

Faculty of Science and Technology

MASTER'S THESIS

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Abbreviations

CCS	China Continent Shelf
CDE	COSL Drilling Europe As
COSL	China Oilfield Services Limited
CNPC	China National Petroleum Corporation
CNOOC	China National Offshore Oil Corporation
M&A	Merge and Acquisition
PT. A	The abbreviation of the sole local shareholder of PT. COSL
11.7	INDO as a subsidiary of COSL in Indonesia Territory
p.a.	per annum
OPEC	Organization of Petroleum Exporting Countries
NDRC	National Development and Reform Commission
SOE	State-owned Enterprise
IOC	International oil company
OFS	Oilfield Services
ODI	Overseas Direct Investment
MNC	Multinational Corporation

Chapter 1. Introduction

1.1. Industrial background

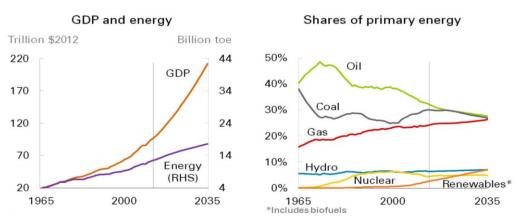


Figure 1 Energy decouples from GDP and fuel mix evolves (BP, 2014)

Reliable evidence reveals that the use of petroleum, in one form or another, dates back to thousands of years ago, and constructions of the walls and towers of Babylon with asphalt pursuant to Herodotus and Diodorus Siculus in more than 4000 years ago (Chisholm, 1911) could be a documented example. By 347 AD, oil was produced from bamboo-drilled wells in China (Totten, 2007), while in 1859 Edwin Drake's well near Titusville, Pennsylvania, is popularly considered the first modern oil well since it was "drilled" with a steam engine and touched off a major boom (Vassiliou, 2009). At the beginning of the 20th century the Industrial Revolution had progressed to the extent that the significance of oil as a world energy source is difficult to be overdramatized and will likely remain so for many decades to come, even under the most optimistic assumptions about the growth in alternative energy sources. With respect to BP (2014), Oil's share will continue to decline and its position as the leading fuel briefly challenged by coal, but world primary energy production will grow at 1.5% p.a. from 2012 to 2035, approximately matching consumption growth estimated with slower speed than the global economy growth (see Figure 1). In general, the world will be unnecessarily suffered from energy shortage.

While an overall balance between production and consumption looks maintained, problems are frequently inevitable due to its uneven distribution (see Figure 2). Nowadays, to some extent it has significantly and profoundly influenced the international relations with respect to its production capacity and corresponding consumption level and sometimes the situation in such a system could even be a determining factor. For example, with impressive proportion of proven reserves and much excessive production capacity in the world OPEC could set the world price (see Figure 3), which clearly reveals prevailing of seller's market and the degree of extensive concerns to energy supply. According to Baldwin (1959), access to oil was and still is a major factor in several military conflicts, World War II included, during

which oil facilities were a major strategic asset and were extensively bombed. Obviously, the importance of petroleum as a resource of energy has reached unprecedented level.

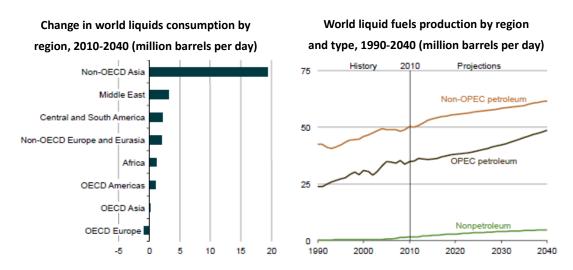


Figure 2 Oil production VS consumption by region (Million barrels daily) (Briefing, 2013)

IEA's estimate that global production of conventional crude oil from all currently producing fields will decline by 41m barrels a day by 2035, but virtually all economic sectors rely heavily on petroleum and accordingly will be intolerable to any decrease in oil production at that time and adversely even be incremental required. Based on Lewis (2013), less than one-third of this increase will be in the form of conventional crude oil, and more than two-thirds will be therefore either from what the IEA calls unconventional crude (light-tight oil, oil sands, and deep/ultra-deepwater oil) or from natural-gas liquids (NGLs).

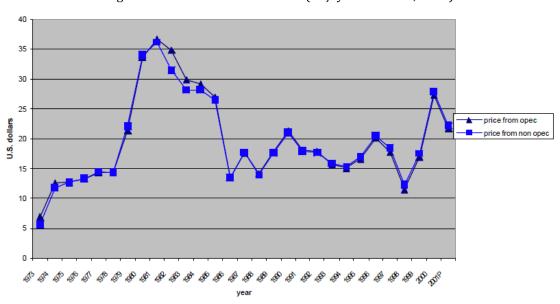


Figure 3 World Oil Price Per Barrel (Hejny and Nielsen, 2003)

"We continue to believe we are in the early stages of a multi-year, double-digit

growth spending upcycle internationally, characterized by increased drilling in complex geologies on land, and exploration and development of traditional and emerging deepwater basins," James West, Barclays oil services and drilling analyst, said summarizing the global picture (Toon, 2012). According to Barclays (2013), Sustained high oil prices, the sanctioning of major projects, and the delivery of a large number of offshore rigs in both 2014 and 2015 are driving the increases in spending. Though different Combining Figure 2 and Figure 4, desirable news will be easily deducible for service providers to oil and gas industry worldwide.

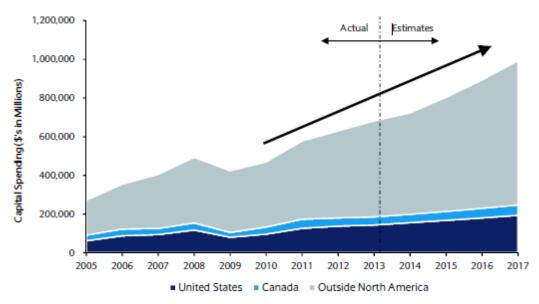


Figure 4 Barclays Multi-Year Exploration & Production Spending Forecast (Barclays, 2013)

1.2. Industrial challenges for China

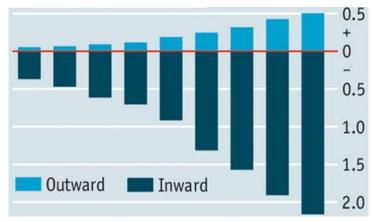


Figure 5 China's Foreign Direct Investment Stock by Type \$trn (Economist, 2013)

With respect to Figure 5, even China's ODI was still dwarfed when compared to foreign investment into China, but it has kept growing and in 2013, China overtook the U.S. as the world's biggest trading nation and increasingly Chinese firms are

morphing themselves form manufacturers and exporters into major global investors (Schuman, 2014).

Sector	Investment	Engineering Contracts	Troubled
Energy and power	\$201.9	\$114.1	\$76.3
Metals	99.3	11.0	60.5
Finance	38.2	_	29.3
Real estate and construction	29.6	30.3	9.0
Transport	18.0	81.9	17.3
Agriculture	17.6	10.3	9.5
Technology	10.1	7.8	13.9
Chemicals	6.2	2.1	0
Other	9.5	0.3	0.3
Total	\$430.4	\$257.7	\$216.1

Table 1 Sector Breakdown of Chinese Business Activity, in Billions of Dollars, 2005-June 2013 (The Heritage Foundation, 2013)

On the one hand, concerns have been voiced that Chinese investment or financial flows more generally have contributed to propping up bad regimes in host countries, and been conducted with a view to exploiting their natural resources (Kolstad and Wiig, 2009). On the other hand, however, either in terms of the purchase of overseas assets or in terms of the expansion of Chinese influence around the globe, Chinese investment does not pose a major threat to the world (Scissors, 2011), but obviously it continues to be a controversial topic and within Table 1 a comparably high proportion of troubled column for each sectors could be a good illustration. While most of the failures are due to host government objections, recalcitrant host countries, badly timed acquisitions, and nervous Chinese regulators are some of the checks on the growth of the PRC's outward investment (Scissors, 2013). But, Scissors (2013) put China's interest of owning commodities as the reason of energy topping the list for investment of China is obviously inappropriate.

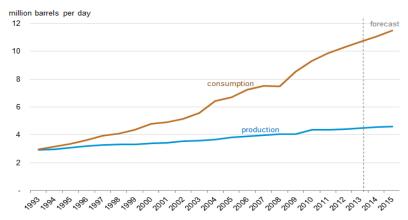


Figure 6 China's Oil Production and Consumption, 1993-2015 (eia, 2013b)

With respect to Figure 6, China became a net oil importer in 1993 and since then China has been increasingly dependent on imports of fuel to sustain the energy

demands. In September 2013, China's net imports of petroleum and other liquids exceeded those of the United States on a monthly basis, making it the largest net importer of crude oil and other liquids in the world (Dunn, 2014). Moreover, eia (2013) predicted that China will maintain a growth rate of approx. 2.6% till 2040, which is amongst the highest ones in the world.

As the world's most populous country and influential fast-growing economy, the oil gap between production and consumption has to be bridged with due carefulness. Whereas, China's largest oil fields are almost mature, and production has peaked, even to sustain oil flows are challenging, virtually every incremental barrel or cubic meter of oil or gas consumed must be imported. Thus accordingly since 2008 China's oil companies (especially state-owned ones) have rapidly expanded their purchase of international oil and gas assets through direct acquisitions of equity and financial loans in exchange for oil supplies. A summary of China's global investment on oil and gas since 2005 in Table 2 could be a good example for such still ongoing expansions.

