CHAPTER THREE

Resource Contention: Resource Control or Market Competition?

The concomitance of "resource exhaustion" and "resource war" is the prevalence of resource contention theory. The increasingly intense competition of international energy and resources led energy or resource security become the focus of the international community. The overseas resources investment was not only portrayed by the media as the "war of oil," "global energy competition," "energy hegemony," and "resource control" but many analysts in the world also believed that some countries are engaged in fierce energy and resource contention.

In essence, the current international resource competition or contention should be more precisely described as "global resource exploration and development and market game," the core of which is more about the profit and market competition among major companies than the contention of resources among countries. They aim to obtain high profit brought by higher price of oil as a result of overseas investment and hence enhance international market share and influence but not to control resources. Under the context of peace, as the global energy and resource markets are becoming increasingly optimized and participants and influencing factors are growing, it is unnecessary and increasingly impossible to control resources.

RESOURCE CONTENTION: CAN RESOURCES BE CONTROLLED?

There are many similar concepts about "resource contention," such as resource competition, resource plundering, resource control, and so on, the logic of which is much similar to "Resource War Theory." Its premise is that oil, gas, and other resources are the greatly limited and nonrenewable strategic resources, which, as such, often lead to fierce competition among countries.

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Compared to war, resource contention or competition is lower in intensity but higher in frequency. In many articles we often read the terms like "resource contention," "resource war," etc., which, however, are discussed mainly from the angle of market competition, political affairs, and diplomatic games, different from the "war" in the general sense. "Resource war" does not refers to the war or armed conflict in military sense, but the war in the sense of competition, not emphasizing bloodshed conflict, but market contention or competition.

Although the cases and scope of the resource war are still relatively limited, the scope of resource contention and the concept involved are much broader. Resource war ranges from the energy competition and game between countries and the big powers' control of the world resources to resource investment and market competition, competition for oil and gas pipeline, and the contention for discourse power for the so-called market prices of oil and gas resources.

When it comes to resource contention or resource control, what occurs to people's mind is the quote by Henry Kissinger, the former US Secretary of State: "Control oil and you control nations, control food and you control the people, control currency and you control the world."

The relevant articles mostly analyzed America's control of resources. For example, in order to secure security in the energy sector, the United States strived to contend for oil and gas resources around the world. To achieve worldwide hegemony, the United States resorted to controlling the world oil and gas market and the main energy production regions and supply lines. Because the control of world's oil and gas resources is equal to having the "clamping force" against the rest of the world. Every administration in the United States had taken the control of world oil and gas resources as the top priority in its governance. One of the US strategies to contend for energy was to increase the wanton control and influence on the world's oil and gas transportation pipelines. The control of Persian Gulf equals the control of Europe, Japan, and China, and equals to keeping the switches of tap in hand [1].

The above analysis pointed out the purpose and role of some major powers in controlling resources, without casting light on how to control resources or whether resources can be controlled. Under the tendency of the increasing optimization of international market and the growing interdependence among nations, it is difficult for one country to control the resources of another country, and the resource countries will not allow other countries to control their own resources.

Furthermore, what Kissinger said "if you control oil" is unachievable, let alone the so-called "you control all nations," It is impossible to control oil of all countries around the world, with no similar case in history, and it might be likely only after controlling all countries. The control of the some countries' oil may be only temporarily achievable in today's world, but these oil or other resources will eventually return to the market. What Kissinger said aims mainly to emphasize the enormous influence of oil on other countries' diplomacy, especially during the oil crisis, and it cannot be simply interpreted as in order to control some countries, it is must to control their oil or other resources.

Chen Weidong, chief economist in China National Offshore Oil Corporation (CNOOC) Research Institute, argues that he has been deeply impressed by Kissinger's words, but later he doubted about it. He points out that over the past 40 years, the world has greatly changed. He states that if there were a chance to talk with this wise man who rode the whirlwind in American politics for a half-century, he would like to ask him for an advice on how to evaluate the status of oil, food, and money in the current world, who could control the world's oil and food, and whether it is true that controlling oil would certainly means controlling all countries. Judging by common sense, he believes that today wise Kissinger would not repeat what he said before [2].

