Petrodollar and De-dollarization: A Survey from OAPEC Countries

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Abstract. The study investigates reducing dependence on the dollar as a supreme currency for oil trade and the basis of the global monetary system and analyses the state of the dominance of the US dollar as an exchange currency in the global oil market. According to an exploration of AOPEC (Organization of Arab Petroleum Exporting Countries) countries' views on the petrodollar after the second shock of globalization, since the second quarter of 2022, with the start of the war in Ukraine, the world order has witnessed an economic war alongside a conventional war. The study created a questionnaire in Arabic for professionals and academics in several Arab oil-exporting countries in the first quarter of 2023. According to the results of the questionnaire analysis, participants hold differing opinions. The global oil market is ready to abandon the petrodollar; the weight of giving up the petrodollar will be more than 50% of the oil market; it will most likely take three to five years. Russia and China are attempting to undermine U.S. control over the global monetary system for political reasons; US efforts to impose the Russian oil price cap are a source of systematic risk to them; Russia's and China's governments employ a wide range of strategies to stop that; on the other hand, the currency diversification policy that oil-exporting countries follow in order to preserve their oil revenues has become a necessity to avoid or reduce the risks of imported inflation and additional fluctuations in the value of the US dollar.

1 Introduction

The US dollar has been the dominant reserve currency since the Bretton Woods agreement of 1944. The US dollar has long been considered a safe haven currency, especially during times of economic and political uncertainty. Investors and central banks often turn to the dollar as a refuge during times of crisis. Reasons why the Dollar is a Safe Haven Currency: Economic Stability: According to Berger and Chaboud, 2019, the US dollar's status as a safe haven currency is largely due to its economic and financial stability. Political Stability: According to Choi and Cook (2019), political stability is a crucial factor in determining a currency's status as a safe haven asset. Liquidity: according to Eichengreen and Mathieson

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(2020), the dollar's liquidity ensures that investors can easily buy and sell the currency during times of market stress. Since the beginning of the war in Ukraine in February 2022, the world order has been afflicted by both conventional and economic warfare; global supply systems have been disrupted. In addition to predictions regarding the U.S.'s effectiveness in negotiating a Russian oil price limit.

Recent developments on the global oil market have been extremely perilous, causing the United States great concern. The China Securities and Regulatory Commission announced that petroleum oil futures contracts commencing trading on March 26, 2022 will be denominated in Chinese Yuan rather than US Dollars. This reflects the severe challenges facing Dollar pricing, which has dominated global oil markets (also known as petrodollars) since 1974, when oil-producing nations such as Saudi Arabia and others agreed to accept the Dollar as the preeminent currency for oil sales. Due to China's expanding involvement in the global political and economic order, China and Russia have made numerous attempts to price oil in Yuan and Ruble. In addition, there are numerous indicators and international institutions that reflect the global system's transformations. This world order is undergoing reorganization in response to the new political and economic reality of the global balance of power. The global system is also experiencing a gradual and rapid end to the system of unequal exchange between Western countries and the rest of the world, as well as an increase in the number of regional crises over the last several decades. This will impact the dollar's confidence and service China's strategic objectives. China has surpassed the United States as the primary destination for oil revenues from the GCC via the commercial channel, which has significantly reduced the effectiveness of the petrodollar system [1].

These developments inevitably impact the many countries' foreign exchange reserves in US dollars and the performance of their central banks. These developments inevitably impact the countries' foreign exchange reserves in US dollars and the performance of their central banks. Since the second quarter of 2022, when the conflict in Ukraine began, the world order has witnessed both conventional and economic warfare. This war caused a second shock to globalization, following the effects of the COVID-19 pandemic on supply chains and business strategy, as a result of the United States, Europe, and Japan's efforts to exclude Russia from the international economic system in general and the banking system in particular.

The US dollar has been hit in two aspects of its strength factors. It has lost political stability, especially in light of the conflict between Tram and the Democratic Party, in addition to the loss of economic stability in light of the high rates of inflation. It only retains the liquidity factor.

The study will be divided into six sections beside introduction; that includes “literature review and theoretical frame-work”; “study methodology and design”; “data analysis and hypothesis test“; ”discussion”, “study limitations” and “conclusions and recommendations”.

2 Literature review and theoretical frame-work

2.1 international monetary system after World War II

The establishment of a new international monetary system that would save the world from the financial crisis that existed between the two world wars was difficult until 1944, when the victors of World War II met in Washington (Bretton Woods / Hampshire) to establish a new international monetary system. The major powers had a strong interest in facilitating the reconstruction of European economies, thereby preventing a return to the 1930s-era competition for devaluation of currencies and protectionist measures. In this context, the
International Bank for Reconstruction and Development was created to provide long-term financing for the reconstruction of Europe [36]. Since the 1950s, the Bank's activity has shifted to providing long-term loans to finance development initiatives and programmes in developing nations, and an institutional framework has been established to manage the new system based on agreed-upon principles [26]. The International Monetary Fund has imposed the following requirements on member states:

- Strengthening global financial cooperation
- Facilitating the expansion of international commerce
- Enhancing currency stability
- Implementation of a multilateral payment system
- Using the Fund to accumulate a sufficient foreign exchange reserve

Under such a system, each member state would set the value of its currency in terms of a fixed amount of gold or U.S. dollars, and currencies would be permitted to fluctuate by no more than 1 percent around the declared par rate, with central banks intervening to buy or sell their currency on free markets to maintain this price.

The Bretton Woods system was founded on the gold exchange base, as it was predicated on the possibility of converting the US dollar into gold and fixing the exchange rates of other currencies relative to the dollar. Thus, the relationship between gold and other currencies becomes indirect. Keynes viewed the existence of the dollar as the new system's fulcrum as a weakness. He advocated for the adoption of a new international currency issued by the International Monetary Fund called The Bancor, but his proposal was rejected at the start of the 1960s as the Bretton Woods system's flaws became apparent [32].

In the aftermath of World War II, the Bretton Woods system was established in 1944 to contribute to the broadening of the Dollar's global circulation, thereby making it the most important currency for resolving international transactions [13]. Despite widespread predictions of a swift global switch to the USD after 1945, sterling's reserve function did not cease until the late 1970s [33]. The most influential factors governing the international use of currency are: [29, 20, 18, 33, 39, 4]. The U.S. dollar can serve as a secure haven in the financial market during economic crises. The US dollar offers very attractive downside risk gains for currencies of emerging economies. It provides confidence in the value of the currency, which requires confidence in the inflation performance of the country that issues the currency and a stable value in order to be a unit of account and unit of exchange. The exchange rate depreciates as a result of variable and high inflation. In this context, the United States' inflation performance has been superior to that of the main industrialised nations since the adoption of deflated rates in 1973.

On other hand; the United States enjoys great political stability due to the absence of countries willing to attack it and the lack of internal conflicts and liberation movements, with the exception of the events of September 11, 2001, which were regarded as one of the factors that began to destabilise the US dollar on the international level.

