

Drivers Analysis of Second Oil Crisis Focusing on the Economic Impact of Developing Countries in Asia

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Abstract. As a strategic commodity, oil is essential to the industrial economy and occupies an important position in international competition and national economic development. Price changes in oil affect every aspect of the economic sphere of each country. The three oil crises in history have become major factors in the world oil market prices. Compared with the other two oil crises, the second oil crisis in 1970 was due to the interruption of Iranian oil exports. The market set psychological expectations for the unsteady oil supply, which led to a surge in oil prices. The study of the second oil crisis is of great significance to Asian countries because Asia, as a region of rapid economic development, has an outstanding internal conflict between oil supply and demand, and the causes of the second oil crisis and its impact on the development of Asian countries are also a major concern for countries around the world. This paper examines the characteristics, causes, and manifestations of the second oil crisis from the perspective of industrial policy through case comparison and other methods. Then, this paper finds that the motivations of the second oil crisis are mainly the decline in oil production capacity caused by the Islamic Revolution and countries' oil reserve plans, which exacerbated the oil crisis. The economic impact of the second oil crisis on developing countries in Asia is mainly reflected in the asymmetry of supply and demand, squeezing domestic economic construction funds, and causing a national debt crisis in oil-poor countries in developing countries.

Keywords: second oil crisis, oil prices, Asian economies, national debt crisis, asymmetry of supply and demand.

1. Introduction

Oil, as one of the indispensable primary energy sources in the world economic system, has been closely related to the significant development of the world economy. Especially in recent years, with the tension of international energy issues, oil, as the main strategy in economic development and global competition, has become the "Achilles' Heel" of countries worldwide. As a necessary basic energy product, oil currently accounts for about 40% of global energy, and the recent oil price fluctuations have also caused concern in various countries [1]. Because once oil prices fall, the international stock market will also fall. Although this paper expects that the decline in oil prices will help the world economy to achieve a better balance, the dramatic changes in oil prices bring about counter-cyclical effects, such as oil prices will lead to the world economy slowing down after the increase in growth rate. In addition, the Russia-Ukraine conflict has become the main factor leading to the spike in international oil prices. According to the Organization of Petroleum Exporting Countries (OPEC) statistics, the average daily settlement price of Brent crude oil futures has risen to \$109.33/barrel, of which the risk premium caused by the Russia-Ukraine conflict has accumulated to \$20-25/barrel [2]. The Russia-Ukraine conflict is because of the pending status of the two sides, which has led to Russia constantly being subjected to multiple rounds of sanctions from multiple parties, thus affecting the supply of Russian crude oil. One of the most notable aspects is the ban on 90% of Russian oil imports, which will significantly reduce oil imports from countries such as Hungary that

are overly dependent on Russian crude. But this initiative destabilized the energy market and led to a decrease in the crude oil market supply, thus bringing an upward trend to the international oil prices.

It can be said that the crisis in the oil market is ultimately determined by the demand of both oil-importing and oil-exporting countries. In addition to natural crisis factors such as geopolitics and war, exchange rate fluctuations and domestic political conflicts can directly impact oil prices. Looking at the three oil crises, from the economic level, the conflict of interests between oil-exporting countries and western oil monopolies became the main reason for the outbreak of the first oil crisis in 1973. From the political level, the first oil crisis was caused by the Arab countries wanting to use oil as a weapon to threaten the U.S. side to give up its support for Israel and exit the occupied Arab territories. The third oil crisis in 1990 was caused by the Gulf War between Iraq and Kuwait, which resulted in severe damage to oil facilities in both countries, leading to a sharp decline in oil volumes. In contrast to the first and third oil crises, the second oil crisis occurred in 1979 due to political changes in Iran, the world's second-largest oil exporter, which caused Iranian oil production to fall from 6.5 million barrels per day to less than 1 million barrels per day [2]. The serious shortage of supply has also led to the price of oil climbing up. On the one hand, the oil crisis is caused by the objective factors of passive supply reduction. Another important reason is that the market for this oil crisis also has strong psychological expectations. Since the first oil crisis, countries are strengthening their awareness of oil storage. Compared to the other two oil crises, the second oil crisis brought less negative impact, after the outbreak of the "Islamic Revolution", countries worried about the stability of oil supply in the Gulf region, have begun to accelerate the speed of oil storage, and the reduction of oil supply also makes the market assumes the oil prices are still rising. The main feature of the second oil crisis is also giving people a more specific forecast of the oil price spike, but it also dealt a serious blow to the international economy.

