Research on the Role of RMB-denominated Oil Trade in Promoting RMB Internationalisation

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Abstract: With the development of the global economy and the continuous expansion of international trade, currency internationalization has become an important goal of monetary policies of various countries. In this context, China has become the second largest economy in the world, and promoting the internationalization of the RMB has become one of the urgent issues for the Chinese government to address. In recent years, the internationalization of RMB has achieved remarkable results, but the use of RMB is still limited in the international commodity market, especially in the oil market. This paper takes the RMB-denominated oil trade as an entry point to analyze its contribution to the internationalization of the RMB and its potential impact. The paper first explains the importance of oil trade to the global economy and analyzes the current situation of the oil market with the US dollar as the main settlement currency. As one of the most important energy sources in the world, oil occupies a pivotal position in international trade. However, for a long time, the pricing and settlement of the oil market has relied mainly on the U.S. dollar, which gives the U.S. dollar a significant dominant position in the global arena and also exposes other countries to the risks associated with exchange rate fluctuations in oil trade. Second, this paper analyzes theoretically and empirically the role of RMB-denominated oil trade in promoting RMB internationalization. Theoretically, RMB-denominated oil trade will help increase the demand for RMB in the international market, reduce exchange rate risk, and thus accelerate the process of RMB internationalization. The empirical analysis shows that in recent years, with the growing volume of China's oil imports and the advancement of RMB internationalization, RMB-denominated oil trade has achieved initial results, and some countries have started to adopt RMB for oil settlement. Then, the paper discusses the challenges faced by RMB-denominated oil trade and the policy measures that the Chinese government should take. In the current international financial system, the U.S. dollar is "entrenched" as an international currency, and it is not easy to realize RMB-denominated oil trade. The Chinese government should strive to improve the credibility and convertibility of the RMB, actively participate in international oil market rule-making, strengthen cooperation with major oil producing and marketing countries, and promote domestic financial market reform to create a favorable external environment for RMB-denominated oil trade. Finally, the paper concludes that RMB-denominated oil trade is important for RMB internationalization. By realizing RMB-denominated oil trade, it is expected to improve the position of RMB in the international market and create favorable conditions for RMB internationalization. At the same time, it will help promote global currency diversification, reduce the sensitivity of China's economy to external shocks, and achieve more stable and sustainable economic development.

Keywords: RMB Internationalization; Oil Trade; Dollar Hegemony; Exchange Rate Risk; Monetary Policy.

1. Introduction

With the in-depth development of economic globalization, the status and influence of many countries' currencies in the international economy has become increasingly prominent. Currently, the process of internationalisation of the RMB has become an important part of China's economic development strategy, and the extent to which the internationalisation of the RMB has advanced directly reflects China's influence and position in the global economy. Although the internationalisation of the RMB has made some progress in recent years, there are still many constraints on the use of the RMB in international commodity markets, especially in the oil market. As one of the world's most important energy sources, oil occupies a pivotal position in international trade, and the oil market has long used the US dollar as the main settlement currency, giving the US dollar a significantly dominant position globally.

By analyzing the importance of oil trade to the global economy and the current situation of the oil market with the US dollar as the main settlement currency, we explore the role of RMB-denominated oil trade in promoting the internationalisation of the RMB. At the same time, the challenges facing the RMB-denominated oil trade and the policy measures that the Chinese government should take are analyzed to provide theoretical support for improving China's monetary policy formulation and promoting the internationalisation of the RMB. The impact of RMB-denominated oil trade on the internationalisation of the RMB is analyzed from both theoretical and empirical perspectives, and the importance of realizing RMB-denominated oil trade and its potential impact on the global monetary system is explored.

2. The Importance of Oil Trade to the Global Economy and an Analysis of the Current Situation

2.1. The Importance of Oil Trade to the Global Economy

As one of the world's most important energy sources, oil plays a key role in the development of the global economy. Oil resources have a wide range of applications in industrial production, transportation and civil energy, especially in important industrial chains such as chemicals, oil processing...
and aviation, where the demand for oil is even greater. Therefore, the stable development of the oil market is of pivotal importance to global economic growth.

Demand and supply in the oil market largely influence international oil prices. Fluctuations in international oil prices not only affect the economic performance of oil producing and consuming countries, but can also trigger inflation and economic fluctuations on a global scale. Therefore, the oil market occupies a pivotal position in the global economic system and oil trade plays an important role in the global economy.