Table 2 China's Global Investment on Oil & Gas since 2005 (The Heritage Foundation, 2013)

Year	Investor	Partner/Target	Sector	Country	Share	Quantity in Millions
2005	CNOOC	MEG Energy	Oil	Canada	17%	\$130
2005	Sinopec	Synenco	Oil	Canada	40%	\$120
2005	CNPC	PetroKazakhstan	Oil	Kazakhstan	67%	\$4,200
2005	CNPC and Sinopec	EnCana	Oil	Ecuador		\$1,420
2005	CNPC	Petro-Canada	Oil	Syria	16%	\$290
2006	Sinopec	Petrobras	Gas	Brazil		\$1,290
2006	Sinopec	Sonangol	Oil	Angola	75%	\$730
2006	CITIC	Kuwait Petroleum	Oil	Indonesia	51%	\$100
2006	Sinopec	North West Shelf Partners	Oil	Iran		\$2,800
2006	Sinopec	Omimex	Oil	Colombia	50%	\$430
2007	CNPC	EnCana	Oil	Chad	50%	\$200
2007	Sinomach		Gas	Pakistan		\$150
2007	Sinomach		Gas	Azerbaijan		\$210
2007	Shenzhen Energy and China Development Bank	Sunon Asogli Power	Gas	Ghana		\$140
2007	Sinopec	National Iranian Oil	Oil	Iran	51%	\$2,010
2007	CNPC		Gas	Kazakhstan		\$1,540
2007	CNPC		Gas	Uzbekistan		\$620
2008	Sinochem	Soco	Oil	Yemen	17%	\$470
2008	Sinopec	AED	Oil	Australia	60%	\$560
2008	CNOOC	Husky Energy	Gas	Indonesia	50%	\$130
2008	CNPC		Oil	Niger		\$4,990
2008	CNOOC	Awilco Offshore	Oil	Norway		\$2,490

2008	Sinopec	Tanganyika Oil	Oil	Syria		\$1,990
2008	Shenzhen Energy	First Bank	Gas	Nigeria		\$2,400
2008	CNPC	International Petroleum Investment	Oil	UAE		\$3,290
2008	CNPC		Oil	Iraq		\$3,020
2009	CNPC	National Iranian Oil	Oil	Iran		\$1,760
2009	CNOOC-led consortium		Gas	Iran		\$3,350
2009	CNPC	Central Asia Petroleum	Gas	Kazakhstan	50%	\$2,600
2009	CNPC	Singapore Petroleum	Oil	Singapore	46%	\$1,020
2009	CNOOC and Sinopec	Talisman Energy	Oil	Trinidad-Tobago		\$320
2009	Shandong Electric Power	Saudi Electricity Company	Oil	Saudi Arabia		\$1,800
2009	CNPC	Athabasca Oil Sands	Oil	Canada	60%	\$1,740
2009	CNOOC	Qatar Petroleum	Gas	Qatar		\$100
2009	CNPC	National Iranian Oil	Oil	Iran	70%	\$2,250
2009	CIC	JSC KazMunaiGas E&P	Gas	Kazakhstan	11%	\$940
2009	CNPC	Singapore Petroleum	Oil	Singapore	50%	\$1,160
2009	CNPC	BP and Iraq South Oil	Oil	Iraq	37%	\$5,590
2009	CIC	Nobel Holdings	Oil	Russian Federation	45%	\$300
2009	CNPC		Oil	Sudan		\$260
2009	CNOOC	Statoil	Oil	USA		\$100
2009	CNPC	State Oil Marketing Organization and South Oil Company	Oil	Iraq		\$240
2009	CNPC		Gas	Turkmenistan		\$3,130
2010	CNPC	Arrow Energy	Gas	Australia	50%	\$1,580
2010	CNOOC	BG	Gas	Australia	5%	\$270
2010	CNOOC	Chevron	Gas	Australia		\$180
2010	Sinopec	ConocoPhillip	Oil	Canada	9%	\$4,650
2010	CNPC	PDVSA	Oil	Venezuela		\$900
2010	Sinochem	Statoil	Oil	Brazil	40%	\$3,070
2010	CIC	Penn West and Penn West Energy	Oil	Canada	5%, 45%	\$1,220
2010	Rongsheng Holding and Sinochem		Oil	Egypt		\$1,990
2010	Нори	Chesapeake Energy	Gas	USA	1%	\$100
2010	China Communications Construction	Friede Goldman United	Oil	USA	100%	\$130
2010	Sinopec	Repsol	Oil	Brazil	40%	\$7,100
2010	CNOOC	Chesapeake Energy	Gas	USA	33%	\$2,370
2010	CNPC	Cuvenpetrol	Oil	Cuba		\$4,500

2010	CNPC and Sinopec		Oil	Ecuador		\$610
2010	Sinopec	Chevron	Gas	Indonesia	18%	\$680
2011	CNOOC	ExxonMobil	Oil	Argentina		\$330
2011	Sinopec	Origin Energy-ConocoPhillips	Gas	Australia	15%	\$1,520
2011	Sinopec	SABC	Oil	Saudi Arabia	38%	\$3,300
2011	CNOOC	Tullow	Oil	Uganda	33%	\$1,450
2011	Sinopec	Shell	Oil	Cameroon	80%	\$540
2011	CNPC	Maysan Oil	Oil	Iraq		\$170
2011	Zhejiang Hengyi and Sinopec		Oil	Brunei		\$2,500
2011	CNOOC	Opti Canada	Oil	Canada	100%	\$2,040
2011	CNPC	Tanzania Petroleum Development	Gas	Tanzania		\$500
2011	CNPC	Watan	Oil	Afghanistan		\$400
2011	Sinomach	Siemens	Gas	Tanzania	50%	\$320
2011	Sinopec	Australia Pacific Liquefied Natural Gas	Gas	Australia	10%	\$990
2011	Sinopec	Ghana National Gas	Gas	Ghana		\$700
2011	CITIC	Kazakh State Energy	Oil	Kazakhstan		\$100
2011	Sinopec	Marubeni	Oil	Kazakhstan		\$850
2011	CNPC	Varun Industries	Oil	Madagascar	51%	\$150
2012	CNPC	Bow Energy	Gas	Australia	50%	\$270
2012	CNPC	Athabasca Oil Sands	Oil	Canada	40%	\$670
2012	Sinopec	Devon Energy	Gas	USA	33%	\$2,440
2012	Sinochem	Siat	Oil	Belgium	35%	\$260
2012	CIC and Sinopec	Sunshine Oilsands	Oil	Canada		\$300
2012	CNPC	Shell	Gas	Canada	20%	\$1,030
2012	Sinochem	Total	Gas	Colombia		\$980
2012	Sinopec	Ghana National Gas	Gas	Ghana		\$850
2012	Dalian Shipbuilding	Sino Tharwa	Oil	Egypt		\$320
2012	Sinomach	Albanisa	Oil	Nicaragua		\$230
2012	United Energy		Gas	Pakistan		\$200
2012	Wison	Hyundai	Oil	Venezuela		\$1,470
2012	Sinopec	Talisman Energy	Oil	Britain	49%	\$1,500
2012	CIC	Cheniere Energy	Gas	USA		\$500
2012	CNOOC	BG	Gas	Australia		\$1,930
2012	CNPC	TransCanada	Oil	Canada	50%	\$1,510
2012	Sinopec		Oil	Indonesia		\$850
2012	Sinopec	Mercuria	Oil	Switzerland	50%	\$170
2012	Sinopec	Total	Oil	Nigeria	20%	\$2,500
2012	CNPC	ВНР	Gas	Australia		\$1,630
2012	Sinomach	Cambodia Petrochemical	Oil	Cambodia		\$2,300

2012	CNPC	Encana	Gas	Canada	49%	\$2,180
2012	CNPC	KazmUnaiGas	Gas	Kazakhstan	50%	\$900
2013	Sinochem	Pioneer Natural Resouces	Oil	USA	40%	\$1,700
2013	Sinopec	Chesapeake Energy	Oil	USA	50%	\$1,020
2013	CNPC		Gas	Mozambique	29%	\$4,210
2013	Sinochem		Gas	Bangladesh		\$180
2013	China National Aviation Fuel		Oil	South Korea	26%	\$130
2013	Power Construction Corp	Tenaga	Gas	Malaysia		\$240
2013	Sinopec	Marathon	Oil	Angola	10%	\$1,520
2013	CNPC	Novatek	Gas	Russian Federation	20%	\$940
2013	Power Construction Corp		Gas	Bosnia		\$280
2013	CNPC	Halfaya	Oil	Iraq		\$500
2013	CNPC	KazMunaiGas National	Oil	Kazakhstan	8%	\$5,300
2013	Meidu Holding	Woodbine Holdings	Oil	USA		\$140
2013	Sinochem	Petrobras	Oil	Brazil	35%	\$1,540
2013	CNOOC	Kingfisher	Oil	Uganda	85%	\$2,000
2013	Sinopec		Oil	Venezuela		\$1,400
2013	CNOOC	Total and Wintershall	Gas	Argentina	10%	\$120
2013	CNOOC and CNPC	Petrobras, Shell, and Total	Oil	Brazil	10%, 10%	\$1,280
2013	Sinopec		Oil	Cambodia		\$1,670
2013	Sinopec		Oil	Sao Tome		\$150
2013	Shanghai Electric Power	Tanzania Electric Supply	Gas	Tanzania		\$400
2013	CNPC	ExxonMobil	Oil	Iraq	25%	\$1,250

\$158,550

Successful acquisitions do not automatically translate into successful operations. Compared to a series of domestic success stories, overseas M&As have proven to be more challenging or in many cases a painful learning process described by some executives interviewed (Nie and Lu, 2009).

1.3. Challenges / Barriers for Internationalization

To face the challenge of increasing global competition, domestic companies need to leverage their strengths overseas. Internationalization is the transfer of a firm's physical and organizational technologies from one country to another (Kotter, 2008). COIN (2013) put cultural differences, language barriers, and financing difficulties and regulatory issues as major challenges for Chinese companies going abroad. To date, while some barriers are inessential, others are of critical importance

and herewith I would like to underline some of them in association with internal issues as below.

1.3.1 Lack of Qualified Human Resources

Since 1960s, the oil industry has been in a boom-bust cycle. According to Jaffe et al. (2007), during the periods of low investment rooting from low oil prices, the industry tends to reduce employment levels, which in turn results in a reduction in number of students studying petroleum engineering relevant. Meanwhile, those with the required skills who are laid off gravitate towards other occupations. When oil prices began to rise, the absence of a large pool of trained and experience skilled labor will be a constraint on rapidly booming industry activities.