The control of resource cannot be achieved by war and conquest. Energy contention and resource control only occurred in local campaigns of the large-scale battles like the Second World War, with an aim to increase their own energy supply of war and destroy the supply of enemies, so as to strengthen one's own fighting capacity and tilt the balance of victory towards themselves as much as possible. In the Second World War, for example, the contentions for Baku oil field in Caucasus (between Germany and the Soviet Union), for Indonesian oil field (between America and Japan), as well as the destruction of each other's oil pipelines, were aimed at, on one hand, getting a reliable and adequate supply of oil, and on the other hand, destroying the enemies' oil supply to paralyze their tanks and planes. During the war, Japan plundered large amounts of oil in Southeast Asia. But because the United States imposed oil embargo on it, its oil reserve could only be used for 3 months, and as a result, Japan had to launch a desperate attack on Pearl Harbor. During the Iran—Iraq war, the two countries frequently launched air strikes or bombed each other's oil facilities, such as oil fields, oil refining bases, and oil export ports just to consume each other's fighting capacity. Even in the above-mentioned state of war, the occupation, control, or destruction of resources such as oil fields and mines was only to meet the needs of war, rather than control the energy resources of the other country for consumption or grab these natural resources as their own. In this sense, the decisive factor for the outcome of war is military and economic power instead of the control or occupation of resources.

If the occupation of the oil field in the battles during the war is not the control of resource in real sense, then when the victorious country occupied the territory of the defeated country, does it make sense that the victorious country controls the resources of the defeated or keeps the resources of the defeated country as its owns? If war changes the territorial ownership, that is, a country occupies the territory of the defeated country and incorporates it into its own territory, and it is also recognized by the international community, then it can be said that this country occupies or controls the defeater's resources. But the key point here is the occupation of territory rather than resources. Since the Second World War, there have been less and less cases of the occupation of another country's territory and changes of territory's status. Since *Charter of the United Nations* was signed and came into force in 1945, the era of plundering resources and territory by large-scale wars and military actions has come to an end. No matter how powerful a country is, it has to depend on normal means such as business and trade to obtain resources. The main content of *Charter of the United Nations* is that all nations, big or small, are equal, and their national sovereignty and territorial integrity are inviolable.

In 2003, the Iraq War launched by George W. Bush administration was conceived by many media and analysts at home and abroad as the typical "oil war," or the war to control the oil resources in Iraq. The motivation of Iraq war or whether it is an oil war has been discussed in Chapter 2, "Resource War": Will Mankind Fight for Resources?, so what follows is mainly discussed from the perspective of resource control.

First, America's occupation of Iraq was only temporary. Later, facts show that Iraq's territory does not become the territory of the United States, Iraq's oil and other resources still belong to the Iraqi people, and the United States does not possess Iraq's oil resources or enjoyed the privilege of acquiring its oil resources. The oil to be imported from Iraq by the United States can only be purchased in international markets.

Second, it is still the Iraqi government that remains the deciding subject in Iraq's postwar oil development or bidding of oil resource. Before the bidding, it was widely believed that American companies would win most of the high-return projects. Andres Cala notes that it is widely believed that George W. Bush, born in oil-bearing families, would definitely hanker over Iraq's oil, and so would American taxpayers who had already suffered losses because they were forced to pay for the country's security and reconstruction after the war. It was clearly seen that even if all of Iraq's oil flew into America's oil tanks for storage, it would be taken for granted, because it would be impossible for Iraq to reconstruct the post-war economy without America's participation [3]. But unexpectedly, American oil companies did not participate in the first two oil biddings to foreign companies conducted by Iraq after the war. Although in the following several rounds of tenders, ExxonMobil Corporation of the United States and other companies won the bidding of some projects, they did not enjoy any privileges or discounts.

Third, although the United States has a great influence on Iraq's political situation, it cannot control the oil trade of Iraq. F.W. Engdahl, the author of *The New Energy Wars*, asserts that America's occupation of Iraq was not mainly for getting oil at a low price but for preventing oil from flowing to its emerging rivals, especially China. Oil in the Middle East originally belonged to the United States—British sphere of influence, and the aim of launching this preemptive war was to leave China no space for development there. Sending troops to control China's major energy sources, and then setting traps for China's future economic development, naturally became a matter of paramount importance in the military and geopolitical strategy implemented by the Bush family and the Rockefeller Empire [4].