The economic characteristics of the country that issues the currency, such as its proportion of international trade and the size of its economy. In addition to having a varying array of financial instruments and developed markets, the country that issues the currency has a liberalised and extensive financial currency. Since 2002, a combination of internal and external factors has contributed to the devaluation of the U.S. dollar, which has been impacted by a number of external and internal disturbances. The budget deficit dominated the internal factors, as the United States pursued a foreign policy that drained a significant portion of its resources through spending on wars and the arms competition. Consequently, the U.S. economy has suffered from structural imbalances that are manifested in the public budget deficit's deterioration.
In this context, China has actively intervened in the foreign exchange market to exert pressure on the dollar in order to prevent its currency from appreciating and compete with its exports. Monthly Chinese intervention in the foreign exchange market ranges between 10 and 15 billion dollars [30]. The dollar's influence precipitated a severe financial crisis that affected European currencies. European nations have experienced severe imbalances manifested by a sharp increase in inflation rates, a decline in the competitiveness of their products, and a decline in the value of their currencies [32]. Consequently, the fluctuations in the Dollar's value and the global economy had the following effects: Through the recovery of these countries' exports to the United States, the dollar exchange rate improves the competitiveness of foreign economies, particularly U.S. corporations, resulting in higher growth rates in these countries.

Therefore, the rise in the Dollar's exchange rate results in the export of US economic growth to the rest of the globe [2]. At the sectoral level, the effects resulting from the fluctuation of dollar prices differ, allowing for a distinction between the substitution effect and the income effect. There is a substitution or transfer effect when fluctuations in the exchange rate impact the profit of a foreign sector on the international market at the expense of sectors in the dollar area. As for the income effect, it is the outcomes that result from the substitution effect, such as increased rates of productivity [36].

2.2. Global oil market and US dollar

There is a strong relationship between the global oil market and the dollar exchange rate, as transactions for buying and selling oil are conducted in dollars, the majority of oil-producing countries receive their revenues in dollars, and international oil corporations invest in dollars when financial surpluses accumulate in oil-producing nations.

In this context, the dollar is the predominant currency. When the United States influences the value of its currency, either up or down, through a variety of means, the most significant of which are interest rates, or through the statements of US monetary policy officials, this will be reflected in the prices of dollar-denominated goods and services, such as oil. This explains the nature of the relationship between the change in the dollar exchange rate and the change in oil prices, given that the dollar is the strongest currency in the world in terms of economic strength and oil is unquestionably the most valuable and most traded commodity. Typically, the nature of the relationship between these two variables is inverse, as a decline in the price of the dollar leads to an increase in the price of oil. According to Cathin Lane's report, there is a 90% chance of an increase in oil prices due to a decline in the dollar index. Midway through 2008, low oil prices were associated with a rise in the dollar's exchange rate, despite the effects of the financial crisis [9]. The short-term and long-term effects of a diminished role are radically dissimilar. If we accept that one of the reasons for the dollar's depreciation is the increase in the US trade deficit, then the short-term effect will be an increase in oil prices, as individuals tend to exchange their dollars for in-kind assets, the most important of which is oil, thereby increasing speculation on oil futures markets. According to the International Monetary Fund, whenever oil prices increase by 10%, the exchange rates of the currencies of OPEC member states will fall by 2%. This is because higher oil prices lead to a rise in oil imports to the United States, which in turn leads to an increase in the United States' trade deficit and current account deficit, resulting in a depreciation of the dollar. The American economy benefits from either a decrease or an increase in crude prices. If the United States is concerned about excessive oil prices, it will increase the dollar's exchange rate in order to purchase oil at a lower price.

However, if the United States is concerned about energy security, it should employ a strong dollar policy, as this will limit the growth of global oil demand. When oil prices fall as a result of a rising dollar, oil sales increase in the short term, and an appreciation of the
dollar against other countries' currencies maximizes their revenues. On the other hand, the eurozone benefits from a lower dollar exchange rate due to lower oil production and import costs, as well as lower prices for US goods and services compared to European goods and services.

2.3 Dollar posture before March 2022

Years after the United States ended the Bretton Woods system, the dollar remains the dominant currency in the globe. Before March 2022, approximately (85%) of all foreign exchange transactions involve the dollar. Almost two-thirds of all central bank reserves are held in dollars [12].

The definition of global reserve currencies refers to those currencies that dominate the basket of other currencies that comprise central banks' foreign exchange reserves and are widely used outside of their home countries in physical transactions and by international financial markets in contracts, trades, and financial instruments. Additionally, a substantial number of nations connect their exchange rates to these global reserve currencies [11]. The dollar has lost approximately 98% of its purchasing power since 1913. 70% of dollars outside the United States are in smaller denominations. This may result in hyperinflation as the dollar loses value. Then the Dollars will begin to return to the United States, and inflation will return to the country, particularly since many American financial bonds are owned by China, Russia, and other foreign nations [16].

When the American mentality dominated the perception that the Japanese yen might be the most suitable currency to compete with the US dollar after the abolition of the Bretton Woods system, primarily during the seventies and eighties of the last century, and to a lesser extent in the early nineties, more than a quarter of Americans believe that Japan is the most powerful economic power in the world, and more than half of them view Japan as a major threat to the United States. Nonetheless, following the bursting of the stock and real estate bubbles in the early 1990s, Japanese development slowed, inflation collapsed to almost zero, and belief in the yen's competition with the dollar declined in favor of a group of other currencies, the most significant of which are: [17, 23, 24, 31, 25].

European Currency (Euro); The liquidity and breadth of euro financial markets are swiftly approaching those of dollar markets, which increases the impetus for monetary authorities to reevaluate the composition of reserve currencies. Nonetheless, the adoption of the euro has not yet substantially altered the currency composition of government reserve holdings.

The US dollar has maintained its status as the preeminent reserve currency, presumably because dollar financial markets continue to have a size, credit quality, and liquidity advantage over euro markets, in addition to foreign currency utilisation inertia. In the past decades, the Euro (the 1999-introduced currency backed by the European Central Bank) has become the most competitive currency against the dollar, with approximately 20% of global reserves presently held in Euros. The second greatest proportion of reserves. The euro is a pan-currency that is transacted across the economies of 19 countries that do not participate in a common asset market; therefore, for a global reserve currency to develop, investors must be able to place their money in deep and liquid markets, of which there are few in the eurozone.

In addition, the Eurozone is experiencing sluggish development, and given investors' pessimistic outlook for the coming years, they may be reluctant to invest in markets that may experience deterioration. The politics of the eurozone are the final concern. As a monetary union devoid of a fiscal union, the eurozone has struggled to compensate for debilitating credit booms and crashes. This resulted in significant economic disparity, which fueled political discontent among nations.
The response of the European Union to the (Covid-19) pandemic has resulted in the formation of what can be termed "financial unions" between European countries to rescue the economies of the surrounding countries in times of crisis, as the European Union agreed in July to issue (750) billion euros of joint debt to finance remittances to countries battling to recover from the pandemic. Although these unions could rival the United States' financial standing, the most likely outcome is that zealous defence of national sovereignty will thwart efforts to establish a permanent European fiscal union. Additionally, Britain's departure from the European Union may result in the departure of other nations, such as Italy. In this case, investors will not find security in an economy that is unstable.