2.2. China's Position in Oil Imports

Table 1. Oil exports to the world (in million barrels / day)

<table>
<thead>
<tr>
<th>Exporting country</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>Major importing country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>5.5</td>
<td>5.7</td>
<td>5.4</td>
<td>5.6</td>
<td>5.8</td>
<td>China, the European Union, Japan, and South Korea</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>7</td>
<td>7.3</td>
<td>6.8</td>
<td>7.1</td>
<td>7.4</td>
<td>Canada, the European Union, Mexico, Japan, and South Korea</td>
</tr>
<tr>
<td>Americas</td>
<td>2</td>
<td>2.5</td>
<td>2.7</td>
<td>3</td>
<td>3.2</td>
<td>USA, China, Japan, South Korea, and the European Union</td>
</tr>
<tr>
<td>Canada</td>
<td>3.5</td>
<td>3.6</td>
<td>3.4</td>
<td>3.7</td>
<td>3.8</td>
<td>China, the United States, India, the European Union, South Korea</td>
</tr>
<tr>
<td>Iraq</td>
<td>3.9</td>
<td>4</td>
<td>3.2</td>
<td>4.3</td>
<td>4.5</td>
<td>China, India, Japan, South Korea, and the US</td>
</tr>
<tr>
<td>The United Arab Emirates</td>
<td>2.6</td>
<td>2.7</td>
<td>2.4</td>
<td>2.7</td>
<td>2.9</td>
<td>China, India, Japan, South Korea, and the US</td>
</tr>
</tbody>
</table>

China is the world's largest importer of oil. As can be seen from the table, China is one of the major oil importers for Russia, Saudi Arabia, Canada, Iraq and the United Arab Emirates. This means that if these countries agree to use the RMB for settlement in their oil transactions with China, the use of the RMB in international trade settlements will be greatly enhanced.

2.3. Status of the US Dollar in the Oil Market

Table 2. Cases of "dedollarization" of oil supply and demand in recent 20 years

<table>
<thead>
<tr>
<th>Number</th>
<th>Year</th>
<th>Supply and Demand parties</th>
<th>Try to dedollarize measures</th>
<th>Whether successful</th>
<th>Reason for the current performance or failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2006</td>
<td>Iran and Venezuela</td>
<td>Use euros to settle oil transactions</td>
<td>Part of the success</td>
<td>The euro gradually increased, but the dollar remains dominant</td>
</tr>
<tr>
<td>2</td>
<td>2006</td>
<td>Russia and China</td>
<td>Sell along-term oil supply agreement and settle in local currency</td>
<td>Success</td>
<td>Oil trade between the two sides has been fully realized in local currency settlement</td>
</tr>
<tr>
<td>3</td>
<td>2009</td>
<td>Russia and Belarus</td>
<td>Russian rubles to settle its oil exports</td>
<td>Success</td>
<td>The current ruble settlement of oil exports has gradually increased</td>
</tr>
<tr>
<td>4</td>
<td>2012</td>
<td>Iran and India</td>
<td>The rupie to settle its oil exports, bypassing dollar sanctions</td>
<td>Success</td>
<td>The Indian Rupee oil trade has been settled in the rupie</td>
</tr>
<tr>
<td>5</td>
<td>2014</td>
<td>Russia and Turkey</td>
<td>Use the rupie and the lira to settle the oil and gas transactions Use RMB to settle oil imports and promote the use of RMB in the UAE</td>
<td>Part of the success</td>
<td>Oil and gas trade between the two sides is gradually reaching local currency settlement, but the dollar still has a strong position</td>
</tr>
<tr>
<td>6</td>
<td>2014</td>
<td>China and the UAE</td>
<td>Oil import settlement and domestic use of RMB in the UAE are gradually becoming popular</td>
<td>Success</td>
<td>Oil import settlement and domestic use of RMB in the UAE are gradually becoming popular</td>
</tr>
<tr>
<td>7</td>
<td>2015</td>
<td>Russia and Iran</td>
<td>Oil trading, based on hedging, using local currencies, gold, and other commodities</td>
<td>Success</td>
<td>The oil trade between the two sides has been dedollarized</td>
</tr>
</tbody>
</table>

For a long time, the oil market has relied heavily on the US dollar for pricing and settlement. Since the collapse of the Bretton Woods system in the 1970s, the US dollar has played a central role in the international oil market as the world's most important reserve currency. Most members of the Organization of Petroleum Exporting Countries (OPEC), as well as other major oil producing countries, use the US dollar as a settlement currency for their oil exports. This has given the US dollar a significant global dominance and also allowed the US to enjoy "dollar hegemony" in the international financial system.