Here, aside from whether the United States intends to contain China and how to contain China, it is quite doubtful whether America could stop oil flowing from Iraq or the Middle East to China, without mentioning that China had occupied the biggest share in Iraq's current oil development. In peacetime, the United States cannot prevent Iraq's oil from flowing to China through normal trade and would not stop oil being shipped to China in terms of transportation. In wartime, if a war broke out between China and the United States, it would be the military power that plays decisive role. Even if Iraq's oil could be sold to China, whether it would be transported to China would depend on military forces between the two countries, regardless of whether the United States had the control of the oil resources in Iraq or the Middle East.

In addition, there are concerns about terrorists' control of some resource countries. In this regard, Duncan Clarke believed that even if terrorists had the control of oil-rich countries, they would still surrender to the economic law. Even if terrorists or the dictators had the control of the resources in a country, they would all need to play the role of resources and comply with the laws of the world energy market. When world markets are getting better and supply is relatively adequate, if they held resources in their hands without exporting it, they could not achieve their political and economic goals [5].

OVERSEAS INVESTMENT IS NOT EQUAL TO CONTROLLING OTHER COUNTRIES' RESOURCES

With focus on overseas resource investment, most of the analyses about resource contention or control considered overseas resource investment of some countries as resource contention. They believed that western oil companies scrambled for oil resources in the Middle East, while China contended for resources in Africa, Central Asia, Latin America, and so on. The remark about China's practice of "mercantilism and neocolonialism" is widely accepted in the west.

In discussions and debates on investment in overseas resources, people are most concerned about "equity oil" or "share oil." In essence, overseas investment and owning shares and "equity oil" in oil fields or mines does not mean controlling resources. Overseas oil investments mean some ownership of oil fields only in a commercial sense, but it will not really guarantee the supply of oil. Li Junfeng, director of the National Center for Climate Change Strategy and International Cooperation, pointed out that many of the analyses on this phenomenon are based on a judgment that companies in China and India could and are willing to get "equity oil" and ship it back to their own countries to sell at lower prices than the market. In the modern market context, no major oil-producing country can tolerate the monopoly of oil resources unless it is under certain threat. During the 1973 embargo, those western oil companies that controlled oil in the Middle East failed to protect their own countries. The British government, despite the ownership of 50% of BP's share, could not guarantee oil security [6].

Robert Predo, the former director of International Energy Agency, said the British government's aim of holding shares in oil companies in the 1970s was to ensure oil supplies. At that time, the British government gained 51% "equity oil," but oil was still run in market transactions. The British government was greatly shocked by the fact that BP had offered to sell oil to the international oil market rather than to the British government. But then the problem was solved appropriately. BP took the North Sea's high-quality crude oil for sale in the international oil market, while the United Kingdom repurchased the oil from the international crude oil market to meet its actual needs for crude oil and oil products [7].

Dong Xiucheng, Professor of China University of Petroleum, also points out that there is a widespread misunderstanding among many common people and even some government officials that when our energy enterprises purchase foreign oil fields or mines, those oil fields and mines will belong to China, and if more are to be purchased, there will be no worry about energy shortage. As Dong said, this is extremely wrong, because overseas merger and acquisition attempts to gain the interests of a certain overseas enterprise, but gaining interests is not equal to owning resources. For example, if an oil field is worth 500 million Yuan, and a Chinese investor invested 400 million Yuan, thus he owned 80% of the shares, becoming the major shareholders and chairman of the board, but that only indicates that if this company makes profit, dividends will be given to him according to this ratio, but it does not mean that if this oil field produces 10 million tons of oil, he can get 8 million tons and ship it back to China. Underground resources still belong to the host country; this company, in essence, is equivalent to the foreign-funded enterprises of those countries. Take the United States as an example. Though American big companies have oil fields everywhere abroad, the oil is also imported by trade, rather than being directly transported to America by the overseas companies. The same is true of iron ore [8].

The competition of overseas investment is essentially the competition for market and profit. In the world today, it is risk-based competition that is in line with the game rules rather than the war that may dominate the allocation of resources. In peacetime, competition for energy is actually a battle for profits and markets with the aim of gaining high profits by selling more oil rather than limiting oil consumption of other countries. Although oil supplies are affected by international political events, oil, as an important commodity with huge profits, is still largely dependent on market mechanisms. The resource contention among many great powers is the competition in accordance with the international rules, with cooperation strategy as the generally adopted way. In peacetime, whether it is between the consuming countries or the supplying countries, the competitions are mainly for pursuit of profits, and the more intense the contention, the more global the investments, the more abundant the supply in the international market will be.