The Chinese currency (The Renminbi); The internationalisation of the renminbi is a crucial component of China's strategy to abandon its "hide and direct" policy, which aims to conceal its rise, as it will reduce China's reliance on the United States, help it develop its markets, and establish Shanghai as an alternative financial center. In this context, the Chinese government has compelled private corporations to issue invoices and resolve transactions in renminbi, requested state corporations to do the same, and urged other central banks to adopt the renminbi. The "Belt and Road" initiative, through which China intends to use its institutions to finance and construct infrastructure in as many as 68 countries, will contribute to the internationalisation of the renminbi by establishing a trading system centred on Chinese corporations. In the near future, China confronts a number of formidable obstacles. Only 2% of cross-border transactions are currently conducted in CNY.

Since 2015, the People's Bank of China's actions have demonstrated that political leaders will continue to control the currency's value. Instead of liberalising its capital account further, China has increased capital controls. To compete directly with the dollar, China would have to terminate capital controls, liberalise interest rates, and float the yuan (the primary unit of the renminbi).

However, implementation of the aforementioned necessitates a significant shift in the Chinese development model and a reduction in the Chinese People's Party's control. As a result of China's rising prominence in global markets, the Chinese yuan will be a long-term competitor to the US dollar. Short-term, however, Beijing's wish to concentrate on domestic markets will be constrained by its pursuit of broader social and geopolitical objectives.

The Special Drawing Rights System; It is an international reserve asset created by the International Monetary Fund, which allocates a reserve asset called the "Special Drawing Right" (SDR) with a value based on a basket of currencies to member states (China had a major success in internationalising its currency when the International Monetary Fund included the Yuan in this basket in 2015). The SDR's primary function in the dollar-based Bretton Woods system was to serve as an additional form of liquidity. Four times since 1970, the IMF has depleted this reserve, despite China's repeated requests for expanded use of Special Drawing Rights in the 1980s and 1990s.

2.4 Future prospects for oil markets and the international monetary system

New foundations for the international monetary system take into account "the avoidance of excessive dependence on the dollar, and the trend towards adopting a basket of currencies according to the strength of their economies, as many countries in Latin America and Asia began abandoning the dollar as a means to finance their foreign trade, such as Brazil, which resorted to using the real." In its trade with China, the Chinese yen diversified the currencies in which its reserves are held, whereas some countries changed their monetary systems linked to the dollar and sought to link their currency to a basket of currencies such as the coquette, and Egypt relied on the flotation system recently.
Referring to the euro, the Japanese yen, the British pound, and the Chinese yuan, it is also possible to re-read the Keynes project on the establishment of an international system for payments and clearing, through the creation of a new international currency and the provision of cooperative financing facilities between central banks to face the problems encountered by some countries in their balance of payments, as well as developing and modernising its projects in accordance with the act. Grinberg (2012) argued that the invasion of Iraq in 2001 was motivated by former Iraqi President Saddam Hussein's desire to sell crude for Euros, which posed a threat to the Dollar's dominance in international trade.

Nabar and Tovar (2017) conducted a study on the internationalisation of the Renminbi in which they analysed the evolution of the Chinese currency abroad as well as the political measures by which China strengthened its currency in its oil exchanges and the repercussions of this strengthening. Through the expansion of Hong Kong's overseas market, the Renminbi emerged as a means of payment in energy exchanges and cross-border investments between China and its neighbours, according to the study. The report concluded that Renminbi support has propelled China towards progress and development and that, despite the increasing use of the Renminbi in Chinese oil exchanges, there is still a long way to go before the Chinese currency is globally recognised. Until this occurs, however, the global monetary and financial systems will be in the midst of a pervasive upheaval.

Costigan and Cottle (2018) argued that the United States' hegemony over the international system since World War II has given its currency dominance over the global monetary system. They concluded that Russia, China, and Iran are attempting to undermine US hegemony over the global monetary system, but such efforts are unlikely to succeed easily due to the dollar's extensive global dominance. Mathews and Selden (2018) analysed the connection between the apex of the oil age and American hegemony over the global economic and political system.

The study argued that the United States' efforts to maintain its hegemony over the global system are becoming increasingly difficult due to the tendency of oil-exporting nations to implement alternative currencies in their oil exchanges, which affects the country's foreign currency reserves (Euro and Dollar). Kamel and Wang (2019) focused on China's endeavours to promote the Renminbi in the oil import market. It examined the phases of this currency's evolution in international trade. It has been argued that it is unlikely that the Petro-Yuan will supplant the Petrodollar in the near future because China lacks the economic and geopolitical leadership to make the Chinese currency a global oil exchange medium.

Despite the growth of oil futures contracts denominated in the Chinese currency RMB and the absence of developed financial markets and a legal system supporting the Chinese currency, the Chinese Yuan is likely to play a significant role in the international oil market in the future. In addition, alternative energy sources will contribute to the decline of oil's importance in the global economy. The significance of the Petrodollar and Petroyuan, as well as the global economic system, will reflect this. Alshareef (2023) argued that as a result of the transformation of the global economy and the rise of significant international powers such as China, the global economy is undergoing sub-regional trade, investment, and financial restructuring.

Data indicates that 11.5% of China's total foreign investments are in Arab countries. In light of the profound changes occurring in the global economy, this study examines the fundamental pillars of the petrodollar system, such as the recycling of energy revenues within the framework of international trade via the time series of trade with the European Union, China, and the United States, as well as the factors that push Gulf countries to reconsider their assessments. China trades crude in yuan. The study revealed a significant
decline in trade between China and the Gulf states, in China's favour. This helps China maintain its geo-economic strength by bolstering the yuan's position in its trade exchanges with Gulf states that seek to attract Chinese investment.

Most literatures focused on the relationship between the price of oil and global trade flows as a major determinant of the global economic system's ability to continue, but they neglected the dynamic character of the economic system and its capacity to expand the scope of its main pillars. The majority of the world's nations have tended to diversify their primary economic sources, and the numerous global crises of the last few decades have confirmed the need to progress towards a multiplicity of alternatives.

There has been a recent trend among researchers and analysts regarding the potential decline of the dollar's function as an intermediary for oil exchanges in international trade. However, the majority of these studies confirmed that this transition will occur over the medium to long term. As a result of the war in Ukraine, the global economy is experiencing a major crisis, which will compel them to reevaluate their forecasts, as the world is heading towards a massive conflict and a deep economic crisis. This trend will be reinforced by Russia's insistence that Western nations purchase energy resources in rubles rather than dollars.