For many years, there has been little research on the second oil crisis, and there is also a lack of research on the causes of the second oil crisis and its impact on the economies of developing countries in Asia, so the analysis of the causes and characteristics of the second oil crisis and its impact on developing countries in Asia can be the main research direction. In the case of Asia, the high global oil prices and their constant fluctuations have become a major concern for Asian countries in terms of economic order. To solve the problems mentioned above, this paper systematically analyses the motivations and characteristics of the second oil crisis and its impact on the economies of Asian developing countries. Specifically, the first part focuses on the manifestations of the second oil crisis and the motivations for the development of the second oil crisis; the second part analyses the economic impact of the second oil crisis on Asian developing countries; and the third part focuses on the recommendations for the future economic policies of Asian developing countries.

2. The characteristics and motivation of the second oil crisis

2.1 Manifestations of the Second Oil Crisis

2.1.1. The Sharp Rise in Oil Prices

One of the main manifestations of the second oil crisis is the soaring oil price. The surge in oil prices has had a negative impact on both developing and advanced industrialized countries that depend on oil imports. Inflation and trade deficits caused by soaring oil prices have further exacerbated the world's economic depression.

For developed industrialized countries, the sharp rise in oil prices caused by the oil crisis has increased the energy expenditure of oil imports, resulting in rising prices and aggravating inflation. In the late 1970s, except for the United Kingdom and Norway, which had lower inflation rates due to their possession of North Sea oil, the average inflation rate of other Western European countries and Japan was above 5%. Even in West Germany, which for decades had paid particular attention to curbing inflation, the wholesale price index rose 13 %. In addition, the surge in oil prices has also increased the trade deficits of industrialized oil-importing countries. Although the United States has

a special influence on the world economy and the dollar occupies a special position in the international financial system, the United States balance of payments deficit was still increasing during the oil crisis, and it also contributed to worldwide inflation. From 1978 to 1980, the United States increased its fiscal deficit by \$25 billion.

For developing countries that depend on oil imports, the second oil crisis hit their economies hard. Except for OPEC member countries, most developing countries are oil-poor countries, and oil dominates their various energy consumption, so these countries are highly dependent on imported oil. As a result, the soaring oil price will inevitably lead to a sharp increase in oil expenditures, which will lead to inflation, high trade deficits and debts, squeeze the funds needed for domestic economic construction, and increase the domestic financial burden. Take South Korea as an example. After the first oil crisis, the Korean government adjusted the industrial structure through the implementation of the third and fourth five-year economic development plans, and the heavy industry and chemical industries were developed. South Korea had also increased its demand for oil due to the adjustment of its industrial structure. The second oil crisis caused South Korea, which is heavily dependent on oil, to experience an economic recession. The real growth of the Korean economy plummeted from 6.4% in 1979 to negative growth of -6.2% in 1980. After the second oil crisis, oil prices rose from \$13.03 in 1978 to \$35.69 in 1980 [3]. The inflation rate increased from 14.46% in 1978 to 28.7% in 1980, as shown in Figure 1. To stabilize domestic prices, the Korean government restricted the export of some items. In addition, factors such as the stagnation of the world economy, the sluggish overseas demand caused by the oil crisis, and the import control measures of developed countries have further deteriorated the terms of trade and increased exports. The rate decreased from 18.4% in 1979 to 16.3% in 1980 [4].

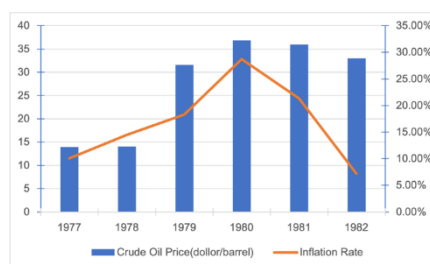


Fig. 1. The change in inflation rate and crude oil price

The trade deficit caused by the oil crisis had increased the pressure on national finances, and the high cost of oil imports had compressed funds for construction in other domestic sectors. Some developing countries even go so far as to borrow heavily to buy oil. As a result, on the one hand, some economic sectors of the oil-poor countries were almost paralyzed, and on the other hand, they were burdened with heavy debt burdens.