Following the logic of resource contention, the consuming countries should more actively seek for, contend for, and invest in resources around the world in order to meet their own consumption. But in fact, it is not only consuming countries but also oil or energy companies in many resource countries that are very active in international energy resource investment. Multinational companies in the resource-rich countries such as Russia, Australia, Canada, and Norway made large amount of investment abroad, with gaining profits and market to enhance their international competitiveness as their target, instead of shipping the so-called resources or "equity oil" back to their own countries for domestic consumption.

Some analysts also mentioned that the control of or contention for the resources in Central Asia by the countries like Russia is also, in fact, mainly determined by price and profit. Russia's so-called resource control of Central Asia is, firstly, to reap returns through investment and secondly to buy oil and gas from Central Asia and sell it to Europe through Russia's pipelines to make profits. Of course, it is inevitable to have political and diplomatic considerations such as strengthening or controlling these countries, but it does not certainly aim at transporting these resources back to Russia for domestic consumption.

THE LOOSE TIE BETWEEN OVERSEAS INVESTMENT AND ENERGY SECURITY

The relationship between overseas investment and energy security has been a hot topic in energy security for many years and is also one of the most misinterpreted subjects about China's overseas energy investment by foreign, especially western media. China's overseas energy investment is interpreted by some as mercantilism, just for China's energy security. In the book *Myth of the Oil Crisis*, Robin M. Mills pointed out mercantilists believed that in order to safeguard energy security, it is preferable to control oil, gas, and associated infrastructure by commercial means. They proposes that countries can adopt some methods to arbitrarily "possess" overseas oil fields (or other resources) and it is greatly likely to ship "their" oil back to their homeland to ensure their energy security.

In fact, overseas investment is a part of transnational investment, which has limited impact on a country's energy security. With the acceleration of the economic globalization, the commodity attribute of the strategic material of oil is becoming more and more prominent. The globalization of the oil market makes it increasingly uncorrelated that who buys and who sells a barrel of oil [9]. Matthew Parris wrote in his article "Relax, Beijing Won't Take All of our Pies" that the western unease about China's investment in Africa was a paranoid. He believed that since we lived on hunting and gathering fruit, a deep-rooted and original fear had always been accompanying the imagination of mankind. Our competitors were trying to monopolize the resources or food that we live on, so that we could not get food or get closer to the places that were indispensable for our survival. We could not help but figure out ways to defeat them to secure our right to get resources. In order to achieve such goals, dog would encroach on the manager, and human beings, although we no longer live in caves, would still have the impulse which was more matched with the caveman's, that is, the impulse of unjustified anxiety.

Chen Xinhua said many people in other countries thought China's overseas oil and gas development was the Chinese government's organized activity for its energy security, but in fact, the company's motivation is greater than that of the government, and China's oil companies' "going global" to develop overseas oil and gas resources is a part of the Chinese economy to integrate into the world. Even the companies that manufacture refrigerators and washing machines had built factories abroad, then why can't oil companies go overseas to develop oil and gas resources? On a deeper level, he thinks Chinese companies are actively developing overseas oil and gas resources, which may be driven by several factors: developing new upstream resources as the basis of long-term development of the company; economic interests with a strong desire to share the huge profit between oil market price and average production cost; exploiting their own advantages in market, engineering, and techniques, as well as labor to carry out international business; and making better use of the huge foreign exchange reserves held currently by China.

According to the assessment made by US Department of Energy about the impact of China's overseas oil and gas mergers and acquisitions on American national security, China's overseas oil and gas acquisitions could not strengthen China's energy security and would not weaken the energy security of America. Since most of the overseas "equity oil" possessed by Chinese companies were sold in the international market, China's overseas oil and gas development is to increase supply to the international oil market.