The situation in China is of dissimilarity, which brings extraordinary challenges to the business expansion, since unlike their major international peer corporations, Chinese company is with restricted access to either employing or dismissal of its employee. In fact, Chinese companies are struggling to identify and nurture an entire generation of a senior management team with the skills necessary to operate effectively on a global scale - such as familiarity with foreign markets, foreign language skills and experience managing global operations(Beebe et al., 2006)(Beebe et al., 2006). Whereas, with the implement of dual control policy over payroll and wage scales, China's SOEs are short of effective substitute options indeed. Gao Xiqing asserts one big difference between Chinese overseas investment and that of developed Western nations is the lack of talent and thus accordingly the greatest challenge for China's SOEs is to establish a mechanism to attract talents, retain them and allow talents to rise to their full potential (Hawley, 2012).

1.3.2 Incomprehension of Culture Divergence

The American Heritage Dictionary defines "culture" as "the totality of socially transmitted behavior patterns, arts, beliefs, institutions, and all other products of human work and thought characteristics of a community or population." As one of the last few socialist states, "the close involvement of China's government in some of the projects, the frequency with which petroleum projects are integrated into a wider package of economic and political deals, and the political nature of some of the host governments has triggered a wide range of political and strategic concerns" (Ma and Andrews - Speed, 2006). Except to the political misunderstanding, Chinese are inclined to put personal interests behind, which is not in line with the western mainstream. With respect to Kotter (2008), cultures can have powerful consequences, especially when they are strong, which enabling a group to take rapid and coordinated action against a competitor or a customer.

Corporate cultures are seldom given due attention, but misunderstanding of cultures creates misinterpretation of actions and motivations, which in turn creates suspicions and distrust. The vital point is that once losing of such a trust, it will be extremely hard to rebuild. Too often this subject is reduced to simplistic do's and don'ts and references to superficial characteristics and stereotypes, though studies have revealed that corporate cultures are more than that, which distinct from but related to the country cultures they are embedded in. Understanding and effectively bridging corporate culture differences between the Chinese parent company and the overseas investment company is not easy to do for those who having lived entirely within a single country culture, even more so if the individual has spent their entire career within a single company (Hawley, 2012).

1.3.3 Shortage of Innovation and inefficient R&D activities

The current laggard of technology for the Chinese firms has its historical cause. Nowadays, the importance of innovation cannot be exaggerated anymore since it is too pivotal to survive and grow for any individual companies in an increasingly competitive world, but undoubtedly many Chinese companies still compete on low-cost labor and aggressive pricing, rather than on innovative, branded products and services with higher profit margins. In addition to its own low efficiency R&D activities arising from bad organizing, deficiencies of information technology, Chinese companies investing abroad have increasingly attempted to buy businesses with technology and know-how, but with regards to its sensitiveness, frequently it is banned by the host government. It looks breakthrough of such a barrier more or less has to be of self-reliance.

1.3.4 Inexperience of Commercial Models

In many respects, it is reported that China's globalization drive is similar to that of Japan in the 1980s and Korea in the 1990s, but unlike Japan and Korea's carefully orchestrated industrial policies that nurtured global champions such as Samsung, Sony and Toyota, China does not have a centralized government body driving China's globalization efforts. China opened its market to foreign competition much earlier than Japan or Korea, which both adopted protectionist policies to allow their companies to develop scale and experience before competing head-on with foreign companies in their home markets (Beebe et al., 2006). Globalization is undoubtedly more than simply exporting, but the appropriate combination of organic globalization, joint ventures, strategic partnerships, or M&A is still a mystery to China's SOEs. Beebe et al. (2006)'s interview suggests that most Chinese companies are not yet capturing the full benefits of globalization by managing operations consistently across countries.

In truth, compared with established multinationals, Chinese enterprises do not have much of an advantage, except for ample funds. They'll have to learn quickly.

Especially when considering Murphy's Law (what can go wrong, will go wrong) as the rule, there shall be no exceptions relied on for overseas investment.

1.4. Scope & Objectives

The scope of the thesis is to review current internationalization practice of COSL and to propose alternative solutions for further developments. Through the review of leading international OFS companies' development trajectory and strengths, and further benchmarking of COSL's actuality with them, the thesis tried to identify the toughest challenges puzzling COSL and to give an illustration on how to survive in overseas market.

1.4.1 Leading Edge International OFS Companies Review

A status quo will be conducted to summary the world's three major OFS companies' global expansion strategy for sustainable developing and how catching up emerging markets with new opportunities. Further a survey of the strength and trajectory of the world's premiere oilfield services markets will be conducted to highlight the possible competence gaps for Chinese Companies to overcome with.

1.4.2 Review of COSL as a Case

Taking COSL as the case company, the author will provide a closer look of the current status of case company COSL's segments management and corresponding business performance to date. Conclusion of toughest challenges puzzling COSL will be drawn based on benchmarking with the world's three major OFS peers companies.

1.4.3 Proposed Corporate Restructuring of a COSL's Subsidiary

Indonesia market offers COSL with opportunity of going overseas for the first attempt in the true sense, since establishment of PT COSL INDO as the first overseas subsidiary in responsible for a country's market in 2005, the rapidly growing business gradually brings difficulties for the management, especially emerging challenges, such as Local Content requirement from the local government, Related Transaction concerns, potential Job Accidents, Contract Performing risks, and Taxation problems etc. all with potentiality of reliability disputes. The thesis has focused on the recognized risks lowering or elimination.

1.5. Methodology

Author has been assigned at marketing department of Oilfield Chemical Division, COSL to write the thesis which is mainly based on the real company case of COSL and

its major overseas subsidiaries since prior to the study program in UiS Author has ever worked as a country manager of Oilfield Chemical Division, COSL for almost 7 years.

Start from cross comparison of OFS industry literatures and theories to the case company COSL's overseas development strategy and practices, the thesis is try to draw out conclusions with regarding to the 4 perspective mentioned at 1.3 in this chapter. Data are mainly collected from companies' annual reports, official websites and meeting presentations etc.

By benchmarking COSL with its major international peers companies, clear overview of major challenges COSL confronting can be obtained. Meanwhile, survey for world's major OFS providers' way in Indonesia are conducted mainly based on local authorities' official websites, publications etc.

The thesis tries to identify the major challenge and take one of them for detailed illustration. With the specified challenges, Proposed Corporate Restructuring of PT COSL INDO as the first subsidiary of COSL will be introduced in detail to elaborate the decision making process of restructuring overseas management framework.

1.6. Limitations

As the world most prevalent and important energy source, its uneven distribution and increasing difficulty on extraction have brought far-reaching impact which is potentially influencing all of the related party. To summarize the challenges and resolutions for a Chinese Oilfield Services Companies' development requires good insights of the industry as well as enough experiences and knowledge of the particular case company COSL. Author do have 12 years work experiences of different positions within the case company COSL, but it is still challenging for the author to reflect the impacts of many other factors such as external economy and politic influences into the Industry as a whole due to knowledge limitations.

Meanwhile OFS in nowadays are closely interact with many external factors due to the remarkable attention to petroleum as a strategic resource. Therefore to examine the most appropriate strategies and practices also require good understanding of the marketing and operations strategies which again could be challenges for the author.

Though Author has ever realized the inappropriateness of the organization structuring when still working there and tried to push its restructuring forward as an early advocator. International commercial models in nowadays are closely interact with various governments, internationalized marketing, financing and operations strategies etc. which could bring high amending expenses. Therefore, to illustrate exploration of appropriate commercial models is not straightforward which again could be challenges for the author.

Further the research based on analysis of an oilfield services company might not be relevant for the other industries' oversea commercial model designing, for instance, most of countries are with special rules or regulations for petroleum related businesses, which need much attention in the process of experiences accumulation, challenges and solutions met in those process might not be issues for others such as trading and automobile industries. Meanwhile the particular challenges met by Chinese state-owned Companies as the new comer in the international OFS industry also may not be an issue for companies in other countries with long history of internationalization.

Chapter 2. Review of Leading International OFS Companies

2.1. Status Quo

The Oilfield Services Industry is made up of a mature set of companies, huge and small businesses coexisting, but the barriers to enter this industry are enough to scare away all but the serious companies. With respect to The-Economist (2012), OFS firms come in three flavors. Some make and sell expensive kit for use on drilling rigs or the seabed, such as FMC, Cameron and National Oilwell Varco, all \$10-billion-plus companies. Some own and lease out drill-rigs, which include Transocean, Seadrill, Noble and Rowan. The third group carries out most of the tasks involved in finding and extracting oil which is dominated by the world's three biggest services giants with broadest array of capabilities - Schlumberger, Halliburton and Baker Hughes. Besides the abovementioned integrated services providers, there have been some bellwethers with very specific functions emerging in corresponding market segmentation.

2.2. Leading OFS firms' Internationalization

Due to finitude and instability of each domestic market, three major OFS companies have been implementing internationalization strategy to buffer their market scale.

Schlumberger, with principal executive offices in Paris, Houston and The Hague, operated in approximately 85 countries as of December 31, 2013. Moreover, through acquisitions of foreign oilfield service companies Schlumberger has not only expanded its regional market share but also opened up new service areas. For example, by acquiring a stake in PetroAlliance Services Company Limited, a leading Russian oilfield services company, Schlumberger consolidated its presence in Russian oilfield services market. International revenue grew by \$3.2 billion in 2013, or 11%, on higher exploration and development activity – both offshore and in key land markets. With respect to Figure 7, Schlumberger is amongst the one with best geographically separated.

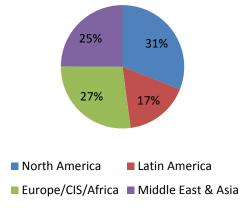


Figure 7 Schlumberger's Revenue Graphical Distribution 2013 (Schlumberger, 2014)

Halliburton, with principal executive office in Houston, took the initial steps toward becoming a worldwide company in 1926 and since then it has continued expanding internationally. With respect to Payne (2010), Halliburton reached global dimensions within the lifetime of the founder. Active in more than 80 countries, according to Figure 8 Halliburton derived 48 percent of its 2013 revenue from outside North America.