2.1.2. Rise of trade protectionism

The economic recession caused by the oil crisis had led to an increase in unemployment and a decrease in foreign trade, which to a certain extent promoted the rise of trade protectionism in developed countries and delayed the recovery and development of the world economy.

On the one hand, ballooning oil spending and trade deficits accelerated the recession and job losses. After the second oil crisis broke out, 35 million people in the United States and Europe were unemployed, accounting for 11% of the labor force population, and 1/8 of the workers in the United States, Belgium, and Denmark had to accept unemployment benefits [5]. To reverse the trade deficit and stimulate economic development, some countries that rely heavily on oil imports, such as Japan, tried to increase foreign trade by exporting cheap commodities, to reduce the losses caused by soaring oil prices. However, the move threatens local industries in importing countries such as the United States and Western Europe. Thus, these countries began to set up some non-tariff barriers to keep Japanese goods out of the country. The measures that all countries took to encourage the export of goods, restrict the import of foreign goods, and maintain the balance of payments, eventually led to

the establishment of trade barriers. The formation of pervasive trade barriers adversely affected the development of world trade. This trade barrier had a particularly severe impact on developing countries that rely on the export of goods from labor-intensive and low-tech industries.

On the other hand, for developing countries, the rise of trade protectionism in developed countries had further led to the shrinking of the world market. The commodity export situation of developing countries had deteriorated, the ability to obtain foreign exchange had weakened, the debt burden had increased, and the maturity of debt could not be repaid. From 1974 to 1980, the trade deficit of developing countries reached 2,800 US dollars, however, for economic development and necessary energy expenditure, they had to continue to spend 50 billion US dollars a year to import oil based on borrowing, and this old debt was not repaid. The situation of adding new debt had caused their external debt to increase rapidly. Rising oil prices are estimated to have added \$100 billion to the debt of developing countries. At the climax of the second oil crisis, the United States and the United Kingdom implemented monetary tightening policies and raised interest rates significantly. The United States once raised the interest rate to 20%, and the United Kingdom also raised the interest rate to 17% [5]. High oil prices and high-interest rates had pushed oil-poor countries' largely dollar-denominated debt to higher levels.

2.2 The Motivation for the Second Oil Crisis

2.2.1. The Decline in Oil Production Capacity Caused by the Islamic Revolution

At the end of 1978, the domestic situation of Iran, which was the second largest exporter of oil in the world at that time, experienced severe turbulence, namely the "Islamic Revolution". From December 26, 1978, to March 4, 1979, Iran completely stopped oil exports. The shortage of oil supply caused a sharp rise in oil prices, which triggered the current oil crisis. When Iran's oil exports gradually recovered, in September 1980, Iraq raided Iran and the Iran-Iraq war broke out. The war had seriously affected Iran and Iraq, the two most important crude oil exporters in the world. Except for Iran and Iraq, the oil supply of other OPEC countries had also been reduced accordingly due to the Iran-Iraq war. As a result, the world's crude oil production plummeted to less than 20% of its original level. When Iran stopped oil exports, some OPEC countries such as Saudi Arabia and Kuwait tried to increase their oil production when Iran reduced oil production. However, limited by the ability to grow oil production in the short term, OPEC countries could not quickly exceed production limits. Therefore, once the oil crisis breaks out, the production capacity restriction in the OPEC region is difficult to ensure the balance of supply and demand in the market.

The tight oil market presented an opportunity for producers to raise prices. During the oil crisis of more than two years, OPEC organized seven oil ministerial meetings, and most countries (except Saudi Arabia) tried their best to use the meeting as a favorable opportunity to raise oil prices. Within a year, all OPEC countries except Saudi Arabia raised oil prices from \$13.34 a barrel in early 1979 to \$30 a barrel. At the beginning of 1980, other OPEC countries except Saudi Arabia raised the oil price to 34 dollars, and the spot market was 34-45 dollars per barrel [5]. OPEC countries were blindly optimistic about the oil market, believing that the market can meet all price requirements. They gave up the long-term contract to obtain a stable market and the arrangement of the official oil price and adopted the method of "going with the market" to pursue the maximum oil price, which also increased the illusion of oil shortage from the price information.