As can be seen from the contents of the table, there have been continuous attempts to de-dollarise oil supply and demand over the last two decades, and in some cases have been successful and have gradually reduced their reliance on the US dollar. However, the US dollar still dominates oil transactions due to its strong credit backing and liquidity as the world's most important reserve currency. At the same time, the US government and financial institutions have strongly defended the position of the US dollar in international trade. Overall, countries have made some progress in de-dollarising, but complete freedom from US dollar hegemony remains a long-term challenge.

The dominance of the U.S. dollar in the oil market exposes other countries to the risks associated with exchange rate fluctuations in the oil trade. Since the oil market is priced and settled mainly in U.S. dollars, oil consuming countries need to buy U.S. dollars to pay for oil imports, and oil producing countries hold large reserves of U.S. dollars. This makes oil market participants very sensitive to movements in the U.S. dollar exchange rate, and exchange rate fluctuations can have a significant impact on their financial position and economic performance.

However, the dominance of the U.S. dollar in the oil market is also being challenged. The global economic landscape has changed profoundly over the past few decades, and the rapid rise of emerging market countries, particularly China and India, has had a significant impact on the international oil market. The continued growth of oil demand in these countries has also placed new demands on the pricing power and settlement currency of the oil market. In addition, the instability of the U.S. dollar exchange rate and the risks of U.S. monetary policy have also affected trust in the U.S. dollar on a global scale. Therefore, in the new international economic landscape, the need for diversification of the oil market and currency internationalization have become increasingly important issues.

In summary, oil trade is of great importance to the global economy, and the dominance of the U.S. dollar in the oil market exposes other countries to the risk of exchange rate fluctuations. However, in the new international economic landscape, the need for diversification and currency internationalization in the oil market has become an increasingly important issue. In this paper, we will explore the role of RMB-denominated oil trade in promoting RMB internationalization and its potential impact.

3. Promotional Role and Potential Impact of RMB-denominated Oil Trade on RMB Internationalization

3.1. Theoretical Analysis

RMB-denominated oil trade has a positive role in promoting the internationalization of RMB. From the
perspective of currency demand, oil trade is one of the most important global commodity transactions. If RMB can be widely used in oil trade, it will effectively increase the demand of RMB in the international market. As the demand for RMB increases, its status and influence in the international financial market will also gradually increase, creating favorable conditions for RMB internationalization.

In addition, RMB-denominated oil trade helps reduce the exchange rate risk faced by China in international trade. Currently, the oil market is mainly denominated in U.S. dollars, which makes China need to bear the risk of exchange rate fluctuations when importing oil. If RMB-denominated oil trade is realized, it will help to reduce the sensitivity of China's economy to exchange rate fluctuations and protect national energy security.

### 3.2. Empirical Analysis

<table>
<thead>
<tr>
<th>country</th>
<th>Import volume (million tons)</th>
<th>proportion (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>72.06</td>
<td>16.7</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>63.42</td>
<td>14.7</td>
</tr>
<tr>
<td>Angola</td>
<td>39.66</td>
<td>9.2</td>
</tr>
<tr>
<td>Iraq</td>
<td>37.73</td>
<td>8.8</td>
</tr>
<tr>
<td>Russia</td>
<td>29.13</td>
<td>6.8</td>
</tr>
<tr>
<td>Iran</td>
<td>24.65</td>
<td>5.7</td>
</tr>
<tr>
<td>Venezuela</td>
<td>22.13</td>
<td>5.1</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>17.24</td>
<td>4</td>
</tr>
<tr>
<td>Oman</td>
<td>15.45</td>
<td>3.6</td>
</tr>
<tr>
<td>Malaysia</td>
<td>11.6</td>
<td>2.7</td>
</tr>
</tbody>
</table>

The data in the table shows that China's oil imports are huge and demand is stable. This creates a broad market for RMB-denominated oil trade. Shifting oil trade from US dollar-denominated to RMB-denominated will help reduce the risks associated with exchange rate fluctuations and improve China's bargaining power in the international oil market. The diversification of China's oil importing countries, covering different geographic regions such as Asia, Africa and South America, indicates China's growing energy cooperation with various parts of the world. By engaging in RMB-denominated oil trade with these countries, it will help to increase the use of the RMB globally and further strengthen the RMB's international status. We can also see the gradual establishment of China's international cooperation base. Taking Russia and Saudi Arabia as examples, since 2013, China has signed a series of RMB-denominated oil trade contracts with Russia and Saudi Arabia, and has already started to try to settle oil trade in RMB. The signing of these contracts is not only conducive to increasing the application of the RMB in the international oil market, but also helps to expand the application of the RMB's internationalisation and enhance the RMB's status in the international financial system.