3 Study Methodology and Design

Due to the dearth of quantitative data and the short time series since Russia's announcement that it would no longer price oil in dollars, a qualitative approach was adopted. This was a result of the sanctions on the access of Russian banks to the international banking system through the restriction of Russian banking operations at the Society for Worldwide Interbank Financial Telecommunication system, also known as the SWIFT system, which, along with the inaccuracy of the data, resulted from the concealment of part of the Russian oil sales to China and India. Many countries have joined an informal coalition seeking to achieve De-dollarization. We find that the BRICS countries are the engine of this, in addition to many emerging economies that have been affected by the strong US dollar policy, especially with the FED fighting inflation in USA. Saudi Arabia, UAE, Egypt, Argentina, and other countries support those efforts. Many emerging markets have been affected by the monetary tightening policy in the United States, raising interest rates on the US dollar has boosted the exit of capital inflows from financial markets, which has put many economies' currencies under pressure. Now there is a tendency to implement international trade through currencies other than the dollar, so de-dollarization has become real now.

The current study measures the attitudes of professionals and academics in OAPEC countries about give up the petrodollar as a mechanism of De-dollarization. - OAPEC is a regional intergovernmental organization that was established in 1968 with the objective of fostering cooperation among its member countries, which are all major oil exporters in the Arab world. The current members of OAPEC are Algeria, Bahrain, Egypt, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, Syria, Tunisia, and the United Arab Emirates. The organization is headquartered in Kuwait- The study addresses the main question of whether the end of the petrodollar, in conjunction with the onset of de-dollarization, or, in other words, does the transition to Petroyuan and Petroruble. So, the study has questions as follows:

Q1: Is it possible to abandon the Petrodollar?
Q2: How long is it expected to give up the petrodollar if that happens?
Q3: What is the weight of the global oil market based on giving up the petrodollar?
Q4: What is the attitude about giving up the petrodollar?
Q5: Do the policies of abandoning the petrodollar could lead to a change in the international reserve policies of the central banks?
Q6: Can the US dollar continue to be the main pricing currency for petroleum?
Q7: Can the United States resist giving up the petrodollar?

The US dollar plays a crucial role in global finance system, as it is the primary currency used for foreign exchange transactions. It is the most traded currency in the globe, accounting for more than 80% of all foreign exchange transactions. In addition, the majority of central banks keep the majority of their foreign currency reserves in dollars, which contributes to the stability of the global financial system. Its dominance is attributable to the stability of the American economy, its acceptance as a payment method, and its use in international commerce and finance. However, the global economy's reliance on the dollar can also pose potential hazards. As a result, it is essential to monitor the dollar's function in the international financial system and to take the necessary steps to mitigate any potential negative effects. The imposition of sanctions on the international payment system on Russia as a result of the military supremacy in Ukraine, in addition to China's intentions to annex Taiwan, in addition to the damage from the strict monetary policy, made many economies negatively affected, making many countries support de-dollarization. So, the study can test the following hypotheses:

H1: There isn’t a significant difference in the attitudes of OAPEC countries about whether it is possible to abandon the Petrodollar.
H2: There isn’t a significant difference in the attitudes of OAPEC countries about the expected time to give up the petrodollar.
H3: There isn’t a significant difference in the attitudes of OAPEC countries about the weight of the global oil market based on giving up the petrodollar.
H4: There isn’t a significant difference in the attitudes of OAPEC countries about giving up the petrodollar.
H5: There isn’t a significant difference in the attitudes of OAPEC countries about change in the international reserve policies of the central banks based on abandoning the petrodollar.
H6: There isn’t a significant difference in the attitudes of OAPEC countries about the US dollar continuing to be the main pricing currency for petroleum.
H7: There isn't a significant difference in the attitudes of OAPEC countries about the ability of the United States to resist giving up the petrodollar.

The original questionnaire was in Arabic. Three experts in the petroleum industry were invited to review the questionnaire. The measurement was based on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire was piloted on a sample of thirty-seven practitioners (scientific committee members and close collaborators) from five Arab nations to guarantee its clarity, reliability, and exhaustiveness.

According to Arab legislation (the countries where the study was coordinated), ethical approval was not required as no intervention was conducted and no information on the health of participants was collected. Based on the pilot test, the study rewrote a few of the questionnaire's questions. The Facebook paid questionnaire was relied on as a data collection tool by targeting both professionals and academics in Arab oil-exporting countries, including top managers of petroleum corporations, bankers, and university professors, in addition to representatives of the government and regulators in the oil industry in Arabic countries.
4 Data Analysis and Hypothesis Test

4.1 Data collection

In the first quarter of 2023, the survey was targeted at five segments, with an approximate response rate of 31%, the study collected 412 useful questionnaires. See Table No. (1)

Table 1. Sample structure

<table>
<thead>
<tr>
<th>No.</th>
<th>Segment</th>
<th>size</th>
<th>weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academy</td>
<td>72</td>
<td>17.47</td>
</tr>
<tr>
<td>2</td>
<td>Bankers</td>
<td>122</td>
<td>29.61</td>
</tr>
<tr>
<td>3</td>
<td>Financial Experts</td>
<td>126</td>
<td>30.58</td>
</tr>
<tr>
<td>4</td>
<td>Government and Regulators Officials</td>
<td>37</td>
<td>8.98</td>
</tr>
<tr>
<td>5</td>
<td>Managers of Petroleum Corporations</td>
<td>55</td>
<td>13.35</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>412</td>
<td>100%</td>
</tr>
</tbody>
</table>

Financial experts were given the most weight in the final sample of 412 professionals and academics from OAPEC countries, while government and regulator officials were given the least. Nine nations (Algeria, Egypt, Iraq, Jordan, Kuwait, Libya, Qatar, Saudi Arabia, and the United Arab Emirates) contributed to the data collection by filling out questionnaires. The inferential analysis results demonstrated the following by comparing the means of more than two separate samples:

4.2 Reliability test

Cronbach’s alpha and Spearman-Brown coefficients, were calculated to assess the reliability of the scale. Of the participants (n = 412). Cronbach’s alpha coefficient for the whole scale was 0.798. The Spearman-Brown coefficients for the whole scale and its sub-dimensions show that reliability values were also sufficient. According to the results of first and second order confirmatory factor analysis, fit indices demonstrated a very good model fit.

4.3 Descriptive statistics

Table No. 2 illustrates the descriptive statistical parameters of the responses of the participants in this questionnaire

Table 2. Descriptive statistical parameters

<table>
<thead>
<tr>
<th>No.</th>
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<th>Mean</th>
<th>Std. Deviation</th>
<th>Variation coefficient</th>
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<tbody>
<tr>
<td>Q1</td>
<td>Do you think that giving up the Petrodollar can work?</td>
<td>4.0971</td>
<td>1.2902</td>
<td>0.314906</td>
</tr>
<tr>
<td>Q2</td>
<td>How long is giving up the Petrodollar expected to take?</td>
<td>2.9029</td>
<td>1.3347</td>
<td>0.459782</td>
</tr>
<tr>
<td>Q3</td>
<td>In case it happens, what percentage of the global oil market will this trend (giving up the Petrodollar) include?</td>
<td>3.5437</td>
<td>1.4213</td>
<td>0.401078</td>
</tr>
<tr>
<td>Q4</td>
<td>Do you think that the Arab countries are able to support that trend?</td>
<td>3.6602</td>
<td>1.3276</td>
<td>0.362712</td>
</tr>
<tr>
<td>Q5</td>
<td>Do you think that the policies of abandoning the Petrodollar could lead to a change in the international reserve policies of the central banks in the Arab countries</td>
<td>4.1165</td>
<td>0.6735</td>
<td>0.16361</td>
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Data Analysis and Hypothesis Test

