co Ltd, a strategic partner in China. The move aims to increase the Group's market share in the country
• 2004- A 60% stake in South Australian fertilizer company, Fertico, was purchased.
• 2004- Paton Fertilizers, a fertilizer company with a sales network that spans the eastern seaboard of Australia, was acquired. The addition of this company facilitates further expansion of the group's fertilizer business in Australia.²
• 2005- Acquired 100% of Sante Naturelle A.G Ltee in Canada,Envirogreen in Australia,Nuturf in Australia. Entered into an agreement to purchase 80% of Vitaquest in US.³
• 2006- The AG Natural Health brand was launched in over 700 Kruidvat stores in the Netherlands. This represents CK Life Sciences’ first foray into the European market.⁴
• 2010- In November 2010, the Company entered into agreements to acquire approximately 72% of Challenger Wine Trust (CWT) for a consideration of approximately HK$33.08 million (approximately HK$260 million). ⁵
• 2011- CK Life Sciences has become the second largest vineyard owner in Australasia. In October 2011, CK Life Sciences further expanded its vineyard investment and acquired the Qualco West Vineyard for A$10.6 million (approximately HK$84.6 million).⁶

¹ Quoted from Annual Report 2003 p.2-3  
² Quoted from Annual Report 2004 p.8-9  
³ Quoted from Annual Report 2005 p.8-9  
⁴ Quoted from Annual Report 2006 p.4-7  
⁵ Quoted from Annual Report 2010 p.4-7  
⁶ Quoted from Annual Report 20011 p.5-7
3.3 Business overview of the CK Life Sciences

Obedience to the mission of improving the standard of life, CK Life Sciences is used in the business of health and agriculture products. The Business of the CK Life Sciences International (Holdings) Inc. can be dividing into three parts, there are Agriculture-related business, Pharmaceutical business, Nutraceutical business.

3.3.1 Agriculture-related business

A lot of news reports about the over-use of chemical-based fertilizers and pesticides for long time around the world. They break soil conditions and soil quality, and reduce crop yields. “farming as Sustainable” has therefore become a the firstly worldwide. With this background, the Group’s eco-fertilizer product, NutriSmart™, shows an ideal solution for today’s agricultural industry. NutriSmart™ does not cause pollution, and improves soil condition as well as best quality.

NGOs and industry companies in promoting the kind of multi-lateral co-operation is hoped to speed up NutriSmart™’s market share increase. This is the map of NutriSmart™ all over the world in 2002:

Figure 3.1 Market shares of NutriSmart™ all over the world in 2002:

Source: Annual Report 2002
In 2004, Group got a team with Sumitomo Corporation - one of the largest enterprises in Japan works as a diversified portfolio of businesses. Promising results have paved the way for NutriSmart™. In 2004, the market of WonderTreat™ in controlling bulking and foaming in sewage treatment In Australia. The Group's eco-fertilizer and related products have been increasingly to 14 countries and regions in 2005. A numbers of acquisitions and strategic corporate have much strengthened CK Life Sciences' market scales.

During the year of 2006, the Group started a new fertilizer production to the market. NutriWiz™ was marketed for try in Mainland China in August in 2004 and sales much better have been promising. The Group’s leading good for environment fertilizer products include the NutriSmart and NutriWiz scopes in 2007.

The purchased of Accensi Pty limited company “Accensihas” further extended the Group’s Australian portfolio in 2007. Accensi’s business the toll manufacturing and marketing of branded crop protection products, and the manufacturing of soluble fertilizers. Both horizontal and vertical combined effect of are generated by the got and the Group’s agriculture businesses in Australia. CK Life Sciences is also the largest supplier of turf management products and services in Australia.

During 2010, the Company purchased Challenger Wine Trust (CWT), the second largest vineyard owner in Australasia, further expanding its agriculture-related business. The portfolio was further improved by the recent obtained of the second largest vineyard owner of Australasia. The vineyards are mostly rented to well-established wine industry intermediaries, including Treasury Wine Estates (formerly Foster’s Group) This one was followed by the purchase of the 500-hectare Qualco West Vineyard, and the 2012 obtained of Peaty Trading Group, the second largest provider of products, what’s more services in the professional turf management industry and the pest management industry in Australia.
3.3.2 Pharmaceutical business

A global research project has been applied to accelerate the Group's pharmaceutical product development.

Clinical trials was in 2004. Improved the success of the pre-clinical studies, clinical trials are just started in collaboration with the University of Hong Kong. Another meaningful progress has been made by CK Life Sciences in this key area of study. Of the 18 anti-cancer pharmaceutical patent applications filed to the US Patent and Trademark Office by the CK Company in 2005.

In 2006, The focus of the Group’s R&D speed continues to be on cancer treatment, and it was expending active materials in plants that may be helpful for this aim. CK Life Sciences continues to explore the potential of a number of different clinical candidates in Canada and the United States. To date a number of pre-clinical and clinical trials on cancer treatment products in Hong Kong, Mainland China, the United States, Canada and Australia.

Green Vision focused on crop-specific fertilizer solutions which good for production but no pollution for the environment and sale well in the market of china in 2008. These include products designed for fruits, vegetables and other specialty agricultural products, marketed under the NutriSmart and NutriWiz brands.

The CK Cancer Institute set up at CK Life Sciences’ in-house R&D initiatives in Hong Kong. It means headway has been made with two promising cancer tasks identified for further pre-clinical development.

The Life Sciences Research Institute was step fast in cancer immunotherapy through CK Life Sciences’ affiliated in the United States, Polynoma LLC (Polynoma). Polynoma is a biotechnology company concentrated on cancer immunotherapeutics, and is currently expending a therapeutic vaccine for the treat ways of melanoma.

WEX Pharmaceuticals Inc. is a Vancouver-based company focused on the discovery, development, product and commercialization, the major business is

3.3.3 Nutraceutical business

In 2004, the VitaGain™ series of nutraceutical products was future expand several new products including VitaGain™ Despite being a relatively fresh brand in the nutraceutical area in 2004, The start of VitaGain™ has ushered in a trend for immunity-related products over the drugs market.

A large amount of new products have been launched in 2005 and early 2006, further expanding the VitaGain™ range. Currently there are 22 VitaGain™ products over market. During the course of 2005, the VitaGain™ series of nutraceutical products was further expanded. The series of VitaGain™ products able to in the Hong Kong market was further expended in the beginning of 2006 with the beginning of many more new products.

In 2006, a large amount of new products foundation herbal ingredients were added to the VitaGain® range, including formulations for liver, heart, respiratory, blood vessel and skin health.

Following the obtained of Santé Naturelle A.G. Ltée in 2005, CK Life Sciences has expanded the Adrien Gagnon brand under the older brand name of AG Natural Health. In Hong Kong, AG Natural Health reported its first full year of operations and achieved meaningful sales increase in 2007.

SNAG’s (it is the bestselling range of nutraceuticals in Québec and proud of being the province’s preferred and most credited brand.) current product range features over 150 natural health choices, with the market first person being the omega brands and glucosamine. In 2008, a large amount of new products have been introduced, Omega Junior Chewable, Omega Materni-T, Inflamed, SOS Migraine, and Vitamin B12 included.
Lipa is committed to upholding the highest levels of testing, product, cleanliness and effect. By building on the core values of highest quality, customer service and client trust, Lipa focuses on maintain it’s widely market position. It counts among its customers almost all the starter brands of nutritional supplements on sale in Australia and New Zealand, same like selected markets in Asia.

Business out of its headquarters in New Jersey, USA, Vitaquest manages its developed facilities under the meticulous Good Manufacturing Practice requirements for products marketed all over the world, including the United States, Canada Latin and so on.

In 2011, Vitaquest expended a lot of new productions, and update its powder businesses to progress the number of packaging formats to including jars, sachets, tablets and vials.

3.4 Common-size Analysis

Through the above description of generally Information, history and business overview of the CK Life Science, we have an essential understanding of this company.

We know the company is a new company and in the stage of development and investment so not every year have high profit even deficit. And then the common-size analysis helps us to learn more about the financial situation of CK Life Science. The methods have been introduced on last chapter, we know this is an effective method to analysis balance sheet and income statement. Below is four parts respectively are vertical common-size analysis of by balance sheet and income statement, horizontal common-size analysis of balance sheet and income statement.
3.4.1 Vertical common-size analysis on balance sheet

There are not all items of balance sheet, just choose the main items, and divided to assets part and equity and liabilities part. The balance sheet and income statement reference on Annexes 1 and Annexes 2.