2.2.2. The Oil Reserve Plan Exacerbates the Oil Crisis

In April 1977, the US Central Intelligence Agency (CIA) issued an energy report, claiming that the oil supply capacity of OPEC countries and the Soviet Union reached its peak around 1985, after which the world oil demand will exceed the supply, The long-term trend in the oil market was a gradual tightening of oil supplies [6]. In 1978, the Rockefeller Foundation energy experts issued a similar energy report, stating that "the world will gradually experience a chronic oil shortage or even a severe shortage" [5]. These two reports laid the psychological foundation for another oil crisis soon. At this time, the outbreak of the Iran-Iraq war further exacerbated the panic in people's hearts.

Concerned about unstable oil supply, governments, oil companies, and individual consumers of oil-consuming countries had begun to buy and store oil in large quantities. The massive oil rush to stockpiles resulted in a drawdown of about 3 million barrels a day, adding another 3 million barrels of "demand" a day, further deepening the oil shortage. In general, rising oil prices increase the value of oil, thereby increasing the impulse to buy and hoard, further driving up demand. In January 1980, the total oil reserves of Western countries reached 5.3 billion barrels, equivalent to almost half of OPEC's annual oil production in 1979, of which more than 1 billion barrels of reserves were added in one year [5].

In addition, many oil reserves led to a shortage of supply and a sharp rise in oil prices. When oil prices rise sharply and oil extraction is reduced, enough fiscal revenue can still be obtained. The incentive for OPEC countries to expand production was thus reduced. Therefore, OPEC countries had reduced oil extraction to slow down the speed of oil depletion and reserve oil for future development. In addition, for OPEC countries, increasing oil revenue beyond what is needed for development means increasing redundant funds, which were at great risk of devaluation due to worldwide inflation and exchange rate fluctuations. Therefore, these countries were also reluctant to increase oil revenues too much.

3. Economic Effects of the Second Oil Crisis on Asian Developing Countries

3.1 The Economic Impact of the Second Oil Crisis on Developing Countries in Asia

3.1.1. Asymmetry of Supply and Demand

From the perspective of developing countries in Asia, one of the manifestations of the second oil crisis for Asian developing countries is the asymmetry of the supply and demand cycle. Due to the strong intervention of the United States, the supply and demand sides of the Asian oil market are often not directly connected, thus forming a third party with a strong influence on the supply and demand circulation system. Among them, the oil exporting countries in West Asia benefited from the wealth effect caused by the oil crisis. As shown in Figure 2. Based on the statistics of the world's proven oil reserves, in the 1990s, more than three-fifths of the world's oil is distributed in the west of Asia - the Gulf region, which is now the region with the most abundant oil resources in the world. According to the statistics of OPEC, the remaining proved recoverable reserves of oil in the whole OPEC countries are 119.1 billion tons, accounting for 78.2% of the world's total [7]. The oil reserves of the Middle East countries are irreplaceable in the world. Since the OPEC member countries began to set production quotas according to the reserves level of each country in the 1980s, the reserves report of many member countries has increased significantly. Especially with the depletion of oil resources outside the Middle East, the Middle East in West Asia can better control the world oil supply.

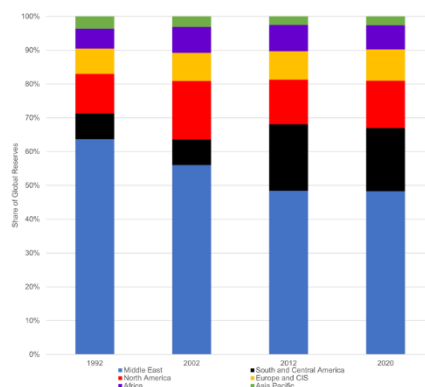


Fig. 2 Distribution Area of Proved Oil Reserves Worldwide in Select Years from 1992 to 2020

There are many developing countries in East Asia and Southeast Asia, which mainly face the demand impact brought by the oil crisis. This is completely different from the situation in which the Middle East region enjoys a net high price oil income. However, the developing countries in East and Southeast Asia must pay a high price for the oil demand in economic development and even are constrained by the oil bottleneck on economic development and economic structure. China is a typical example. As essential energy, the short-term demand elasticity of oil is very small, even zero. In the oil market, the adjustment function of demand to price is very slow. Therefore, a small change in supply or demand will cause price fluctuations. This oil characteristic causes frequent price fluctuations and potential shocks. As the impact of oil price rise on the national economy is very extensive, from daily consumption to trade and investment will be adversely affected by oil price rise, which will inevitably reduce the economic growth rate. As shown in Table 1. Shaobang Kang made a comprehensive analysis of China's GDP, oil import volume, and price fluctuations. The results show that if the international oil price changes by the US \$1 per barrel, China's imports will cost an additional 4.6 billion yuan, directly affecting China's GDP by about 0.043 percentage points. According to a study conducted by the International Energy Agency in the 1990s, the continuous rise of oil prices by US \$10 will slow down China's economic growth rate by 0.8 percentage points [8]. With the rise of international oil prices, the three factors that promote the development of the national economy: investment, consumption, and exports will inevitably show a downward trend, thus slowing down the economic growth rate of developing countries. This is also the impact of the asymmetry of oil supply and demand on most developing countries in Asia, represented by China.