4.1 Data collection
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<td>126</td>
<td>30.58</td>
</tr>
<tr>
<td>4</td>
<td>Government and Regulators Officials</td>
<td>37</td>
<td>8.98</td>
</tr>
<tr>
<td>5</td>
<td>Managers of Petroleum Corporations</td>
<td>55</td>
<td>13.35</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>412</td>
<td>100%</td>
</tr>
</tbody>
</table>

Financial experts were given the most weight in the final sample of 412 professionals and academics from OAPEC countries, while government and regulator officials were given the least. Nine nations (Algeria, Egypt, Iraq, Jordan, Kuwait, Libya, Qatar, Saudi Arabia, and the United Arab Emirates) contributed to the data collection by filling out questionnaires. The inferential analysis results demonstrated the following by comparing the means of more than two separate samples:

4.2 Reliability test
Cronbach's alpha and Spearman-Brown coefficients were calculated to assess the reliability of the scale. Of the participants (n = 412), Cronbach's alpha coefficient for the whole scale was 0.798. The Spearman-Brown coefficients for the whole scale and its sub-dimensions show that reliability values were also sufficient. According to the results of the first and second order confirmatory factor analysis, fit indices demonstrated a very good model fit.

4.3 Descriptive statistics
Table No. 2 illustrates the descriptive statistical parameters of the responses of the participants in this questionnaire.

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>Do you think that giving up the Petrodollar can work?</td>
<td>4.0971</td>
<td>1.2902</td>
<td>0.314906</td>
</tr>
<tr>
<td>Q2</td>
<td>How long is giving up the Petrodollar expected to take?</td>
<td>2.9029</td>
<td>1.3347</td>
<td>0.459782</td>
</tr>
<tr>
<td>Q3</td>
<td>In case it happens, what percentage of the global oil market will this trend include?</td>
<td>3.5437</td>
<td>1.4213</td>
<td>0.401078</td>
</tr>
<tr>
<td>Q4</td>
<td>Do you think that the Arab countries are able to support that trend?</td>
<td>3.6602</td>
<td>1.3276</td>
<td>0.362712</td>
</tr>
<tr>
<td>Q5</td>
<td>Do you think that the policies of abandoning the Petrodollar could lead to a change in the international reserve policies of the central banks in the Arab countries</td>
<td>4.1165</td>
<td>0.6735</td>
<td>0.16361</td>
</tr>
<tr>
<td>Q6</td>
<td>Is the US dollar continuing to be the main pricing currency for petroleum?</td>
<td>2.9126</td>
<td>0.9777</td>
<td>0.335679</td>
</tr>
<tr>
<td>Q7</td>
<td>Do you think that OAPEC countries will unsupported US dollar continuing to be the main pricing currency for petroleum?</td>
<td>3.4369</td>
<td>1.0595</td>
<td>0.308272</td>
</tr>
</tbody>
</table>

Source: Statistical Package for Social Sciences outputs

Through Table No. 2, the study found that the most expressions in which there is agreement for the answers of the participants in the questionnaire are the Statement (Q7), with an agreement of ability (69.17%), while the Statement (Q2) is the least expression in which there is agreement for the answers of the participants in the questionnaire, with an average agreement of ability (54.02%).

4.4 Statistical testing of Hypothesis No. 1
Table No. 3 illustrates the inferential test for the attitudes of OAPEC countries about whether it is possible to abandon the Petrodollar.

Table 3. The inferential test Outputs of hypothesis No.1

<table>
<thead>
<tr>
<th>Test Statisticsa,b</th>
<th>Q1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>184.088</td>
</tr>
<tr>
<td>df</td>
<td>8</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

Source: Statistical Package for Social Sciences outputs

Table No. 3 illustrates that the calculated value of Chi-square is 184.088, compared with the tabular value at a degree of freedom of 8. It is significant at 1%, which indicates the presence of significant differences in OAPEC countries attitudes towards the success of abandoning the dollar as the main pricing currency for petroleum. Now, the study rejects the Null hypothesis and conclude that accepts the following alternative hypothesis: There is a significant difference in the attitudes of OAPEC countries about whether it is possible to abandon the Petrodollar.

4.5 Statistical testing of Hypothesis No. 2
Table No. 4 illustrates the inferential test for the attitudes of OAPEC countries about the expected time to give up the petrodollar.
Table 4. The inferential test Outputs of hypothesis No.2

<table>
<thead>
<tr>
<th>Test Statistics&lt;sup&gt;a,b&lt;/sup&gt;</th>
<th>Q2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>161.528</td>
</tr>
<tr>
<td>df</td>
<td>8</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

Source: Statistical Package for Social Sciences outputs

Table No. 4 illustrates that the calculated value of Chi-square is 161,528 compared with the tabular value at a degree of freedom of 8. It is significant at 1%, which indicates the presence of significant differences in OAPEC countries attitudes towards abandoning the dollar as the main pricing currency for petroleum. Now, the study rejects the Null hypothesis and conclude that accepts the following alternative hypothesis: There is a significant difference in the attitudes of OAPEC countries about the expected time to give up the petrodollar.

4.6 Statistical testing of Hypothesis No. 3

Table No. 5 illustrates the inferential test for the attitudes of OAPEC countries about the weight of the global oil market based on giving up the petrodollar.

Table 5. The inferential test outputs of hypothesis No.3

<table>
<thead>
<tr>
<th>Test Statistics&lt;sup&gt;a,b&lt;/sup&gt;</th>
<th>Q3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>182.536</td>
</tr>
<tr>
<td>df</td>
<td>8</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

Source: Statistical Package for Social Sciences outputs

Table No. 5 illustrates that the calculated value of Chi-square is 182.536, compared with the tabular value at a degree of freedom of 8. It is significant at 1%, which indicates the presence of significant differences in OAPEC countries attitudes towards abandoning the dollar as the main pricing currency for petroleum. Now, the study rejects the Null hypothesis and conclude that accepts the following alternative hypothesis: There is a significant difference in the attitudes of OAPEC countries about the weight of the global oil market based on giving up the petrodollar.

4.7 Statistical testing of Hypothesis No. 4

Table No. 6 illustrates the inferential test for the attitudes of OAPEC countries about giving up the petrodollar.
Table 4. The inferential test Outputs of hypothesis No.2

| Source: Statistical Package for Social Sciences outputs |

Table No. 4 illustrates that the calculated value of Chi-square is 161.528 compared with the tabular value at a degree of freedom of 8. It is significant at 1%, which indicates the presence of significant differences in OAPEC countries attitudes towards abandoning the dollar as the main pricing currency for petroleum. Now, the study rejects the Null hypothesis and conclude that accepts the following alternative hypothesis: There is a significant difference in the attitudes of OAPEC countries about abandoning the petrodollar.