Tab 3.1 is vertical common-size analysis of assets, and the sum number is use bold sign.

*Tab 3.1 Vertical common-size balance sheet (assets) of CK*

<table>
<thead>
<tr>
<th>Years</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property (vines 2011)</td>
<td>7.45%</td>
<td>7.17%</td>
<td>6.82%</td>
<td>7.08%</td>
<td>21.87%</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>55.97%</td>
<td>60.01%</td>
<td>57.58%</td>
<td>54.40%</td>
<td>46.92%</td>
</tr>
<tr>
<td>Investments in associates</td>
<td>8.03%</td>
<td>5.98%</td>
<td>5.23%</td>
<td>7.23%</td>
<td>6.13%</td>
</tr>
<tr>
<td>Deferred taxation</td>
<td>0.72%</td>
<td>0.31%</td>
<td>0.31%</td>
<td>0.31%</td>
<td>0.27%</td>
</tr>
<tr>
<td>Non-current assets</td>
<td>72.18%</td>
<td>73.47%</td>
<td>70.50%</td>
<td>70.57%</td>
<td>75.19%</td>
</tr>
<tr>
<td>Inventories</td>
<td>5.52%</td>
<td>7.47%</td>
<td>6.17%</td>
<td>6.88%</td>
<td>7.39%</td>
</tr>
<tr>
<td>Receivables and prepayments</td>
<td>9.62%</td>
<td>9.92%</td>
<td>11.68%</td>
<td>11.81%</td>
<td>11.17%</td>
</tr>
<tr>
<td>Deposits with financial ins.</td>
<td>11.63%</td>
<td>5.62%</td>
<td>9.23%</td>
<td>8.53%</td>
<td>5.35%</td>
</tr>
<tr>
<td>Current assets</td>
<td>27.82%</td>
<td>26.53%</td>
<td>29.50%</td>
<td>29.43%</td>
<td>24.81%</td>
</tr>
<tr>
<td>Total asset</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Chart 3.1 show percentages of current assets and non-current assets on sum assets. We can see it in different color so more clear to analysis the proportion.
Chart 3.1 Vertical common-size balance sheet (assets) of CK

Tab 3.1 reveal vertical common-size analysis of assets from 2007 to 2011, and the criterion total assets and each item is component of the total asset, total assets as percentage. For instance the property, plant and equipment is 7.45% of total assets in 2007, and in 2008 the property, plant and equipment turn down to 7.17%, we can related the business activities in 2007-2008 to analysis the financial changes.

As we can see from Tab 3.1, the non-current assets and current assets are two parts from assets, the intangible assets increase 4% from 2008 to 2009 because the company purchased Accensi Pty Ltd and Lipa whole shares this year, and goodwill arising on acquisition of a subsidiary increased by HK$37 million. And the inventory increased a lot, it almost 3% higher than 2007, because Raw materials and Finished goods increased much, it means the company sales volume add more in 2007, the market of fertilizer expanded, it is positive trend.

Another huge change is the property, plant and equipment, we can see the change is 14.79%. Because the freehold land and building in overseas were increased HK$64 million, in 2011 the company start a new agriculture field that Wine, the data is HK$53.7 million increased. So the non-current assets also increased.

After analysis assets, next we will talk about liabilities and equity, and we also can see balance sheet in Annexes 1 and Tab 3.2 and Chart 3.2 are base on balance sheet,
In vertical common-size analysis, we will use total liabilities and equity as a benchmark and each item is show as proportion.

Tab 3.2 Vertical common-size balance sheet (liabilities and equity) of CK

<table>
<thead>
<tr>
<th>Years</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank loans</td>
<td>10.24%</td>
<td>16.86%</td>
<td>15.38%</td>
<td>0.00%</td>
<td>19.20%</td>
</tr>
<tr>
<td>Loan from a minority shareholder</td>
<td>0.40%</td>
<td>0.42%</td>
<td>0.50%</td>
<td>0.49%</td>
<td>6.09%</td>
</tr>
<tr>
<td>Deferred taxation</td>
<td>0.72%</td>
<td>0.48%</td>
<td>0.45%</td>
<td>0.37%</td>
<td>0.30%</td>
</tr>
<tr>
<td>Total non-current liabilities</td>
<td>11.37%</td>
<td>17.77%</td>
<td>16.35%</td>
<td>0.87%</td>
<td>25.60%</td>
</tr>
<tr>
<td>Payables and accruals</td>
<td>9.69%</td>
<td>9.49%</td>
<td>9.01%</td>
<td>7.35%</td>
<td>9.34%</td>
</tr>
<tr>
<td>Derivative financial instruments</td>
<td>0.81%</td>
<td>1.60%</td>
<td>0.33%</td>
<td>0.33%</td>
<td>0.42%</td>
</tr>
<tr>
<td>Bank loans</td>
<td>1.81%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>14.45%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Taxation</td>
<td>0.23%</td>
<td>0.32%</td>
<td>0.71%</td>
<td>0.88%</td>
<td>0.70%</td>
</tr>
<tr>
<td><strong>Total liability</strong></td>
<td><strong>24.11%</strong></td>
<td><strong>29.32%</strong></td>
<td><strong>26.41%</strong></td>
<td><strong>23.90%</strong></td>
<td><strong>36.0%</strong></td>
</tr>
<tr>
<td>Share capital</td>
<td>13.85%</td>
<td>15.49%</td>
<td>13.93%</td>
<td>13.01%</td>
<td>10.91%</td>
</tr>
<tr>
<td>Share premium and reserves</td>
<td>60.38%</td>
<td>53.35%</td>
<td>57.17%</td>
<td>61.59%</td>
<td>50.03%</td>
</tr>
<tr>
<td>Share option reserve of a subsidiary</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>1.50%</td>
<td>2.99%</td>
</tr>
<tr>
<td>Minority interests</td>
<td>1.66%</td>
<td>1.84%</td>
<td>2.48%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>Total equity</strong></td>
<td><strong>75.89%</strong></td>
<td><strong>70.68%</strong></td>
<td><strong>73.59%</strong></td>
<td><strong>76.10%</strong></td>
<td><strong>63.9%</strong></td>
</tr>
<tr>
<td><strong>Total liability and equity</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Chart 3.2 shows the proportion of liabilities and equity as benchmark total liabilities and equity.
Chart 3.2 Vertical common-size balance sheet (liabilities and equity) of CK

Tab 3.2 shows the vertical common-size liabilities and equity from 2007-2011, we can find the two different bank loans on the table, and the higher proportion one is indicate loans will be repay Within 1 year, and the another one is the loans the repayable is 2 to 5 years. But in the year 2010, the short-term loans is HK$106.7 million, but the long-term loans is 0, the data indicate in years 2010, the financial situation was retrench, and the company more need money at once, and can be repay soon, less in one year, so the loans has high liquidity.

Because the short-term loans increase much in 2010, the proportion of non-current liabilities just 0.87%, it is 15.48% lower than last year (2009), and proportion of non-current liabilities of 2011 was 24.73% higher than year 2010.

Chart 3.2 Vertical common-size balance sheet (liabilities and equity) of CK show the proportion of total equity, we can see the proportion of equity in year 2007 is 75.89%, until year 2011 the proportion reduce 12.26% to 63.93%. The greater the proportion of equity, and the proportion of debt is smaller, the smaller of the financial risk of the enterprise. But on the opposite position, the situations like CK Life Science, the proportion of equity turn to lower so the financial risk be higher.
3.4.2 Vertical common-size analysis of Income statement

Before analysis income statement in vertical common-size method, the table of income statement can fine on Annex 2.

Tab 3.3 is vertical common-size analysis of income statement, we can use turnover is benchmark, cost of sale and gross profit are show as proportion of turnover. Others items is parts of expense. The last item is net profit.