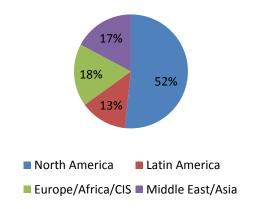


Figure 8 Halliburton's Revenue Graphical Distribution 2013 (Halliburton, 2014)

Baker Hughes, with the establishment of first overseas companies in 1949, shortly won the OFS market in Canada and Venezuela. In 1960, a subsidiary company was set up in Mexico. Today, with corporate headquarters in Houston, Baker Hughes do businesses in more than 80 countries, organized in nine regions and 23 geomarkets. During the year ended December 31, 2013, in line with Figure 9 approximately one-half of Baker Hughes' revenue and operating income were attributable to the area out of North America.

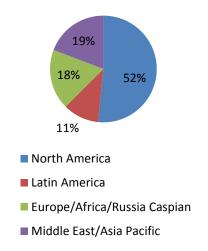


Figure 9 Baker Hughes' Revenue Graphical Distribution 2013 (Hughes, 2014)

2.3. Practicing of Integration Strategy

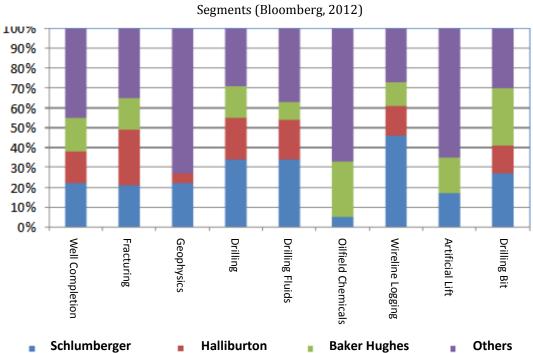


Figure 10 Worldwide Market Share of the three Major Oilfield Services Providers in Main Segments (Bloomberg 2012)

Via series of mergers and acquisitions, three major OFS companies are capable of offering the world's broadest array of products, services and integrated solutions for oil and gas exploration, development and production. In fact, they have almost covered all aspects of petroleum technology services. Relying on their own existing advantages, such as products manufacturing, expertise technology and extant market shares, the revenue and profit margins are maximized with expanded depth and breadth of operations or economies of scale. Figure 10 could be a proof on such

a trend.

Schlumberger was founded by the two Schlumberger brothers who invented wireline logging as a technique for obtaining downhole data in oil and gas wells. While its advantage on wireline logging is well maintained, new services lines are nurtured mainly by acquisitions. In 1956, Schlumberger acquired Johnston Testers, a US testing and production company, and later acquired Flopetrol (testing production of oil wells) in 1971, thus becoming a comprehensive logging company. In 1952, Schlumberger stepped in drilling market through the acquisition of equity interest in FOREX drilling rig company. In 1960, via Dowell as a joint venture with Dow Chemical, Schlumberger entered into pumping services for the oil industry. In 1984, Schlumberger reorganized its vertical drilling business and the drilling services under Dowell as Anadrill, which heralded the formation of integrated services market. In 1992, to fulfill growing clients' demands on integrated services and project management, Schlumberger set up coordination office in both Paris and Houston. In 1993, Schlumberger acquired IDF, thus becoming the world's major drilling fluids service provider. In 2010, Schlumberger acquired the world's second largest drill bit producer Smith International. Up to date, as an OFS giant, Schlumberger further develops towards more integrated direction and involves logging, drilling, cementing, comprehensive drilling, integrated seismic, reservoir management and integrated project management.

Halliburton was founded in 1919, through continuous internal improvements combined with series of external acquisitions which has gained unprecedented development. Inception, the company's main business is cementing. In 1932, Halliburton bought a drill stem test company and two years later it began offering acidizing services. In 1957, Halliburton acquired Welex Jet Services, which provides capability of electric logging and perforating services. In 1959, Halliburton purchased Otis Engineering Corporation of Dallas and started to offer well completions, oil (as well as gas) production, oil and gas wells control equipment and related services. The significant acquisition of Brown and Root of Houston in 1962 gained for the company the sort of subsidiaries that heretofore had been missing: industrial and marine engineering and construction firms. Brown and Root had been involved in many notable construction projects, foremost being its work in constructing the NASA Manned Spacecraft Center near Houston, but its construction work included especially off-shore production platforms. In 1998, Halliburton merged with Dresser Industries Inc., which has significantly developed its integrated services, project management, petroleum refining and chemical processing, technology, engineering and construction business.

Baker Hughes was formed in 1987 with the merger of Baker International and Hughes Tool Company - both founded over 100 years ago. Right as the above-mentioned OFS giants, Baker Hughes has moved towards integration steadily. In 2009, the acquisition of BJ Services Company enhances Baker Hughes in non-traditional jobs, such as deep-sea oil and gas exploration and business

competitiveness. Today, with a strong competitive edge Baker Hughes has operations in the reservoir consulting, drilling production, drilling services, formation evaluation, completion services and production services.

2.4. Technology Being in the Lead Strategy

Today, oil is considerably harder to find, but new technologies are making the once-inaccessible accessible (Elatab, 2012). The role of technology in modern oil and gas industry cannot be over-exaggerated anymore, thus accordingly it is of critical importance to the survival of any services providers. To lead or sometimes just catch up the development of the whole industry, OFS providers must put continuous technological innovation in unprecedented position. Only those with capability of settling difficulties confront, which may potentially be invincible. All of the major OFS companies attach great attention on scientific and technological innovations, with considerable manpower, material and financial resources. Of course, with respect to Figure 11, the achievement is notable.

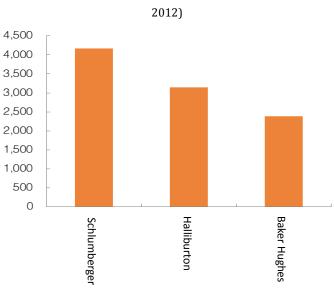


Figure 11 the Number of Patents Granted by 2007 (Bloomberg,

Schlumberger and its affiliates own and control a variety of intellectual property, including but not limited to patents, proprietary information and software tools and applications that, in the aggregate, are material to Schlumberger's business. As one of the largest suppliers in upstream petroleum, Schlumberger now outspends all other companies in the sector on R&D. With over 10,000 employees working on more than 600 projects in approximately 125 centers located in 15 countries worldwide and a huge investment of more than \$1.2 billion (accounting for 2.65% of total revenue) annually, Schlumberger has been granted 11,500 patents within just the last 5 years. As of late 2007, Schlumberger held 3397 basic patents in the major technical fields of the petroleum upstream sector, accounting for 3.4% of all basic patents in upstream petroleum worldwide and as to the field of well logging,

Schlumberger holds up to 16.8% of all basic patents worldwide (Yundong et al., 2008). Qureshi (2003) described Schlumberger as having taken the lead in using technology as a competitive differentiator to support premium pricing and gain market share.

Halliburton originated in technological innovation. Erle Halliburton as the corporation founder learned the cementing technique in California during a period of employment with the Perkins Oil Well Cementing Company that began and ended in 1916. Halliburton Getting hired and being fired by Perkins were the best two things that ever happened to him, Halliburton later said. Fired for suggesting too many method changes, he decided to go into the cementing business on his own and when he was able to prove his cementing techniques by controlling a wild well on a Skelly Oil property, a key step forward came (Payne, 2010). Technical innovation is adopted as an important development strategy. To maintain a competition edge in its core business, \$588 million was invested in 2013 which accounts for 2% of its total revenue. Following the establishment of the first research laboratory, Halliburton has set up a number of advanced research center worldwide. As of 2009, the figure of patents owned by Halliburton has been up to 7,000, which has significantly improved the competitive position and profitability of the whole enterprise (Yundong et al., 2008).

Baker Hughes lays extraordinary stress on research and innovation too. Baker Hughes consistently invests an increasing value and the figure in 2013 has reached a record high at \$556 million in research and engineering, which in percentage is comparable to its oilfield services peer group. Driven by increased investments and staffing at its technology centers, Baker Hughes continued to ramp up its research and development activity.

2.5. Ongoing Mergers, Divesting and Recombinant

A common feature amongst the three major OFS companies is that in the process of integration they are constantly divesting non-related businesses to keep the resources and capabilities accumulated on their business with competitive advantages, namely OFS industry. On the one hand, divesting could avoid loss or even spin off businesses without synergy effects with advantageous ones; on the other hand, it optimizes the use of corporate resources and capabilities and further strengthens the competitive advantage of its core business.

Schlumberger has more and more focused on Oilfield Services in recent years, in order to maintain its leading position in the oilfield services industry. In 2004, Schlumberger completing divestiture of SchlumbergerSema to Atos Origin could be an example. Up to date, most of its revenue is from the oilfield services, which is only 61% of its total revenue in 2001.

Halliburton strategically reorganized its entire business as two divisions as Energy Services Group and KBR Group in 2002. In order to strengthen its core business and

enhance the services integration, Halliburton successively sold its non-core businesses, such as insurance business and telecommunication business. Halliburton divested KBR and realigned its work into Eastern and Western Hemisphere operations in 2006, and in 2007, divided its service offerings into two divisions: Completion and Production, and Drilling and Evaluation, majoring in OFS.

In recent years, the revenue of the three major OFS companies is waved as Figure 12 and the reason is apparently arising from ceaseless mergers, divesting and recombinant, which is made upon both external circumstances and internal capabilities and has been taken as effective measures for their corresponding strategy of internationalization, integration and technology leadership since it helps to integrate and optimize internal resources and capabilities, reduce costs and improve efficiency. By means of M&A of various enterprises, the three major OFS giants achieved integration and internationalization in OFS industry; via divesting or selling shares of non-core business, the three OFS titans could get rid of the non-profit or even loss sector or spin off the low correlation business and thus accordingly consolidate its competitive edge on their core business. Historically, OFS companies with low margins on straightforward tasks were far smaller than their employers named as oil companies. Since 2011, the market capitalization of Schlumberger has been even bigger than several international oil companies (ENI, Statoil and Conoco-Philips included), which highlights a shift in the balance of power between oil companies and their flunkeys.