The control of energy assets is not equal to limiting the export or supply of energy. As mentioned before, acquiring the benefits or shares of overseas minerals and oil fields does not mean that those shares could or may be shipped back to their own countries for domestic consumption. Similarly, for various reasons, even if a country controls, restricts, or designates part of its "strategic" energy or resources as "not-for-sale" products, it does not mean that the country delimits energy or resources as "not for sale" and restricts their exports and trade. Out of national security, the United States obstructed CNOOC from acquiring Unocal but did not and would not prevent Chevron from selling its products in Asia and the Pacific to China after acquiring Unocal. Chinese companies sold much of the oil shares acquired in Sudan to the United States and Japan.

WHY ARE OVERSEAS ENERGY ASSETS FAVORED?

The amount of overseas assets is an important component of a company's strength and international competitiveness. The resources or assets of the international energy giants like ExxonMobil, BP, and Shell are largely globally allocated, and many companies have far more overseas assets or resources than domestic ones. The so-called resource contention or control makes sense from the perspective of company operation strategy, or competition, and such resources more refers to assets or resources in terms of management or investment, and mainly the amount of ownership or share of oil fields or mines. For a company, the more the share or ownership of overseas oil fields, the more profit would be usually gained, and the stronger the competitiveness in the international market.

On May 18, 2011, PetroChina announced that by 2015 overseas operations would amount to 200 million tons of oil and gas equivalent, equal to its domestic output. This caused a sensation in the media. According to public opinion, Chinese companies expand and obtain overseas oil assets in order to meet the growing domestic demand, and in the long run to safeguard China's energy security. This is a misunderstanding, as Yu Sihe said. In fact, the overseas output and reserves of Chinese energy companies are more meaningful to the investors than consumers. Though China hopes to secure energy supply through international energy cooperation, Chinese energy companies' mergers and acquisitions, investment abroad, and their increasing of reserves and output are activities of investment driven by commercial interests, which has little to do with the country's energy security, at least at present.

Competitions among different companies in the same country, such as the competitions among Indian ONGC (Oil and Natural Gas Corporation), GAIL (The Gas Authority of India Ltd.), and IOC (Indian Oil Corporation), as well as among several major oil companies in China, make these overseas acquisitions more like the mutual boasting of their own countries. Robin M. Mills pointed out that the nature of such competitions is to prevent their companies from being controlled in their own countries and being compelled to sell products at lower retail prices than the market but not to cater for national strategies [10]. In 2004, "equity oil" accounted for 14% of China's total oil imports and was planned to rise to 25% by 2020. Now, China's overseas "equity oil" production is 1.3 million barrels per day, of which only one-fourth is shipped back to China. He said that they did not rob all of the "equity oil" back to China, and there was no need to be panic about this type of operation. Chinese, Indian, and other overseas investment projects could indeed help to increase rather than decrease the global supply of oil [11].

In the bidding in the early Iraqi postwar period, American companies were absent out of the considerations of profit and business, such as insecurity, unrest political situation, absence of institutions, corruption, and oppressive conditions (the Iraqi government only adopted a service contract, but not a product-sharing agreement). In the opinion of Jafar, an energy economist in the Centre for Global Energy Studies (CGES), low return and lack of security are the main causes for the absence of American companies in the bidding. In general, US companies condition more than 25% return on investment, but they could only get 20% in Iraq. In this context, Russian and Asian companies have more advantages thanks to their lower labor cost than American companies [11]. The final successful bidders are BP, CNPC, Shell, Total, Statoil ASA, Sonangol EP, Japan Petroleum Exploration Company Limited, Gazprom, Turkish Petroleum, and Korea Gas Corporation, most of which are state-owned oil companies.

Han Xiaoping points out that the goal of "going global" does not necessarily mean "bringing back" the resources. The thinking mode that "going global" is "bringing back" is tainted with gunboat color in colonial era. For PetroChina, Sinopec, and CNOOC, the goal of going global is to develop more businesses, and only by controlling more recourses and assets could oil companies be able to increase their value and expand their business, regardless of whether these resources are in the surrounding areas of China or not. Even when these resources are in the Gulf of Mexico or the North Sea, they would strive for them. PetroChina succeeded in the acquisition in Kazakhstan without the intention of bringing the resources back to China, as the cost of shipping oil mined in western Kazakhstan to China is much higher than direct purchase of oil in the Middle East. If Kazakhstan's oil resources are exported to Europe through the pipe network of Commonwealth of Independent States, and the total amount of oil imported by Europe from the Middle East is reduced, there will be spare shares to meet the oil demand of China. In this way, both the international and domestic markets as well as the Chinese petroleum enterprises can achieve the maximization of interests.