Tab 3.3 Vertical common-size analysis of income statement

<table>
<thead>
<tr>
<th>Years</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnover</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>64.81%</td>
<td>69.66%</td>
<td>68.65%</td>
<td>69.49%</td>
<td>66.3%</td>
</tr>
<tr>
<td>Gross profit</td>
<td>35.19%</td>
<td>30.34%</td>
<td>31.35%</td>
<td>30.51%</td>
<td>33.6%</td>
</tr>
<tr>
<td>Other income, gains</td>
<td>2.19%</td>
<td>-9.22%</td>
<td>10.91%</td>
<td>9.77%</td>
<td>-0.26%</td>
</tr>
<tr>
<td>Staff costs</td>
<td>14.25%</td>
<td>11.51%</td>
<td>11.57%</td>
<td>12.52%</td>
<td>10.34%</td>
</tr>
<tr>
<td>Depreciation</td>
<td>1.38%</td>
<td>1.07%</td>
<td>1.30%</td>
<td>0.81%</td>
<td>0.50%</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>1.78%</td>
<td>1.69%</td>
<td>1.78%</td>
<td>1.67%</td>
<td>1.28%</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>16.72%</td>
<td>14.78%</td>
<td>18.47%</td>
<td>16.32%</td>
<td>14.07%</td>
</tr>
<tr>
<td>Finance costs</td>
<td>1.64%</td>
<td>2.24%</td>
<td>0.68%</td>
<td>0.65%</td>
<td>2.54%</td>
</tr>
<tr>
<td>Share of associates</td>
<td>0.26%</td>
<td>0.33%</td>
<td>0.42%</td>
<td>0.00%</td>
<td>0.02%</td>
</tr>
<tr>
<td>profit before taxation</td>
<td>1.58%</td>
<td>-10.88%</td>
<td>8.04%</td>
<td>8.32%</td>
<td>4.60%</td>
</tr>
<tr>
<td>Taxation</td>
<td>3.94%</td>
<td>-0.92%</td>
<td>-1.09%</td>
<td>-0.95%</td>
<td>-1.32%</td>
</tr>
<tr>
<td>profit for the year</td>
<td>5.51%</td>
<td>-11.80%</td>
<td>6.95%</td>
<td>7.37%</td>
<td>3.28%</td>
</tr>
</tbody>
</table>

Tab 3.3 the most important data is proportion of gross profit, because every single company or enterprise as a precondition for get more and more profit, and through this table we can see it direct compare with total revenue. And another financial characteristic of CK Life Science is the enterprise was be in high speed develop term in year 2007-2011, so the gross profit did not be very high, we can see the proportion was around 33%, and the proportion in year 2007 was highest, the data is 35.19%, but in the next year of 2007, the proportion turn down to 30.34% in year 2008. And related to business overview, the reason can be discover. In year 2008, CK
Life Science focus on pharmaceutical operations, and had good progress in 2008, the turnover of pharmaceutical business was HK$ 196 million. There was HK$47 million increase by year 2007. From the turnover increased lot, but the profit decreased, because CK Life Science was dedicated to the discovery, development, product drug products to treat pain and made it commercialization.

And make a general survey of net profit, the same result of gross profit, the enterprise spent more and more money in research and innovated.

3.4.3 Horizontal common-size analysis of balance sheet

This is another analysis method of common-size is horizontal analysis. It is also one method to help us to know about financial characteristics of CK Life Science. The result calculated base on Annexes 2 income statement, tab 3.4 is absolutely change and tab 3.5 is relative change.

Tab 3.4 is Absolutely change on balance sheet of 2008-2011 and year 2007 is the first benchmark year.

*Tab 3.4 Absolutely change on balance sheet of CK life science company in 2008-2011 with horizontal analysis (HK$000)*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-current assets</td>
<td>-450,985</td>
<td>305,205</td>
<td>350,467</td>
<td>1,410,770</td>
</tr>
<tr>
<td>Current assets</td>
<td>-285,274</td>
<td>389,642</td>
<td>139,487</td>
<td>10,938</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>-736,259</td>
<td>694,847</td>
<td>489,954</td>
<td>1,421,708</td>
</tr>
<tr>
<td>Non-current liabilities</td>
<td>313,468</td>
<td>25,136</td>
<td>-1,063,706</td>
<td>2,191,391</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>-167,867</td>
<td>-21,985</td>
<td>1,007,775</td>
<td>-779,788</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>145,601</td>
<td>3,151</td>
<td>-55,931</td>
<td>1,411,603</td>
</tr>
<tr>
<td>Total equity</td>
<td>-881,860</td>
<td>691,696</td>
<td>545,885</td>
<td>10,105</td>
</tr>
<tr>
<td><strong>Total liabilities and equity</strong></td>
<td>-736,259</td>
<td>694,847</td>
<td>489,954</td>
<td>1,421,708</td>
</tr>
</tbody>
</table>
Through Tab 3.4. At first we can see the change data has not always plus or minus, because the company was in the situation of high-speed expend all over the world, so the absolutely change of non-current in 2008 is HK$-45 million. When I check on the report in 2008, i saw the landed property amount reduce more. The building in Hong Kong was revalued at HK$76 million on December 2008, and others buildings in overseas were all revalued, the reason is the global economic crisis influence more, the market were upheaval. After year 2008, CK Life Science developed speedy, we can see the current asset change in 2009, it HK$389 million increase. And the business in the pharmaceutical, nutraceutical and agriculture-related filed expand well, but investment business reduced in year 2009.

The short-term loans are also reflect on this tab, we can see the change of non-current in 2010, it is HK$-106.3 million. We can discovery the another data easier, it’s total liabilities and equity absolutely change in 2011, how huge change it is HK$142.1 million increase than year 2010, wine business expanded in Australia this year.

The below sheet Tab 3.5 is about relative change on balance sheet, we can see the result show as proportion, and it obvious to find the change trend.

*Tab 3.5 Relative change on balance sheet of CK life science company in 2008-2011 with horizontal analysis*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-current assets</td>
<td>-9%</td>
<td>7%</td>
<td>7%</td>
<td>27%</td>
</tr>
<tr>
<td>Current assets</td>
<td>-15%</td>
<td>24%</td>
<td>7%</td>
<td>1%</td>
</tr>
<tr>
<td>Non-current liabilities</td>
<td>40%</td>
<td>2%</td>
<td>-94%</td>
<td>3424%</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>-19%</td>
<td>-3%</td>
<td>145%</td>
<td>-46%</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>9%</td>
<td>0.17%</td>
<td>-3%</td>
<td>80%</td>
</tr>
<tr>
<td>Total equity</td>
<td>-17%</td>
<td>16%</td>
<td>11%</td>
<td>0.18%</td>
</tr>
<tr>
<td><strong>Total liabilities and equity</strong></td>
<td><strong>-11%</strong></td>
<td><strong>11%</strong></td>
<td><strong>7%</strong></td>
<td><strong>19%</strong></td>
</tr>
</tbody>
</table>
From Tab 3.5, the year 2007 is the benchmark, and non-current liabilities is the most biggest change because CK Life Science purchased whole shares of two company in Australia. Another data change should be not notice, we can see the relative change of total liabilities and equity from 2010-2011, the data is 19%, it is 12% higher than last one, and the equity increase related solvency ratio change, non-current liabilities increase will lead to the liquidity reduce.

3.4.4 Horizontal common-size analysis of income statement

From Annexes 2 we can analysis it in horizontal method way, the absolutely change is in Tab 3.6, from 2008 to 2011 is change to last year.

*Tab 3.6 Absolutely change on income statement of CK life science company in 2008-2011 with horizontal analysis (HK$000)*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Turnover</strong></td>
<td>900,205</td>
<td>-312,908</td>
<td>15,315</td>
<td>817,359</td>
</tr>
<tr>
<td><strong>Cost of sales</strong></td>
<td>-728,678</td>
<td>245,084</td>
<td>-33,019</td>
<td>-459,280</td>
</tr>
<tr>
<td><strong>Other income,</strong></td>
<td>-321,651</td>
<td>568,208</td>
<td>-29,119</td>
<td>-272,287</td>
</tr>
<tr>
<td><strong>Staff costs</strong></td>
<td>-46,311</td>
<td>34,382</td>
<td>-27,188</td>
<td>-25,821</td>
</tr>
<tr>
<td><strong>Depreciation</strong></td>
<td>-2,942</td>
<td>-2,848</td>
<td>12,848</td>
<td>4,203</td>
</tr>
<tr>
<td><strong>operating expenses</strong></td>
<td>-92,534</td>
<td>-52,546</td>
<td>55,182</td>
<td>-54,528</td>
</tr>
<tr>
<td><strong>Finance costs</strong></td>
<td>-32,750</td>
<td>48,872</td>
<td>689</td>
<td>-71,743</td>
</tr>
<tr>
<td><strong>Share of associates</strong></td>
<td>-4,368</td>
<td>-1,394</td>
<td>11,280</td>
<td>-739</td>
</tr>
<tr>
<td><strong>profit before tax</strong></td>
<td>-358,535</td>
<td>540,874</td>
<td>8,935</td>
<td>-62,907</td>
</tr>
<tr>
<td><strong>Taxation</strong></td>
<td>-109,859</td>
<td>-1,731</td>
<td>3,674</td>
<td>-20,655</td>
</tr>
<tr>
<td><strong>profit for the year</strong></td>
<td>-468,394</td>
<td>539,143</td>
<td>12,609</td>
<td>-83,562</td>
</tr>
</tbody>
</table>

From Tab 3.6 a negative change of turnover from 2008 to 2009, we can see relative change is HK$-31.2 million. As we know the impact of the global financial crisis continued to influence the world economy in 2009, so until to 2011 the turnover increase more but the net profit reduce, because CK Life Science expand agriculture business to wine, in 2011 Acquisitions operation were the major business, and
According to the report 2011, agriculture-related business reported revenue of HK$121.4 million, so it was experienced solid growth in finance.