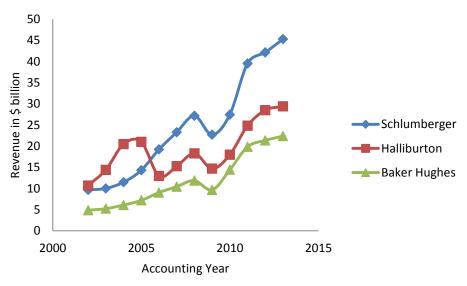


Figure 12 Revenue Changes for 3 Major OFS Providers

Chapter 3. The Case of China Oilfield Services Limited (COSL)

3.1. Status of the Chinese Oilfield Services Companies

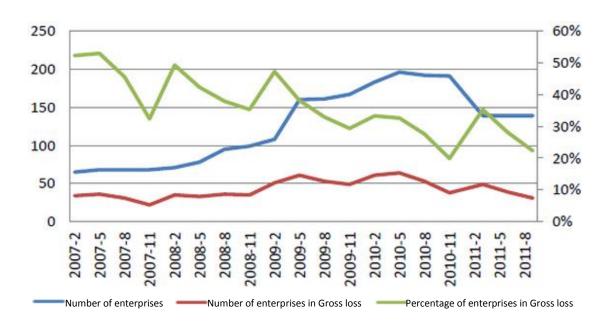


Figure 13 Status of China's OFS companies (Cao, 2012)

With respect to Cao (2012), the market size of China's OFS industry is accounted for around 10% of the global capacity. However, when compared to the international OFS industry, China has a relatively unique industry structure. A feature is that China's OFS industry is composed of numerous small businesses with scattered layouts and low level integration, much smaller than their international peer companies. A survey made by Peking University reveals that around 1,200 private OFS companies accounting for 10% of overall market share, the international OFS providers holding 5%, and the remaining 85% falling into state-owned ones. China SOEs prefer to use their own seemingly independent subsidiary OFS companies to fulfill most of their services demands for both domestic and overseas markets, which is understandable especially when considering the nominal clients and their sibling services providers are in fact pertaining to the same mother company. Obviously most of the Chinese OFS companies are actually state-owned too and generally follow their mother companies' oversea expansion steps. Taking OFS companies under CNPC as an example, there are 119 oil equipment manufacturing enterprises affiliated to its 31 bureau-level units, of which only 13 of them are with revenue more than RMB1 billion and more than 50% of them with revenue less than RMB100 million. Up to date, the vast majority of private oil companies offer relatively simple or even single service.

3.2. Services Segments and Business performance overview of COSL

3.2.1 Four Services Segments

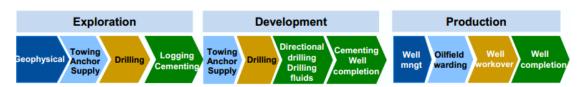


Figure 14 COSL's Service category (COSL, 2014)

With respect to Figure 14, China Oilfield Services Limited (COSL) is an integrated oilfield service solution provider with nearly 50 years of experience in offshore operation. COSL listed in both shanghai and the HK Stock Exchange. With its four major business segments of geophysical services, drilling services, well services and marine & transportation services covering the exploration, development and production phases of oil and gas industry, COSL is an all-round offshore oilfield service company with integrated functions and bundled service chain in China and even in the world. COSL not only provides services of single operations for the customers, but also offers integrated package and turnkey services; COSL's business activities are conducted not only in offshore China, but also in South East Asia, Middle East, Europe, Australia, North and South America and Africa. Hereafter a brief introduction to COSL's four service segments is as below.

Geophysical and Surveying Services

The Group's geophysical and surveying services are divided into two main categories: geophysical services and surveying services. At present, the Group owns 7 seismic vessels, 2 undersea cable teams and 7 integrated marine surveying vessels with annual acquisition capability of 28,000 km² for 3D and 26,000 km for 2D, which mainly provides services such as Seismic Data Acquisition, Processing and Interpretation services, Offshore Geophysical Survey and Geotechnical Investigation Services, Marine Environmental Investigation Services, Submarine Engineering Survey and Foundation Engineering Services, Geotechnical Survey and Gas Survey Services, Manufacture and Maintenance of Seismic Streamer etc. Besides, 1 twelve streamer seismic vessel for deep water and 1 underwater integrated survey vessel are under construction. The two vessels are expected to be completed between Q3-Q4 of 2014 and in 2016 respectively.

As a member of International Association of Geophysical Contractor (IAGC), COSL is a major supplier of geophysical services for offshore China with vast majority of market share, but also operates in other offshore regions, including Southeast Asia, Europe, America, Africa and the Middle East and provided quality services for a large number of oil companies worldwide with favorable appraisals.

Drilling Services

COSL Drilling mainly provides Drilling Service, Casing and Tubing Running Service, Integrated Drilling Service and other relative services. The division operates and manages a fleet of 40 Drilling Rigs (30 Jack-ups and 10 Semi-submersibles, being able to provide drilling services in water depths ranging from 5 m to 3000m), and 5 Modular Rigs and Land Rigs. Each rig is qualified with vessel classification certificates issued by ABS, DNV and CCS respectively. All of our rigs are equipped with advanced top drive systems, large power diesel engines, mud pumps as well as a full range of modernized mud processing and cleaning equipment, also with the ability to drill the HTHP wells for our customers. Meanwhile, COSL Drilling has four drilling rigs being built now, two 5000 ft-rated semi-submersibles and two high-premium 400ft-rated jack-ups. The rigs are scheduled for delivery in the end of 2014 and in following two years respectively.

As a member of IADC, COSL Drilling is the major offshore drilling services provider in China, as well as an important participant in the international drilling services. COSL Drilling has Over 10 years of experience in international market and the business has extended up to all 7 hot areas of offshore oil & gas over 20 countries and regions, such as South East Asia, Australia, Middle East & Africa, America, and Europe.

Well Services

Through continuous input in technology research and development, advanced technological facilities and an excellent management team, COSL is capable of providing comprehensive professional well services to clients. COSL WellTech Division, an integrated business segment of Field Services, R&D, Data Processing and Interpretation, Manufacturing and Product Sales, providing customers with services including Open Hole Wireline Logging, MWD/LWD, Cased Hole and Directional Drilling; COSL Oilfield Chemicals Division offers Drilling/Completion Fluid, Cementing, Environmental Protection and Chemicals Manufacturing & Sales etc.; COSL Production Optimization Division offers Production Management, Well Completion and Well Intervention to Maximize and Extend Production for the Lift of the Reservoir, furthermore, Reservoir Analysis, Fabrication and Sales, Project Design and Onsite Services etc. included.

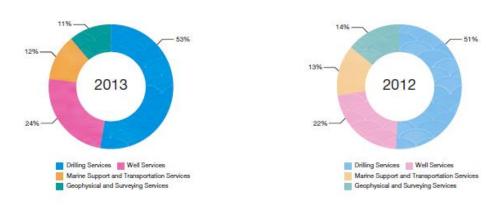
Certified by DNV since 2008, COSL is the largest offshore oilfield service provider in China both from its size and service range and has successfully expanded its markets to Indonesia, Myanmar, Philippines, Russia, Mexico, United Arab Emirates and many other countries.

Marine Services

COSL Shipping operates and manages the most powerful and largest OSV fleet in China, owns and operates about 120 vessels including anchor handling tug supply

vessels (AHTS), platform supply vessels (PSV), multi-purpose vessels and barges. As a professional provider of offshore support vessels, COSL Shipping provides various kind of vessel services, including anchor handling, towing, transportation, stand-by, ice breaking, firefighting, rescue, oil spill assisting, oil lifting and workover support to satisfy customer demands. Moreover we have shuttle tankers and chemical tankers to transport crude oil and refined petrochemical products. Since 2012, 4 COSL offshore supporting barges have been on hire in Indonesia.

3.2.2 Business Performance



Analysis by operation area

Region	2013	2012	Increase	Unit: RMB million Percentage change
China Offshore	18,465.5	15,225.3	3,240.2	21.3%
North sea	3,679.4	1,925.5	1,753.9	91.1%
Others	5,218.9	4,953.9	265.0	5.3%
Total	27,363.8	22,104.7	5,259.1	23.8%

Figure 15 COSL Revenue Analysis by Business (COSL, 2014)

In 2013, the revenue of COSL made the best historic record, amounting to RMB27.36 billion, representing an increase of 23.8% over the corresponding period and around 14 times of 2002 when listed in Hong Kong stock exchange market, of which 32.5% revenue generated from the international markets. While the Group's main source of revenue is still from offshore China, it has been with a clear trend of gradual diversification.

By services segments, due to increasing scale of the equipments and raising of the calendar date utilization rate, the drilling services segment achieved revenue of RMB14.67 billion, representing an increase of 30.3% over the corresponding period; the technical service capability of the well services segment continued to be enhanced, the industrialization of research and development achievements was launched in a steady process, achieving revenue of RMB6.48 billion, representing an increase of 33.3% over the corresponding period; the marine support and transportation services segment closely followed the growth in market demand,

expanding high end equipments and utilizing external resources in a reasonable fashion, achieving revenue of RMB3.25 billion, representing an increase of 10.4% over the corresponding period; the geophysical and surveying services segment was affected by the weather, sea conditions and repair of some vessels, it achieved revenue of RMB2.97 billion, and was similar to that of last year.

3.3. Benchmarking COSL with international peers

There is a radical difference between COSL and its international peers competitors, which is COSL is State-owned with limited assess on M&A activities, but still as OFS providers they have somewhat similarities to worth a discussion.