In the case of CNOOC's bid for Unocal that attracted the worldwide attention, Chevron defeated CNOOC by seeking political influence from congressmen. But David O'Reilly, the chairman and chief executive of Chevron Corporation which won this acquisition, rushed to China after the bid to open markets for the gas in the Asia-Pacific region of Chevron and Unocal. From this perspective, despite the fact that Unocal's assets were taken over by Chevron, they still had to sell their products to China [12]. That means the core of the bid was not, as some American media said, to rob energy and overseas resources from the United States but a competition for investment and interests.

CONTENTION AMONG COUNTRIES OR COMPETITION AMONG ENTERPRISES?

Among many articles that discussed resource contention, most of the cited examples are the competitions between major international oil companies (IOC) in overseas investment, especially the commercial competitions between multinational oil companies and the national oil companies (NOCs) in the resource countries and emerging market countries. Competition in the world's oil and energy markets is largely featured as the profit and market competition among powerful energy companies, in spite of the support from governments in some cases, and the involvement of international politics and diplomacy factors. Therefore, the conclusion cannot be drawn that it is the competition or contention among countries for their energy demands, or in order to obtain energy supplies, countries direct energy companies to go abroad to search for, to fight for or to rob oil, and then ship oil back for domestic consumption. While it can be called overseas energy investment competition, it cannot be defined as resource contention.

In the world's energy or resource industries, the oil industry alone can be called the biggest industry in the world, valued at $2 trillion to $5 trillion [13]. If other energy and other resources are taken into consideration, the scale of the resource industry is even more spectacular. In 2008 alone, the total amount of fossil energy trade was nearly $2 trillion, accounting for about 18% of global trade in goods and services, much more than that of other commodities. If the trade of energy-based financial derivatives is added, the global capital flow and wealth distribution driven by energy prices will have a considerable influence on the wealth and power pattern in the contemporary world [14]. In view of the lure of huge wealth and great profit, the energy resource inevitably becomes the industry that is most attractive and extremely competitive, especially after the energy resource entered a new round of rising price.

World oil industry is dominated by the international energy and resource corporations represented by the international oil giants such as BP, Exxon, and Total. In the modern history of oil industry, it was the privately owned companies that were engaged in the early oil business, and not until 1914 did the British government begin to participate into the oil industry. For quite a long time before the first oil crisis, Exxon, Mobil, Texaco, Chevron and Gulf Oil, Shell, and BP monopolized the world oil market as a whole, known as the Seven Sisters (of Oil). These companies, at that time, almost held the power to make decisions, not only for the international oil market but also to greatly influence the world economy and international politics.

For energy or resource companies, business and profit are the key factors in their consideration. In western countries such as America and

European countries, the standpoint of oil and other energy companies is not always consistent with that of the governments out of their own interests, and they often run counter to the government. Oil companies contend and compete against each other around the world, more often than not, out of their own interests, though in some cases they gained some support from the governments, especially when the stances or strategic intentions of the two parties are consistent. More frequently, for their own interests, the companies lobby, promote or even "abduct" the government to adopt policies in resource-rich countries and regions for their advantage. When the government's stance or strategy conflicts with their overseas business strategies, sometimes they restrain their actions to avoid government sanctions, and sometimes they would get around the ban or even violate the government policies. In 1937, Texaco gave the oil tanker which was supposed to leave for Belgium as a gift to the Franco Rebellion of Spain. During the Second World War, the oil companies, such as Texaco and Standard Oil of New Jersey, secretly sold oil to Germany according to a "shadow agreement" signed with their partners in neutral countries.

In the book *Who Won the Oil Wars*, in addition to the statement of the relationship between oil and Bolivia's invasion of Paraguay in 1932, the Iran—Iraq War, and the Iraq War in 1990, Andy Stern dwells on the competition and contention among multinational companies. He stressed that the desire for oil and the huge profits it might offer induced oil companies to cross national boundaries, and multinational oil companies of the United Kingdom, France, and the United States had always been devoted to developing overseas oil resources. In order to gain control of the great wealth, whether in Africa, Asia, or Latin America, they have never hesitated to bribe local government officials or subvert the local governments. At present, there are allegations that transnational oil companies have committed crimes in most parts of the world. Unocal was ordered to compensate Burmese villagers for forcing them to work like slaves in building a gas pipeline leading to Thailand. Total was tried in France for it used to co-finance with Unocal to build this gas pipeline. ExxonMobil was accused of taking part in Indonesian army's massacre in Aceh [15].