And then because of the turnover changed and immediate change the cost of sales, we can see obvious from relative change of cost of sales. The change of 2010-2011 is HK$-45.9 million. It is Means Company have lots of expense in this year, mainly activities investment to the agriculture-related business in a Australia, and the wine operating in the starting stage, so we can obtain the net profit decrease in year 2011. It is hard to say positive or negative, invest period will be last more than 3 years, and have high impact to profit.

The last table is about relative change on income statement, it’s clear to find out the change from each item.

Tab 3.7 Relative change on income statement of CK life science company in 2008-2011 with horizontal analysis

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnover</td>
<td>43.0%</td>
<td>-10.5%</td>
<td>0.6%</td>
<td>30.3%</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>53.8%</td>
<td>-11.8%</td>
<td>1.8%</td>
<td>24.5%</td>
</tr>
<tr>
<td>Other income,</td>
<td>-702.5%</td>
<td>-206.0%</td>
<td>-10.0%</td>
<td>-103.4%</td>
</tr>
<tr>
<td>Staff costs</td>
<td>15.5%</td>
<td>-10.0%</td>
<td>8.8%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Depreciation</td>
<td>10.2%</td>
<td>8.9%</td>
<td>-37.0%</td>
<td>-19.2%</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>26.5%</td>
<td>11.9%</td>
<td>-11.2%</td>
<td>12.4%</td>
</tr>
<tr>
<td>Finance costs</td>
<td>95.7%</td>
<td>-73.0%</td>
<td>-3.8%</td>
<td>411.8%</td>
</tr>
<tr>
<td>Share of associates</td>
<td>79.3%</td>
<td>14.1%</td>
<td>-100.1%</td>
<td>-9237.5%</td>
</tr>
<tr>
<td>Profit before taxation</td>
<td>-1086.7%</td>
<td>-166.1%</td>
<td>4.1%</td>
<td>-28.1%</td>
</tr>
<tr>
<td>Taxation</td>
<td>-133.5%</td>
<td>6.3%</td>
<td>-12.6%</td>
<td>80.7%</td>
</tr>
<tr>
<td>Profit for the year</td>
<td>-406.2%</td>
<td>-152.7%</td>
<td>6.8%</td>
<td>-42.1%</td>
</tr>
</tbody>
</table>

Tab 3.7 is relative change base on the benchmark of year 2007, and one outstanding data is finance cost, from 2010 to 2011, the relative change is 411.8%, really huge higher than year 2009, because the investment operating and acquisition
activities, the enterprise need more money to support it, so there were many long term-loans in year 2011, the long-term loans is bank borrowings wholly repayable within five years, and it increase finance cost, except that the other borrowing increase than year 2010.

From the relative change of net income in 2008-2010, the impact of financial crisis have be improve again, the profit for the year have sharp decrease, and until year 2010, the profit gain a little, until year 2011, in order to expand business all over the world, the profit reduce -42.1%.

The staff cost always stable or a little bit change over the five years, because the company be engaged in research or innovate, so the cost almost fixed.
4 FINANCIAL ANALYSIS OF SELECTED COMPANY

In this chapter we will analysis financial situation about CK Life Science deeply, financial ratio is a useful way. And we can see the change of data clearly, and formulas in chapter two are apply to calculate ratios. So in this part, we will analysis with activity ratio, liquidity ratio, solvency ratio and profitability ratio.

4.1 Activity ratios

Inventory turnover is one to measure a company of its balance sheet accounts into cash or turnover accounting ratios. The data cost of goods sold and average inventory will be use, and calculate the ratio by formula (2.4), from the result we can get the Chart 4.1, and we can see the change trend clearly.

Chart 4.1 The inventory turnover of CK in 2007-2011

![Chart 4.1 The inventory turnover of CK in 2007-2011](image)

From Chart 4.1 we can find the inventory of CK Life Science was increase in 2008, but from year 2009, the trend turn to decrease and the number of 2011 was almost equal to 2007, then the two evident changes must be explain. One is 27 percent up from 2007 to 2008, another one is 15 percent down from 2009 to 2010.

We can find the lowest turnover in year 2007, and the highest turnover ratio was in year 2008, on account of the in 2007 the inventor input just HK$38.3 million, and the data of cost of sale was HK$135.6 million in 2007, so the lowest inventory
data and lowest revenue data calculate lowest inventory turnover ratio. But the next year of 2007, the inventory turnover ratio went up to 4.49, it’s 27 percent increased, on account of the cost of sale increased HK$72.8 million, and the inventory increased HK$80.1 million, and we can find the change almost equal, so the inventory turnover ratio increase a lot. On the opposite, must be have decrease trend, after 2008, the curve fallen down, and the trend from 2009 to 2010 was sharp, that because cost of sale was HK$187.2 million, but the inventory input was HK$50.8 million, so the inventory turnover ratio went down a lot.

In year 2008, about Nutraceuticals field business, CK cooperated with bestselling range of nutraceuticals companies, there is SANTÉ NATURELLE A.G.company in Canada, VITAQUEST company in American and LIPA in Australia, the three companies help CK to expand nutraceuticals market all over the world. Expect Nutraceuticals field, in Agriculture-related businesses, The Company’s Green Vision fertilizer were sold in a number of markets around the world successfully, Green Vision’s marketing extends to all the major agricultural provinces in China, including Guangdong, Guangxi, Jiangsu, Anhui, Zhejiang and Shandong. Excellent sales growth has been achieved during 2008. So we can see the the inventory turnover increase a lot in 2008.

But in year 2010, CK Life Science acquired Challenger Wine Trust (CWT), it’s the second largest vineyard owner in Australasia, so in the inventory turnover formula, if the cost of goods sold increase a lot, so the ratio will decrease.

Receivable turnover using the data total revenue and receivable can get the result by formula (2.10), finally show as chart 4.2. from this ratio, we must analysis the change of total revenue, it was the most important change in income statement, and another data is receivable from current assets.

Calculate by formula (2.10), finally result show as chart 4.2.
From Chart 4.2 we can find that huge increase from 2007 to 2008, and the receivable keep going down during 2008-2010, and until 2010 to 2011, has 16 percent higher. We can compare with total revenue in Income statement, the revenue in 2008 went up a lot, the revenue was HK$299.1 million in 2009, so the receivable increase too, the receivable was 56.9 million, and the trend of receivable turnover is follow the change trend of revenue, but in year 2011 the revenue was highest, the input is HK$351.2 million, but the receivable was not go up a lot, the data of receivable was HK$98.4 million.

The high receivable turnover in 2008 means highly efficient credit and collection, since 2009 the ratio turn to lower means the collection policies were not very strict. We can see in receivable change in Tab 4.4, the data of receivable in 2011 is biggest, so the ratio not changed much in 2011.

In order to calculate total assets turnover ratio, we must to use two data total revenue and total assets, and the result by formula (2.12). The finally result show as chart 4.3.
Chart 4.3 Total assets turnover in 2007-2011

In Chart 4.3 we can find the total assets turnover has increase 60 percent from 2007 to 2008, it indicate CK Life Science’s total asset could bring more revenue, and the efficiency was higher. The company can get more profit from each unit asset. And the change of total assets from 2007 to 2008 was HK$73.6 million decrease, and the total revenue from 2007 to 2008 was increase HK$90 million, so the result was obvious.

On the contrary, after 2008 the total assets turn fall down year to year, from 2008 to 2009 the ratio reduce 19 percent, the phenomenon end at year 2011, just 11 percent increase, the reason fall down from 2008 to 2009 was HK$31.3 decrease, but the total assets was HK$69.5 increase, so the total assets turnover ratio fallen down a lot. And another reason was negative influence of the financial crisis around the world, it impact the sales went down, and market were more narrow.