3.3.1 Steps of Internationalization

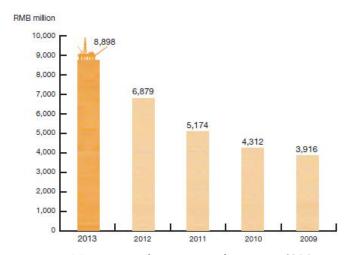


Figure 16 Revenue of International Business (COSL,

2014)

Founded in 2002, COSL's history could be traced back to 50 years ago, which is 100 years later than Schlumberger's, Halliburton's, or Baker Hughes' foundation. With respect to Eaton (2014), "Clearly, the low-hanging fruit has been picked," so challenges left for COSL are conceivable. During 2013, 2012 and 2011, no individual customer accounted for more than 10% of Schlumberger's consolidated revenue, while for COSL only CNOOC group has already accounted for almost 65% of its total revenue in 2013. Up to date, as an affiliated subsidiary of CNOOC group and a new comer to the OFS industry obviously such an opportunity is of great importance. Further, if Schlumberger's rule applied to COSL, an inspiring inference will be generated which is COSL's revenue will be even more than Halliburton or Baker Hughes and only behind Schlumberger in the industry. With respect to Figure 16, revenue sourced from the international business in 2013 amounted to RMB8.9 billion, representing 32.5% of the total revenue and an increase of almost 30%. But one side it is still dwarfed when compared to Schlumberger, Halliburton, or Baker Hughes, another side according to Figure 17 it looks like both the large equipment predominated composition and the disordered geographical distribution shall be

given due attention.

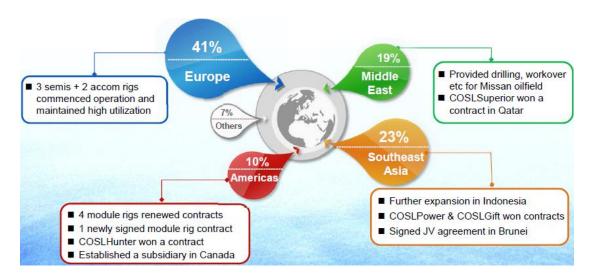


Figure 17 Status of International Market (COSL, 2014)

3.3.2 Performance of Integration Strategy

Integrated Drilling Service provided by COSL Drilling dated back to 1992 which is even prior to COSL's establishment. Aiming at providing integrated services to minimize clients' coordination costs with COSL's full stage capability in OFS industry, COSL's management has made great efforts to forge such a competitive edge amongst its international counterparts. Nevertheless compared to the propagandist practicing, such as Schlumberger in Argentina, Halliburton in Malaysia and Baker Hughes in Middle East etc., for a long period of time there are not many workloads for COSL, except recently in Iraq, fragmentarily in China and in Indonesia. On 5 November 2013, the Company and CNOOC entered into a new integrated services framework agreement in respect of the continuing connected transactions between the Company and CNOOC and its subsidiaries from 1 January 2014 to 31 December 2016. The resolution regarding the integrated service framework agreement dated 5 November 2013 and entered into between the Company and CNOOC was approved, pursuant to which, the Group and CNOOC Group will enter into various transactions contemplated under the Agreement.

3.3.3 **Developments of Technology**

With RMB560 millions of Research and development costs, 2013 was a year with significant improvement in the work in research and development of the Company as the Company obtained 158 patents during the year, of which 45 were invention patents. At present the Company has a total of 621 effective patents, of which 170 were invention patents. The industrialization of research and development achievements was launched in a steady process, achieving revenue of RMB6.48 billion, representing an increase of 33.3% over the corresponding period. The

investment, the number of patents and the operation capability as per below Figure is still poor, but undeniably the improvements are extraordinarily inspiring.

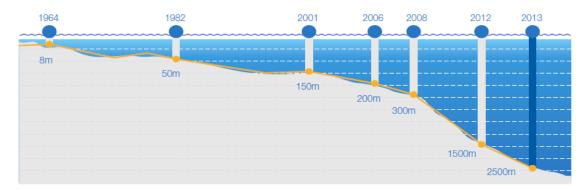


Figure 18 Operation in terms of water depth

3.3.4 Practicing of Mergers, Divesting and Recombinant

As abovementioned, on this dimension COSL is totally incomparable to its international peers competitors since it is with restricted assess on M&A, but it did happen once. Even up to date, COSL's technical and managerial capacities are insufficient to export services / assets to North Europe Markets on a regular basis, yet acquisition could be a shortcut. In 2008, COSL acquired Former Norwegian Drilling Company Awilco with US\$25 million. Though challenges inevitably occurs, but what COSL got is not only the assess to high-end Europe market and its corresponding promotion on COSL image, but also deeper drilling water depth (drilling water depth from 20 ~ 1,500 ft before acquisition to 2,500 ft after acquisition), healthier fleet ages (average fleet ages from around 16 before acquisition to over 50% fleets below 10 years old after acquisition), and higher specs fleets. According to Thomson Reuters, this acquisition would be the fourth largest by Chinese NOCs to date and is the first cross country acquisition of COSL. Today 5 years since acquisition, we could say it is a successful attempt.

3.3.5 Recognition of the Principal Contradiction

Newcomers to the international arena may encounter difficulties different from those of established multinational corporations (MNCs). Even internationalization are still in small scale and initial period, COSL has successfully expanded its services to most of the hot areas, such as the Middle East, the Mexico Gulf, and the North Sea etc.; even the integration solutions are not that as per expectation, it has revealed a good trend especially with the signing of the strategic agreement with CNOOC; even there is still a long way to catch up the latest technology development, COSL's operation capability is steadily upwards. With respect to its ownership differences compared with its three major international peers companies, commercial model

could obviously be a bottleneck. Herewith, Proposed Corporate Restructuring of PT COSL INDO one side could be a mirror of ever pitfalls, another side could be a good case for future improvements.

Chapter 4. Proposed Corporate Restructuring of PT COSL INDO

4.1. Background Information

In 2001, prior to COSL's establishment, the drilling company made an initial attempt towards internationalization by mobilizing BH9 jack-up drilling platform to Nigeria. The quick demobilization gave the hotheaded management a good lesson since BH9 even does not satisfy the area at all. Following the establishment of COSL in 2002, CNOOC's acquisition of Repsol-YPE's equities and acting role as operators for three offshore oilfields in Indonesia offered COSL with opportunity of going overseas for the first attempt in the true sense. To take the first step and launch operations promptly, in such a situation even necessary investigation could be useless time waste and everything is handled in a rush. At last due to time restrictions for application of necessary work permit, unsettled local experiences, and immature tax considerations etc., not COSL's registered branch office - BUT COSL, but a local agent -PT. Mutiara Virgo was assigned to run BH4 Jack-up drilling platform in Indonesia territory, with accumulation of conflict of interest between COSL and this agent which eventually brought COSL into lawsuits. Whatsoever, aiming at OFS market within Indonesia territory a local limited liability subsidiary - PT. COSL INDO was established in 2005 under the law of the Republic of Indonesia.

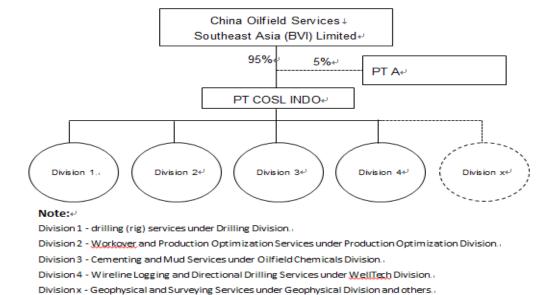


Figure 19 Shareholder Constitution and Business Framework

Businesses in Indonesia involve geophysical services, drilling, well completion, logging, directional drilling, well cementing, drilling / completion fluids, well work-over services and barge rental etc. and since 2005 all of COSL's four core business segments have penetrated the market. Accordingly, except barge services under shipping division has been spun off as PT SUMUDRA TIMUR SANTOSA (simplified as PT STS) from PT COSL INDO due to compulsory flag replacement required by Indonesia Government in 2010, the company has established four corresponding divisions plus one division for additional activities within PT COSL INDO as per Figure 19.

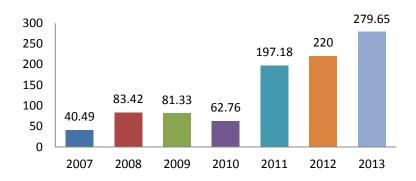


Figure 20 Revenue of Indonesia Business in Recent Years, in million US\$

Based on Figure 20, the business of the company has been rapidly growing and as per 31 October 2011 the company is having a total assets value of approximately US\$127,000,000 spread among the divisions. The largest assets relate to Division 2. The second largest assets relate to Division 3, furthermore down to Division 4 and Division 1. The company is assessing the risks which may be encountered by the company from performing its business activities under the relevant divisions and under one legal entity. Obviously the largest potential liability of the company relates to drilling activities under Division 1. Hypothetically, if the company conducts negligence while it is performing drilling activities and there is a claim from a third

party to the company due to such negligence, all assets (drilling sector excluded since they are all temporarily imported) of the company are in principle reserved for the purpose of the satisfaction of the claim by the company to such a third party. This will include the assets under Division 2 and Division 3 which constitute the largest assets of the company. In a word, any risks (such as potential accidents, local content requirement from Indonesia

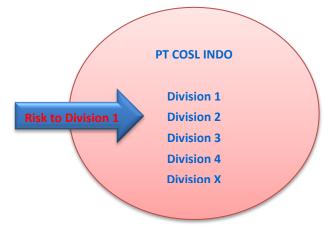


Figure 21 The Risk Interaction Among the various business Lines

Government, related transaction concerns, contract performing risks, and taxation problems etc.) to a specific division will inevitably cast a shadow on the others. In fact, at the time of initiating, the ownership of equipments in Libya is again in disputes due to organizational deficiencies.

4.2. Other Major Companies in the Same or Similar Industry with the Company

There are similar companies / competitors of the company that operate in Indonesia. However, such companies are not listed companies and hence there is not much information publicly on how they are operating. Based on some available public information derived from their publications and any other forms of public information, some of larger European or US competitors operate with more than one Indonesian subsidiary or entity in Indonesia. Below are some public information about them and how they are structured in Indonesia.

■ Group A

This group used to have many companies in Indonesia and have undergone a series of consolidation. It appears that they had many companies in Indonesia (carrying OFS) because they used to operate with many different partners. As their partnership is cancelled or the partners' shares are acquired, these companies are consolidated. Currently, they operate with three major companies. One of its Indonesian subsidiaries operates predominantly in seismic activities. Another company is in drilling and geophysical. The last company operates mainly in drilling and cementing. They have a common director team but each subsidiary has its own manager team that operates the "front office" and "back office" for the relevant subsidiary.