4.6 Statistical testing of Hypothesis No. 3

Table No. 5 illustrates the inferential test for the attitudes of OAPEC countries about the expected time to give up the petrodollar.

| Source: Statistical Package for Social Sciences outputs |

Table No. 5 illustrates that the calculated value of Chi-square is 182.536, compared with the tabular value at a degree of freedom of 8. It is significant at 1%, which indicates the presence of significant differences in OAPEC countries attitudes towards abandoning the dollar as the main pricing currency for petroleum. Now, the study rejects the Null hypothesis and conclude that accepts the following alternative hypothesis: There is a significant difference in the attitudes of OAPEC countries about giving up the petrodollar.

4.7 Statistical testing of Hypothesis No. 4

Table No. 6 illustrates the inferential test for the changes in the international reserve policies of the central banks based on abandoning the petrodollar.

| Source: Statistical Package for Social Sciences outputs |

Table No. 6 illustrates that the calculated value of Chi-square is 143.181, compared with the tabular value at a degree of freedom of 8. It is significant at 1%, which indicates the presence of significant differences in Arab attitudes towards abandoning the dollar as the main pricing currency for petroleum. Now, the study rejects the Null hypothesis and conclude that accepts the following alternative hypothesis: There is a significant difference in the attitudes of OAPEC countries about giving up the petrodollar.

4.8 Statistical testing of Hypothesis No. 5

Table No. 7 illustrates the inferential test for the attitudes of OAPEC countries about the change in the international reserve policies of the central banks based on abandoning the petrodollar.

| Source: Statistical Package for Social Sciences outputs |

Table No. 7 shows that the calculated value of Chi-square is 227.833, compared with the tabular value at a degree of freedom of 8. It is significant at 1%, which indicates the presence of significant differences in OAPEC countries attitudes towards abandoning the dollar as the main pricing currency for petroleum. Now, the study rejects the Null hypothesis and conclude that accepts the following alternative hypothesis: There is a significant difference in the attitudes of OAPEC countries about change in the international reserve policies of the central banks based on abandoning the petrodollar.

4.9 Statistical testing of Hypothesis No. 6

Table No. 8 illustrates the inferential test for the attitudes of OAPEC countries about the US dollar continuing to be the main pricing currency for petroleum.
Table 8. The inferential test outputs of hypothesis No. 6

<table>
<thead>
<tr>
<th>Test Statistics$^{a,b}$</th>
<th>Q6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>156.759</td>
</tr>
<tr>
<td>df</td>
<td>8</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

Source: Statistical Package for Social Sciences outputs

Table No. 8 illustrates that the calculated value of Chi-square is 156.759, compared with the tabular value at a degree of freedom of 8. It is significant at 1%. Now, the study rejects the Null hypothesis and conclude that accepts the following alternative hypothesis: There is a significant difference in the attitudes of OAPEC countries about the US dollar continuing to be the main pricing currency for petroleum.

4.10 Statistical testing of Hypothesis No. 7

Table No. 9 illustrates the inferential test for the attitudes of OAPEC countries about.

Table 9. The inferential test outputs of hypothesis No. 7

<table>
<thead>
<tr>
<th>Test Statistics$^{a,b}$</th>
<th>Q7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>158.585</td>
</tr>
<tr>
<td>df</td>
<td>8</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

Source: Statistical Package for Social Sciences outputs

Table No. 9 illustrates that the calculated value of Chi-square is 158.585, compared with the tabular value at a degree of freedom of 8. It is significant at 1%, which indicates the presence of significant differences in Arab attitudes towards abandoning the dollar as the main pricing currency for petroleum. Now, the study rejects the Null hypothesis and conclude that accepts the following alternative hypothesis: There is a significant difference in the attitudes of OAPEC countries about the ability of the United States to resist giving up the petrodollar.
5 Discussion

5.1 Motives De-dollarization

De-dollarization refers to the process of reducing or eliminating the use of the US dollar in international trade and financial transactions. There are several motives behind de-dollarization, which can vary depending on the country or region involved. Some of the main motives include:

(a) Geopolitical Considerations: De-dollarization can be driven by geopolitical motives, as countries seek to reduce their dependence on the United States and its influence over their economies. This motive is often more pronounced among countries that have strained relationships with the US or perceive it as an adversary. This appears in both China and the Russian Federation. It is possible to understand the positions of some Arab oil-exporting countries according to this justification.

(b) Economic Sovereignty: De-dollarization can be seen as a way for countries to assert their economic sovereignty and reduce vulnerability to external economic shocks. By diversifying away from the dollar, countries aim to reduce the impact of fluctuations in the US economy and monetary policy on their own economies. Many emerging economies have been subjected to shocks as a result of raising US interest rates. Many emerging markets have witnessed external cash flows for foreign investment.

(c) Currency Risk Mitigation: Holding significant amounts of US dollars as reserves exposes countries to currency risk. De-dollarization allows countries to diversify their reserve holdings, reducing their exposure to potential depreciation or volatility in the value of the dollar.

(d) Trade Facilitation: In some cases, de-dollarization is pursued to facilitate trade with countries that are not major users of the US dollar. By using alternative currencies or settlement mechanisms, countries can reduce transaction costs and barriers to trade, particularly with nations that have limited access to dollars or face restrictions on their use. The BRICS countries seek to rely on local currencies to be international trade payments, whether between the bloc countries or with other countries, Egypt and Argentina, in national (local) currencies.

5.2 International attitude for oil pricing currency

Historically, the US dollar has been the dominant currency used for pricing and trading oil, which has provided certain benefits to the United States, including the ability to influence global financial markets and the demand for its currency. However, in recent years, there has been a growing sentiment among some countries, particularly those with significant oil reserves, to explore alternatives to the dollar in oil pricing. This is partly driven by the desire to reduce exposure to US economic sanctions and financial dominance. Some countries have expressed frustration with the potential negative impact of US policies on their economies and have sought ways to mitigate these risks.

While there is interest in diversifying away from the dollar, the practical challenges and risks involved in shifting away from the established system cannot be overlooked. The dollar's dominant position in oil pricing is deeply entrenched, and any significant change would require widespread cooperation and coordination among oil-producing nations, as well as acceptance from major oil consumers. Furthermore, the international attitude toward de-dollarization in oil pricing can vary depending on the country or region. Some nations may view it as a way to challenge US dominance and enhance their own geopolitical standing, while others may be cautious about the potential disruption and uncertainty associated with such a shift.
Overall, while there is growing interest in exploring alternatives to the dollar in oil pricing, the process of de-dollarization is complex and will likely take time to unfold, with significant geopolitical and economic implications for all parties involved. Under this controversy regarding oil pricing, pricing mechanisms that are based on fundamental analysis and technical analysis are still used in analyzing trends in oil prices. We believe that artificial intelligence can be used in this matter, as is done in the currencies of emerging economies [37]. However, the importance of the strength of the US dollar will vary in the future when pricing oil.

5.3 Global monetary system under de-dollarization

The repercussions of de-dollarization are complex and far-reaching. On the one hand, reducing the dominance of the US dollar could promote financial stability by reducing the risks associated with a single currency. It could also lead to a more multipolar global financial system, with a greater role for other currencies such as the euro, yen, and yuan. This could benefit countries that hold large reserves of these currencies, as well as those seeking to diversify their holdings.