To calculate number of days of inventory we must to use average day’s cost of goods sold data to calculate this ratio with formula (2.7), it easy to get, just use cost of sale divide 365, the answer is average day’s cost of goods sold. We can get the finally result of number of days of inventory on Chart 4.4.
We can see the most days of inventory was in 2007, and the least days is in 2008. As we know, if the result is high, indicate there is lack of demand for the product being sold, and in year 2007, the inventory change from HK$38.3 million to HK$46.4 million, but the average cost of sales just change from HK$135.6 to HK$ 208.4, so the result decrease a lot, but after year 2008 the number of days of inventory decrease, the relative sharp change is from 2009 to 2010, and we can find the inventory input change from HK$42.5 million to HK$50.9 million. But the average of cost of sales changed HK$3.3 million.

The CK Life Sciences just has extended the reach of its nutraceutical products into Australia for the first time in 2007, so the market in Australia is not very maturity, and in year 2008 the market develop very well so the number of days decrease to 81, and until 2010, CK Life Science start vine business, so the cost of sale increased, and the trend of number of days of inventory go down.

We can get the result of number of days of receivable in formula (2.8), and the change of answer is related to average day’s revenue, and accounts receivable. So it is necessary to compare revenue in 2007-2011, the finally change of number of days of receivable show as bellow Chart 4.5.
At first we can find the change trend related revenue change, from 2007 to 2008 the revenue increase HK$90 million, but the receivable changed from HK$61.5 to HK$56.9, so the number of days of receivable reduce 41, the next of 2007 the revenue decrease HK$31.2 million, the receivable changed from HK$56.9 million to HK$75.7 million, so the number of days of receivable increase 35. Same to year 2008 and 2009.

And another evident reason is, the business of CK Life Science is trade not in cash, so the number of days of receivable is very large number, because of the marketing extend, the number of days of receivable is smallest.

4.2 Liquidity ratios

Used to measure enterprise liquid assets in short-term debt is due before, can be turned into cash used to repay debt the ability. There are three ratios can analysis in this part, respectively are current ratio, quick ratio and cash ratio.

Current ratio calculates by formula (2.13), and the data will be use is current assets and current liabilities, the result show as Chart 4.6.
Higher ratio means higher liquidity, and we can find the current ratio in year 2009 is highest over five years, from the annual report 2010, the evident reason is the current assets in 2010 increase a lot. We can discover the change of current assets from 2009 to 2010 is HK$13.9 million, but the change of current liabilities from 2009 to 2010 is HK$100.7 million, so the current ratio is very low in 2010, the another outstanding change is from 2008 to 2009, from balance sheet we can find the current assets is going up from HK$16.5 to HK$20.3, but the current liabilities is fallen down, from HK$71.6 to HK$69.4, that is why the current ratio in 2009 is highest, and more liquidity.

The **quick ratio** can be calculated as formula (2.14), and the data of current assets, inventory and current liabilities must be used. The result can be show as Chart 4.7.
Same as current ratio, lower quick ratio lower liquidity, so we can see the ratio in 2010, it’s lowest number over five years, just 0.51, compare with year 2009 is 53 percent lower, and compare with year 2011, there is 56 percent higher than year 2010, we can find the reason in balance sheet, because in 2010, company have HK$106.7 million bank loans, notice the bank loans is consist in current liabilities, the loans is repayable less than one year, so the quick ratio is lowest over five years. And the highest ratio was in 2009, because the current assets increased HK$39.5 million from 2008 to 2009, but the inventory input was decreased from HK$46.3 million to HK$42.5 million, and the current liabilities decreased 2.3 million, so the finally result went up a lot.

The cash ratio calculate by cash and current liabilities in formula (2.15), and the cash is most liquidity asset, so the cash ratio can indicate how the asset liquidity of one enterprise, and the cash divided current liabilities can show the proportion of cash in short term debt.so the finally result can be show as Chart 4.8
We can find the result in Chart 4.8, the lower result was in year 2008, the lowest cash input is in 2008 just HK$29.6 million, but in 2009, the cash input was HK$63.6 million, from 2008 to 2009 the decrease from HK$ 71.6 million to HK$69.4 million. And another huge change is from 2009 to 2010, the cash amount decrease HK$6.1 million, but the current liabilities increase from HK$69.4 to HK$170.2, so the cash ratio had sharp fallen down.

Even the sale was very well in 2008, but we know the international financial crisis in 2008, so the payment of goods did not back immediately, so it was not show as cash. So the current ratio in 2008 is lower, and in the ratio in 2010 is lowest, the highest current liabilities and relative higher cash number cause it, the highest current liabilities in 2010, so there was lowest liquidity in 2010.
4.3 Solvency ratios

Solvency ability is to show the enterprise with its assets to repay the long-term debt and short-term debt ability. Enterprises have to pay cash and repay debt ability, is the key of enterprise survival and healthy development.

The debt-to-assets ratio is proportion of total liabilities on total assets. It can be calculate by formula (2.16). And the results deliver in Chart 4.9.

*Chart 4.9 Debt-to-assets ratio in 2007-2011*

![Chart 4.9 Debt-to-assets ratio in 2007-2011](image)

The reason debt-to-assets ratio change, we can find there was a little change of total liabilities change in 2007-2010, the lowest amount of total liabilities was HK$167.3 million in 2007, and the highest amount of total liabilities was HK$317.7 million in 2011, but total assets change much than total liabilities, and we can see both total liabilities and total assets had sharp change from 2010 to 2011, because the total assets changed from HK$738.8 million to HK$881 million, but the total liabilities just changed from HK$176.6 million to HK$317.8 million, so the curve go up.

Then we can see another change, the small change from 2009 to 2010, because the total assets increased HK$49 million, but the total liabilities decreased HK$5.6 million.
Debt-to-equity ratio calculate by formula (2.17), two data should be use one is total liabilities, the other one is total equity. The result show on Chart 4.10, as well we can analysis change of equity every year.

Chart 4.10 Debt-to-equity ratio of CK in 2007-2011

We can find that debt-to-equity ratio has decrease in 2008-2010, because of the total liabilities grow slower than total equity, in year 2008, the total equity decreased HK$88.2 million, but the debt-to-equity ratio has increase 81 percent point in 2010-2011, on account of the total liabilities increased from HK$176.6 million to HK$317.8 million, the denominator increase a lot, but the numerator almost fixed, so the debt-to-equity ratio increase of course.

Another reason of the drop down in 2008-2010, it is in this period, CK Life Science acquired all shares from many companies around the world. This business activities increase total equity. So the debt-to-equity ratio turned down in 2008-2010.

The total liabilities in 2009 were HK$182.2 million, and the data in 2010 was HK$176.7, just small change, but at equity part, the data from 2009 to 2010 increase HK$49 million. So the Debt-to-equity ratio was lowest.
**Financial leverage ratio** is important, it means shareholders provide a unit money, and how much does lenders willing to provide borrowing. It can be calculate by formula (2.19), and the data of total assets and total equity. And the final result show as Chart 4.11.

*Chart 4.11 Financial leverage ratio in 2007-2011*

We can find the financial leverage ratio in 2008 was second highest number, because the share premium and reserves in 2008 is HK$88.1 million lower than last year, so the total equity is lower and the total assets is lowest over the five years, so the financial leverage ratio is a little bit high.

The lowest number of financial leverage ratio over the five year is 1.31, and the reason was share premium and reserves is very high, lead to the to the total equity higher, but the total assets just HK$ 48.9 million higher than last year, so the financial leverage ratio very low.

And another huge change is from 2010 to 2011, there was 19 percent higher, the obvious reason is the change of total assets, there was HK$142.1 million higher than last year, the biggest add item is property, the property, plant and equipment item increased HK$140.4 million, because the enterprise acquired many vine company in Austria, with the total assets increase, and total equity change a little, the financial leverage ratio has a huge change of course.
**Interest coverage ratio** calculates by formula (2.18), the ratio between EBIT and interest expense, and the result show as Chart 4.12.

*Chart 4.12 Interest coverage ratio of CK in 2007-2011*

If the ratio greater than 1, it means the enterprise can afford the finance expense, we can see it in Chart 4.12, the strange result in 2008, because the enterprise was deficit in this year, so the ratio is below 0, the EBIT of 2008 was HK$-25.8 million, and the financial cost of this year was HK$ 6.6 million.