Table 1. Analysis of oil price on China's GDP and economic growth

| | China's Imports Cost | Impact on GDP | Impact on China's Economic Growth Rate |
|--|---------------------------|-------------------|--|
| International Oil Price Changes by the US \$1 Per Barrel | Increase 4.6 billion yuan | Affect GDP 0.043% | |
| Oil Prices Rise by \$10 | | | Slow down by 0.8% |

3.1.2. Squeeze Domestic Economic Construction Funds of Developing Countries

The second oil crisis led to a sharp rise in oil prices, which caused a sharp increase in the oil expenditure of the third-world oil importing countries, resulting in high trade deficits and debts, squeezing the funds needed for domestic economic construction and increasing the domestic financial burden, especially in the developing countries in East and Southeast Asia. Except for OPEC members, third-world countries are oil-poor countries, and oil plays a dominant role in their energy consumption. Therefore, these countries are highly dependent on imported oil. After the outbreak of the second oil crisis, the economic situation of these countries suddenly became very severe. In 1980, the proportion of oil expenditure in oil-poor countries increased five times, accounting for 40% of their total export revenue [9]. As a basic commodity, the short-term demand elasticity of oil is exceedingly small or even close to zero, and the adjustment function of price to demand is slow. In other words, the market demand for oil is rigid in the short term and will not be reduced due to the rise in prices. Therefore, even if the oil price rises sharply, the oil-consuming countries in developing countries in Asia still need to continue to import oil to meet the energy power necessary for their economic development, so they must reduce the construction funds of other domestic departments to ensure the expensive

and necessary import of petroleum. Some developing countries even go as far as to incur enormous amounts of foreign debt. As a result, on the one hand, some economic sectors of the oil-poor countries are almost paralyzed, and on the other hand, they bear a heavy debt burden. Take India as an example. India's domestic oil production is less than 30% of its total consumption, and the rest is dependent on imported oil. Before the first oil crisis, the Indian government formulated an ambitious five-year economic development plan (1973-1978). The implementation measures of the plan are based on the large-scale consumption of energy. The oil demand plan will increase from 21.5 million tons in 1973-1974 to 34.6 million tons in 1978-1979, and the oil import volume in 1974 alone will reach 17 million tons [10]. After the rise in oil prices, India is faced with the dilemma of reducing the scale of economic construction or importing the same amount of oil at a high price in the form of foreign debt. Therefore, taking India as a developing country in Asia as an example, it is not difficult to see the impact of the oil crisis on domestic economic construction.

3.1.3. Trigger the National Debt Crisis

Due to the economic depression and the prevalence of trade protectionism in developed countries, the international export market has shrunk and the ability of oil-poor countries to earn foreign exchange has declined, triggering the international debt crisis. In the 1980s, the developing countries in Asia exported agricultural products, and the export targets were developed countries in Europe and America. Therefore, the series of measures taken by developed countries had the most obvious impact on the developing countries in Asia. On the other hand, this series of measures have also led to a reduction in the ability to develop countries in Asia to obtain foreign exchange, an increase in their debt burden, and an inability to repay their debts when they mature. From 1974 to 1980, the trade deficit of developing countries reached US \$2800, of which about two-thirds occurred with OPEC member countries [11]. After 1980, oil expenditure accounted for 60% of the energy expenditure of the oil-poor countries. The oil-poor countries were troubled by high debt and high energy expenditure. However, for the sake of economic development and necessary energy expenditure, they had to continue to spend \$50 billion a year on importing oil based on borrowing. This situation of adding new debt to the old debt has led to a rapid increase in foreign debt [5]. It is estimated that the rise in oil prices has increased the debt of developing countries by \$100 billion. At the peak of the second oil crisis, the United States and Britain implemented a monetary tightening policy and significantly increased interest rates. High-interest rates and high oil prices have pushed the debt of oil-poor countries denominated in US dollars to a frightening level, causing the already overburdened economy of oil-poor countries to suffer another heavy blow [5]. In 1973, the debt of oil-poor countries was only 130 billion US dollars. In 1981, it reached 550 billion US dollars. In 1982, it increased to 612 billion US dollars. The debt has accounted for 20-25% of the gross national product (GNP) of oil-poor countries, but their per capita income is extremely low. The per capita income of many countries is far less than the US \$1000 per year, of which China's per capita GDP was the US \$194.80 in 1980 and India's per capita GDP was the US \$266.58 in 1980 [12]. To repay their debts, these countries can only use a small amount of their income to repay debts with high-interest rates to obtain new loans and relax the repayment conditions of international commercial banks. Such a huge scale of foreign debt and such a small hope of repayment are unlikely to last too long, which eventually led to the worldwide debt crisis in the early 1980s. Most of the developing countries in Asia, such as Turkey, have demanded to postpone or reduce their debts because they have lost the ability to repay their debts. This debt crisis has not only had a significant impact on the oil-poor countries in developing countries in Asia but also caused panic in the international community. The oil crisis has brought a direct crisis to the global financial system.