On the other hand, de-dollarization could also have negative effects. The US dollar has been the dominant currency in the global financial system for decades, and its decline could lead to a loss of confidence in the system as a whole. This could lead to increased volatility in financial markets and could make it more difficult for countries to access funding. De-dollarization could also lead to higher costs for US borrowers, as investors demand higher yields to compensate for the increased risk.

The outlook for the global monetary system under de-dollarization is uncertain and subject to various factors and potential outcomes. It is important to note that de-dollarization does not necessarily imply a complete replacement of the US dollar as the dominant global currency, but rather a gradual shift towards a more diversified international monetary system. With that in mind, here are a few potential outcomes and considerations:

- **Multipolar Currency System:** De-dollarization could lead to the emergence of a more multipolar currency system, with several currencies playing a larger role in international trade and finance. This could include the increased use of regional currencies, such as the euro, Chinese yuan, or the Russian ruble, as well as the potential development of new international reserve currencies.

- **Increased Currency Volatility:** A more diversified global monetary system could potentially lead to increased currency volatility and exchange rate fluctuations. As different currencies gain prominence and compete for global market share, the relative values of these currencies may become more volatile, introducing additional risks and uncertainties for international trade and investment.

- **Shift in Financial Centers:** De-dollarization could also lead to a redistribution of financial centers and influence. If the dominance of the US dollar diminishes, other financial centers may gain prominence, such as London, Frankfurt, Shanghai, or Singapore. This could have implications for global financial regulations, infrastructure, and the concentration of economic power.

- **Geopolitical Realignment:** The process of de-dollarization may have geopolitical implications, as it could alter the balance of power and influence among nations. Countries seeking to reduce their dependence on the US dollar may strengthen economic and financial ties with other like-minded nations, potentially leading to the formation of new alliances or partnerships.

- **Transition Challenges:** Shifting away from the dollar as the primary global currency would be a complex and challenging process. It would require coordination
among multiple stakeholders, including central banks, governments, and international institutions. Technical issues, such as establishing alternative payment systems, enhancing liquidity in new currencies, and maintaining stability during the transition, would need to be addressed.

It's important to note that de-dollarization is not a linear or predetermined process. The extent and pace of de-dollarization will depend on a range of factors, including economic developments, geopolitical dynamics, and the willingness of countries to adopt alternative currencies or mechanisms. The global monetary system is likely to evolve gradually, and its final shape will depend on the interplay of these factors and the decisions made by various stakeholders.

5.4 Arab countries prefer gold as a basis for international reserves

In recent years, international reserves of gold have increased in the countries under investigation, which supports the attitude of De-dollarization (see figures 1 and 2).

There are several reasons why some Arab countries prefer gold as a basis for international reserves as an alternative to the US dollar. These reasons are rooted in historical, economic, and geopolitical factors. Here are some key points:

A. Stability and Trust: Gold has been considered a stable and reliable store of value throughout history. Arab countries may see it as a more secure asset compared to currencies like the US dollar, which can be influenced by economic and political factors. Gold's tangible nature and limited supply contribute to its perceived stability.

B. Hedging against Currency Fluctuations: Arab countries often rely heavily on oil exports, and the price of oil is denominated in US dollars. By holding gold reserves, they can hedge against potential fluctuations in the value of the US dollar. If the dollar weakens, the value of gold may rise, helping to offset any potential losses.

C. Geopolitical Considerations: Some Arab countries may view gold as a means of reducing their reliance on Western-dominated financial systems and currencies. It can be seen as a way to assert independence and protect against potential geopolitical risks or changes in international relations. The cases of Libya and Iraq were the most prominent in this regard.

D. Historical Significance: Gold holds cultural and historical significance in many Arab countries. It has been traditionally valued and used as a form of currency and wealth preservation. Therefore, there may be a preference to maintain gold reserves based on cultural and historical ties.
C. Diversification of Monetary Power: By holding gold reserves, Arab countries can diversify their monetary power beyond just the US dollar-dominated global financial system. This diversification can provide them with more autonomy and influence in international economic affairs.

It's important to note that the preference for gold as a basis for international reserves can vary among Arab countries, as each nation has its own unique economic and geopolitical circumstances. While some may prioritize gold, others may still maintain a significant portion of their reserves in US dollars or other currencies based on their specific needs and strategies.

6 Study limitations

The qualitative approach was adopted due to the lack of quantitative data. The shortness of the time series, along with the inaccuracy of the data, results from the concealment of part of the Russian oil sales to China and India. In addition to the lack of diversity of participants, from just Arab countries only. The study justified this by relying on an Arabic-language survey. This matter caused a bias when reaching the individuals participating in the investigation. Finally, the type of social media platform used influenced the study results.

7 Conclusions and recommendations

The initial shock of globalization caused by the COVID-19 pandemic revealed the extent to which emerging and international markets are intertwined with international economies. The pandemic had considerable effects on global supply chains. Due to the challenges of international integration and the tendency of the global economy to recover, many corporations restructured their business models. After the Russian invasion of Ukraine in February 2022, the western nation attempted to isolate the Russian economy from the international monetary system [7], which had a compounding effect on the international monetary system. that it is the second shock of globalization.

On other hand; the US dollar plays a crucial role in global finance system, as it is the primary currency used for foreign exchange transactions. It is the most traded currency in the globe, accounting for more than 80% of all foreign exchange transactions. In addition, the majority of central banks keep the majority of their foreign currency reserves in dollars, which contributes to the stability of the global financial system. Utilizing the Dollar as the international medium of exchange and reserve currency provides the United States with a number of benefits. As a result of foreign demand for U.S. securities, the cost of financing for the U.S. government and its citizens is lower than it would be otherwise. Other nations subsidize the U.S. government and their consumers by holding significant quantities of U.S. currency and securities as foreign-exchange reserves. The advantages of possessing the global reserve currency extend beyond lower financing rates [5].

US dollar dominance is attributable to the stability of the American economy, its acceptance as a payment method, and its use in international commerce and finance. However, the global economy's reliance on the dollar can also pose potential hazards. As a result, it is essential to monitor the dollar's function in the international financial system and to take the necessary steps to mitigate any potential negative effects. The imposition of sanctions on the international payment system on Russia as a result of the military supremacy in Ukraine, in addition to China's intentions to annex Taiwan, in addition to the damage from the strict monetary policy, made many economies negatively affected, making many countries support de-dollarization. Russia and China led these efforts of de-
dollarization, with support from India and the Kingdom of Saudi Arabia. Following the yuan and the dirham of the United Arab Emirates, Russia adopted the ruble as the primary currency for oil pricing. To eliminate the influence of the U.S. dollar on the Russian financial sector, Russia implemented "de dollarization" in foreign exchange reserves, settlement fields, and clearing systems, and issued the "ruble settlement order" as a global model [7].