Group B

This group operates with two subsidiaries in Indonesia. The basis of having two subsidiaries is driven more than on the need and location of the project and management of its employees (for one company to employ all its permanent foreign workers and another to employ the rotation crew). Its major assets are located within one company.

Group C

This group has many more Indonesia subsidiaries compared to group A and B abovementioned. Most of the companies are engaged in separate and distinct oil and gas field services (i.e. a separate company for drilling, a separate company for enhancement services and cementing, a separate company for chemical, fluid systems, performance additives etc., a separate company for wireline and logging services etc.). The division is driven by how the group is structured worldwide and it

may be a result of their key performance measurements and control, size of operations etc. that each service has its own Indonesian subsidiary rather than a common Indonesia subsidiary that is used by all service lines. Each company owns their own assets and operational team but they share some common "back office" support provided either through a single Indonesian subsidiary or through a foreign affiliate.

Based on above, each group has their own unique Indonesian ownership structure and the different structure is created due to different legal, commercial or tax considerations. Whilst the purpose and reasons could differ, a clear common outcome is that they all have more than one company operating in Indonesia. Further, from public information available it would appear that they have a "flat structure" without any Indonesian subsidiary owning shares in other Indonesia subsidiaries (i.e. no Indonesia holding Co.).

4.3. Proposed Alternative Corporate Restructuring

All assets are registered in the name of the company. It looks apparent that the need to mitigate the operational risks and legal risks is a primary concern and hence there is a need to separate the more risky operations from the less risky operations. It may be worth to consider separating the assets to be under separate companies to be established by the company or the current shareholder of the company ("Newco") due to the reason of liability separation.

4.3.1 By Way of Project Locations

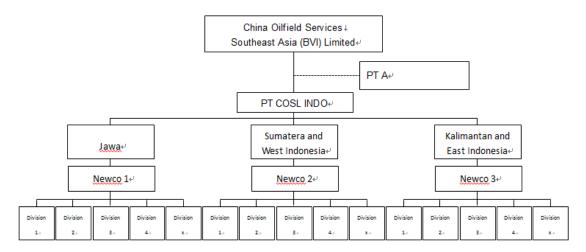


Figure 22 Restructuring as per Project Locations

The company may separate its business / assets based on the location of the work. For example, there will be a new company working for Java area, a new company working for Sumatera area, and other company working for Papua area. In this scenario, all the companies can have all licenses needed for every kind of work in the

relevant area. But due to the size of the projects currently held by the company is relatively still small, this structure of Newcos based on project locations is not preferable.

4.3.2 By Way of Specific Business Activities / Assets

In order to avoid risk and liability as abovementioned, the company may restructure its division based assets into separate companies so that the assets are not put in one company. The benefit by separating the holding assets is if one of the companies is being sued, the other assets of the company may not be affected by such a claim. The way separating the assets is by way of spin-off.

Option 1: Subsidiaries Structure

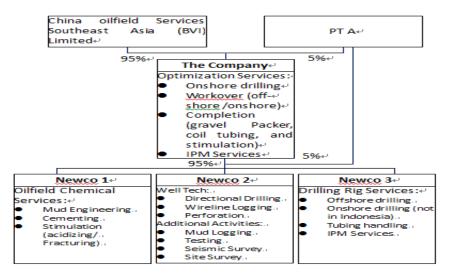


Figure 24 Subsidiary Structure as per Business Activities

Option 2: Sister Companies

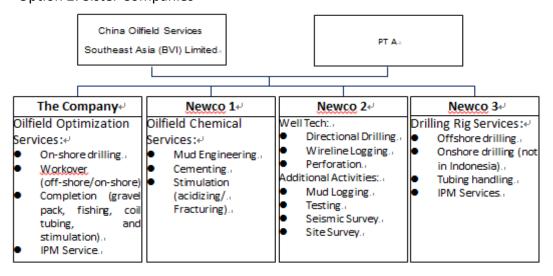


Figure 23 Sister Structure as per Business Activities

Since the current largest asset of the company is in Division 2, therefore activities currently held under Division 2 need attention from the company. Onshore drilling activities would however need to be excluded. The shareholders of the company (in Option 2) or the company and PT A (in Option 1) will furthermore establish Newco 1 to engage in the activities currently held under Division 3. The assets, employees and contracts of the company under Division 3 will need to be transferred by the company to Newco 1 (upon establishment). The shareholder of the company (in Option 2) or the company and PT A (in Option 1) furthermore establish Newco 2 to engage in the activities currently held under Division 4 and Division x. the assets, employees and contracts of the company under Division 4 and Division x will be transferred by the company to Newco 2 (upon establishment). Furthermore, the shareholder of the company (in Option 2) or the Company and PT A (in Option 1) will need to establish Newco 3 to engage in the activities currently held under Division 1. Onshore drilling activities (which are currently under Division 2) will be included in Newco 3. The assets, employees and contracts of the company under Division 1 (and under onshore drilling activities which are currently under Division 2) will be transferred by the company to Newco 3 (upon establishment). Newco 1, 2 and 3 will need to obtain new license to engage in their business activities.

4.3.3 Minimum Investment for the Newcos

Based on informal discussion with BKPM (Government Managing Sector) regarding the minimum investment and capital amounts for Newcos to engage in oil and gas supporting business activities, BKPM will let investor to determine the total investment and capital amounts in accordance with the business plan and commercial model of Newcos. However, BKPM expects that the total investment amount for each Newco (with one type of business activity) must be more than approximately US\$1,200,000 with the maximum ratio 3:1 for loan and equity, which means the minimum capital amount in such Newco would be approximately US\$300,000. The capital amount can be paid in cash or in kind. The in kind capital contribution will need to have an independent appraisal opinion in relation to the value of the goods that needs to be contributed as a capital in the Newco.

4.3.4 Asset Transfers

Equipment and machinery will be transferred to the Newcos using a deed of sale and purchase of assets. The transfer of machineries (capital goods) by the company may be subject to prior approval from the Directorate General of Customs and Excise ("DGCE") on behalf of the Minister of Finance ("Customs Approval"). This will be dependent in part on the terms of the company's investment approval and any import facilities granted upon such imported equipment. In addition, Regulation of the Minister of Finance No. 176/PMK.011/2009 regarding the Exemption of Import Duty on the imports of Machinery and Goods and Materials for Construction or

Industrial Development with respect to Investments ("RMF No. 176") regulates the transfer of assets which have enjoyed the facilities as provided by DGCE as follows.

- i. Pursuant to RMF No. 176, in the event a company intends to transfer its machineries which have enjoyed such facilities for a period of five or more years from the date of import customs notification, then the company must obtain prior approval from the DGCE to transfer such machineries.
- ii. As for the transfer of machineries which have enjoyed such facilities for a period of less than five years from the date of import customs notification to another company that has not obtain and exemption facility of import duty, the company must obtain prior approval from the DGCE to transfer such machineries and pay any outstanding import duties and interest at a rate of 2% per month for a maximum period of 24 months which is calculated from the outstanding import duties of the date of import duty notification up to the payment date. If however, the transfer of machineries is performed to another company that has obtained an exemption facility of import duty (such as a PMA company), such transfer must obtain a prior approval from DGCE, but the outstanding import duty and interest as abovementioned will not be payable.

In the second item, a reference to any outstanding import duties means any import duties that should have been paid by the company with respect to the machineries in question if such company has not enjoyed any import duty exemptions. For example, if a company has enjoyed an import duty exemption for a period of three years and intends to transfer the machineries to another company which does not have a principal license, then consequently the transferring company must pay import duties with respect to the machineries in question under an amount which will be calculated from the date such machineries have been imported into Indonesia up to the third year when they are to be transferred. Note that clarifications are yet to be provided, in the form of implementing regulations of RMF No. 176, on the mechanism for the transfer of machineries. In the absence of such implementing regulations, matters would in practice be driven by the policies and discretion of the authorities (in this case Customs and Excise).

4.3.5 **Employee transfers**

The transfer of employees of the company to Newcos will legally constitute a termination of employment by the company with consequent severance package entitlements under law No. 13 of 2003 concerning Manpower ("Law 13"). This is technically the case even if the employees are simply "transferred" to another group company. No exception is set out in Law 13 or implementing regulations for internal group transfers. In these circumstances, two main approaches are often considered

in practice as below.

- a) Start from Scratch: the employees will be terminated by the company and all legal severance entitlements will be paid out in full, following which the companies will re-hire the terminated employees under such new terms and conditions as will be agreed to by the employees and Newcos with no regard to their prior services; or
- b) Transfer of Employment: the company and Newcos will together provide an opportunity to the employee to become an employee of Newcos under the same employment conditions as those currently received with their prior periods of service and accrued entitlements being acknowledged and recognized by Newcos. This is an approach that is often used in practice but requires the full consent of all parties involved. The consensual "transfer" approach is not referred to as such under the relevant laws.

In the case of b), no severance package is normally paid although a termination of the prior employment relationship legally takes place. The employee is considered to have agreed to waive the severance package upon his/her transfer to the new companies on the basis that his/her accrued rights and entitlements are recognized by the Newcos and are payable in the future. In practice, each employee would be required to sign a written acknowledgement and waiver to this effect. In such a case, Law 13 would require that the terms and conditions applicable to the transferred employee at the Newcos must at least be the same as those currently enjoyed from the company. In the case of a), under Law 13, severance payment package must include a service payment which is must only when the employee having served the company for 3 years or more and, if applicable, a compensation payment, depending on how long the employee has worked with the employer, and also in certain cases based on the reasons for the termination.

The Anti-monopoly Law regulates that a director or commissioner of one company may not serve as a director or commissioner of another company that (I) engages in the same lines of business or related markets or (II) can jointly control an unhealthy market share for a good or service. If the situation does not create monopolistic practices and/or unhealthy business completion, in director or commissioner level, no regulation prohibits an expatriate from simultaneously holding multiple positions in two or more companies. However, for those on operation level, the employee will only be permitted to work in one company.