3.2 Transmission Mechanism between Countries in East Asia and Southeast Asia during the Second Oil Crisis

During the outbreak of the oil crisis, the economic development of East Asia was extremely remarkable. Since the 1960s, East Asia has maintained rapid economic growth for 30 years: from 1965 to 1990, the per capita GNP in the Asia Pacific region increased by 5.5% annually, while that

in other regions of the world was only 2.5%. During this period, the real per capita income of Japan and the four little dragons in Asia (South Korea, Chinese Taiwan, Chinese Hong Kong, and Singapore) increased by more than four times, while that of the newly industrialized countries in Southeast Asia increased by more than one times, creating an internationally recognized "economic miracle" [13]. This concentrated regional explosive growth is very rare because it experienced two oil crises in the 1970s, but it led to the rapid economic growth of developing countries and regions in East Asia and Southeast Asia during this period, which is related to the inter-country transmission mechanism in East Asia and Southeast Asia during the oil crisis.

On the surface, according to the statistics of the world bank, the average annual economic growth rate of East Asia reached 7.1% from 1971 to 1990. The economic development process of East Asia has not been affected by the oil crisis as in the western developed countries. However, if looking at the economic development of East Asian countries in the past 30 years and the relationship between them and the oil crisis, it still finds the interdependence between them, especially after the second oil crisis. When the second oil crisis broke out, Japan, as the main representative of the oil demand side in Asia, directly and positively accepted the impact of the oil crisis and spread and digested these impacts in East Asia. Therefore, Japan was the mediator of the oil crisis in Asia when the second oil crisis broke out [14]. Secondly, after the second oil crisis, the East Asian economy has played an increasingly important role in the world economic aggregate. Since the mid-1980s, the international oil market has become a buyer's market. Within the framework of supply exceeding demand, the influence of the demand side on the supply side rarely exceeds the influence of the supply side on the demand side. Due to the rise of the newly industrialized countries in East Asia, represented by China and India, and the sharp rise in the demand for oil imports, the world oil market has turned to the seller's market, and the oil price has been rising. The comprehensive impact of high-priced oil on the Asian economy has further shown distinctive characteristics and transmission mechanisms from those in the past. Overall, in the process of oil price fluctuation caused by the second oil crisis, the impact of oil energy on the East Asian economy is indirect. As the only developed country in East Asia at that time, Japan played an important media role in it, that is, the oil price effect directly affected the Japanese economy, and the adjustment and response measures of the Japanese economy directly affected the development of the East Asian economy. In the transmission process of this effect, industrial transmission based on investment and trade became the most important channel and mechanism. Although the impact of the second oil crisis was weaker than that of the previous one, the impact and warning effect on Japan's economic development model were still obvious, which led to the Japanese government's industrial structural reform. At the same time, East Asian countries led by Japan also found the problem of unbalanced development of energy structure.