According to the results of the questionnaire analysis, participants hold differing opinions. The global oil market is ready to abandon the petrodollar; the weight of giving up the petrodollar will be more than 50% of the global oil market; it most likely take three to five years. On the other hand, the policies of abandoning the petrodollar could lead to a change in the international reserve policies of the central banks, but the US dollar continues to be the main pricing currency for petroleum, and the United States cannot resist giving up the petrodollar in the medium term. The cohort from Qatar was the least willing to give up the dollar. On the other hand, those from Saudi Arabia favor the success of abandoning the dollar in the very near future, particularly in light of the trend towards pricing oil in other currencies for forward and spot contracts (i.e., the yuan). Hence, the terms Petroypuan, and Petroruble were floated in the business world as well as becoming popular in academic writings.

One possible mechanism for oil-exporting countries to reduce the negative effects of oil pricing in dollars is to establish regional or international agreements to trade oil in currencies other than the US dollar. This could involve setting up currency swap agreements with other countries or using a basket of currencies to price oil, rather than relying solely on the US dollar. This would reduce the impact of fluctuations in the value of the dollar on the price of oil and help stabilize revenues for oil-exporting countries.

According to Mathews and Selden (2018), the Chinese government has long desired for the yuan, its national currency, to have a larger role in global finance. The internationalization of the yuan has been pursued via a variety of efforts and strategies, most notably in relation to the International Monetary Fund and the inclusion of the yuan in a "basket" of currencies sustaining Special Drawing Rights. Internationalization has been delayed by, among other factors, China's state-run banking system and its relative inconvertibility. As financial affairs are liberalized, it becomes more plausible for the yuan to play the global role expected of the currency of the largest trading nation, the largest manufacturing nation, and the second-largest economy in the world.

The results of the study are consistent with the results of Alshareef (2023), as he indicated that China has surpassed the United States as the largest destination for the recycling of oil receipts from the GCC through the trade channel, which has significantly diminished the efficacy of the petrodollar regime.

The previous results can be interpreted according to Asuelime and Asuelime (2022), they indicated that through its "Petrodollar system" and its repercussions, the United States has not pursued a strategic interdependent global economic drive that considers a collaborative and transformative development for many nations.

Due to a dearth of quantitative data, the qualitative approach imposed constraints on the study. Due to the brevity of the time series and the imprecision of the data, a portion of the Russian oil exports to China and India were concealed. In addition to the paucity of diversity among participants, only Arab nations were represented. The study supported its conclusion with an Arabic-language survey. This matter resulted in bias among those who participated in the investigation. Lastly, the type of social media platform utilized affected the study's findings. Therefore, the study suggests that future research should not be limited to Facebook alone but should also include Twitter, YouTube, WeChat, Instagram, Sina Weibo, WhatsApp, QQ, Telegram, Snapchat, Kuaishou, and Qzone.
Some respondents believe that the relationship between oil and the dollar should be severed, which necessitates two radical, unrealistic solutions, one of which is pricing oil on a basis other than the dollar. It is not in China's best interest to purchase crude in dollars, as the United States is its largest market. According to some, in order to correct the pricing trajectory of oil, a basket of currencies or what are known as special drawing rights must be adopted for pricing, and delinking the US dollar and the oil price will be an effective and necessary step because it will help to neutralize the impact of a fluctuating dollar's value on the real price of a barrel of oil and preserve the purchasing power of oil revenues.

De-dollarization refers to the process of reducing the use of the US dollar in international transactions and shifting to other currencies or payment systems. Matsuyama et al. (1993) have two mechanisms to de-dollarization: taxes on domestic transactions in foreign currency and a reduction in the storage cost of local currency. According to Vidal et al. (2022) these mechanisms are effective. Achieving de-dollarization can be a challenging task, but their other mechanisms: Promoting the use of alternative currencies: Countries can encourage the use of other currencies, such as the euro, yen, or Chinese yuan, in addition to the new currencies of the BRICS countries, in international transactions. This can be done by signing currency swap agreements with other countries or by allowing businesses to price their goods and services in other currencies. Developing regional payment systems: Countries can establish regional payment systems that enable them to conduct transactions without relying on the US dollar. Examples of such systems include the China International Payment System (CIPS) and the Russian Financial Messaging System (FMS). Strengthening the role of the IMF: The International Monetary Fund (IMF) can play a role in promoting de-dollarization by providing alternative currencies for countries in need of financing. This could be achieved through the creation of a new global reserve currency or by using the IMF's special drawing rights (SDRs) as a unit of account for international transactions. Reducing the use of the US dollar in oil trading: Since oil is traded in US dollars, reducing its use in oil trading can be a significant step towards de-dollarization. Oil-exporting countries can establish new payment systems or agreements to trade oil in other currencies or use a basket of currencies to price oil. Encouraging trade in local currencies: Countries can promote the use of their local currencies in international trade by offering incentives for businesses to use them, such as tax breaks or reduced transaction costs. Diversifying foreign exchange reserves: Countries can reduce their dependence on the US dollar by diversifying their foreign exchange reserves and holding more of other currencies or assets, such as gold or cryptocurrencies. It is important to note that achieving de-dollarization can be a complex and long-term process that requires careful planning and coordination between countries.

Here are some potential areas for future studies on de-dollarization:

a. Regional Perspectives: Investigate the de-dollarization efforts in specific regions, such as Latin America, Asia, or the Middle East. Examine the motivations, strategies, and potential consequences of de-dollarization in these regions.

b. Central Bank Digital Currencies (CBDCs): Analyze the role of CBDCs in the process of de-dollarization (Edwards, 2021). Explore how the introduction of digital currencies by central banks may impact the use of the US dollar and the potential implications for financial systems and global monetary dynamics.

c. Trade and Investment Implications: Examine the effects of de-dollarization on international trade and investment flows. Investigate how changes in currency composition and exchange rate dynamics may affect the competitiveness of countries and the patterns of global economic integration.

d. Financial Stability: Assess the potential implications of de-dollarization for financial stability at both the national and global levels. Examine the risks and challenges associated with reducing reliance on the US dollar and explore alternative mechanisms.
to ensure stability in a multi-currency or de-dollarized environment. De-dollarize can have an impact on the liquidity of financial markets and ownership structures of corporation [38]. Which is reflected in the performance of financial markets, whether emerging or international markets.

e. Geopolitical Dynamics: Explore the geopolitical implications of de-dollarization. Investigate how shifts in global reserve currencies may impact the balance of power among nations, influence geopolitical alliances, and reshape the international order.

f. Financial Innovation and Infrastructure: Investigate the development of new financial instruments, platforms, and infrastructure to support de-dollarization efforts. Analyze the role of fintech, blockchain, and other emerging technologies in facilitating alternative currency arrangements and cross-border transactions.

Finally, political factors have accelerated the trend away from basing oil prices on the forces of demand and supply and towards basing prices on market forces. In addition to the economic factors that have emerged over the past three decades, there are additional factors to consider, especially the repercussions of US monetary policy on the economies of the rest of the world according to capital flows and fluctuations in exchange rates.

Disclosure statement

There was no prospective conflict of interest disclosed by the authors.

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