Except year 2008, the ratio all normal, we can find the interest coverage ratio is 13.87 in year 2010, because the EBIT in 2010 is higher than before years, the data of EBIT in 2010 was HK$24.4 million, and the financial cost is HK$1.7 million. And in 2010-2011, the enterprise need to pay high interest of short-term loans was HK$106.7 million, so the financial cost in this year was HK$8.9 million, and the EBIT of 2011 was HK$16.1 million, so the interest coverage ratio fallen down.
4.4 Profitability ratios

Operating profit ratio can calculate by formula (2.21), and data of EBIT and total revenue, we can get the result of operating profit ratio on Chart 4.13.

**Chart 4.13 Operating profit ratio in 2007-2011**

The most striking is in year 2008, there was 370 percent lower than year 2007, and after 2008, because the total revenue in 2007 was HK$209.1 million, but in 2008 the total revenue was HK$299.1 million, and compare with EBIT, the EBIT in year 2007 was HK$6.7 million, and in year 2008 the EBIT was HK$-25.9 million. There is 17.35 percent higher in year 2009, the most evident reason is in year 2008 the company loss HK$33.9 million. But the total revenue was decreased as HK$267.8 million. The international financial crisis has negative impact to enterprise marketing around the world.

From -8.64% to 8.71% higher in 2008-2009, the Nutraceutical business and agriculture-related businesses made a steady progress in 2009, the sales expend to key market in Asia and US, it is a big step to get more profit. So we can see the high operating profit ratio in 2009.

After year 2009, the trend of curve is stable, but the revenue in 2011 was HK$351.1 million, here was HK$81.7 increased, but the EBIT decreased HK$9 million in 2011. So the change was not very huge.
Another important ratio is **net profit margin**, each enterprise operating in order to get profit and the ratio can calculate in formula (2.22) and the result show on Chart 4.14.

*Chart 4.14 Net profit margin in 2007-2011*

We can find the change trend same to Chart 4.11, so ratio fallen down in year 2008, for the net profit was HK$-35.3 million, but from 6.95% to 7.37% in 2009-2010, just 0.42% change in this period, so we can know in year 2010 the ability to get profit is 0.42% higher than year 2009, compare on EBT, the EBT amount of 2009 was HK$21.5, and in year 2009 the EBT was HK$ 22.4, not big changes, except that the reason is agriculture-related businesses in Mainland of China are first expend in the country’s fertilizer market. So the Green Vision is a new power to protect environment, and good for production. Not only in china, in US, Australian , and other countries in Asian, the fertilizer is popular.

In 2010-2011, the net profit margin has a little fallen down, because the net profit just HK$ 11.4 million, and total revenue was HK$351.1 million. it’s not means the get profit power reduce, new vines business investment expense a lot, so the revenue reduce, and net profit reduce, so net profit margin fallen down.
Using formula (2.23) to calculate **return on assets**, and the data EBIT and total assets should be use, the finally show as Chart 4.15.

*Chart 4.15 Return on assets in 2007-2011*

From Chart 4.13, we can find three different change on it, the sharp fallen down and go up, a little fallen down and more than 418 percent fallen down. The higher return on assets, the using better of enterprise assets, enterprise can have more income and save money to use, etc. So it’s a obtained good effect.

But from Chart 4.15, the HK$35.7 million huge decreased in EBT cause the first huge change, the second change was because total assets increase HK$69.5 million and the EBIT increased as well. CK Life Science invested and purchased every year, so it’s hard to say loss or gain. The sharp decrease in 2008, the reason is international financial crisis impact a lot. And the sharp increase show the result of expends marketing. The last small change because the total assets changed HK$142.4 million. But the EBIT decreased HK$9 million, so the finally result just decreased 47 percent.
**Return on equity** calculated by using formula (2.24), and data EAT, total equity, finally show as Chart 4.16.

*Chart 4.16 Return on equity in 2007-2011*

In Chart 4.16, the lowest ratio in year 2008 as well, the return on equity ratio has kept falling from 3.67% to 2.04% in 2009-2011, and it has increased business scope in 2009-2011.

There are two major reasons to explain the big change of ROE ratio, net profit fallen down from HK$11.5 million to HK$35.3 million, and the total equity decreased from HK$526.6 to HK$438.4, in next year of 2008, the net profit increased HK$53.9 million, total equity increased HK$69.2 million. Company’s product structure was further optimized, it means do invest or acquired every year and around the world, the international financial crisis impact negative to company marketing and receivable.

From 2010 to 2011, the cost of sales increases HK$45.9 million, so the net profit decreased HK$8.3 million, also the ROE ratio fallen down.
4.5 Summary

From activity ratios, we can find the highest inventory turnover was 4.49 in 2008, and the lowest inventory turnover was 3.54 in 2007, after 2008 the trend of inventory turnover went down. The highest receivable turnover was 3.26 in 2008, and the lowest receivable turnover was 3.09 in 2010. The highest total assets turnover was 0.48 in 2008, and the lowest total assets turnover was 0.3 in 2007, the trend went down after 2008, until 2010 up a little.

From liquidity ratios, the highest current ratio was 2.93 in 2009, and the lowest current ratio was 1.28 in 2010. The highest quick ratio was 1.09 in 2009, and the lowest quick ratio was 0.51 in 2010. The highest cash ratio was 0.92 in 2009, and the lowest cash ratio was 0.34 in 2010.

From solvency ratios, we can get the highest debt-to-assets ratio was 0.36 in 2011, and the lowest debt-to-assets ratio was 0.24 both in 2007 and 2010. The highest debt-to-equity ratio was 0.56 in 2001, and the lowest debt-to-equity ratio was 0.31 in 2010, the highest financial leverage ratio was 1.56 in 2011, and the lowest financial leverage ratio was 1.31 in 2010. The last one of solvency ratio is interest coverage ratio, and the highest interest coverage ratio was 13.87 in 2010, and the lowest interest coverage ratio was -3.86 in 2008.

From profitability ratios, we can obtain 4 different ratios. In operating profit ratio, the highest one is 8.97% in 2010, and the lowest operating profit ratio was -8.64% in 2008. The highest net profit margin was 7.37% in 2010, the lowest net profit margin was -11.80%. The highest ROA was 2.88% in 2009, and the lowest ROA was -5.47% in 2008. The highest ROE was 3.67% in 2009, and the lowest ROE was -8.05% in 2008.
5 CONCLUSIONS

At before four chapters of thesis, the chapter one is introduction, chapter two is description of the financial methodology, the chapter three is general information of CK and common-size analysis, the chapter four is about financial ratio analysis. And the goal of the thesis was assessment of financial health of CK Life Science from 2007 to 2011.

From common-size analysis in chapter three, we know the cost of sales is main part of turnover, from 2007 to 2009 the proportion of cast of sales around 67 percent, and operating expense occupy about 17 percent, the most huge absolutely change of total assets was in year 2010-2011, the data is HK$142.2 million. And the huge relative change of EBT is -1086.7 percent.

In chapter four, base on the results of financial analysis, we know in year 2008 CK has most Selling Power, because the inventory turnover was 4.49, the receivable turnover was 5.26, and in the year 2009 was most liquidity, because the current ratio was 2.93 in 2009, and both quick ratio and cash ratio get the highest data over the five year, and most highest activity risk was in year 2011, because both debt-to-asset ratio and debt-to-equity ratio are highest, the debt-to-asset ratio in 2011 was 5.36, the debt-to-equity ratio was 0.56 in 2012. financial leverage increased 19 percent to 1.56 in year 2011, in year 2008 the company deficit, on account of all profitability ratios are below 0, the operating profit ratio was -8.64% in 2008, the net profit margin was -11.8% in 2008, the ROA and ROE were -5.47% and -8.05%. From 2010 to 2011 the operating ratio and net profit ratio were decreases, because the cost of sales increases, the EBT just HK$16.1 million.