In the face of the second oil crisis, Japan, as a developed country, has achieved remarkable results by adopting the methods of economic structural transformation and outward production. After 1974, the Japanese government, on the one hand, promoted the transition of industrial structure from "labor-intensive industrial structure" to "technical knowledge-based industrial structure, and vigorously supported the development of emerging low-energy and high-tech industrial sectors such as automobile, electronics, precision machinery, nuclear energy, and atomic energy; On the other hand, the Japanese government encourages industrial capital to expand foreign direct investment, especially in Asia. In this process, the industrial transfer driven by the oil price factor can be reflected in two main ways. The first is to improve the energy consumption industrial structure and the outward migration of the heavy industry, manufacturing industry, and other industries. Based on this decision of the Japanese government, after the second oil crisis, it promoted the rapid economic development of developing countries in East and Southeast Asia. After this series of reforms, the economic development levels of East Asian countries and regions are at different levels of industrialization, and the important industrial structure is also in a ladder-type development trend, forming an economic system of the developed and mature industrial economy (Japan) - the first generation of newly industrialized economies (the four little dragons of Asia) - the second generation of newly industrialized economies (the four countries of ASEAN) - developing countries (China and Vietnam)

undergoing industrialization. As shown in Figure 3. The second is to ensure supply-oriented foreign investment. To reduce the oil risk and ensure the energy supply, since the late 1970s, Japan has gradually transferred energy-intensive industries, such as heavy industry, to Southeast Asia, which is stable in politics and has resource security. It has focused its investment on the oil, and chemical industry, and is committed to diversifying the sources of oil imports. By providing funds and technology, it has continuously obtained mineral resources. At the same time, this initiative in Japan has also brought opportunities for rapid economic development for developing countries in East and Southeast Asia. Based on the cheap labor force of these developing countries, and their focus is not on environmental governance, energy conservation, and emission reduction, the goal is to quickly reduce the impact of the second oil crisis on their economy, and make the economy develop again at a faster speed. This link also reflects the transmission mechanism of inter-countries in East and Southeast Asia.

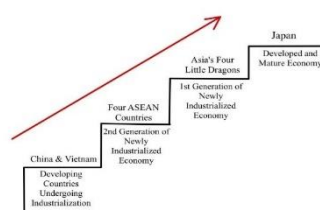


Fig. 3 The Level of Industrialization and Economic Development of East Asian Countries and Regions from the 1980s-1990s

4. Suggestions for Asia Developing Countries

The asymmetry of oil supply and demand reflected in the second oil crisis is a major difficulty for oil-poor countries in Asia. This problem caused by the second oil crisis needs Asian oil poor countries to actively promote the reform of oil industrialization and build a national oil security strategic system to prevent it. After the second oil crisis, oil-poor countries in Asia gradually opened their domestic oil markets, allowed foreign oil companies to enter, and gradually relaxed restrictions. This measure is only the beginning of promoting the reform of oil industrialization. Governments of all countries should issue a series of policies to encourage the rise of local oil enterprises and no longer nationalize the control of oil resources. This will promote the diversity of domestic oil resources and provide a higher guarantee for the oil demand of all regions. The stability of supply sources and the safety of transportation routes are also important conditions for ensuring the safe supply of energy products. Both are vulnerable to emergencies, and their stability and safety are low. To prevent supply interruption, it is necessary to strengthen the supply guarantee capacity under emergencies and strengthen strategic reserves for important energy such as oil. Because oil is non-renewable and plays a leading role in resource consumption, it has a higher strategic role in national energy utilization. The establishment of strategic reserves of coal, oil, and natural gas resources can alleviate the tension in the supply of energy products in a short time to a certain extent. Energy strategic reserve should encourage and strengthen the combination of the national reserve and local reserve, and the combination of government reserve and Private Reserve of enterprises [15]. This series of measures will help oil-poor countries in Asia prevent the recurrence of the oil crisis in advance and reduce their high dependence on oil resources in case of emergencies.

To avoid the national debt crisis and the squeezing of domestic economic construction funds caused by the second oil crisis on oil-poor countries in Asia, these countries should accelerate industrial structural transformation, promote oil conservation, and develop new alternative energy through scientific and technological innovation. As a basic product, oil resources will be in short supply for a long time. Oil-poor countries in Asia should pay attention to oil consumption and build a resource-saving society. At present, the GDP energy consumption level of several oil-poor countries led by Asia is 3 to 11 times that of developed countries, and there is great potential for saving [16].