MULTINATIONAL OIL COMPANIES AND STATE-OWNED OIL COMPANIES

In the 1970s, in order to break the monopoly of international oil giants, developing countries set off the wave of nationalization of oil industry. By the mid of 1980s, almost all the developing oil-producing countries had established NOC. In addition to the United States, most Western developed countries, for the sake of safeguarding national oil security, also established NOC. The NOC gradually developed into a leading force in the upstream area of oil and gas, which greatly changed the pattern of the world oil industry and greatly influenced the pattern of international relations. In the past one to two decades, with the prices of petroleum and other resources entering the rising cycle, the strength of state-owned oil and energy companies has been growing, and those companies began to increase overseas investment on a large scale, which aroused great concern and controversy in the international community. In particular, the relationship between the state-owned enterprises and their home governments not only triggered criticism of unfair competition of state-owned oil companies by western multinational oil companies but also caused the misreading and panic of the international community that the governments of developing countries directed their state-owned enterprises to compete for overseas resources.

Since the mid of 1980s, western developed countries, with great emphasis on the function of market mechanism, began to carry out privatization reform for NOC. Some developing countries, in order to accelerate the process of liberalization and marketization, also carried out privatization for their NOC. NOC have gradually been divided into three categories: (1) the ones that continue to be owned or controlled by the state, such as in the oil- and gas-rich countries like Saudi Arabia, Venezuela, Iraq, Kuwait, the United Arab Emirates and Iran, with NOC kept existent; (2) the ones that are fully privatized, such as Total (France), Ente Nazionale Idrocarburi (Italy), Ray Pschorr (Spain), and YPF (Argentina), which have been operated commercially according to the market economy model. BP was established as a result of the lack of management experience on the part of British government after a great deal of oil and gas was found in North Sea, that is to say, the operation by NOC was adopted [16]. Twelve years later, Mrs. Thatcher thought that there was no need for the existence of NOC, for the government had

had rich managerial experience and capacity, and then its state-owned nature was changed; (3) the ones in the transition, such as Petrobras (Brazil), Pertamina (Indonesia), Petronas (Malaysia), Statoil ASA (Norway), and several oil companies of Russia and China. Some of these companies' business and assets are restructured and listed, and are being transformed from the purely NOC to market-based multinational oil companies.

The nationalization movements in oil-producing countries made multinational oil companies such as Exxon lose almost all of its oil and gas reserves and output except in North America, and thus lose control of crude oil prices in the world oil markets. From 1971 to 1981, the share of sales of the seven largest oil companies in 40 largest oil companies in the western world fell from 39% to 35%, and the share of net assets fell from 56% to 27%, and the proportion in the total net profit dropped from 62% to 35% [17].

In the late 1960s, traditional oil giants such as Exxon and Shell owned 85% of global oil and gas reserves. By the end of the 1970s, with the rise of petroleum exporting countries, and the nationalization of oil fields in the countries like Saudi Arabia, the share controlled by western oil giants dropped to 60% and the proportion is only 15% today. Those countries like Brazil that are short of oil in history now have quickly become "very rich in oil," and Petrobras' market value has surpassed that of the traditional oil giants such as Shell, Chevron, BP, and Total. The *Wall Street Journal* argued that as more of the listed companies in countries such as Russia, China, and Brazil ranked high on the list of influential world energy giants, the center of the global energy industry was shifting out of the West [18].

In many aspects, traditional multinational oil companies are facing increasingly fierce competition from state-owned oil companies in emerging market countries. In 1950, the traditional oil giants "Seven Sisters" controlled 85% of the world's remaining proven reserves, while today more than 90% of the remaining proven reserves are held by state-owned oil companies. In the past, state-owned oil companies relied on technology, management and global market networks of multinational oil companies to produce, smelt, and sell their oil, but now they become independent. Moreover, currently about half of assets possessed by the multinational oil companies are concentrated in unconventional and deepwater oil fields, with production cost far higher than that of conventional oil fields. In the fields of technical services, capital, and so on, many state-owned oil companies have become growingly powerful, which is a great challenge to the multinational oil companies. In 2011, multinational oil giants invested $4.4 billion in research and development, and oil-services companies invested $2.3 billion, while the investment of the top five state-owned oil companies reached $5.3 billion.