After the international financial crisis in 2008, the trend of financial condition not very well, because the profitability ratios not went up, and the solvency ratio was not stable. But I can envision the financial situation will turn to boom in recent years, because the revenue in year 2011 is HK$351.2 million, and the investment business is going well. So CK Life Science company will deepen markets what already have and innovate more production good for healthy of human.
Bibliography


Electronic references


List of Abbreviations

DOH  Days of inventory On Hand
DSO  Days of Sales Outstanding
EBIT Earn Before Interest and Tax
EAT  Earn After Tax
ROA  Return On Assets
ROE  Return On Equity
E   Equity
A   Assets
EBT  Earn Before Tax
Declaration of Utilization of Results from the Bachelor Thesis

- I am informed that Act No. 121/2000 Coll. – the Copyright Act, in particular, Section 35 – Utilization of the Work as a Part of Civil and Religious Ceremonies, as a Part of School Performances and the Utilization of a School Work – and Section 60 – School Work, fully applies to my diploma (bachelor) thesis;
- I take account of the VSB – Technical University of Ostrava (hereinafter as VSB-TUO) having the right to utilize the diploma (bachelor) thesis (under Section 35(3)) unprofitably and for own use;
- I agree that the diploma (bachelor) thesis shall be archived in the electronic form in VSB-TUO” Central Library and one copy shall be kept by the supervisor of the diploma (bachelor) thesis. I agree that the bibliographic information about the diploma (bachelor) thesis shall be published in VSB-TUO” information system;
- It was agreed that, in case of VSB-TUO” interest, I shall enter into a license agreement with VSB-TUO, granting the authorization to utilize the work in the scope of Section 12(4) of the Copyright Act;
- It was agreed that I may utilize my work, the diploma (bachelor) thesis, or provide a license to utilize it only with the consent of VSB-TUO, which is entitled, in such a case, to claim an adequate contribution from me to cover the cost expended by VSB-TUO for producing the work (up to its real amount).

Ostrava dated: 6. 5. 2013

Xiaomin Li
List of Annexes

Annex 1: balance sheet
Annex 2: income statement
Annex 3: cash flow
### Annexes

**Annex 1/2: Balance sheet**

<table>
<thead>
<tr>
<th>BALANCE SHEETS</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ASSETS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NON-CURRENT ASSETS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property, plant and Equipment (vines 2011)</td>
<td>516,855</td>
<td>444,877</td>
<td>470,684</td>
<td>523,312</td>
<td>1,927,035</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>3,884,548</td>
<td>3,722,997</td>
<td>3,972,183</td>
<td>4,019,236</td>
<td>4,133,396</td>
</tr>
<tr>
<td>Investments in associates</td>
<td>557,390</td>
<td>371,130</td>
<td>360,782</td>
<td>534,544</td>
<td>540,373</td>
</tr>
<tr>
<td>Deferred taxation</td>
<td>50,272</td>
<td>19,076</td>
<td>21,056</td>
<td>23,196</td>
<td>23,718</td>
</tr>
<tr>
<td>Long-term receivables</td>
<td>0</td>
<td>0</td>
<td>38,580</td>
<td>19,984</td>
<td>0</td>
</tr>
<tr>
<td>Time deposits</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>93,480</td>
<td>0</td>
</tr>
<tr>
<td><strong>NON-CURRENT ASSETS</strong></td>
<td>5,009,065</td>
<td>4,558,080</td>
<td>4,863,285</td>
<td>5,213,752</td>
<td>6,624,522</td>
</tr>
<tr>
<td><strong>CURRENT ASSETS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt investment</td>
<td>0</td>
<td>59,474</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Investments at fair value through profit or loss</td>
<td>55,104</td>
<td>139,351</td>
<td>163,171</td>
<td>163,000</td>
<td>76,083</td>
</tr>
<tr>
<td>Derivative financial Instruments</td>
<td>18,428</td>
<td>15,780</td>
<td>2,633</td>
<td>0</td>
<td>3,102</td>
</tr>
<tr>
<td>Tax recoverable</td>
<td>0</td>
<td>3,629</td>
<td>762</td>
<td>0</td>
<td>42</td>
</tr>
<tr>
<td>Inventories</td>
<td>382,841</td>
<td>463,711</td>
<td>425,921</td>
<td>508,603</td>
<td>650,886</td>
</tr>
<tr>
<td>Receivables and prepayments</td>
<td>667,525</td>
<td>615,195</td>
<td>805,906</td>
<td>872,654</td>
<td>983,985</td>
</tr>
<tr>
<td>Deposits with financial Institutions</td>
<td>807,022</td>
<td>348,506</td>
<td>636,895</td>
<td>630,518</td>
<td>471,615</td>
</tr>
<tr>
<td><strong>CURRENT ASSETS</strong></td>
<td>1,930,920</td>
<td>1,645,646</td>
<td>2,035,288</td>
<td>2,174,775</td>
<td>2,185,713</td>
</tr>
<tr>
<td><strong>TOTAL ASSETS</strong></td>
<td>6,939,985</td>
<td>6,203,726</td>
<td>6,898,573</td>
<td>7,388,527</td>
<td>8,810,235</td>
</tr>
</tbody>
</table>
## Annex 1/2: Balance sheet

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LIABILITIES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NON-CURRENT LIABILITIES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank loans</td>
<td>710,546</td>
<td>1,045,675</td>
<td>1,061,300</td>
<td>0</td>
<td>1,691,606</td>
</tr>
<tr>
<td>Finance lease obligations</td>
<td>937</td>
<td>1,108</td>
<td>807</td>
<td>399</td>
<td>1,277</td>
</tr>
<tr>
<td>Loan from a minority Shareholder</td>
<td>27,574</td>
<td>25,907</td>
<td>34,333</td>
<td>36,531</td>
<td>536,201</td>
</tr>
<tr>
<td>Deferred taxation</td>
<td>50,052</td>
<td>29,887</td>
<td>31,273</td>
<td>27,077</td>
<td>26,314</td>
</tr>
<tr>
<td><strong>NON-CURRENT LIABILITIES</strong></td>
<td>789,109</td>
<td>1,102,577</td>
<td>1,127,713</td>
<td>64,007</td>
<td>2,255,398</td>
</tr>
<tr>
<td><strong>CURRENT LIABILITIES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payables and accruals</td>
<td>672,262</td>
<td>588,995</td>
<td>621,545</td>
<td>543,123</td>
<td>822,767</td>
</tr>
<tr>
<td>Derivative financial Instruments</td>
<td>55,889</td>
<td>99,398</td>
<td>23,087</td>
<td>24,692</td>
<td>37,151</td>
</tr>
<tr>
<td>Bank overdrafts</td>
<td>13,391</td>
<td>7,445</td>
<td>385</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Bank loans</td>
<td>125,901</td>
<td>0</td>
<td>0</td>
<td>1,067,956</td>
<td>0</td>
</tr>
<tr>
<td>Finance lease obligations</td>
<td>752</td>
<td>494</td>
<td>580</td>
<td>1,003</td>
<td>373</td>
</tr>
<tr>
<td>Taxation</td>
<td>15,949</td>
<td>19,945</td>
<td>48,695</td>
<td>65,293</td>
<td>61,988</td>
</tr>
<tr>
<td><strong>CURRENT LIABILITIES</strong></td>
<td>884,144</td>
<td>716,277</td>
<td>694,292</td>
<td>1,702,067</td>
<td>922,279</td>
</tr>
<tr>
<td><strong>TOTAL LIABILITIES</strong></td>
<td>1,673,253</td>
<td>1,818,854</td>
<td>1,822,005</td>
<td>1,766,074</td>
<td>3,177,677</td>
</tr>
<tr>
<td><strong>EQUITY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share capital</td>
<td>961,107</td>
<td>961,107</td>
<td>961,107</td>
<td>961,107</td>
<td>961,107</td>
</tr>
<tr>
<td>Share premium and Reserves</td>
<td>4,190,206</td>
<td>3,309,661</td>
<td>3,944,251</td>
<td>4,550,419</td>
<td>4,407,652</td>
</tr>
<tr>
<td>Share option reserve of a Subsidiary</td>
<td>0</td>
<td>0</td>
<td>55</td>
<td>110,927</td>
<td>263,799</td>
</tr>
<tr>
<td>Minority interests</td>
<td>115,419</td>
<td>114,104</td>
<td>171,155</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL EQUITY</strong></td>
<td>5,266,732</td>
<td>4,384,872</td>
<td>5,076,568</td>
<td>5,622,453</td>
<td>5,632,558</td>
</tr>
<tr>
<td><strong>TOTAL LIABILITIES AND EQUITY</strong></td>
<td>6,939,985</td>
<td>6,203,726</td>
<td>6,898,573</td>
<td>7,388,527</td>
<td>8,810,235</td>
</tr>
</tbody>
</table>
## Annex 2: Income statement