Therefore, oil-poor countries in Asia need to adjust their industrial structure and product structure, force out high energy-consuming equipment, and improve energy efficiency through technological innovation and strengthening management. At the beginning of the large-scale and high-speed development of automobiles, China and India should vigorously support the research, development, and introduction of advanced fuel-saving and alternative fuel technologies and promote the use of automobiles with a good economy, low fuel consumption, and alternative power sources. Coal direct liquefaction products are clean liquid fuels that replace oil, commonly known as "coal to oil". "Coal to oil" is a very advanced clean coal technology, and its effect on environmental protection is also very significant [16]. The progress of the industrialization of "coal to oil" largely depends on the change in oil prices. Oil prices are rising, which makes the production cost of "coal to oil" fully accepted by the market, and has better economic benefits, which can reduce the dependence of oil-poor countries in Asia on foreign oil and further improve the prevention of future oil crises.

There are not only oil-poor countries in Asia, but also oil-producing countries in the Middle East, which account for a large part of the global oil supply. All these oil-producing countries belong to OPEC. From the first oil crisis to the second oil crisis, OPEC's control of oil prices and production had different effects. The first oil crisis was when the Arab countries, members of the OPEC Organization, took measures such as production reduction, embargo, nationalization, and a price increase to counteract the assistance of the United States and other countries to Israel. OPEC's action caused the international crude oil market to fall short of demand and the oil price to rise. After the outbreak of the second oil crisis, international oil prices generally fell, and OPEC implemented measures to limit production and ensure prices to boost oil prices. But the result backfired. Instead of rising oil prices, the market share of crude oil has gradually decreased due to production restrictions, which has brought great losses to OPEC member states. The two different measures taken by OPEC led to different results, which not only affected the world's oil supply but also had an economic impact on OPEC. Therefore, OPEC should set an elastic range of reasonable prices, as well as an upper and lower limit of production, to avoid sudden events leading to a sudden increase or decrease in oil prices. Although, with the development of new energy and the development and use of other resources, oil is still a political weapon that can affect world stability. Setting effective measures for price and output by OPEC will form a win-win situation for oil-poor countries and oil-producing countries to a greater extent.

5. Conclusion

The characteristics and dangers of the second oil crisis can be seen in the oil price spike that harmed both oil-importing developing countries and developed industrialized countries. Inflation and trade deficits caused by the oil price boom further aggravated the world economic depression. At the same time, developed countries implemented trade protectionism to encourage exports of their goods and restrict imports of foreign goods, which further led to the shrinking of the world market. Trade protectionism has led to the deterioration of the commodity export situation of developing countries, weakening their ability to obtain foreign exchange, increasing their debt burden, and causing them to fail to repay matured debts.

Based on the comparative case method, this paper analysis the motivations and characteristics of the second oil crisis and its manifestations, as well as its economic impact on developing countries in Asia. The study finds that the motivations and characteristics of the second oil crisis were due to the decline in oil production capacity triggered by the Islamic revolution, the war severely affected the oil exports of crude oil exporting countries, and the tightening of the oil market provided opportunities for oil-producing countries to raise oil prices, leading to further increases in oil prices. Besides, national oil reserve plans have also increased the oil demand, further widening the gap between supply and demand. The study also found that the economic impact on Asian developing countries is mainly reflected in the sharp increase in oil-importing countries' expenditures, resulting in high trade deficits and debts, a backlog of funds for domestic economic construction, and an increase in domestic fiscal

burden, especially in developing countries in eastern and southern Asia. In addition, the economic recession has led to a contraction in international crude oil exports and the prevalence of trade protectionism in developed countries, which has triggered a global debt crisis.

All in all, this paper provides some policy insights for Asian oil-producing and oil-poor countries to work together to maintain the stability of oil markets and avoid the next oil crisis. For the poor oil countries in Asia, the asymmetry of oil supply and demand embodied in the second oil crisis is one of their major difficulties. Therefore, to solve this problem, Asian oil-poor countries need to actively promote oil industrialization reform and build a national oil security strategy system for prevention. In addition, it is also crucial for oil-poor countries to formulate a series of policies to encourage the emergence of local oil enterprises, which can effectively promote the diversity of local oil resource sources and reduce the dependence on imported oil. Besides, promoting the development of new energy technologies and industrial restructuring reforms are also important suggestions for oil-poor countries to solve the problems of national debt crises and squeeze funds for domestic economic construction. For Asian oil-producing countries, allowing OPEC to set a reasonable oil price elasticity range to reduce the dramatic fluctuations in oil prices will effectively avoid unexpected events, such as geopolitical factors that lead to an explosion in oil prices.

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