In addition, as the world's second largest economy and the largest oil importer, China's position in the international oil market is becoming increasingly important. 2019 saw China's oil imports account for over 30% of total global oil imports. In this context, promoting RMB-denominated oil trade will be conducive to increasing China's voice in the international oil market and further promoting the RMB internationalisation process.

However, the share of RMB-denominated oil trade in the international market is still relatively small. According to statistics, by the end of 2022, the share of RMB-denominated oil trade in China's total oil imports was only about 8%. This means that more efforts are still needed to achieve the widespread use of the RMB in oil trade.

### 3.3. Potential Impacts

The promotion of RMB-denominated oil trade has far-reaching implications for the development of the global monetary system. On the one hand, the application of RMB in oil trade will help break the monopoly of the US dollar in the international oil market and promote global currency diversification. This will help maintain the stability of international financial markets and improve the ability of the global economy to withstand risks.

On the other hand, RMB-denominated oil trade will help promote the opening of China's financial market to the outside world. As the application of RMB in oil trade gradually expands, the attention of international investors to China's financial market will further increase. This will be conducive to attracting foreign capital to China's financial market, promoting the reform of the domestic financial market and enhancing the ability of financial services to the real economy.

In conclusion, RMB-denominated oil trade is of great significance to promote RMB internationalization. The macro level should make comprehensive use of various policy instruments to actively promote the application of RMB in the oil market and create favorable conditions for achieving the goal of RMB internationalization.

### 4. Challenges and Policy Measures for RMB-denominated Oil Trade

#### 4.1. Challenges of RMB-denominated Oil Trade

Although RMB-denominated oil trade is expected to promote the internationalization of RMB, it still faces many challenges in the process of practice.

1. The dominant position of the U.S. dollar in the international oil market is difficult to shake: for a long time, the U.S. dollar, as the main settlement currency in international trade, has a pivotal position in the oil market. The widespread use of the U.S. dollar gives it a significant advantage in the international monetary system, and it will take time and effort to challenge the position of the U.S. dollar in the oil market.

2. Insufficient international creditworthiness of RMB: Although the internationalization of RMB has achieved certain results, compared with mature currencies such as USD and EUR, the international creditworthiness of RMB still needs to be improved. External markets have limited recognition of RMB and may have some resistance to RMB-denominated oil trade.

3. Insufficient RMB convertibility: Although China has implemented a policy of conditional capital account convertibility, there are still restrictions in many aspects that affect the convertibility of the RMB in the international market. Improving the convertibility of RMB is one of the key factors to promote oil trade denominated in RMB.

4. Imperfect domestic financial market: The domestic financial market has not yet been fully opened, and the imperfection of the financial market may affect the development of RMB-denominated oil trade. In addition, the potential risks in the financial market may affect the stability of the RMB, which in turn affects the application of the RMB
in the oil market.

4.2. Policy Measures

To address the above challenges, the Chinese government needs to adopt a series of policy measures to facilitate the development of RMB-denominated oil trade.

1) Improve the international credibility of the RMB: actively participate in international financial institutions and rule-making in the international oil market, strive to play a greater role in the international oil pricing system, and improve the international status of the RMB. At the same time, we should step up external publicity to improve the international image of the RMB and enhance the trust of external markets in the RMB.

2) Improve the RMB convertibility policy: gradually relax the conditions for capital account convertibility and increase the convertibility of the RMB in the international market. In addition, actively develop the offshore RMB market, increase the international circulation channels of RMB, and provide more convenience for RMB-denominated oil trade.

3) Deepen domestic financial market reform: improve financial market infrastructure, enhance the transparency and efficiency of financial markets, and create a favorable internal environment for the application of RMB in the oil market. Strengthen financial risk prevention to ensure the stable operation of the financial market and enhance the attractiveness of the RMB.

4) Strengthen cooperation with major oil-producing and marketing countries: Deepen economic and trade cooperation with major oil-producing and marketing countries through bilateral and multilateral channels, and actively promote the application of RMB in oil trade. For example, explore with Russia, Saudi Arabia and other countries to establish RMB-denominated oil trade mechanism, so as to lay a good foundation for the promotion of RMB in the international oil market.

Facing the challenges of RMB-denominated oil trade, the Chinese government needs to adopt a series of policy measures to promote the development of RMB-denominated oil trade and provide strong support for the internationalization of RMB.