Targeted at internationalization and enhancing international competitiveness, the state-owned oil companies need to make some overseas investments. State-owned oil companies in resource-rich countries such as Saudi Arabia, Venezuela, Brazil, and Algeria have also stepped out of the door of their own countries and gradually shifted to international state-owned companies. In 2012, NOC played the leading role in the global M&A market, with Asian oil companies spent $48 billion for overseas oil and gas assets, accounting for 21% of total global mergers and acquisitions [19]. Despite the growing competitiveness of state-owned oil companies, western multinational oil giants remain prominent in technology and management and are still at the top of the international oil and gas industry chain.

The more the state-owned oil companies participate into international competition, the more they will comply with international rules, and the faster they will transfer to IOC. First, it is the general trend. Second, the state-owned oil companies can enjoy more of monopoly and the support from the government only in domestic market, and once these companies enter the international market, there is no chance for them to enjoy the domestic privileges. Thus they will have to follow international rules and gradually learn from transnational corporations to accumulate experience. With the passage of time and the enhancement of competitiveness, they will become more and more internationalized.

REFERENCES

[1] L. Han, Energy Game, New World Press, Beijing, 2008, pp. 66−67.
[2] W. Chen, The Blade of Petroleum Weapon Has Been Blunt, China Petrochem. vol. 5, 2012, p. 29.
[3] A. Cala (Ed.), Has George W. Bush's "Topple Saddam's Regime" Nothing to Do with Oil? China Energy News, January 4th, 2010, B3.
[4] D. Clarke, Empires of Oil (X. Sun, X. Liu, Trans.), Petroleum Industry Press, Beijing, 2011, p. 237.
[5] D. Clarke, Empires of Oil (X. Sun, X. Liu, Trans.), Petroleum Industry Press, Beijing, 2011, p. 13.
[6] R.M. Mills, The Myth of the Oil Crisis (Y. Chu, Trans.), Petroleum Industry Press, Beijing, 2009, p. 251.
[7] Y. Yang, et al., A Talk on the Experience in International Energy Policy, vol. 3, 2004, p. 28.

[8] X. Dong, Domestic Supply: Safeguard of Chinese Energy Security, Green Leaf, vol. 10, 2009. http://blog.sina.com.cn/greenleafxp.
[9] D. Zha, China's Petroleum Security: Perspective of International Political Economics, Contemporary World Press, Beijing, 2005, p. 95.
[10] R.M. Mills, The Myth of the Oil Crisis (Y. Chu, Trans.), Petroleum Industry Press, Beijing, 2009, p. 252.
[11] A. Cala (Ed.), Has George W. Bush's "Topple Saddam's Regime" Nothing to Do with Oil? China Energy News, January 4th, 2010, B3.
[12] X. Han, Market in Hand, Free of Worry—the New Thinking of China's Energy Security, China Energy News, September 20th, 2005.
[13] J. Rifkin, The Hydrogen Economy (Y. Gong, Trans.), Hainan Publishing House, Haikou, 2003, p. 89.
[14] D. Zhai, Why China Is Promising: Strategic Potential of Foreign Economic Relations, China Machine Press, Beijing, 2010, p. 162.
[15] A. Stern, Who Won the Oil Wars? (X. Shi, Trans.), China CITIC Press, Beijing, 2010, pp. 107–108.
[16] Y. Yang, et al., A Talk on the Experience in International Energy Policy: Answering Chinese Scholars' Questions by Robert Priddle, Former Director of International Energy Agency, International Petroleum Economy, vol. 3, 2004, p. 25.
[17] J. Wang, World Petroleum Economy, Nan Hai Publishing Co., Haikou, 1999, p. 142.
[18] The U.S. Will Start a Shale Gas Energy Revolution. Global Times, January 30th, 2011.
[19] M. Hou, The Achievements, Characteristics and Prospects of Global Oil and Gas Resource Acquisition in 2012, International Petroleum Economy, vol. 4, 2013, p. 26.