4.3.6 Transfer of Ongoing Contracts

The transfer of assets may require the consents/approval of third parties such as lenders/other creditors if such assets have been pledged as security for certain

financing. A creditor's right may be contractual in nature (e.g. under negative pledges) or under formal security interests. Therefore, relevant financing agreements shall be reviewed to ascertain if any third party's interests of this kind exist and need to be waived or released to enable a clear transfer.

4.4. Recommendations on an Optimum Solution

4.4.1 Tax Consideration

An OFS company in Indonesia will be subject to corporate income tax (rate at 25%), withholding tax (rate at 2% and by customers) and VAT (rate at 10%) etc. In Indonesia, OFS companies deal with the Production and Sharing Contractor (PSC) in oil and gas industry. According to the Indonesian tax law and regulations, such PSC are appointed as VAT collector. In this case, the company or the restructured companies will always be in a VAT overpayment position as they will have VAT credits on the costs but no VAT output on the sales. Companies are able to obtain their tax refunds after they have been subject to tax audit by the Indonesian tax office.

To spin off the current divisions of the company to be held and engaged by one or more new companies under the same group of the company has a legal and commercial benefit, which is to achieve separation of liabilities. Indonesia does not adopt group taxation or consolidated taxation. Each Indonesia subsidiary is taxed as a single entity and it is unable to transfer or receive tax losses from other group companies. Hence, unless there is careful tax planning, the benefit of the tax losses of an Indonesia subsidiary can be lost if it is not to be utilized by other group companies. This will be one of the Indonesia tax considerations whether to spin out the different divisions to different companies.

Based on the company's audit report as well as the company's annual corporate income tax return for the previous years, the company is in a profitable position and is in a "net income" position. Further data shows that each of division is in "gross profit" position, so it is unlikely that the result of the restructuring will result in unutilized tax losses. Assumed that the divisions will continue to be operated and trade profitably in the future and hence there will be no issues with assessing Indonesia tax losses trapped within the group. In fact, it is common for group tax losses to be effectively transferred by ensuring that commercially sensible transactions occur between the group companies to effectively transfer the tax losses from tax loss companies to taxable companies. Until very recently, this will require such domestic group transactions to be subject to domestic transfer pricing laws. Since November 2011, subject to certain exceptions, domestic transactions between related Indonesia parties are excluded from satisfying Indonesian transfer pricing rules. Which will provide more flexibility in allowing careful commercial and tax planning to be carried out to maximize the use of any such tax losses (if any) within the Indonesia group. Broadly, there will be no real or significant tax advantage that can be achieved by spinning out the company's operation to various entities, but the "disadvantage" of having separate entities in terms of tax losses can be mitigated with careful planning and should not be a critical factor in determining the outcome of the decision of the group restructuring. Though, the increase of tax administration in term of VAT reporting for each entity will be inevitably happen.

4.4.2 Structure Considerations

One of the considerations for the restructuring is the use of an Indonesian Holding Company that will hold majority shareholding interest in the rest of the Indonesian subsidiaries. From an Indonesia tax perspective, have such a structure or a flat structure (i.e. all Indonesian subsidiaries are majority held by foreign entities) is neutral. That is, there is no additional Indonesian tax that will be levied by having a two tier Indonesian structure, provided that the dividend from the Indonesian subsidiaries are from retained profits and Indonesian holding company has 25% or more shareholding in the Indonesian subsidiaries, the dividend paid is exempt from domestic withholding tax and is not taxable to Indonesian holding Company. This means both a single and two-tiered Indonesian group structure are equally acceptable. Thus accordingly a flat structure will be preferred. It is apparent to mitigate the operational risks and legal risks is a primary concern and hence there is a need to separate the more risky operations from the less risky operations. The drilling operations or division was advised by the company to be the riskier operation. Therefore, the suggestion was to group the non-drilling divisions in a separate company and spin out these divisions from the drilling income. The recommended structure is outlined as below.

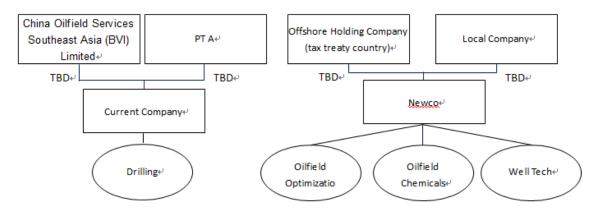


Figure 25 Current Proposed Structure

With respect to the above structure, there are undermentioned considerations.

 As the other division are small operationally compared to drilling, it is possible to consolidate them to a single entity. Assuming this is the proposal the company needs to consider other factors such as costs of obtaining new licenses, the capital gains tax implications on transfer of the assets, and employees, etc.

- Based on preliminary discussion with the foreign investment review board, the minimum additional investment to set up Newco will be US\$1.2 million for each and US\$ 300,000 will be in the form of cash of assets contribution, it still open to negotiate with the foreign investment review board whether if three businesses are to be operated in Newco, whether the minimum additional investment will be US\$1.2 million or a higher amount.
- There could also be a need to keep the company with all the licenses to ensure that it is able to tender for all types of project. Being a new company, Newco may not have the necessary "experiences" to tender for projects and may have to work together with the company in tendering.
- It is still open to transfer the drilling division to Newco. However, given that it is the largest division by revenue and has the higher valued contracts signed through tender processes, assigning these assets or contracts to another company could result in disruption in operations and retendering. A closer legal and commercial review will be required to be undertaken.

Chapter 5. Discussion

The thesis examined current internationalization practice of COSL, from which, the author tried to identify one of the major challenges and its corresponding resolutions along with the company's internationalization process focusing on commercial models. In light of the COSL's benchmarking to its major international peer companies, herewith a further review to the listed challenges / barriers in Section 1.3 is necessary.

5.1. 4 major challenges and its Corresponding resolutions

Demands on Qualified Human Resources could be tackled through training international talents (we could be an ongoing example for such an effort) and enrolling employees with good education (in 2013, the company newly recruited more than 2,000 fresh graduates from the university), the company are now able to export managerial, technical employees as well as labors to foreign markets. Human resources localization is also the key for

overseas regional success. The delicate restructuring of PT COSL INDO has aimed at maintaining the current employed.

- Though frequently ignored, cultural divergence is of high potentiality to significantly impair the organization. An efficient system construction is necessary. Besides, while we are still initial process of nurturing our domestic employees to adapt to the outside, the participants of local employees will be helpful to boost such a process.
- Inexperience of appropriate commercial models has been raised at an unprecedented level due to we are inherently in shortage of relevant authorizing on it. Whatsoever, the restructuring of PT COSL INDO gives us an opportunity to set the organization in a more efficient way. In future, with the ongoing expansion to overseas market, COSL shall be of more self-confidence.
- Shortage of innovation or technology content compared to the major international peer companies will be a disadvantage in long term, but with persistent concerns from COSL's management and continuous high proportion investment the operation capability has been in process of stretching. Combined with optimized M&A, a further advancement shall be conceivable.

5.2. Recommendations for further steps:

- The importance of appropriate human resources cannot be amplified anymore, besides training and enrollment of Chinese Employees in domestic markets, COSL as an international player should further improve its human resources composition by enrolling and training more international talents directly from overseas markets locally. An international talents pool separate from the system of Chinese domestic employees should be set up for all around needs.
- To catch up the latest progress on technology, investing in technology innovation via corresponding overseas cooperation with relevant agencies shall be considered and practiced.
- More aggressive actions shall be adopted by the management towards international market. With time going on the internationalization will be of more and more challenges since the oilfield service is experiences based in many cases. The Author has noticed that unlike the domestic market there

are no clear boundaries for the three Chinese SOEs (CNPC, Sinopec and CNOOC) in oversea market. Frequently, they are mutually preferred, but as an international player, COSL shall try to grasp more outside opportunity and expand its clients groups. Of course, the commercial model shall be well designed to minimize corresponding risks.

- While M&A of equipments predominant companies offered an opportunity for immediate inorganic growth. As a shortcut to high tech or high-end market, M&A of leading well services providers with state-of-the-art technology in the markets shall be seriously considered. COSL's technology is still insufficient to participant high end markets such as unconventional or deepwater wells.

5.3. Follow-up Process since Conclusions

Considering more than 20 sets of cementing units are running in Indonesia, which is with high risks arising from its extensive distribution and comprehensive operations. Since November 2013, a new company named as PT. COSL Well Services has been registered for its separate running. Different from PT COSL INDO, its shareholder has used a subsidiary of COSL in Singapore since it is with 5% percent tax benefits compared with China Oilfield Services Southeast Asia (BVI) Limited. The reason to retain COSL is for brand consideration. While to date it is not yet in use, the management has considered setting up a company for every division.

5.4. Challenges confronted in writing the thesis

The challenges author confronted in writing this thesis is first to examine international marketing and managing with company internationalization perspectives, in nowadays, with the demands for high efficiency services, internationalization itself is high related to marketing and operations as a whole. So the thesis content has to relate to internationalization theories and practices as well besides commercial optimization. Secondly COSL as a relative new comer to oilfield services industry do not share many similarities with other Major oilfield Services Providers such as Schlumberger, Halliburton and Baker Hughes. Therefore comparative discussions are not easy to conduct in the thesis.

Chapter 6. Conclusion

It is unnecessary to deny COSL's achievements. Since its establishment in 2002, the revenue both domestic and overseas has been gradually moving upwards and in 2012 it ranked 13 in the industry with its ranking 12 assets.

Meanwhile in the process, the challenges and pitfalls the company faced has always been significant due to many reasons such as lack of qualified human resources, incomprehension of culture divergence, inexperience of operating models, and shortage of innovation and inefficient R&D activities etc. Based on brief analysis to the situation, the author has made a significant finding on imbalance investments to recognized challenges. While pitfalls on others are appropriately handled, deficiencies on commercial models are seldom cared by the organization which is bringing difficulties for its business running.

Based on the above findings, aiming at eliminate or lower the risks confronting the company, such as local content requirement from the local government, related transaction concerns, potential job accidents, contract performing risks, and taxation problems etc. The author exemplified the major international peer companies first, analyzed the risks from tax and legal prospects and drew a recommended restructuring proposal. After all, companies that learn efficiently from their experience are able to expand overseas faster and with fewer mistakes.

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