5. Importance of RMB-denominated oil Trade for RMB Internationalization

5.1. Improving the Position of RMB in the International Market

The realization of RMB-denominated oil trade will help improve the RMB's position in the international market. Since oil occupies a pivotal position in the international commodity market, the currency settlement of oil trade has a significant impact on the global monetary system. Currently, the dominance of the U.S. dollar in the international oil market makes it the most important reserve and settlement currency in the world. If the RMB can gain a certain share in the oil market, it will help improve the RMB's status in the international financial system and make it gradually become a competitive reserve currency and settlement currency.

5.2. Create Favorable Conditions for RMB Internationalization

RMB-denominated oil trade will create favorable conditions for the internationalization of RMB. First, RMB-denominated oil trade will increase the demand for RMB in the global market and increase the frequency of RMB use in international settlement. Second, as the application of RMB in the oil market expands, the cross-border liquidity of RMB will be significantly improved, providing a broader practical basis for RMB internationalization. In addition, by promoting RMB-denominated oil trade, China can accumulate experience in rule-making and oil trade practices in the international oil market, and accumulate experience for promoting RMB internationalization in more areas in the future.

5.3. Promote Global Currency Diversification

RMB-denominated oil trade will help promote global currency diversification. The dominance of the U.S. dollar in the international financial system has made the global financial market overly dependent on the U.S. dollar, thus increasing the instability of the global financial system. The application of RMB in the oil market is conducive to breaking the monopoly of the US dollar in the international financial system and achieving a balance of multiple currencies in international settlement. In this context, the risks of the global financial market will be more effectively dispersed and the stability of the international financial system will be improved.

5.4. Reduce the Sensitivity of China's Economy to External Shocks

The promotion of RMB-denominated oil trade will reduce the sensitivity of China's economy to external shocks. In the current international oil market, the U.S. dollar is the main settlement currency, and there is significant currency risk between the U.S. dollar required to be paid for China's oil imports and China's foreign exchange earnings. By realizing RMB-denominated oil trade, China will be able to hedge this currency risk to a certain extent, thus reducing the sensitivity of the domestic economy to external shocks. In addition, reducing dependence on the U.S. dollar will also increase China's independence in the international economy and provide a more stable external environment for China's economic development.

5.5. Achieve More Stable and Sustainable Economic Development

RMB-denominated oil trade will have a positive impact on China's economic development. By promoting the application of RMB in the oil market, China will be able to reduce the cost of oil imports, improve the stability of domestic energy supply, and thus promote the stable development of the domestic economy. At the same time, achieving currency diversification on a global scale will help improve the stability of the international financial market and create a more favorable external environment for China's economic development. In this context, China's economy will be more likely to achieve more stable and sustainable development.

To sum up, promoting RMB-denominated oil trade is of strategic importance for RMB internationalization. By realizing RMB-denominated oil trade, the RMB's status in the international market will be improved, creating favorable conditions for RMB internationalization. At the same time, it will help promote global currency diversification, reduce the sensitivity of our economy to external shocks and achieve more stable and sustainable economic development. To this end, China should fully recognize the important role of RMB-
denominated oil trade in the process of RMB internationalization and continue to promote the formulation and implementation of relevant policies to achieve the goal of RMB internationalization.

6. Conclusion

Through an in-depth study of the role of RMB-denominated oil trade in promoting RMB internationalization and its potential impact, this paper finds that promoting RMB-denominated oil trade has important strategic significance. The realization of RMB-denominated oil trade will help improve the RMB's position in the international market, reduce exchange rate risks, and thus accelerate the internationalization of the RMB. In addition, this initiative will help promote global currency diversification, reduce the sensitivity of China's economy to external shocks, and create favorable conditions for achieving stable and sustainable economic development.

However, to realize RMB-denominated oil trade, it is still necessary to overcome the challenges of the current international financial system in which the US dollar is an international currency. To this end, the Chinese government needs to take a series of policy measures, including improving the credibility and convertibility of the RMB, actively participating in international oil market rule-making, strengthening cooperation with major oil producing and marketing countries, and promoting domestic financial market reform, in order to create a favorable external environment for RMB-denominated oil trade.

In conclusion, promoting RMB-denominated oil trade is an important task in the process of RMB internationalization. The government should make comprehensive use of policy instruments to actively promote the application of RMB in the oil market and gradually realize the goal of RMB internationalization. In this process, it is necessary to give full play to the active role of all parties, including the government, enterprises and the financial market, to jointly contribute to promoting the internationalization of the RMB and achieving high-quality development of China's economy.

References