<table>
<thead>
<tr>
<th>INCOME STATEMENT</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnover</td>
<td>2,091,592</td>
<td>2,991,797</td>
<td>2,678,889</td>
<td>2,694,204</td>
<td>3,511,563</td>
</tr>
<tr>
<td>Average of turnover</td>
<td>5,730</td>
<td>8,197</td>
<td>7,339</td>
<td>7,381</td>
<td>9,621</td>
</tr>
<tr>
<td>Gross profit</td>
<td>736,053</td>
<td>907,580</td>
<td>839,756</td>
<td>822,052</td>
<td>1,180,131</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>-1,355,539</td>
<td>-2,084,217</td>
<td>-1,839,133</td>
<td>-1,872,152</td>
<td>-2,331,432</td>
</tr>
<tr>
<td>Average of cost of sales</td>
<td>3,714</td>
<td>5,710</td>
<td>5,039</td>
<td>5,129</td>
<td>6,387</td>
</tr>
<tr>
<td>Other income, gains and losses</td>
<td>45,788</td>
<td>-275,863</td>
<td>292,345</td>
<td>263,226</td>
<td>-9,061</td>
</tr>
<tr>
<td>Staff costs</td>
<td>-298,148</td>
<td>-344,459</td>
<td>-310,077</td>
<td>-337,265</td>
<td>-363,086</td>
</tr>
<tr>
<td>Depreciation</td>
<td>-28,934</td>
<td>-31,876</td>
<td>-34,724</td>
<td>-21,876</td>
<td>-17,673</td>
</tr>
<tr>
<td>Amortization of intangible assets</td>
<td>-37,138</td>
<td>-50,412</td>
<td>-47,808</td>
<td>-44,861</td>
<td>-44,932</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>-349,699</td>
<td>-442,233</td>
<td>-494,779</td>
<td>-439,597</td>
<td>-494,125</td>
</tr>
<tr>
<td>Revaluation deficit on building</td>
<td>0</td>
<td>-11,420</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Gain on disposal of associates</td>
<td>2,712</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Gain on disposal of a subsidiary</td>
<td>2,100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Finance costs</td>
<td>-34,232</td>
<td>-66,982</td>
<td>-18,110</td>
<td>-17,421</td>
<td>-89,164</td>
</tr>
<tr>
<td>Share of results of associates</td>
<td>-5,510</td>
<td>-9,878</td>
<td>-11,272</td>
<td>8</td>
<td>-731</td>
</tr>
<tr>
<td>(Loss)/profit before taxation</td>
<td>32,992</td>
<td>-325,543</td>
<td>215,331</td>
<td>224,266</td>
<td>161,359</td>
</tr>
<tr>
<td>Taxation</td>
<td>82,319</td>
<td>27,540</td>
<td>-29,271</td>
<td>-25,597</td>
<td>-46,252</td>
</tr>
<tr>
<td>(Loss)/profit for the year</td>
<td>115,311</td>
<td>-353,083</td>
<td>186,060</td>
<td>198,669</td>
<td>115,107</td>
</tr>
</tbody>
</table>
Annexes 1/3: Cash flow

<table>
<thead>
<tr>
<th>Cash flow statement</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating cash flows before working capital changes</td>
<td>116,187</td>
<td>188,726</td>
<td>260,442</td>
<td>229,719</td>
<td>395,371</td>
</tr>
<tr>
<td>(Increase)/decrease in inventories</td>
<td>19,619</td>
<td>-108,665</td>
<td>69,487</td>
<td>-47,517</td>
<td>-159,016</td>
</tr>
<tr>
<td>(Increase)/decrease in receivables and prepayments</td>
<td>58,816</td>
<td>-32,828</td>
<td>-148,992</td>
<td>-17,670</td>
<td>-131,512</td>
</tr>
<tr>
<td>Decrease in payables and accruals</td>
<td>-190,930</td>
<td>-55,089</td>
<td>-25,313</td>
<td>19,002</td>
<td>69,611</td>
</tr>
<tr>
<td>Profits tax paid</td>
<td>-3,479</td>
<td>-14,962</td>
<td>-5,950</td>
<td>-16,360</td>
<td>-52,942</td>
</tr>
<tr>
<td>Net cash (used in)/from operating activities</td>
<td>213</td>
<td>-22,818</td>
<td>149,674</td>
<td>167,174</td>
<td>121,512</td>
</tr>
</tbody>
</table>
Annexes 2/3: Cash flow

<table>
<thead>
<tr>
<th>Investing Activities</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchases of property, plant</td>
<td>-38,506</td>
<td>-42,765</td>
<td>-58,861</td>
<td>-60,539</td>
<td>-111,094</td>
</tr>
<tr>
<td>Purchases of investment properties</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td>-46,139</td>
</tr>
<tr>
<td>Purchases of vines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-32,168</td>
</tr>
<tr>
<td>Proceeds from disposal of investment properties</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>39,048</td>
</tr>
<tr>
<td>Proceeds from disposal of vines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6,451</td>
</tr>
<tr>
<td>Proceeds from disposal of property, plant and equipment</td>
<td>-1,915</td>
<td>2,291</td>
<td>17,652</td>
<td>2,054</td>
<td>13,830</td>
</tr>
<tr>
<td>Purchase of subsidiaries</td>
<td>-628,588</td>
<td>-206,026</td>
<td>46,458</td>
<td>0</td>
<td>-183,757</td>
</tr>
<tr>
<td>Repayment of a promissory note receivable</td>
<td>0</td>
<td>0</td>
<td>66,821</td>
<td>27,533</td>
<td>38,503</td>
</tr>
<tr>
<td>Purchase of convertible debentures issued by an associate</td>
<td>-65,874</td>
<td>-59,260</td>
<td>-26,240</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Purchase of debt investment</td>
<td>0</td>
<td>-58,706</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Increase in time deposits</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-139,765</td>
<td>55,877</td>
</tr>
<tr>
<td>Purchases of investments at fair value through profit or loss</td>
<td>-243,122</td>
<td>-388,090</td>
<td>-224,688</td>
<td>-82,748</td>
<td>-109,462</td>
</tr>
<tr>
<td>Purchase of available-for-sale investments</td>
<td>-101</td>
<td>-86,346</td>
<td>-43,400</td>
<td>-193,935</td>
<td>-77,999</td>
</tr>
<tr>
<td>Proceeds from disposal of investments at fair value through profit or loss</td>
<td>817,519</td>
<td>346,717</td>
<td>191,093</td>
<td>80,894</td>
<td>174,054</td>
</tr>
<tr>
<td>Proceeds from disposal of available-for-sale investment</td>
<td>174,469</td>
<td>0</td>
<td>190,713</td>
<td>329,882</td>
<td>0</td>
</tr>
<tr>
<td>Expenditure on intangible assets</td>
<td>-59,250</td>
<td>-32,415</td>
<td>-32,716</td>
<td>-70,135</td>
<td>-28,017</td>
</tr>
<tr>
<td>(Increase)/decrease in deposits with financial institutions</td>
<td>7,800</td>
<td>-4,821</td>
<td>44,952</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Interest received</td>
<td>17,471</td>
<td>14,973</td>
<td>9,454</td>
<td>12,960</td>
<td>14,898</td>
</tr>
<tr>
<td><strong>Net cash used in investing</strong></td>
<td><strong>-20,097</strong></td>
<td><strong>-497,420</strong></td>
<td><strong>-181,238</strong></td>
<td><strong>-93,799</strong></td>
<td><strong>-301,691</strong></td>
</tr>
</tbody>
</table>
Annexes 3/3: Cash flow

<table>
<thead>
<tr>
<th>Financing Activities</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Net cash from financing activities</td>
<td>353,346</td>
<td>88,465</td>
<td>-19,297</td>
<td>-149,605</td>
</tr>
<tr>
<td>Net (decrease)/increase in cash and cash equivalents</td>
<td>333,462</td>
<td>-431,773</td>
<td>311,615</td>
<td>-76,230</td>
</tr>
<tr>
<td>Cash and cash equivalents at beginning of the year</td>
<td>411,693</td>
<td>753,500</td>
<td>296,109</td>
<td>636,510</td>
</tr>
<tr>
<td>Effect of foreign exchange rate changes</td>
<td>8,345</td>
<td>-25,618</td>
<td>28,786</td>
<td>14,929</td>
</tr>
<tr>
<td><strong>Cash and cash equivalents at end of the year</strong></td>
<td><strong>753,500</strong></td>
<td><strong>296,109</strong></td>
<td><strong>636,510</strong></td>
<td><strong>575,209</strong></td>
</tr>
</tbody>
</table>
